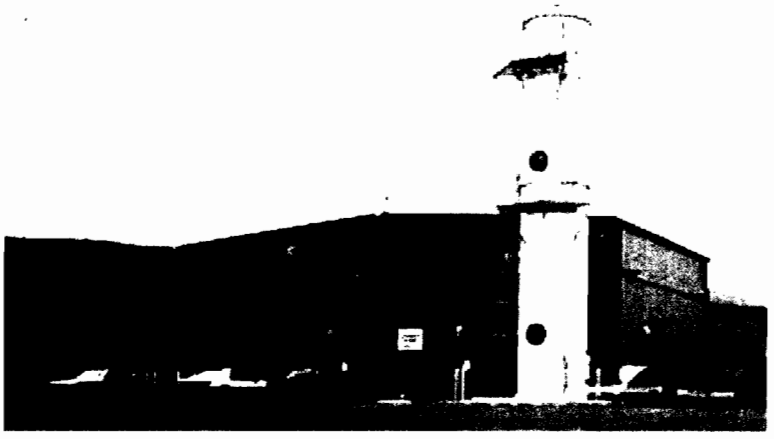
2005 ANNUAL SUMMARY REPORT

Old Bethpage
Solid Waste Disposal Complex
Groundwater Treatment Facility

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
SYOSSET, NEW YORK 11791

August 2006



LOCKWOOD
KESSLER &
BARTLETT, INC.
SYOSSET, NEW YORK 11791

2005
ANNUAL SUMMARY REPORT

OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX
GROUNDWATER TREATMENT FACILITY

TOWN OF OYSTER BAY
DEPARTMENT OF PUBLIC WORKS

Prepared By

Lockwood, Kessler & Bartlett, Inc.
Consulting Engineers
One Aerial Way
Syosset, New York 11791

AUGUST 2006

TABLE OF CONTENTS

TABLE OF CONTENTS

(Continued)

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

A. Well Location Map

B. "TOWN OF OYSTER BAY, OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX, EVALUATION OF VOLATILE ORGANIC COMPOUNDS IN AIR AND SOIL GAS AND SOIL GAS PRESSURE READINGS, 2005 Annual Summary Report, RTP Environmental Associates, Inc., March 2006.

C. "ANNUAL SUMMARY, OLD BETHPAGE QUARTERLY GROUNDWATER MONITORING PROGRAM, JANUARY THROUGH DECEMBER 2005", Gannett Fleming Engineers and Architects, P.C., August 2006.

SECTION 1.0
INTRODUCTION

1.1 Purpose of this Document

Operation of the Groundwater Treatment Facility (GTF) located at the Old Bethpage Solid Waste Disposal Complex (OBSWDC) in Old Bethpage, Long Island, New York, commenced on April 1, 1992. Pursuant to the terms of Consent Decree 83 CIV 5357 with the State of New York, the Town of Oyster Bay (Town) is required to submit quarterly operating and annual summary reports for the GTF. The reports shall contain appropriate operational and summary data, respectively, to demonstrate compliance with the Consent Decree. This document is the annual summary report for calendar year 2005, and is submitted in satisfaction of Consent Decree requirements.

1.2 Scope of this Document

This report is divided into six sections and three appendices. Section 2.0 (Background Information) presents background information on site history and a summary of the Town's responsibilities with respect to the Consent Decree. Section 3.0 (Groundwater Treatment Facility Operations) provides an overview of GTF operations and the scope of the various monitoring programs. Section 4.0 (Groundwater Monitoring Program) summarizes the results from the hydraulic monitoring and groundwater sampling activities performed during this reporting period. Section 5.0 (Air Stripper Stack Emissions Monitoring) summarizes the results of the mass-balance performed by LKB for the air stripper exhaust. Section 6.0 (Discussion and Recommendations) discusses the results achieved by the GTF operation and monitoring programs during 2005, and provides recommendations based on the current findings. Appendices A, B and C contain a well location map, and the other consultants' annual summary reports for the ambient air/soil gas and groundwater monitoring programs, respectively.

SECTION 2.0
BACKGROUND INFORMATION

2.1 Site History

The OBSWDC has been in operation since 1958, and was used for the processing and disposal of all non-hazardous waste generated in the Town. The wastes were burned in two on-site incinerators, and excess materials were compacted and baled for disposal in the on-site Old Bethpage Landfill (Landfill). The Landfill also accepted incinerator ash and residue, as well as raw municipal solid waste bypassed around the incinerators during periods of maintenance downtime.

In April 1986, all landfilling and incineration activities ceased, and the Town began to ship, offsite, all solid waste collected that was not recycled. Presently, the site operations largely consist of operating the Town's scalehouse, solid waste transfer station, recycling program, clean fill disposal site, gas control system, leachate and groundwater treatment facilities, and vehicle maintenance garage.

In June 1988, the Town entered into Consent Decree 83 CIV 5357 with the State of New York. That document required the Town to perform the following actions:

- design, construct and operate the GTF, to contain, recover and remediate the off-site contaminated groundwater plume associated with the Landfill;
- design and construct an acceptable cap for the Landfill;
- continue to operate the leachate treatment facility;
- continue to operate the landfill gas migration control system; and
- perform various monitoring functions designed to assess the adequacy of the remediation efforts.

The GTF, which is located in the northeast corner of the OBSWDC (see Appendix A), began normal operations on April 1, 1992. The final capping activities at the top of the closed Landfill, initiated in early 1992, were completed in early 1993. As noted above,

the Town continues to operate the leachate treatment facility and the landfill gas migration collection system. As a result of these actions, the Landfill is now classified as a Class 4 site (Site is properly closed – requires continued management) by the New York State Department of Environmental Conservation (NYSDEC).

2.2 Consent Decree Requirements Pertaining to Groundwater Plume Remediation

2.2.1 Requirements for Groundwater Monitoring

The nature and extent of the area to be remediated (a.k.a., the "plume"), under the terms and conditions of the Consent Decree were defined in the report titled "OBSWDC Offsite Groundwater Monitoring Program, Old Bethpage, Long Island, New York", by Geraghty & Miller, Inc. (now known as Arcadis G&M, Inc.), and dated September 1986.

To verify hydraulic containment of the plume by the recovery well system, and assess the progress of the remediation, the Town implemented a groundwater-monitoring program. In accordance with the requirements set forth in the Consent Decree, the groundwater-monitoring program is comprised of the following elements:

Hydraulic Monitoring - Monthly rounds of water-level measurements in the required monitoring wells until equilibrium and appropriate drawdown has been established; followed by quarterly water-level monitoring in a reduced number of wells thereafter so long as hydraulic control of the plume is maintained.

Groundwater Quality Monitoring - A baseline comprehensive first round of monitoring in the required wells prior to start-up of the GTF; followed by quarterly monitoring of groundwater quality until the termination criteria, as defined in the Consent Decree, have been demonstrated; and termination/post-termination monitoring thereafter for a minimum of five full years (20 quarters).

A total of 16 rounds of monthly hydraulic monitoring were performed during the period from April 1992 through September 1993. Beginning with the October 1993 round, which was performed concurrently with the fourth quarter 1993 groundwater quality monitoring round, the frequency of hydraulic monitoring was reduced to quarterly. A

total of forty-nine (49) quarterly hydraulic monitoring rounds have been completed since October 1993.

The baseline first round of groundwater quality monitoring was performed during the period from July 30 through August 2, 1991. Quarterly monitoring of groundwater quality began in July 1992, approximately three months after start-up of the GTF and a total of fifty-four (54) quarterly rounds have been completed to date.

The following hydraulic and groundwater quality monitoring activities were completed during 2005 in fulfillment of Consent Decree requirements:

- four rounds of quarterly water-level measurements, collected on January 11, April 18, July 11, and October 3, 2005, respectively; and

- four rounds of quarterly groundwater quality samples collected on January 12-14, April 19-21, July 12-14, and October 4-5, 2005, respectively.

Water-level measurements were collected from all of the wells originally specified in the Consent Decree, rather than in a reduced number of wells, as this information is required by the groundwater sampling protocol. Water-level measurements were also collected from Claremont Site Well Cluster EW-2 during 2005.

The groundwater samples from all four quarterly sampling rounds were analyzed for the volatile organic compound (VOCs), total (unfiltered) metals, dissolved (filtered) metals and leachate indicator parameters required by the Consent Decree. All 16 of the monitoring wells specified in the Consent Decree were sampled during each round, including Landfill Well LF-1, which was sampled for leachate indicator parameters per Consent Decree requirements, as well as VOCs. In addition, in keeping with a prior recommendation, during the third quarter round Well MW-9D was sampled for VOCs to provide current data for the deep potentiometric zone of the aquifer at this location downgradient of the Landfill and upgradient of the Town's recovery wellfield. Also during the third quarter round, Well OBS-2 was sampled for all parameters to provide current data for the deep potentiometric zone of the aquifer at this location downgradient of the Town's recovery wellfield. Also during 2005, split samples were collected from various Claremont Site wells sampled quarterly by the USEPA.

2.2.2 Treatment Facility Discharge Limitations and Monitoring Requirements

The Consent Decree placed certain limitations on the effluent quality of the GTF. The limits are listed in Table 2 of that document, which is titled "Groundwater Aquifer and Treated Groundwater Discharge Requirements". Some effluent limitations were later modified in a letter to the Town from the New York State Department of Law, and in subsequent revisions to the New York State Part 703 Ambient Water Quality Standards, which were last updated in March of 1998. The current limits, for both VOCs and inorganic parameters, are listed in Tables 1 and 2 of this report, respectively. The Town began monthly SPDES monitoring of the GTF effluent in April of 1992 for the parameters listed in Tables 1 and 2, and continued during 2005. The town also performs monthly SPDES monitoring of the GTF influent for the VOCs listed in Table 1. A New York State-certified outside laboratory performed the SPDES influent and effluent analyses.

The Consent Decree also placed limitations on the air stripper stack emissions. These limits appear in the Consent Decree as Table 1, which is titled "Applicable Air Discharge Requirements for Air Stripper Treatment System", and is reproduced in this report as Table 3. The Town began quarterly monitoring of the air stripper stack emissions on May 28, 1992, and performed quarterly monitoring through the second quarter of 1998. Beginning with the third quarter of 1998, the Town suspended the air stripper stack emissions monitoring program indefinitely as this program is not specifically mandated by the Consent Decree, and review of the body of data generated to date indicated that it was no longer warranted. In lieu of stack testing, the Town now uses the water-quality data generated by its an on-site laboratory and the operating data recorded by Town personnel to calculate air emissions from the stack and, if warranted, model air-quality impacts at the downwind property line.

In addition to the above requirements, the Town is required to perform certain self-monitoring functions related to recording comprehensive flow measurements for the GTF and maintaining a record of downtime. The Town has enhanced these abilities with the installation of the on-site laboratory. The laboratory is used to monitor the GTF influent and effluent three times per week, and groundwater at each recovery well on a weekly basis. This regular monitoring allows Town personnel to make process adjustments when necessary, and may also warn the operator of equipment malfunction, or the need for maintenance. Weekly monitoring of each recovery well will

TABLE 1

VOLATILE ORGANIC COMPOUNDS (VOCs)
EFFLUENT LIMITATIONS

CHEMICAL CONSTITUENT	ALLOWABLE CONCENTRATION (in parts per billion)
TOTAL VOCs (for discharge)	100
TOTAL VOCs (for groundwater)	50
BENZENE	1*
BROMODICHLOROMETHANE	50
BROMOFORM	50
CARBON TETRACHLORIDE	5
CHLOROBENZENE	5*
CHLORODIBROMOMETHANE	50
CHLOROETHANE	5*
CHLOROFORM	7*
DICHLOROBENZENE (each isomer)	3*
1,1 DICHLOROETHANE	5*
1,2 DICHLOROETHANE	0.6*
1,1 DICHLOROETHENE	5*
1,2 DICHLOROETHENE cis	5
1,2 DICHLOROETHENE trans	5*
1,2 DICHLOROPROPANE	1*
ETHYLBENZENE	5*
METHYLENE CHLORIDE	5*
TETRACHLOROETHENE	5*
TOLUENE	5*
1,1,1 TRICHLOROETHANE	5*
TRICHLOROETHENE	5
VINYL CHLORIDE	2
XYLENE (each isomer)	5*

Limits taken from Table 2, "Groundwater Aquifer And Treated Groundwate Discharge Requirements", of Consent Decree 83 CIV 5357, Appendix A.

* Indicates value modified by 11/10/88 letter to the Town, and/or in subsequent revisions to the NYCRR Part 703 Groundwater Standards.

TABLE 2

INORGANIC EFFLUENT LIMITATIONS

LEACHATE INDICATOR	ALLOWABLE CONCENTRATION (in parts per million)
BARIUM	1
CADMIUM	0.005*
CHLORIDE	250
CHROMIUM (total or hexavalent)	0.05
COPPER	0.2*
CYANIDE	0.2
IRON	0.3
IRON AND MANGANESE	0.5*
LEAD	0.025
MAGNESIUM (no Class GA limit)	35
MANGANESE	0.3
MERCURY	0.0007*
SILVER	0.05
ZINC (no Class GA limit)	5
TOTAL DISSOLVED SOLIDS	500
NITRATE	10
SULFATE	250
PHENOLS (total)	0.001

Limits taken from Table 2, "Groundwater Aquifer And Treated Groundwater Discharge Requirements", of Consent Decree 83 CIV 5357, Appendix A.

* Indicates value modified by 11/10/88 letter to the Town, and/or in subsequent revisions to the NYCRR Part 703 Groundwater Standards.

TABLE 3

APPLICABLE AIR DISCHARGE REQUIREMENTS FOR AIR STRIPPING TREATMENT SYSTEM*

Constituent	-Ambient Air Concentrations- NYSDEC Annual Guideline (ug/m3)
Vinyl Chloride	4.00E-01
Freon 13	3.00E-02
Methylene Chloride	1.17E+03
1,1-Dichloroethane	2.70E+03
1,2-Dichloroethene	2.63E+03
Chloroform	1.67E+02
1,1,1,-Trichloroethane	3.80E+04
Carbon Tetrachloride	1.00E+02
1,2-Dichloroethane	2.00E+01
Trichloroethylene	9.00E+02
1,2,-Dichloropropane	1.17E+03
Bromodichloromethane	3.00E-02
Tetrachloroethene	1.12E+03
Chlorodibromomethane	3.00E-02
Bromoform	1.67E+01
Benzene	1.00E+02
Toluene	7.50E+03
Ethyl Benzene	1.45E+03
(m) Xylene	1.45E+03
(o&p) Xylene	1.45E+03
(m) Dichlorobenzene	3.00E-02
(o) Dichlorobenzene	1.00E+03
(p) Dichlorobenzene	1.50E+03
Chloroethane	5.20E+04
1,1,-Dichloroethylene	6.67E+01
Chlorobenzene	1.17E+03
Ammonia	3.60E+02

* Established per New York State Department of Environmental Conservation Air Guide No. 1 for Toxic Air Contaminants. If any federal National Ambient Air Quality Standards or National Emission Standards for Hazardous Air Pollutants are promulgated which are more stringent than these State guidelines, the more stringent standard shall apply.

also assist the Town in establishing the initiation of termination monitoring, as proscribed in the Consent Decree. Since 2001, the Town has maintained certification of its on-site laboratory to perform Method 601/602 VOC analyses under the New York State Department of Health's Environmental Laboratory Approval Program (ELAP).

2.3 Other Consent Decree Requirements

2.3.1 Requirements for Ambient Air and Soil-Gas Quality Monitoring

"RAP Attachment 2" in the Consent Decree requires the Town to monitor ambient air and soil gas quality in the vicinity of the Landfill on a quarterly basis. These monitoring efforts took place in March, June, August and November 2005, respectively. A New York State-certified outside laboratory performed the analyses. The results were compared to NYSDEC ambient air quality limits. These results were used to evaluate the impacts that the Landfill, together with all other OBSWDC operations, have on the local air quality.

In early 1998, it was recommended that the Town request approval from the NYSDEC to reduce the frequency of ambient air monitoring from quarterly to annual. This monitoring program is specifically mandated by the Consent Decree; however, review of the body of data generated to date indicates that a reduction in the frequency of this monitoring is warranted. Pending receipt of this approval, however, the Town is required to continue this monitoring program on a quarterly schedule.

2.3.2 Requirements for Thermal Oxidizer Stack Emissions Monitoring

"RAP Attachment 2" in the Consent Decree also requires the Town to perform annual monitoring of the stack emissions from the thermal oxidizer. The purpose of this monitoring is to ensure that the landfill gas collected by the Town's migration prevention system, which contain trace amounts of organic compounds, undergoes complete high temperature destruction. Thermal oxidizer stack emissions monitoring for 2005 took place on October 5th. The results of this test were reported in the 2005 Fourth Quarter Report, and the consultant's report of the findings was submitted in its entirety as Appendix H of that report.

SECTION 3.0
GROUNDWATER TREATMENT FACILITY OPERATIONS

3.1 Theory of Operation

A system of five (5) groundwater recovery wells, designated RW-1 through RW-5, was installed at the leading edge of the off-site VOC plume associated with the Landfill, in Bethpage State Park. The locations of the recovery wells, in relation to the Landfill and other site features, are shown on the Well Location Map in Appendix A.

The combined flow from all wells is directed through common transmission piping to the air stripper wet well. A triplex pump arrangement delivers the collected groundwater to the top of the air stripper, which contains proprietary packing media. As the groundwater passes through and wets the packing, it is contacted with air directed into the bottom of the air stripper via a blower. Dissolved VOCs pass from the liquid phase (groundwater) into the gas phase (air), and exit the stripper through a stack.

The treated groundwater is directed into a receiving wet well, where another triplex pump arrangement delivers it to a series of Town-owned recharge basins. The primary recharge basin, Recharge Basin No. 1, contains a system of eight diffusion wells and is located upgradient of the Landfill on the west perimeter of the OBSWDC. The secondary recharge basin is Town Recharge Basin No. 33, which is located on Winding Road across from the east face of the Landfill. The Town also uses an unnamed temporary recharge basin located north-northeast of the GTF building on an as-needed basis. The locations of these recharge basins are shown in Appendix A.

3.2 Physical Plant

The GTF consists of the following major components:

- five recovery wells, which deliver a combined maximum design flow of 1.5 million gallons per day (MGD);
- the treatment plant building, which houses the control room, laboratory, wet wells, pumps, acid-rinse system, and chemical holding tanks;

- the air stripper, which contains proprietary media;
- Recharge Basin No. 1, which contains eight diffusion wells; and
- transmission piping.

3.3 Initial Operating Conditions

On April 1, 1992, the GTF began pumping approximately 1.5 MGD of groundwater from the five recovery wells located in Bethpage State Park. Flow was processed through the air stripper operating at a nominal 1,050 gallons per minute (GPM) forward hydraulic flow and approximately 10,400 standard cubic feet per minute (SCFM) of atmospheric air. The treatment plant design and the initial operating conditions are based on continuous 24 hours per day, seven days per week operation.

3.4 Monitoring Functions Related to Groundwater Treatment

3.4.1 Daily Operations Reports

The control console located at the GTF provides continuous readouts to the operating personnel of pumpage rates from each recovery well, as well as various locations throughout the plant. Hourly, the operating personnel transfer these readings onto a "Daily Operations Report". One report is completed for each 8-hour shift. The report also provides a space for any written observations made by those personnel concerning plant operations. Copies of these reports were provided in Appendix B of the quarterly reports. The originals will be archived by the Town for at least five years following termination of the GTF, as per Consent Decree requirements.

The Town has developed computer software to assist in assembling these data into meaningful form for reporting purposes. On an ongoing basis, Town representatives enter the data into an Excel-based program, which sorts it into separate databases for further review and interpretation.

3.4.2 Organic Analyses Reports

The Town installed a gas chromatograph at the on-site laboratory to self-monitor the day-to-day treatment efficiency of the GTF. During 2005, influent and effluent samples were collected three times per week and analyzed for VOCs. In addition, weekly samples from each of the off-site recovery wells were collected and analyzed for VOCs.

The Town has also developed computer software to assist in assembling the VOC data into meaningful form for reporting purposes. At the conclusion of each analysis, the Town enters all data into an Excel-based program for further review and interpretation, and prints out computer-generated tables for inclusion in the quarterly reports. The results for 2005 have been previously submitted as Appendix C of the respective quarterly reports.

3.4.3 Inorganic Analyses Reports

The Town also installed at the on-site laboratory, equipment to self-monitor selected inorganic water-quality parameters. These tests are performed to forewarn the operating personnel of changes in the influent or effluent, which may signal potential equipment problems requiring maintenance, or the need for other corrective action. Therefore, soluble iron is occasionally monitored through the air stripper to quantify the potential for iron fouling of the packing media. Dissolved oxygen is measured in the effluent to assure proper blower operation and to verify thorough aeration of the influent. Results from this testing are also entered into an Excel-based program for inclusion in the quarterly reports. The results for 2005 have been previously submitted as Appendix D of the respective quarterly reports.

3.4.4 State Pollution Discharge Elimination System (SPDES) Reports

In addition to self-monitoring, the Town sends monthly facility influent and effluent samples to a New York State-certified laboratory for organic and inorganic (effluent only) analyses. The analyses performed are those listed in Table 6 of the Consent Decree, titled "Analytical Methods", which is reproduced here in Table 4 as it appears in that document. The 2005 SPDES reports were submitted as Appendix E of the respective quarterly reports.

TABLE 4
Analytical Methods

Parameter	Analytical Method	Sample Preservation	Holding Time
Chloride	SM 407 A	None	28 Days
Ammonia	SM 417B, EPA 350.2	Cool to 4°C pH 2 w/H_2SO_4	28 Days
Iron SM 303B,	EPA 236.1	Field filter, Cool to 4°C, pH 2 w/HNO_3	6 Months
Hardness	SM 314B, EPA 130.2	Cool to 4°C	6 Months
Alkalinity	SM 403, EPA 310.1	Cool to 4°C	14 Days
pH (measured in field)	SM 423	None	Analyze Immediately
Specific Conductance (measured in field)	SM 205	Cool to 4°C	28 Days
VOCs	EPA 601 and 602	Cool to 4°C	14 Days
Metals and others*	EPA 40 CFR 136.3 (Individual Analyses)	As per Individual method	As per Individual method

*Aluminum, Copper, Lead, Manganese, Nickel, Sodium, Zinc, Chromium (VI), Chromium, Mercury, Potassium, Magnesium, Calcium, Total Dissolved Solids, Nitrate, Sulfate, Carbonate, Total Kjeldahl Nitrogen, Bicarbonate Alkalinity, Cyanide, Phenols, and Barium.

3.4.5 Air Stripper Stack Emissions Monitoring

Air stripper stack emissions monitoring for 2005 was performed by LKB using the water-quality data generated by the Town's on-site laboratory and the GTF operational data recorded by Town personnel. A mass-balance approach was used to calculate VOC emissions from the air stripper stack. The results were compared to the stack discharge limits listed in the Consent Decree. Typically, one or two VOCs slightly exceeded the limits each quarter. However, previous dispersion modeling has shown that such concentrations do not result in air quality impacts at the downwind property boundary. Therefore, additional dispersion modeling was not performed in 2005. The results from the air stripper stack emissions monitoring were submitted as Section 5.0 of the respective quarterly reports, and are summarized Section 5.0 of this report.

3.5 Other Monitoring Functions

3.5.1 Ambient Air and Soil-Gas Quality Monitoring

The 2005 quarterly ambient air and soil-gas quality monitoring rounds were performed in March, June, August and November 2005, respectively. The ambient air testing procedure involves the taking of simultaneous, measured samples for VOC analyses, upwind and downwind of the Landfill. These results are used to evaluate the impacts that the Landfill, together with other OBSWDC operations, have on the local air quality. The soil gas quality testing provides useful information regarding the effectiveness of the landfill gas collection system. The 2005 quarterly ambient air and soil gas quality reports have been submitted previously as Appendix F of the respective quarterly monitoring reports. The consultant's annual summary report for this program is provided in Appendix B of this report.

3.5.2 Thermal Oxidizer Stack Emissions Monitoring

The annual thermal oxidizer stack emissions test was performed on October 5, 2005. The testing procedure involves the taking of simultaneous, measured samples for VOC analyses from the thermal oxidizer stack. Simultaneously, the burner operating conditions during the test are also monitored. The analytical results demonstrate the degree of VOC destruction achieved by the equipment. The consultant's report for this test was submitted previously as Appendix H of the 2005 Fourth Quarter Report.

SECTION 4.0
GROUNDWATER MONITORING PROGRAM

4.1 General

In compliance with the Consent Decree for the Landfill, the following groundwater monitoring activities were performed during calendar year 2005:

- four rounds of quarterly water-level measurements, collected on January 11, April 18, July 11, and October 3, 2005, respectively; and

- four rounds of quarterly groundwater quality samples collected on January 12-14, April 19-21, July 12-14, and October 4-5, 2005, respectively.

The results from each monitoring round were submitted as Appendix G of each quarterly report. The consultant's annual summary report for 2005 is reproduced in Appendix C of this report.

4.1.1 Field Sampling Protocols

Except as noted in the quarterly monitoring reports, the field sampling protocols used during each 2005 monitoring round were those previously submitted to the NYSDEC by the Town in July of 1991. Quality Assurance/Quality Control (QA/QC) procedures utilized during each 2005 monitoring round consisted of one field blank analyzed for all parameters, and daily trip blanks analyzed for VOCs only. The blank samples were used to gauge the level of background contamination, if any, from sources other than the wells. In addition, one anonymous replicate sample was collected during each sampling round and analyzed for all parameters to determine the laboratory precision of the analytical results. All field procedures were in conformance with Sections IV.A, B and C in Appendix A of the Consent Decree.

4.1.2 Elevation of Well Screen Intervals

Elevations of the well screen intervals (in feet, relative to Mean Sea Level (MSL)) were assigned to the following zones for data correlation and water-level mapping purposes:

- Water Table Zone: 76 to 43 feet above MSL;
- Shallow Potentiometric Zone: 30 feet above to 30 feet below MSL; and
- Deep Potentiometric Zone: 65 to 157 feet below MSL.

The recovery well screen intervals range in elevation from 4 feet above MSL to 128 feet below MSL, and therefore intersect both the shallow and deep potentiometric zones.

4.2 Hydraulic Monitoring

The purposes of the hydraulic monitoring are: 1) to delineate the effective capture zone of the groundwater recovery wells so that hydraulic containment of the VOC plume can be demonstrated; and 2) to determine the extent of mounding around the recharge basin(s), and the effect of that mounding, if any, on local groundwater flow patterns.

The following wells were incorporated into the 2005 hydraulic monitoring rounds:

- The 23 off-site monitoring wells (e.g., MW-5A, MW-5B, etc.);
- Existing Phase II and III wells (LF-1 through LF-4, and TW-1 and TW-2);
- Nassau County Monitoring Well N-9980 (N-9936), at Melville Road;
- Observation Wells OBS-1 and OBS-2;
- Recovery Wells RW-1 through RW-5;
- Upgradient/Recharge Basin Wells M-29A&B and M-30A&B;
- Replacement Wells M-29A-R, M-30B-R and TW-3-R; and
- Claremont Site Well Cluster EW-2.

With the exception of Well MW-9A, which was dry during all four quarterly monitoring rounds, all of the monitoring wells specified in the Consent Decree were measured during each of the hydraulic monitoring rounds performed during 2005. Static water levels were measured to the nearest 0.01-foot with an electronic water-level meter. The water-level data collected during 2005 are summarized in Table 1 of Appendix C.

The water-level data were converted to elevations relative to MSL and plotted according to well depth on a Location Plan. The water-level elevations were then contoured to produce water table, shallow potentiometric and deep potentiometric surface maps. These maps for 2005 are provided in Appendix A of Appendix C. The approximate areal extent of the total VOC plume (based on the 2005 data) and the limiting flow lines of the effective capture zone are also shown on these maps.

4.2.1 Overview of 2005 Water-Level Data

As shown in Table 1 of Appendix C, during 2005, with the exception of the wells in the immediate vicinity of the recovery wellfield which are directly influenced by variations in wellfield operation, water-level elevations primarily increased by up to 0.5 feet during the first half of the year, but then decreased markedly by up to 2 to 3 feet by the time of the fourth quarter round in October. Decreases of similar magnitude were observed for the recovery wells. The site-wide decrease in water-level elevations during the second half of 2005 is attributed to the fact that virtually no aquifer recharge occurred during the second and third quarters of 2005 due to relatively low rainfall during this period.

Water-level elevations in all three aquifer zones were consistently highest in wells located north and west of the Landfill, and lowest in wells located south and east of the Landfill, confirming that the horizontal groundwater flow direction was from northwest to southeast across the site during 2005 with the exception of the radially inward flow within the effective capture zone of the recovery welllfield. This groundwater flow direction is consistent with previous data for the site, as well as the regional data reported by the United States Geological Survey. Although localized mounding occurs in the shallower zones of the aquifer in the vicinity of actively used recharge basins, the discharge of treated groundwater to the basins does not appear to have a significant effect on groundwater flow patterns in the deeper zones of the aquifer.

Based on the difference in water-level elevation between upgradient Well LF-4 and downgradient Well MW-11A (approximately 11.7 feet) and the distance between the wells (8,100 feet), the horizontal hydraulic gradient in the shallow potentiometric zone is approximately 0.0014. Previous aquifer tests by Geraghty & Miller, Inc. determined that the groundwater flow velocity in the vicinity of the site is approximately 0.5 feet per day.

Review of the water-level data in Table 1 of Appendix C further indicates that the natural vertical hydraulic gradient in this area, which is downward, has been altered by pumpage from the Town's recovery wellfield, and to a lesser extent by unusual recharge conditions. Specifically, at well clusters located outside the radius of influence of the Town's recovery wellfield, water-level elevations generally decrease with increasing well depth, indicating a downward vertical hydraulic gradient. In contrast, at well clusters located within the radius of influence of the recovery wellfields (e.g., Well Clusters MW-6 and MW-9), water level elevations remain constant or increase with increasing well depth, indicating flat or upward vertical hydraulic gradients, respectively. These influences can be attributed to long-term pumping at the Town's recovery wellfield, which has lowered hydraulic head pressures in the shallow and deep potentiometric zones, where the recovery wells are screened.

The presence of flat or upward vertical hydraulic gradients at certain locations indicates that groundwater is no longer moving downward in the aquifer as it migrates downgradient at these locations. Note that a flat or slightly upward vertical hydraulic gradient exists at Well Cluster MW-10, indicating that the Town's recovery wellfield appears to be influencing groundwater flow patterns at this location.

In addition, since mid 2000, relatively strong upward hydraulic gradients have been observed at Well Cluster MW-8. Previously, downward gradients were observed at this well cluster, which is located outside the radius of influence of the Town' recovery wellfield. The upward gradients observed at this well cluster since mid 2000 may reflect localized hydraulic influences from the Claremont Site's recovery wells, which are located a short distance to the south and screened at the same general depth interval.

Review of the various water-level maps in Appendix A of Appendix C indicates that the overall size and position of the capture zone remained consistent during 2005, although some variation was noted from quarter to quarter. The maps for the first quarter round performed in January show a small capture zone; however, these maps merely reflect that fact that the GTF was mostly off-line during January while vertical turbine pumps were replaced. The GTF maintained an average on-line performance of 84 percent during 2005, and remediated approximately 440 million gallons of groundwater at an average influent flow rate of 1.21 MGD. Moreover, the quarterly water-level maps shown in Appendix A of Appendix C indicate that the full extent of the Landfill's VOC plume was being captured during 2005.

4.3 Groundwater Quality and Quarterly Monitoring

In fulfillment of Consent Decree requirements, four rounds of quarterly groundwater sampling were conducted on January 12-14, April 19-21, July 12-14, and October 4-5, 2005, respectively. As per Consent Decree requirements, the following 16 wells were sampled during each round:

Off-Site Wells:	MW-5B
	MW-6A, MW-6B, MW-6C, MW-6E and MW-6F
	MW-7B
	MW-8A and MW-8B
	MW-9B and MW-9C
	MW-11A and MW-11B
Observation Well:	OBS-1
Upgradient Well:	M-30B-R
Landfill Well:	LF-1

The groundwater samples from all four quarterly monitoring rounds were analyzed for the VOCs, total (unfiltered) metals, dissolved (filtered) metals and leachate indicators listed in Table 4. The only exceptions were the samples from Well LF-1, which were analyzed for leachate indicators, per Consent Decree requirements, and VOCs. In keeping with a previous recommendation, Well MW-9D was sampled for VOCs during the third quarter round to provide current data for the deep potentiometric zone of the aquifer at this location downgradient of the Landfill and upgradient of the Town's recovery wellfield. Moreover, Well OBS-2, which is located downgradient of the Town's recovery wellfield was sampled for all parameters during the third quarter monitoring round. Split samples were also collected from various Claremont Site wells that are sampled on a quarterly basis by the USEPA. The results of these split samples were forwarded to the USEPA and were utilized in preparing the plume-related maps in Appendix C, but are not discussed in detail in this report. The analytical results from each quarterly monitoring round are summarized in Tables 3 through 5 and Appendix B of Appendix C. The certified laboratory data reports were included in Appendix G of the respective quarterly reports. No artifact compounds or blank contaminants were reported during any of the 2005 quarterly monitoring rounds, and duplicate sample results were reported to be within acceptable limits for all analyses.

The groundwater recovery system was designed to capture and treat the VOC portion of the Landfill plume. Therefore, the data analysis focuses on VOC contamination. Analysis of the metal and leachate indicator results was limited to a comparison of those data to VOC plume dimensions, and a compilation of exceedances of the groundwater aquifer requirements for these parameters based on the limitations provided in Table 2.

The VOC data collected during the four 2005 quarterly monitoring rounds were evaluated on the basis of their observed 2005 ranges, and comparison to pre-2005 quarterly monitoring results and the 1991 baseline sampling data. To facilitate this evaluation, summary tables have been incorporated into the text of this report. These tables are intended to demonstrate annual and long-term trends in the data, and therefore differ from those used in the quarterly reports. Specifically, the 2005 VOC data are presented as the minimum, maximum and average concentrations detected, rather than as specific results for each quarter. The pre-2005 VOC data are presented as average concentrations for both 2004 and the combined period from 1992-2004, rather than as historical minimum, maximum and average values. The baseline 1991 data are presented as the actual concentrations detected.

Also, it should be noted that the ranges and averages given for Well OBS-1 reflect only those quarters for which data are available. During 2005, Well OBS-1 was sampled during all four quarterly monitoring rounds. Well OBS-1 has been sampled during 43 of the 54 monitoring rounds performed since start-up of the GTF. Well OBS-2 was sampled as a substitute well during the 11 quarterly monitoring rounds when Well OBS-1 was damaged and could not be sampled. Well OBS-2 was not sampled as a substitute well during 2002, and was sampled for VOCs only during the third quarters of 2003 and 2004. Therefore, the historical results for Well OBS-2 are not discussed in detail in this report. Well MW-9D has been sampled eight times since start-up of the GTF, specifically during the third quarter rounds from 1998 though 2005, and during 2005 it was only sampled for VOCs. The ranges and averages given for Well MW-9D are based on the available data for this well. Well LF-1 has only been sampled for VOCs on a regular basis since 2004 and the VOC summary tables below reflect this.

Consistent with the quarterly reports, the following subsections discuss the distribution of total VOC concentrations, as well as the nature and extent of the three distinct VOC groupings which have historically been detected in groundwater: volatile halogenated organics, excluding tetrachloroethene (VHOs); aromatic hydrocarbons; and

tetrachloroethene. Summary plume maps depicting the approximate areal extent of these VOC groupings during 2005 based on the combined results from the 2005 monitoring rounds are provided in Figures 1 through 3 in Appendix C.

4.3.1 Analysis of 2005 Total VOC Data

VOCs were detected in 13 of the 18 wells sampled for VOCs during 2005, including 11 of the 16 wells sampled quarterly (Wells MW-5B, MW-6A, MW-6B, MW-6C, MW-6E, MW-7B, MW-8A, MW-8B, MW-11A, OBS-1 and LF-1) and Wells MW-9D and OBS-2, which were sampled during the third quarter round. Except for Well MW-6A, which was non-detectable for VOCs during 2004, these are the same wells in which VOCs were detected last year. Moreover, in addition to Wells MW-10B and MW-10C, and Claremont Well Cluster EW-3, which contained VOCs during the third quarter 1998 monitoring round, these are the wells in which VOCs have historically been detected.

The nature and extent of the total VOC detections in the wells sampled during 2005 is summarized, and contrasted against previous data, in the following table:

TOTAL VOC CONCENTRATIONS IN 2005 GROUNDWATER SAMPLES*

Well Number	Observed (Min.)	2005 (Max.)	Range (Avg.)	2004 Average	1992-2004 Average	Baseline 1991 Data
MW-5B	ND	0.9	0.2	0.2	4.4	17.0
MW-6A	ND	0.7	0.2	ND	0.5	2.0
MW-6B	11.6	27.1	18.7	21.5	16.9	105
MW-6C	2.7	6.8	4.2	7.9	7.9	31.0
MW-6E	0.6	6.5	3.0	3.1	6.3	530
MW-7B	357	1,005	631	204	138	157
MW-8A	17.0	39.3	23.6	18.3	272	507
MW-8B	ND	1.1	0.7	1.9	4.0	43.0
MW-9D	47.5	47.5	47.5	37.4	69.6	ND
MW-11A	ND	0.8	0.6	0.7	0.5	ND
OBS-1	4.1	8.3	6.8	8.9	99.0	156
OBS-2	1.5	1.5	1.5	1.4	9.4	8.0
LF-1	0.5	3.8	1.7	3.1	NA	16.0

* all concentrations in parts per billion (ppb), ND = not detectable, NA = not applicable.

Note that, relative to the 2004 averages, the 2005 average concentrations were lower for Wells MW-6B, MW-6C, MW-8B, OBS-1 and LF-1, similar for Wells MW-5B, MW-6A, MW-6E, MW-11A and OBS-2, and higher for Wells MW-7B, MW-8A and MW-9D. The lower total VOC concentrations observed for Wells MW-6B, MW-6C, MW-8B, OBS-1 and LF-1 are consistent with the overall downward trend in groundwater total VOC concentrations that has been observed since start-up of the GTF. The similar, very low average total VOC concentrations observed for Wells MW-5B, MW-6A, MW-6E, MW-11A and OBS-2 are consistent with the sporadic low concentrations that have been detected in these wells in recent years. The increase in average total VOC concentration in Well MW-7B reflects the marked increase in total VOC concentrations observed in this well since 2001. This increase is attributed to a westward shift in the position of the total VOC plume associated with Recovery Well RW-5 being off-line for repairs during the period from May 2000 through June 2001. The increase in total VOC concentration observed for Well MW-8A is attributed to localized fluctuations in groundwater quality in the vicinity of the Claremont Site. The increase in total VOC concentration in Well MW-9D is attributed to temporal variation in groundwater quality conditions and to the continued migration of the total VOC plume past this location and toward the Town's recovery wellfield.

Comparison of the 2005 average total VOC concentrations to the 1992-2004 averages indicates that the 2005 average total VOC concentrations are lower or similar for all wells except Well MW-6B and MW-7B. The temporal decreases in average total VOC concentration observed for the majority of the wells are consistent with the overall temporal decrease in groundwater VOC concentrations that has been observed since start-up of the GTF. Previously, a decreasing trend was also observed for Well MW-9C, which is currently non-detectable for VOCs. The temporal increases observed for Wells MW-6B is attributed to previous plume dilution associated with the full-time discharge of treated groundwater to Town Recharge Basin No. 33 during the period from October 1994 trough October 1996. As a result of this dilution, the 1992-2004 average for Well MW-6B is biased low. Overall, total VOC concentrations in this well have also shown a fluctuating but gradually decreasing trend since start-up of the GTF. The relatively large magnitude temporal increase observed for Well MW-7B reflects the increase in total VOC concentrations detected in this well since 2001. As noted above, this increase is attributed to a westward shift in the position of the total VOC plume. Prior to 2001, total VOC concentrations in Well MW-7B showed a fluctuating but generally decreasing trend.

Compared to the baseline 1991 data, the 2005 average total VOC concentrations were lower for all wells except Wells MW-7B, MW-9D and MW-11A. The relative increase in Well MW-7B is attributed to the westward shift in the position of the plume noted above. The relative increase in Well MW-9D is attributed to downgradient migration of the Landfill VOC plume toward the Town's recovery wellfield subsequent to start-up of the GTF. The relative increase in Well MW-11A merely reflects the fact that this well was non-detectable for VOCs during the 1991 baseline monitoring round. As shown in the above table, the total VOC concentrations in Well MW-11A during 2005 were low.

During 2005, the general pattern of total VOC concentrations in the wells monitored quarterly was similar to the water-level elevation data in that the highest and lowest concentrations occurred primarily during the first and fourth quarters, respectively. Overall, total VOC concentrations in the wells sampled quarterly showed decreasing trends during 2005. This finding is consistent with the overall temporal increase in groundwater VOC concentrations observed since start-up of the GTF, and indicates that groundwater quality is continuing to improve in response to the ongoing groundwater remediation.

The various figures Appendix A of Appendix C show the approximate areal extent of the total VOC plume in each aquifer zone, based on the results from each quarterly monitoring round, respectively. As shown in these figures, the occurrence of VOCs in the water-table zone is limited to the area immediately downgradient of the Claremont Site. In contrast, the occurrence of VOCs in the shallow potentiometric zone extends from the Landfill downgradient to the recovery wellfield, and shows the greatest areal extent of the three aquifer zones. It should be noted, however, that the portion of the plume shown around Well Clusters MW-10 and EW-3 is attributed to the Claremont Site. The occurrence of VOCs in the deep potentiometric zone is limited to the area downgradient of the Landfill and the immediate vicinity of the Town's recovery wellfield.

Apart from the portion of the plume in the vicinity of Well Clusters MW-10 and EW-3, which is attributed to the Claremont Site, the current plume dimensions are somewhat smaller relative to the 1991 plume boundaries. These findings, together with the temporal decrease in total VOC concentrations observed since start-up of the GTF, indicate that groundwater quality is continuing to improve in response to the ongoing remediation.

The Consent Decree specifies a Groundwater Aquifer Requirement of 100 ppb for total VOCs. During 2005, this limit was exceeded in Well MW-7B during all four quarters. Previously, this limit has also exceeded in Wells MW-8A, MW-9D and OBS-1. These are the wells that have historically exceeded this limit. Except for Well MW-7B, in which total VOC concentrations have been generally increasing since 2001, the magnitudes of these exceedances have been gradually decreasing since start-up of the GTF.

4.3.2 Analysis of 2005 VHO Data

VHOs were detected in eight of the 13 wells in which VOCs were detected during 2005, including six of the wells sampled quarterly (Wells MW-6B, MW-6C, MW-7B, MW-8A, MW-11A and OBS-1) and Wells MW-9D and OBS-2, which were sampled during the third quarter round. In addition to Wells MW-6E, MW-8B, MW-11B and LF-1, which contained sporadic low levels of VHOs in 2004, these are the same wells VHOs were detected in last year. Moreover, in addition to Wells MW-5B, MW-6A and MW-9C, these are the wells in which VHOs have been detected during quarterly monitoring.

The distribution of the total VHO detections in the wells sampled during 2005 is summarized, and contrasted against previous data, in the following table:

TOTAL VHO CONCENTRATIONS IN 2005 GROUNDWATER SAMPLES*

Well Number	Observed (Min.)	2005 (Max.)	Range (Avg.)	2004 Average	1992-2004 Average	Baseline 1991 Data
MW-6B	ND	0.8	0.2	1.2	0.2	59.0
MW-6C	ND	2.5	1.1	3.7	0.7	1.0
MW-7B	234	738	495	50.3	22.0	17.0
MW-8A	1.0	2.8	2.0	2.4	114	65.0
MW-9D	31.5	31.5	31.5	30.0	39.4	ND
MW-11A	ND	0.8	0.6	0.4	0.4	ND
OBS-1	1.6	4.2	3.4	3.6	43.2	18
OBS-2	1.5	1.5	1.5	1.4	8.5	8

* all concentrations in parts per billion (ppb), ND = not detectable.

Note that, relative to the 2004 and 1992-2004 average concentrations and the 1991 baseline concentrations, the 2005 average concentrations were lower or similar for all wells except Wells MW-7B and MW-9D. With respect to the wells sampled quarterly, the relative decreases are consistent with the overall temporal decrease in total VHO concentrations observed across the site since start-up of the GTF. The temporal increase in total VHO concentrations in Well MW-7B is attributed to the westward shift in the position of the VOC plume noted above. The increase in the "average" total VHO concentration in Well MW-9D during 2005 relative to the 1991 through 1994 average and the 1991 baseline concentration of non-detectable is attributed to temporal variation in groundwater quality at this location, and migration of the VOC plume past this location toward the Town's recovery wellfield subsequent to start-up of the GTF.

During 2005, the general pattern of total VHO concentrations in the wells monitored quarterly was similar to the total VOC results in that the highest and lowest concentrations occurred primarily during the first and fourth quarters, respectively. However, overall, total VHO concentrations remained fairly consistent in these wells during 2005. This is expected, and reflects the fact that as the remediation progresses, the magnitudes of the improvement in water quality become less pronounced and therefore harder to distinguish on a short-term basis.

Figure 1 in Appendix C shows the approximate areal extent of total VHOs in groundwater based on the combined results from the 2005 monitoring rounds. As shown, the current dimensions of the VHO plume are generally comparable to earlier findings. Note that the configuration of the VHO plume has changed somewhat relative to the baseline 1991 plume boundaries. Specifically, in addition to the general lack of VHO detections in the central portion of the plume area (e.g., Well MW-5B), the eastern side of the plume has been extended to reflect the VHO detections in Well Clusters MW-10 and EW-3, which are associated with the off-site plume from the Claremont Site. Also note that the VHO plume shown in Figure 1 of Appendix C extends south to Well MW-11A, however, this is based on the sporadic, very low (<1 ppb) levels of total VHOs detected in this well during 2005. Aromatic hydrocarbons and tetrachloroethene were not detected in Well MW-11A or MW-11B during 2005.

A total of ten specific VHO compounds was detected in the quarterly groundwater samples collected during 2005. Seven of these VHOs (chloroform, 1,1-dichloroethene, cis- and trans-1,2-dichloroethene, 1,1,1-trichloroethane, trichloroethene and vinyl

chloride) were detected in the wells sampled quarterly. These are generally the VHOs that have been detected in groundwater on a regular basis. Three additional VHOs (chloroethane, dichlorodifluoromethane and 1,1-dichloroethane) were detected only in the sample collected from Well MW-9D during the third quarter round.

The VHO compound detections in groundwater during 2005 are summarized below:

VHO COMPOUNDS DETECTED IN 2005 GROUNDWATER SAMPLES*

Compound	Detection** Frequency	Observed 2005 Range (Min.)	(Max.)	(Avg.)	Grndwtr Limits***
Chloroethane	1/21	5.0	5.0	5.0	5.0
Chloroform	3/21	0.7	3.5	1.9	7.0
Dichlorodifluoromethane	1/21	9.0	9.0	9.0	5.0
1,1-Dichloroethane	1/21	5.9	5.9	5.9	5.0
1,1-Dichloroethene	4/21	0.7	8.4	4.5	5.0
cis- 1,2-Dichloroethene	13/21	0.7	33.4	8.2	5.0
trans-1,2-Dichloroethane	5/21	0.5	2.5	0.7	5.0
1,1,1-Trichloroethane	5/21	0.7	21.2	10.6	5.0
Trichloroethene	11/21	0.7	680	166	5.0
Vinyl chloride	2/21	1.2	2.0	1.6	2.0

* all concentrations in ppb.

** frequency each compound was detected in the 21 well samples in which VHOs were detected.

*** see Table 1.

As noted above, chloroethane, dichlorodifluoromethane and 1,1-dichloroethane were only detected in the sample collected from Well MW-9D during the third quarter round. The concentrations of dichlorodifluoromethane and 1,1-dichloroethane were higher than their respective groundwater standards. Chloroform and 1,1-dichloroethene were only detected in Well MW-7B. The concentrations of chloroform were lower than the groundwater standard. The concentrations of 1,1-Dichloroethene detected in Well MW-7B during the third and fourth quarter rounds were higher than the groundwater standard. Cis-1,2-dichloroethene was detected in Wells MW-7B, MW-9D, MW-11A, OBS-1 and OBS-2. The highest concentrations were detected in Wells MW-7B and MW-9D, and were higher than the groundwater standard. Lower concentrations were

detected in Well OBS-1, and only very low (< 1ppb) concentrations were detected in Well MW-11A. Trans-1,2-dichloroethene was detected in Wells MW-6B, MW-6C and MW-9D, and all detections were lower than the groundwater standard. 1,1,1-Trichloroethane was detected in Wells MW-7B and MW-9D. The concentrations detected in Well MW-7B were all higher than the groundwater standard. Trichloroethene was detected in Wells MW-7B, MW-8A, MW-9D and OBS-1. The concentrations detected in Well MW-7B were approximately two orders of magnitude higher than in the other wells, and were much higher than the groundwater standard. Vinyl chloride was detected in Wells M-9D and OBS-1, at concentrations at or below the groundwater standard.

4.3.3 Analysis of 2005 Aromatic Hydrocarbon Data

Aromatic hydrocarbons were also detected in eight of the 13 wells in which VOCs were detected during 2005, including seven of the wells sampled quarterly (Wells MW-6A, MW-6B, MW-6C, MW-6E, MW-7B, OBS-1 and LF-1) and Well MW-9D, which was sampled during the third quarter monitoring round. However, it should be noted that aromatic hydrocarbon detections in Wells MW-6A and MW-7B were limited to one or two <1-ppb detections in each well. As such, they are considered spurious and are not discussed further in this report.

With the exception of Well MW-7B, which was non-detectable for aromatic hydrocarbons in 2004, and Well MW-8B, which was non-detectable for VOCs during 2005, these are the same wells in which aromatic hydrocarbons were detected last year. Moreover, in addition to Wells MW-9C and OBS-2, in which low levels of aromatic hydrocarbons were previously detected but are currently at non-detectable levels, these are the wells in which aromatic hydrocarbons have been detected during quarterly monitoring. Aromatic hydrocarbons were also detected in Landfill Well LF-2 during the expanded third quarter 1998 monitoring round.

The distribution of total aromatic hydrocarbon detections in groundwater during 2005 is summarized, and contrasted against previous data, in the table below:

TOTAL AROMATIC HYDROCARBONS IN 2005 GROUNDWATER SAMPLES*

Well Number	Observed (Min.)	2005 (Max.)	Range (Avg.)	2004 Average	1992-2004 Average	Baseline 1991 Data
MW-6B	11.6	26.3	18.5	19.8	16.7	48
MW-6C	1.3	4.3	3.1	3.7	7.1	30
MW-6E	0.6	6.5	3.0	2.1	4.6	37
MW-9D	13.4	13.4	13.4	26.0	25.0	ND
OBS-1	0.8	3.5	2.4	3.2	50.7	110
LF-1	0.5	3.8	1.7	2.9	NA	12

* all concentrations in ppb, ND = not detectable, NA = not applicable.

Note that, relative to the 2004 average concentrations, the 2005 average concentrations were lower, or similar, in all six wells. These relative decreases are consistent with the site-wide temporal decrease in groundwater aromatic hydrocarbon concentrations observed since start-up of the GTF. The similar 2004 and 2005 averages for Wells MW-6B and MW-6C indicate that aromatic hydrocarbon concentrations have been relatively consistent in these wells over the past two years.

Comparison of the 2005 average total aromatic hydrocarbon concentrations to the 1992-2004 averages indicates temporal decreases in concentration for all wells except Well MW-6B. These relative decreases are also consistent with the overall improvement in groundwater aromatic hydrocarbon concentrations since start-up of the GTF. The slight increase in average concentration in Well MW-6B is attributed to local variations in groundwater quality conditions at this location and to the fact that the 1992-2004 average for this well is biased low due to plume dilution as noted above.

Comparison of the 2005 average concentrations to the 1991 baseline data indicates decreases for all wells except Well MW-9D, which increased from non-detectable in 1991 to 13.4 ppb in 2005. As noted previously, this increase reflects downgradient migration of the deeper portion of the Landfill plume at this location towards the Town's recovery wellfield subsequent to start-up of the GTF.

During 2005, total aromatic hydrocarbon concentrations showed fluctuating, but generally decreasing, trends in all of the wells sampled on a quarterly basis. Similar to the water-level, total VOC and total VHO results, on a per well basis, total aromatic hydrocarbon concentrations showed a decreasing trends during 2005.

Figure 2 in Appendix C shows the approximate areal extent of the aromatic hydrocarbon plume based on the combined results from the 2005 quarterly monitoring rounds. Comparison of these figures to previous findings indicates that the dimensions of the aromatic hydrocarbon plume have decreased somewhat relative to the baseline 1991 plume boundary.

A total of eight aromatic hydrocarbon species were detected during 2005: benzene, chlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, ethylbenzene, m&p-xylene and o-xylene. In general, these are the aromatic hydrocarbon species that have historically been detected in groundwater samples.

The specific aromatic hydrocarbon compound detections in groundwater in 2005 are summarized below:

AROMATIC HYDROCARBONS DETECTED IN 2005 GROUNDWATER SAMPLES*

Compound	Detection** Frequency	Observed 2005 Range (Min.)	(Max.)	(Avg.)	Grndwtr Limits***
Benzene	10/20	0.5	6.5	2.0	1
Chlorobenzene	13/20	0.5	5.9	2.3	5
1,2-Dichlorobenzene	9/20	0.7	8.9	3.3	3
1,3-dichlorobenzene	2/20	1.3	1.5	1.4	3
1,4-dichlorobenzene	13/20	0.8	7.5	2.8	3
Ethylbenzene	2/20	1.0	1.8	1.4	5
M&p-Xylene	2/20	0.5	0.8	0.7	5
O-Xylene	2/20	1.2	3.4	2.3	5

* all concentrations in parts per billion (ppb).

** frequency each compound was detected in the 20 samples in which aromatic hydrocarbons were detected.

*** see Table 2.

Benzene was detected in Wells MW-6B, MW-6E, MW-9D and OBS-1. The highest concentrations of benzene were detected in Well MW-9D, followed by Well MW-6B, and all of the benzene detections in these two wells were higher than the groundwater standard. The benzene concentration detected in Well OBS-1 during the third quarter round was also higher than the standard. Chlorobenzene was detected in all of the wells in which aromatic hydrocarbons were detected. The highest concentrations of chlorobenzene were detected in Well MW-6B, and the concentration detected in this well during the first quarter round was higher than the groundwater standard. 1,2-Dichlorobenzene was detected in all of the wells in which aromatic hydrocarbons were detected except Well LF-1. The highest concentrations of 1,2-dichlorobenzene were detected in Well MW-6B, followed by Well MW-6C, and three out of the four detections in these two wells were higher than the groundwater standard. 1,3-Dichlorobenzene was detected in Wells MW-6C and MW-6E, at concentrations lower than the groundwater standard. 1,4-dichlorobenzene was detected in all of the wells in which aromatic hydrocarbons were detected except Well MW-9D. The highest concentrations of 1,4-dichlorobenzene were detected in Well MW-6B, and were all higher than the groundwater standard. Ethylbenzene was detected in Wells MW-6B and MW-6E at concentrations lower than the groundwater standard. M&p-xylene was detected in Well MW-6B at concentrations lower than the groundwater standard. O-xylene was detected in Wells MW-6B and MW-9D at concentrations lower than the groundwater standard.

Overall, aromatic hydrocarbons were detected most frequently and at the highest concentrations in Wells MW-6B, MW-6C and MW-6E. The majority of the exceedances of the groundwater standards occurred in Well MW-6B. Single exceedances were noted for Wells MW-6C (1,2-dichlorobenzene), MW-9D (benzene) and OBS-1 (benzene). No exceedances for aromatic hydrocarbons occurred in Wells MW-6E or LF-1 in 2005.

.

4.3.4 Analysis of 2005 Tetrachloroethene Data

Tetrachloroethene was detected in Wells MW-7B, MW-8A and OBS-1 during all four 2005 quarterly monitoring rounds, in Well MW-8B during the second, third and fourth quarter monitoring rounds, in Well MW-5B during the first quarter monitoring round, and in the sample collected from Well MW-9D during the third quarter monitoring round. These are the same wells in which tetrachloroethene was detected last year.

The highest concentrations of tetrachloroethene were detected in Wells MW-7B (64-266 ppb) and MW-8A (15-37 ppb), and all of the tetrachloroethene detections in these two wells were higher than the 5-ppb groundwater standard. Much lower concentrations were detected in Wells MW-5B (0.9 ppb), MW-9D (2.6 ppb) and OBS-1 (0.5-1.6 ppb). Compared to last year's data, on average, tetrachloroethene concentrations increased in Wells MW-7B and MW-8A, and remained essentially unchanged in Wells MW-9D and OBS-1. The increase observed in Well MW-7B is attributed to the previously mentioned westward shift in the position of the VOC plume. The increase noted for MW-8A is attributed to localized variations in groundwater tetrachloroethene concentrations in the vicinity of the Claremont Site. The similar average tetrachloroethene concentrations detected in Well OBS-1 during 2005 and 2004 is consistent with the fluctuating but slowly decreasing trend observed in this well since 1996. The comparable findings for Well MW-9D indicate that tetrachloroethene levels in the deep potentiometric zone of the aquifer at this location have remained relatively unchanged since last year.

Compared to the 1992-2004 data, except for the increase in tetrachloroethene concentrations in Well MW-7B since 2001, groundwater tetrachloroethene levels have shown gradually decreasing trends since start-up of the GTF.

Figure 3 in Appendix C shows the approximate areal extent of the tetrachloroethene plume based on the combined results from the 2005 quarterly monitoring rounds. As shown, the tetrachloroethene plume extends from the area upgradient of Well MW-8A, downgradient to Recovery Wells RW-3, RW-4 and RW-5. The current extent of the tetrachloroethene plume is consistent with that shown by pre-2005 quarterly monitoring rounds, and corresponds to the eastern component of the tetrachloroethene plume delineated by the baseline 1991 monitoring data.

The western component of the tetrachloroethene plume, which was delineated on the baseline 1991 results as a separate plume, is shown as an extension of the eastern component of the tetrachloroethene plume in Figure 3 of Appendix C to more accurately reflect the distribution of tetrachloroethene in groundwater.

4.3.5 Delineation of the VOC Plume

The position of the total VOC plume, which is a composite of the three site-specific VOC groupings, has been delineated on the water table and potentiometric surface maps provided in Appendix A of Appendix C. The outlines (shaded areas) represent the approximate areal extent of the total VOC plume based on the findings of the respective 2005 quarterly monitoring rounds. A review of the total VOC plume outlines in these figures indicates that the approximate length of the plume downgradient of the landfill is 2,400 feet, and the maximum width of the plume is about 3,600 feet. Overall, the dimensions of the plume are consistent with the 2004 data.

4.3.6 Analysis of 2005 Inorganic Data

Inorganic data collected during the 2005 quarterly monitoring rounds are summarized in Tables 7 and 8 of Appendix C. Overall, the distribution of leachate indicators in the aquifer remained relatively constant during 2005, and was similar to that of previous quarterly monitoring efforts and the 1991 baseline sampling round. However, the extent and concentration of leachate indicator parameters in groundwater appeared to also be decreasing over time at most locations in response to the ongoing groundwater remediation. Moreover, certain leachate indicators continued to be detected in Wells MW-8A and MW-8B on a regular basis during 2005. The presence of leachate indicators in these two wells is believed to reflect localized hydraulic influences associated with the Claremont Site's recovery wellfield, which is located a short distance south of these wells and screened in the water table zone of the aquifer. Specifically, it appears that pumpage from this wellfield is causing the Landfill plume in this area to shift eastward.

The overall distribution of inorganic parameters within the aquifer during 2005 was evaluated based on the nature and occurrence of exceedances of the Groundwater Aquifer Requirements listed in Table 2. During 2005, exceedances were noted for ammonia, chloride, iron, manganese, phenols, sodium, and total dissolved solids. Exceedances occurred in Wells MW-5B, MW-6A, MW-6B, MW-6C, MW-6E, MW-6F, MW-8A, MW-8B, MW-9B, MW-9C, LF-1 and OBS-1. Nearly all of the exceedances occurred in wells located directly downgradient of the Landfill, and primarily occurred in Wells MW-5B and OBS-1, and Well Clusters MW-6, MW-8 and MW-9. No exceedances occurred in downgradient Wells MW-7B, MW-11A, MW-11B and OBS-2.

4.4 Hydraulic Evaluation of the Groundwater Remediation System

4.4.1 Effective Capture Zone

The various figures provided in Appendix A of Appendix C show the configuration of the water table, and the shallow and deep potentiometric surfaces, respectively, relative to the position of the total VOC plume based on the findings of the 2005 quarterly monitoring rounds. In addition, the limiting flow lines depicting the capture zone are shown on the shallow and deep potentiometric surface maps.

The GTF was mostly off-line during January 2005 while the vertical turbine pumps were replaced. As a result, the capture zone of the recovery wellfield was not developed to its maximum extent at the time of the first quarter monitoring round, which was performed in January 2005. Nevertheless, analysis of the limiting flow lines in the figures for the various figures for the second, third and fourth quarter rounds in Appendix A of Appendix C indicates that the Landfill VOC plume was being captured during 2005.

Review of the 2005 water-level data, and prior data, indicates that the current capture zone developed soon after start-up of the GTF, and that its size and shape has remained stable over time. For example, comparison of the water-level data for the April 30, 1992 round (i.e., the first monthly water-level round following start-up of the GTF) with the pre-pumping water-level data from the October 1991 round, indicates that water levels in the vicinity of the capture zone initially declined an average of 10.5 feet in response to pumping. Specifically, pre-pumping water levels ranged from approximately 65.3 to 66.8 feet above MSL, whereas pumping water levels ranged from approximately 52.2 to 57.3 feet above MSL.

Since the April 30, 1992 round, the average water-level elevation in the recovery wells during pumping conditions has ranged from a low of 47.5 feet above MSL following the 1995 drought, to a high of 56.5 feet above MSL following the 1997-98 El Nino winter. Water-level elevations in the recovery wells also show what appear to be relatively minor fluctuations that can be correlated to normal seasonal variations in recharge.

During the period from April 1, 1992 through December 31, 2005, various recovery wells have been temporarily off-line on the dates that the hydraulic monitoring rounds were conducted. While off-line, water levels in these wells recovered approximately 7 to 12 feet relative to the other wells, but remained approximately 3 to 5 feet below their pre-pumping levels due to the drawdown associated with the other recovery wells.

During 2005, excluding wells located in the immediate vicinity of the recovery wellfield, which are directly influenced by short-term variations in the operation of the GTF, water level elevations generally increased during the first half of the year, but decreased markedly by the time of the fourth quarter round in October 2005. The site-wide fluctuation in water-level elevations during 2005 is attributed to natural seasonal variation in recharge from precipitation. The abrupt decrease in water-level elevations by the fourth quarter monitoring round is attributed to the fact that essentially no recharge from precipitation occurred during the second and third quarters of 2005. Drawdown in the capture zone during 2005 was approximately 15 feet relative to the water-level elevation in the recovery wells prior to start-up of the GTF.

Based upon the limiting flow lines of the capture zones, as presented in the figures in Appendix A of Appendix C, the average facility flow of 1.21 MGD (see Section 6.0) during 2005 has adequately maintained hydraulic control over the Landfill VOC plume. Furthermore, control of the VOC plume has been maintained during the fifty-five operating quarters since start-up of the GTF, where average facility flow has varied from approximately 0.90 to 1.48 MGD regardless of the seasonal effects. Therefore, the frequency of hydraulic monitoring can continue to be safely reduced to the present quarterly from the original monthly schedule.

4.4.2 Effects of Mounding Due to Recharge

During 2005, the mounding effects associated with the various recharge basins were not as pronounced due to a somewhat decreased flow rate associated with recovery well downtime during January 2005, the fairly even distribution of recharge over the first half of the year, and the fact that the effluent from the GTF was distributed among the available recharge basins.

4.4.3 Evaluation of System Pumpage

System pumpage during 2005 was evaluated based on the information regarding total system pumpage and individual recovery well flow presented in the quarterly monitoring reports. During 2005, the average daily combined pumpage from the five recovery wells was 1.21 MGD. System flow was primarily affected by various recovery wells being off-line during January while the vertical turbine pumps at the GTF were replaced, and by Recovery Well RW-1 being off-line for repair. There was also limited downtime due to maintenance and repair of the various treatment system appurtenances. Quarterly pumpage records and system flow data for 2005 were summarized by LKB and reproduced in Table 2 of Appendix C.

SECTION 5.0
AIR STRIPPER STACK EMISSIONS MONITORING RESULTS

LKB used the water-quality data generated at the Town's on-site laboratory and the operational data recorded by Town personnel to calculate the average concentrations of individual VOCs in the air stripper stack exhaust during each quarter of 2005. The results were compared to the stack discharge limits established by the Consent Decree. The results from this comparison indicated that the concentrations of one or two VOCs were usually slightly higher than the limits during one or more quarters of 2005. However, previous dispersion modeling of similar low concentrations has consistently shown that these concentrations of these VOCs do not result in exceedances of the NYSDEC Air Guide No. 1 Short-Term or Annual Guideline Concentrations (SGCs and AGCs, respectively) at the downwind property boundary. Therefore, additional dispersion modeling was not warranted during 2005.

SECTION 6.0
DISCUSSION AND RECOMMENDATIONS

6.1 Discussion

6.1.1 Facility Operations

Review of the operational data provided in the quarterly reports indicates that the GTF maintained an average on-line performance of approximately 84 percent during 2005. Approximately 440 million gallons of groundwater were pumped, treated and recharged, at an average daily flow rate of 1.21 MGD (Figure 1).

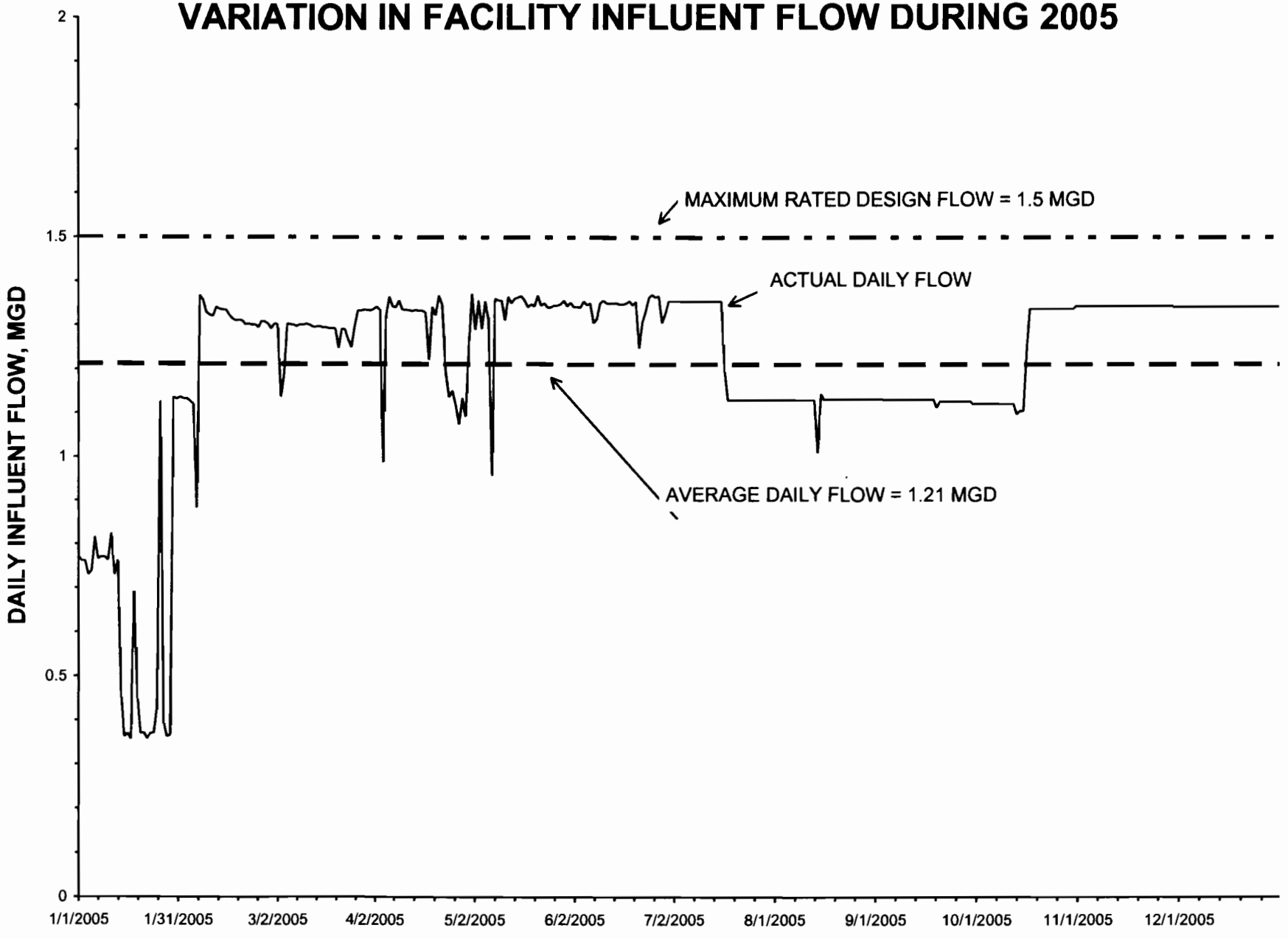
The GTF's performance on a quarterly basis is summarized below:

Reporting Period	On-Line Performance (%)	Avg. Daily Flow (MGD)	Total Flow (MG)
1st Quarter of 2005	75	1.08	97
2nd Quarter of 2005	92	1.32	120
3rd Quarter of 2005	81	1.17	103
4th Quarter of 2005	90	1.30	120

Determination of the on-line performance of the GTF is based on the percentage of the total available operating time that the GTF was actually on-line during the reporting period. The total available pump operating time during 2005 was 43,800 hours, based on five recovery wells operating 24 hours per day for 365 days. The total downtime recorded on the Daily Operations Reports during 2005 was approximately 7,000 hours.

As shown in Figure 1, the majority of the downtime occurred during the first and third quarters of 2005. This downtime was primarily associated with replacement of the vertical turbine pumps at the GTF, and Recovery Well RW-1 being off-line for repair, but included routine maintenance and repair of the various treatment system appurtenances.

FIGURE 1
VARIATION IN FACILITY INFLUENT FLOW DURING 2005



TOWN OF OYSTER BAY GROUNDWATER TREATMENT FACILITY

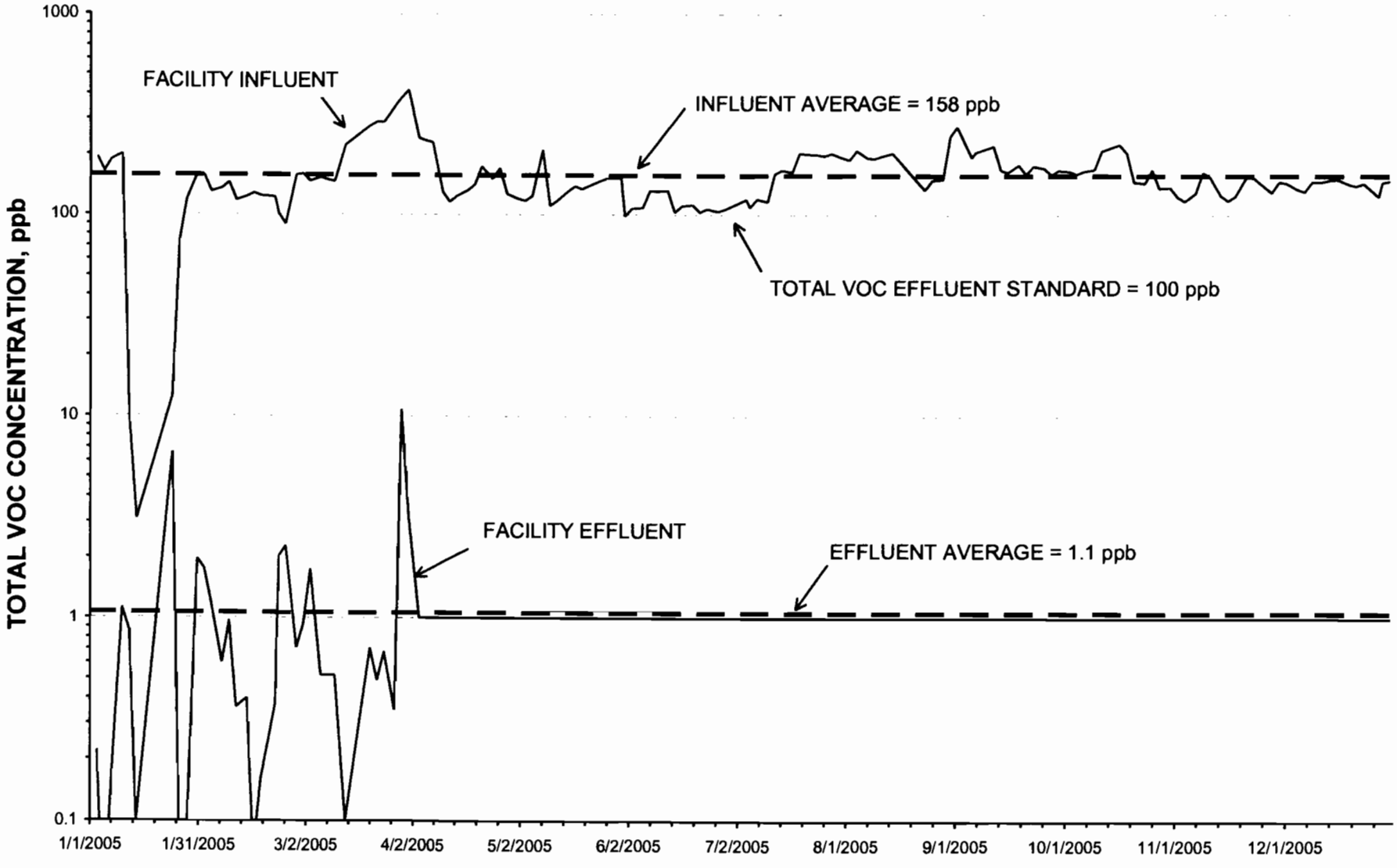
Based on the Town laboratory's data, which were quality checked with the monthly SPDES analyses, during 2005, the total VOC concentration of the GTF influent averaged 158 ppb and the total VOC concentration of the effluent averaged 1.1 ppb (Figure 2). The total VOC concentration of the GTF influent varied according to which recovery wells were on-line, but otherwise remained relatively constant during 2005. The relative proportions of the individual VOC species comprising the plume also remained consistent during 2005 (Figure 3).

With respect to the individual recovery wells, total VOC concentrations in Recovery Wells RW-1 and RW-2 remained relatively constant during 2005. In contrast, total VOC concentrations in Recovery Wells RW-3, RW-4 and RW-5 spiked initially during the second quarter of 2005, shortly after each well was returned to service following replacement of the vertical turbine pumps, then decreased and remained relatively constant during the second half of the year (Figure 4). The initial spikes in concentration in these three recovery wells is attributed to recovery of relatively undiluted plume water when the recovery wells were first turned on. The subsequent decreases and stabilization in concentration are attributed to the re-establishment of their capture zones and the collection of uncontaminated groundwater from the downgradient sides of the recovery wells in addition to the VOC plume.

The treatment efficiency of the GTF air stripper averaged 98.9 percent during 2005 (Figure 5), which is comparable to that achieved in previous years. Removal efficiencies have remained high for three reasons. Firstly, a five-well recovery system tends to dampen out large variations in influent VOC concentrations to the air stripper. Secondly, the amount of VOC loading to the air stripper has been gradually decreasing over time in response to the ongoing remediation. Lastly, a high awareness exists among operating personnel regarding maintenance of the stripper internals through observation of the tower packing, where iron deposit fouling can cause a drop in process efficiency. Acid washes of the tower internals are part of regular maintenance.

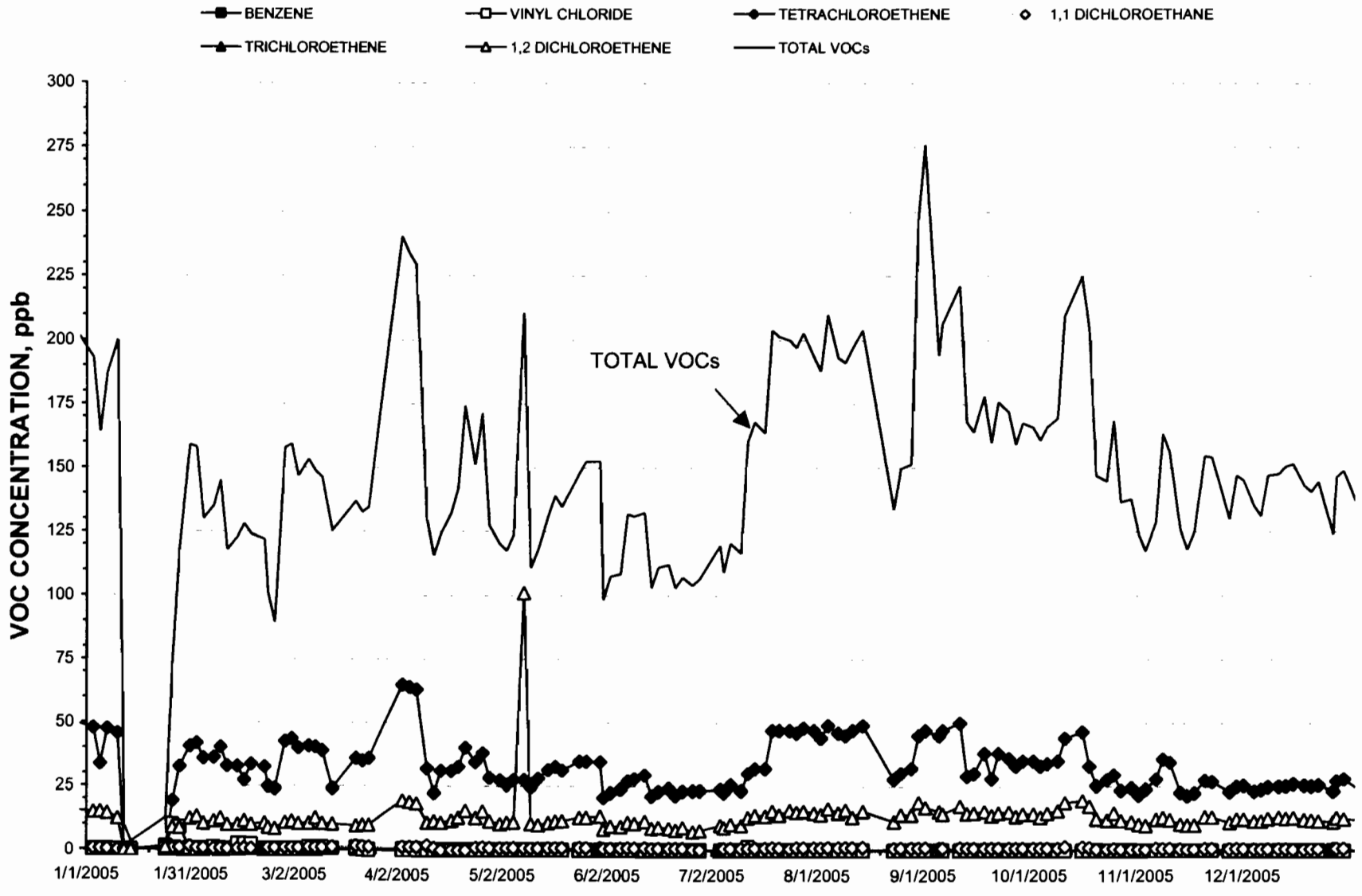
The VOC results from the 12 monthly SPDES effluent samples collected during 2005 did not detect any VOCs above the certified laboratory's method detection limits, which are lower than the Groundwater Aquifer Limits listed in Table 1. Moreover, the results from the self-monitoring effluent analyses performed three times per week at the Town's on-site laboratory did not detect any VOCs above the limits listed in Table 1.

FIGURE 2
COMPARISON OF INFLUENT/EFFLUENT TOTAL VOC CONCENTRATIONS DURING 2005



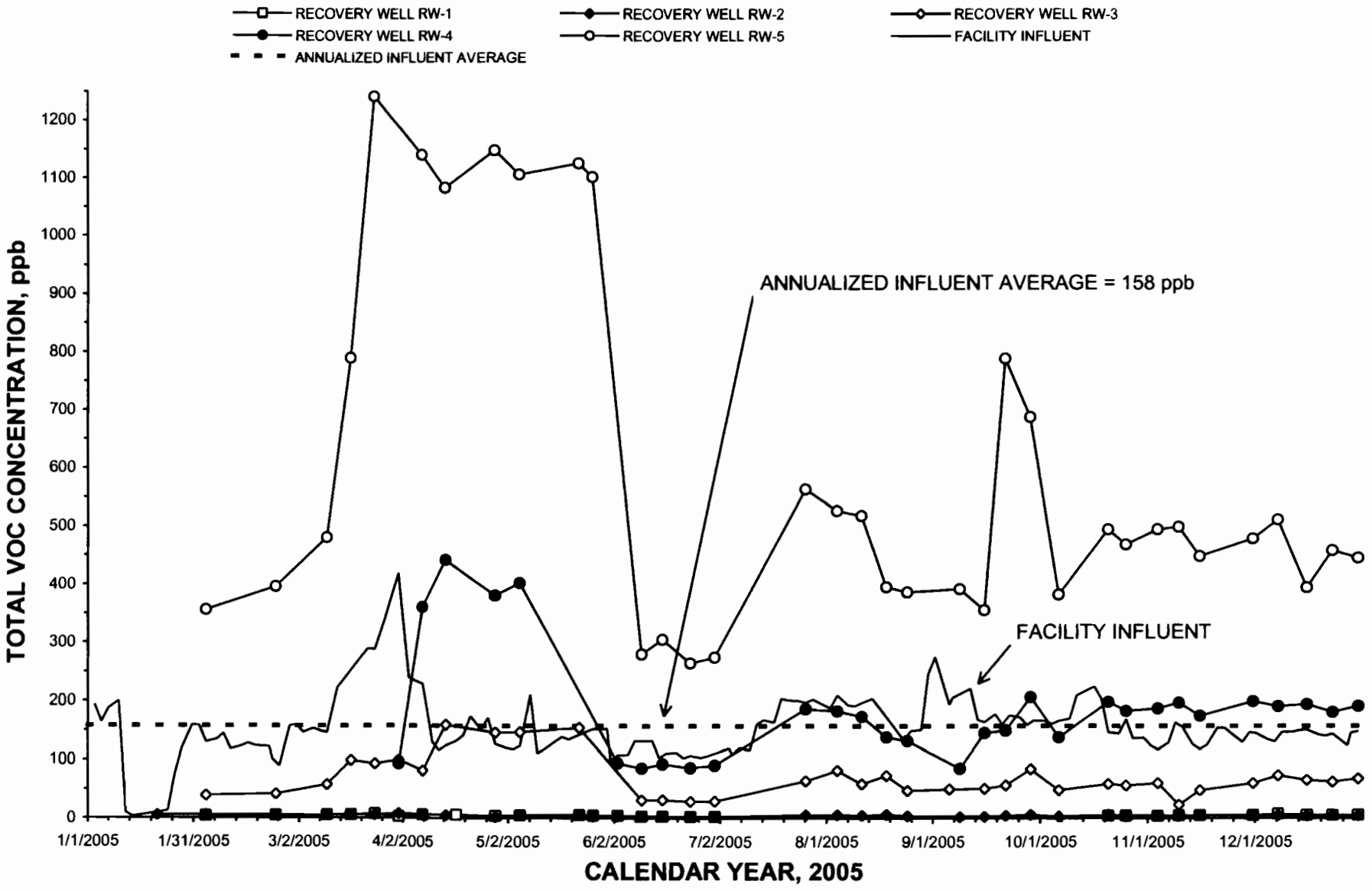
TOWN OF OYSTER BAY GROUNDWATER TREATMENT FACILITY

FIGURE 3
VARIATION IN FACILITY INFLUENT VOC CONCENTRATIONS DURING 2005



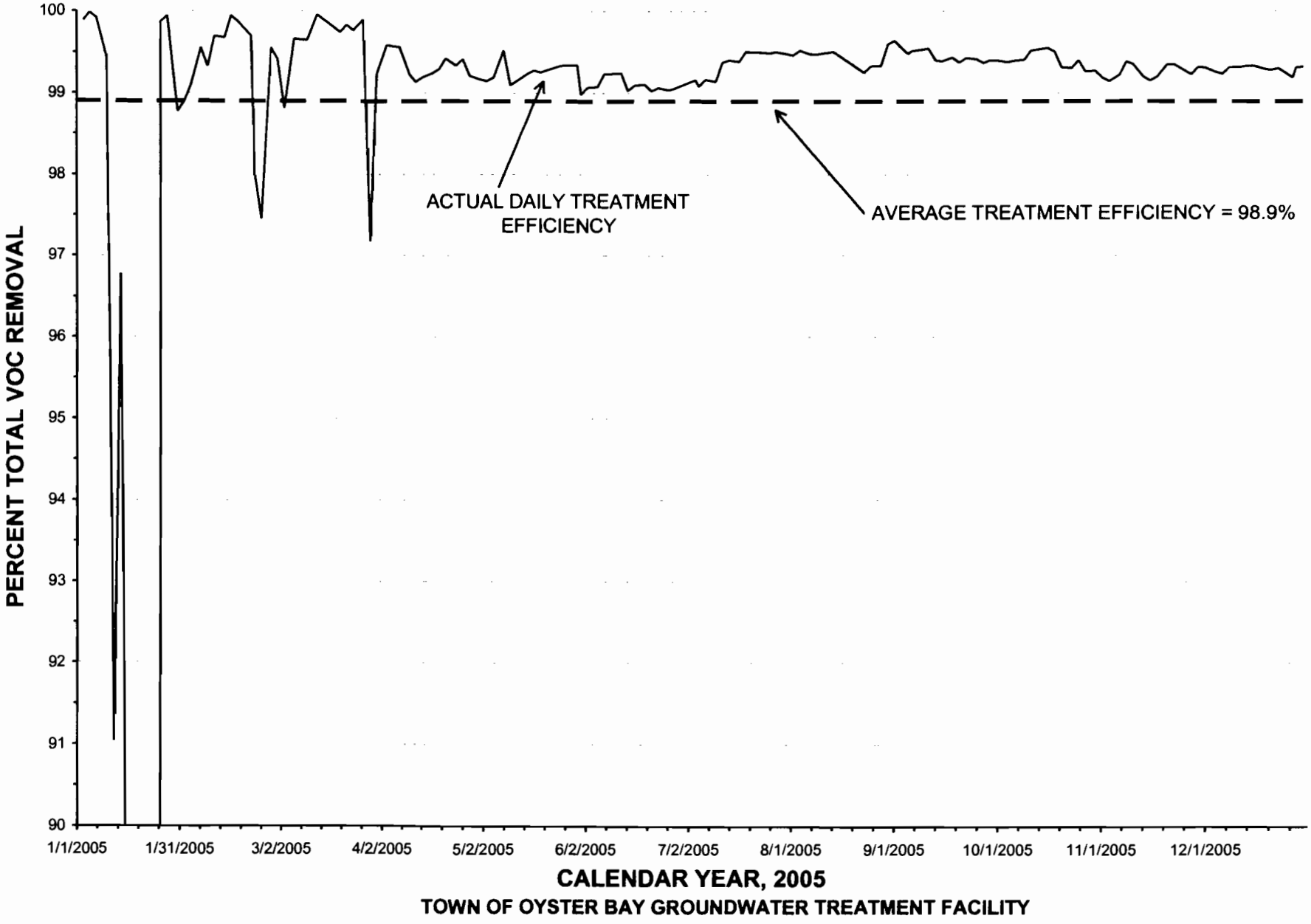
TOWN OF OYSTER BAY GROUNDWATER TREATMENT FACILITY

FIGURE 4
VARIATION IN WELLFIELD TOTAL VOC CONCENTRATIONS DURING 2005



TOWN OF OYSTER BAY GROUNDWATER TREATMENT FACILITY

FIGURE 5
VARIATION IN TREATMENT EFFICIENCY DURING 2005



Therefore, based on the results from the SPDES monitoring and self-monitoring performed during 2005, no additional treatment units are required to remove VOCs from the GTF effluent since all Consent Decree limits continue to be satisfied.

The inorganic and leachate indicator parameter results from the 12 monthly SPDES effluent samples collected during 2005 indicate that with the exception of ammonia, the concentrations of the parameters analyzed for were also less than the Groundwater Aquifer Requirements listed in Table 2. The results from the self-monitoring effluent analyses performed at the Town's on-site laboratory also indicate that the ammonia concentration of the GTF effluent was often higher than the limits specified in Table 2. The concentrations of ammonia detected in the GTF effluent are less than the 10-mg/L SPDES total nitrogen limitation (applicable in Nassau County). Moreover, samples from Well M-30B-R, located adjacent to Recharge Basin No. 1 and screened at the water table, do not show elevated levels of ammonia-nitrogen. Biological assimilation of nitrogen in the recharge basin may account for its absence in the shallow groundwater near the recharge basin.

Based on this assessment of the inorganic and leachate indicator parameter results, no additional treatment units are currently proposed to remove iron or other inorganic or leachate indicator parameters from the GTF effluent.

The 2005 air stripper stack emission monitoring results (Section 5.0) indicates that the concentrations of one or two VOCs usually slightly exceeded the Consent Decree stack discharge limits during each monitoring quarter. However, previous dispersion modeling of similar concentrations of these VOCs has shown that they do not result in exceedances of the NYSDEC SGCs and AGCs at the downwind property line. Therefore, on the basis of these findings, no additional treatment units are currently required to remove VOCs from the air stripper stack exhaust since all applicable guideline values are currently satisfied.

6.1.2 Hydraulic Control of the VOC Plume

In order to evaluate and compare the respective effects of system flow and recharge on water levels within the capture zone, data on system pumpage, recharge and water-level elevations were compiled for 2004-2005, and summarized graphically in Figure 6. Facility flow data were compiled from the "Daily Operations Reports" and are presented

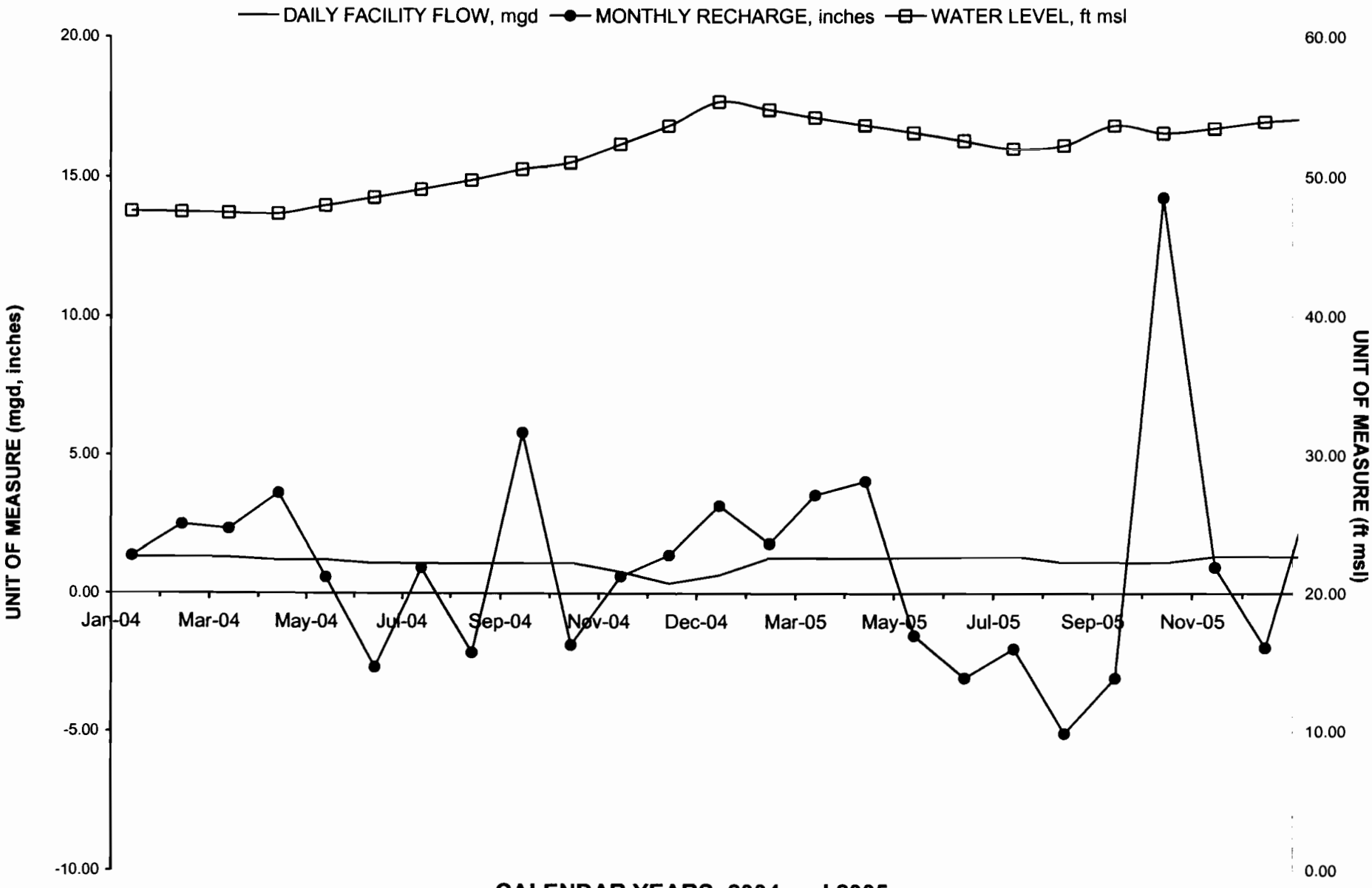
in Figure 6 as the average flow for the days on which the hydraulic monitoring rounds were conducted. Recharge was estimated as the monthly precipitation corrected for evapotranspiration. Precipitation data were obtained from a meteorological station located approximately 2 miles east of the site. Evapotranspiration (ET) data were obtained from the local U.S. Soil Conservation Service office in the form of historical monthly ET values for grass, which is the dominant ground cover at both the OBSWDC and adjacent Bethpage State Park. The water-level data shown in Figure 6 represent the average water-level elevations recorded for the five recovery wells during each hydraulic monitoring round.

Review of Figure 6 indicates that facility flow, and to a lesser extent unusual recharge conditions, are the primary factors influencing water-level elevations in the capture zone. Specifically, the average water-level elevation in the recovery wells remains very constant over time, despite the normal seasonal variation in recharge to the aquifer. However, unusual recharge conditions, such as the lack of recharge during the second and third quarters of 2005, also appear to influence water-level elevations in the recovery wells. Moreover, there is a time lag of several months between when recharge occurs and its effect is seen on water level elevations in the recovery wellfield.

Based on the above evaluation, if the average facility flow is maintained at the current levels, regardless of seasonal recharge, hydraulic monitoring can continue to be safely reduced to quarterly from the original monthly schedule. This specific revision to the current monitoring procedures is provided for in the Consent Decree, and was implemented beginning with the fourth quarter 1993 monitoring round.

As discussed previously in Section 4.4.1, analysis of the limiting flow lines and plume boundaries for the 2005 data indicates that hydraulic control of the Landfill VOC plume was maintained during all four operating quarters. Moreover, as shown in the various figures contained in Appendix A of Appendix C, although the GTF was not fully operational during the first and third quarters of 2005, the capture zone appears to have been sufficient to maintain hydraulic control of the Landfill VOC plume. Overall, the configuration of the capture zone was comparable to previous operating years.

FIGURE 6
CORRELATION OF RECOVERY WELL AND HYDRAULIC DATA



CALENDAR YEARS, 2004 and 2005

TOWN OF OYSTER BAY GROUNDWATER TREATMENT FACILITY

6.1.3 Variation in Wellfield VOC Concentrations

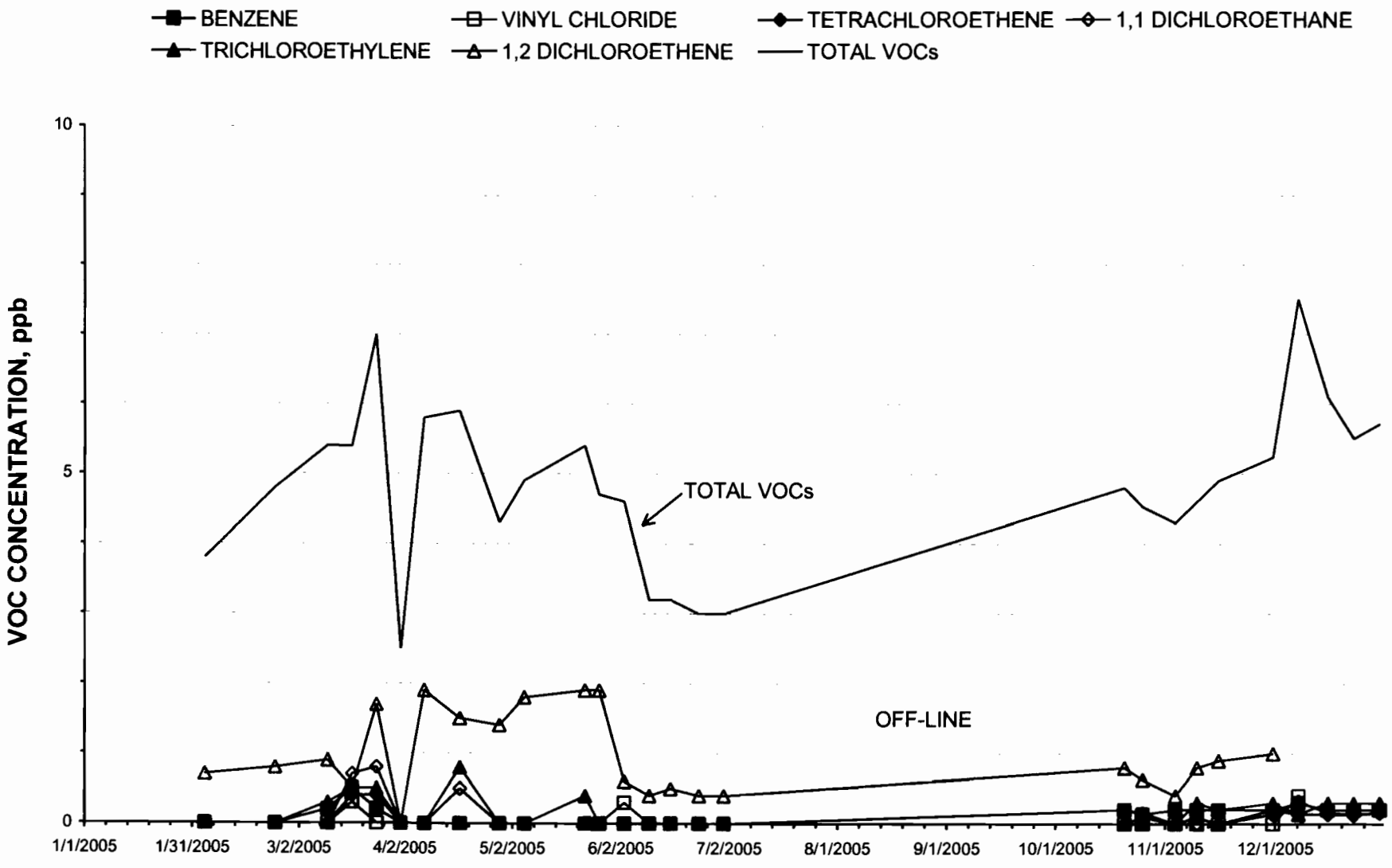
During 2005, the Town continued to monitor VOC concentrations in each recovery well on a weekly basis. These data are summarized for each recovery well in Figures 7 through 11, respectively. Review of these figures indicates that total VOC concentrations in Recovery Wells RW-1 and RW-2 remained relatively consistent during 2005. In contrast, total VOC concentrations in Recovery Wells RW-2, RW-3 and RW-5 spiked initially during the second quarter of 2005 when each was returned to service following replacement of the vertical turbine pumps, then decreased and stabilized during the second half of the year. The initial spikes in concentration in these three recovery wells are attributed to recovery of relatively undiluted plume water when the recovery wells were first turned on. The subsequent decreases and stabilization in concentration are attributed to the re-establishment of their capture zones and the collection of uncontaminated groundwater from the downgradient sides of the recovery wells along with the plume.

As shown in Figures 7 through 11, the trends in total VOC concentration for Recovery Wells RW-1 and RW-2 can be attributed to a variety of VHOs, whereas the trend for Recovery Well RW-3 is associated primarily with two compounds: 1,2-dichloroethene and tetrachloroethene. The trends for Recovery Wells RW-4 and RW-5 are also associated primarily with two compounds: trichloroethene and tetrachloroethene. The trends observed for the recovery wells are consistent with the monitoring well data described previously in Section 4.3.

6.1.4 Remediation of Groundwater Plumes from Other Sources

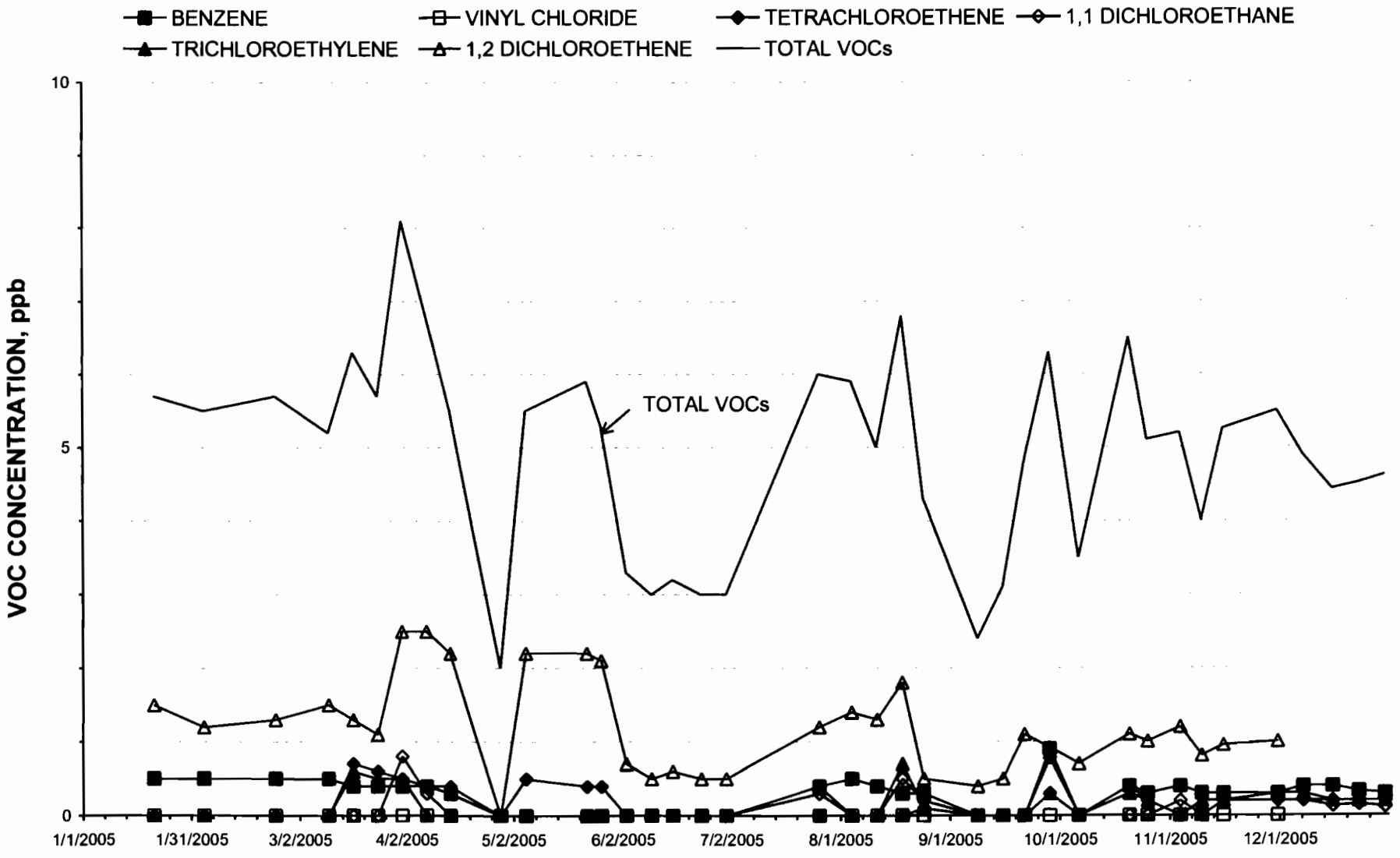
Review of the available data regarding the distribution of VOCs in groundwater indicates that a portion of the VOC plume being remediated by the GTF is not attributable to the Landfill, but associated instead with one or more adjacent properties. Specifically, the concentrations of VOCs detected in groundwater have not been homogeneously distributed as would be expected from hydrodynamic dispersion of a plume originating entirely from the Landfill.

FIGURE 7
VARIATION IN VOC CONCENTRATIONS AT RECOVERY WELL RW-1 DURING 2005



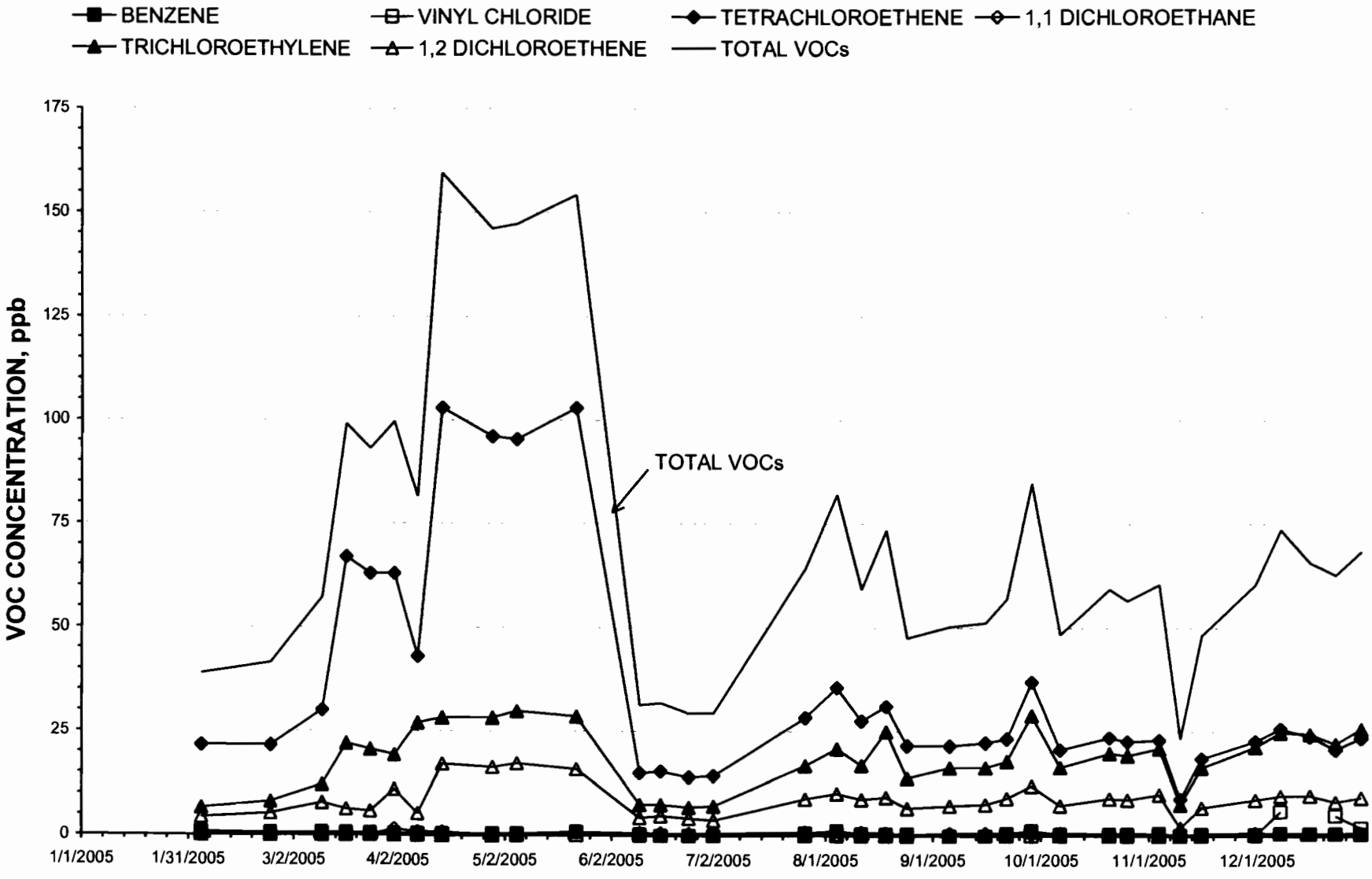
TOWN OF OYSTER BAY GROUNDWATER TREATMENT FACILITY

FIGURE 8
VARIATION IN VOC CONCENTRATIONS AT RECOVERY WELL RW-2 DURING 2005



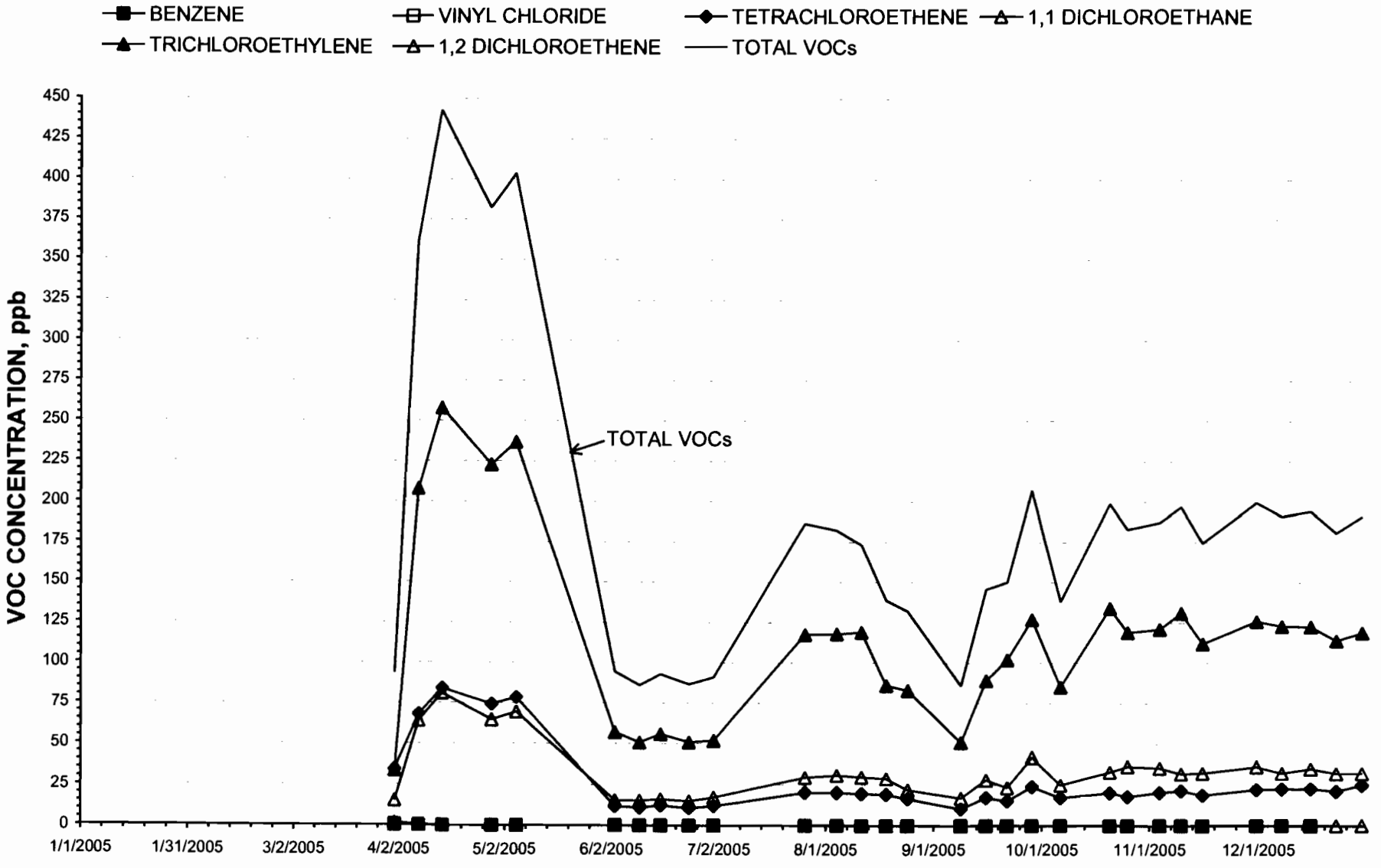
TOWN OF OYSTER BAY GROUNDWATER TREATMENT FACILITY

FIGURE 9
VARIATION IN VOC CONCENTRATIONS AT RECOVERY WELL RW-3 DURING 2005



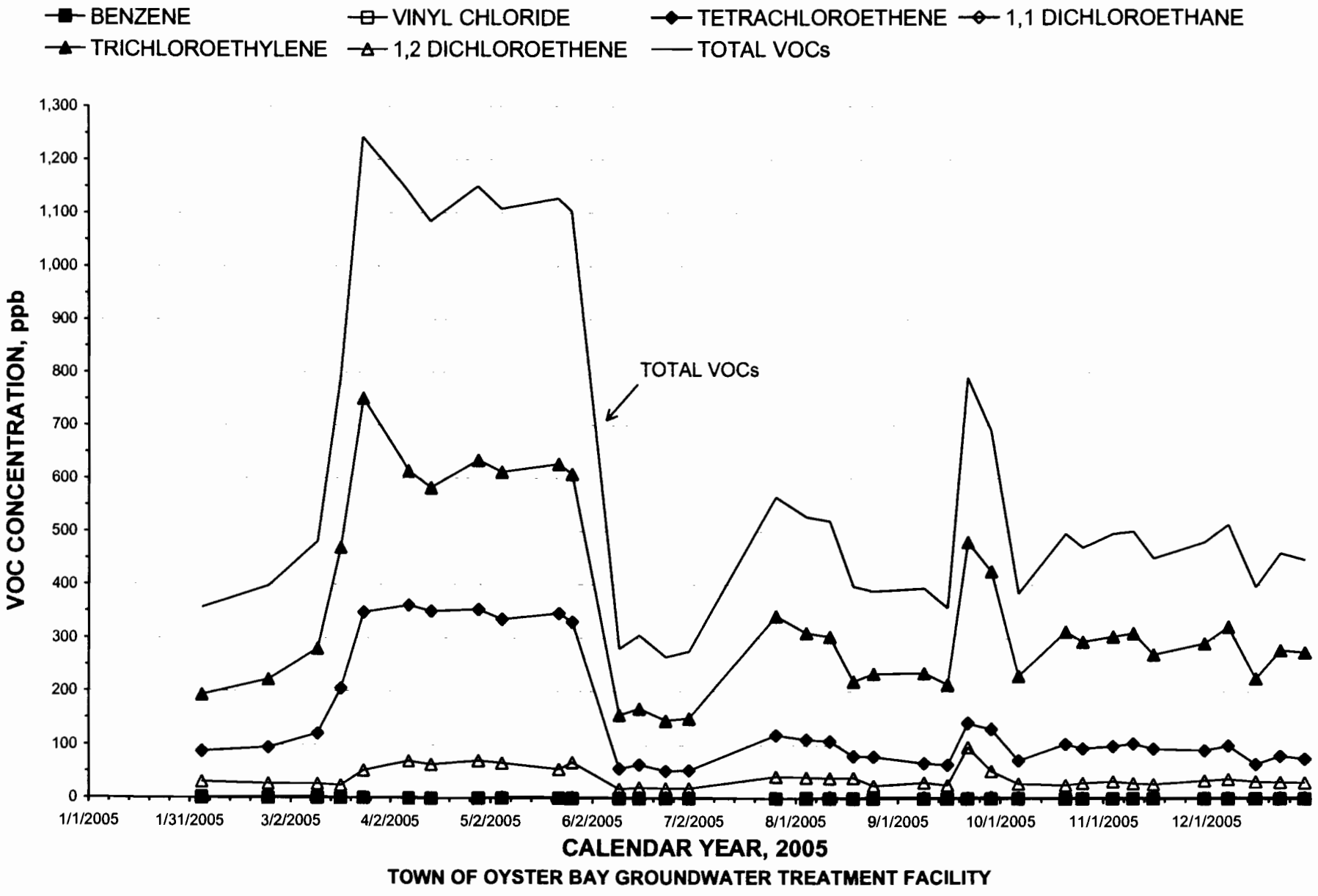
TOWN OF OYSTER BAY GROUNDWATER TREATMENT FACILITY

FIGURE 10
VARIATION IN VOC CONCENTRATIONS AT RECOVERY WELL RW-4 DURING 2005



TOWN OF OYSTER BAY GROUNDWATER TREATMENT FACILITY

FIGURE 11
VARIATION IN VOC CONCENTRATIONS AT RECOVERY WELL RW-5 DURING 2005



TOWN OF OYSTER BAY GROUNDWATER TREATMENT FACILITY

The current distribution of VOCs in groundwater, based on the 2005 quarterly monitoring data, is also consistent with this information. Specifically, much higher concentrations of tetrachloroethene, trichloroethene and several other VHOs which are breakdown products of tetrachloroethene, were detected on the east side of the plume in Monitoring Wells MW-7B and MW-8A, and Recovery Wells RW-3, RW-4 and RW-5.

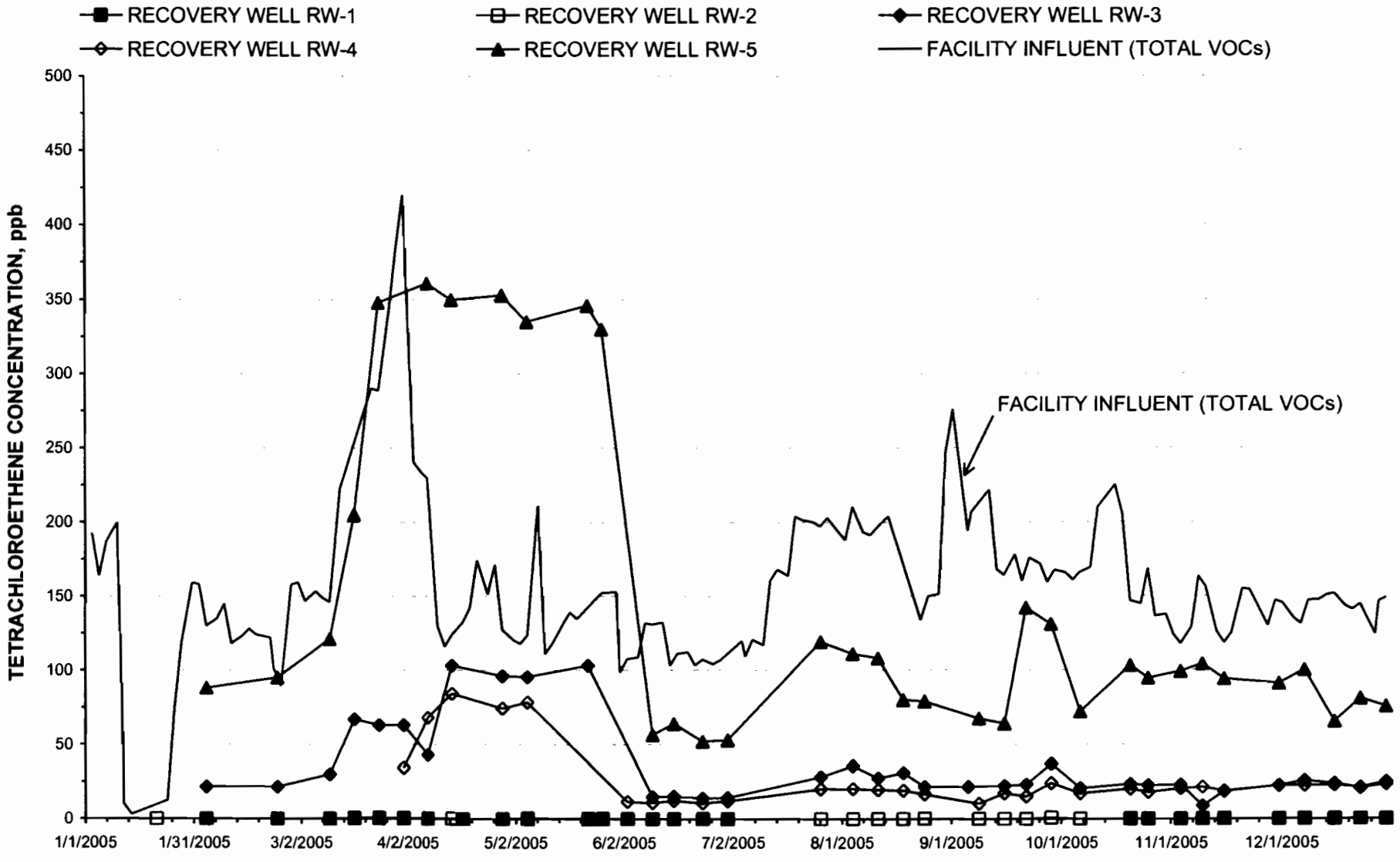
The fact that high total VOC concentrations have historically been detected in Well MW-8A, which is screened in the water-table zone, and not in Well MW-8B, which is screened in the shallow potentiometric zone, indicates that this well cluster is located immediately downgradient of a separate VOC source near the east side of the Landfill. In contrast, at Well Cluster MW-6, which is located immediately downgradient of the Landfill, VHOs were not detected in the water-table zone monitoring well (Well MW-6A) during 2005.

The Claremont Site is located directly upgradient of Well Cluster MW-8, at the northerly end of what has historically been referred to as the "eastern tetrachloroethene plume". Tetrachloroethene is the major contaminant historically associated with the Claremont Site, although previous investigations have identified high concentrations of other VHO compounds, such as trichloroethene, in soil and groundwater.

With respect to the Town's recovery wellfield, the Claremont Site is located closest to, and hydraulically upgradient from, Recovery Well RW-5, and at increasing distance from Recovery Wells RW-4, RW-3, etc. The detected concentrations of tetrachloroethene, trichloroethene and several other VHO compounds, show a marked decrease with increasing distance from the Claremont Site. This relationship is illustrated in Figure 12, which demonstrates the wide variation in tetrachloroethene concentrations detected in the individual recovery wells during 2005. Figure 13 is a cross-section plot showing the average annual concentration of selected VOCs at each recovery well, and clearly illustrates the increasing concentration of tetrachloroethene and trichloroethene in the direction of the Claremont Site.

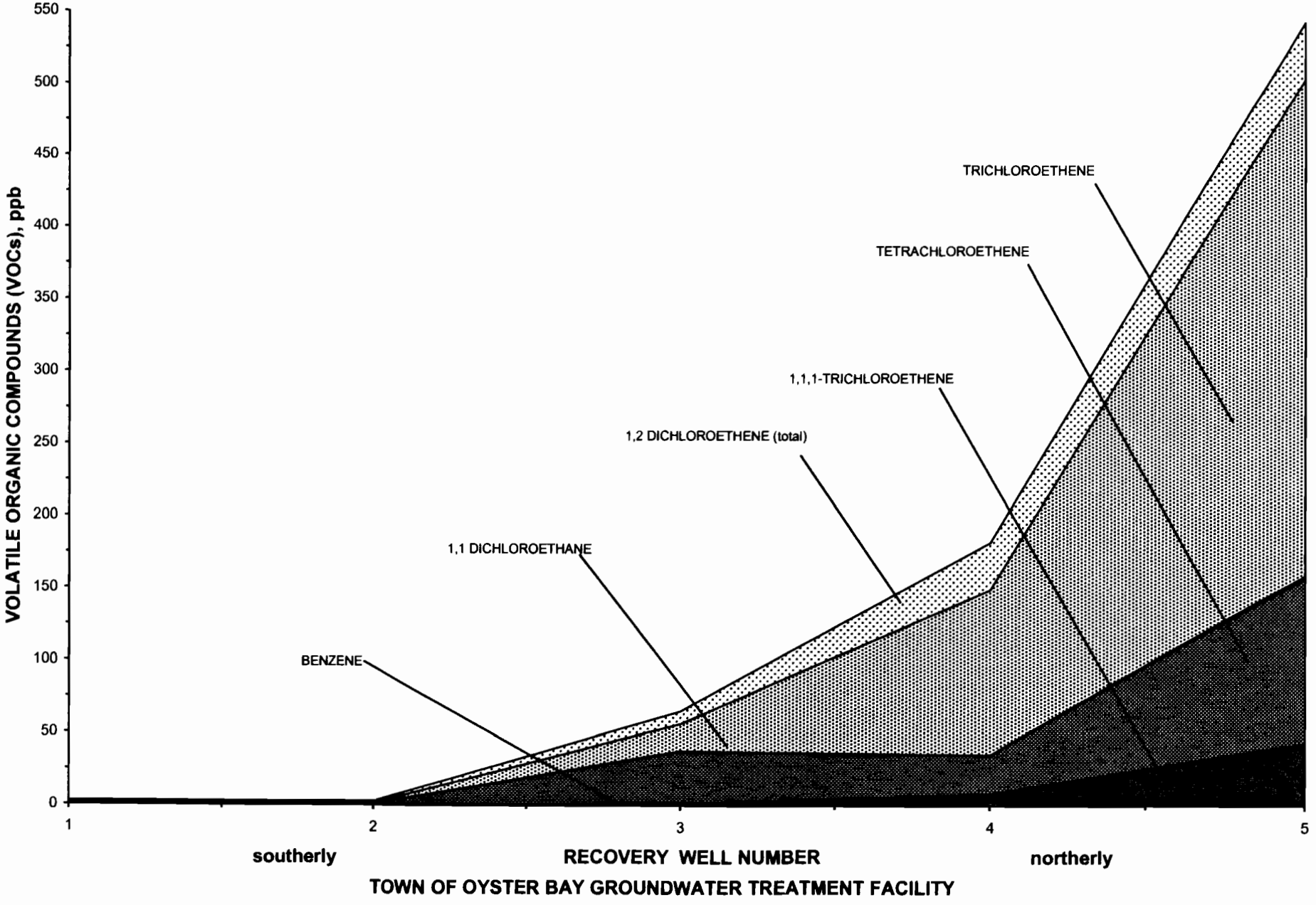
Aromatic hydrocarbons, in contrast to VHOs and tetrachloroethene, were primarily detected at lower concentrations, in wells located downgradient of the Landfill and the adjacent Nassau County Fireman's Training Center.

FIGURE 12
VARIATION IN WELLFIELD TETRACHLOROETHENE CONCENTRATIONS DURING 2005



TOWN OF OYSTER BAY GROUNDWATER TREATMENT FACILITY

FIGURE 13
AVERAGE DISTRIBUTION OF VOCs ACROSS RECOVERY WELLFIELD DURING 2005



6.1.5 Overview of Other Monitoring Program Results

The results from the ambient air and soil-gas quality monitoring performed during 2005 indicate that the Landfill, and all other OBSWDC operations together, do not have a significant impact on air quality. The results from the thermal oxidizer test indicate that the thermal oxidizer continues to operate according to design and that the current air quality limits are satisfied.

6.2 Recommendations

6.2.1 Groundwater Treatment Facility

Under the current operating conditions, the analytical results compiled during 2005 do not support the need for additional groundwater or air stripper-exhaust treatment units at this time. However, continued quantitative, maintenance and facility improvements should be identified and implemented. In this regard, it is recommended that the Town maintain certification of its on-site environmental laboratory under New York State's Environmental Laboratory Approval Program (ELAP) and perform the quarterly groundwater VOC analyses in-house as an effective means to expedite analyses and control project costs. It is also recommended that the Town continue to perform acid washes of the air stripper internals on an as-needed basis. With respect to the various recharge basins utilized for the project, it is recommended that the Town continue the phased cleaning of the basins so that sufficient recharge capacity is maintained.

Since the overall dimensions of the Landfill plume have decreased in response to the ongoing remediation, some reduction in flow from the recovery wellfield may be possible without compromising hydraulic control of the Landfill plume. Flow reduction may be accomplished by throttling flow from the wellfield or selected wells, taking one or more wells out of operation for some period of time, or a combination of these techniques. Although some cost savings can be realized if flow reduction is implemented, the real benefit is in reducing the hydraulic loading on the various recharge basins.

6.2.2 Groundwater Monitoring Program

Based on the present demonstrated hydraulic control over the Landfill VOC plume regardless of the normal variation in total system flow and seasonal groundwater recharge, it is recommended that the frequency of hydraulic monitoring continue to be reduced to quarterly from monthly, as previously discussed in Section 6.1.2. It is also recommended that water-level measurements continue to be collected from the available Claremont Site Well Clusters located nearest to the Town's recovery wellfield as part of the quarterly monitoring activities to provide current data at these locations.

The water-quality data indicate that groundwater quality is continuing to improve in response to the ongoing remediation and that at certain locations (e.g., Well MW-9D) the concentrations of Landfill-related VOCs continue to exceed water-quality standards. Moreover, the hydraulic and water-quality data collected at Well Cluster MW-8 during 2005 indicated that the on-site groundwater treatment system at the Claremont Site appears to be altering local hydraulic and water-quality conditions in the eastern portion of the plume area. Therefore, it is recommended that the quarterly groundwater-monitoring program be continued without change to track the progress of the ongoing remediation and evaluate potential impacts from the Claremont Site's groundwater remediation system on the Town's system. It is also recommended that Well MW-9D, which is not part of the quarterly monitoring program but contains significant concentrations of Landfill-related contaminants, continue to be sampled annually to provide data on the deep potentiometric zone of the aquifer at this location downgradient of the Landfill and upgradient of the Town's recovery wellfield. Any future reduction in the testing frequency specified in the Consent Decree will require the concurrence of the regulatory agencies. Any improvements in sampling/analytical protocols should be incorporated into the program as they are developed, after approval by the regulatory agencies.

6.2.3 Thermal Oxidizer Stack Emissions Monitoring Program

The Town is required to continue this program on an annual basis, as proscribed by the Consent Decree. All monitoring results will be compared to the latest version of NYSDEC Air Guide No. 1. Improvements in sampling/analytical protocols should be incorporated into the program as they are developed after approval by the regulatory agencies.

6.2.4 Ambient Air and Soil-Gas Quality Monitoring Program

In Early 1998, it was recommended that the Town request approval from the NYSDEC to reduce the frequency of ambient air monitoring from quarterly to annual. Pending receipt of such approval, the Town is required to monitor on a quarterly basis.

6.2.5 Air Stripper Stack Emissions Monitoring Program

The results presented in Section 5.0 indicate that the current methodology is viable for assessing air quality impacts from the GTF at the OBSWDC property line. Therefore, it is recommended that this methodology continue to be used for subsequent reports.

APPENDIX A

WELL LOCATION MAP

APPENDIX B

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX
EVALUATION OF VOLATILE ORGANIC COMPOUNDS
IN AIR AND SOIL GAS AND SOIL GAS PRESSURE READINGS

2005 Annual Summary Report

RTP Environmental Associates, Inc.
March 2006

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

EVALUATION OF VOLATILE ORGANIC COMPOUNDS IN AMBIENT AIR AND SOIL GAS AND SOIL GAS PRESSURE READINGS

2005 Annual Summary Report

Prepared for:

Town of Oyster Bay
Department of Public Works
Syosset, New York

Prepared by:

RTP Environmental Associates, Inc.
400 Post Avenue
Westbury, New York

March 2006

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

EVALUATION OF VOLATILE ORGANIC COMPOUNDS IN AMBIENT AIR AND SOIL GAS AND SOIL GAS PRESSURE READINGS

2005 Annual Summary

TABLE OF CONTENTS

LIST OF TABLES

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

EVALUATION OF VOLATILE ORGANIC COMPOUNDS IN AMBIENT AIR AND SOIL GAS AND SOIL GAS PRESSURE READINGS

1.0 INTRODUCTION

The Town of Oyster Bay (the Town) has contracted RTP Environmental Associates, Inc. to conduct a supplemental gas monitoring program of volatile organic compounds (VOCs) and soil gas pressures during 2005 on a quarterly basis at the Old Bethpage Landfill. The landfill is located within the Old Bethpage Solid Waste Disposal Complex (OBSWDC). The ambient air, soil gas and soil gas pressure monitoring program was designed to comply with several requirements stipulated in the New York State Consent Decree (83CIV5357) RAP Attachment 2. The details of the specific monitoring methods used, laboratory analyses performed and the results for all program phases including VOC monitoring, have been presented in the 2005 quarterly reports. The quarterly reports have been forwarded to the Town as they were completed. The other monitoring efforts being conducted to complete the Consent Decree requirements were reported separately. This evaluation has been prepared to review and summarize the ambient air and soil gas VOC concentration and soil gas pressure data that were collected during the 2005 monitoring efforts.

The OBSWDC is located in the Town of Oyster Bay, New York. The OBSWDC is comprised of a landfill, inactive power generating facility, thermal oxidizer, leachate and groundwater treatment systems, clean fill disposal site, solid waste recycling center, solid waste transfer station, vehicle maintenance garage and scale house. The OBSWDC is bordered on the north by Bethpage Sweethollow Road, on the west by Round Swamp Road and on the east by Winding Road. A concrete plant and the Nassau County Firemen's Training Center (NCFTC) are located along the southern border of the OBSWDC and a campground is located along the northwest border. An industrial park adjoins the northeastern border of the OBSWDC and other industrial areas exist nearby to the north and west. These other industrial areas do not have common boundaries with the OBSWDC, however, these locations are sources of air pollutants that impact the area. Other sources of air pollutants are vehicular traffic on the roads that border the OBSWDC as well as regional sources. Therefore, several other sources emitting VOCs influence the ambient concentrations being monitored.

To control landfill emissions, the landfill has undergone significant changes as part of the closure process. A gas collection system was installed along the perimeter of the landfill and portions began operating in 1981 and a capping program was initiated in 1983. The capping program involved placing an impervious clay cap over the landfill. The capping program was completed in January, 1993. The perimeter gas collection system was expanded in 1995. Six landfill gas extraction wells (LGV23, LGV24, LGV25, LGV26, LGV27 and LGV28) were installed and became operational August 16, 1995. These wells are located along the western and southern perimeters of the capped landfill and they are designed to contain gas migration and to maintain acceptable methane levels at the thermal oxidizer. Four (4) additional perimeter gas collection wells (LGV29, LGV30, LGV31 and LGV32) were installed and became operational during 1996 along the west side of the Haul Road, near Briden Construction. The perimeter gas collection well loop around the landfill was also completed during 1996.

The thermal oxidizer was installed in 1987 to combust the landfill gas collected by the perimeter collection system. In early 2001, the contractor who was mining gas from the landfill for energy production suspended operations due to low recovery rates of landfill gas. These activities have restricted or mitigated the release of gas from the landfill and thereby reduced landfill gas and associated air pollutant emissions from this site.

As stipulated in the Consent Decree, ambient air and soil gas concentrations and soil gas pressure levels are currently measured on a quarterly basis at selected points around the landfill. The results are reported quarterly and are summarized in this report. The air emissions from the thermal oxidizer were tested on a quarterly basis initially and are now tested on an annual basis. The test results for the thermal oxidizer have been reported separately.

2.0 ANALYSIS OF DATA

2.1 Analysis of the 2005 Data Base

The established target compound list (TCL) for this study was based on the Volatile Organic Sampling Train (VOST) method developed by the United States Environmental Protection Agency (USEPA) to quantify various VOC emissions. The standard VOST sampling train was modified slightly to make a portable unit for in-field use. The sampling train and the sampling and analysis protocols along with all the details on data collection, analysis and other documentation are provided in the quarterly reports.

The sampling events were scheduled to observe concentrations during various seasons of the year. As a conservative step, the sampling events typically take place during periods of steady or falling atmospheric pressure. These periods would coincide with the greatest potential for releases of VOCs from the landfill. For 2005, three (3) of the four (4) quarterly tests were conducted during periods of steady or falling atmospheric pressure. Sampling for each quarterly test occurred over a consecutive 24-hour period. Occasionally a test will be performed during steady to rising atmospheric pressure conditions due to testing deadlines, as was the case during the third quarter test Table 2.1 provides the months during which the quarterly test efforts for each year of the sampling program were conducted. Monitoring for the 2005 sampling program which is evaluated herein, occurred in March, June, August and November 2005.

The program TCL is provided in Table 2.2 along with toxicity and guideline concentration values. The TCL has been modified during the course of the monitoring effort because of changing State requirements, analytical capabilities and continuing data review as related to the tentatively identified compounds being detected.

Several changes to the TCL and analytical procedures had been made for the 1997 program and these changes apply to the 2005 program as well. The designation for cis-1,2-dichloroethene was changed from a tentatively identified compound to a target compound as the result of preceding tests. The combined 1-ethyl-2-methylbenzene and 1-ethyl-4-methylbenzene isomers are reported as 2/4-ethyltoluene (total) as a means of simplifying the data reduction reporting process, and because the combined isomer concentration is required for direct comparison to the NYSDEC guideline value. Furthermore, a practical quantitation limit (PQL) was introduced by the analytical laboratory H2M, for several compounds as a result of lowering the minimum detection limit from twenty (20) nanograms to five (5) nanograms. The PQL represents the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. H2M introduced a target tentatively identified compound (TIC) minimum detection limit of twenty-five (25) ng, (50 ng for one compound) which also can be applied to additional TICs when less than six (6) are detected. Otherwise, the lowest mass loading of the top six (6) additional TICs is considered to be the additional TIC minimum detection limit of a particular sample.

During the 2003 monitoring program the designation of decane has been changed from an additional TIC to a targeted TIC on the TCL. This change first became effective in the 2003 fourth quarter testing effort.

The New York State Department of Environmental Conservation (NYSDEC) provides both short-term (1-hour)

TABLE 2.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

PROGRAM EFFORTS ACCORDING TO CALENDAR QUARTER

Year	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
1990-1991	July	October	February	May
1992-1993	October	March	May	August
1994	April	July	September	December
1995	March	May	July	October
1996	March	June	August	November
1997	February	April	August	November
1998	March	May	August	November
1999	March-April	May	July	November
2000	March	June	August	October
2001	March	May	August	September
2002	February	May	September	November
2003	March	May	August	December
2004	March	June	August	November
2005	March	June	August	November

Note:
The first two years of the program did not follow the calendar year schedule.

TABLE 2.2

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

2005 PROGRAM TARGET COMPOUND LIST
AND NYSDEC AMBIENT AIR GUIDELINE CONCENTRATIONS

CHEMICAL NAME	CAS NUMBER	AIRS CODE	24 HOUR SGC ug/m³	W (SCG)	AGC ug/m³	W (ACG)	T	CODES 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Acetone	00067-64-1	4	180,000	Z	28,000	T	L				I											
Benzaldehyde	00100-52-7	4	----		0.10	d																
Benzene	00071-43-2	4	1,300	D	0.13	E	H	U		H	A											
Bromodichloromethane	00075-27-4	4	---		0.02	D	H															
Bromoform	00075-25-2	4	---		0.90	E	M			H	I											
Bromomethane	00074-83-9	4	3,900	D	5.0	E	M			H	I											
2-Butanone	00078-93-3	4	59,000	D	5,000	E	M			H												
Carbon Disulfide	00075-15-0	6	6,200	D	700	E	M			H												
Carbon Tetrachloride	00056-23-5	4	1,900	D	0.067	E	H	U		H	B											
Chlorobenzene	00108-90-7	4	---		110	T	M			H	I											
Chloroethane	00075-00-3	4	---		10,000	E	L			H	I											
Chloroethyl Vinyl Ether	00110-75-8		----		0.10	d																
Chloroform	00067-66-3	4	150	D	0.043	E	M	U		H	I											
Chloromethane	00074-87-3	4	22,000	D	90	E	M			H	I											
Decane	00124-18-5	4	---		200	A	M										R					
Dibromochloromethane	00124-48-1	4	---		0.10	d	M															
1,2-Dichlorobenzene (o)	00095-50-1	4	30,000	Z	360	T	M				I											
1,3-Dichlorobenzene (m)	00541-73-1	4	30,000	A	360	A	M										R	R				
1,4-Dichlorobenzene (p)	00106-46-7	4	---		0.09	D	M	U		H	I											
1,1-Dichloroethane	00075-34-3	4	---		0.63	D	L			H	I											
1,2-Dichloroethane	00107-06-2	4	---		0.038	E	M	U		H	I											
1,1-Dichloroethene	00075-35-4	4	---		70.00	D	M			H	I											
cis-1,2-Dichloroethene	156-59-2	4	---		1,900	T	M															
trans-1,2-Dichloroethene	156-60-5	4	----		1,900	T	M															
1,2-Dichloropropane	00078-87-5	4	51,000	Z	4.00	E	M			H	I											
1,3-Dichloropropene,cis & trans isomers	00542-75-6	4	---		0.25	E		U		H	I											
Ethylbenzene	00100-41-4	4	54,000	Z	1,000	E	M			H												
2/4 Ethyltoluene (total)	611-14-3/622-96-8				0.10	d																
Freon 13	00075-72-9	4	560,000	A	---	X	L										R					
2-Hexanone	00591-78-6	4	4,000	Z	48.0	T																
Methylene Chloride	00075-09-2	6	14,000	D	2.10	E	M	U		H	I											
4-Methyl-2-Pentanone	00108-10-1	4	31,000	Z	3,000	E	M			H												
Styrene	00100-42-5	4	17,000	D	1,000	E	M			H	I											
1,1,2,2-Tetrachloroethane	00079-34-5	4	---		0.02	E	M	U		H	I											
Tetrachloroethene	00127-18-4	4	1,000	H	1.00	H	M	U		H	I											
Toluene	00108-88-3	4	37,000	D	400	E	L			H												
1,1,1-Trichloroethane	00071-55-6	6	68,000	D	1,000	D	L			H	I											
1,1,2-Trichloroethane	00079-00-5	4	---		1.40	D	M	U		H	I											
Trichloroethene	00079-01-6	4	54,000	Z	0.45	D	M	U		H	I											
Trichlorofluoromethane	00075-69-4	6	560,000	Y	---	X	L					C	I									
Vinyl Chloride	00075-01-4	4	180,000	D	0.11	E	H	U		H	A											
Xylenes (Total)	01330-20-7	4	4,300	D	100	E	M			H	I											

TABLE 2.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

PROGRAM TARGET COMPOUND LIST
AND NYSDEC AMBIENT AIR GUIDELINE CONCENTRATIONS

NOTES:

TOXICITY (T):
(H) HIGH Toxicity Contaminant.
(M) MODERATE Toxicity Contaminant.
(L) LOW Toxicity Contaminant.

WHO (W), Source of AGC/SGC Assignment:
(A) AGC/SGC based upon NYSDEC "Analogy".
(D) NYSDEC derived AGC/SGC.
(E) AGC based upon EPA IRIS data (RFC or Unit Risk).
(H) NYSDOH derived AGC/SGC.
(S) AGC/SGC listed is FEDERAL or NYS Standard.
(T) AGC based upon ACGIH TLV.
(Y) SGC is based on ACGIH TLV Ceiling limit.
(Z) SGC is based on ACGIH STEL.
(d) AGC assigned Moderate Toxicity "de minimis" limit.
(*) AGC assigned High Toxicity "de minimis" limit.
(---) There is no SGC for this compound.

WHO (W), Source of special AGC/SGC Interim Assignment:
(s) AGC/SGC based upon Equivalent FEDERAL or NYS Standard.
(X) There is no AGC/SGC value for this contaminant.

-----codes-----
111111
123456789012345:
codes, (Position 1):
(U) AGC equivalent to "one in a million risk".
codes, (Position 3):
(H) FEDERAL HAP identified by 1990 CAAA.
codes, (Positions 4 & 5):
(A) ACGIH Human Carcinogen.
(B) ACGIH Suspected Human Carcinogen.
(C) ACGIH Ceiling Limit.
(G) ACGIH Simple Asphxiant.
(I) Refer to ACGIH Handbook.
(K) Multiple TLVs assigned in ACGIH Handbook.
codes, (Position 8):
(Q) REFERENCED AGC adjusted for elemental assignment.
codes, (Position 9):
(Q) REFERENCED SGC adjusted for elemental assignment.
codes, (Position 10):
(R) AGC ASSIGNED TO REFERENCED COMPOUND.
codes, (Position 11):
(R) SGC ASSIGNED TO REFERENCED COMPOUND.
codes, (Position 12):
(Q) AGC ASSIGNED AS DIFFERENT ELEMENT(s) & ADJUSTED.
codes, (Position 13):
(Q) SGC ASSIGNED AS DIFFERENT ELEMENT(s) & ADJUSTED.
codes, (Position 14):
(M) REFERENCED AGC adjusted for MOLECULAR WEIGHTS.
codes, (Position 15):
(M) REFERENCED SGC adjusted for MOLECULAR WEIGHTS.

- AGC/SGC last revised December 2003 and are still current as of January 2006.

and long-term (annual average) guideline concentration values for most of the compounds being monitored. Short-term guideline concentration (SGCs) values are significantly higher than annual guideline concentration (AGCs) values, and therefore, the program concentrates on longer term averages based on 24-hour samples as stipulated in the Consent Decree. The October 16, 1995 Air Guide-1 AGC and SGC values have been used in previous quarterly and annual reports until 2000. Revisions of the Air Guide-1 AGS/SGS values were released by the NYSDEC on July 12, 2000. These new values had been in the 2001, 2002 and the 2003 quarterly and annual reports. Additional revisions were made to the NYSDEC Air Guide-1 on December 22, 2003 and any changes in guidelines were incorporated in the 2004 and 2005 quarterly reports as well as this 2005 annual summary report. The quoted values represent NYSDEC guidelines as of December, 2005.

The ambient air monitoring program incorporates repositioning of sampling equipment to best define the overall contributions associated with the OBSWDC during each quarterly 24-hour test effort. Normally, two (2) collocated samples were taken at an upwind location and three (3) samples were taken at two (2) locations downwind of the OBSWDC. Therefore, upwind concentrations can be compared directly to downwind concentrations to conservatively determine the impact of the OBSWDC on the ambient air.

2.2 Analysis of 2005 Ambient Air Quality Data

Ambient air quality levels were monitored for each 24-hour sampling period at three (3) sampling locations during the 2005 sampling events. Samplers were positioned at two (2) locations generally downwind of the OBSWDC as prescribed by the Consent Decree. Two (2) collocated low volume samples and an individually located low volume sample were collected in the areas downwind of the landfill during the test efforts. Collocated samples were used as precision checks and in a screening procedure to assure inaccurately measured concentration constituents do not invalidate an analysis. In this case, at the upwind location and one (1) downwind location, collocated samplers were positioned to provide duplicate samples for QA/QC purposes.

Table 2.3 provides data for the 2005 monitoring program at the primary downwind sampling locations. The primary downwind location presented for each quarter was chosen based on the highest total speciated target VOCs for the downwind samples per quarterly test effort. These data represent conservative annual average ambient air concentrations downwind of the OBSWDC. The samples were collected over a 24-hour period using a 0.25 liter per minute nominal sampling rate. The individual quarterly 24-hour samples were averaged to provide an estimated annual average concentration for locations downwind of the OBSWDC. As shown in Table 2.3, the

TABLE 2.3

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF MAXIMUM QUARTERLY 24-HOUR DOWNWIND AMBIENT AIR VOST SAMPLE RESULTS
2005 Annual Summary

Quarterly I.D. Sample Identification	1st D1	2nd D1	3rd D2	4th D2	ANNUAL AVERAGE MAX DOWNWIND VALU	CURRENT AGC	24 HOUR SGC
Lower Quantitation Limit (ug/m^3)	0.0158	0.0152	0.0337	0.0331	0.0245	---	---
Practical Quantitation Limit (ug/m^3)	0.0253	0.0243	0.0539	0.0530	0.0391	---	---
Target TIC Lower Quantitation Limit (ug/m^3)	0.0791	0.0760	0.1684	0.1656	0.1223	---	---
Constituent/Units	($ug/std\text{-}m^3$)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)
Acetone*	4.43E-01	1.91E+00	< 1.34E+00	9.97E-01	1.17E+00	28,000	180,000
Benzaldehyde**						0.10	----
Benzene	1.39E+00	1.85E+00	< 3.40E-01	< 9.44E-01	1.13E+00	0.13	1,300
Bromodichloromethane						0.02	---
Bromoform*				< 6.95E-02	4.33E-02	0.90	---
Bromomethane	2.53E-02			< 3.97E-02	2.85E-02	5.00	3,900
2-Butanone*	2.82E-01	7.60E-01	< 2.26E-01	< 4.90E-01	4.39E-01	5,000	59,000
Carbon Disulfide						700	6,200
Carbon Tetrachloride	9.26E-01	8.21E-01	< 7.11E-01	5.43E-01	7.61E-01	0.067	1,900
Chlorobenzene						110	---
Chloroethane	9.81E-02				4.50E-02	10,000	---
Chloroethyl Vinyl Ether**						0.10	----
Chloroform	2.06E-01	3.65E-01	< 1.14E-01	< 1.06E-01	1.98E-01	0.043	150.0
Chloromethane	5.70E-02	7.29E-02	< 7.74E-02	6.62E-02	< 6.84E-02	90.00	22,000
Dibromochloromethane						0.10	---
1,2-Dichlorobenzene (o)						360.0	30,000
1,3-Dichlorobenzene (m)						360.0	30,000
1,4-Dichlorobenzene (p)	2.37E-01	4.86E-01	< 8.08E-02	< 8.94E-02	2.23E-01	0.09	---
1,1-Dichloroethane						0.63	---
1,2-Dichloroethane						0.038	---
1,1-Dichloroethene						70.00	---
cis-1,2-Dichloroethene						1,900	---
trans-1,2-Dichloroethene						1,900	----
1,2-Dichloropropane						4.00	51,000
1,3-Dichloropropene, cis & trans isomers						0.25	---
Ethylbenzene	5.06E-01	1.09E+00	< 2.36E-01	< 2.15E-01	5.13E-01	1,000	54,000
2/4-Ethyltoluene (total)	1.17E+00	2.43E+00	< 7.24E-01	< 4.14E-01	1.19E+00	0.10	
Freon 13**						---	560,000
2-Hexanone*						48.00	4,000
Methylene Chloride	5.38E+00	1.28E+00	2.76E-01	3.41E-01	1.82E+00	2.10	14,000
4-Methyl-2-Pentanone*						3,000	31,000
Styrene						1,000	17,000
1,1,2,2-Tetrachloroethane						0.02	---
Tetrachloroethene	8.54E-01	3.65E+00	< 2.09E-01	3.94E-01	1.28E+00	1.00	1,000
Toluene	3.16E+00	5.78E+00	< 1.20E+00	< 1.08E+00	2.80E+00	400.0	37,000
1,1,1-Trichloroethane	3.04E-01		< 1.85E-01	< 1.59E-01	1.66E-01	1,000	68,000
1,1,2-Trichloroethane						1.40	---
Trichloroethene	2.69E+00	2.01E-01	< 2.69E-01	< 5.30E-02	8.03E-01	0.45	54,000
Trichlorofluoromethane	1.20E+00	3.65E+00	3.16E+00	2.62E+00	2.66E+00	---	560,000
Vinyl Chloride						0.11	180,000
Xylenes (Total)	2.37E+00	5.17E+00	< 8.59E-01	< 9.11E-01	2.33E+00	100.0	4,300
Decane**	8.23E-01	1.22E+00	< 5.22E-01	3.21E-01	7.20E-01	200.0	---

TABLE 2.3
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF MAXIMUM QUARTERLY 24-HOUR DOWNWIND AMBIENT AIR VOST SAMPLE RESULTS FOR ADDITIONAL TENTATIVELY IDENTIFIED COMPOUNDS

2005 Annual Summary

Quarterly I.D.	1st	2nd	3rd	4th	ANNUAL AVERAGE	CURRENT	24 HOUR
Sample Identification	D1	D1	D2	D2	MAX DOWNWIND VALU	AGC	SGC
TIC Lower Quantitation Limit (LQL)	0.079	0.076	0.168	0.166	0.122	---	---
Constituent/Units	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)
2-Methyl-pentane		2.01E+00		< 4.47E-01	< 6.76E-01	4,200	350,000
(DEL) Branched Alkane	9.81E-01	1.79E+00	< 1.18E+00	< 1.90E+00	< 1.46E+00	---	---
Cyclohexanone	5.01E-01			< 4.14E-01	< 3.15E-01	0.13	1,300
1,3-dimethyl Benzene	2.23E-01		< 5.89E-01	< 5.13E-01	< 5.00E-01	0.13	1,300
2-Methyl-butane		3.34E+00	< 4.88E-01	< 7.78E-01	< 1.17E+00	42,000	---
.alpha-pinene isomer			< 6.23E-01		< 2.36E-01	---	---
Hexane		1.73E+00	< 4.55E-01	< 4.11E-01	< 6.69E-01	200	---
Isobutane		1.64E+00		< 7.12E-01	< 6.50E-01	45,000	---
Dichlorodifluoromethane			< 1.73E+00	< 1.94E+00	< 9.56E-01	12,000	---
Butane		1.82E+00		< 5.79E-01	< 6.62E-01	45,000	---
Nonanal	5.70E-01		< 3.74E-01		< 2.96E-01	---	---
Unknown (RT: 1.71-14.23)			< 3.20E-01		< 1.60E-01	---	---
Nonane	6.96E-01				< 2.77E-01	25,000	---
1,3-Butadiene, 2-methyl			< 2.31E+00		< 6.58E-01	---	---
Hexachloroethane			< 3.00E-01		< 1.55E-01	0.25	---
Octane	6.01E-01				< 2.53E-01	3,300	---
Unknown alkene (RT: 3.33-3.34)		1.95E+00			< 5.91E-01	---	---
(DEL) Straight-chain Alkane			< 5.39E-01		< 2.15E-01	---	---

Notes:

* An 8 (splitless) nanogram practical quantitation limit has been assigned to these compounds due to their poor responses during laboratory analysis.

** Targeted Tentatively Identified Compound (TIC). As reported by the laboratory, Targeted TICs have a Lower Quantitation Limit that is five (5) times the targeted compound Lower Quantitation Limit.

- All values are reported in micrograms per standard cubic meter ($ug/std\text{-}m^3$) except for the field blank and trip blank mass loading results which are reported in nanograms (ng).
- Blank values:
  Targeted Compounds and Targeted TICs- All blank values are below the Lower Quantitation Limit, Practical Quantitation Limit (applies to Acetone, Bromoform, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone), or the Targeted TIC Lower Quantitation Limit (applies to Chloroethylvinylether, Freon 13 and Decane). Benzaldehyde has a LQL 2 times the targeted TIC LQL.
  Additional Tentatively Identified Compounds- All blank values are either below the Targeted TIC Lower Quantitation Limit where less than six (6) additional TICs are reported for a particular sample or below the lowest reported additional TIC value, where six (6) or more additional TICs are reported for a particular sample.
- Values in shaded areas are at or exeeed the level of the current (last revised December 2003 and still current as of December 2005) and/or previous ambient air Annual Guideline Concentration (AGC) values.
- Less than values (<) are used where the Lower Quantitation Limit, the Target TIC Lower Quantitation Limit, or the Practical Quantitation Limit is averaged with the reported values.

annual average downwind value of seven (7) TCL constituents exceeded or potentially exceeded the level of their respective current AGCs specified by the NYSDEC. However, an annual average exeedance does not necessarily suggest that guideline values were exceeded by each quarterly test effort. In addition, three (3) TIC constituents exceeded the level of their AGC. No Target or Tentatively Identified compounds exceeded their respective SGC values.

Table 2.4 presents the 2005, 24-hour monitoring data for ambient air concentrations at the selected upwind sample locations. Two (2) collocated samplers were positioned upwind of the OBSWDC during all four (4) quarters of testing. The quarterly upwind samples presented in Table 2.4 were chosen based on lowest total speciated target VOCs in order to provide conservative 24-hour ambient air background concentrations for determining a conservative landfill impact. The samples were collected using a 0.25 liter per minute nominal sampling rate. The individual quarterly 24-hour samples were averaged to provide an estimated annual average background ambient air quality concentration. Of the annual average background (upwind) concentrations presented in Table 2.4, six (6) TCL constituents exceeded the level of the current NYSDEC AGCs. In addition, two (2) TIC identified at both the upwind sites exceeded the level of it's respective AGC. No Target or Tentatively Identified Compounds exceeded their respective SGC values.

As a means of providing a conservative estimate of the potential impacts from OBSWDC emissions, the difference between the minimum annual average upwind values and maximum downwind values are calculated and compared to the level of the current NYSDEC AGCs. These values are provided in Table 2.5. To be conservative, the upwind annual average included quarterly upwind samples with comparatively the lowest concentration of speciated target VOCs while the downwind annual average included quarterly samples with comparatively the highest concentrations of speciated target VOCs. As shown in Table 2.5, the results indicate that four (4) TCL constituents, benzene, carbon tetrachloride, chloroform and 2/4-ethyltoluene (total) potentially impacted the ambient air quality at a concentration that exceeds the level of their current AGC values. If an estimate is calculated using all upwind and downwind data, the net impacts downwind of the landfill will be below values documented in Table 2.5 and lower than their respective AGCs. All other TCL constituents identified in the annual averages have differential downwind impact values that are below their respective AGCs.

It must be stressed that because minimum 2005 upwind sample concentrations were subtracted from maximum 2005 downwind sample concentrations, the ambient air impact analysis presented within this report takes a conservative approach rather than simply comparing 2005 average upwind concentrations with 2005 average

TABLE 2.4

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF MINIMUM QUARTERLY 24-HOUR UPWIND AMBIENT AIR VOST SAMPLE RESULTS
2005 Annual Summary

Quarterly I.D.	1st	2nd	3rd	4th	ANNUAL AVERAGE	CURRENT	24 HOUR
Sample Identification*	U2	U2	U2	U2	MIN UPWIND VALUE	AGC	SGC
Lower Quantitation Limit (ug/m3)	0.0307	0.0278	0.0306	0.0286	0.029	---	---
Practical Quantitation Limit (ug/m3)	0.0491	0.0444	0.0489	0.0457	0.046	---	---
Target TIC Lower Quantitation Limit (ug/m3)	0.1534	0.1389	0.1529	0.1429	0.145	---	---
Constituent/Units	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)
Acetone**	< 5.46E-01		8.04E-01	6.83E-01	< 5.19E-01	28,000	180,000
Benzaldehyde***						0.10	----
Benzene	**< 1.12E+00**	**< 1.40E+00**	**< 2.54E-01**	**< 8.71E-01**	**< 9.12E-01**	0.13	1,300
Bromodichloromethane						0.02	---
Bromoform**				< 5.43E-02	< 4.92E-02	0.90	---
Bromomethane				5.71E-02	3.65E-02	5.00	3,900
2-Butanone*	< 1.96E-01			< 3.94E-01	< 1.71E-01	5,000	59,000
Carbon Disulfide				< 4.00E-02	< 3.23E-02	700.0	6,200
Carbon Tetrachloride	**< 5.98E-01**	**< 6.25E-01**	**6.48E-01**	**< 5.29E-01**	**< 6.00E-01**	0.067	1,900
Chlorobenzene						110.0	---
Chloroethane						10,000	---
Chloroethyl Vinyl Ether***						0.10	----
Chloroform	**< 1.13E-01**	**< 2.92E-01**	**< 9.17E-02**	**< 1.00E-01**	**< 1.49E-01**	0.043	150.0
Chloromethane	1.38E-01		< 5.20E-02	5.43E-02	< 6.80E-02	90.00	22,000
Dibromochloromethane				< 3.43E-02	< 3.08E-02	0.10	---
1,2-Dichlorobenzene (o)						360.0	30,000
1,3-Dichlorobenzene (m)						360.0	30,000
1,4-Dichlorobenzene (p)	**< 1.47E-01**	**< 4.31E-01**	< 7.65E-02	8.57E-02	**< 1.85E-01**	0.09	---
1,1-Dichloroethane						0.63	---
1,2-Dichloroethane						0.038	---
1,1-Dichloroethene						70.00	---
cis-1,2-Dichloroethene						1,900	---
trans-1,2-Dichloroethene						1,900	----
1,2-Dichloropropane						4.00	51,000
1,3-Dichloropropene, cis & trans isomers						0.25	---
Ethylbenzene	< 5.37E-01	< 9.03E-01	2.29E-01	< 2.00E-01	< 4.67E-01	1,000	54,000
2/4-Ethyltoluene (total)	**1.23E+00**	**< 1.88E+00**	**8.10E-01**	**< 4.14E-01**	**< 1.08E+00**	0.10	
Freon 13***						---	560,000
2-Hexanone**						48.00	4,000
Methylene Chloride	4.69E-01	3.08E-01	2.66E-01	1.91E-01	3.09E-01	2.10	14,000
4-Methyl-2-Pentanone**						3,000	31,000
Styrene			< 1.13E-01		< 5.00E-02	1,000	17,000
1,1,2,2-Tetrachloroethane						0.02	---
Tetrachloroethene	< 5.98E-01	**< 2.51E+00**	< 1.68E-01	< 3.57E-01	< 9.09E-01	1.00	1,000
Toluene	< 2.62E+00	< 4.18E+00	1.28E+00	< 9.57E-01	< 2.26E+00	400.0	37,000
1,1,1-Trichloroethane	< 1.90E-01		< 1.50E-01	< 1.14E-01	< 1.21E-01	1,000	68,000
1,1,2-Trichloroethane						1.40	---
Trichloroethene	**< 1.40E+00**	< 1.53E-01	**< 2.19E+00**	< 3.71E-02	**< 9.43E-01**	0.45	54,000
Trichlorofluoromethane	2.61E+00	2.44E+00	2.72E+00	1.50E+00	2.32E+00	---	560,000
Vinyl Chloride						0.11	180,000
Xylenes (Total)	2.48E+00	< 3.90E+00	1.01E+00	< 9.00E-01	< 2.07E+00	100.0	4,300
Decane***	< 6.90E-01	< 9.03E-01	< 4.43E-01	2.86E-01	< 5.81E-01	200.0	---

TABLE 2.4
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF MINIMUM QUARTERLY 24-HOUR DOWNWIND AMBIENT AIR VOST SAMPLE RESULTS FOR ADDITIONAL TENTATIVELY IDENTIFIED COMPOUNDS
2005 Annual Summary

Quarterly I.D.	1st	2nd	3rd	4th	ANNUAL AVERAGE	CURRENT	24 HOUR
Sample Identification*	U2	U2	U2	U2	MIN UPWIND VALUE	AGC	SGC
TIC Lower Quantitation Limit (LQL)	0.153	0.139	0.153	0.143	0.147	---	---
Constituent/Units	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)
2-Methyl-pentane			< 3.00E-01	< 5.86E-01	< 2.95E-01	4,200	350,000
(DEL) Branched Alkane	1.30E+00	2.23E+00	< 3.69E+00	1.56E+00	< 2.20E+00	---	---
C3 subst. Benzene	< 1.06E+00	< 2.26E+00	< 5.35E-01		< 9.99E-01	0.13	1,300
2-Methyl-butane	< 1.09E+00	3.83E+00	< 4.13E-01	< 1.16E+00	< 1.62E+00	42,000	---
2-Methyl-hexane		< 9.58E-01			< 3.52E-01	1.00	14.0
Isobutane	< 3.50E-01	< 1.76E+00		< 4.14E-01	< 6.69E-01	3,300	---
Dichlorodifluoromethane	< 8.74E-01	< 2.68E+00	< 1.02E+00	< 1.41E+00	< 1.50E+00	45,000	---
Butane	< 1.03E+00	< 1.46E+00		< 1.10E+00	< 9.36E-01	45,000	---
Chlorodifluoromethane				< 7.57E-01	< 3.01E-01	45,000	---
Nonanal	< 9.05E-01			< 5.29E-01	< 4.31E-01	50,000	---
Unknown (RT: 1.71-14.23)	1.50E+00		< 7.58E-01		< 6.35E-01	---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu		< 3.28E-01			< 1.94E-01	180,000	960,000
1,3-Butadiene, 2-methyl			< 1.21E+00		< 4.11E-01	---	180
Hexachloroethane			< 6.57E-01	1.04E+00	< 4.97E-01	0.25	---
Octane		< 1.15E+00			< 4.00E-01	3,300	---
2-methyl-nonane			< 3.82E-01		< 2.04E-01	---	---
(DEL) Straight-chain Alkane	< 2.02E-01				< 1.59E-01	---	---

Notes:

* An 8 (splitless) nanogram practical quantitation limit has been assigned to these compounds due to their poor responses during laboratory analysis.

** Targeted Tentatively Identified Compound (TIC). As reported by the laboratory, Targeted TICs have a Lower Quantitation Limit that is five (5) times the targeted compound Lower Quantitation Limit.

- All values are reported in micrograms per standard cubic meter ($ug/std\text{-}m^3$) except for the field blank and trip blank mass loading results which are reported in nanograms (ng).
- Blank values:
  Targeted Compounds and Targeted TICs- All blank values are below the Lower Quantitation Limit, Practical Quantitation Limit (applies to Acetone, Bromoform, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone), or the Targeted TIC Lower Quantitation Limit (applies to Chloroethylvinylether, Freon 13 and Decane). Benzaldehyde has a LQL 2 times the targeted TIC LQL.
  Additional Tentatively Identified Compounds- All blank values are either below the Targeted TIC Lower Quantitation Limit where less than six (6) additional TICs are reported for a particular sample or below the lowest reported additional TIC value, where six (6) or more additional TICs are reported for a particular sample.
- Values in shaded areas are at or exceed the level of the current (last revised December 2003 and still current as of December 2005) and/or previous ambient air Annual Guideline Concentration (AGC) values.
- Less than values (<) are used where the Lower Quantitation Limit, the Target TIC Lower Quantitation Limit, or the Practical Quantitation Limit is averaged with the reported values.

TABLE 2.5

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

CONSERVATIVE ESTIMATION OF POTENTIAL IMPACTS

Quarterly I.D.	ANNUAL AVERAGE	ANNUAL AVERAGE	MAX DOWNWIND -	CURRENT
Sample Identification	MAX DOWNWIND VALUE	MIN UPWIND VALUE	MIN UPWIND VALUE ***	AGC
Lower Quantitation Limit (ug/m3)	0.0245	0.0294	---	---
Target TIC Lower Quantitation Limit (ug/m3)	0.0391	0.0464	---	---
Practical Quantitation Limit (ug/m3)	0.1223	0.1449	---	---
Constituent/Units	**(ug/m^3)**	**(ug/m^3)**	**(ug/m^3)**	**(ug/m^3)**
Acetone*	1.17E+00	< 5.19E-01	6.54E-01	28,000
Benzaldehyde**				0.10
Benzene	1.03E+00	< 5.00E-01	2.21E-01	0.13
Bromodichloromethane				0.02
Bromoform*	4.33E-02	< 4.92E-02		0.90
Bromomethane	2.85E-02	3.65E-02		5.00
2-Butanone*	4.39E-01	< 1.71E-01	2.68E-01	5,000
Carbon Disulfide		< 3.23E-02		700.0
Carbon Tetrachloride	2.61E-01	< 6.00E-01	1.61E-01	0.067
Chlorobenzene				110.0
Chloroethane	4.50E-02		4.50E-02	10,000
Chloroethyl Vinyl Ether**				0.10
Chloroform	1.28E-01	< 1.49E-01	4.85E-02	0.043
Chloromethane	< 6.84E-02	< 6.80E-02	3.72E-04	90.00
Dibromochloromethane		< 3.08E-02		0.10
1,2-Dichlorobenzene (o)				360.0
1,3-Dichlorobenzene (m)				360.0
1,4-Dichlorobenzene (p)	2.23E-01	< 1.85E-01	3.85E-02	0.09
1,1-Dichloroethane				0.63
1,2-Dichloroethane				0.038
1,1-Dichloroethene				70.00
cis-1,2-Dichloroethene				1,900
trans-1,2-Dichloroethene				1,900
1,2-Dichloropropane				4.00
1,3-Dichloropropene, cis & trans isomers				0.25
Ethylbenzene	5.13E-01	< 4.67E-01	4.56E-02	1,000
2/4-Ethyltoluene (total)	1.19E+00	< 1.08E+00	1.03E-01	0.10
Freon 13**				---
2-Hexanone*				48.00
Methylene Chloride	1.82E+00	3.09E-01	1.51E+00	2.10
4-Methyl-2-Pentanone*				3,000
Styrene		< 5.00E-02		1,000
1,1,2,2-Tetrachloroethane				0.02
Tetrachloroethene	1.28E+00	< 9.09E-01	3.67E-01	1.00
Toluene	2.80E+00	< 2.26E+00	5.44E-01	400.0
1,1,1-Trichloroethane	1.66E-01	< 1.21E-01	4.53E-02	1,000
1,1,2-Trichloroethane				1.40
Trichloroethene	8.03E-01	< 9.43E-01		0.45
Trichlorofluoromethane	2.66E+00	2.32E+00	3.39E-01	---
Vinyl Chloride				0.11
Xylenes (Total)	2.33E+00	< 2.07E+00	2.56E-01	100.0
Decane**	< 6.84E-02	< 6.80E-02	3.72E-04	200.0

NOTES:

* An 8 (splitless) nanogram practical quantitation limit has been assigned to these compounds due to their poor responses during laboratory analysis.

** Targeted Tentatively Identified Compound (TIC). As reported by the laboratory, Targeted TICs have a Lower Quantitation Limit that is five (5) times the targeted compound Lower Quantitation Limit.

***Only compounds with an average downwind concentration higher than an average upwind concentration have been included.

- All values are reported in micrograms per standard cubic meter (ug/std-m^3) except for the field blank and trip blank mass loading results which are reported in nanograms (ng).
- Blank values:
  Targeted Compounds and Targeted TICs- All blank values are below the Lower Quantitation Limit, Practical Quantitation Limit (applies to Acetone, Bromoform, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone), or the Targeted TIC Lower Quantitation Limit (applies to Chloroethylvinylether, Freon 13 and Decane). Benzaldehyde has a LQL 2 times the targeted TIC LQL.
  Additional Tentatively Identified Compounds- All blank values are either below the Targeted TIC Lower Quantitation Limit where less than six (6) additional TICs are reported for a particular sample or below the lowest reported additional TIC value, where six (6) or more additional TICs are reported for a particular sample.
- Values in shaded areas are at or exceed the level of the current (last revised December 2003 and still current as of December 2005) and/or previous ambient air Annual Guideline Concentration (AGC) values.
- Less than values (<) are used where the Lower Quantitation Limit, the Target TIC Lower Quantitation Limit, or the Practical Quantitation Limit is averaged with the reported values.

downwind concentrations.

The short-term guideline values for the target compounds were estimated from the 24-hour recorded values. The individual quarterly concentrations shown in Tables 2.3 and 2.4 were compared to the 24-hour SGC values, (which are calculated by multiplying the current SGC by 0.4, an EPA averaging time adjustment factor). This comparison of the observed values with the resulting guidelines show that concentrations fall within their respective SGC values. The remaining upwind and downwind ambient air quality sample data that were collected during the four test efforts during the 2005 monitoring program are presented in Appendix A. In all cases, no measured concentrations exceeded this respective short-term guideline value.

Directly to the northeast of the landfill are several corporations that use paints and other chemicals to manufacture products. Under certain meteorological conditions when the winds are persistent from the northeast, these activities may affect the ambient upwind or the downwind samplers. None of the tests during 2005 had northeasterly component winds for significant durations, therefore, the impacts from this source area is probably not significant.

2.3 Analysis of the Ambient Air Quality Program Data Base Since 1990

The ambient air quality at and surrounding the Old Bethpage Landfill has been monitored by RTP Environmental Associates, Inc. for the Town since 1990. Over the course of the past sixteen years, several changes have been made to the program to improve the quality of the data. These changes occurred throughout the program, principally before 1997. A comparison between upwind and downwind sample ambient data collected during 2004 and in 2005 (as well as results from previous years) confirm that benzene, carbon tetrachloride, chloroform, 1,4 - ethylbenzene (p) and 2/4-ethyltoluene (previously reported as ethyl-methyl benzene) concentrations consistently exceed the level of the NYSDEC ambient annual guideline values at both upwind and downwind locations. For the 2004 monitoring program decane exceeded it's respective 2004 guideline value and did not exceed its new guideline value in 2005, although present in the ambient samples during the 2005 monitoring efforts. Since the decane AGC guideline value was revised upward in December 2003, it is unlikely that decane will exceed its new AGC value during future quarterly monitoring efforts. Benzaldehyde and 1,1,2,2-tetracholorethane were present in very low concentrations in the downwind samples during the 2004 tests, but not seen during the 2005 tests. These compounds have been detected during past monitoring efforts and seem to appear in low quantities from time to time. Based on discussions with the laboratory that analyzes the samples, benzaldehyde is sometimes

detected because of coeluting compounds that interfere with the identification and quantification of benzaldehyde, and unfortunately, there is no easy way to avoid this interference. In addition, tetrachloroethene and trichloroethene were in excess of their respective AGC guideline values in both upwind and downwind samples during 2005. These compounds are normally detected during quarterly sampling, although usually in slightly lower concentrations.

Several compounds observed in upwind and downwind samples during the first two years of monitoring appear at slightly higher concentration values when comparing 2004 and 2005 values. The decrease for some compounds may, in part, be attributed to landfill capping which was completed in January 1993 and the decrease in landfill gas generation which is expected to occur with time as the landfill ages. Furthermore, the 2005 study data show that upwind and downwind concentrations for most compounds, in general, are similar and thus, tending to discount the OBSWDC as a significant source of any detected compounds.

2.4 Analysis of 2005 Soil Gas VOC Concentration Data

The 2005 soil gas VOC samples provide data on the concentrations of TCL and TIC constituents in the soil gas in the vicinity of the landfill. Soil gas concentrations of the identified constituents observed during the 2005 year of testing have been presented in the quarterly reports and summary tables are reproduced in Appendix B of this report. Table 2.6 provides an annual summary of maximum soil gas VOC concentrations in any quarter. Since the third quarterly test of 2003 (August), no tests were conducted at soil gas well M21 due to the construction of a retaining wall along Claremont Avenue making the well inaccessible. To be conservative, these samples were chosen based on the highest total speciated target VOCs for the soil gas samples per test effort for the shallow thirty inch wells only. As shown in Table 2.6, a total of five (5) compounds averaged higher than their respective AGC value in the ambient air. Individually, M37 provides the highest annual average out of all the soil gas wells analyzed during the 2005 quarterly monitoring efforts. The number of soil gas wells containing target compound constituents that had exceeded the level of their respective AGCs were similar throughout the four 2005 quarterly tests. There were no additional TIC compounds that exceeded their respective AGC value from the selected soil gas well from each quarter. Since the soil gas values are not ambient air values, they cannot be directly compared to NYSDEC AGC/SGC ambient guidelines; although, the measured ten-minute concentrations for several compounds are in excess of the levels of annual ambient air guideline values specified. No soil gas concentrations were measured in excess of NYSDEC SGC guidelines during 2005. The NYSDEC has not developed VOC concentration guidelines for soils, and therefore, a direct comparison to applicable State regulations cannot be

TABLE 2.6

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF MAXIMUM SOIL GAS VOC SAMPLE RESULTS FROM 2005

Quarterly I.D.	1st	2nd	3rd	4th	ANNUAL AVERAGE	CURRENT
Soil Gas Well Identification*	M37	M39	M37	M39	---	AGC
Lower Quantitation Limit (LQL)	0.495	0.524	0.519	0.515	0.511	---
Practical Quantitation Limit (PQL)	0.791	0.838	0.831	0.825	0.82	---
Targeted TIC LQL	2.47	2.62	2.60	2.58	2.57	---
Constituent/Units	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m^3)
Acetone**	5.74E+00	4.50E+00	6.65E+00	2.58E+00	4.87E+00	28,000
Benzaldehyde***						0.10
Benzene		**8.38E-01**			**1.63E+00**	0.13
Bromodichloromethane						0.02
Bromoform**						0.90
Bromomethane				7.22E-01	1.16E+00	5.00
2-Butanone**						5,000
Carbon Disulfide						700.0
Carbon Tetrachloride			**1.04E+00**		**1.24E+00**	0.067
Chlorobenzene						110.0
Chloroethane						10,000
Chloroethyl Vinyl Ether***						0.10
Chloroform		**1.47E+00**	**1.35E+00**	**5.15E-01**	**7.99E-01**	0.043
Chloromethane	6.92E-01				1.64E+00	90.0
Dibromochloromethane						0.10
1,2-Dichlorobenzene (o)						360.0
1,3-Dichlorobenzene (m)						360.0
1,4-Dichlorobenzene (p)						0.09
1,1-Dichloroethane						0.63
1,2-Dichloroethane						0.038
1,1-Dichloroethene						70.00
cis-1,2-Dichloroethene						1,900
trans-1,2-Dichloroethene						1,900
1,2-Dichloropropane						4.00
1,3-Dichloropropene, cis & trans isomers						0.25
Ethylbenzene		7.33E-01			1.63E+00	1,000
2/4-Ethyltoluene (total)						0.10
Freon 13***						---
2-Hexanone**						48.00
Methylene Chloride	**2.37E+00**	**7.33E+00**		8.25E-01	2.04E+00	2.10
4-Methyl-2-Pentanone**						3,000
Styrene		7.33E-01			1.63E+00	1,000
1,1,2,2-Tetrachloroethane						0.02
Tetrachloroethene		**6.28E+01**	**2.18E+00**	**2.44E+01**	**6.99E+00**	1.00
Toluene		6.60E+00	6.23E-01		1.13E+00	400
1,1,1-Trichloroethane		9.42E-01			1.63E+00	1,000
1,1,2-Trichloroethane						1.40
Trichloroethene		**8.38E-01**			**1.63E+00**	0.45
Trichlorofluoromethane	1.68E+02	1.88E+01	1.56E+02	1.75E+00	1.23E+02	---
Vinyl Chloride						0.11
Xylenes (Total)		2.51E+00			1.63E+00	100.0
Decane***						200.0

TABLE 2.6
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF MAXIMUM SOIL GAS VOC SAMPLE RESULTS FROM 2005
ADDITIONAL TENTATIVELY IDENTIFIED COMPOUNDS

Quarterly	1st	2nd	3rd	4th	ANNUAL AVERAGE	CURRENT
Soil Gas Well Identification*	M37	M39	M37	M39	---	AGC
Additional TIC LQL	2.47	2.62	2.60	2.58	2.57	---

Constituent/Units	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)
Dichlorodifluoromethane	3.76E+00	4.61E+00	8.00E+00	4.43E+00	5.20E+00	12,000
1,1-dichloro-1-fluoroethane		3.25E+00			2.72E+00	---
Unknown siloxane		3.25E+00			2.72E+00	---
Hexane				5.98E+00	3.42E+00	200
Unknown compounds (RT: 1.44-15.44)	3.07E+00				2.72E+00	---

NOTES:

* The samples identified were chosen based on the highest total speciated target VOCs for the soil gas samples per test effort.

** An 8 (splitless) nanogram practical quantitation limit has been assigned to these compounds due to their poor responses during laboratory analysis.

*** Targeted Tentatively Identified Compound (TIC). As reported by the laboratory, Targeted TICs have a Lower Quantitation Limit that is five (5) times the targeted compound Lower Quantitation Limit.

- All values are reported in micrograms per standard cubic meter (ug/std-m^3) except for the field blank and trip blank mass loading results which are reported in nanograms (ng).
- Blank values:
  Targeted Compounds and Targeted TICs- All blank values are below the Lower Quantitation Limit, Practical Quantitation Limit (applies to Acetone, Bromoform, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone), or the Targeted TIC Lower Quantitation Limit (applies to Chloroethylvinylether, Freon 13 and Decane). Benzaldehyde has a LQL 2 times the targeted TIC LQL.
  Additional Tentatively Identified Compounds- All blank values are either below the Targeted TIC Lower Quantitation Limit where less than six (6) additional TICs are reported for a particular sample or below the lowest reported additional TIC value, where six (6) or more additional TICs are reported for a particular sample.
- Values in shaded areas are at or exceed the level of the current (last revised December 2003 and still current as of December 2005) and/or previous ambient air Annual Guideline Concentration (AGC) values.
- Less than values (<) are used where the Lower Quantitation Limit, the Target TIC Lower Quantitation Limit, or the Practical Quantitation Limit is averaged with the reported values.

made. Nassau County does not have soil gas standards at this point.

The 2005 soil gas VOST sample results for cluster well M9, including wells M9(10'), M9(20'), M9(30') and M9(40') show an increase in certain constituent concentrations as well depth increases for all four quarterly tests. This trend may be attributed to groundwater conditions at this location.

2.5 Analysis of the Soil Gas Program Data Base Since 1990

VOC concentrations in soil gas samples have been measured at the OBSWDC since 1990. Throughout the past sixteen years, modifications have been made to the soil gas program in order to provide quality data. However, since 1992, the soil gas wells that have been sampled and the target sample volume has remained the same. Therefore, these data are directly comparable. In general, these soil gas VOC concentration exceedances increased in number from 1992 through 1997. Since 1997, the number of exceedances have remained similar for each test year, specifically the compounds benzene, carbon tetrachloride, chloroform, tetrachloroethene and trichloroethene consistently exceeded the level their respective NYSDEC ambient annual guideline values. It is critical to note that the subsurface soil gas data were only ten minute samples which are not directly comparable to NYSDEC annual or short-term guideline concentration values for ambient air. As stated before, Nassau County does not have soil gas standards at this point, and therefore, a direct comparison to applicable regulations cannot be made.

2.6 Analysis of 2005 Soil Gas Pressure Measurements

Soil gas pressure measurements were made during the 2005 testing program as prescribed in the Consent Order. The locations of the pressure wells are provided in the quarterly reports. PW1 and PW2 are on the Old Bethpage Solid Waste Disposal Complex property while PW3 is off-site at the Firemen's Training Center. PW1 and PW3 are located outside the perimeter collection system while PW2 is located within the perimeter collection system.

Soil gas pressure readings during 2005 were zero or negative. The soil gas pressure readings for the quarterly tests are provided in Appendix C. Pressure well readings can be dependent on landfill influences, the perimeter collection system status, atmospheric pressure and perched water near a well location.

Ambient atmospheric pressure is measured at the landfill during each quarterly test effort to determine the atmospheric pressure drop over the 24-hour test period. Each 2005 quarterly test was conducted during falling ambient pressure conditions. Ambient pressure drops for each quarter were calculated by subtracting the lowest ambient pressure from the highest. Ambient pressure drops during the test efforts were reviewed and are similar for all four quarters.

3.0 SUMMARY AND CONCLUSIONS

In summary, the 2005 test program involved collecting data on ambient air and soil gas volatile organic compound samples and soil gas pressure readings. The program was completed according to the NYSDEC approved monitoring plan which is in conformance with the Order on Consent. The data indicates that several compounds, most notably benzene, carbon tetrachloride, chloroform, trichloroethene and 2/4-ethyltoluene had ambient air concentrations in excess of the level of their respective NYSDEC annual guideline concentrations. These compounds were measured in excess of the level of the guideline values at locations both upwind and downwind of the OBSWDC.

Once the average upwind VOC concentrations (background levels) are subtracted from the peak downwind VOC concentration levels, benzene, carbon tetrachloride, chloroform and 2/4-ethyltoluene when adjusted for conservative background levels, exceeded the level of the guideline value downwind of the landfill. When all data are used to estimate actual conditions as monitored (not conservative data), the constituent emissions from the landfill would not cause exceedances of the State AGC values.

Representative upwind and downwind values have been used in estimating air quality impacts associated with releases from the landfill. It should be noted, however, that quarterly monitoring occurred during generally falling barometric pressure conditions which tend to maximize the observed impacts from any landfill source. The downwind sampling locations were also positioned on or near the foot of the landfill slope again maximizing the recorded impact. One would expect to observe a decrease in these levels as the distance downwind of the landfill and the other neighboring emission sources increases.

A data base is being developed for both an uncapped and a capped landfill. Since capping was completed, the data collected continues to show for a limited set of compounds exceedances of the NYSDEC ambient guideline values both upwind and downwind of the OBSWDC. Additionally, the target compound list has been occasionally

updated based on continuing reviews of tentatively identified compounds being detected by enhanced analytical procedures. These compounds can be significant as illustrated by hexachloroethane and decane, which were not on the initial list of target compounds but were measured in excess of the current State annual guideline concentration both upwind and downwind of the OBSWDC in the past. Hexachloroethane, an additional TIC is not often found during quarterly sampling efforts but was detected during the 2003, 2004 and 2005 quarterly tests. Prior to this, hexachloroethane was last detected during the 2001 third quarter effort before being detected during the fourth quarter of 2002. During the 2005 monitoring program, hexachloroethane was detected in the ambient samples only during the third and fourth quarters. Since this annual summary report only presents the maximum upwind and downwind ambient sample from each quarterly test, hexachloroethane may have been detected in other ambient samples reflected in each 2005 quarterly report. The observed concentrations were large enough to exceed its respective State annual guideline. This compound is rarely detected in the vicinity of the OBSWDC, and the source(s) are currently unknown. No additional precautions are recommended at this point since concentrations are below the State SGC limit.

In conclusion, the ambient VOC concentrations measured during the 2005 study upwind and downwind of the facility for most compounds appear to be similar. Where the conservative net differences between the upwind and downwind sample exceed the NYSDEC AGC, the level of exceedances is fairly limited. Based on this data, the Old Bethpage Solid Waste Disposal Complex is not having a significant impact on air quality for measured VOC compounds. No VOC compound concentrations measured downwind of the landfill exceeded NYSDEC short-term guidelines.

APPENDIX A

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX
EVALUATION OF VOLATILE ORGANIC COMPOUNDS IN AMBIENT AIR AND SOILS AND SOIL GAS PRESSURE READINGS

2005 ANNUAL SUMMARY REPORT

2005 QUARTERLY AMBIENT AIR CONCENTRATION DATA

TABLE 4.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

FIRST QUARTER 2005

	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION*	U1	U2	D1	D2	D3	FB3	TB1	AGC	SGC****
LOWER QUANTITATION LIMIT (LQL)	0.0150	0.0307	0.0158	0.0389	0.0323	5	5		
PRACTICAL QUANTITATION LIMIT (PQL)	0.0240	0.0491	0.0253	0.0623	0.0516	8	8		
TARGETED TIC LQL	0.0751	0.1534	0.0791	0.1946	0.161	25	25		
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ng)	(ng)	(ug/m3)	(ug/m3)
Acetone**	4.50E-01	< 5.46E-01	4.43E-01		6.58E-01			28,000	180,000
Benzaldehyde***								0.1	---
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			0.13	1,300
Bromodichloromethane								0.02	---
Bromoform**								0.9	---
Bromomethane			2.53E-02					5.0	3,900
2-Butanone**	2.40E-01	< 1.96E-01	2.82E-01		4.32E-01			5,000	59,000
Carbon Disulfide								700	6,200
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			0.067	1,900
Chlorobenzene								110	---
Chloroethane			9.81E-02	< 6.61E-02				10,000	---
Chloroethyl Vinyl Ether***								0.1	---
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			0.043	150
Chloromethane	6.01E-02	1.38E-01	5.70E-02	2.41E-01	< 6.45E-02			90	22,000
Dibromochloromethane								0.1	---
1,2-Dichlorobenzene (o)								360	30,000
1,3-Dichlorobenzene (m)								360	30,000
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			0.09	---
1,1-Dichloroethane								0.63	---
1,2-Dichloroethane								0.038	---
1,1-Dichloroethene								70.00	---
cis-1,2-Dichloroethene					< 4.84E-02			1,900	---
trans-1,2-Dichloroethene								1,900	---
1,2-Dichloropropane								4.00	51,000
1,3-Dichloropropene, cis & trans isomers								0.25	---
Ethylbenzene	4.80E-01	< 5.37E-01	5.06E-01		< 3.71E-01			1,000	54,000
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			0.1	---
Freon 13***								---	560,000
2-Hexanone**								48	.4,000
[illegible]	4.20E-01	4.69E-01	[illegible]	1.83E-01	6.26E-01	38		2.1	14,000
4-Methyl-2-Pentanone**								3,000	31,000
Styrene								1,000	17,000
1,1,2,2-Tetrachloroethane								0.02	---
Tetrachloroethene	5.71E-01	< 5.98E-01	8.54E-01		< 6.61E-01			1.0	1,000
Toluene	2.58E+00	< 2.62E+00	3.16E+00		< 1.85E+00			400	37,000
1,1,1-Trichloroethane	2.37E-01	< 1.90E-01	3.04E-01		2.84E-01			1,000	68,000
1,1,2-Trichloroethane								1.4	---
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			0.50	54,000
Trichlorofluoromethane	2.79E+00	2.61E+00	1.20E+00	1.83E-01	3.51E+00	18		---	560,000
Vinyl Chloride								0.11	180,000.0
Xylenes (Total)	2.31E+00	2.48E+00	2.37E+00		< 1.60E+00			100	4,300
Decane***	4.80E-01	< 6.90E-01	8.23E-01		< 4.03E-01			200	---

TABLE 4.1
Continued

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

FIRST QUARTER 2005

SAMPLE TYPE	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION (1)	U1	U2	D1	D2	D3	FB3	TB1	AGC	SGC****
ADDITIONAL TIC LQL	0.075	0.153	0.079	0.195	0.161	25	25		
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ng)	(ng)	(ug/m3)	(ug/m3)
2-Methyl-1 propene								45,000	450,000
2-Methyl-pentane					6.10E-01			4,200	350,000
2-Methoxy-2-Methyl-propane								3,000	---
(DEL) Branched Alkane	6.91E-01	1.30E+00	9.81E-01		< 4.03E-01			---	---
1-methyl-4-1,3-cyclohexadiene								---	---
[redacted]								0.13	1,300
								0.13	1,300
2-Methyl-butane	8.71E-01	< 1.09E+00			< 1.02E+00			42,000	---
.alpha-pinene isomer								270	---
2-Methyl-hexane					< 4.68E-01			---	---
Hexane					< 6.94E-01			200	---
Undecane								---	---
6,6-dimeth-bicyclo[3.1.1] heptane								---	---
Isobutane		< 3.50E-01			< 6.94E-01			45,000	---
Dichlorodifluoromethane		< 8.74E-01		2.92E+00	< 5.97E-01			12,000	---
1,1-Dichloro-1-fluoroethane								200	---
1,1-difluoroethane								50,000	---
Butane	7.81E-01	< 1.03E+00			< 1.15E+00			45,000	---
Chlorodifluoromethane								50,000	---
Nonanal		< 9.05E-01	5.70E-01					---	---
Unknown (RT: 1.71-14.23)	7.81E-01	1.50E+00		< 2.26E-01				---	---
Dichlorotetrafluoroethane									
Ethane, 1,1,2-trichloro-1,2,2-triflu	6.91E-01				< 7.90E-01			180,000	960,000
Nonane			6.96E-01					25,000	---
1,3-Butadiene, 2-methyl								---	---
Hexachloroethane				< 1.95E-01				0.25	---
Octane			6.01E-01		< 6.61E-01			3,300	---
Trichloromonofluoromethane								560,000	---
2-methyl-1-butanol								---	---
6-methyl-5-hepten-2-one								---	---
(DEL) Straight-chain Alkane		< 2.02E-01						---	---
Dodecane								---	---
.beta-pinene isomer									
D-limonene									
1-methyl-4-(1,4-cyclohexadiene)									
1-methyl-4-(1-methcyclohexadiene)									

NOTES:

* See Figure 2.1 for ambient air sampling locations.

** An 8 (splitless) nanogram practical quantitation limit has been assigned to these compounds due to their poor responses during laboratory analysis.

*** Targeted Tentatively Identified Compound (TIC). As reported by the laboratory, Targeted TICs have a Lower Quantitation Limit that is five (5) times the targeted compound Lower Quantitation Limit.

****This 24-hour guideline concentration was calculated by multiplying the current SGC value (last revised December 2003 and still current as of May 2005) by 0.4 (EPA averaging time adjustment factor).

U1/U2: Ambient upwind samplers collocated near the 15th hole fairway of the Bethpage State Park Black Golf Course approximately 150 feet west of Round Swamp Rd.

D1/D2: Ambient downwind samplers located approximately 100 feet east of the landfill haul road on the west side of the landfill.

D3: Ambient downwind sampler located along the westside landfill access road about halfway to the top of the landfill.

TB1: No Trip Blanks were analyzed due to clean field blank results.

- All values are reported in micrograms per standard cubic meter (ug/std-m^3) except for the field blank and trip blank mass loading results which are reported in nanograms (ng).
- Blank values:

  Targeted Compounds and Targeted TICs- All blank values are below the Lower Quantitation Limit, Practical Quantitation Limit (applies to Acetone, Bromoform, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone), or the Targeted TIC Lower Quantitation Limit (applies to Chloroethyl, Vinyl Ether, Freon 13 and Decane). Benzaldehyde has a LQL 2 times the targeted TIC LQL.

  Additional Tentatively Identified Compounds- All blank values are either below the Targeted TIC Lower Quantitation Limit where less than six (6) additional TICs are reported for a particular sample or below the lowest reported additional TIC value, where six (6) or more additional TICs are reported for a particular sample.
- Values in shaded areas are at or exceed the level of the current (last revised December 2003 and still current as of May 2005) and/or previous ambient air Annual Guideline Concentration (AGC) values.
- Less than values (<) are used where the Lower Quantitation Limit, the Target TIC Lower Quantitation Limit, or the Practical Quantitation Limit is averaged with the reported values.
- Freon 13 is listed as Chlorotrifluoromethane in the analytical results, Appendix C.
- (ug/std-m^3): micrograms per standard cubic meter
- (ng): nanograms

TABLE 4.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

SECOND QUARTER 2005

	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION*	U1	U2	D1	D2	D3	FB3	TB1	AGC	SGC****
LOWER QUANTITATION LIMIT (LQL)	0.0137	0.0278	0.0152	0.0306	0.0282	5	5		
PRACTICAL QUANTITATION LIMIT (PQL)	0.0220	0.0444	0.0243	0.0489	0.0452	8	8		
TARGETED TIC LQL	0.0687	0.1389	0.0760	0.1529	0.141	25	25		
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ng)	(ng)	(ug/m3)	(ug/m3)
Acetone**			1.91E+00	< 2.01E+00	1.36E+00			28,000	180,000
Benzaldehyde***								0.1	---
[redacted]								0.13	1,300
Bromodichloromethane								0.02	---
Bromoform**								0.9	---
Bromomethane								5.0	3,900
2-Butanone**			7.60E-01	< 5.75E-01	7.01E-01			5,000	59,000
Carbon Disulfide								700	6,200
[redacted]								0.067	1,900
Chlorobenzene								110	---
Chloroethane								10,000	---
Chloroethyl Vinyl Ether***								0.1	---
[redacted]								0.043	150
Chloromethane			7.29E-02	1.07E-01				90	22,000
Dibromochloromethane								0.1	---
1,2-Dichlorobenzene (o)								360	30,000
1,3-Dichlorobenzene (m)								360	30,000
[redacted] (p)	4.40E-01	< 4.31E-01	4.26E-01	< 4.13E-01	< 9.32E-02			0.09	---
1,1-Dichloroethane								1	---
1,2-Dichloroethane								0.038	---
1,1-Dichloroethene								70.00	---
cis-1,2-Dichloroethene								1,900	---
trans-1,2-Dichloroethene								1,900	---
1,2-Dichloropropane								4.00	51,000
1,3-Dichloropropene, cis & trans isomers								0.25	---
Ethylbenzene	9.34E-01	< 9.03E-01	1.09E+00	< 9.33E-01	< 6.07E-01			1,000	54,000
[redacted] (total)	2.01E+00	< 1.93E+00	2.41E+00	< 2.01E+00	< 1.75E-01			0.1	---
Freon 13***								---	560,000
2-Hexanone**								48	4,000
[redacted]	1.68E+00	3.08E-01	1.28E+00	9.14E-01	3.76E+00	53		2.1	14,000
4-Methyl-2-Pentanone**								3,000	31,000
Styrene	1.65E-01							1,000	17,000
1,1,2,2-Tetrachloroethane								0.02	---
[redacted]	2.11E+00	< 1.93E+00	2.41E+00	< 2.01E+00	< 1.71E+00			1.0	1,000
Toluene	4.95E+00	< 4.18E+00	5.78E+00	< 4.60E+00	3.41E+00			400	37,000
1,1,1-Trichloroethane				< 3.15E-01	< 1.81E-01			1,000	68,000
1,1,2-Trichloroethane								1.4	---
Trichloroethene	2.34E-01	< 1.53E-01	2.01E-01	< 1.74E-01	< 1.55E-01			0.50	54,000
Trichlorofluoromethane	8.52E+00	2.44E+00	3.65E+00	3.24E+00	2.73E+00	320		---	560,000
Vinyl Chloride								0.11	180,000.0
Xylenes (Total)	4.40E+00	< 3.90E+00	5.17E+00	< 3.99E+00	< 2.53E+00			100	4,300
Decane***	1.10E+00	< 9.03E-01	1.22E+00	< 1.24E+00	< 9.18E-01			200	---

TABLE 4.1
Continued

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

SECOND QUARTER 2005

SAMPLE TYPE	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION (1)	U1	U2	D1	D2	D3	FB3	TB1	AGC	SGC****
ADDITIONAL TIC LQL	0.069	0.139	0.076	0.153	0.141	25	25		
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ng)	(ng)	(ug/m3)	(ug/m3)
2-Methyl-pentane	2.75E+00		2.01E+00	1.43E+00	1.58E+00			4,200	350,000
(DEL) Branched Alkane	1.79E+00	2.23E+00	1.79E+00		< 6.07E-01			---	---
[redacted]								0.13	1,300
2-Methyl-butane	5.22E+00	3.83E+00	3.34E+00	3.85E+00	3.05E+00			42,000	---
3-Methyl-hexane					< 7.49E-01			---	---
2-Methyl-hexane		< 9.58E-01		< 1.15E+00	< 8.33E-01			---	---
Hexane	1.48E+00		1.73E+00	< 1.42E+00	< 1.57E+00			200	---
Isobutane		< 1.76E+00	1.64E+00	< 2.00E+00	< 1.60E+00			45,000	---
Dichlorodifluoromethane		< 2.68E+00		< 3.13E+00	< 1.91E+00			12,000	---
Butane	2.45E+00	< 1.46E+00	1.82E+00	< 1.79E+00	< 1.91E+00			45,000	---
Unknown alkene (RT: 3.33-3.34)	2.61E+00		1.95E+00	< 1.36E+00	< 1.43E+00			---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu		< 3.28E-01		< 4.74E-01				180,000	960,000
Nonane					< 7.77E-01			25,000	---
Octane	1.79E+00	< 1.15E+00		< 1.30E+00	< 1.06E+00			3,300	---

NOTES:

* See Figure 2.1 for ambient air sampling locations.

** An 8 (splitless) nanogram practical quantitation limit has been assigned to these compounds due to their poor responses during laboratory analysis.

*** Targeted Tentatively Identified Compound (TIC). As reported by the laboratory, Targeted TICs have a Lower Quantitation Limit that is five (5) times the targeted compound Lower Quantitation Limit.

****This 24-hour guideline concentration was calculated by multiplying the current SGC value (last revised December 2003 and still current as of July 2005) by 0.4 (EPA averaging time adjustment factor).

U1/U2: Ambient upwind samplers collocated near the 15th hole fairway of the Bethpage State Park Black Golf Course approximately 150 feet west of Round Swamp Rd.

D1/D2: Ambient downwind samplers collocated in the southeast corner of the landfill boundary on the landfill access road, just northwest of the Fireman's Training Center.

D3: Ambient downwind sampler located on the second footbridge on the eastern side of the landfill, approximately 25 feet west of Winding Road.

TB1: No Trip Blanks were analyzed due to clean field blank results.

- All values are reported in micrograms per standard cubic meter (ug/std-m^3) except for the field blank and trip blank mass loading results which are reported in nanograms (ng).
- Blank values:

  Targeted Compounds and Targeted TICs- All blank values are below the Lower Quantitation Limit, Practical Quantitation Limit (applies to Acetone, Bromoform, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone), or the Targeted TIC Lower Quantitation Limit (applies to Chloroethyl, Vinyl Ether, Freon 13 and Decane). Benzaldehyde has a LQL 2 times the targeted TIC LQL.

  Additional Tentatively Identified Compounds- All blank values are either below the Targeted TIC Lower Quantitation Limit where less than six (6) additional TICs are reported for a particular sample or below the lowest reported additional TIC value, where six (6) or more additional TICs are reported for a particular sample.
- Values in shaded areas are at or exceed the level of the current (last revised December 2003 and still current as of July 2005) and/or previous ambient air Annual Guideline Concentration (AGC) values.
- Less than values (<) are used where the Lower Quantitation Limit, the Target TIC Lower Quantitation Limit, or the Practical Quantitation Limit is averaged with the reported values.
- Freon 13 is listed as Chlorotrifluoromethane in the analytical results, Appendix C.
- (ug/std-m^3): micrograms per standard cubic meter
- (ng): nanograms

TABLE 4.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

THIRD QUARTER 2005

	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION*	U1	U2	D1	D2	D3	FB3	TB1	AGC	SGC****
LOWER QUANTITATION LIMIT (LQL)	0.0146	0.0306	0.0131	0.0337	0.0292	5	5		
PRACTICAL QUANTITATION LIMIT (PQL)	0.0233	0.0489	0.0209	0.0539	0.0468	8	8		
TARGETED TIC LQL	0.0729	0.1529	0.0654	0.1684	0.146	25	25		
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ng)	(ng)	(ug/m3)	(ug/m3)
Acetone**	2.13E+00	8.04E-01	5.50E-01	< 1.34E+00	8.19E-01			28,000	180,000
Benzaldehyde***								0.1	---
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			0.13	1,300
Bromodichloromethane								0.02	---
Bromoform**								0.9	---
Bromomethane								5.0	3,900
2-Butanone**	4.08E-01		2.36E-01	< 2.26E-01	< 3.01E-01			5,000	59,000
Carbon Disulfide								700	6,200
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			0.067	1,900
Chlorobenzene								110	---
Chloroethane								10,000	---
Chloroethyl Vinyl Ether***								0.1	---
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			0.043	150
Chloromethane		< 5.20E-02	6.28E-02	< 7.74E-02	< 7.02E-02			90	22,000
Dibromochloromethane								0.1	---
1,2-Dichlorobenzene (o)								360	30,000
1,3-Dichlorobenzene (m)								360	30,000
1,4-Dichlorobenzene (p)	5.54E-02	< 7.65E-02	3.93E-02	< 8.08E-02	< 8.77E-02			0.09	---
1,1-Dichloroethane								1	---
1,2-Dichloroethane								0.038	---
1,1-Dichloroethene								70.00	---
cis-1,2-Dichloroethene								1,900	---
trans-1,2-Dichloroethene								1,900	---
1,2-Dichloropropane								4.00	51,000
1,3-Dichloropropene, cis & trans isomers								0.25	---
Ethylbenzene	1.95E-01	2.29E-01	1.52E-01	< 2.36E-01	< 2.40E-01			1,000	54,000
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			0.1	---
Freon 13***								---	560,000
2-Hexanone**								48	4,000
Methylene Chloride	1.46E-01	2.66E-01	1.36E-01	2.76E-01	2.19E-01	18		2.1	14,000
4-Methyl-2-Pentanone**								3,000	31,000
Styrene		< 1.13E-01			< 3.22E-02			1,000	17,000
1,1,2,2-Tetrachloroethane								0.02	---
Tetrachloroethene	1.55E-01	< 1.68E-01	1.41E-01	< 2.09E-01	< 1.78E-01			1.0	1,000
Toluene	1.20E+00	1.28E+00	8.12E-01	< 1.20E+00	1.23E+00			400	37,000
1,1,1-Trichloroethane	2.19E-01	< 1.50E-01	1.68E-01	< 1.85E-01	2.11E-01			1,000	68,000
1,1,2-Trichloroethane								1.4	---
[redacted]	[redacted]	[redacted]	1.86E-01	< 2.69E-01	< 1.64E-01			0.50	54,000
Trichlorofluoromethane	2.36E+00	2.72E+00	2.88E+00	3.16E+00	3.13E+00			---	560,000
Vinyl Chloride								0.11	180,000.0
Xylenes (Total)	7.87E-01	1.01E+00	5.76E-01	< 8.59E-01	< 9.21E-01			100	4,300
Decane***	3.50E-01	< 4.43E-01	3.40E-01	< 5.22E-01	< 5.12E-01			200	---

TABLE 4.1
Continued

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

THIRD QUARTER 2005

SAMPLE TYPE	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION (1)	U1	U2	D1	D2	D3	FB3	TB1	AGC	SGC****
ADDITIONAL TIC LQL	0.073	0.153	0.065	0.168	0.146	25	25		
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ng)	(ng)	(ug/m3)	(ug/m3)
2-Methyl-pentane	3.50E-01	< 3.00E-01			4.50E-01			4,200	350,000
(DEL) Branched Alkane	3.79E-01	< 3.69E+00		< 1.18E+00	9.09E-01			---	---
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			0.13	1,300
2-Methyl-butane	3.79E-01	< 4.13E-01	3.66E-01	< 4.88E-01	< 4.24E-01			42,000	---
Hexane	3.79E-01		6.28E-01	< 4.55E-01	< 6.58E-01			200	---
Dichlorodifluoromethane		< 1.02E+00	1.65E+00	< 1.73E+00	< 1.13E+00			12,000	---
Unknown (RT: 1.44-14.14)	4.96E-01	< 7.58E-01	4.97E-01	< 3.20E-01	< 6.29E-01			---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu					< 3.65E-01			180,000	960,000
Nonane			4.45E-01					25,000	---
1,3-Butadiene, 2-methyl	1.02E+00	< 1.21E+00	1.81E+00	< 2.31E+00	< 5.70E-01			---	---
[redacted]		[redacted]		[redacted]				0.25	---
Nonanal				< 3.74E-01	< 3.95E-01			---	---
(DEL) Straight-chain Alkane				5.39E-01	< 5.70E-01			---	---
Alpha pinene isomer				< 6.23E-01					
2-methyl-nonane		< 3.82E-01							

NOTES:

* See Figure 2.1 for ambient air sampling locations.

** An 8 (splitless) nanogram practical quantitation limit has been assigned to these compounds due to their poor responses during laboratory analysis.

*** Targeted Tentatively Identified Compound (TIC). As reported by the laboratory, Targeted TICs have a Lower Quantitation Limit that is five (5) times the targeted compound Lower Quantitation Limit.

****This 24-hour guideline concentration was calculated by multiplying the current SGC value (last revised December 2003 and still current as of October 2005) by 0.4 (EPA averaging time adjustment factor).

U1/U2: Ambient upwind samplers collocated approximately 75 feet east of the old incineration plant, in the northern portion of the OBSWDC.

D1/D2: Ambient downwind samplers collocated in the southeast corner of the landfill boundary on the landfill access road, just northwest of the Fireman's Training Center.

D3: Ambient downwind sampler located along the landfill access road approximately 150 feet southeast of soil gas well M37.

TB1: No Trip Blanks were analyzed due to clean field blank results.

- All values are reported in micrograms per standard cubic meter (ug/std-m^3) except for the field blank and trip blank mass loading results which are reported in nanograms (ng).
- Blank values:

  Targeted Compounds and Targeted TICs- All blank values are below the Lower Quantitation Limit, Practical Quantitation Limit (applies to Acetone, Bromoform, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone), or the Targeted TIC Lower Quantitation Limit (applies to Chloroethyl, Vinyl Ether, Freon 13 and Decane). Benzaldehyde has a LQL 2 times the targeted TIC LQL.

  Additional Tentatively Identified Compounds- All blank values are either below the Targeted TIC Lower Quantitation Limit where less than six (6) additional TICs are reported for a particular sample or below the lowest reported additional TIC value, where six (6) or more additional TICs are reported for a particular sample.
- Values in shaded areas are at or exceed the level of the current (last revised December 2003 and still current as of October 2005) and/or previous ambient air Annual Guideline Concentration (AGC) values.
- Less than values (<) are used where the Lower Quantitation Limit, the Target TIC Lower Quantitation Limit, or the Practical Quantitation Limit is averaged with the reported values.
- Freon 13 is listed as Chlorotrifluoromethane in the analytical results, Appendix C.
- (ug/std-m^3): micrograms per standard cubic meter
- (ng): nanograms

TABLE 4.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

FOURTH QUARTER 2005

	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION*	U1	U2	D1	D2	D3	FB3	TB1	AGC	SGC****
LOWER QUANTITATION LIMIT (LQL)	0.0150	0.0286	0.0156	0.0331	0.0339	5	5		
PRACTICAL QUANTITATION LIMIT (PQL)	0.0240	0.0457	0.0250	0.0530	0.0542	8	8		
TARGETED TIC LQL	0.0751	0.1429	0.0781	0.1656	0.169	25	25		
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ng)	(ng)	(ug/m3)	(ug/m3)
Acetone**	1.08E+00	6.83E-01	1.00E+00	9.97E-01	6.92E-01			28,000	180,000
Benzaldehyde***								0.10	---
[redacted]								0.13	1,300
Bromodichloromethane								0.02	---
Bromoform**	9.91E-02	< 5.43E-02	4.38E-02	< 6.95E-02	< 6.10E-02			0.90	---
Bromomethane		5.71E-02		< 3.97E-02	< 3.39E-02			5.00	3,900
2-Butanone**	9.31E-01	< 3.94E-01	5.63E-01	< 4.90E-01	< 5.02E-01			5,000	59,000
Carbon Disulfide	3.00E-02	< 4.00E-02						700	6,200
[redacted]								0.067	1,900
Chlorobenzene								110	---
Chloroethane								10,000	---
Chloroethyl Vinyl Ether***								0.10	---
[redacted]								0.043	150
Chloromethane	4.80E-02	5.43E-02	3.44E-02	6.62E-02				90	22,000
Dibromochloromethane		< 3.43E-02						0.10	---
1,2-Dichlorobenzene (o)								360	30,000
1,3-Dichlorobenzene (m)								360	30,000
[redacted]	6.91E-02	8.57E-02	[redacted]	< 8.94E-02	7.80E-02			0.09	---
1,1-Dichloroethane								0.63	---
1,2-Dichloroethane								0.038	---
1,1-Dichloroethene								70.00	---
cis-1,2-Dichloroethene								1,900	---
trans-1,2-Dichloroethene								1,900	---
1,2-Dichloropropane								4.00	51,000
1,3-Dichloropropene, cis & trans isomers								0.25	---
Ethylbenzene	2.22E-01	< 2.00E-01	2.09E-01	< 2.15E-01	< 2.03E-01			1,000	54,000
[redacted]								0.10	---
Freon 13***								---	560,000
2-Hexanone**								48	4,000
Methylene Chloride	1.71E-01	1.91E-01	3.13E-01	3.41E-01	4.27E-01	6		2.10	14,000
4-Methyl-2-Pentanone**	2.58E-01							3,000	31,000
Styrene								1,000	17,000
[redacted]	[redacted]							0.02	---
Tetrachloroethene	4.80E-01	< 3.57E-01	3.44E-01	3.94E-01	3.83E-01			1.00	1,000
Toluene	1.32E+00	< 9.57E-01	1.22E+00	< 1.08E+00	1.04E+00			400	37,000
1,1,1-Trichloroethane	1.26E-01	< 1.14E-01	1.75E-01	< 1.59E-01	< 1.59E-01			1,000	68,000
1,1,2-Trichloroethane								1.40	---
Trichloroethene	3.30E-02	< 3.71E-02	4.06E-02	< 5.30E-02	< 4.75E-02			0.50	54,000
Trichlorofluoromethane	1.41E+00	1.50E+00	2.28E+00	2.62E+00	1.66E+00			---	560,000
Vinyl Chloride								0.11	180,000.0
Xylenes (Total)	9.91E-01	< 9.00E-01	9.06E-01	< 9.11E-01	< 9.32E-01			100	4,300
Decane***	2.10E-01	2.86E-01	3.13E-01	3.21E-01	4.07E-01			200	---

TABLE 4.1
Continued

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

FOURTH QUARTER 2005

SAMPLE TYPE	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION (1)	U1	U2	D1	D2	D3	FB3	TB1	AGC	SGC****
ADDITIONAL TIC LQL	0.075	0.143	0.078	0.166	0.169	25	25		
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ng)	(ng)	(ug/m3)	(ug/m3)
2-Methyl-pentane	5.11E-01	< 5.86E-01		< 4.47E-01	< 4.58E-01			4,200	350,000
Branched Alkane (Total)	1.20E+00	1.56E+00	1.44E+00	1.90E+00	< 7.93E-01			---	---
[redacted]				[redacted]				0.13	1,300
[redacted]			[redacted]	[redacted]	[redacted]			0.13	1,300
2-Methyl-butane	6.61E-01	< 1.16E+00	6.56E-01	7.78E-01	9.49E-01			42,000	---
Hexane				< 4.11E-01	< 4.58E-01			200	---
Isobutane		< 4.14E-01		< 7.12E-01	< 8.98E-01			45,000	---
Dichlorodifluoromethane	5.71E-01	< 1.41E+00	5.63E-01	< 1.94E+00	< 1.47E+00			12,000	---
Butane		< 1.10E+00	5.63E-01	< 5.79E-01	< 1.03E+00			45,000	---
Unknown cyclic		< 7.57E-01	6.56E-01					---	---
Unknown (RT: 13.99-14.25)					< 5.25E-01			---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu					< 7.63E-01			180,000	960,000
[redacted]	[redacted]	[redacted]						0.25	---
Octane	3.90E-01				< 3.36E-01			3,300	---
Nonanal		< 5.29E-01			< 4.24E-01			---	---

NOTES:

* See Figure 2.1 for ambient air sampling locations.

** An 8 (splitless) nanogram practical quantitation limit has been assigned to these compounds due to their poor responses during laboratory analysis.

*** Targeted Tentatively Identified Compound (TIC). As reported by the laboratory, Targeted TICs have a Lower Quantitation Limit that is five (5) times the targeted compound Lower Quantitation Limit.

****This 24-hour guideline concentration was calculated by multiplying the current SGC value (last revised December 2003 and still current as of December 2005) by 0.4 (EPA averaging time adjustment factor).

U1/U2: Ambient upwind samplers collocated near the 15th hole fairway of the Bethpage State Park Black Golf Course approximately 150 feet west of Round Swamp Rd.

D1/D2: Ambient downwind samplers located approximately 75 feet southwest of the southwestern corner of the RAP building.

D3: Ambient downwind sampler located near the second footbridge on the eastern side of the landfill, approximately 25 feet west of Winding Road.

TB1: No Trip Blanks were analyzed due to clean field blank results.

- All values are reported in micrograms per standard cubic meter (ug/std-m^3) except for the field blank and trip blank mass loading results which are reported in nanograms (ng).
- Blank values:

  Targeted Compounds and Targeted TICs- All blank values are below the Lower Quantitation Limit, Practical Quantitation Limit (applies to Acetone, Bromoform, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone), or the Targeted TIC Lower Quantitation Limit (applies to Chloroethylvinylether, Freon 13 and Decane). Benzaldehyde has a LQL 2 times the targeted TIC LQL.

  Additional Tentatively Identified Compounds- All blank values are either below the Targeted TIC Lower Quantitation Limit where less than six (6) additional TICs are reported for a particular sample or below the lowest reported additional TIC value, where six (6) or more additional TICs are reported for a particular sample.
- Values in shaded areas are at or exceed the level of the current (last revised December 2003 and still current as of December 2005) and/or previous ambient air Annual Guideline Concentration (AGC) values.
- Less than values (<) are used where the Lower Quantitation Limit, the Target TIC Lower Quantitation Limit, or the Practical Quantitation Limit is averaged with the reported values.
- Freon 13 is listed as Chlorotrifluoromethane in the analytical results, Appendix C.
- (ug/std-m^3): micrograms per standard cubic meter
- (ng): nanograms

APPENDIX B

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX
EVALUATION OF VOLATILE ORGANIC COMPOUNDS IN
AMBIENT AIR AND SOILS AND SOIL GAS PRESSURE READINGS

2005 ANNUAL SUMMARY REPORT

2005 QUARTERLY SOIL GAS CONCENTRATION DATA

TABLE 4.2

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
FIRST QUARTER 2005

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	Current	Current
LOWER QUANTITATION LIMIT (LQL)	0.483	0.476	0.472	0.978	0.499	0.474	0.470	0.935	0.462	AGC	SGC
PRACTICAL QUANTITATION LIMIT (PQL)	0.772	0.762	0.755	1.564	0.798	0.758	0.753	1.495	0.74	—	—
TARGETED TIC LQL	2.41	2.38	2.36	4.89	2.49	2.37	2.35	4.67	2.31	—	—
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m3)	(ug/m3)
Acetone*	4.34E+00	3.14E+00	2.17E+00	< 2.35E+00	1.20E+00		3.76E+00		3.97E+00	28,000	180,000
Benzaldehyde**										0.1	—
Benzene										0.13	1300
Bromodichloromethane										0.02	—
Bromoform*										0.9	—
Bromomethane										5	3900
2-Butanone*										5000	59,000
Carbon Disulfide										700	6200
Carbon Tetrachloride		[illegible]	[illegible]		[illegible]	[illegible]				0.067	1,900
Chlorobenzene										110	—
Chloroethane										10,000	—
Chloroethyl Vinyl Ether**										0.1	—
Chloroform	[illegible]	[illegible]	[illegible]	< [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.043	150
Chloromethane		6.67E-01								90	22,000
Dibromochloromethane										0.10	—
1,2-Dichlorobenzene (o)										360	30,000
1,3-Dichlorobenzene (m)										360	30,000
1,4-Dichlorobenzene (p)										0.09	—
1,1-Dichloroethane										0.63	—
1,2-Dichloroethane										0.038	—
1,1-Dichloroethene										70	—
cis-1,2-Dichloroethene										1,900	—
trans-1,2-Dichloroethene										1900	—
1,2-Dichloropropane										4	51,000
1,3-Dichloropropene, cis & trans isomers										0.25	—
Ethylbenzene										1,000	54,000
2/4-Ethyltoluene (total)										0.1	—
Freon 13**										—	560,000
2-Hexanone*										48	4000
Methylene Chloride	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.1	14,000
4-Methyl-2-Pentanone*										3000	31,000
Styrene										1,000	17,000
1,1,2,2-Tetrachloroethane										0.017	—
Tetrachloroethene	[illegible]		[illegible]	< [illegible]	6.98E-01	[illegible]	[illegible]	[illegible]	[illegible]	1.0	1,000
Toluene	4.83E-01		7.55E-01						8.32E-01	400	37,000
1,1,1-Trichloroethane								< 1.21E+00	3.42E+00	1,000	68,000
1,1,2-Trichloroethane										1.4	—
Trichloroethene		[illegible]	[illegible]							0.5	54,000
Trichlorofluoromethane	3.76E+00	6.67E+00	1.89E+01	2.83E+00	2.59E+00	3.41E+00	3.76E+00	6.07E+00	2.22E+01	—	560,000
Vinyl Chloride										0.11	180,000
Xylenes (Total)										100	4,300
Decane***										200	—

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
ADDITIONAL TENTATIVELY IDENTIFIED COMPOUNDS
FIRST QUARTER 2005

SOIL GAS WELL ID	Fi	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	Current	Current
ADDITIONAL TIC LQL	2.41	2.38	2.36	4.89	2.49	2.37	2.35	4.67	2.31	AGC	SGC
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m3)	(ug/m3)
(DEL) Branched Alkane										---	---
.alpha-pinene isomer	5.12E+00									270	---
Hexane			4.43E+00						3.51E+00	200	---
Undecane										---	---
6,6-dimeth-bicyclo[3.1.1] heptane	5.21E+00									---	---
Dichlorodifluoromethane		3.14E+00		< 5.18E+00	2.49E+00	3.32E+00	6.40E+00	< 1.36E+01	3.97E+01	12,000	---
1,1-Dichloro-1-fluoroethane									4.16E+00	---	---
1,1-difluoroethane										40,000	---
Chlorodifluoromethane			8.21E+00							50,000	---
Nonanal	3.86E+00	2.86E+00								---	---
Unknown (RT: 1.71-14.23)						2.56E+00				---	---
Dichlorotetrafluoroethane								< 7.94E+00	4.25E+01	17,000	---
Ethane, 1,1,2-trichloro-1,2,2-triflu								< 5.33E+00	3.14E+01	180,000	960,000
.beta-pinene isomer	4.15E+00									270	---
D-limonene	8.78E+00									---	---
1-methyl-4-(1,4-cyclohexadiene)	1.25E+01									---	---
1-methyl-4-(1-methcyclohexadiene)	3.67E+01									---	---

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
FIRST QUARTER 2005

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	Current AGC	Current SGC
LOWER QUANTITATION LIMIT (LQL)	0.495	0.493	-	0.501	0.498	0.493	0.497	0.495	0.494		
PRACTICAL QUANTITATION LIMIT (PQL)	0.791	0.788	-	0.801	0.796	0.79	0.795	0.791	0.790		
TARGETED TIC LQL	2.47	2.46	-	2.50	2.49	2.47	2.49	2.47	2.47		
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m^3)	(ug/m^3)
Acetone*	1.38E+00	1.28E+00		6.31E+00		3.25E+00	5.27E+00	5.74E+00	3.16E+00	28,000	180,000
Benzaldehyde**										0.1	—
[redacted]							[redacted]			0.13	1300
[redacted]									[redacted]	0.02	—
Bromoform*										0.9	—
Bromomethane										5	3,900
2-Butanone*										5000	59,000
Carbon Disulfide						7.89E-01				700	6200
[redacted]		[redacted]		[redacted]	[redacted]	[redacted]	[redacted]			0.067	1,900
Chlorobenzene										110	—
Chloroethane										10,000	—
Chloroethyl Vinyl Ether**										0.1	—
[redacted]	[redacted]	[redacted]		[redacted]	[redacted]	[redacted]			[redacted]	0.043	150
Chloromethane							1.09E+00	6.92E-01		90	22,000
[redacted]									[redacted]	0.1	—
1,2-Dichlorobenzene (o)										360	30,000
1,3-Dichlorobenzene (m)										360	30,000
1,4-Dichlorobenzene (p)										0.09	—
1,1-Dichloroethane										0.63	—
1,2-Dichloroethane										0.038	—
1,1-Dichloroethene										70	—
cis-1,2-Dichloroethene										1,900	—
trans-1,2-Dichloroethene										1900	—
1,2-Dichloropropane										4	51,000
1,3-Dichloropropene, cis & trans isomers										0.25	—
Ethylbenzene										1,000	54,000
2/4-Ethyltoluene (total)										0.1	—
Freon 13**										—	560,000
2-Hexanone*										48	4000
[redacted]	[redacted]	[redacted]		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	1.97E+00	2.1	14,000
4-Methyl-2-Pentanone*										3000	31,000
Styrene										1,000	17,000
1,1,2,2-Tetrachloroethane										0.017	—
[redacted]	[redacted]	[redacted]		[redacted]		6.90E-01			[redacted]	1.0	1,000
Toluene	4.95E-01			6.01E-01			1.69E+00			400	37,000
1,1,1-Trichloroethane										1,000	68,000
1,1,2-Trichloroethane										1.4	—
[redacted]		[redacted]		[redacted]						0.5	54,000
Trichlorofluoromethane	4.25E+01	9.16E+00		3.00E+01	3.78E+00	4.34E+00	4.17E+00	1.68E+02	6.42E+00	—	560,000
Vinyl Chloride										0.11	180,000
Xylenes (Total)										100	4,300
Decane***										200	—

TABLE 4.2
(Concluded)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
ADDITIONAL TENTATIVELY IDENTIFIED COMPOUNDS
FIRST QUARTER 2005

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	Current	Current
ADDITIONAL TIC LQL	2.47	2.46	-	2.50	2.49	2.47	2.49	2.47	2.47	AGC	SGC
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m^3)	(ug/m^3)
(DEL) Branched Alkane							2.58E+00			---	---
.alpha-pinene isomer										270	---
Hexane	2.97E+00									200	---
Undecane				2.40E+01						---	---
6,6-dimeth-bicyclo[3.1.1] heptane										---	---
Dichlorodifluoromethane							3.28E+00	3.76E+00		12,000	---
1,1-Dichloro-1-fluoroethane				3.30E+01		5.52E+00				---	---
1,1-difluoroethane	5.14E+00	7.00E+00								40,000	---
Chlorodifluoromethane				1.20E+01		5.13E+00			3.85E+00	50,000	---
Nonanal							2.58E+00			---	---
Unknown (RT: 1.71-14.23)		2.56E+00						3.07E+00		---	---
Dichlorotetrafluoroethane										17,000	---
Ethane, 1,1,2-trichloro-1,2,2-triflu										180,000	960,000
.beta-pinene isomer										270	---
D-limonene							6.66E+01	2.87E+00		---	---
1-methyl-4-(1,4-cyclohexadiene)										---	---
1-methyl-4-(1-methcyclohexadiene)										---	---

Notes:

* An 8 nanogram practical quantitation limit has been assigned to these compounds due to their poor responses during laboratory analysis.

** Targeted Tentatively Identified Compound (TIC). As reported by the laboratory, Targeted TICs have a Lower Quantitation Limit that is five (5) times the targeted compound Lower Quantitation Limit.

- All values are reported in micrograms per standard cubic meter (ug/std-m3).
- Blank values:

  Targeted Compounds and Targeted TICs- All blank values are below the Lower Quantitation Limit, Practical Quantitation Limit (applies to Acetone, Bromoform, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone), or the Targeted TIC Lower Quantitation Limit (applies to Chloroethyl, Vinyl Ether, Freon 13 and Decane). Benzaldehyde has a LQL 2 times the targeted TIC LQL.

  Additional Tentatively Identified Compounds- All blank values are either below the Targeted TIC Lower Quantitation Limit where less than six (6) additional TICs are reported for a particular sample or below the lowest reported additional TIC value, where six (6) or more additional TICs are reported for a particular sample.
- Values in shaded areas are at or exceed the level of the current (last revised December 2003 and still current as of May 2005) and/or previous ambient air Annual Guideline Concentration (AGC) values.
- Less than values (<) are used where the Lower Quantitation Limit, the Target TIC Lower Quantitation Limit, or the Practical Quantitation Limit is averaged with the reported values.
- Freon 13 is listed as Chlorotrifluoromethane in the Analytical Results, Appendix C.
- (ug/std-m^3): micrograms per standard cubic meter
- (ng): nanograms

TABLE 4.2

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
SECOND QUARTER 2005

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	Current	Current
LOWER QUANTITATION LIMIT (LQL)	0.499	0.500	0.498	1.018	0.505	0.508	0.513	1.019	0.510	AGC	SGC
PRACTICAL QUANTITATION LIMIT (PQL)	0.798	0.799	0.796	1.629	0.807	0.812	0.821	1.631	0.82	—	—
TARGETED TIC LQL	2.49	2.50	2.49	5.09	2.52	2.54	2.57	5.10	2.55	—	—
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m3)	(ug/m3)
Acetone*	4.59E+00		3.78E+00	7.33E+00	1.61E+00		1.44E+00		2.55E+00	28,000	180,000
Benzaldehyde**										0.1	—
Benzene										0.13	1300
Bromodichloromethane										0.02	—
Bromoform*										0.9	—
Bromomethane										5	3900
2-Butanone*										5000	59,000
Carbon Disulfide										700	6200
Carbon Tetrachloride										0.067	1,900
Chlorobenzene										110	—
Chloroethane										10,000	—
Chloroethyl Vinyl Ether**										0.1	—
Chloroform										0.043	150
Chloromethane										90	22,000
Dibromochloromethane										0.10	—
1,2-Dichlorobenzene (o)										360	30,000
1,3-Dichlorobenzene (m)										360	30,000
1,4-Dichlorobenzene (p)										0.09	—
1,1-Dichloroethane										0.63	—
1,2-Dichloroethane										0.038	—
1,1-Dichloroethene										70	—
cis-1,2-Dichloroethene										1,900	—
trans-1,2-Dichloroethene										1900	—
1,2-Dichloropropane										4	51,000
1,3-Dichloropropene, cis & trans isomers										0.25	—
Ethylbenzene										1,000	54,000
2/4-Ethyltoluene (total)										0.1	—
Freon 13**										—	560,000
2-Hexanone*										48	4000
Methylene Chloride										2.1	14,000
4-Methyl-2-Pentanone*										3000	31,000
Styrene										1,000	17,000
1,1,2,2-Tetrachloroethane										0.017	—
Tetrachloroethene				< 1.07E+01						1.0	1,000
Toluene		7.99E-01	4.98E-01							400	37,000
1,1,1-Trichloroethane								< 1.02E+00	1.73E+00	1,000	68,000
1,1,2-Trichloroethane										1.4	—
Trichloroethene				< 1.22E+00						0.5	54,000
Trichlorofluoromethane	3.99E+00	3.60E+00	2.79E+00	5.70E+00	3.83E+00	4.77E+00	4.62E+00	6.32E+00	1.12E+01	—	560,000
Vinyl Chloride										0.11	180,000
Xylenes (Total)										100	4,300
Decane***										200	—

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
ADDITIONAL TENTATIVELY IDENTIFIED COMPOUNDS
SECOND QUARTER 2005

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	Current	Current
ADDITIONAL TIC LQL	2.49	2.50	2.49	5.09	2.52	2.54	2.57	5.10	2.55	AGC	SGC
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m3)	(ug/m3)
Hexane										200	---
Isobutane										45,000	---
Dichlorodifluoromethane				< 1.11E+01	7.16E+00	7.82E+00	9.03E+00	< 1.89E+01	3.98E+01	12,000	---
1,1-Dichloro-1-fluoroethane	1.99E+01									---	---
1,1-difluoroethane	5.88E+00	6.19E+00	5.17E+00							40,000	---
Unknown siloxane								< 8.87E+00		---	---
Unknown alkene (RT: 3.33-3.34)										---	---
Unknown (RT: 2.70-14.25)	1.08E+01		5.77E+00							---	---
Dichlorotetrafluoroethane				< 1.88E+01				< 1.21E+01	3.88E+01	17,000	---
Ethane, 1,1,2-trichloro-1,2,2-triflu									1.73E+01	180,000	960,000
Trichloromonofluoromethane										560,000	---
Chlorodifluoromethane										50,000	---
pinene isomer			1.61E+01							---	---
D-limonene			8.36E+00							---	---
1-methyl-4-(1,4-cyclohexadiene)			1.29E+01							---	---
1-methyl-4-(1-methcyclohexadiene)			7.26E+01							---	---

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
SECOND QUARTER 2005

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	Current AGC	Current SGC
LOWER QUANTITATION LIMIT (LQL)	0.541	0.631	-	0.525	0.522	0.522	0.524	0.522	0.524		
PRACTICAL QUANTITATION LIMIT (PQL)	0.866	1.009	-	0.839	0.835	0.84	0.839	0.835	0.838		
TARGETED TIC LQL	2.71	3.15	-	2.62	2.61	2.61	2.62	2.61	2.62		
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m^3)	(ug/m^3)
Acetone*	2.60E+00	4.16E+00		2.94E+00	1.67E+00	2.19E+00	3.98E+00		4.50E+00	28,000	180,000
Benzaldehyde**										0.1	—
Benzene										0.13	1300
Bromodichloromethane										0.02	---
Bromoform*										0.9	—
Bromomethane										5	3,900
2-Butanone*				1.57E+00						5000	59,000
Carbon Disulfide						7.31E-01				700	6200
Carbon Tetrachloride				**6.30E-01**	**7.31E-01**					0.067	1,900
Chlorobenzene										110	---
Chloroethane										10,000	—
Chloroethyl Vinyl Ether**										0.1	—
Chloroform	**3.90E+00**	**7.44E+00**								0.043	150
Chloromethane							9.43E-01			90	22,000
Dibromochloromethane										0.1	—
1,2-Dichlorobenzene (o)										360	30,000
1,3-Dichlorobenzene (m)										360	30,000
1,4-Dichlorobenzene (p)										0.09	—
1,1-Dichloroethane	**2.06E+00**									0.63	—
1,2-Dichloroethane										0.038	---
1,1-Dichloroethene										70	---
cis-1,2-Dichloroethene										1,900	—
trans-1,2-Dichloroethene										1900	—
1,2-Dichloropropane										4	51,000
1,3-Dichloropropene, cis & trans isomers										0.25	—
Ethylbenzene							5.24E-01		7.33E-01	1,000	54,000
2/4-Ethyltoluene (total)										0.1	—
Freon 13**										—	560,000
2-Hexanone*										48	4000
Methylene Chloride	**1.30E+01**	**3.28E+01**		**1.99E+01**	**5.95E+01**	**3.55E+00**				2.1	14,000
4-Methyl-2-Pentanone*										3000	31,000
Styrene									7.33E-01	1,000	17,000
1,1,2,2-Tetrachloroethane										0.017	—
Tetrachloroethene	**2.49E+01**	**1.77E+01**		**1.47E+00**	8.35E-01	**1.35E+00**				1.0	1,000
Toluene	3.35E+00	3.78E+00		1.57E+00	1.15E+00	1.04E+00	2.83E+00	1.36E+00	6.60E+00	400	37,000
1,1,1-Trichloroethane	1.62E+00							3.76E+00	9.42E-01	1,000	68,000
1,1,2-Trichloroethane										1.4	—
Trichloroethene	**1.95E+00**									0.5	54,000
Trichlorofluoromethane	9.42E+00	7.57E+00		2.94E+00		2.82E+00	4.93E+00	1.67E+01	1.88E+01	—	560,000
Vinyl Chloride										0.11	180,000
Xylenes (Total)							2.10E+00		2.51E+00	100	4,300
Decane***										200	—

TABLE 4.2
(Concluded)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
ADDITIONAL TENTATIVELY IDENTIFIED COMPOUNDS
SECOND QUARTER 2005

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	Current	Current
ADDITIONAL TIC LQL	2.71	3.15	-	2.62	2.61	2.61	2.62	2.61	2.62	AGC	SGC
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m^3)	(ug/m^3)
Hexane								2.92E+00		200	---
Isobutane								5.22E+00		45,000	---
Dichlorodifluoromethane						4.39E+00	4.61E+00		4.61E+00	12,000	---
1,1-Dichloro-1-fluoroethane				2.62E+00	4.38E+00	2.72E+00		1.25E+01	3.25E+00	---	---
1,1-difluoroethane	6.28E+00			4.62E+00				9.08E+00		40,000	---
Unknown siloxane	2.71E+00							3.24E+00	3.25E+00	---	---
Unknown alkene (RT: 3.33-3.34)						3.34E+00				---	---
Unknown (RT: 2.70-14.25)							5.03E+00	3.03E+00		---	---
Dichlorotetrafluoroethane										17,000	---
Ethane, 1,1,2-trichloro-1,2,2-triflu										180,000	960,000
Trichloromonofluoromethane					8.04E+00					560,000	---
Chlorodifluoromethane		1.26E+01			1.25E+01					50,000	---
pinene isomer										---	---
D-limonene										---	---
1-methyl-4-(1,4-cyclohexadiene)										---	---
1-methyl-4-(1-methcyclohexadiene)										---	---

Notes:

* An 8 nanogram practical quantitation limit has been assigned to these compounds due to their poor responses during laboratory analysis.

** Targeted Tentatively Identified Compound (TIC). As reported by the laboratory, Targeted TICs have a Lower Quantitation Limit that is five (5) times the targeted compound Lower Quantitation Limit.

- All values are reported in micrograms per standard cubic meter (ug/std-m3).
- Blank values:

  Targeted Compounds and Targeted TICs- All blank values are below the Lower Quantitation Limit, Practical Quantitation Limit (applies to Acetone, Bromoform, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone), or the Targeted TIC Lower Quantitation Limit (applies to Chloroethyl, Vinyl Ether, Freon 13 and Decane). Benzaldehyde has a LQL 2 times the targeted TIC LQL.

  Additional Tentatively Identified Compounds- All blank values are either below the Targeted TIC Lower Quantitation Limit where less than six (6) additional TICs are reported for a particular sample or below the lowest reported additional TIC value, where six (6) or more additional TICs are reported for a particular sample.
- Values in shaded areas are at or exceed the level of the current (last revised December 2003 and still current as of July 2005) and/or previous ambient air Annual Guideline Concentration (AGC) values.
- Less than values (<) are used where the Lower Quantitation Limit, the Target TIC Lower Quantitation Limit, or the Practical Quantitation Limit is averaged with the reported values.
- Freon 13 is listed as Chlorotrifluoromethane in the Analytical Results, Appendix C.
- (ug/std-m^3): micrograms per standard cubic meter
- (ng): nanograms

TABLE 4.2

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
THIRD QUARTER 2005

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	Current	Current
LOWER QUANTITATION LIMIT (LQL)	0.469	0.468	0.466	0.943	0.471	0.503	0.476	0.943	0.472	AGC	SGC
PRACTICAL QUANTITATION LIMIT (PQL)	0.750	0.748	0.746	1.509	0.754	0.805	0.761	1.508	0.75	—	—
TARGETED TIC LQL	2.34	2.34	2.33	4.72	2.36	2.52	2.38	4.71	2.36	—	—
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m3)	(ug/m3)
Acetone*						4.73E+00	4.66E+01		2.92E+00	28,000	180,000
Benzaldehyde**										0.1	—
Benzene										0.13	1300
Bromodichloromethane										0.02	—
Bromoform*										0.9	—
Bromomethane										5	3900
2-Butanone*	8.34E+00						1.52E+01			5000	59,000
Carbon Disulfide										700	6200
Carbon Tetrachloride			8.40E-01	< 1.79E+00	6.60E-01					0.067	1,900
Chlorobenzene										110	—
Chloroethane										10,000	—
Chloroethyl Vinyl Ether**										0.1	—
Chloroform	9.37E-01			< 2.08E+00		1.31E+00				0.043	150
Chloromethane										90	22,000
Dibromochloromethane										0.10	—
1,2-Dichlorobenzene (o)										360	30,000
1,3-Dichlorobenzene (m)										360	30,000
1,4-Dichlorobenzene (p)										0.09	—
1,1-Dichloroethane										0.63	—
1,2-Dichloroethane										0.038	—
1,1-Dichloroethene										70	—
cis-1,2-Dichloroethene										1,900	—
trans-1,2-Dichloroethene										1900	—
1,2-Dichloropropane										4	51,000
1,3-Dichloropropene, cis & trans isomers										0.25	—
Ethylbenzene										1,000	54,000
2/4-Ethyltoluene (total)										0.1	—
Freon 13**										—	560,000
2-Hexanone*										48	4000
Methylene Chloride	1.69E+00	1.03E+00	4.66E-01	8.49E+00					1.79E+00	2.1	14,000
4-Methyl-2-Pentanone*										3000	31,000
Styrene										1,000	17,000
1,1,2,2-Tetrachloroethane										0.017	—
Tetrachloroethene	2.16E+01	1.34E+00	2.52E+00	< 7.08E+00	1.13E+00	2.31E+01				1.0	1,000
Toluene										400	37,000
1,1,1-Trichloroethane									1.13E+00	1,000	68,000
1,1,2-Trichloroethane										1.4	—
Trichloroethene	1.31E+00									0.5	54,000
Trichlorofluoromethane	5.62E+00	2.25E+00	2.43E+00	< 3.49E+00		1.21E+01	8.56E+00	7.16E+00	1.13E+01	—	560,000
Vinyl Chloride										0.11	180,000
Xylenes (Total)										100	4,300
Decane***							2.28E+01			200	—

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
ADDITIONAL TENTATIVELY IDENTIFIED COMPOUNDS
THIRD QUARTER 2005

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	Current	Current
ADDITIONAL TIC LQL	2.34	2.34	2.33	4.72	2.36	2.52	2.38	4.71	2.36	AGC	SGC
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m3)	(ug/m3)
(DEL) Branched Alkane					6.31E+00					---	---
Hexane										200	---
Undecane										---	---
Dichlorodifluoromethane	4.12E+00	3.37E+00	3.92E+00	< 6.23E+00	3.49E+00	9.36E+00	1.14E+01	< 1.56E+01	2.64E+01	12,000	---
1,1-Dichloro-1-fluoroethane	6.56E+00				1.23E+01	9.66E+00				---	---
Unknown siloxane						3.42E+00				---	---
Unknown (RT: 1.44-14.14)										---	---
Dichlorotetrafluoroethane								< 4.71E+00	1.79E+01	17,000	---
Ethane, 1,1,2-trichloro-1,2,2-triflu									5.94E+00	180,000	960,000
1,3-Butadiene, 2-methyl										---	---
Nonanal										---	---
1,1-Dichloro-1-fluoroethene					6.79E+00	4.83E+00				---	---

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
THIRD QUARTER 2005

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	Current AGC	Current SGC
LOWER QUANTITATION LIMIT (LQL)	0.519	0.519	-	0.518	0.513	0.515	0.517	0.519	0.515		
PRACTICAL QUANTITATION LIMIT (PQL)	0.830	0.831	-	0.828	0.821	0.82	0.826	0.831	0.825		
TARGETED TIC LQL	2.59	2.60	-	2.59	2.57	2.57	2.58	2.60	2.58		
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m^3)	(ug/m^3)
Acetone*				8.39E+00		4.33E+00		6.65E+00	8.97E+00	28,000	180,000
Benzaldehyde**										0.1	—
Benzene										0.13	1300
Bromodichloromethane										0.02	—
Bromoform*										0.9	—
Bromomethane										5	3,900
2-Butanone*										5000	59,000
Carbon Disulfide	1.56E+00					1.54E+00				700	6200
Carbon Tetrachloride		**6.23E-01**		**1.04E+00**	**1.03E+00**	**9.27E-01**	**9.28E-01**	**1.04E+00**	**9.28E-01**	0.067	1,900
Chlorobenzene										110	—
Chloroethane										10,000	—
Chloroethyl Vinyl Ether**										0.1	—
Chloroform	**2.18E+00**	**1.04E+00**						**1.55E+00**	**1.14E+00**	0.043	150
Chloromethane										90	22,000
Dibromochloromethane										0.1	—
1,2-Dichlorobenzene (o)										360	30,000
1,3-Dichlorobenzene (m)										360	30,000
1,4-Dichlorobenzene (p)										0.09	—
1,1-Dichloroethane	**3.01E+00**									0.63	—
1,2-Dichloroethane										0.038	—
1,1-Dichloroethene										70	—
cis-1,2-Dichloroethene										1,900	—
trans-1,2-Dichloroethene	8.30E-01									1900	—
1,2-Dichloropropane										4	51,000
1,3-Dichloropropene, cis & trans isomers										0.25	—
Ethylbenzene										1,000	54,000
2/4-Ethyltoluene (total)										0.1	—
Freon 13**										—	560,000
2-Hexanone*										48	4000
Methylene Chloride	1.35E+00	1.25E+00		**2.17E+00**	1.13E+00	1.03E+00				2.1	14,000
4-Methyl-2-Pentanone*										3000	31,000
Styrene										1,000	17,000
1,1,2,2-Tetrachloroethane										0.017	—
Tetrachloroethene	**2.49E+01**	**4.15E+01**		**1.55E+00**	7.19E-01	**1.34E+00**	**1.47E+00**	**1.11E+00**	**1.49E+00**	1.0	1,000
Toluene	2.18E+00	1.97E+00		2.38E+00	1.33E+00	1.85E+00	2.07E+00	6.23E-01	2.68E+00	400	37,000
1,1,1-Trichloroethane	3.11E+00	1.56E+00							1.44E+00	1,000	68,000
1,1,2-Trichloroethane										1.4	—
Trichloroethene	**2.59E+00**									0.5	54,000
Trichlorofluoromethane	5.60E+00	8.31E+00		1.24E+01	6.16E+00	9.17E+00	1.76E+01	1.56E+02	6.49E+00	—	560,000
Vinyl Chloride										0.11	180,000
Xylenes (Total)										100	4,300
Decane***										200	—

TABLE 4.2
(Concluded)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
ADDITIONAL TENTATIVELY IDENTIFIED COMPOUNDS
THIRD QUARTER 2005

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	Current	Current
ADDITIONAL TIC LQL	2.59	2.60	-	2.59	2.57	2.57	2.58	2.60	2.58	AGC	SGC
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m^3)	(ug/m^3)
(DEL) Branched Alkane										—	—
Hexane	3.11E+00			3.21E+00			3.51E+00		3.20E+00	200	---
Undecane	4.56E+01									---	---
Dichlorodifluoromethane	6.02E+00			3.21E+00	3.39E+00	3.19E+00	3.10E+00	8.00E+00	3.61E+00	12,000	---
1,1-Dichloro-1-fluoroethane						4.12E+00	5.68E+00			---	---
Unknown siloxane										---	---
Unknown (RT: 1.44-14.14)		3.74E+00			2.77E+00					---	---
Dichlorotetrafluoroethane										17,000	—
Ethane, 1,1,2-trichloro-1,2,2-triflu										180,000	960,000
1,3-Butadiene, 2-methyl				3.21E+00						---	---
Nonanal	3.73E+00			2.69E+00						---	---
1,1-Dichloro-1-fluoroethene										—	---

Notes:

* An 8 nanogram practical quantitation limit has been assigned to these compounds due to their poor responses during laboratory analysis.

** Targeted Tentatively Identified Compound (TIC). As reported by the laboratory, Targeted TICs have a Lower Quantitation Limit that is five (5) times the targeted compound Lower Quantitation Limit.

- All values are reported in micrograms per standard cubic meter (ug/std-m3).
- Blank values:

  Targeted Compounds and Targeted TICs- All blank values are below the Lower Quantitation Limit, Practical Quantitation Limit (applies to Acetone, Bromoform, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone), or the Targeted TIC Lower Quantitation Limit (applies to Chloroethyl, Vinyl Ether, Freon 13 and Decane). Benzaldehyde has a LQL 2 times the targeted TIC LQL.

  Additional Tentatively Identified Compounds- All blank values are either below the Targeted TIC Lower Quantitation Limit where less than six (6) additional TICs are reported for a particular sample or below the lowest reported additional TIC value, where six (6) or more additional TICs are reported for a particular sample.
- Values in shaded areas are at or exceed the level of the current (last revised December 2003 and still current as of October 2005) and/or previous ambient air Annual Guideline Concentration (AGC) values.
- Less than values (<) are used where the Lower Quantitation Limit, the Target TIC Lower Quantitation Limit, or the Practical Quantitation Limit is averaged with the reported values.
- Freon 13 is listed as Chlorotrifluoromethane in the Analytical Results, Appendix C.
- (ug/std-m^3): micrograms per standard cubic meter
- (ng): nanograms

TABLE 4.2

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
FOURTH QUARTER 2005

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	Current AGC	Current SGC
LOWER QUANTITATION LIMIT (LQL)	0.520	0.476	0.478	0.955	0.473	0.477	0.477	0.962	0.481		
PRACTICAL QUANTITATION LIMIT (PQL)	0.832	0.761	0.764	1.528	0.758	0.763	0.763	1.540	0.77	—	—
TARGETED TIC LQL	2.60	2.38	2.39	4.78	2.37	2.38	2.38	4.81	2.40	—	—
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m3)	(ug/m3)
Acetone*	3.74E+00	3.81E+00	2.20E+00	5.06E+00	2.37E+00	4.19E+00	2.19E+00	6.54E+00	5.67E+00	28,000	180,000
Benzaldehyde**										0.10	—
Benzene						[illegible]				0.13	1300
Bromodichloromethane										0.02	—
Bromoform*										0.90	—
Bromomethane		8.56E-01		< 1.15E+00				< 1.35E+00	6.73E-01	5.00	3900
2-Butanone*	2.18E+00							< 3.75E+00	1.73E+00	5000	59,000
Carbon Disulfide										700	6200
Carbon Tetrachloride										0.067	1,900
Chlorobenzene										110	—
Chloroethane										10,000	—
Chloroethyl Vinyl Ether**										0.10	—
Chloroform	1.57E+00			< 5.06E+00		[illegible]	[illegible]			0.043	150
Chloromethane						6.67E-01				90.0	22,000
Dibromochloromethane				< 1.24E+00						0.10	—
1,2-Dichlorobenzene (o)										360	30,000
1,3-Dichlorobenzene (m)										360	30,000
1,4-Dichlorobenzene (p)										0.09	—
1,1-Dichloroethane										0.63	—
1,2-Dichloroethane										0.038	—
1,1-Dichloroethene										70.00	—
cis-1,2-Dichloroethene										1,900	—
trans-1,2-Dichloroethene										1900	—
1,2-Dichloropropane										4.00	51,000
1,3-Dichloropropene, cis & trans isomers										0.25	—
Ethylbenzene										1,000	54,000
2/4-Ethyltoluene (total)										0.10	—
Freon 13**										—	560,000
2-Hexanone*								< 3.08E+00		48.0	4000
Methylene Chloride	7.28E-01	1.90E+00	1.91E+00	< 3.06E+00	1.80E+00	[illegible]	9.53E-01	[illegible]	7.69E-01	2.10	14,000
4-Methyl-2-Pentanone*								< 2.79E+00		3,000	31,000
Styrene										1,000	17,000
1,1,2,2-Tetrachloroethane								[illegible]		0.017	—
Tetrachloroethene	1.04E+01	9.51E-01	1.34E+00	< 1.15E+00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.00	1,000
Toluene	1.56E+00					1.72E+00				400	37,000
1,1,1-Trichloroethane										1,000	68,000
1,1,2-Trichloroethane										1.40	—
Trichloroethene								[illegible]	[illegible]	0.50	54,000
Trichlorofluoromethane	2.39E+00	2.00E+00	1.72E+00	< 2.01E+00	1.70E+00	4.19E+00	2.76E+00	1.92E+00	2.21E+00	—	560,000
Vinyl Chloride										0.11	180,000
Xylenes (Total)										100	4,300
Decane**										200	—

C:\Projects\Town of Oyster Bay\TOB05\OBL Q4\Ob05-4F

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
ADDITIONAL TENTATIVELY IDENTIFIED COMPOUNDS
FOURTH QUARTER 2005

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	Current	Current
ADDITIONAL TIC LQL	2.60	2.38	2.39	4.78	2.37	2.38	2.38	4.81	2.40	AGC	SGC
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m3)	(ug/m3)
Branched Alkane (Total)		1.33E+01				4.07E+01				---	---
Hexane	5.93E+00									200	---
Decane						4.77E+00				200	---
Dichlorodifluoromethane	4.16E+00	3.71E+00	3.72E+00	< 6.02E+00	3.88E+00	6.77E+00	6.20E+00	< 6.83E+00	5.48E+00	12,000	---
1,1-Dichloro-1-fluoroethane	4.89E+00	7.99E+00	3.06E+00	< 8.50E+00		1.72E+01				---	---
1-Chloro-1-fluoroethene	3.74E+00	5.04E+00								40,000	---
Unknown (RT: 13.99-14.25)		6.57E+00		< 5.06E+00						---	---
Dichlorotetrafluoroethane					5.87E+00					17,000	---
(DEL) Straight-chain Alkane		4.66E+00								---	---

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
FOURTH QUARTER 2005

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	Current AGC	Current SGC
LOWER QUANTITATION LIMIT (LQL)	0.517	0.512	-	0.514	0.511	0.508	0.514	0.514	0.515		
PRACTICAL QUANTITATION LIMIT (PQL)	0.827	0.820	-	0.823	0.817	0.81	0.822	0.822	0.825		
TARGETED TIC LQL	2.59	2.56	-	2.57	2.55	2.54	2.57	2.57	2.58		
VOC COMPOUND NAME	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/std-m^3)	(ug/m^3)	(ug/m^3)
Acetone*	6.62E+00	5.43E+00		9.26E+00	7.05E+00	2.94E+00	3.39E+00	1.64E+00	2.58E+00	28,000	180,000
Benzaldehyde**										0.10	—
Benzene										0.13	1300
Bromodichloromethane										0.02	—
Bromoform*										0.90	—
Bromomethane				6.17E-01			9.25E-01		7.22E-01	5.00	3900
2-Butanone*					1.12E+00	8.12E-01	1.64E+00			5000	59,000
Carbon Disulfide										700	6200
Carbon Tetrachloride										0.067	1,900
Chlorobenzene										110	—
Chloroethane										10,000	—
Chloroethyl Vinyl Ether**										0.10	—
Chloroform	**9.31E-01**	**1.64E+00**								0.043	150
Chloromethane							7.19E-01			90.0	22,000
Dibromochloromethane										0.10	—
1,2-Dichlorobenzene (o)										360	30,000
1,3-Dichlorobenzene (m)										360	30,000
1,4-Dichlorobenzene (p)										0.09	—
1,1-Dichloroethane										0.63	—
1,2-Dichloroethane										0.038	—
1,1-Dichloroethene										70.00	—
cis-1,2-Dichloroethene										1,900	—
trans-1,2-Dichloroethene										1900	—
1,2-Dichloropropane										4.00	51,000
1,3-Dichloropropene, cis & trans isomers										0.25	—
Ethylbenzene										1,000	54,000
2/4-Ethyltoluene (total)										0.10	—
Freon 13**										—	560,000
2-Hexanone*										48.0	4000
Methylene Chloride							8.22E-01	1.03E+00	8.25E-01	2.10	14,000
4-Methyl-2-Pentanone*										3,000	31,000
Styrene										1,000	17,000
1,1,2,2-Tetrachloroethane										0.017	—
Tetrachloroethene	**6.41E+00**	**8.40E+00**		7.20E-01	9.19E-01	8.12E-01	8.22E-01			1.00	1,000
Toluene							7.19E-01	7.19E-01		400	37,000
1,1,1-Trichloroethane		6.15E-01		6.17E-01				1.23E+00		1,000	68,000
1,1,2-Trichloroethane										1.40	—
Trichloroethene										0.50	54,000
Trichlorofluoromethane	2.17E+00	9.22E+00		1.54E+00	1.53E+00	1.42E+00	1.23E+00	1.44E+00	1.75E+00	—	560,000
Vinyl Chloride										0.11	180,000
Xylenes (Total)										100	4,300
Decane**										200	—

TABLE 4.2
(Concluded)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
ADDITIONAL TENTATIVELY IDENTIFIED COMPOUNDS
FOURTH QUARTER 2005

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	Current	Current
ADDITIONAL TIC LQL	2.59	2.56	-	2.57	2.55	2.54	2.57	2.57	2.58	AGC	SGC
VOC COMPOUND NAME	($ug/std\text{-}m^3$)	($ug/std\text{-}m^3$)	($ug/std\text{-}m^3$)	($ug/std\text{-}m^3$)	($ug/std\text{-}m^3$)	($ug/std\text{-}m^3$)	($ug/std\text{-}m^3$)	($ug/std\text{-}m^3$)	($ug/std\text{-}m^3$)	(ug/m^3)	(ug/m^3)
Branched Alkane (Total)						2.64E+00	4.11E+00	5.62E+01		---	---
Hexane	3.52E+00	4.30E+00		8.23E+00	8.78E+00	1.52E+01			5.98E+00	200	---
Decane								3.08E+00		200	---
Dichlorodifluoromethane	3.72E+00	1.13E+01		3.81E+00	3.98E+00	3.35E+00	3.39E+00		4.43E+00	12,000	---
1,1-Dichloro-1-fluoroethane								7.40E+00		---	---
1-Chloro-1-fluoroethene										40,000	---
Unknown (RT: 13.99-14.25)										---	---
Dichlorotetrafluoroethane										17,000	---
(DEL) Straight-chain Alkane										---	---

Notes:

* An 8 nanogram practical quantitation limit has been assigned to these compounds due to their poor responses during laboratory analysis.

** Targeted Tentatively Identified Compound (TIC). As reported by the laboratory, Targeted TICs have a Lower Quantitation Limit that is five (5) times the targeted compound Lower Quantitation Limit.

- All values are reported in micrograms per standard cubic meter (ug/std-m3).
- Blank values:

  Targeted Compounds and Targeted TICs- All blank values are below the Lower Quantitation Limit, Practical Quantitation Limit (applies to Acetone, Bromoform, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone), or the Targeted TIC Lower Quantitation Limit (applies to Chloroethylvinylether, Freon 13 and Decane). Benzaldehyde has a LQL 2 times the targeted TIC LQL.

  Additional Tentatively Identified Compounds- All blank values are either below the Targeted TIC Lower Quantitation Limit where less than six (6) additional TICs are reported for a particular sample or below the lowest reported additional TIC value, where six (6) or more additional TICs are reported for a particular sample.
- Values in shaded areas are at or exceed the level of the current (last revised December 2003 and still current as of December 2005) and/or previous ambient air Annual Guideline Concentration (AGC) values.
- Less than values (<) are used where the Lower Quantitation Limit, the Target TIC Lower Quantitation Limit, or the Practical Quantitation Limit is averaged with the reported values.
- Freon 13 is listed as Chlorotrifluoromethane in the Analytical Results, Appendix C.
- ($ug/std\text{-}m^3$): micrograms per standard cubic meter
- (ng): nanograms

APPENDIX C

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX
EVALUATION OF VOLATILE ORGANIC COMPOUNDS IN AMBIENT AIR AND SOILS AND SOIL GAS PRESSURE READINGS

2005 ANNUAL SUMMARY REPORT

2005 QUARTERLY SOIL GAS PRESSURE DATA

TABLE 5.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF SOIL GAS PRESSURE TESTS

FIRST QUARTER 2005

SAMPLE ID	DATE (mm/dd/yy)	TIME (EDT)	WELL ID	WELL LOCATION	WELL DEPTH (feet)	READINGS (INCHES H2O)
P1	03/31/05	7:19 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P2	03/31/05	7:19 AM	PW1	NW corner of the landfill on Haul Road	20	-0.02
P3	03/31/05	7:20 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P4	03/31/05	7:20 AM	PW1	NW corner of the landfill on Haul Road	20	-0.02
P5	03/31/05	7:09 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P6	03/31/05	7:08 AM	PW2	SE corner of the landfill NW of Well M2	20	0.00
P7	03/31/05	7:10 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P8	03/31/05	7:10 AM	PW2	SE corner of the landfill NW of Well M2	20	0.00
P9	03/31/05	7:34 AM	PW3	Fireman's Training Center	10	-0.01
P10	03/31/05	7:34 AM	PW3	Fireman's Training Center	20	-0.01
P11	03/31/05	7:36 AM	PW3	Fireman's Training Center	10	-0.01
P12	03/31/05	7:36 AM	PW3	Fireman's Training Center	20	-0.01

NOTES:

- Measurements taken using a ten inch Dwyer inclined manometer.
- Leak checks were performed on manometer before testing each well.

TABLE 5.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF SOIL GAS PRESSURE TESTS

SECOND QUARTER 2005

SAMPLE ID	DATE (mm/dd/yy)	TIME (EDT)	WELL ID	WELL LOCATION	WELL DEPTH (feet)	READINGS (INCHES H2O)
P1	06/08/05	6:50 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P2	06/08/05	6:50 AM	PW1	NW corner of the landfill on Haul Road	20	-0.03
P3	06/08/05	6:51 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P4	06/08/05	6:51 AM	PW1	NW corner of the landfill on Haul Road	20	-0.03
P5	06/08/05	6:35 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P6	06/08/05	6:35 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.08
P7	06/08/05	6:36 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P8	06/08/05	6:36 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.08
P9	06/08/05	7:08 AM	PW3	Fireman's Training Center	10	0.00
P10	06/08/05	7:08 AM	PW3	Fireman's Training Center	20	-0.12
P11	06/08/05	7:09 AM	PW3	Fireman's Training Center	10	0.00
P12	06/08/05	7:09 AM	PW3	Fireman's Training Center	20	-0.13

NOTES:

- Measurements taken using a ten inch Dwyer inclined manometer.
- Leak checks were performed on manometer before testing each well.

TABLE 5.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF SOIL GAS PRESSURE TESTS

THIRD QUARTER 2005

SAMPLE ID	DATE (mm/dd/yy)	TIME (EDT)	WELL ID	WELL LOCATION	WELL DEPTH (feet)	READINGS (INCHES H2O)
P1	08/25/05	7:07 AM	PW1	NW corner of the landfill on Haul Road	10	-0.02
P2	08/25/05	7:07 AM	PW1	NW corner of the landfill on Haul Road	20	-0.02
P3	08/25/05	7:08 AM	PW1	NW corner of the landfill on Haul Road	10	-0.01
P4	08/25/05	7:08 AM	PW1	NW corner of the landfill on Haul Road	20	-0.02
P5	08/25/05	6:51 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P6	08/25/05	6:51 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.05
P7	08/25/05	6:53 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P8	08/25/05	6:53 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.05
P9	08/25/05	7:22 AM	PW3	Fireman's Training Center	10	0.00
P10	08/25/05	7:22 AM	PW3	Fireman's Training Center	20	-0.08
P11	08/25/05	7:23 AM	PW3	Fireman's Training Center	10	0.00
P12	08/25/05	7:23 AM	PW3	Fireman's Training Center	20	-0.08

NOTES:

- Measurements taken using a ten inch Dwyer inclined manometer.
- Leak checks were performed on manometer before testing each well.

TABLE 5.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF SOIL GAS PRESSURE TESTS

FOURTH QUARTER 2005

SAMPLE ID	DATE (mm/dd/yy)	TIME (EDT)	WELL ID	WELL LOCATION	WELL DEPTH (feet)	READINGS (INCHES H2O)
P1	11/14/05	7:29 AM	PW1	NW corner of the landfill on Haul Road	10	-0.02
P2	11/14/05	7:29 AM	PW1	NW corner of the landfill on Haul Road	20	-0.03
P3	11/14/05	7:30 AM	PW1	NW corner of the landfill on Haul Road	10	-0.02
P4	11/14/05	7:30 AM	PW1	NW corner of the landfill on Haul Road	20	-0.03
P5	11/14/05	7:20 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P6	11/14/05	7:20 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.07
P7	11/14/05	7:21 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P8	11/14/05	7:21 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.07
P9	11/14/05	7:51 AM	PW3	Fireman's Training Center	10	0.00
P10	11/14/05	7:51 AM	PW3	Fireman's Training Center	20	-0.20
P11	11/14/05	7:53 AM	PW3	Fireman's Training Center	10	0.00
P12	11/14/05	7:53 AM	PW3	Fireman's Training Center	20	-0.20

NOTES:

- Measurements taken using a ten inch Dwyer inclined manometer.
- Leak checks were performed on manometer before testing each well.

APPENDIX C

ANNUAL SUMMARY
OLD BETHPAGE LANDFILL
QUARTERLY GROUNDWATER MONITORING PROGRAM
JANUARY THROUGH DECEMBER 2005

Gannett Fleming Engineers and Architects, P.C.
August 2006

OLD BETHPAGE LANDFILL
BETHPAGE, NEW YORK

ANNUAL SUMMARY
OLD BETHPAGE LANDFILL
QUARTERLY GROUNDWATER
MONITORING PROGRAM
JANUARY THROUGH DECEMBER 2005

PROJECT #43311

AUGUST 2006

Office Location:
GANNETT FLEMING ENGINEERS AND ARCHITECTS, P.C.
480 Forest Avenue
Locust Valley, New York 11560

Office Contact:
Greg Ernst
(516) 671-8440

Locations Nationwide

CONTENTS

TABLES

FIGURES

APPENDIX A

APPENDIX B

1.0 INTRODUCTION

This report summarizes the groundwater monitoring activities for the calendar year 2005 at the Old Bethpage Solid Waste Disposal Complex (OBSWDC). The 2005 monitoring period covers the thirteenth year of operation of the Old Bethpage Landfill Groundwater Treatment Facility (GTF). Quarterly groundwater monitoring was performed in accordance with the requirements of the Remedial Action Plan (RAP) in Appendix I of the 1988 Record of Decision issued by the New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA).

The OBSWDC groundwater remediation system began operating on April 1, 1992. Geraghty & Miller, Inc. initiated monthly hydraulic monitoring approximately 30 days after system start-up, with the frequency reduced to quarterly beginning with the October 1993 round. The 2005 sampling program consisted of four synoptic rounds of water-level measurements to assess the effectiveness of the hydraulic control created by the recovery well network, and four rounds of groundwater sampling at 16 monitoring wells to track changes in groundwater quality over time. At the request of Lockwood, Kessler and Bartlett (LKB), monitoring wells MW-9D and OBS-2 were also sampled during the third quarter sampling round.

2.0 WATER-LEVEL MEASUREMENTS AND MAPPING

A synoptic round of water-level measurements was recorded in monitoring and recovery wells by Gannett Fleming at the start of each monitoring event. The depth to water and water-level elevation data are summarized in Table 1. These data were used to create the water table, shallow potentiometric, and deep potentiometric zone groundwater flow maps for each quarter as provided in Appendix A. Each map shows the water-level elevation contours, limiting flow lines, and the approximate aerial extent of the volatile organic compound (VOC) plume. Excluding well MW-9A, which was dry during all four sampling rounds, water level elevations in the monitoring wells decreased an average of 0.312 feet during the annual monitoring period.

The recovery system was not operating at its full capacity during 2005 due to repairs and power outages. The annual pumpage data are summarized in Table 2.

Regional groundwater flow at the water table and in the shallow and deep potentiometric zones is southeasterly, except in the capture zone area where the shallow and deep potentiometric groundwater flows toward the recovery wells. The GTF effluent is discharged to Recharge Basin #1, which causes localized water table mounding beneath the basin. The mounding has not affected the overall hydraulic gradient or flow direction.

3.0 GROUNDWATER SAMPLING AND CONTAMINANT DISTRIBUTION

Gannett Fleming sampled monitoring wells M-30B-R, MW-5B, MW-6A, MW-6B, MW-6C, MW-6E, MW-6F, MW-7B, MW-8A, MW-8B, MW-9B, MW-9C, MW-11A, MW-11B, OBS-1 and LF-1 in January, April, July and October 2005 in accordance with the *Protocols for Sampling Groundwater Under the Old Bethpage Solid Waste Disposal Complex Remedial Action Plan* prepared by Geraghty & Miller, Inc. Field blanks and field duplicates were also collected and analyzed for quality assurance/quality control (QA/QC) purposes. Trip blanks were prepared by the laboratory for QA/QC purposes. The samples collected for VOC analysis were analyzed by the Town of Oyster Bay's on-site laboratory. Metals and leachate parameters were analyzed by H2M Laboratories. The quarterly analytical results are summarized in Tables 3, 4, 5, 6, 7 and 8. Raw laboratory data and well sampling logs are included in the quarterly reports prepared by Gannett Fleming.

Dedicated submersible pumps, a two-inch Grundfos pump, or a dedicated bailer was used to purge and sample the monitoring wells. All non-dedicated down-well equipment was cleaned before use and after sampling each well by washing with laboratory-grade detergent solution and rinsing with potable water to minimize the possibility of cross contamination.

Recovery well analytical data, provided quarterly by the Town of Oyster Bay Department of Public Works, are summarized in Table 6. The monitoring well and recovery well databases were combined to create the plume maps shown on Figures 1 through 3.

3.1 Volatile Organic Compound Plume

Volatile organic compounds (VOCs) are divided into three classifications for discussion in this report: volatile halogenated hydrocarbons (VHOs), volatile aromatic hydrocarbons, and

tetrachloroethene (PCE). Changes in chemical constituent concentrations between the first and fourth quarter sampling rounds are discussed below.

3.1.1 Volatile Halogenated Compounds

Ten VHO compounds were detected during 2005. The location and monitoring round during which the highest concentration of each compound was found is listed below.

Compound	Peak Concentration (ppb*)	Quarter	Location
1,1-Dichloroethane	5.90	Third	MW-9D
1,1-Dichloroethene	8.40	Third	MW-7B
1,1,1-Trichloroethane	21.2	Second	MW-7B
Chloroethane	5.0	Third	MW-9D
Chloroform	3.5	Third	MW-7B
cis-1,2-Dichloroethene	33.4	Second	MW-7B
Dichlorodifluoromethane	9.0	Third	MW-9D
trans-1,2-Dichloroethene	2.5	First	MW-6C
Trichloroethylene	680.0	Second	MW-7B
Vinyl chloride	2.0	Third	MW-9D

*ppb – parts per billion

Total VHO concentrations decreased in monitoring wells MW-6B (0.8 ppb to non-detect), MW-6C (2.5 to 0.5 ppb), MW-8A (2.8 to 1.0 ppb), and OBS-1 (3.9 to 1.6 ppb), but increased MW-7B (234.1 to 461.9 ppb), MW- 9D (23.9 to 31.5 ppb [compared to third quarter of 2004]), and MW-11A (non-detect to 0.7 ppb). VHO concentrations remained at less than the laboratory detection limit in wells M-30B-R, MW-5B, -6A, -6E, -6F, -9B, -9C, and -11B during the first through fourth quarter sampling rounds.

For the year, concentrations of volatile halogenated compounds remained low in the water table and shallow potentiometric zone. In the deep potentiometric zone, trichloroethylene was detected during the second quarter monitoring round at a concentration of 680.0 ppb in monitoring well MW-7B. Trichloroethylene decreased in MW-7B to 461.90 ppb by the fourth quarter monitoring round.

Figure 1 shows the distribution of VHOs during 2005. Changes in the concentrations of total volatile halogenated compounds in each potentiometric zone are shown in Figures 1 through 3 in Appendix B.

3.1.2 Aromatic Hydrocarbons

Eight aromatic hydrocarbons were detected during the 2005 monitoring period. The location and monitoring round during which the highest concentration of each compound was found is listed below.

Compound	Peak Concentration (ppb*)	Quarter	Location
Benzene	6.5	Third	MW-9D
Chlorobenzene	5.9	First	MW-6B
Ethylbenzene	1.8	Fourth	MW-6B
1,2-Dichlorobenzene	8.9	First	MW-6B
1,3-Dichlorobenzene	1.5	Fourth	MW-6C
1,4-Dichlorobenzene	5.9	First	MW-6B
o-xylene	3.4	Third	MW-9D
m/p-xylene	6.0	Second	MW-6B

*ppb – parts per billion

Aromatic hydrocarbon concentrations increased in well MW-6E (1.2 to 6.5 ppb), however the concentrations decreased in wells LF-1 (3.8 to 0.5 ppb), MW-6A (0.7 to non-detect), MW-6B (26.3 to 11.6 ppb), MW-6C (4.3 to 3.5 ppb), MW-7B (0.6 ppb to non-detect), MW-9D (19.0 to 13.4 ppb [compared to third quarter 2004]) and OBS-1 (3.3 to 2.0 ppb). Aromatic hydrocarbons concentrations remained at less than the laboratory detection limit in wells M-30B-R, MW-5B, -6F, -8A, -8B, -9B, -9C, -11A, and -11B during the first through fourth quarter sampling rounds.

Aromatic hydrocarbons were not detected at the water table. Aromatic hydrocarbon concentrations in the shallow and deep potentiometric zones generally decreased between the first and fourth quarter

monitoring rounds. Figure 2 shows the distribution of aromatic hydrocarbons during 2005. Changes in the concentrations of total aromatic hydrocarbons in each potentiometric zone are shown in Figures 4 through 6 in Appendix B.

3.1.3 PCE

The location and monitoring round during which the highest concentration of PCE was found is listed below.

Compound	Peak Concentration (ppb*)	Quarter	Location
PCE	266.0	Second	MW-7B

PCE concentrations decreased in monitoring wells MW-7B (122.0 to 64.0 ppb) and OBS-1 (1.1 ppb to 0.5 ppb) and increased in monitoring wells MW-8A (15.1 to 16.0 ppb), MW-8B (non-detect to 0.6 ppb) and MW-9D (1.9 to 2.6 ppb [compared to third quarter 2004]). PCE concentrations remained at less than the laboratory detection limit in the samples from LF -1, M-30B-R, MW-6A, -6B, -6C, -6E, -6F, -9B, -9C, -11A, and -11B, during the first through fourth quarter sampling rounds.

PCE was found only in MW-8A at the water table depth. In the deep potentiometric zone, monitoring well MW-7B contained the highest concentration of PCE (266.0 ppb) during the Second quarter. The PCE concentrations in MW-7B were 122 ppb in the first quarter and 91.0 ppb in the third quarter, decreasing to 64.0 ppb by the fourth quarter monitoring round. The PCE concentrations in MW-8A and MW-7B exceed the New York State Water Quality Guidance Value of 5.0 ppb.

Figure 3 shows the distribution of PCE during 2005. Changes in the concentrations of PCE in each potentiometric zone are shown in Figures 7 through 9 in Appendix B.

3.2 Inorganic Compound Plume

The 2005 inorganic compound data shows a slight decrease in the extent and concentration of leachate parameters over time. The highest leachate parameter concentrations were found in the samples from wells MW-6B, MW-6C, and MW-8B.

4.0 FINDINGS AND CONCLUSIONS

1. The average system pumpage in 2005 was 845 gallons per minute and appeared sufficient to control the VOC plume.

2. Localized water table mounding beneath Recharge Basin #1 was caused by the discharge of the GTF effluent to the basin.

3. Total VHO concentrations decreased in monitoring wells MW-6B, MW-6C, MW-8A, and OBS-1, but increased MW-7B, MW- 9D, and MW-11A. VHO concentrations remained at less than the laboratory detection limit in wells M-30B-R, MW-5B, -6A, -6E, -6F, -9B, -9C, and -11B.

4. Aromatic hydrocarbon concentrations increased in well MW-6E. Aromatic hydrocarbon concentrations decreased in wells LF-1, MW-6A, MW-6B, MW-6C, MW-7B, MW-9D [compared to third quarter 2004]) and OBS-1. Aromatic hydrocarbon concentrations remained at less than the laboratory detection limit in wells M-30B-R, MW-5B, -6F, -8A, -8B, -9B, -9C, -11A, and -11B during the first and fourth quarter sampling rounds.

5. PCE concentrations decreased in monitoring wells MW-7B (122.0 to 64.0 ppb) and OBS-1 (1.1 ppb to 0.5 ppb) and increased in monitoring wells MW-8A (15.1 to 16.0 ppb), MW-8A (non-detect to 0.6 ppb) and MW-9D (1.9 to 2.6 ppb [compared to third quarter 2004]). PCE was not found at a concentration exceeding the laboratory detection limit in the samples from LF -1, M-30B-R, MW-6A, -6B, -6C, -6E, -6F, -9B, -9C, -11A, and -11B, during the first through fourth quarter sampling rounds. PCE was detected above the NYSDEC Ambient Water Quality Guidance value in wells MW-7B and MW-8A.

6. The distribution and concentration of inorganic compounds show a slight decrease in the extent and concentration of leachate parameters during 2005.

5.0 RECOMMENDATIONS

1. Restore active pumping in all recovery wells to assure hydraulic control as per system design.

2. Continue the quarterly groundwater monitoring program to track changes in water quality conditions over time and to assess the groundwater remediation system effectiveness.

3. Continue to evaluate trends in water levels in response to seasonal inputs.

TABLES

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2005

PERIOD: From 01/11/2005 thru 10/03/2005 - Inclusive

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	DELTA WATER ELEV (feet)	WATER ELEV. (feet)
EW-02A	1/11/2005	157.14	00:00	94.72	NA	62.42
EW-02A	4/18/2005	157.14	00:00	94.05	0.67	63.09
EW-02A	7/11/2005	157.14	00:00	93.39	0.66	63.75
EW-02A	10/3/2005	157.14	00:00	95.55	-2.16	61.59
EW-02B	1/11/2005	157.61	00:00	94.95	NA	62.66
EW-02B	4/18/2005	157.61	00:00	94.20	0.75	63.41
EW-02B	7/11/2005	157.61	00:00	93.61	0.59	64.00
EW-02B	10/3/2005	157.61	00:00	95.91	-2.30	61.70
EW-02C	1/11/2005	157.54	00:00	94.97	NA	62.57
EW-02C	4/18/2005	157.54	00:00	94.03	0.94	63.51
EW-02C	7/11/2005	157.54	00:00	93.46	0.57	64.08
EW-02C	10/3/2005	157.54	00:00	96.15	-2.69	61.39
LF-1	1/11/2005	111.40	00:00	47.37	NA	64.03
LF-1	4/18/2005	111.40	00:00	46.58	0.79	64.82
LF-1	7/11/2005	111.40	00:00	46.56	0.02	64.84
LF-1	10/3/2005	111.40	00:00	48.16	-1.60	63.24
LF-2	1/11/2005	118.70	00:00	55.00	NA	63.70
LF-2	4/18/2005	118.70	00:00	54.12	0.88	64.58
LF-2	7/11/2005	118.70	00:00	53.86	0.26	64.84
LF-2	10/3/2005	118.70	00:00	55.73	-1.87	62.97
LF-3	1/11/2005	126.50	00:00	62.27	NA	64.23
LF-3	4/18/2005	126.50	00:00	56.07	6.20	70.43
LF-3	7/11/2005	126.50	00:00	59.00	-2.93	67.50
LF-3	10/3/2005	126.50	00:00	61.10	-2.10	65.40
LF-4	1/11/2005	149.93	00:00	82.57	NA	67.36
LF-4	4/18/2005	149.93	00:00	81.90	0.67	68.03
LF-4	7/11/2005	149.93	00:00	81.74	0.16	68.19
LF-4	10/3/2005	149.93	00:00	83.41	-1.67	66.52
M-29A-R	1/11/2005	157.50	00:00	92.19	NA	65.31
M-29A-R	4/18/2005	157.50	00:00	91.37	0.82	66.13
M-29A-R	7/11/2005	157.50	00:00	91.44	-0.07	66.06
M-29A-R	10/3/2005	157.50	00:00	93.11	-1.67	64.39
M-29B	1/11/2005	157.41	00:00	92.29	NA	65.12
M-29B	4/18/2005	157.41	00:00	89.52	2.77	67.89
M-29B	7/11/2005	157.41	00:00	89.88	-0.36	67.53
M-29B	10/3/2005	157.41	00:00	91.21	-1.33	66.20
M-30A	1/11/2005	151.20	00:00	83.80	NA	67.40
M-30A	4/18/2005	151.20	00:00	83.16	0.64	68.04
M-30A	7/11/2005	151.20	00:00	82.87	0.29	68.33

NA-Not Applicable NM-Not Measured
D-Dry

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2005

PERIOD: From 01/11/2005 thru 10/03/2005 - Inclusive

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	DELTA WATER ELEV (feet)	WATER ELEV. (feet)
M-30A	10/3/2005	151.20	00:00	84.65	-1.78	66.55
M-30B-R	1/11/2005	154.51	00:00	87.83	NA	66.68
M-30B-R	4/18/2005	154.51	00:00	87.11	0.72	67.40
M-30B-R	7/11/2005	154.51	00:00	87.03	0.08	67.48
M-30B-R	10/3/2005	154.51	00:00	88.74	-1.71	65.77
MW-05A	1/11/2005	137.13	00:00	74.41	NA	62.72
MW-05A	4/18/2005	137.13	00:00	73.69	0.72	63.44
MW-05A	7/11/2005	137.13	00:00	73.34	0.35	63.79
MW-05A	10/3/2005	137.13	00:00	74.96	-1.62	62.17
MW-05B	1/11/2005	138.43	00:00	75.72	NA	62.71
MW-05B	4/18/2005	138.43	00:00	75.00	0.72	63.43
MW-05B	7/11/2005	138.43	00:00	74.63	0.37	63.80
MW-05B	10/3/2005	138.43	00:00	76.25	-1.62	62.18
MW-06A	1/11/2005	160.24	00:00	97.73	NA	62.51
MW-06A	4/18/2005	160.24	00:00	97.27	0.46	62.97
MW-06A	7/11/2005	160.24	00:00	96.87	0.40	63.37
MW-06A	10/3/2005	160.24	00:00	98.75	-1.88	61.49
MW-06B	1/11/2005	160.39	00:00	98.00	NA	62.39
MW-06B	4/18/2005	160.39	00:00	97.53	0.47	62.86
MW-06B	7/11/2005	160.39	00:00	97.10	0.43	63.29
MW-06B	10/3/2005	160.39	00:00	99.01	-1.91	61.38
MW-06C	1/11/2005	159.99	00:00	97.55	NA	62.44
MW-06C	4/18/2005	159.99	00:00	97.04	0.51	62.95
MW-06C	7/11/2005	159.99	00:00	96.63	0.41	63.36
MW-06C	10/3/2005	159.99	00:00	98.54	-1.91	61.45
MW-06D	1/11/2005	160.39	00:00	97.82	NA	62.57
MW-06D	4/18/2005	160.39	00:00	97.33	0.49	63.06
MW-06D	7/11/2005	160.39	00:00	97.00	0.33	63.39
MW-06D	10/3/2005	160.39	00:00	98.91	-1.91	61.48
MW-06E	1/11/2005	160.88	00:00	98.46	NA	62 42
MW-06E	4/18/2005	160.88	00:00	98.05	0.41	62.83
MW-06E	7/11/2005	160.88	00:00	97.81	0.24	63.07
MW-06E	10/3/2005	160.88	00:00	99.71	-1.90	61.17
MW-06F	1/11/2005	159.88	00:00	97.63	NA	62.25
MW-06F	4/18/2005	159.88	00:00	97.11	0.52	62.77
MW-06F	7/11/2005	159.88	00:00	97.05	0.06	62.83
MW-06F	10/3/2005	159.88	00:00	98.94	-1.89	60.94
MW-07A	1/11/2005	148.44	00:00	88.68	NA	59.76

NA-Not Applicable NM-Not Measured
D-Dry

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2005

PERIOD: From 01/11/2005 thru 10/03/2005 - Inclusive

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	DELTA WATER ELEV (feet)	WATER ELEV. (feet)
MW-07A	4/18/2005	148.44	00:00	86.41	2.27	62.03
MW-07A	7/11/2005	148.44	00:00	87.61	-1.20	60.83
MW-07A	10/3/2005	148.44	00:00	89.61	-2.00	58.83
MW-07B	1/11/2005	147.94	00:00	88.78	NA	59.16
MW-07B	4/18/2005	147.94	00:00	89.05	-0.27	58.89
MW-07B	7/11/2005	147.94	00:00	88.91	0.14	59.03
MW-07B	10/3/2005	147.94	00:00	91.02	-2.11	56.92
MW-08A	1/11/2005	134.94	00:00	72.75	NA	62.19
MW-08A	4/18/2005	134.94	00:00	71.83	0.92	63.11
MW-08A	7/11/2005	134.94	00:00	71.24	0.59	63.70
MW-08A	10/3/2005	134.94	00:00	73.39	-2.15	61.55
MW-08B	1/11/2005	134.24	00:00	71.42	NA	62.82
MW-08B	4/18/2005	134.24	00:00	70.34	1.08	63.90
MW-08B	7/11/2005	134.24	00:00	70.04	0.30	64.20
MW-08B	10/3/2005	134.24	00:00	72.65	-2.61	61.59
MW-08C	1/11/2005	135.72	00:00	72.20	NA	63.52
MW-08C	4/18/2005	135.72	00:00	71.56	0.64	64.16
MW-08C	7/11/2005	135.72	00:00	71.43	0.13	64.29
MW-08C	10/3/2005	135.72	00:00	73.55	-2.12	62.17
MW-09A	1/11/2005	153.35	00:00	D	NA	NA
MW-09A	4/18/2005	153.35	00:00	D	NA	NA
MW-09A	7/11/2005	153.35	00:00	D	NA	NA
MW-09A	10/3/2005	153.35	00:00	D	NA	NA
MW-09B	1/11/2005	153.28	00:00	93.58	NA	59.70
MW-09B	4/18/2005	153.28	00:00	95.41	-1.83	57.87
MW-09B	7/11/2005	153.28	00:00	93.30	2.11	59.98
MW-09B	10/3/2005	153.28	00:00	94.89	-1.59	58.39
MW-09C	1/11/2005	153.53	00:00	94.59	NA	58.94
MW-09C	4/18/2005	153.53	00:00	94.56	0.03	58.97
MW-09C	7/11/2005	153.53	00:00	94.31	0.25	59.22
MW-09C	10/3/2005	153.53	00:00	96.12	-1.81	57.41
MW-09D	1/11/2005	152.95	00:00	93.50	NA	59.45
MW-09D	4/18/2005	152.95	00:00	93.10	0.40	59.85
MW-09D	7/11/2005	152.95	00:00	93.13	-0.03	59.82
MW-09D	10/3/2005	152.95	00:00	95.04	-1.91	57.91
MW-10A	1/11/2005	161.28	00:00	98.75	NA	62.53
MW-10A	4/18/2005	161.28	00:00	98.29	0.46	62.99
MW-10A	7/11/2005	161.28	00:00	97.69	0.60	63.59
MW-10A	10/3/2005	161.28	00:00	99.72	-2.03	61.56

NA-Not Applicable NM-Not Measured
D-Dry

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2005

PERIOD: From 01/11/2005 thru 10/03/2005 - Inclusive

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	DELTA WATER ELEV (feet)	WATER ELEV. (feet)
MW-10B	1/11/2005	161.12	00:00	98.93	NA	62.19
MW-10B	4/18/2005	161.12	00:00	98.46	0.47	62.66
MW-10B	7/11/2005	161.12	00:00	98.04	0.42	63.08
MW-10B	10/3/2005	161.12	00:00	100.05	-2.01	61.07
MW-10C	1/11/2005	160.27	00:00	98.00	NA	62.27
MW-10C	4/18/2005	160.27	00:00	98.60	-0.60	61.67
MW-10C	7/11/2005	160.27	00:00	97.28	1.32	62.99
MW-10C	10/3/2005	160.27	00:00	99.28	-2.00	60.99
MW-10D	1/11/2005	161.17	00:00	98.99	NA	62.18
MW-10D	4/18/2005	161.17	00:00	100.26	-1.27	60.91
MW-10D	7/11/2005	161.17	00:00	98.41	1.85	62.76
MW-10D	10/3/2005	161.17	00:00	100.35	-1.94	60.82
MW-11A	1/11/2005	80.19	00:00	25.17	NA	55.02
MW-11A	4/18/2005	80.19	00:00	23.65	1.52	56.54
MW-11A	7/11/2005	80.19	00:00	24.43	-0.78	55.76
MW-11A	10/3/2005	80.19	00:00	26.65	-2.22	53.54
MW-11B	1/11/2005	79.91	00:00	25.28	NA	54.63
MW-11B	4/18/2005	79.91	00:00	23.62	1.66	56.29
MW-11B	7/11/2005	79.91	00:00	24.33	-0.71	55.58
MW-11B	10/3/2005	79.91	00:00	26.58	-2.25	53.33
N-9980	1/11/2005	80.46	00:00	26.16	NA	54.30
N-9980	4/18/2005	80.46	00:00	26.05	0.11	54.41
N-9980	7/11/2005	80.46	00:00	25.41	0.64	55.05
N-9980	10/3/2005	80.46	00:00	27.74	-2.33	52.72
OBS-1	1/11/2005	110.61	00:00	50.93	NA	59.68
OBS-1	4/18/2005	110.61	00:00	50.47	0.46	60.14
OBS-1	7/11/2005	110.61	00:00	50.55	-0.08	60.06
OBS-1	10/3/2005	110.61	00:00	52.02	-1.47	58.59
OBS-2	1/11/2005	105.26	00:00	47.25	NA	58.01
OBS-2	4/18/2005	105.26	00:00	46.43	0.82	58.83
OBS-2	7/11/2005	105.26	00:00	46.52	-0.09	58.74
OBS-2	10/3/2005	105.26	00:00	48.53	-2.01	56.73
RW-01	1/11/2005	110.94	00:00	NM	NA	NA
RW-01	4/18/2005	110.94	00:00	NM	NA	NA
RW-01	7/11/2005	110.94	00:00	57.88	NA	53.06
RW-01	10/3/2005	110.94	00:00	51.31	6.57	59.63
RW-02	1/11/2005	145.31	00:00	99.75	NA	45.56
RW-02	4/18/2005	145.31	00:00	NM	NA	NA

NA-Not Applicable NM-Not Measured
D-Dry

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2005

PERIOD: From 01/11/2005 thru 10/03/2005 - Inclusive

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	DELTA WATER ELEV (feet)	WATER ELEV. (feet)
RW-02	7/11/2005	145.31	00:00	97.35	NA	47.96
RW-02	10/3/2005	145.31	00:00	99.09	-1.74	46.22
RW-03	1/11/2005	120.92	00:00	61.35	NA	59.57
RW-03	4/18/2005	120.92	00:00	NM	NA	NA
RW-03	7/11/2005	120.92	00:00	72.38	NA	48.54
RW-03	10/3/2005	120.92	00:00	75.80	-3.42	45.12
RW-04	1/11/2005	144.82	00:00	O	NA	NA
RW-04	4/18/2005	144.82	00:00	NM	NA	NA
RW-04	7/11/2005	144.82	00:00	85.70	NA	59.12
RW-04	10/3/2005	144.82	00:00	87.77	-2.07	57.05
RW-05	1/11/2005	149.74	00:00	88.55	NA	61.19
RW-05	4/18/2005	149.74	00:00	NM	NA	NA
RW-05	7/11/2005	149.74	00:00	98.07	NA	51.67
RW-05	10/3/2005	149.74	00:00	41.98	NA	107.76
TW-1	1/11/2005	121.12	00:00	53.67	NA	67.45
TW-1	4/18/2005	121.12	00:00	53.14	0.53	67.98
TW-1	7/11/2005	121.12	00:00	52.78	0.36	68.34
TW-1	10/3/2005	121.12	00:00	54.32	-1.54	66.80
TW-2	1/11/2005	117.52	00:00	53.35	NA	64.17
TW-2	4/18/2005	117.52	00:00	52.61	0.74	64.91
TW-2	7/11/2005	117.52	00:00	52.41	0.20	65.11
TW-2	10/3/2005	117.52	00:00	54.27	-1.86	63.25
TW-3-R	1/11/2005	133.93	00:00	70.24	NA	63.69
TW-3-R	4/18/2005	133.93	00:00	69.46	0.78	64.47
TW-3-R	7/11/2005	133.93	00:00	69.30	0.16	64.63
TW-3-R	10/3/2005	133.93	00:00	71.04	-1.74	62.89

NA-Not Applicable NM-Not Measured
D-Dry

TABLE 2

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

GROUNDWATER REMEDIATION SYSTEM PUMPAGE RECORDS

JANUARY THROUGH DECEMBER 2005

Date(s)	Flow (gpm)	Remarks
1/1 to 1/9	535	RW-1, RW-3 and RW-4 off-line.
1/10/2005	410	RW-1, RW-3 and RW-4 off-line.
		RW-5 off-line 13 hr.
		RW-2 off-line 5 hr.
1/11 to 1/20	252	RW-1, RW-3, RW-4 and RW-5 off-line.
1/21/2005	295	GTF off-line 8hr.
		RW-1 and RW-4 off-line 16 hr.
		RW-3 and RW-5 off-line 10 hr.
1/22/2005	753	RW-1 and RW-4 off-line.
1/23/2005	236	RW-1 and RW-4 off-line.
		RW-3 and RW-5 off-line 21 hr.
1/24/2005	252	RW-1, RW-3, RW-4 and RW-5 off-line.
1/25/2005	422	RW-1 and RW-4 off-line.
		RW-3 and RW-5 off-line 17 hr.
1/26 to 2/1	781	RW-1 and RW-4 off-line.
2/2/2005	671	RW-1 off-line 7 hr.
		RW-4 off-line 19 hr.
		GTF off-line 5hr.
2/3/2005	954	RW-4 off-line.
2/4/2005	852	RW-4 off-line 22 hr.
		GTF off-line 2 hr.
2/5 to 3/23	904	RW-4 off-line.
3/24/2005	908	RW-4 off-line 16 hr.
3/25 to 3/31	927	GTF on-line.
Average:	750.36	
4/1	686	GTF off-line 6 hr.
4/2 to 4/14	929	GTF on-line
4/15	848	GTF off-line 2 hr.
4/16-4/19	934	GTF on-line.
4/20	830	RW-1 off-line 16 hr.
4/21-4/26	777	RW-1 off-line.
4/27	868	RW-1 off-line 12 hr.
4/28 - 5/3	923	GTF on-line.
5/4	665	GTF off-line 7 hr.
5/5 - 6/30	935	GTF on-line.
Average:	914	

TABLE 2

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

GROUNDWATER REMEDIATION SYSTEM PUMPAGE RECORDS

JANUARY THROUGH DECEMBER 2005

07/01/05-07/17/05	941	GTF on-line
07/18/05	833	RW-1 off-line 17 hrs
07/19/05-08/14/05	785	RW-1 off-line
08/15/05	702	RW-1 off-line, RW-2 off-line 9 hrs
08/16/05	795	RW-1 off-line
08/17/05	785	RW-1 off-Line 22 hr, GTF off-line 2 hrs
08/17/05-09/19/05	786	RW-1 off-line
09/20/05	773	RW-1 off-line 15 hrs, GTF off-line 9 hrs
09/21/05-09/30/05	783	RW-1 off-line
Average:	813	
10/01/05-10/13/05	779	RW-1 Off-Line
10/14/05	763	RW-1 Off-Line, GTF Off-Line 9 Hrs.
10/15/05-10/16/05	768	RW-1 Off-Line
10/17/05	860	RW-1 Off-Line 14 Hrs, GTF Off-Line 5 Hrs.
10/18/05-10/31/05	929	RW-2 Off-Line 36 Hrs.
11/01/2005-11/30/05	933	GTF On-Line
12/01/05-12/31/05	932	GTF On-Line
Average:	904	
Annual Average:	845	

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	LF-1	LF-1	LF-1	LF-1
DATE:	1/14/2005	4/21/2005	Third Quarter	10/5/2005
1,1,1-Trichloroethane	<0.5	<0.5	NA	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	NA	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	NA	<0.5
1,1-Dichloroethane	<0.5	<0.5	NA	<0.5
1,1-Dichloroethene	<0.5	<0.5	NA	<0.5
1,2-Dichloroethane	<0.5	<0.5	NA	<0.5
1,2-Dichloropropane	<0.5	<0.5	NA	<0.5
Bromodichloromethane	<0.5	<0.5	NA	<0.5
Bromoform	<0.5	<0.5	NA	<0.5
Bromomethane	<0.5	<0.5	NA	<0.5
Carbon tetrachloride	<0.5	<0.5	NA	<0.5
Chlorodibromomethane	<0.5	<0.5	NA	<0.5
Chloroethane	<0.5	<0.5	NA	<0.5
Chloroform	<0.5	<0.5	NA	<0.5
Chloromethane	<0.5	<0.5	NA	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	NA	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	NA	<0.5
Dichlorodifluoromethane	<0.5	<0.5	NA	<0.5
Methylene chloride	<0.5	<0.5	NA	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	NA	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	NA	<0.5
Trichloroethylene	<0.5	<0.5	NA	<0.5
Trichlorofluoromethane	<0.5	<0.5	NA	<0.5
Vinyl chloride	<0.5	<0.5	NA	<0.5
Sum of Constituents	0.00	0.00	NA	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	M-30B-R	M-30B-R	M-30B-R	M-30B-R
DATE:	1/12/2005	4/19/2005	7/12/2005	10/4/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-05B	MW-05B	MW-05B	MW-05B
DATE:	1/14/2005	4/21/2005	7/14/2005	10/5/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-06A	MW-06A	MW-06A	MW-06A
DATE:	1/13/2005	4/20/2005	7/13/2005	10/5/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-06B	MW-06B	MW-06B	MW-06B
DATE:	1/13/2005	4/20/2005	7/13/2005	10/5/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	0.8	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.80	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-06C	MW-06C	MW-06C	MW-06C
DATE:	1/13/2005	4/20/2005	7/13/2005	10/5/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	2.5	1.4	<0.5	0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	2.50	1.40	0.00	0.50

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-06E	MW-06E DUP	MW-06E	MW-06E
DATE:	1/13/2005	1/13/2005	4/20/2005	7/13/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-06E DUP	MW-06E	MW-06E DUP	MW-06F
DATE:	7/13/2005	10/5/2005	10/5/2005	1/13/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-06F	MW-06F	MW-06F	MW-07B
DATE:	4/20/2005	7/13/2005	10/5/2005	1/12/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	5.9
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	0.7
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	6.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	221.0
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	234.10

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: / DATE:	MW-07B 4/20/2005	MW-07B DUP 4/20/2005	MW-07B 7/12/2005	MW-07B 10/4/2005
1,1,1-Trichloroethane	21.2	17.4	15.0	10.0
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	3.6	2.4	8.4	5.3
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	3.5	1.6
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	33.4	28.9	29.0	25.0
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	680	703	491	420
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	738.20	751.70	546.90	461.90

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-08A	MW-08A	MW-08A	MW-08A
DATE:	1/13/2005	4/20/2005	7/13/2005	10/5/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	2.8	2.4	1.6	1.0
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	2.80	2.40	1.60	1.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-08B	MW-08B	MW-08B	MW-08B
DATE:	1/13/2005	4/20/2005	7/13/2005	10/5/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-09B	MW-09B	MW-09B	MW-09B
DATE:	1/12/2005	4/19/2005	7/12/2005	10/4/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-09C	MW-09C	MW-09C	MW-09C
DATE:	1/12/2005	4/19/2005	7/12/2005	10/4/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-11A	MW-11A	MW-11A	MW-11A
DATE:	1/12/2005	4/19/2005	7/12/2005	10/4/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	0.8	0.7	0.7
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.80	0.70	0.70

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-11B	MW-11B	MW-11B	MW-11B
DATE:	1/12/2005	4/19/2005	7/12/2005	10/4/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	OBS-1	OBS-1	OBS-1	OBS-1
DATE:	1/14/2005	4/21/2005	7/14/2005	10/5/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	2.7	3.3	3.5	1.6
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	0.7	0.7	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	1.2	<0.5	<0.5	<0.5
Sum of Constituents	3.90	4.00	4.20	1.60

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	MW-09D	OBS-2		
DATE:	7/12/2005	7/14/2005		
1,1,1-Trichloroethane	0.7	<0.5		
1,1,2,2-Tetrachloroethane	<0.5	<0.5		
1,1,2-Trichloroethane	<0.5	<0.5		
1,1-Dichloroethane	5.9	<0.5		
1,1-Dichloroethene	<0.5	<0.5		
1,2-Dichloroethane	<0.5	<0.5		
1,2-Dichloropropane	<0.5	<0.5		
Bromodichloromethane	<0.5	<0.5		
Bromoform	<0.5	<0.5		
Bromomethane	<0.5	<0.5		
Carbon tetrachloride	<0.5	<0.5		
Chlorodibromomethane	<0.5	<0.5		
Chloroethane	5.0	<0.5		
Chloroform	<0.5	0.7		
Chloromethane	<0.5	<0.5		
cis-1,2-Dichloroethene	6.2	0.8		
cis-1,3-Dichloropropene	<0.5	<0.5		
Dichlorodifluoromethane	9.0	<0.5		
Methylene chloride	<0.5	<0.5		
trans-1,2-Dichloroethene	0.7	<0.5		
trans-1,3-Dichloropropene	<0.5	<0.5		
Trichloroethylene	2.0	<0.5		
Trichlorofluoromethane	<0.5	<0.5		
Vinyl chloride	2.0	<0.5		
Sum of Constituents	31.50	1.50		

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION:	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK
DATE:	1/12/2005	4/20/2005	7/14/2005	10/4/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: / DATE:	TRIP BLANK 1/12/2005	TRIP BLANK 4/19/2005	TRIP BLANK 7/12/2005	TRIP BLANK 10/4/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: / DATE:	TRIP BLANK 1/13/2005	TRIP BLANK 4/20/2005	TRIP BLANK 7/13/2005	TRIP BLANK 10/5/2005
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5
Bromomethane	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	<0.5
Chloromethane	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: / DATE:	TRIP BLANK 1/14/2005	TRIP BLANK 4/21/2005	TRIP BLANK 7/14/2005	
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	
1,1-Dichloroethane	<0.5	<0.5	<0.5	
1,1-Dichloroethene	<0.5	<0.5	<0.5	
1,2-Dichloroethane	<0.5	<0.5	<0.5	
1,2-Dichloropropane	<0.5	<0.5	<0.5	
Bromodichloromethane	<0.5	<0.5	<0.5	
Bromoform	<0.5	<0.5	<0.5	
Bromomethane	<0.5	<0.5	<0.5	
Carbon tetrachloride	<0.5	<0.5	<0.5	
Chlorodibromomethane	<0.5	<0.5	<0.5	
Chloroethane	<0.5	<0.5	<0.5	
Chloroform	<0.5	<0.5	<0.5	
Chloromethane	<0.5	<0.5	<0.5	
cis-1,2-Dichloroethene	<0.5	<0.5	<0.5	
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	
Dichlorodifluoromethane	<0.5	<0.5	<0.5	
Methylene chloride	<0.5	<0.5	<0.5	
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	
Trichloroethylene	<0.5	<0.5	<0.5	
Trichlorofluoromethane	<0.5	<0.5	<0.5	
Vinyl chloride	<0.5	<0.5	<0.5	
Sum of Constituents	0.00	0.00	0.00	

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION:	LF-1	LF-1	LF-1	LF-1	M-30B-R	M-30B-R	M-30B-R	M-30B-R
DATE:	1/14/2005	4/21/2005	Third Quarter	10/5/2005	1/12/2005	4/19/2005	7/12/2005	10/4/2005
1,2-Dichlorobenzene	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	1.3	0.8	NA	0.8	<0.5	<0.5	<0.5	<0.5
Benzene	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	2.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-Xylene	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	3.80	0.80	NA	0.50	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION:	MW-05B	MW-05B	MW-05B	MW-05B	MW-06A	MW-06A	MW-06A	MW-06A
DATE:	1/14/2005	4/21/2005	7/14/2005	10/5/2005	1/13/2005	4/20/2005	7/13/2005	10/5/2005
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION:	MW-06B	MW-06B	MW-06B	MW-06B	MW-06C	MW-06C	MW-06C	MW-06C
DATE:	1/13/2005	4/20/2005	7/13/2005	10/5/2005	1/13/2005	4/20/2005	7/13/2005	10/5/2005
1,2-Dichlorobenzene	8.9	<0.5	8.0	<0.5	3.5	<0.5	2.8	<0.5
1,3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.5
1,4-Dichlorobenzene	7.5	6.5	6.47	5.0	<0.5	1.3	<0.5	2
Benzene	3.5	1.5	2.4	1.7	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	5.9	4.3	4.9	3.1	0.8	<0.5	0.6	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	<0.5	<0.5
o-Xylene	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-Xylene	0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	26.30	13.10	22.97	11.60	4.30	1.30	3.40	3.50

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION:	MW-06E	MW-06E DUP	MW-06E	MW-06E	MW-06E DUP	MW-06E	MW-06E DUP	MW-06F
DATE:	1/13/2005	1/13/2005	4/20/2005	7/13/2005	7/13/2005	10/5/2005	10/5/2005	1/13/2005
1,2-Dichlorobenzene	1.2	1.4	<0.5	1.5	1.9	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5
1,4-Dichlorobenzene	<0.5	0.6	0.6	<0.5	<0.5	2.1	2.1	<0.5
Benzene	<0.5	<0.5	<0.5	0.8	0.8	0.8	0.8	<0.5
Chlorobenzene	<0.5	0.7	<0.5	1.4	1.4	1.3	1.3	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	1.0	<0.5
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	1.20	2.70	0.60	3.70	4.10	6.50	5.20	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION:	MW-06F	MW-06F	MW-06F	MW-07B	MW-07B	MW-07B DUP	MW-07B	MW-07B
DATE:	4/20/2005	7/13/2005	10/5/2005	1/12/2005	4/20/2005	4/20/2005	7/12/2005	10/4/2005
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzene	<0.5	<0.5	<0.5	0.6	0.6	<0.5	<0.5	<0.5
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.60	0.60	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION:	MW-08A	MW-08A	MW-08A	MW-08A	MW-08B	MW-08B	MW-08B	MW-08B
DATE:	1/13/2005	4/20/2005	7/13/2005	10/5/2005	1/13/2005	4/20/2005	7/13/2005	10/5/2005
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION:	MW-09B	MW-09B	MW-09B	MW-09B	MW-09C	MW-09C	MW-09C	MW-09C
DATE:	1/12/2005	4/19/2005	7/12/2005	10/4/2005	1/12/2005	4/19/2005	7/12/2005	10/4/2005
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION:	MW-09D	MW-11A	MW-11A	MW-11A	MW-11A	MW-11B	MW-11B	MW-11B
DATE:	7/12/2005	1/12/2005	4/19/2005	7/12/2005	10/4/2005	1/12/2005	4/19/2005	7/12/2005
1,2-Dichlorobenzene	1.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzene	6.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	3.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION:	MW-11B	OBS-1	OBS-1	OBS-1	OBS-1	OBS-2	
DATE:	10/4/2005	1/14/2005	4/21/2005	7/14/2005	10/5/2005	7/14/2005	
1,2-Dichlorobenzene	<0.5	0.7	<0.5	1.6	<0.5	<0.5	
1,3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
1,4-Dichlorobenzene	<0.5	<0.5	0.8	<0.5	1.0	<0.5	
Benzene	<0.5	0.6	<0.5	1.4	0.5	<0.5	
Chlorobenzene	<0.5	2.0	<0.5	0.5	0.5	<0.5	
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
m/p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Sum of Constituents	0.00	3.30	0.80	3.50	2.00	0.00	

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION:	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
DATE:	1/12/2005	4/20/2005	7/14/2005	10/4/2005	1/12/2005	4/19/2005	7/12/2005	10/4/2005
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sum of Constituents	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION:	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	
DATE:	1/13/2005	4/20/2005	7/13/2005	10/5/2005	1/14/2005	4/21/2005	7/14/2005	
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
1,3-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
m/p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Sum of Constituents	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 5

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TETRACHLOROETHENE

SAMPLE ID:	LF-1	LF-1	LF-1	LF-1	M-30B-R	M-30B-R	M-30B-R	M-30B-R
DATE:	1/14/2005	4/21/2005	Third Quarter	10/5/2005	1/12/2005	4/19/2005	7/12/2005	10/4/2005
Tetrachloroethene	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5
SAMPLE ID:	MW-05B	MW-05B	MW-05B	MW-05B	MW-06A	MW-06A	MW-06A	MW-06A
DATE:	1/14/2005	4/21/2005	7/14/2005	10/5/2005	1/13/2005	4/20/2005	7/13/2005	10/5/2005
Tetrachloroethene	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SAMPLE ID:	MW-06B	MW-06B	MW-06B	MW-06B	MW-06C	MW-06C	MW-06C	MW-06C
DATE:	1/13/2005	4/20/2005	7/13/2005	10/5/2005	1/13/2005	4/20/2005	7/13/2005	10/5/2005
Tetrachloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 5

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TETRACHLOROETHENE

SAMPLE ID:	MW-06E	MW-06E DUP	MW-06E	MW-06E	MW-06E DUP	MW-06E	MW-06E DUP	MW-06F
DATE:	1/13/2005	1/13/2005	4/20/2005	7/13/2005	7/13/2005	10/5/2005	10/5/2005	1/13/2005
Tetrachloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SAMPLE ID:	MW-06F	MW-06F	MW-06F	MW-07B	MW-07B	MW-07B DUP	MW-07B	MW-07B
DATE:	4/20/2005	7/13/2005	10/5/2005	1/12/2005	4/20/2005	4/20/2005	7/12/2005	10/4/2005
Tetrachloroethene	<0.5	<0.5	<0.5	122.0	266.0	324.0	91.0	64.0
SAMPLE ID:	MW-08A	MW-08A	MW-08A	MW-08A	MW-08B	MW-08B	MW-08B	MW-08B
DATE:	1/13/2005	4/20/2005	7/13/2005	10/5/2005	1/13/2005	4/20/2005	7/13/2005	10/5/2005
Tetrachloroethene	15.1	36.9	18.7	16.0	<0.5	1.1	0.9	0.6

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 5

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TETRACHLOROETHENE

SAMPLE ID:	MW-09B	MW-09B	MW-09B	MW-09B	MW-09C	MW-09C	MW-09C	MW-09C
DATE:	1/12/2005	4/19/2005	7/12/2005	10/4/2005	1/12/2005	4/19/2005	7/12/2005	10/4/2005
Tetrachloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SAMPLE ID:	MW-09D	MW-11A	MW-11A	MW-11A	MW-11A	MW-11B	MW-11B	MW-11B
DATE:	7/12/2005	1/12/2005	4/19/2005	7/12/2005	10/4/2005	1/12/2005	4/19/2005	7/12/2005
Tetrachloroethene	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SAMPLE ID:	MW-11B	OBS-1	OBS-1	OBS-1	OBS-1	OBS-2		
DATE:	10/4/2005	1/14/2005	4/21/2005	7/14/2005	10/5/2005	7/14/2005		
Tetrachloroethene	<0.5	1.1	0.7	1.6	0.5	<0.5		

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 5

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TETRACHLOROETHENE

SAMPLE ID:	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
DATE:	1/12/2005	4/20/2005	7/14/2005	10/4/2005	1/12/2005	4/19/2005	7/12/2005	10/4/2005
Tetrachloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

SAMPLE ID:	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	
DATE:	1/13/2005	4/20/2005	7/13/2005	10/5/2005	1/14/2005	4/21/2005	7/14/2005	
Tetrachloroethene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	

Notes:
All concentrations in micrograms per liter (µg/L).

TABLE 6

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
FIRST QUARTER RECOVERY WELL SAMPLING RESULTS - FEBRUARY 2005
VOLATILE ORGANIC COMPOUNDS

SAMPLE DESIGNATION: SAMPLE COLLECTION DATE:	RW-1 2/4/2005	RW-2 2/4/2005	RW-3 2/4/2005	RW-4	RW-5 2/4/2005
Benzene	<0.5	0.5	0.8	NM	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	NM	<0.5
Bromoform	<0.5	<0.5	<0.5	NM	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	NM	<0.5
Chlorobenzene	<0.5	1.5	2.5	NM	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	NM	<0.5
Chloroethane	<0.5	<0.5	<0.5	NM	<0.5
Chloroform	<0.5	<0.5	<0.5	NM	<0.5
o,p-Dichlorobenzene	1.1	1.3	1.0	NM	<0.5
m,o,p-Dichlorobenzene	1.1	1.3	1.3	NM	<0.5
1,1-Dichloroethane	<0.5	<0.5	<0.5	NM	<0.5
1,2-Dichloroethane	<0.5	<0.5	<0.5	NM	<0.5
1,1-Dichloroethene	<0.5	<0.5	0.6	NM	**17.8**
cis-1,2-Dichloroethene	0.7	1.2	4.3	NM	**27.2**
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	NM	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	NM	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	NM	<0.5
Methylene chloride	<0.5	<0.5	<0.5	NM	<0.5
Tetrachloroethene	<0.5	<0.5	**21.6**	NM	**95.6**
Toluene	<0.5	<0.5	<0.5	NM	<0.5
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	NM	<0.5
Trichloroethylene	<0.5	<0.5	**6.4**	NM	**207.0**
Vinyl chloride	<0.5	<0.5	<0.5	NM	<0.5
o-Xylene	<0.5	<0.5	0.5	NM	<0.5
m+p-Xylene	<0.5	<0.5	<0.5	NM	<0.5
Xylenes (total)	<0.5	<0.5	0.5	NM	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	NM	<0.5
Isopropylbenzene	<0.5	<0.5	<0.5	NM	<0.5
n-Butylbenzene	<0.5	<0.5	<0.5	NM	<0.5
tert-Butylbenzene	<0.5	<0.5	<0.5	NM	<0.5
Total VOCs	1.8	4.5	38.5	NM	347.6

Notes:
All concentrations in ug/L.
NM - Not Measured, Well offline during first quarter 2005 sampling round

TABLE 6

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
SECOND QUARTER RECOVERY WELL SAMPLING RESULTS - APRIL 2005
VOLATILE ORGANIC COMPOUNDS

SAMPLE DESIGNATION: SAMPLE COLLECTION DATE:	RW-1	RW-2	RW-3	RW-4	RW-5
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	<0.5	<0.5	0.6	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	<0.5	1.2	<0.5
o,p-Dichlorobenzene	1.2	0.9	1.7	<0.5	<0.5
m,o,p-Dichlorobenzene	1.2	0.9	1.7	<0.5	<0.5
1,1-Dichloroethane	<0.5	<0.5	0.9	0.5	2.4
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	2.2
1,1-Dichloroethene	<0.5	<0.5	<0.5	2.5	**15.7**
cis-1,2-Dichloroethene	1.9	2.5	**16.0**	**63.8**	**70.1**
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene	<0.5	<0.5	**97.0**	**68.1**	**361.0**
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	0.6	<0.5	1.2	**15.6**	**73.8**
Trichloroethylene	<0.5	<0.5	**27.2**	**208.0**	**614.0**
Vinyl chloride	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5
m+p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5
Xylenes (total)	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5
Isopropylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
n-Butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
Total VOCs	3.7	3.4	144.6	511.4	1139.2

Notes:
All concentrations in ug/L.
NM - Not Measured, Well offline during first quarter 2005 sampling round

TABLE 6

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
THIRD QUARTER RECOVERY WELL SAMPLING RESULTS - JULY 2005
VOLATILE ORGANIC COMPOUNDS

SAMPLE DESIGNATION: SAMPLE COLLECTION DATE:	RW-1 7/1/2005	RW-2 7/27/2005	RW-3 7/27/2005	RW-4 7/27/2005	RW-5 7/27/2005
Benzene	<0.5	0.4	0.7	<0.5	<0.5
Bromodichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	<0.5	0.5	0.8	<0.5	<0.5
Chlorodibromomethane	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.5	<0.5	0.6	1.7	1.5
o,p-Dichlorobenzene	0.6	1.2	2.0	5.0	<0.5
m,o,p-Dichlorobenzene	0.6	1.2	2.5	5.0	<0.5
1,1-Dichloroethane	<0.5	<0.5	0.9	<0.5	<0.5
1,2-Dichloroethane	<0.5	<0.5	**0.7**	<0.5	**2.3**
1,1-Dichloroethene	<0.5	<0.5	<0.5	2.8	**22**
cis-1,2-Dichloroethene	<0.5	1.2	**8.9**	**30**	**41**
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	0.7
1,2-Dichloropropane	<0.5	<0.5	0.5	<0.5	<0.5
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
Methylene chloride	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene	<0.5	<0.5	**28**	**20**	**119**
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	<0.5	<0.5	0.8	**5.5**	**34**
Trichloroethylene	<0.5	<0.5	**17**	**118**	**341**
Vinyl chloride	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	<0.5	<0.5	0.8	2.4	2.2
m+p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5
Xylenes (total)	<0.5	<0.5	0.8	2.4	2.2
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5
Isopropylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
n-Butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5
Total VOCs	1.2	4.5	65.1	192.0	565.4

Notes:
All concentrations in ug/L.

TABLE 6

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
FOURTH QUARTER RECOVERY WELL SAMPLING RESULTS - OCTOBER 2005
VOLATILE ORGANIC COMPOUNDS

SAMPLE DESIGNATION: SAMPLE COLLECTION DATE:	RW-1	RW-2 10/7/2005	RW-3 10/7/2005	RW-4 10/7/2005	RW-5 10/7/2005
Benzene	NM	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	NM	<0.5	<0.5	<0.5	<0.5
Bromoform	NM	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	NM	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	NM	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	NM	<0.5	<0.5	<0.5	<0.5
Chloroethane	NM	<0.5	<0.5	<0.5	<0.5
Chloroform	NM	<0.5	<0.5	0.8	0.7
o,p-Dichlorobenzene	NM	0.8	1.1	<0.5	<0.5
m,o,p-Dichlorobenzene	NM	0.8	1.2	<0.5	<0.5
1,1-Dichloroethane	NM	<0.5	0.7	<0.5	1.9
1,2-Dichloroethane	NM	<0.5	<0.5	<0.5	**2.0**
1,1-Dichloroethene	NM	<0.5	<0.5	2.4	**21**
cis-1,2-Dichloroethene	NM	0.7	**7.3**	**25**	**29**
trans-1,2-Dichloroethene	NM	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	NM	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	NM	<0.5	<0.5	<0.5	<0.5
Methylene chloride	NM	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene	NM	<0.5	**21**	**17**	**72**
Toluene	NM	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	NM	<0.5	0.6	**5.3**	**27**
Trichloroethylene	NM	<0.5	**16**	**85**	**230**
Vinyl chloride	NM	<0.5	<0.5	<0.5	<0.5
o-Xylene	NM	<0.5	<0.5	<0.5	<0.5
m+p-Xylene	NM	<0.5	<0.5	<0.5	<0.5
Xylenes (total)	NM	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	NM	<0.5	<0.5	<0.5	<0.5
Isopropylbenzene	NM	<0.5	<0.5	<0.5	<0.5
n-Butylbenzene	NM	<0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	NM	<0.5	<0.5	<0.5	<0.5
Total VOCs	NM	2.3	47.9	135.5	383.6

Notes:
All concentrations in ug/L.
NM - Not Measured, Well offline during fourth quarter 2005 sampling round

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	LF-1 01/14/2005 Primary	LF-1 04/21/2005 Primary	LF-1 07/14/2005 Primary	LF-1 10/05/2005 Primary
Alkalinity	(mg/l)	138	---	122	146
Aluminum	(mg/l)	---	---	---	---
Ammonia (as N)	(mg/l)	23.4	24.6	23.9	26.2
Barium	(mg/l)	---	---	---	---
Bicarbonate (as CaCO3)	(mg/l)	138	158	122	146
Calcium	(mg/l)	---	---	---	---
Carbonate (as CaCO3)	(mg/l)	<4	<1	<1	<1
Chloride	(mg/l)	164	164	140	145
Chromium	(mg/l)	---	---	---	---
Chromium(Hexavalent)	(mg/l)	---	---	---	---
Copper	(mg/l)	---	---	---	---
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	88.0	116	66.0	72.0
Iron	(mg/l)	---	---	---	---
Lead	(ug/l)	---	---	---	---
Magnesium	(mg/l)	---	---	---	---
Manganese	(mg/l)	---	---	---	---
Mercury	(ug/l)	---	---	---	---
Nickel	(mg/l)	---	---	---	---
Nitrate (as N)	(mg/l)	<0.1 J	<0.1 J	<0.1 J	<0.1
Nitrogen, Kjeldahl, Total	(mg/l)	23.2	25.7	33.4	27.4
Potassium	(mg/l)	---	---	---	---
Sodium	(mg/l)	---	---	---	---
Sulfate	(mg/l)	17.5	21.4	32.5	28.8
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	---	---	---	---
Total Dissolved Solids	(mg/l)	424	376	382	312

The following qualifier(s) exist: Expert: J ---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	M-30B-R 01/12/2005 Primary	M-30B-R 04/19/2005 Primary	M-30B-R 07/12/2005 Primary	M-30B-R 10/04/2005 Primary
Alkalinity	(mg/l)	24.8	19.8	19.6	19.6
Aluminum	(mg/l)	<0.2	<0.2	<0.2	<0.2
Ammonia (as N)	(mg/l)	<0.1	<0.1	<0.1	<0.1
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	24.7	---	19.5	19.6
Calcium	(mg/l)	20.2	16.5	15.8	12.9
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	31.0	42.1	40.5	34.3
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	92.0	72.0	68.0	62.0
Iron	(mg/l)	0.06	0.08	0.04	0.07
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	10.8	9.00	8.52	7.00
Manganese	(mg/l)	<0.02	<0.02	<0.02	<0.02
Mercury	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	7.06	4.98	5.21	4.71
Nitrogen, Kjeldahl, Total	(mg/l)	<0.1 J	0.12	0.17	0.16
Potassium	(mg/l)	6.58	6.51	7.05	5.28
Sodium	(mg/l)	18.8	26.1	25.7	24.8
Sulfate	(mg/l)	36.9	24.5	19.0	18.3
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.07	0.03	0.03	0.02
Total Dissolved Solids	(mg/l)	182	190	197	299

The following qualifier(s) exist: Expert: J ---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-05B 01/14/2005 Primary	MW-05B 04/21/2005 Primary	MW-05B 07/14/2005 Primary	MW-05B 10/05/2005 Primary
Alkalinity	(mg/l)	31.4	28.2	33.6	29.6
Aluminum	(mg/l)	<0.2	<0.2	<0.2	<0.2
Ammonia (as N)	(mg/l)	0.13	<0.1	<0.1	<0.1
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	31.4	28.2	33.6	29.6
Calcium	(mg/l)	14.7	13.3	14.2	14.4
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	8.8	95.0	92.8	90.7
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	90.0	120	92.0	84.0
Iron	(mg/l)	0.03	0.03	0.04	0.03
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	9.17	9.00	9.32	9.58
Manganese	(mg/l)	7.28	6.25	6.33	6.31
Mercury	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	6.17	3.02	2.47	2.55
Nitrogen, Kjeldahl, Total	(mg/l)	0.45	0.29	0.54	0.34
Potassium	(mg/l)	4.29	5.43	6.02	6.60
Sodium	(mg/l)	46.5	47.8	53.2	52.8
Sulfate	(mg/l)	22.2	20.6	23.6	21.2
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.05	0.02	<0.02	<0.02
Total Dissolved Solids	(mg/l)	262	245	335	262

---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-06A 01/13/2005 Primary	MW-06A 04/20/2005 Primary	MW-06A 07/13/2005 Primary	MW-06A 10/05/2005 Primary
Alkalinity	(mg/l)	5.4	10.4	4.8	4.2
Aluminum	(mg/l)	<0.2	0.27	0.39	0.21
Ammonia (as N)	(mg/l)	1.64	0.69	0.18	0.12
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	5.4	10.3	4.8	4.2
Calcium	(mg/l)	0.70	0.85	1.11	1.10
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	158	<20	14.2	10.6
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	5.0	13.0	8.0	8.0
Iron	(mg/l)	0.29	0.52	0.68	0.46
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	0.72	0.55	0.89	0.92
Manganese	(mg/l)	0.03	0.02	0.02	<0.02
Mercury	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	2.22	1.04	1.48	0.49
Nitrogen, Kjeldahl, Total	(mg/l)	2.16	0.87	0.42	0.28
Potassium	(mg/l)	7.43	7.47	7.39	3.85
Sodium	(mg/l)	10.1	9.78	8.68	6.79
Sulfate	(mg/l)	<5	6.7	6.0	<5
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.03	0.06	0.02	<0.02
Total Dissolved Solids	(mg/l)	134	46	99	42

---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-06B 01/13/2005 Primary	MW-06B 04/20/2005 Primary	MW-06B 07/13/2005 Primary	MW-06B 10/05/2005 Primary
Alkalinity	(mg/l)	750	---	910	928
Aluminum	(mg/l)	<0.2	<0.2	<0.2	<0.2
Ammonia (as N)	(mg/l)	118	147	148	155
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	750	948	909	927
Calcium	(mg/l)	21.5	18.8	17.3	19.4
Carbonate (as CaCO3)	(mg/l)	<100	1.2	<1 J	<1
Chloride	(mg/l)	295	290	300	305
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	110	92.0	100	96.0
Iron	(mg/l)	10.9	9.59	8.44	9.28
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	14.5	12.1	11.4	13.0
Manganese	(mg/l)	0.12	0.09	0.07	0.08
Mercury	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	<0.1 J	<0.1	<0.1	<0.1
Nitrogen, Kjeldahl, Total	(mg/l)	121	138	149	152
Potassium	(mg/l)	119	119	121	131
Sodium	(mg/l)	304	281	296	297
Sulfate	(mg/l)	6.4	9.7	25.4	15.6
Total Phenols	(mg/l)	<0.0050	0.019	0.0067	0.0071
Zinc	(mg/l)	0.07	0.06	0.02	<0.02
Total Dissolved Solids	(mg/l)	1120	824	1390	536

The following qualifier(s) exist: Expert: J ---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-06C 01/13/2005 Primary	MW-06C 04/20/2005 Primary	MW-06C 07/13/2005 Primary	MW-06C 10/05/2005 Primary
Alkalinity	(mg/l)	590	---	650	596
Aluminum	(mg/l)	<0.2	<0.2	<0.2	<0.2
Ammonia (as N)	(mg/l)	46.1	46.3	45.6	46.3
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	590	670	650	596
Calcium	(mg/l)	57.3	50.8	42.6	37.3
Carbonate (as CaCO3)	(mg/l)	<100	<1 J	<1	<1
Chloride	(mg/l)	462	397	380	288
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	172	188	164	128
Iron	(mg/l)	8.12	7.72	6.39	4.90
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	13.8	11.7	9.85	8.92
Manganese	(mg/l)	0.14	0.12	0.09	0.07
Mercury	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	<0.1 J	<0.1 J	<0.1	<0.1
Nitrogen, Kjeldahl, Total	(mg/l)	45.5	46.5	45.4	43.6
Potassium	(mg/l)	88.0	77.4	66.9	65.2
Sodium	(mg/l)	507	416	369	341
Sulfate	(mg/l)	78.2	77.0	74.5	79.0
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.03	0.07	0.02	<0.02
Total Dissolved Solids	(mg/l)	1430	1300	1410	996

The following qualifier(s) exist: Expert: J ---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-06E 01/13/2005 Primary	MW-06E 01/13/2005 Duplicate 1	MW-06E 04/20/2005 Primary	MW-06E 07/13/2005 Primary
Alkalinity	(mg/l)	45.2	47.6	50.9	218
Aluminum	(mg/l)	<0.2	<0.2	<0.2	<0.2
Ammonia (as N)	(mg/l)	9.55	9.62	10.6	35.8
Barium	(mg/l)	0.29	0.28	0.26	<0.2
Bicarbonate (as CaCO3)	(mg/l)	45.1	47.6	50.9	217
Calcium	(mg/l)	36.3	34.9	37.1	33.8
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	182	182	192	222
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	146	144	148	148
Iron	(mg/l)	2.34	2.26	2.22	2.98
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	14.3	13.8	15.0	14.6
Manganese	(mg/l)	0.79	0.76	0.74	0.73
Mercury	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	<0.1 J	<0.1 J	<0.1 J	<0.1
Nitrogen, Kjeldahl, Total	(mg/l)	10.0	9.60	10.2	36.0
Potassium	(mg/l)	24.1	23.4	26.3	46.1
Sodium	(mg/l)	59.1	57.3	64.3	112
Sulfate	(mg/l)	18.6	18.2	19.4	17.7
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.07	0.05	0.07	0.04
Total Dissolved Solids	(mg/l)	393	396	462	708

The following qualifier(s) exist: Expert: J ---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-06E 07/13/2005 Duplicate 1	MW-06E 10/05/2005 Primary	MW-06E 10/05/2005 Duplicate 1	MW-06F 01/13/2005 Primary
Alkalinity	(mg/l)	215	306	306	<1
Aluminum	(mg/l)	<0.2	<0.2	<0.2	<0.2
Ammonia (as N)	(mg/l)	35.1	56.7	56.3	<0.1 J
Barium	(mg/l)	0.20	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	215	305	306	<1
Calcium	(mg/l)	36.6	30.2	29.6	32.7
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	224	227	225	154
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	160	124	128	122
Iron	(mg/l)	3.23	5.28	5.22	0.08
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	15.6	13.7	13.4	12.3
Manganese	(mg/l)	0.79	0.77	0.76	0.07
Mercury	(ug/l)	<0.2	<0.2	<0.2	0.32
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	<0.1 J	<0.1	<0.1	0.30
Nitrogen, Kjeldahl, Total	(mg/l)	34.6	51.5	50.5	1.57
Potassium	(mg/l)	48.0	59.2	58.5	2.77
Sodium	(mg/l)	118	137	135	46.3
Sulfate	(mg/l)	19.2	18.0	19.9	<5
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.03	0.03	0.03	0.06
Total Dissolved Solids	(mg/l)	696	554	548	314

The following qualifier(s) exist: Expert: J ---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-06F 04/20/2005 Primary	MW-06F 07/13/2005 Primary	MW-06F 10/05/2005 Primary	MW-07B 01/12/2005 Primary
Alkalinity	(mg/l)	<1	<2	<1	<5 J
Aluminum	(mg/l)	<0.2	0.21	<0.2	<0.2
Ammonia (as N)	(mg/l)	0.11	0.16	0.13	<0.1 J
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	<1	<1	<1	4.5
Calcium	(mg/l)	33.6	33.3	33.6	4.91
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	157	165	165	15.8
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	0.04
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	140	136	144	20.0
Iron	(mg/l)	0.07	0.08	0.06	0.03
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	12.6	12.6	13.0	2.32
Manganese	(mg/l)	0.07	0.07	0.07	0.04
Mercury	(ug/l)	0.29	0.31	0.4	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	0.37	0.37	0.44	4.43
Nitrogen, Kjeldahl, Total	(mg/l)	0.21	0.16	0.31	<0.1 J
Potassium	(mg/l)	3.04	3.34	3.28	0.87
Sodium	(mg/l)	47.2	48.9	46.9	12.8
Sulfate	(mg/l)	<5	<5	<5	<5
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.07	0.03	0.03	0.10
Total Dissolved Solids	(mg/l)	422	540	443	69

The following qualifier(s) exist: Expert: J ---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-07B 04/20/2005 Primary	MW-07B 04/20/2005 Duplicate 1	MW-07B 07/12/2005 Primary	MW-07B 10/04/2005 Primary
Alkalinity	(mg/l)	2.0	2.4	2.6	2.6
Aluminum	(mg/l)	<0.2	<0.2	<0.2	<0.2
Ammonia (as N)	(mg/l)	<0.1	<0.1	<0.1	<0.1
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	1.9	2.4	2.5	2.5
Calcium	(mg/l)	5.04	4.91	4.47	5.11
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	17.8	17.8	16.9	19.4
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	0.04	0.04	0.05	0.04
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	24.0	23.0	21.0	24.0
Iron	(mg/l)	0.04	0.05	0.04	0.03
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	2.61	2.47	2.37	2.91
Manganese	(mg/l)	0.04	0.04	0.04	0.04
Mercury	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	4.37	4.34	4.50	4.22
Nitrogen, Kjeldahl, Total	(mg/l)	0.16	0.97	0.11	3.31
Potassium	(mg/l)	1.03	0.97	7.04	1.07
Sodium	(mg/l)	13.3	12.5	11.0	12.4
Sulfate	(mg/l)	<5	<5	<5	<5
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.07	0.08	0.03	0.03
Total Dissolved Solids	(mg/l)	102	75	124	194

---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-08A 01/13/2005 Primary	MW-08A 04/20/2005 Primary	MW-08A 07/13/2005 Primary	MW-08A 10/05/2005 Primary
Alkalinity	(mg/l)	163	---	26.7	29.2
Aluminum	(mg/l)	<0.2	0.21	0.36	<0.2
Ammonia (as N)	(mg/l)	8.12	7.42	1.54	1.92
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	163	145	26.7	29.2
Calcium	(mg/l)	28.2	31.7	21.3	26.1
Carbonate (as CaCO3)	(mg/l)	<4	<1	<1	<1
Chloride	(mg/l)	84.0	84.0	53.2	67.5
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	100	156	84.0	112
Iron	(mg/l)	0.34	0.57	0.73	0.19
Lead	(ug/l)	<5	9.05	<5	<5
Magnesium	(mg/l)	12.9	13.5	9.51	11.1
Manganese	(mg/l)	0.16	0.15	0.12	0.12
Mercury	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	5.71	8.26	5.99	9.13
Nitrogen, Kjeldahl, Total	(mg/l)	8.06	15.8	1.57	2.56
Potassium	(mg/l)	23.6	23.9	15.8	18.4
Sodium	(mg/l)	76.7	75.5	50.5	50.7
Sulfate	(mg/l)	54.5	46.5	25.2	21.6
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.04	0.07	0.02	0.03
Total Dissolved Solids	(mg/l)	415	367	306	283

---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-08B 01/13/2005 Primary	MW-08B 04/20/2005 Primary	MW-08B 07/13/2005 Primary	MW-08B 10/05/2005 Primary
Alkalinity	(mg/l)	<1 J	<1 J	1.5	1.2
Aluminum	(mg/l)	<0.2	<0.2	0.20	<0.2
Ammonia (as N)	(mg/l)	1.77	1.80	1.69	1.43
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	<1 J	<1 J	1.5	1.1
Calcium	(mg/l)	30.2	28.2	24.2	21.3
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	241	238	235	201
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10 J	<10	<10
Hardness (as CaCO3)	(mg/l)	112	144	124	94.0
Iron	(mg/l)	0.02	0.05	0.05	0.02
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	13.0	12.3	10.6	9.67
Manganese	(mg/l)	1.49	1.31	1.14	1.00
Mercury	(ug/l)	0.38	0.24	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	0.65	0.71	0.90	1.01
Nitrogen, Kjeldahl, Total	(mg/l)	1.74	1.74	1.73	1.46
Potassium	(mg/l)	20.5	20.1	18.4	17.0
Sodium	(mg/l)	124	119	116	109
Sulfate	(mg/l)	58.5	67.2	60.8	64.8
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.13	0.14	0.10	0.08
Total Dissolved Solids	(mg/l)	522	526	520	358

The following qualifier(s) exist: Expert: J ---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-09B 01/12/2005 Primary	MW-09B 04/19/2005 Primary	MW-09B 07/12/2005 Primary	MW-09B 10/05/2005 Primary
Alkalinity	(mg/l)	12.5	11.8	12.6	21.2
Aluminum	(mg/l)	<0.2	<0.2	<0.2	<0.2
Ammonia (as N)	(mg/l)	0.55	0.77	1.12	3.81
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	12.5	11.8	12.5	21.2
Calcium	(mg/l)	11.5	12.8	13.3	13.8
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	44.2	49.0	61.1	69.4
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	0.03	0.03	0.03	0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	50.0	52.0	58.0	60.0
Iron	(mg/l)	0.03	0.04	0.03	<0.02
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	4.77	5.51	5.66	6.37
Manganese	(mg/l)	0.10	0.12	0.13	0.13
Mercury	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	3.51	3.85	4.00	3.65
Nitrogen, Kjeldahl, Total	(mg/l)	0.62	0.72	1.17	3.60
Potassium	(mg/l)	5.01	6.29	7.62	10.6
Sodium	(mg/l)	26.7	29.6	33.3	39.4
Sulfate	(mg/l)	16.9	20.8	18.9	18.6
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.06	0.05	<0.02	0.02
Total Dissolved Solids	(mg/l)	154	149	209	322

---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-09C 01/12/2005 Primary	MW-09C 04/19/2005 Primary	MW-09C 07/12/2005 Primary	MW-09C 10/05/2005 Primary
Alkalinity	(mg/l)	54.5	45.7	45.9	43.4
Aluminum	(mg/l)	<0.2	<0.2	0.20	<0.2
Ammonia (as N)	(mg/l)	8.41	8.89	8.26	10.1
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	54.5	45.7	45.9	43.3
Calcium	(mg/l)	4.45	4.78	4.80	4.02
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	81.2	86.7	87.4	89.2
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	44.0	38.0	46.0	38.0
Iron	(mg/l)	0.24	0.19	0.20	0.16
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	7.39	7.72	7.48	6.47
Manganese	(mg/l)	0.10	0.09	0.09	0.08
Mercury	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	0.10	0.11	0.10	<0.1
Nitrogen, Kjeldahl, Total	(mg/l)	8.62	8.49	8.08	12.9
Potassium	(mg/l)	20.0	20.6	19.2	19.2
Sodium	(mg/l)	47.8	51.5	51.0	49.8
Sulfate	(mg/l)	17.4	16.4	16.0	15.0
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.07	0.07	0.02	0.02
Total Dissolved Solids	(mg/l)	206	196	266	324

---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-11A 01/12/2005 Primary	MW-11A 04/19/2005 Primary	MW-11A 07/12/2005 Primary	MW-11A 10/04/2005 Primary
Alkalinity	(mg/l)	<5 J	<1	<1 J	<1
Aluminum	(mg/l)	<0.2	<0.2	<0.2	<0.2
Ammonia (as N)	(mg/l)	<0.1	<0.1	<0.1	<0.1
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	3.0	---	<1 J	<1
Calcium	(mg/l)	4.09	4.56	4.67	4.68
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	7.6	7.8	8.2	8.7
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	19.0	18.0	20.0	22.0
Iron	(mg/l)	0.04	0.04	0.03	0.02
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	1.98	2.28	2.27	2.40
Manganese	(mg/l)	<0.02	<0.02	<0.02	<0.02
Mercury	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	4.79	4.79	5.04	4.64
Nitrogen, Kjeldahl, Total	(mg/l)	0.15	0.97	<0.1	0.11
Potassium	(mg/l)	0.83	1.08	1.24	1.08
Sodium	(mg/l)	5.64	6.12	5.98	5.92
Sulfate	(mg/l)	<5	<5	<5	<5
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.06	0.04	0.02	0.02
Total Dissolved Solids	(mg/l)	63	45	100	103

The following qualifier(s) exist: Expert: J ---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-11B 01/12/2005 Primary	MW-11B 04/19/2005 Primary	MW-11B 07/12/2005 Primary	MW-11B 10/04/2005 Primary
Alkalinity	(mg/l)	<5 J	<1 J	<1 J	<1
Aluminum	(mg/l)	<0.2	<0.2	<0.2	<0.2
Ammonia (as N)	(mg/l)	<0.1	<0.1	<0.1	<0.1
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	3.0	<1 J	<1 J	<1
Calcium	(mg/l)	1.19	1.54	1.62	1.43
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	4.5	5.0	4.9	5.4
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	5.0	9.0	7.0	10
Iron	(mg/l)	0.05	0.06	0.06	<0.02
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	0.47	0.58	0.58	0.60
Manganese	(mg/l)	<0.02	<0.02	<0.02	<0.02
Mercury	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	0.80	0.74	0.81	0.76
Nitrogen, Kjeldahl, Total	(mg/l)	<0.1	<0.1	<0.1	0.14
Potassium	(mg/l)	0.40	0.61	0.76	0.63
Sodium	(mg/l)	3.24	3.62	3.67	3.64
Sulfate	(mg/l)	<5	<5	<5	<5
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.06	0.05	0.02	0.02
Total Dissolved Solids	(mg/l)	34	27	40	58

The following qualifier(s) exist: Expert: J ---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE	OBS-1 01/14/2005	OBS-1 04/21/2005	OBS-1 07/14/2005	OBS-1 10/05/2005
Alkalinity	(mg/l)	79.6	64.6	78.8	62.8
Aluminum	(mg/l)	<0.2	<0.2	<0.2	<0.2
Ammonia (as N)	(mg/l)	6.70	7.05	6.53	6.12
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	79.5	64.6	78.7	62.7
Calcium	(mg/l)	13.4	12.3	16.8	16.6
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	10.5	94.0	98.5	101
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	74.0	96.0	86.0	88.0
Iron	(mg/l)	0.07	0.12	0.14	0.08
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	8.76	8.86	10.9	11.1
Manganese	(mg/l)	0.73	0.70	0.92	0.93
Mercury	(ug/l)	<0.2	0.23	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	0.26	0.36	0.34	0.33
Nitrogen, Kjeldahl, Total	(mg/l)	7.01	7.03	7.80	5.74
Potassium	(mg/l)	8.18	11.7	12.0	11.0
Sodium	(mg/l)	77.6	65.3	77.9	74.8
Sulfate	(mg/l)	56.8	51.0	61.8	49.5
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	0.03	0.02	0.02	<0.02
Total Dissolved Solids	(mg/l)	340	289	370	276

---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE / DATE	OBS-2 07/14/2005
Alkalinity	(mg/l)	2.8
Aluminum	(mg/l)	<0.2
Ammonia (as N)	(mg/l)	<0.1
Barium	(mg/l)	<0.2
Bicarbonate (as CaCO3)	(mg/l)	2.7
Calcium	(mg/l)	3.43
Carbonate (as CaCO3)	(mg/l)	<1
Chloride	(mg/l)	12.9
Chromium	(mg/l)	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02
Copper	(mg/l)	<0.02
Cyanide	(ug/l)	<10
Hardness (as CaCO3)	(mg/l)	26.0
Iron	(mg/l)	0.03
Lead	(ug/l)	<5
Magnesium	(mg/l)	4.23
Manganese	(mg/l)	<0.02
Mercury	(ug/l)	<0.2
Nickel	(mg/l)	<0.04
Nitrate (as N)	(mg/l)	2.27
Nitrogen, Kjeldahl, Total	(mg/l)	0.43
Potassium	(mg/l)	1.58
Sodium	(mg/l)	6.82
Sulfate	(mg/l)	9.0
Total Phenols	(mg/l)	<0.0050
Zinc	(mg/l)	0.02
Total Dissolved Solids	(mg/l)	95

---=Not analyzed

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE	FIELD BLANK 01/12/2005	FIELD BLANK 04/20/2005	FIELD BLANK 07/14/2005	FIELD BLANK 10/04/2005
Alkalinity	(mg/l)	<5 J	<1	<1 J	<1
Aluminum	(mg/l)	<0.2	<0.2	<0.2	<0.2
Ammonia (as N)	(mg/l)	<0.1	<0.1	<0.1	<0.1
Barium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Bicarbonate (as CaCO3)	(mg/l)	2.0	<1	<1 J	<1
Calcium	(mg/l)	<0.2	<0.2	0.28	0.20
Carbonate (as CaCO3)	(mg/l)	<1	<1	<1	<1
Chloride	(mg/l)	<2	<2	<2	<2
Chromium	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper	(mg/l)	<0.02	<0.02	<0.02	<0.02
Cyanide	(ug/l)	<10	<10	<10	<10
Hardness (as CaCO3)	(mg/l)	<5	<5 J	<5 J	<5
Iron	(mg/l)	<0.02	<0.02	<0.02	<0.02
Lead	(ug/l)	<5	<5	<5	<5
Magnesium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Manganese	(mg/l)	<0.02	<0.02	<0.02	<0.02
Mercury	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel	(mg/l)	<0.04	<0.04	<0.04	<0.04
Nitrate (as N)	(mg/l)	<0.1 J	<0.1 J	<0.1 J	<0.1
Nitrogen, Kjeldahl, Total	(mg/l)	0.14	<0.1	<0.1	0.10
Potassium	(mg/l)	<0.2	<0.2	<0.2	<0.2
Sodium	(mg/l)	<0.2	<0.2	0.27	0.40
Sulfate	(mg/l)	<5	<5	<5	<5
Total Phenols	(mg/l)	<0.0050	<0.0050	<0.0050	<0.0050
Zinc	(mg/l)	<0.02	<0.02	<0.02	<0.02
Total Dissolved Solids	(mg/l)	16	<10	<10 J	46

The following qualifier(s) exist: Expert: J ---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	M-30B-R 01/12/2005 Primary	M-30B-R 04/19/2005 Primary	M-30B-R 07/12/2005 Primary	M-30B-R 10/04/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	19.9	15.3	14.9	12.1
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Iron (Dissolved)	(mg/l)	0.03	<0.02	0.02	<0.02
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	10.7	8.48	7.57	6.15
Manganese (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	6.58	6.56	5.66	4.89
Sodium (Dissolved)	(mg/l)	19.3	25.0	23.8	21.0
Zinc (Dissolved)	(mg/l)	0.05	0.02	<0.02	<0.02

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-05B 01/14/2005 Primary	MW-05B 04/21/2005 Primary	MW-05B 07/14/2005 Primary	MW-05B 10/05/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	14.6	13.7	14.1	13.1
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Iron (Dissolved)	(mg/l)	<0.02	<0.02	0.02	<0.02
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	9.36	9.19	8.73	8.22
Manganese (Dissolved)	(mg/l)	6.99	6.20	6.10	6.09
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	4.33	5.52	5.47	5.93
Sodium (Dissolved)	(mg/l)	47.2	48.5	54.5	47.3
Zinc (Dissolved)	(mg/l)	0.05	<0.02	<0.02	<0.02

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD DEPOSIT LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-06A 01/13/2005 Primary	MW-06A 04/20/2005 Primary	MW-06A 07/13/2005 Primary	MW-06A 10/05/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	1.41	0.39	1.16	0.80
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Iron (Dissolved)	(mg/l)	0.02	<0.02	0.02	0.02
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	0.81	0.38	0.87	0.68
Manganese (Dissolved)	(mg/l)	0.02	<0.02	<0.02	<0.02
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	7.26	7.17	7.42	3.70
Sodium (Dissolved)	(mg/l)	10.4	9.43	8.81	6.92
Zinc (Dissolved)	(mg/l)	0.03	<0.02	<0.02	<0.02

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-06B 01/13/2005 Primary	MW-06B 04/20/2005 Primary	MW-06B 07/13/2005 Primary	MW-06B 10/05/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	18.5	17.4	17.3	17.4
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Iron (Dissolved)	(mg/l)	0.17	0.17	0.15	0.11
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	12.3	11.8	11.2	11.1
Manganese (Dissolved)	(mg/l)	0.10	0.09	0.07	0.08
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	103	128	123	125
Sodium (Dissolved)	(mg/l)	265	292	303	290
Zinc (Dissolved)	(mg/l)	0.02	<0.02	<0.02	<0.02

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUND WATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-06C 01/13/2005 Primary	MW-06C 04/20/2005 Primary	MW-06C 07/13/2005 Primary	MW-06C 10/05/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	51.6	49.0	43.6	35.4
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Iron (Dissolved)	(mg/l)	0.57	0.09	0.09	0.07
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	12.5	11.7	10.3	7.95
Manganese (Dissolved)	(mg/l)	0.13	0.11	0.09	0.07
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	78.7	83.6	70.8	64.4
Sodium (Dissolved)	(mg/l)	500	433	376	356
Zinc (Dissolved)	(mg/l)	0.03	<0.02	<0.02	<0.02

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-06E 01/13/2005 Primary	MW-06E 01/13/2005 Duplicate 1	MW-06E 04/20/2005 Primary	MW-06E 07/13/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	0.26	0.26	0.24	0.20
Calcium (Dissolved)	(mg/l)	31.5	31.2	37.4	34.0
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Iron (Dissolved)	(mg/l)	2.03	2.04	2.20	1.56
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	12.3	12.4	14.9	14.3
Manganese (Dissolved)	(mg/l)	0.69	0.69	0.71	0.75
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	20.2	20.2	29.3	44.4
Sodium (Dissolved)	(mg/l)	51.7	51.8	72.2	107
Zinc (Dissolved)	(mg/l)	0.07	0.05	0.04	0.03

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-06E 07/13/2005 Duplicate 1	MW-06E 10/05/2005 Primary	MW-06E 10/05/2005 Duplicate 1	MW-06F 01/13/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	37.4	27.9	27.3	32.6
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Iron (Dissolved)	(mg/l)	1.70	0.65	0.51	0.07
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	15.5	11.9	11.6	12.2
Manganese (Dissolved)	(mg/l)	0.80	0.76	0.74	0.08
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	49.5	57.1	54.9	2.91
Sodium (Dissolved)	(mg/l)	124	129	127	45.9
Zinc (Dissolved)	(mg/l)	0.02	0.02	0.02	0.09

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-06F 04/20/2005 Primary	MW-06F 07/13/2005 Primary	MW-06F 10/05/2005 Primary	MW-07B 01/12/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	32.9	31.8	34.0	4.88
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	0.04
Iron (Dissolved)	(mg/l)	0.05	0.06	0.06	0.02
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	12.6	11.7	12.3	2.33
Manganese (Dissolved)	(mg/l)	0.06	0.08	0.08	0.04
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	0.31	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	3.76	3.22	3.19	1.09
Sodium (Dissolved)	(mg/l)	48.4	44.8	45.7	12.7
Zinc (Dissolved)	(mg/l)	0.03	0.03	0.03	0.10

---=Not analyzed

TABLE 6
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-07B 04/20/2005 Primary	MW-07B 04/20/2005 Duplicate 1	MW-07B 07/12/2005 Primary	MW-07B 10/04/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	4.38	4.49	4.31	4.47
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	0.03	0.04	0.03	0.04
Iron (Dissolved)	(mg/l)	<0.02	<0.02	0.02	<0.02
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	2.50	2.47	2.42	2.44
Manganese (Dissolved)	(mg/l)	0.04	0.04	0.03	0.04
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	1.23	0.97	6.81	0.85
Sodium (Dissolved)	(mg/l)	12.9	12.5	10.4	11.1
Zinc (Dissolved)	(mg/l)	0.02	0.02	<0.02	0.02

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-08A 01/13/2005 Primary	MW-08A 04/20/2005 Primary	MW-08A 07/13/2005 Primary	MW-08A 10/05/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	33.9	37.3	20.6	24.9
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Iron (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Lead (Dissolved)	(ug/l)	<5	5.65	<5	<5
Magnesium (Dissolved)	(mg/l)	14.6	15.7	9.10	9.73
Manganese (Dissolved)	(mg/l)	0.17	0.14	0.13	0.12
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	26.4	31.7	14.6	18.2
Sodium (Dissolved)	(mg/l)	83.4	85.0	47.7	46.1
Zinc (Dissolved)	(mg/l)	0.04	<0.02	0.02	<0.02

---=Not analyzed

TABLE 6
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-08B 01/13/2005 Primary	MW-08B 04/20/2005 Primary	MW-08B 07/13/2005 Primary	MW-08B 10/05/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	28.3	26.6	24.3	19.4
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Iron (Dissolved)	(mg/l)	0.02	0.02	0.03	0.05
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	12.1	11.8	10.5	8.30
Manganese (Dissolved)	(mg/l)	1.38	1.26	1.11	1.02
Mercury (Dissolved)	(ug/l)	0.29	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	18.6	20.1	17.7	15.6
Sodium (Dissolved)	(mg/l)	115	117	113	101
Zinc (Dissolved)	(mg/l)	0.10	0.10	0.09	0.07

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-09B 01/12/2005 Primary	MW-09B 04/19/2005 Primary	MW-09B 07/12/2005 Primary	MW-09B 10/05/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	11.6	12.7	5.00	12.2
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	0.03	0.02	0.03	<0.02
Iron (Dissolved)	(mg/l)	0.05	0.02	0.02	0.02
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	4.82	5.52	2.55	5.31
Manganese (Dissolved)	(mg/l)	0.10	0.12	0.05	0.13
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	5.28	6.47	1.08	9.60
Sodium (Dissolved)	(mg/l)	28.0	30.0	12.8	34.6
Zinc (Dissolved)	(mg/l)	0.09	0.02	<0.02	<0.02

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-09C 01/12/2005 Primary	MW-09C 04/19/2005 Primary	MW-09C 07/12/2005 Primary	MW-09C 10/05/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	4.29	4.88	4.63	3.77
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	0.02
Iron (Dissolved)	(mg/l)	0.17	<0.02	0.02	<0.02
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	6.91	7.27	7.18	5.79
Manganese (Dissolved)	(mg/l)	0.09	0.09	0.09	0.08
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	18.6	20.1	17.3	18.2
Sodium (Dissolved)	(mg/l)	45.9	48.8	45.4	46.3
Zinc (Dissolved)	(mg/l)	0.06	<0.02	<0.02	<0.02

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-11A 01/12/2005 Primary	MW-11A 04/19/2005 Primary	MW-11A 07/12/2005 Primary	MW-11A 10/04/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	4.45	5.11	4.12	4.08
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Iron (Dissolved)	(mg/l)	0.02	<0.02	<0.02	<0.02
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	2.16	2.66	1.94	1.99
Manganese (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	1.01	1.44	0.91	0.88
Sodium (Dissolved)	(mg/l)	6.20	7.15	6.27	5.38
Zinc (Dissolved)	(mg/l)	0.06	0.02	<0.02	0.02

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE RESULT TYPE	MW-11B 01/12/2005 Primary	MW-11B 04/19/2005 Primary	MW-11B 07/12/2005 Primary	MW-11B 10/04/2005 Primary
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	1.72	1.42	1.79	1.29
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Iron (Dissolved)	(mg/l)	0.02	<0.02	0.02	<0.02
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	0.64	0.65	0.69	0.55
Manganese (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	0.57	0.62	0.65	0.53
Sodium (Dissolved)	(mg/l)	3.81	3.48	5.01	3.47
Zinc (Dissolved)	(mg/l)	0.07	0.03	<0.02	<0.02

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE	OBS-1 04/21/2005	OBS-1 07/14/2005	OBS-1 10/05/2005	OBS-2 07/14/2005
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	13.0	16.2	14.8	3.35
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Iron (Dissolved)	(mg/l)	0.09	0.13	0.07	<0.02
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	9.19	10.3	9.29	3.99
Manganese (Dissolved)	(mg/l)	0.72	0.93	0.88	<0.02
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	11.7	11.3	9.89	1.48
Sodium (Dissolved)	(mg/l)	67.1	73.2	66.2	6.57
Zinc (Dissolved)	(mg/l)	<0.02	0.02	<0.02	<0.02

---=Not analyzed

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

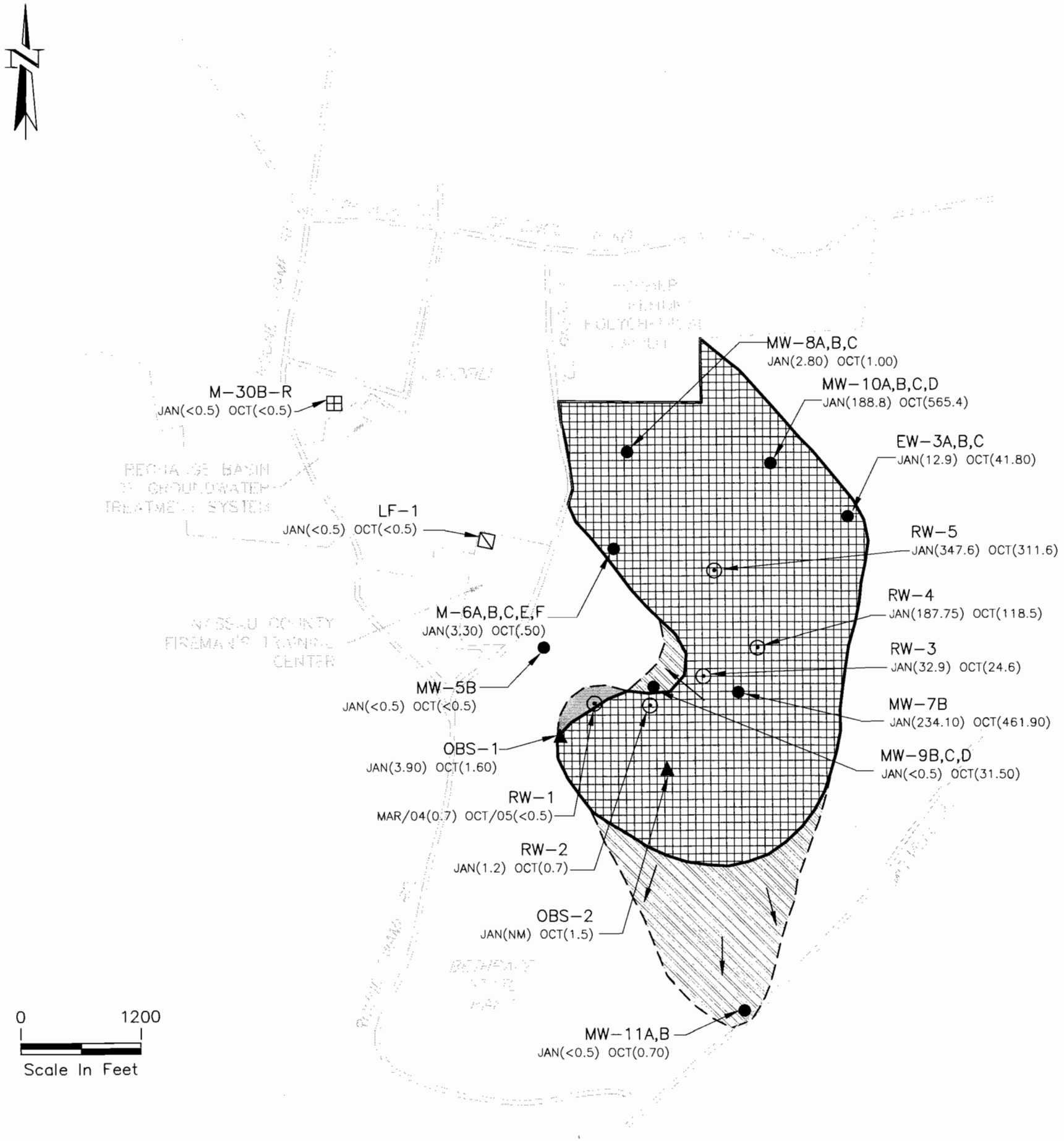
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2005
DISSOLVED (FILTERED) METALS

PERIOD: From 01/12/2005 thru 10/05/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE DATE	FIELD BLANK 01/12/2005	FIELD BLANK 04/20/2005	FIELD BLANK 07/14/2005	FIELD BLANK 10/04/2005
Aluminum (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Barium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Calcium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Chromium (Dissolved)	(mg/l)	<0.01	<0.01	<0.01	<0.01
Chromium(Hexavalent) (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Copper (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Iron (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Lead (Dissolved)	(ug/l)	<5	<5	<5	<5
Magnesium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Manganese (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02
Mercury (Dissolved)	(ug/l)	<0.2	<0.2	<0.2	<0.2
Nickel (Dissolved)	(mg/l)	<0.04	<0.04	<0.04	<0.04
Potassium (Dissolved)	(mg/l)	<0.2	<0.2	<0.2	<0.2
Sodium (Dissolved)	(mg/l)	<0.2	<0.2	0.28	0.27
Zinc (Dissolved)	(mg/l)	<0.02	<0.02	<0.02	<0.02

---=Not analyzed

FIGURES



S43311 A1-A05
041906

LEGEND

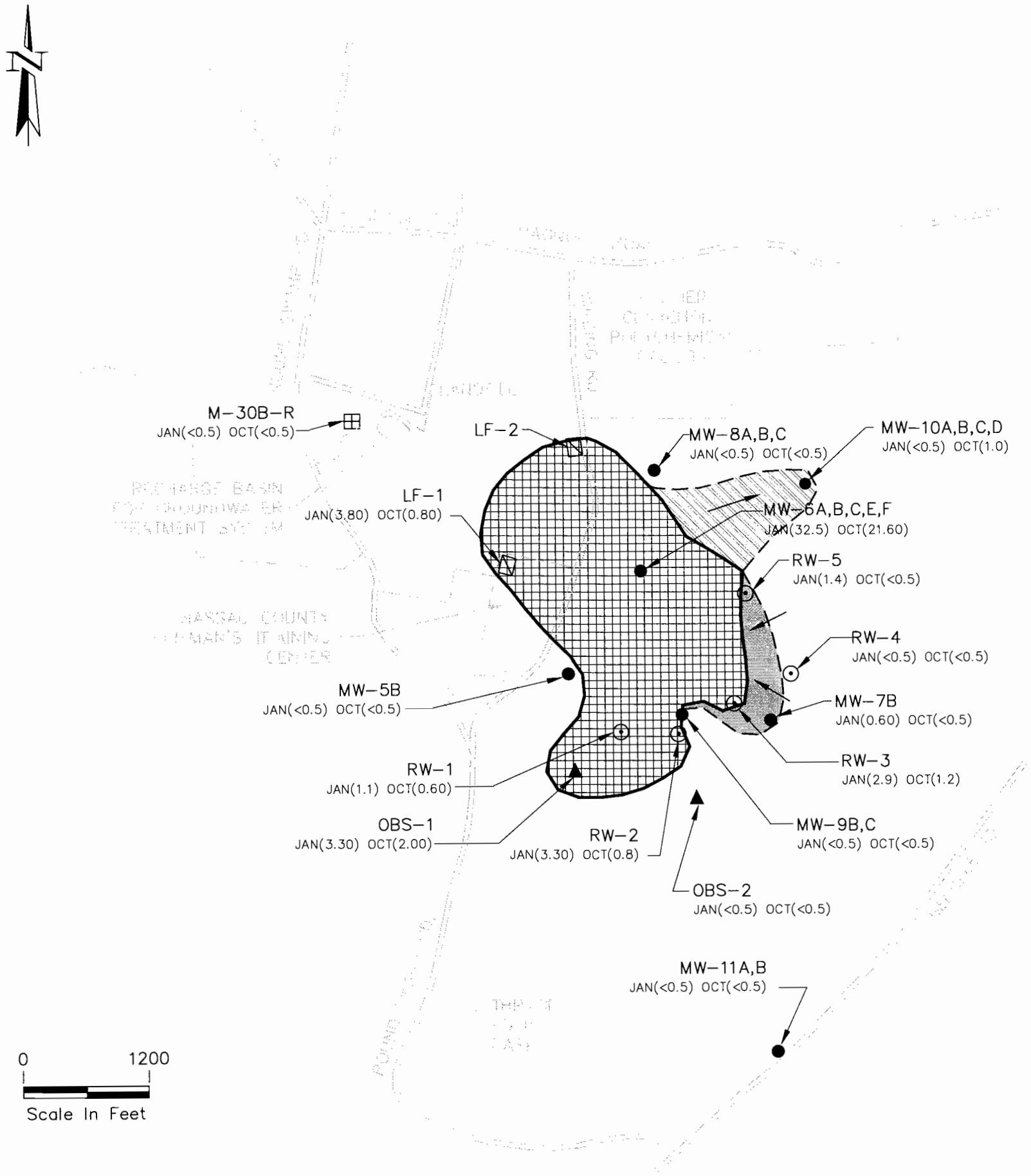
MW-5B ●	MONITORING WELL LOCATION AND TOTAL VOLATILE HALOGENATED ORGANICS CONCINTRATION, PPB
RW-4 ⊙	RECOVERY WELL
OBS-1 ▲	PHASE II EXTENSION WELL
LF-3 ▨	PHASE III WELL
M-30B-R ⊞	UPGRADIENT WELL
(NM)	NOT MEASURED
- - - -	PROPERTY BOUNDARY
←	MIGRATION
	JANUARY 2005 APPROXIMATE AREAL EXTENT OF THE VOLATILE HALOGENATED ORGANICS PLUME
	OCTOBER 2005 APPROXIMATE AREAL EXTENT OF THE VOLATILE HALOGENATED ORGANICS PLUME
	OVERLAP OF APPROXIMATE AREAL EXTENT OF THE VOLATILE HALOGENATED ORGANICS FOR JANUARY AND OCTOBER OF 2005

NOTE:

PLUME CONTOUR IS BASED ON TOTAL VOLATILE HALOGENATED ORGANICS CONCENTRATIONS IN THE MONITORING AND RECOVERY WELLS. PLUM LIMITS BASED ON MOST RECENT AVAILABLE DATA AS NOTED.

APPROXIMATE EXTENT AND DISTRIBUTION OF TOTAL VOLATILE HALOGENATED ORGANICS ANNUAL 2005

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY



S43311 B2-A05
041906

LEGEND

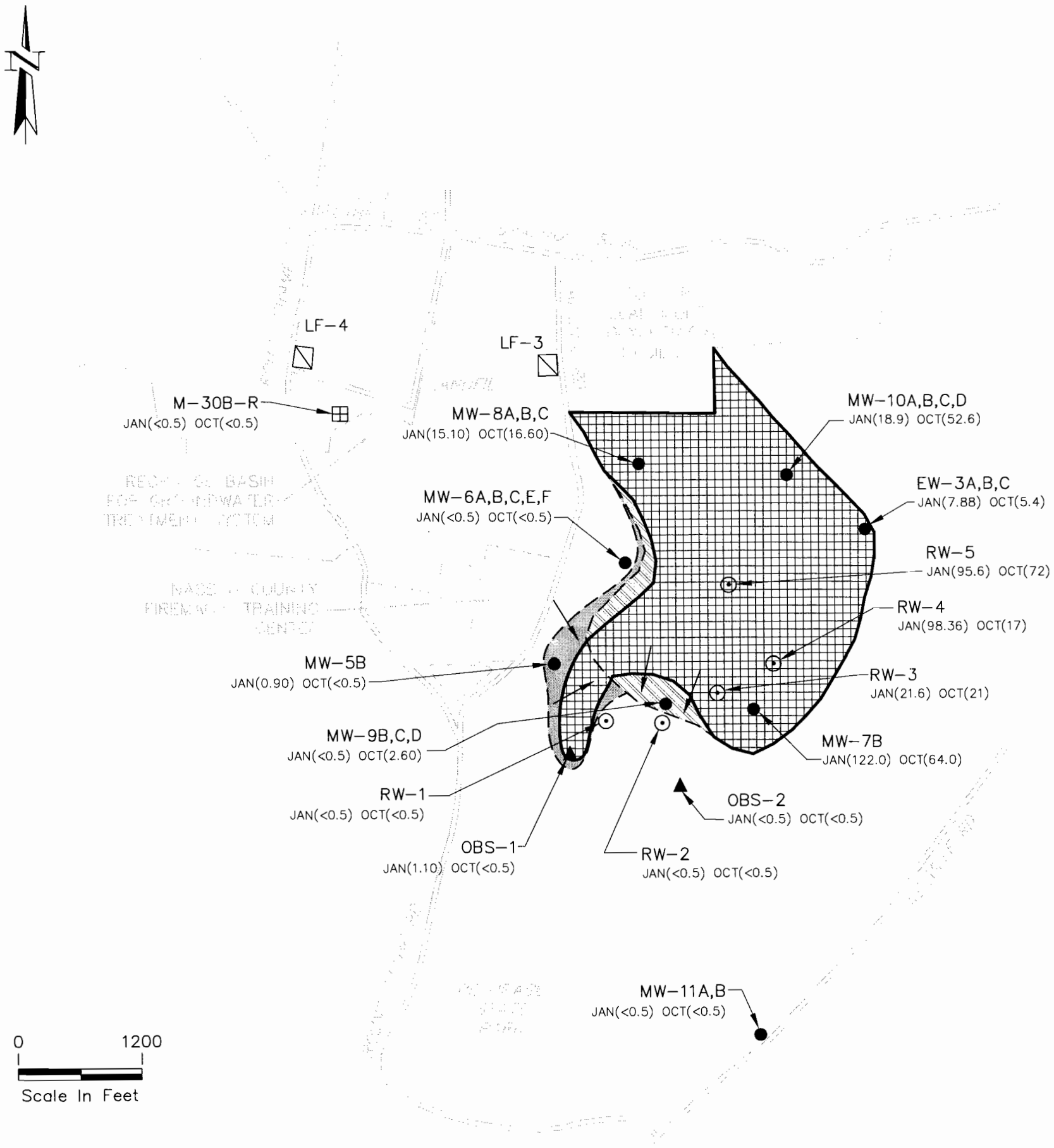
MW-5B ●	MONITORING WELL LOCATION AND TOTAL AROMATIC HYDROCARBON CONCENTRATION, PPB
RW-4 ⊙	RECOVERY WELL
OBS-1 ▲	PHASE II EXTENSION WELL
LF-3 ▨	PHASE III WELL
M-30B-R ⊞	UPGRADIENT WELL
(NM)	NOT MEASURED
- - - - - -	PROPERTY BOUNDARY
←	MIGRATION
	JANUARY 2005 APPROXIMATE AREAL EXTENT OF THE AROMATIC HYDROCARBON PLUME
	OCTOBER 2005 APPROXIMATE AREAL EXTENT OF THE AROMATIC HYDROCARBON PLUME
	OVERLAP OF APPROXIMATE AREAL EXTENT OF THE AROMATIC HYDROCARBON PLUME FOR JANUARY AND OCTOBER OF 2005

NOTE:

PLUME CONTOUR IS BASED ON TOTAL AROMATIC HYDROCARBON CONCENTRATIONS IN THE MONITORING AND RECOVERY WELLS. PLUM LIMITS BASED ON MOST RECENT AVAILABLE DATA AS NOTED.

APPROXIMATE EXTENT AND DISTRIBUTION OF TOTAL AROMATIC HYDROCARBONS ANNUAL 2005

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY



S43311 C3-A05
041906

LEGEND

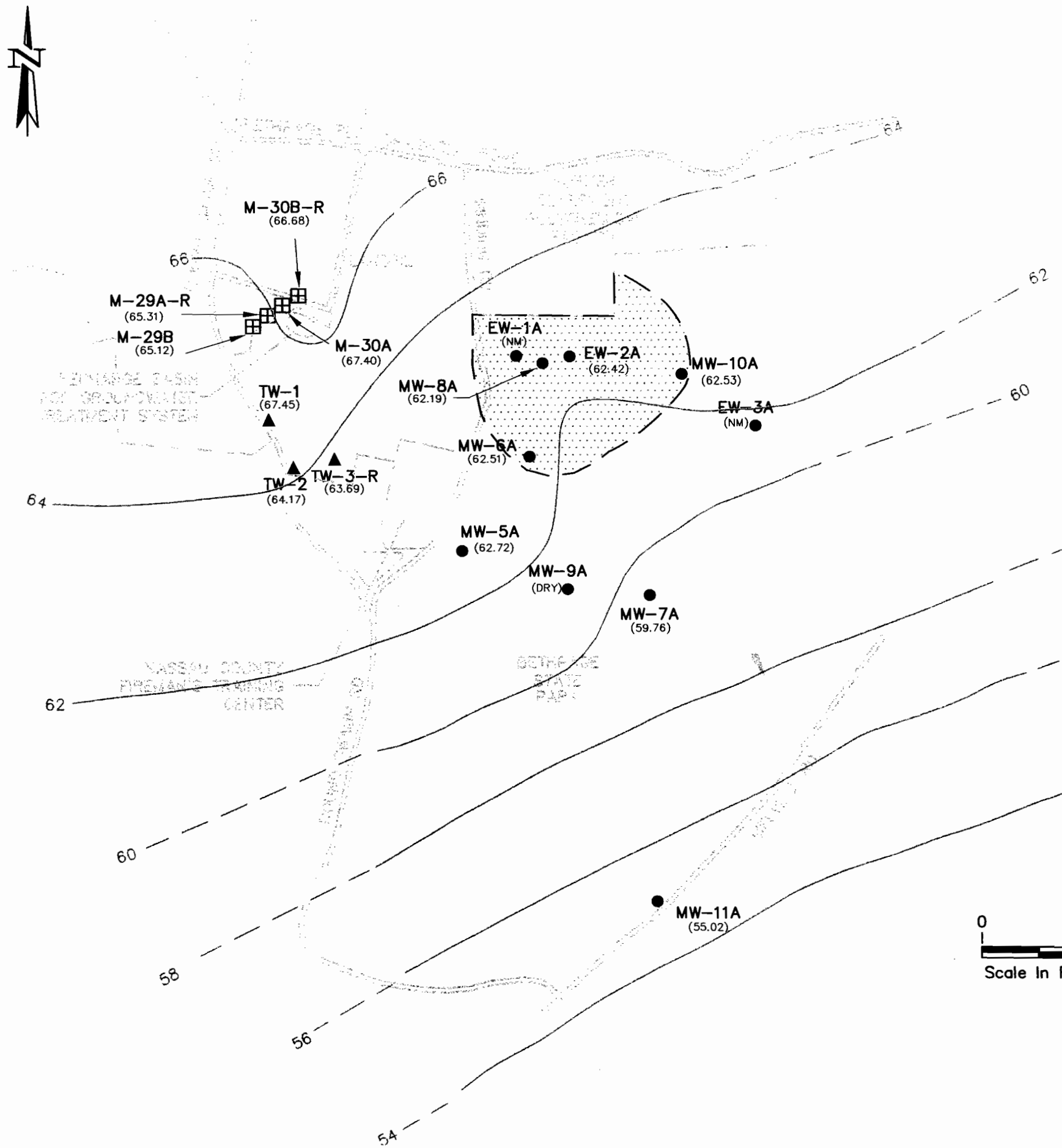
MW-5B ●	MONITORING WELL LOCATION AND TOTAL VOLATILE HALOGENATED ORGANICS CONCINTRATION, PPB
RW-4 ⊙	RECOVERY WELL
OBS-1 ▲	PHASE II EXTENSION WELL
LF-3 ▨	PHASE III WELL
M-30B-R ⊞	UPGRADIENT WELL
(NM)	NOT MEASURED
	PROPERTY BOUNDARY
←	MIGRATION
	JANUARY 2005 APPROXIMATE AREAL EXTENT OF THE TETRACHLOROETHENE PLUME
	OCTOBER 2005 APPROXIMATE AREAL EXTENT OF THE TETRACHLOROETHENE PLUME
	OVERLAP OF APPROXIMATE AREAL EXTENT OF THE TETRACHLOROETHENE PLUME FOR JANUARY AND OCTOBER OF 2005

NOTE:
PLUME CONTOUR IS BASED ON TOTAL TETRACHLOROETHENE CONCENTRATIONS IN THE MONITORING AND RECOVERY WELLS. PLUM LIMITS BASED ON MOST RECENT AVAILABLE DATA AS NOTED.

APPROXIMATE EXTENT AND DISTRIBUTION OF TETRACHLOROETHENE ANNUAL 2005

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

APPENDIX A



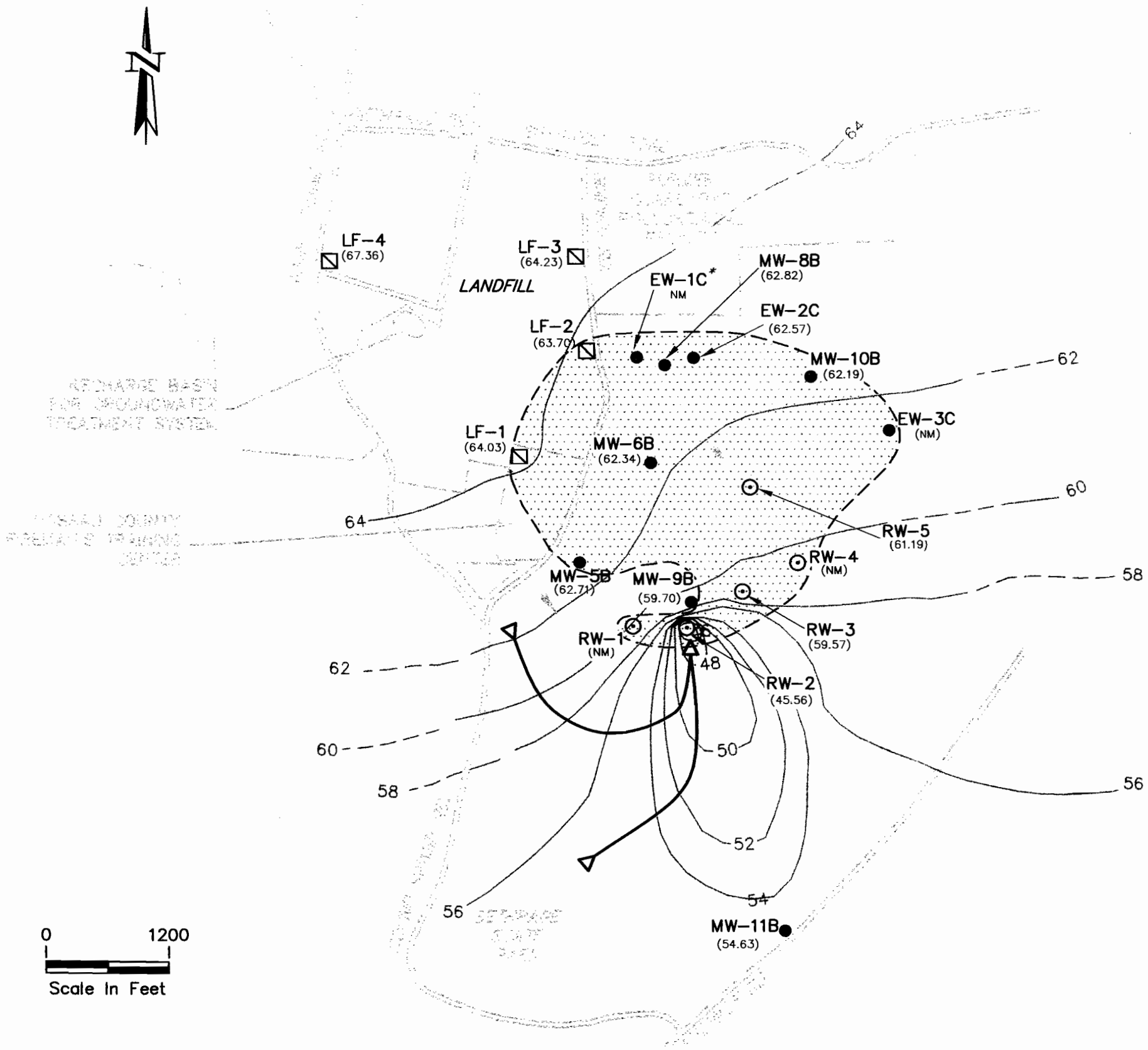
LEGEND

MW-5A ● (61.32)	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
TW-2 ▲	*Phase II Extension Well*
M-29A ⊞	*Upgradient Well*
	Property Boundary
	Groundwater Flow Direction
56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
	Approximate Extent Of The VOC Plume In Water Table Wells – January 2004
(NM)	*Not Measured*

WATER TABLE FLOW MAP JANUARY 11, 2005

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

SN43311A2
091205



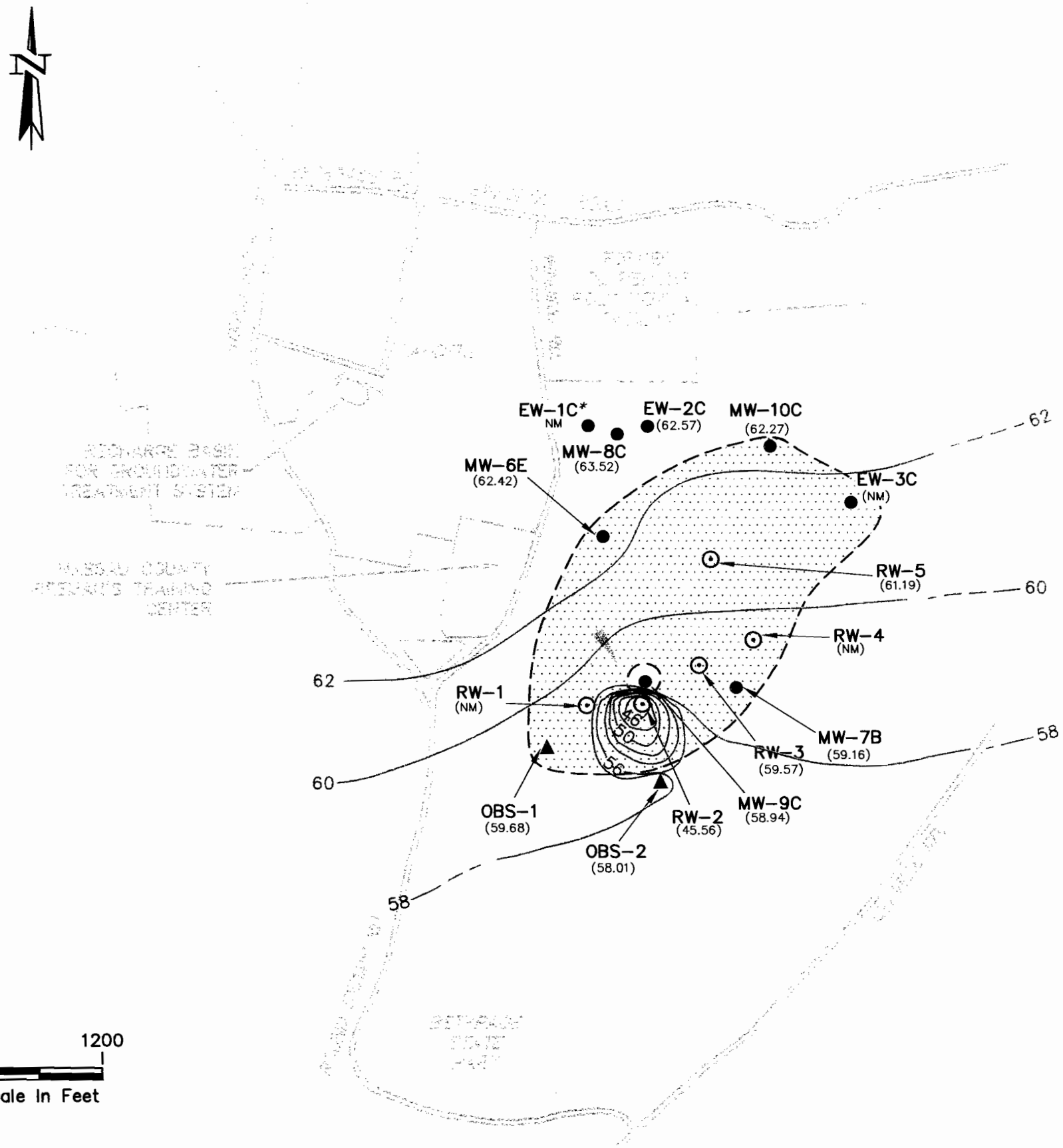
LEGEND

MW-5B (60.85) ●	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
RW-5 ⊙	*Recovery Well*
LF-2 ⧅	*Phase III Well*
▷——▷	*Limiting Flow Lines Depicting Estimated Effective Capture Zones*
	Groundwater Flow Direction
——56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
- - - - - -	*Property Boundary*
⬭	*Approximate Extent Of The VOC Plume In Shallow Potentiometric Zone January 2004.*
(NM)	*Not Measured*
*	*Plume Extent Based On Third Quarter 1998 Data.*

SHALLOW POTENTIOMETRIC FLOW MAP JANUARY 11, 2005

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

SN43311B2
091205



LEGEND

MW-8C (49.22) ●	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
RW-4 ⊙	*Recovery Well*
OBS-2 ▲	*Phase II Extension Well*
	Property Boundary
——▷	*Limiting Flow Lines Depicting Estimated Effective Capture Zone*
	Groundwater Flow Direction
56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
	Approximate Extent Of The VOC Plume In The Deep Potentiometric Zone – January 2004
(NM)	*Not Measured*
*	*Plume Extent Based On Third Quarter 1998 Data*

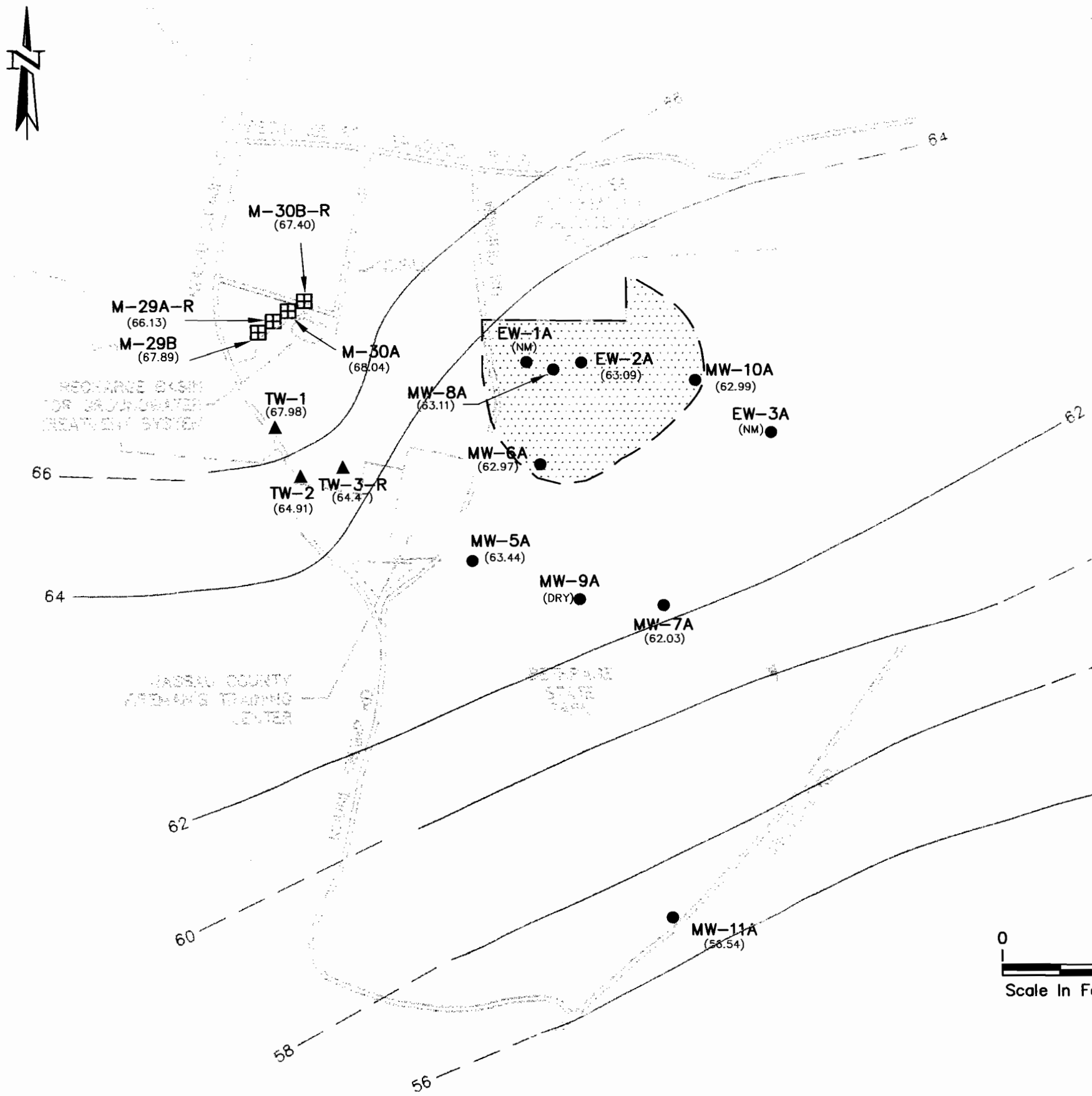
DEEP POTENTIOMETRIC FLOW MAP JANUARY 11, 2005

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

SN43311C2
091205

Gannett Fleming

FIGURE 1



LEGEND

MW-5A ● (61.32)	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
TW-2 ▲	*Phase II Extension Well*
M-29A ⊞	*Upgradient Well*
	Property Boundary
	Groundwater Flow Direction
56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
	Approximate Extent Of The VOC Plume In Water Table Wells – January 2005
(NM)	*Not Measured*

0 1200

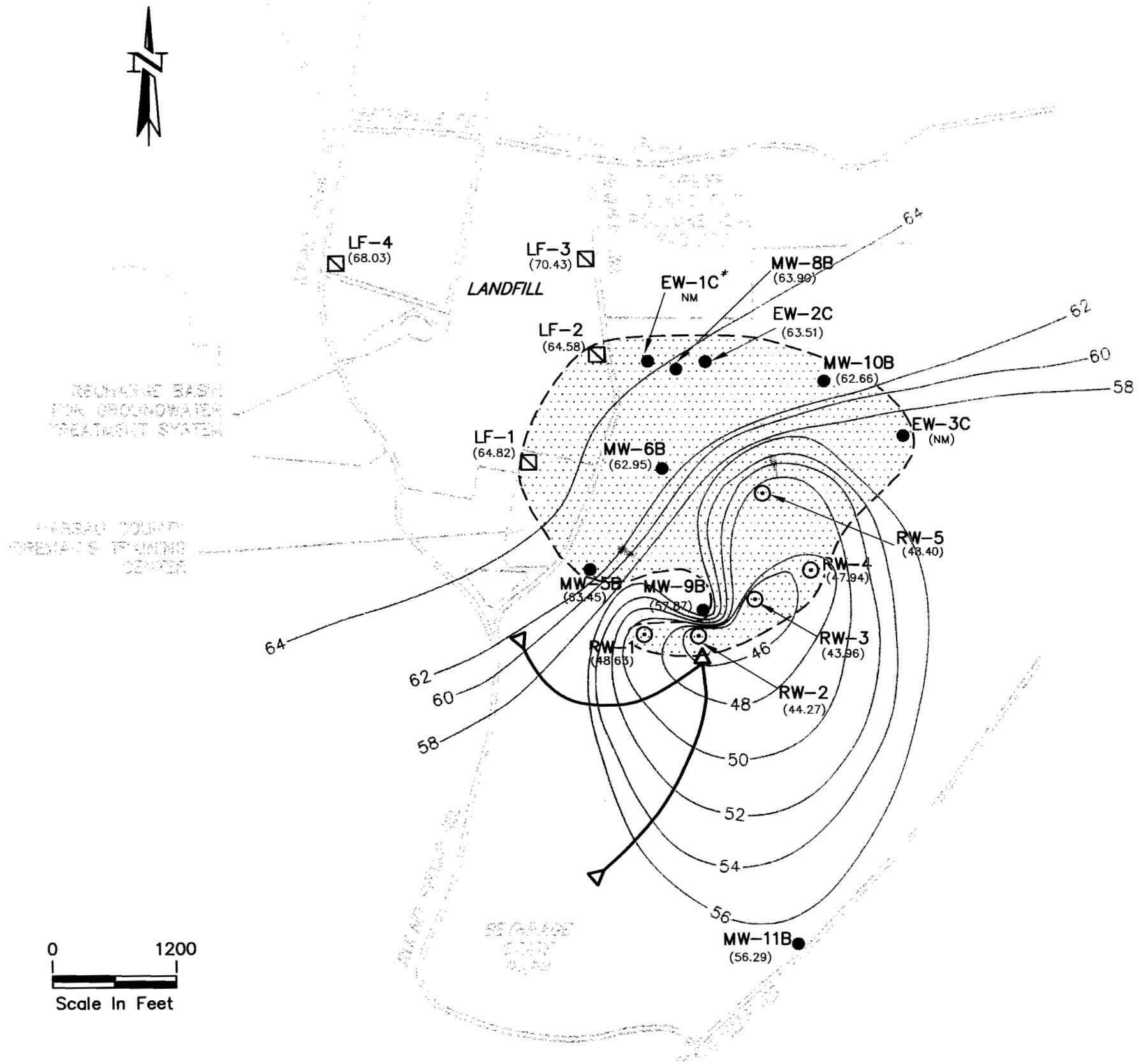
Scale In Feet

WATER TABLE FLOW MAP APRIL 18, 2005

OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY

SN43311A
091305



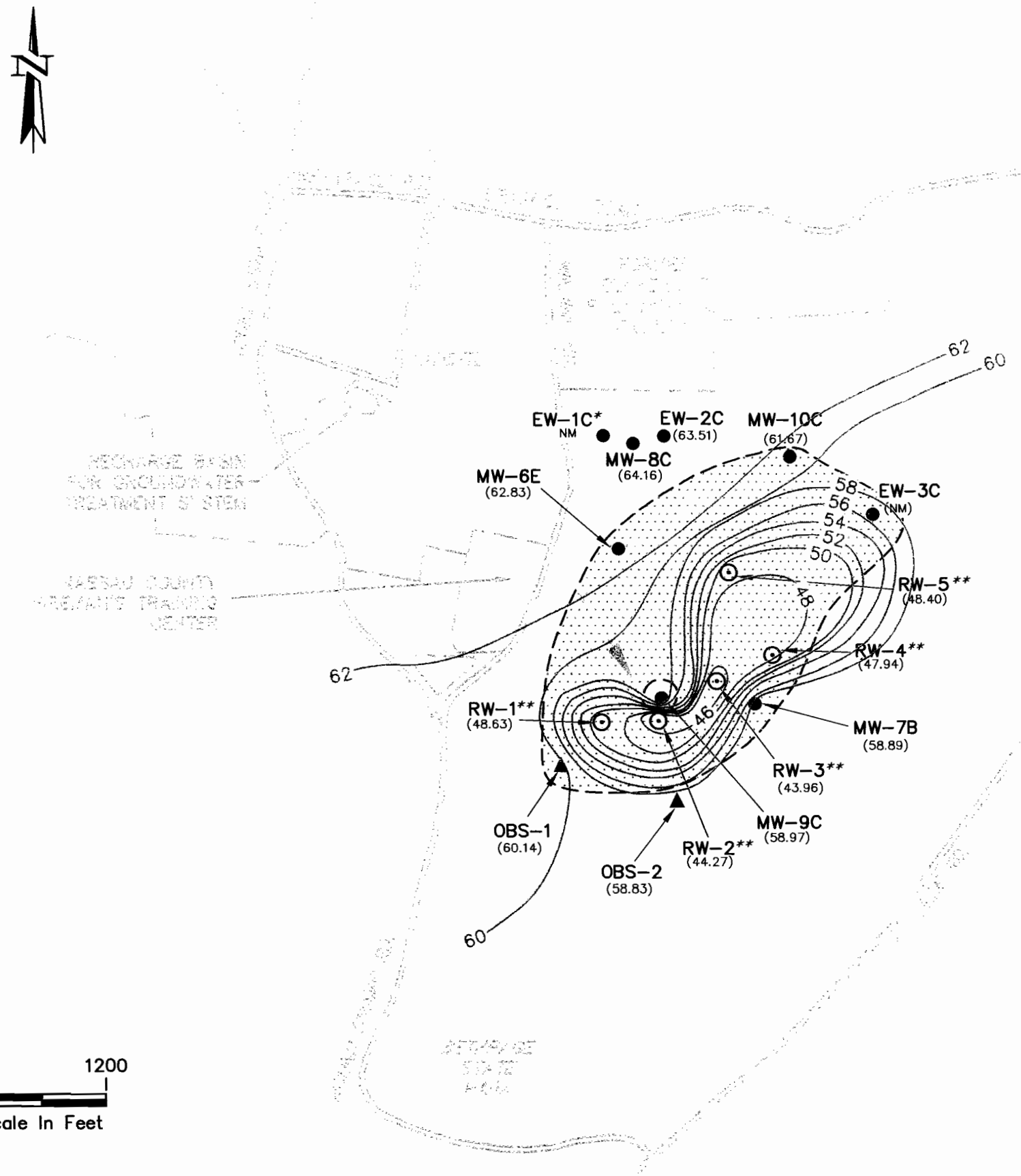
LEGEND

MW-5B (60.85) ●	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
RW-5 ⊙	*Recovery Well*
LF-2 ⊠	*Phase III Well*
▷——▷	*Limiting Flow Lines Depicting Estimated Effective Capture Zones*
	Groundwater Flow Direction
——56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
	Property Boundary
	Approximate Extent Of The VOC Plume In Shallow Potentiometric Zone January 2004.
(NM)	*Not Measured*
*	*Plume Extent Based On Third Quarter 1998 Data.*
**	*Water Level Elevation Based On Historic Average For 2nd Quarter Monitoring*

SHALLOW POTENTIOMETRIC FLOW MAP APRIL 18,. 2005

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

SN43311B
091305



LEGEND

MW-8C (49.22) ●	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
RW-4 ⊙	*Recovery Well*
OBS-2 ▲	*Phase II Extension Well*
	Property Boundary
	Limiting Flow Lines Depicting Estimated Effective Capture Zone
	Groundwater Flow Direction
56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
	Approximate Extent Of The VOC Plume In The Deep Potentiometric Zone – January 2004
(NM)	*Not Measured*
*	*Plume Extent Based On Third Quarter 1998 Data*
**	*Water Level Elevation Based On Historic Average For 2nd Quarter Monitoring*

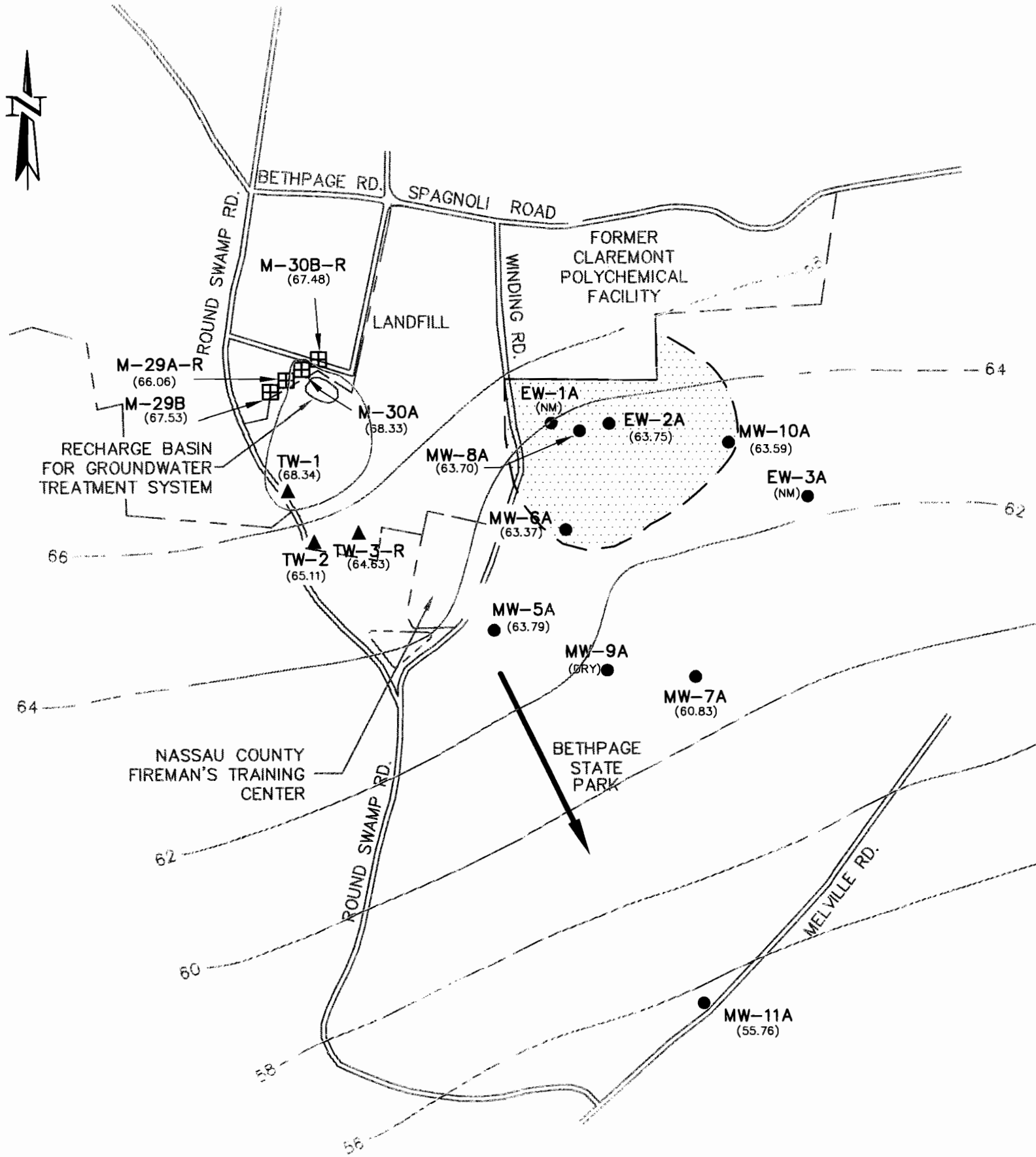
DEEP POTENTIOMETRIC FLOW MAP APRIL 18, 2005

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

SN43311C
091305

Gannett Fleming

FIGURE 1



LEGEND

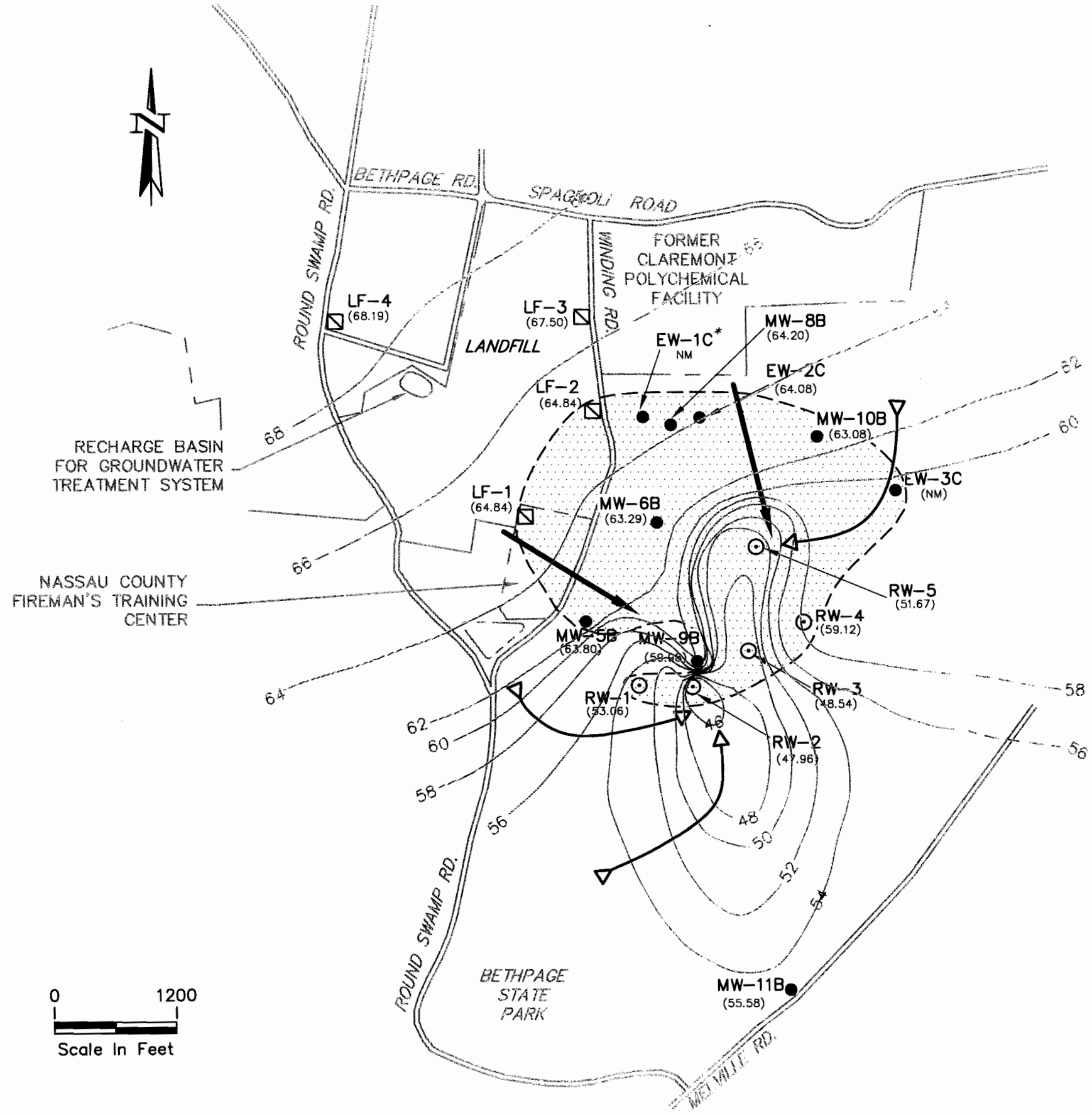
MW-5A ● (61.32)	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
TW-2 ▲	*Phase II Extension Well*
M-29A ⊞	*Upgradient Well*
– – – – –	*Property Boundary*
➡	*Groundwater Flow Direction*
56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
⬭	*Approximate Extent Of The VOC Plume In Water Table Wells – January 2005*
(NM)	*Not Measured*

WATER TABLE FLOW MAP JULY 11 2005

OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY

SN43311A
102005



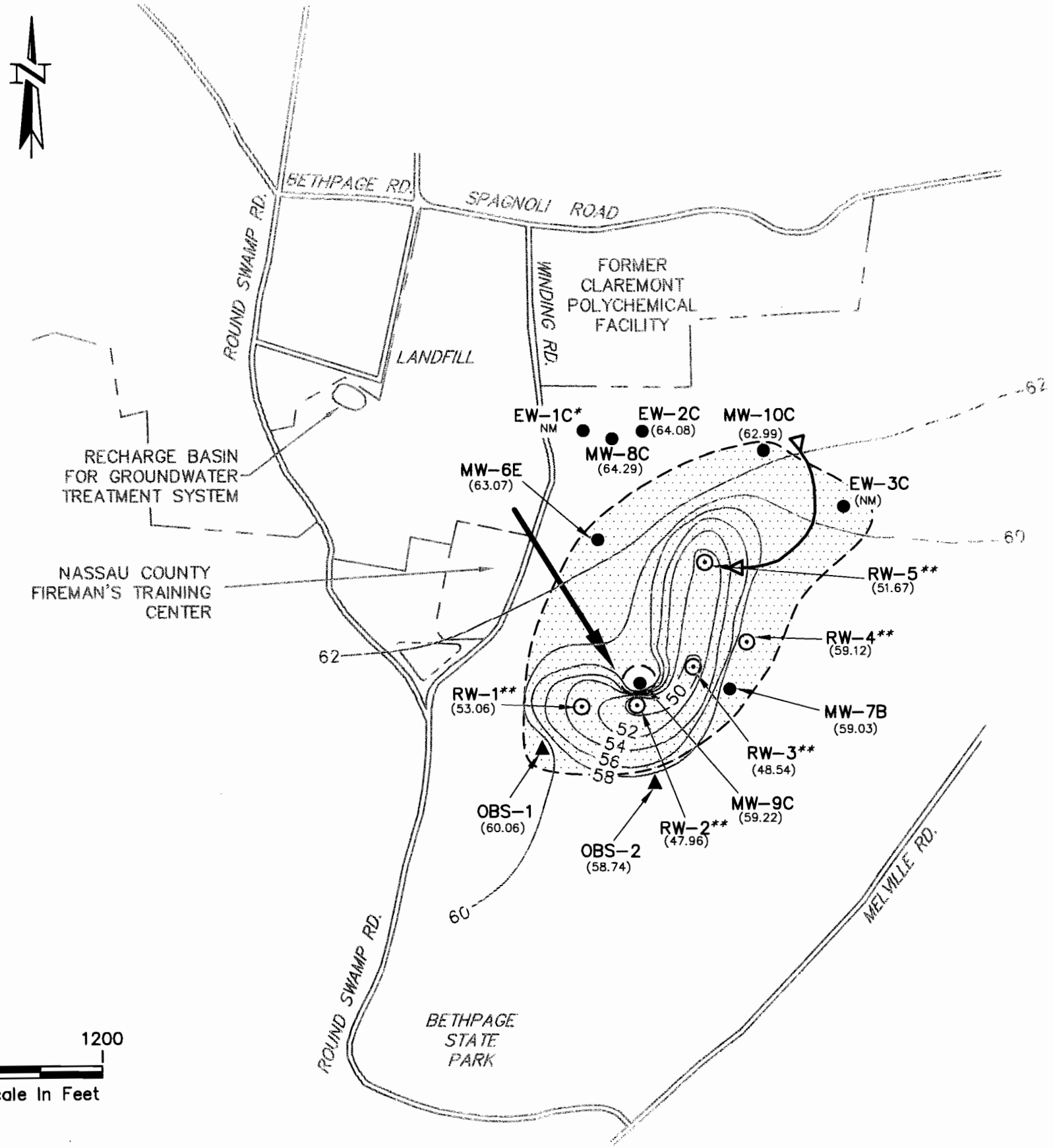
LEGEND

MW-5B (60.85) ●	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
RW-5 ⊙	*Recovery Well*
LF-2 ⧄	*Phase III Well*
▷——▷	*Limiting Flow Lines Depicting Estimated Effective Capture Zones*
——→	*Groundwater Flow Direction*
56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
- - - - - -	*Property Boundary*
⬭	*Approximate Extent Of The VOC Plume In Shallow Potentiometric Zone January 2004.*
(NM)	*Not Measured*
*	*Plume Extent Based On Third Quarter 1998 Data.*
**	*Water Level Elevation Based On Historic Average For 2nd Quarter Monitoring*

SHALLOW POTENTIOMETRIC FLOW MAP JULY 11, 2005

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

SN43311B-2
122805



LEGEND

MW–8C (49.22) ●	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
RW–4 ⊙	*Recovery Well*
OBS–2 ▲	*Phase II Extension Well*
— — —	*Property Boundary*
——▷	*Limiting Flow Lines Depicting Estimated Effective Capture Zone*
——►	*Groundwater Flow Direction*
56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
⬭	*Approximate Extent Of The VOC Plume In The Deep Potentiometric Zone – January 2004*
(NM)	*Not Measured*
*	*Plume Extent Based On Third Quarter 1998 Data*
**	*Water Level Elevation Based On Historic Average For 2nd Quarter Monitoring*

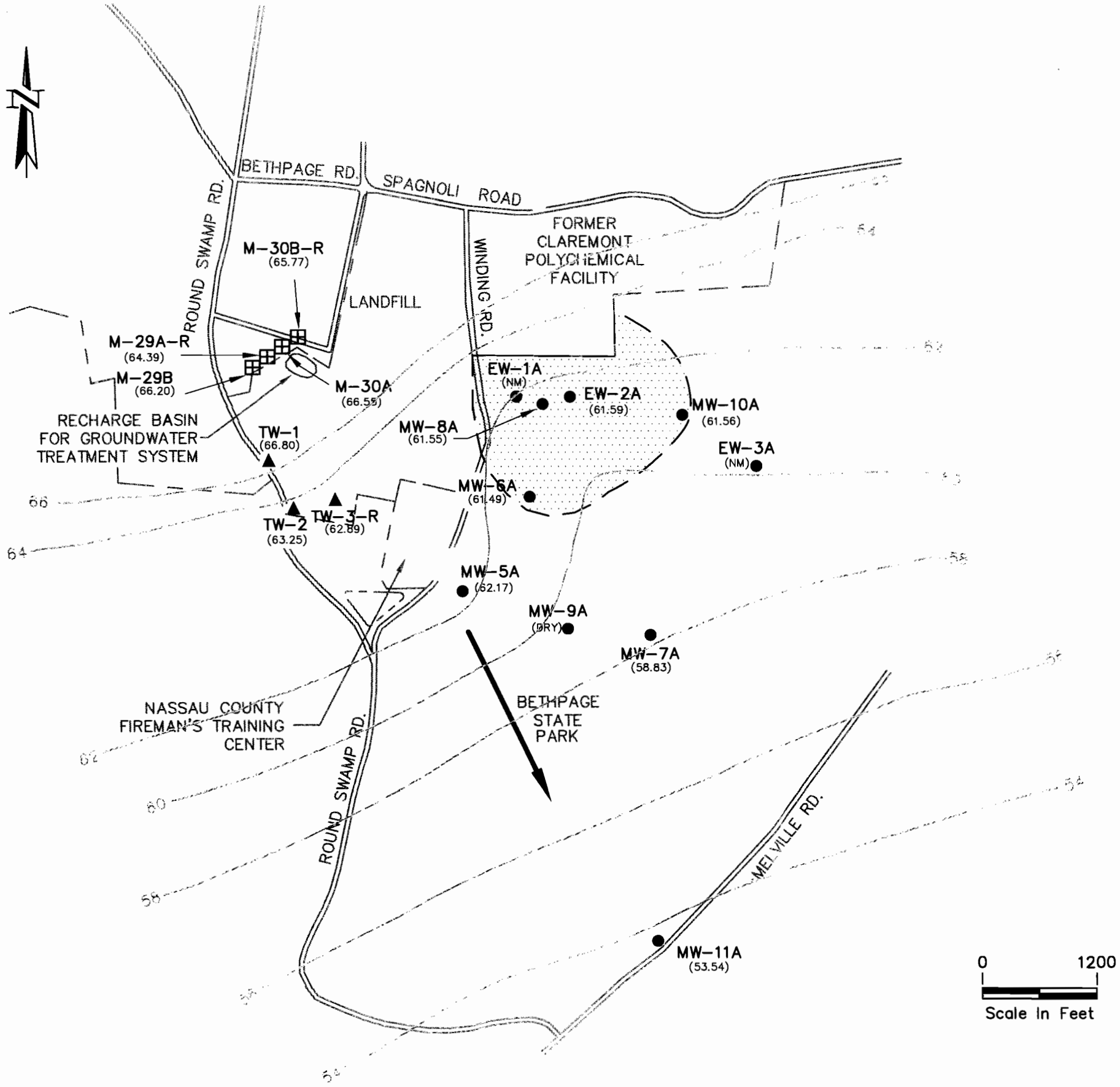
DEEP POTENTIOMETRIC FLOW MAP JULY 11; 2005

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

SN43311C–2
122805

Gannett Fleming

FIGURE 1



LEGEND

MW-5A (61.32) ●	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
TW-2 ▲	*Phase II Extension Well*
M-29A ⊞	*Upgradient Well*
	Property Boundary
	Groundwater Flow Direction
58	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
	Approximate Extent Of The VOC Plume In Water Table Wells – January 2005
(NM)	*Not Measured*

WATER TABLE FLOW MAP OCTOBER 3, 2005

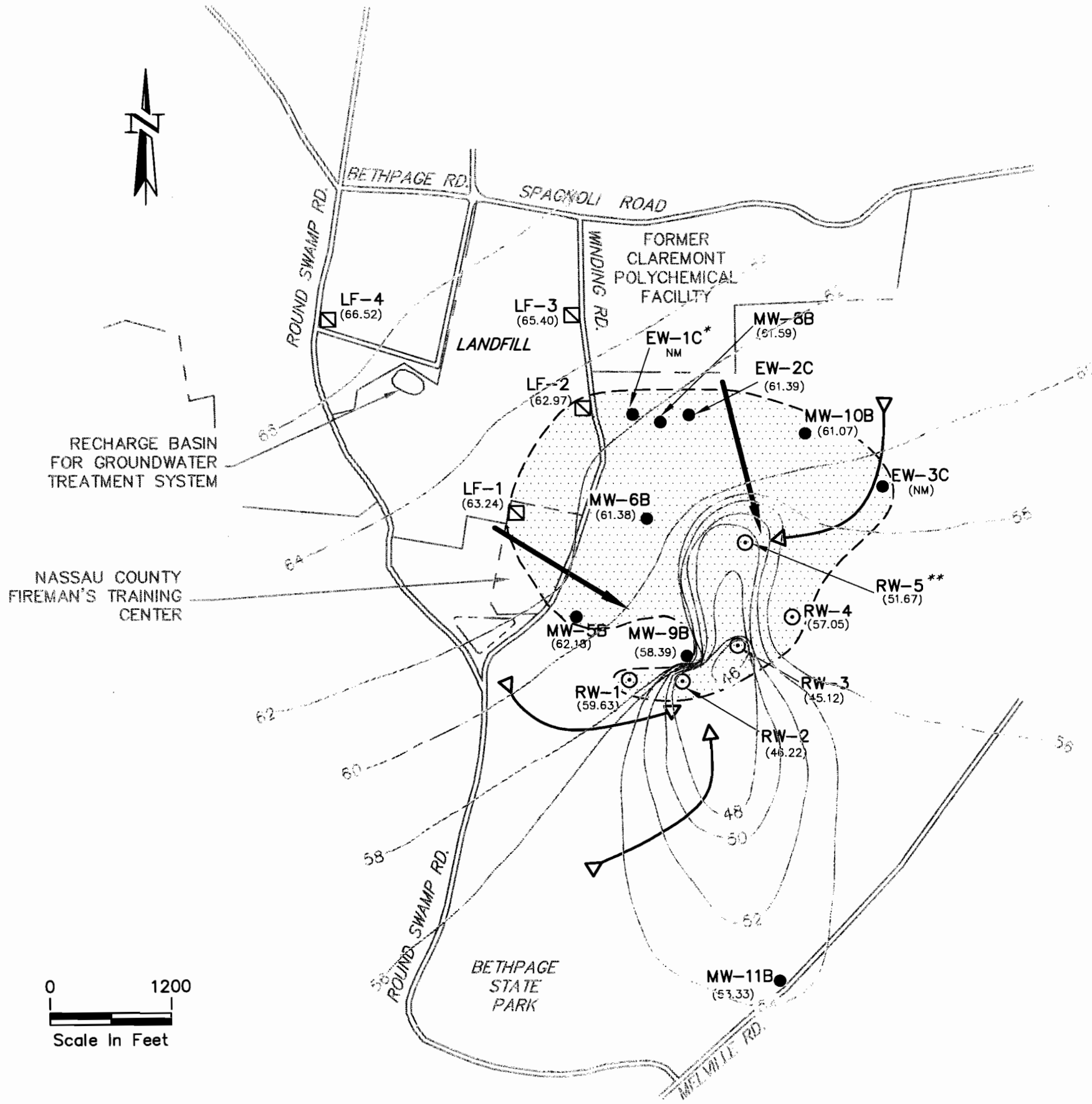
OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY

SN43311A
122905

Gannett Fleming

FIGURE 2



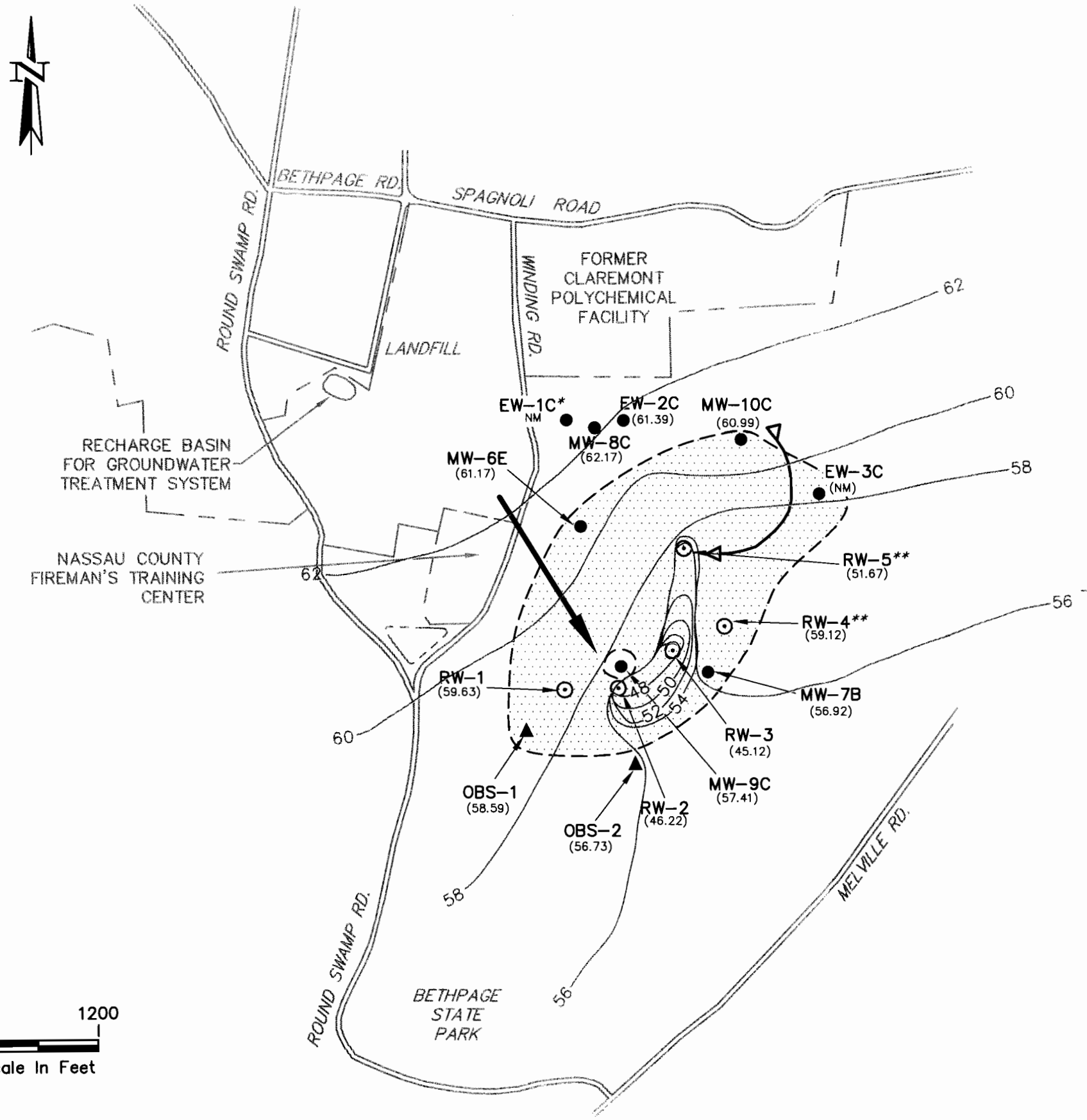
LEGEND

MW–5B (60.85) ●	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
RW–5 ⊙	*Recovery Well*
LF–2 ⊠	*Phase III Well*
▷——▷	*Limiting Flow Lines Depicting Estimated Effective Capture Zones*
——→	*Groundwater Flow Direction*
56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
— — — —	*Property Boundary*
⬭	*Approximate Extent Of The VOC Plume In Shallow Potentiometric Zone January 2004.*
(NM)	*Not Measured*
*	*Plume Extent Based On Third Quarter 1998 Data.*
**	*Water Level Elevation Based On Third Quarter Data*

SHALLOW POTENTIOMETRIC FLOW MAP OCTOBER 3, 2005

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

SN43311B
122905



LEGEND

MW–8C (49.22) ●	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
RW–4 ⊙	*Recovery Well*
OBS–2 ▲	*Phase II Extension Well*
	Property Boundary
	Limiting Flow Lines Depicting Estimated Effective Capture Zone
	Groundwater Flow Direction
56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
	Approximate Extent Of The VOC Plume In The Deep Potentiometric Zone – January 2004
(NM)	*Not Measured*
*	*Plume Extent Based On Third Quarter 1998 Data*
**	*Water Level Elevation Based On Third Quarter Data*

DEEP POTENTIOMETRIC FLOW MAP OCTOBER 3, 2005

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

SN43311C2
022706

APPENDIX B

Figure 1. Total Volatile Halogenated Organics - Water Table

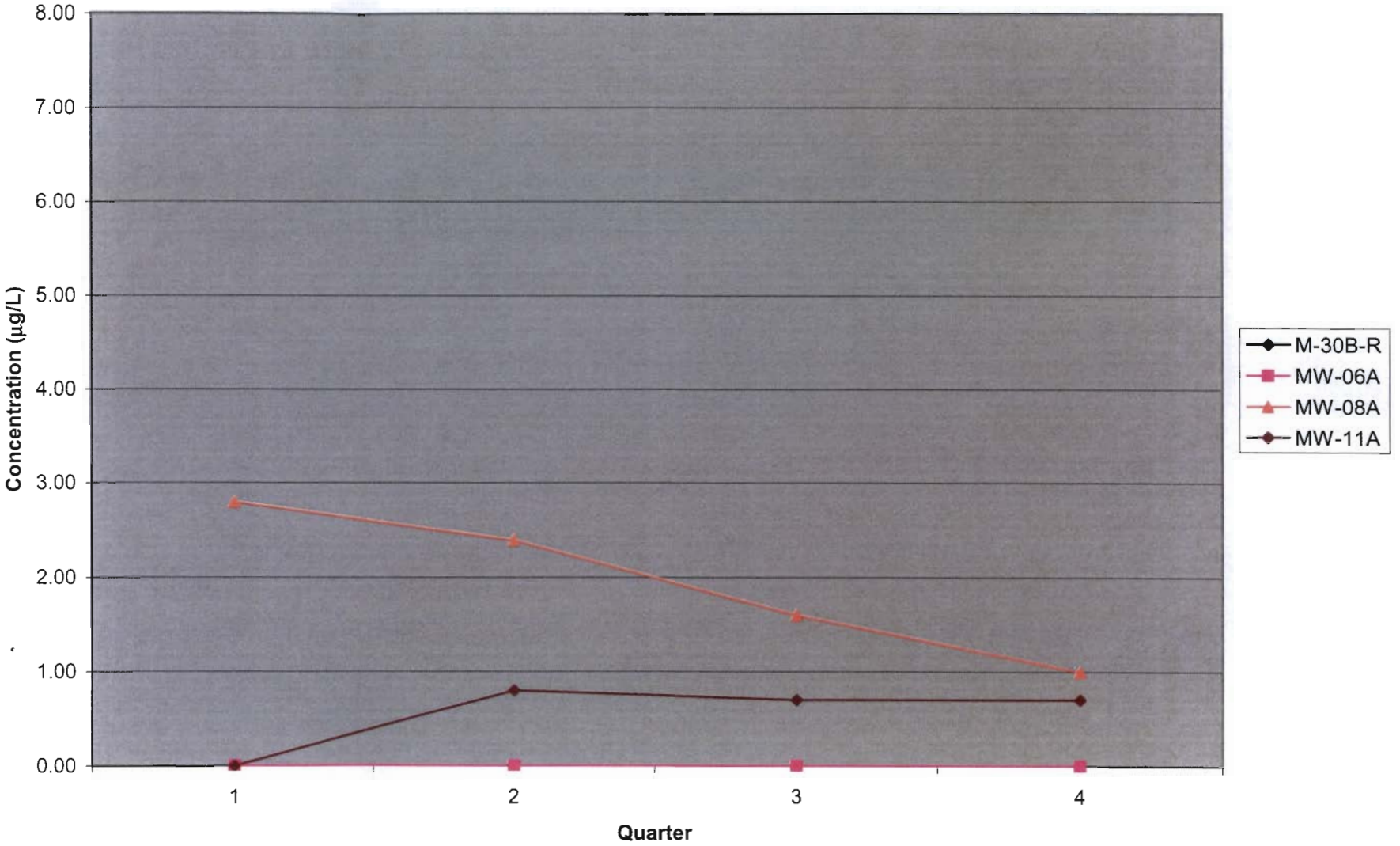


Figure 2. Total Volatile Halogenated Organics - Shallow Potentiometric Zone

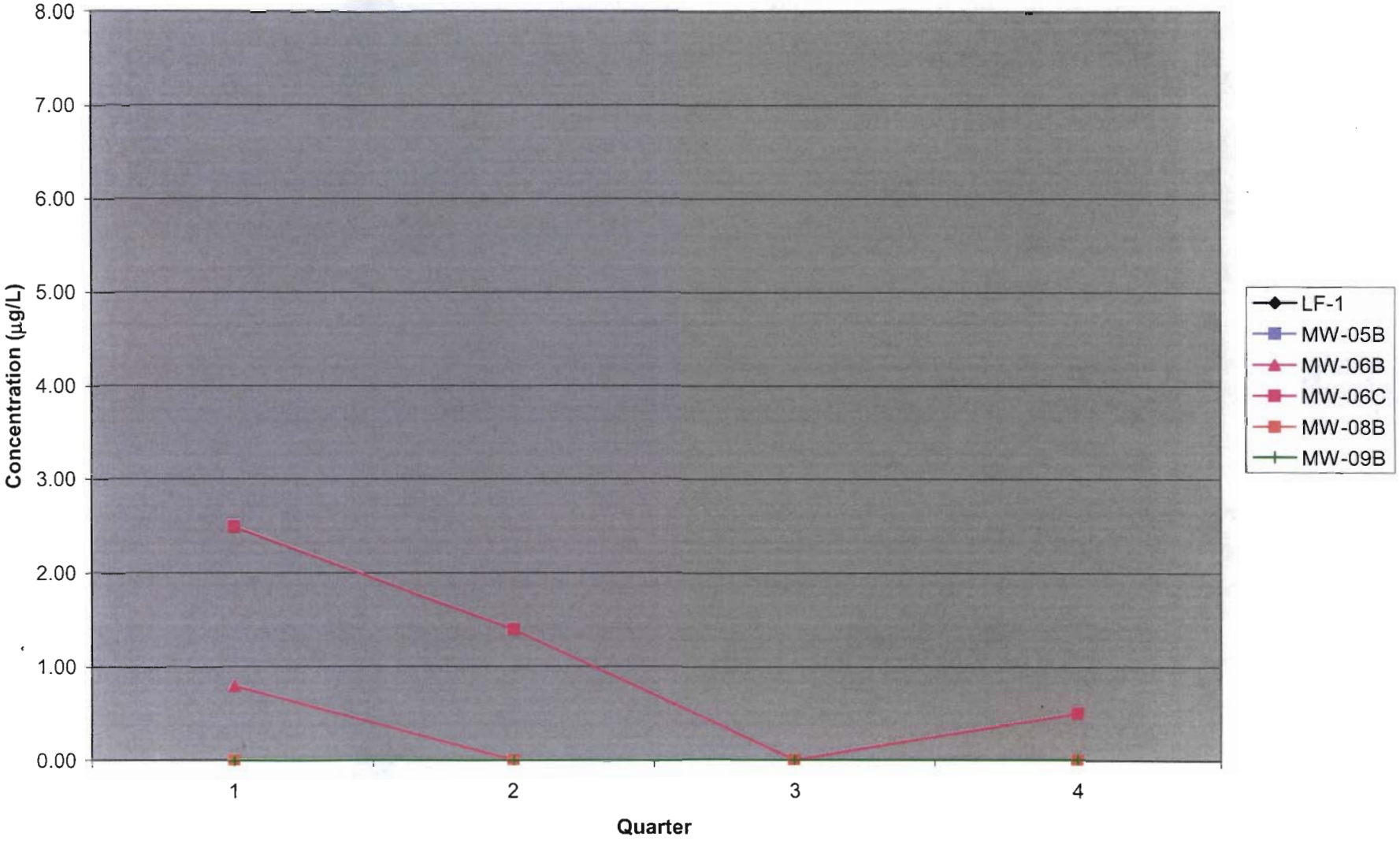


Figure 3. Total Volatile Halogenated Organics - Deep Potentiometric Zone

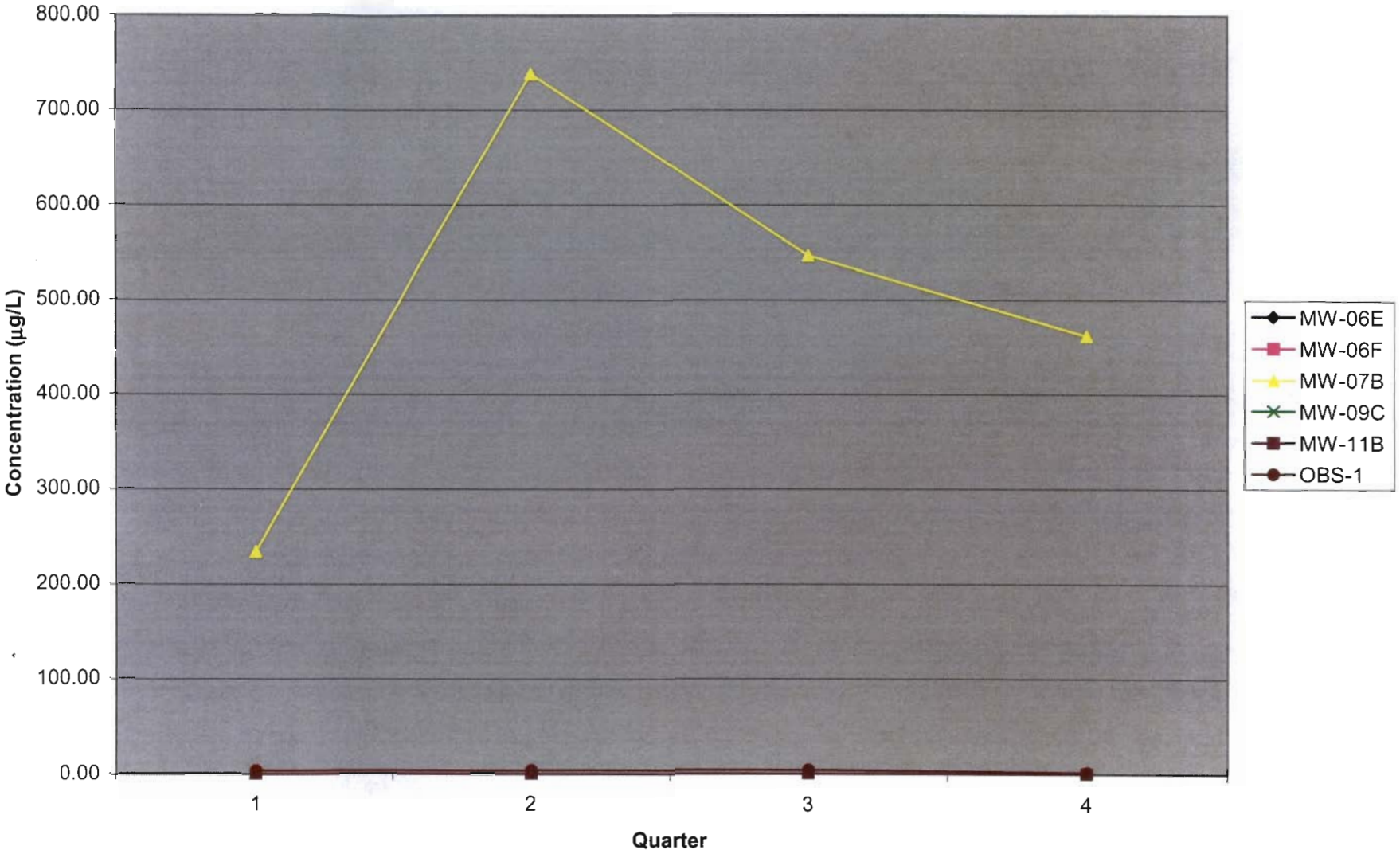


Figure 4. Total Aromatic Hydrocarbons - Water Table

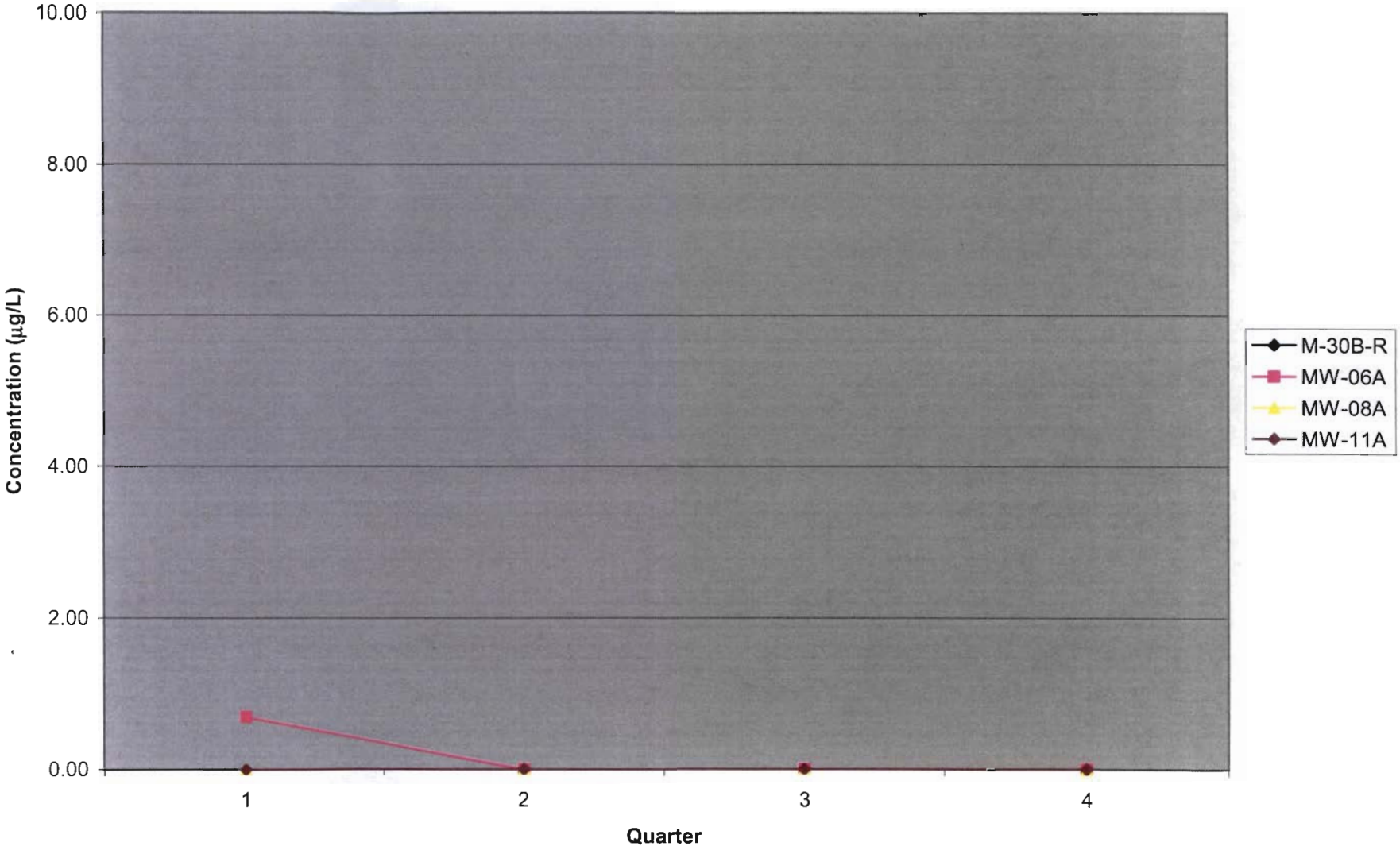


Figure 5. Total Aromatic Hydrocarbon Concentrations - Shallow Potentiometric Zone

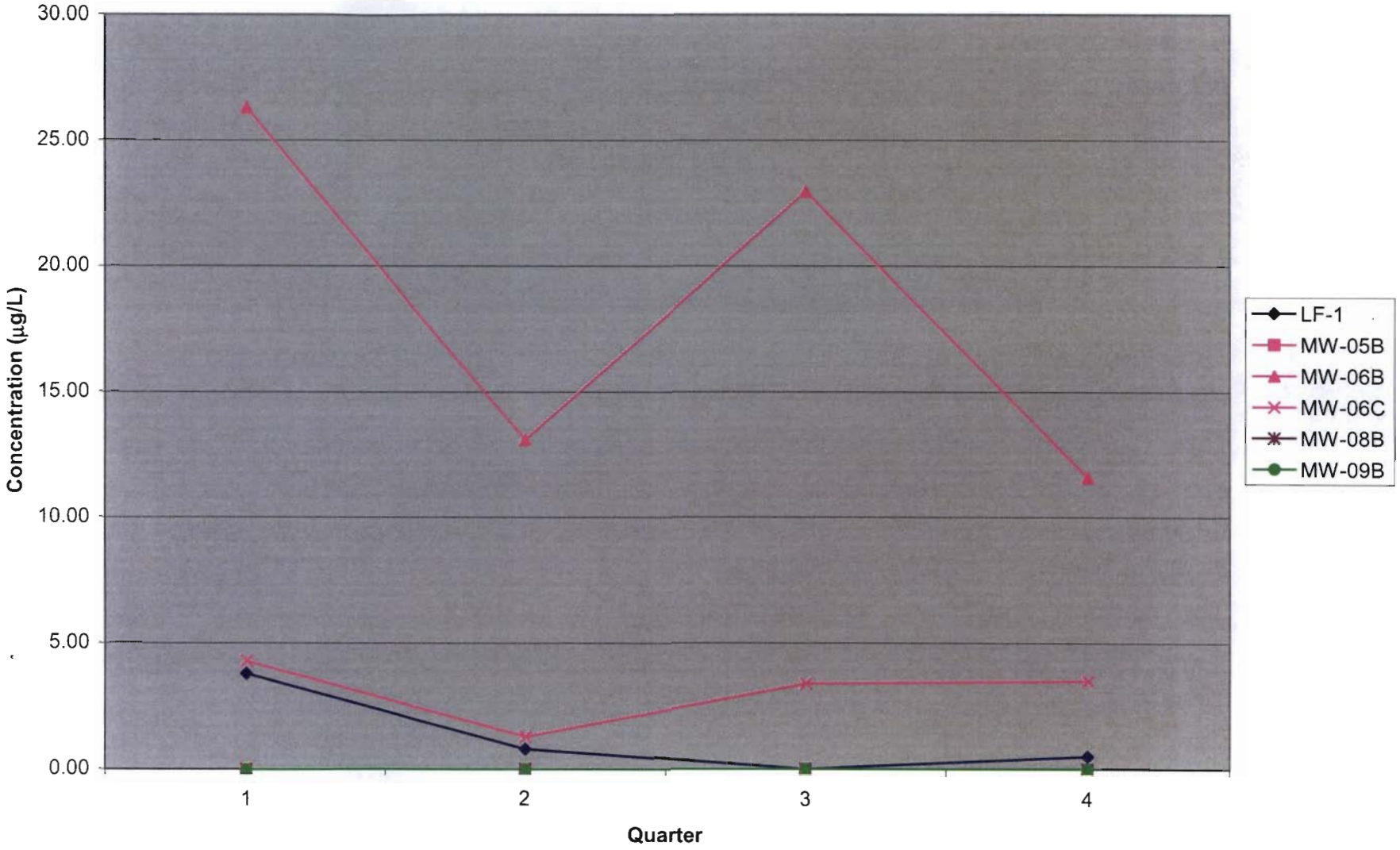


Figure 6. Total Aromatic Hydrocarbon Concentrations - Deep Potentiometric Zone

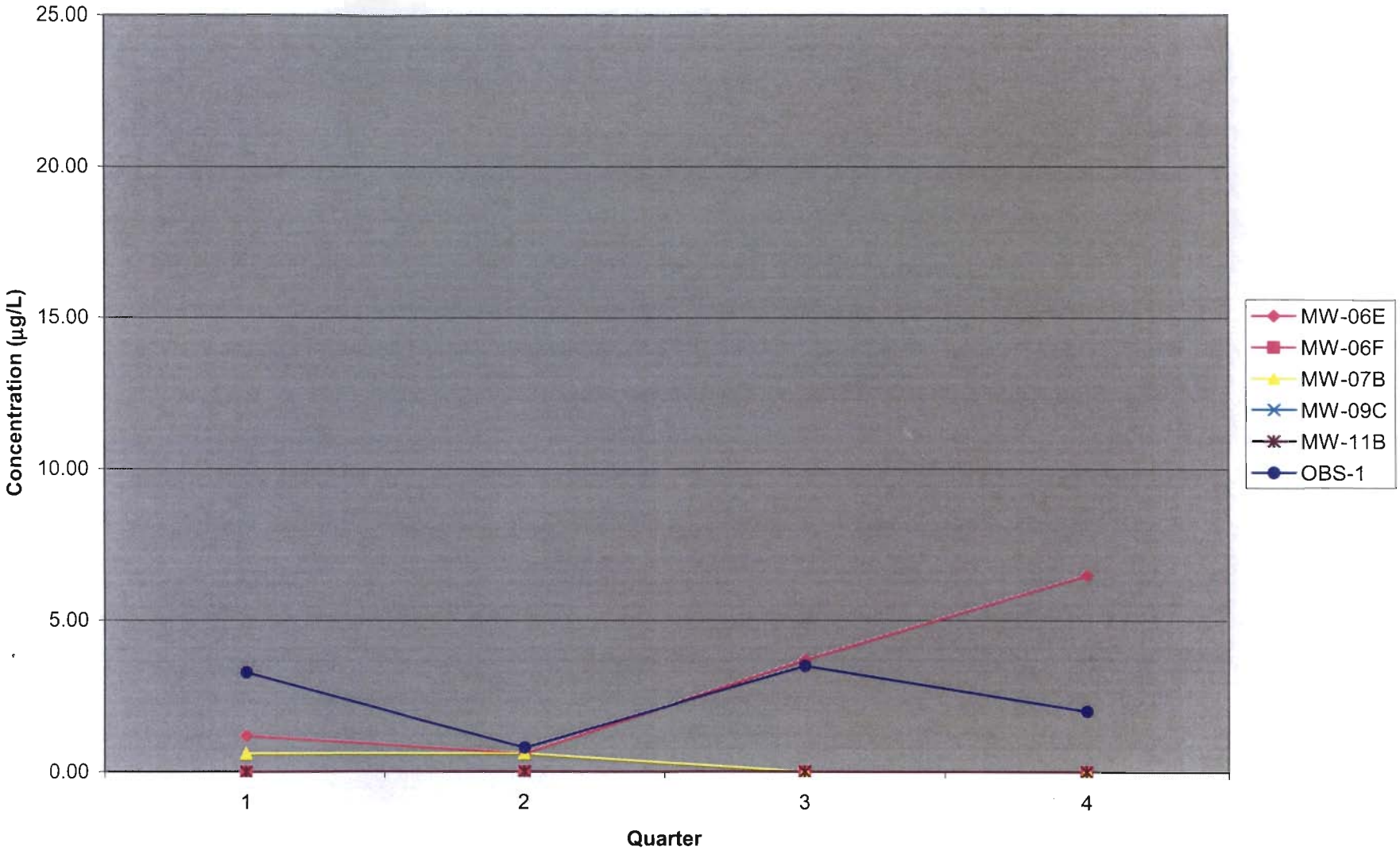


Figure 7. Tetrachloroethylene - Water Table

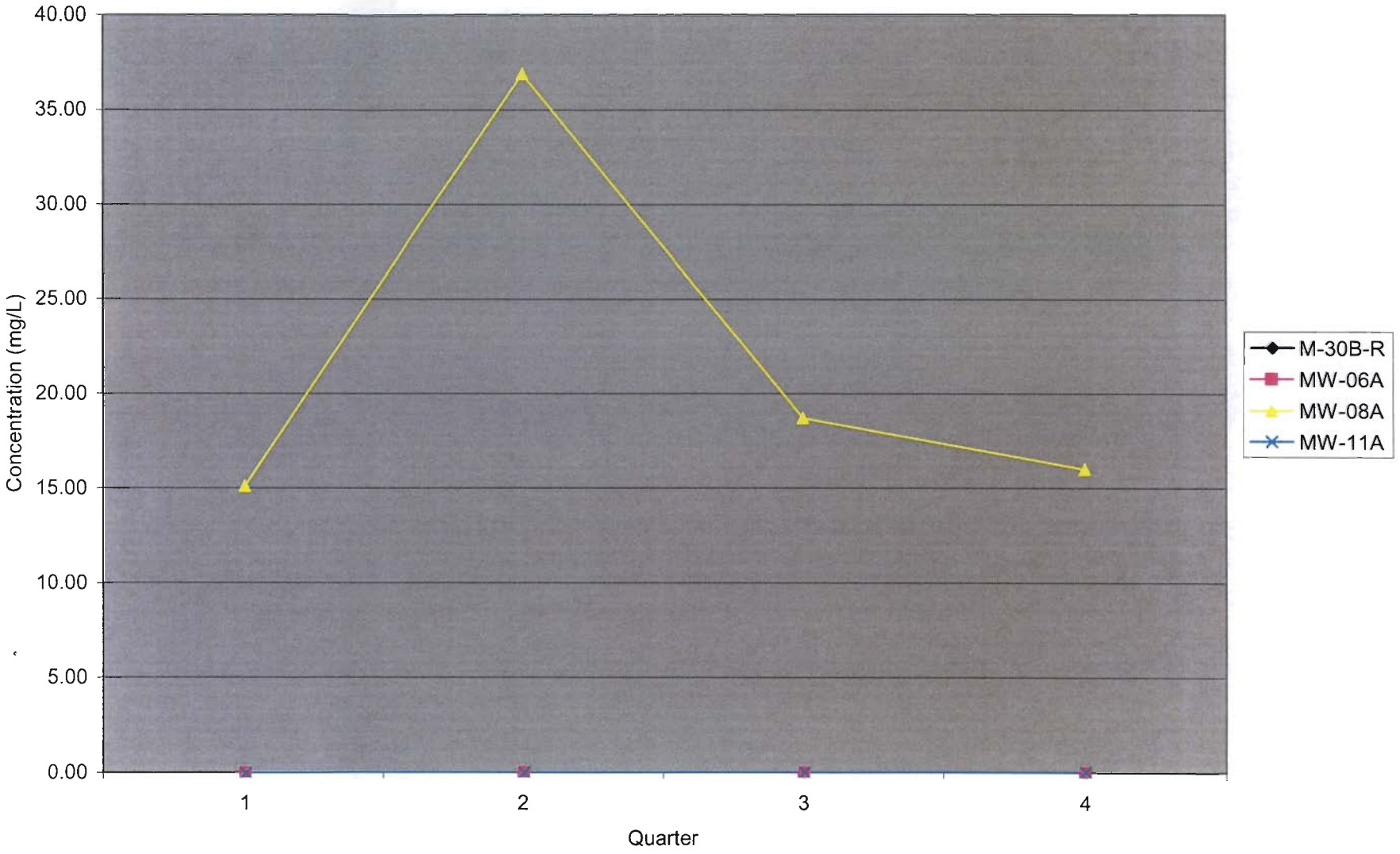


Figure 8. Tetrachloroethylene - Shallow Potentiometric Zone

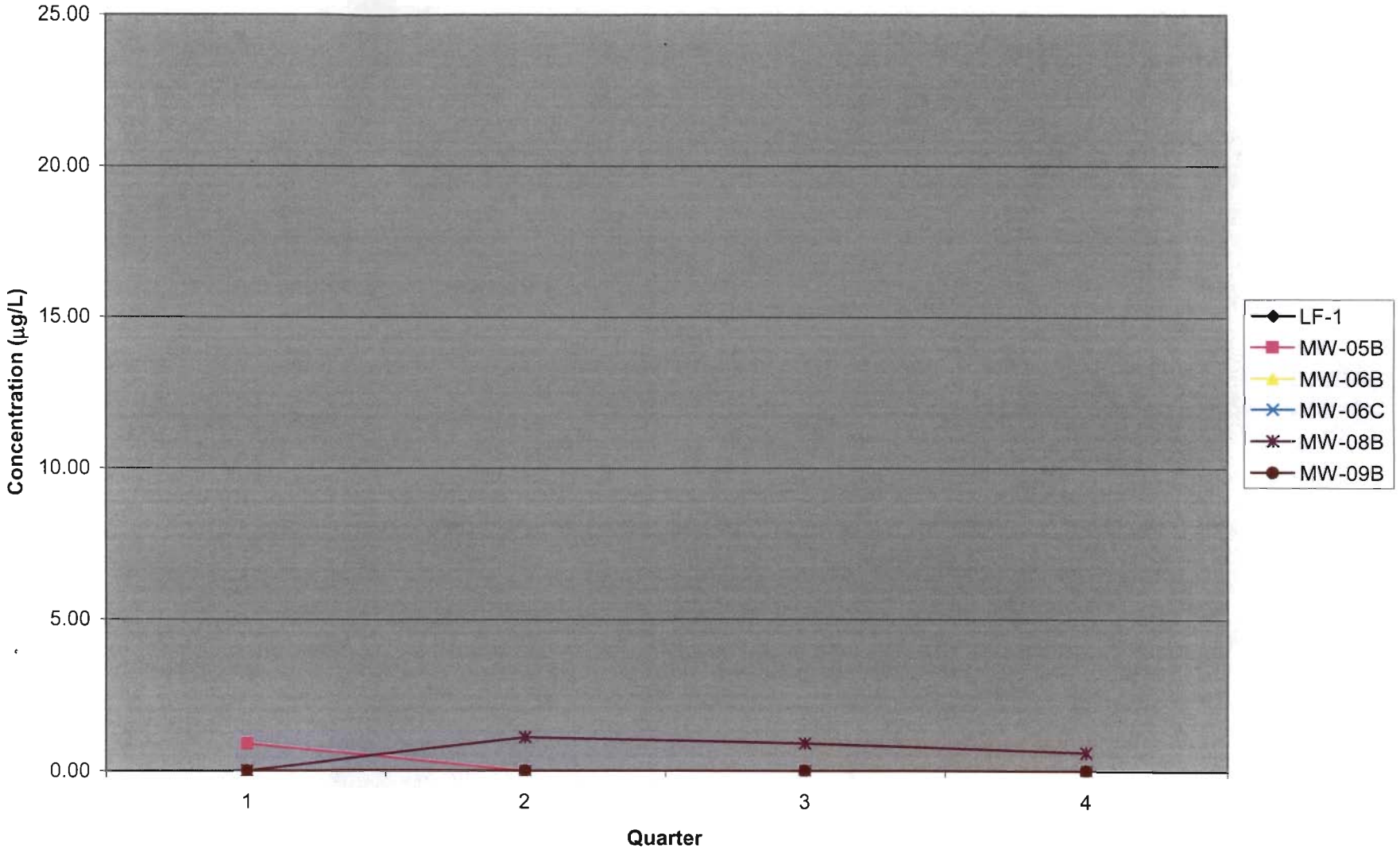


Figure 9. Tetrachloroethylene - Deep Potentiometric Zone