2010 FOURTH QUARTER AND ANNUAL REPORT

Old Bethpage
Solid Waste Disposal Complex
Groundwater Treatment Facility

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
SYOSSET, NEW YORK 11791

September 2011

LOCKWOOD
KESSLER &
BARTLETT, INC.
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F. Town of Oyster Bay, Old Bethpage Solid Waste Disposal Complex Ambient Air Quality Survey and Soil Gas Quality Survey, 2010 Fourth Quarter Report", RTP Environmental Associates, Inc., March 2011

G. "Town of Oyster Bay, Old Bethpage Solid Waste Disposal Complex, Evaluation of Volatile Organic Compounds in Ambient Air, Soil Gas and Soil Gas Pressure Readings, 2010 Annual Summary Report", RTP Environmental Associates, Inc. March 2011

1.0 INTRODUCTION

This document is the Old Bethpage Solid Waste Disposal Complex (OBSWDC) Remedial Action Plan (RAP) Report for the fourth calendar quarter of 2010 and calendar year 2010. This RAP Report was prepared on behalf of the Town of Oyster Bay (Town) by Lockwood, Kessler & Bartlett, Inc. (LKB). It is submitted to the New York State Department of Environmental Conservation (NYSDEC) pursuant to the OBSWDC RAP requirements specified in Appendix A of Consent Decree 83 Civ. 5357.

Section D.1.b (Reporting, Quarterly Reports, Operating Period) of the OBSWDC RAP requires the Town to submit the following information for the ground-water treatment facility quarterly:

- Pumpage records
- Treatment system air and water discharge data
- Treatment system performance records
- Data analysis (trends, position of plume, etc.)
- Modifications to system, including method and dates of approval
- Ground water-quality monitoring data
- Water-level data
- Potentiometric surface maps, as revised
- Records of all system downtime

Section D.2 (Reporting, Annual Operating Report) of the OBSWDC RAP requires the Town to also submit an annual operating report containing a summary and analysis of the information in the quarterly reports, and allows the Town to combine the fourth quarter report for each year and the annual report into one combined report.

The above-listed information is summarized and evaluated in the Sections 2.0 and 3.0 below, first for the fourth quarter of 2010, and then for all of 2010. Copies of the data and records for the fourth quarter of 2010, as well as the monitoring subconsultants' quarterly and annual reports, are provided in Appendices A through G. Conclusions and recommendations based on this RAP Report's findings are provided in Section 4.0.

2.0 STATUS OF GROUND-WATER REMEDIATION

2.1 Ground Water-Treatment Facility Operation

During the fourth quarter of 2010, the ground water-treatment facility was only partially operational pending replacement of its automated control panel and related appurtenances, which were damaged by a series of lightning strikes earlier in the third quarter. Due to the age of the control system, parts for it are no longer stocked by the manufacturer (General Electric). Therefore, the Town retained GE to design and fabricate a new control system. The Town also retained GE to fabricate the key replacement parts for the old control panel so that it could be maintained as a backup system. While this work was being performed, the facility was operated in manual mode, one or two shifts per day depending on the availability of Town personnel.

Also, during this quarter, the facility was off-line on four days while assessment of the damage to the control system and related appurtenances was performed; on two Town holidays, and during a three-day period of adverse weather conditions in December. The average facility flow this quarter, based on continuous, 24-hour-per-day operation, was 272 Gallons per Minute (GPM). Table 1 provides a summary of facility operation this quarter based on the pumpage records maintained by the Town. A copy of those records is provided in Appendix A.

The ground-water treatment facility daily pumpage for all of 2010 is summarized in Figure 1. As shown in Figure 1, during the first quarter and the first half of the second quarter, the facility operated at or near its maximum capacity of approximately 1.3 million gallons per day (MGD) with only a few isolated maintenance- and/or repair-related shut-downs. During the remainder of the second quarter, Recovery Well RW-1 was off-line pending replacement of its pump. Early in the third quarter, a series of lightning strikes severely damaged the facility's automated control panel and eventually rendered it inoperable. The Town attempted to fix the panel in-house, but was unable to do so. As noted above, GE was retained to design and fabricate a new computerized control panel and the key replacement parts for the old control panel. During the remainder of 2010, the facility was operated manually either one, two or three shifts per day, depending on availability of Town personnel.

2.2 Ground Water-Treatment Facility Monitoring

During 2010, samples of the facility influent and effluent were collected approximately three times per week, except when the facility was off-line or closed, and analyzed for volatile organic compounds (VOCs) at the on-site laboratory. The facility influent and effluent were also tested weekly for pH, iron, manganese, dissolved oxygen, ammonia and chloride at the on-site laboratory. Monthly samples of influent and effluent were also sent to an outside laboratory for VOC and inorganic/leachate (effluent only) parameter analyses. The monitoring results for the fourth quarter 2010 are provided in Appendix B, and the key findings for this quarter are summarized below:

- Influent Total VOC concentration ranged from 12.5 to 374 ug/L, and averaged 113 ug/L.
- Effluent Total VOC concentration ranged from 1.5 to 21.1 ug/L, and averaged 6.9 ug/L.
- Treatment efficiency ranged from 49 to 99 %, and averaged 90 %.
- Effluent VOC concentrations were less than applicable limits except for trichloroethene, which sporadically exceeded the 5-ug/L limit in the self-monitoring results this quarter. No SPDES sample VOC result exceeded its discharge limit this quarter.
- Effluent inorganic/leachate indicator parameter concentrations were less than applicable limits except for manganese, which often slightly exceeded the 0.6-mg/L limit in the self-monitoring samples. No SPDES sample inorganic/leachate parameter result exceeded its discharge limit this quarter. The limit for manganese is aesthetics-based, so these exceedances are not a concern with respect to public health or the environment.

The influent and effluent Total VOC results for all of 2010 are summarized in Figures 2 and 3, respectively. As shown in Figure 2, influent Total VOC concentrations were relatively consistent in the 100- to 200-ug/L range during the first quarter through the first half of the second quarter, when the facility was operating at or near its maximum capacity. Influent Total VOC concentrations increased markedly near the end of the second quarter, possibly as a result of Recovery Well RW-1, which has relatively low Total VOC concentrations, being off-line. During the remainder of 2010, influent Total VOC concentrations exhibited a fluctuating pattern that is

Table 1
Summary of Ground Water-Treatment Facility Operation, Fourth Quarter 2010

Date(s)	Daily Flow (GPM)	Remarks
10/1/10 - 10/6/10	226	GTF on-line 7 hours per day.
10/7/10-10/8/10	451	GTF on-line 14 hours per day.
10/9/10-10/10/10	208	GTF on-line 7 hours per day.
10/11/10	0	GTF off-line.
10/12/10	243	GTF on-line 7 hours.
10/13/10-10/15/10	451	GTF on-line 14 hours per day.
10/16/10-10/17/10	0	GTF off-line.
10/18/10-10/19/10	243	GTF on-line 7 hours per day.
10/20-10-10/22/10	451	GTF on-line 14 hours per day.
10/23/10-10/26/10	226	GTF on-line 7 hours per day.
10/27/10-10/29/10	451	GTF on-line 14 hours per day.
10/30/10-11/2/10	217	GTF on-line 7 hours per day.
11/3/10	417	GTF on-line 14 hours.
11/4/10	243	GTF on-line 7 hours.
11/5/10	451	GTF on-line 14 hours.
11/6/10-11/9/10	217	GTF on-line 7 hours per day.
11/10/10	451	GTF on-line 14 hours.
11/11/10	0	GTF off-line.
11/12/10	451	GTF on-line 14 hours.
11/13/10	208	GTF on-line 7 hours.
11/14/10	0	GTF off-line.
11/15/10-11/16/10	226	GTF on-line 7 hours per day.
11/17/10	417	GTF on-line 14 hours.
11/18/10	243	GTF on-line 7 hours.
11/19/10	451	GTF on-line 14 hours.
11/20/10-11/23/10	234	GTF on-line 7 hours per day.
11/24/10	451	GTF on-line 14 hours.
11/25/10	0	GTF off-line.
11/26/10-11/30/10	222	GTF on-line 7 hours per day.
12/1/10-12/3/10	440	GTF on-line 14 hours per day.
12/4/10-12/7/10	226	GTF on-line 7 hours per day, RW-3 off-line.
12/8/20-12/10/10	451	GTF on-line 14 hours per day, RW-3 off-line.
12/11/10-12/14/10	226	GTF on-line 7 hours per day, RW-3 off-line.
12/15/10-12/16/10	486	GTF on-line 14 hours per day, RW-3 off-line.
12/17/10-12/21/10	208	GTF on-line 7 hours per day, RW-3 off-line.
12/22/10-12/24/10	440	GTF on-line 14 hours per day, RW-3 off-line.
12/25/10	0	GTF off-line.
12/26/10	208	GTF on-line 7 hours, RW-3 off-line.
12/27/10-12/29/10	0	GTF off-line.
12/30/10	208	GTF on-line 7 hours, RW-3 off-line.
12/31/10	417	GTF on-line 14 hours, RW-3 off-line.

Avg. Rate (GPM): 272

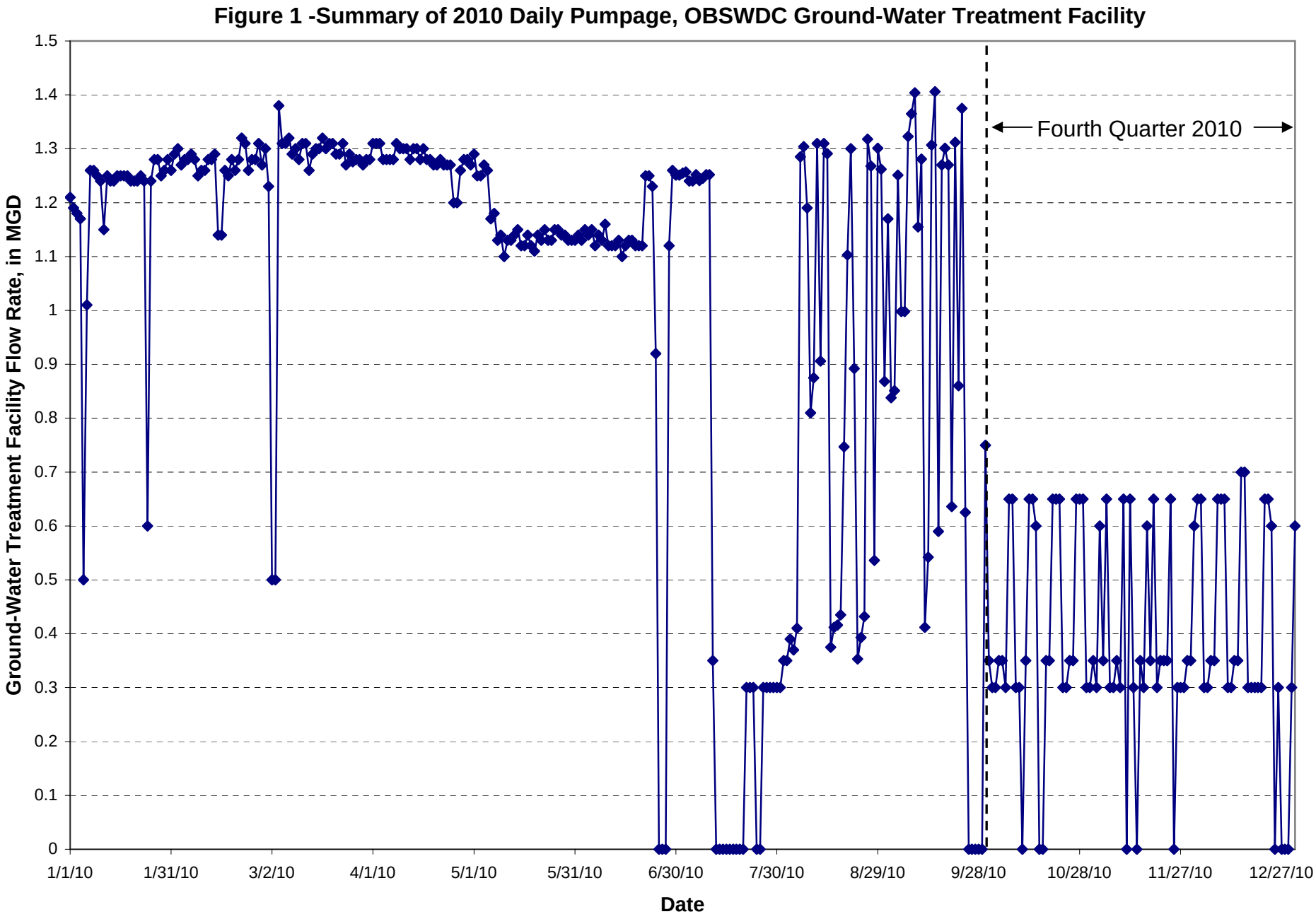


Figure 1 -Summary of 2010 Daily Pumpage, OBSWDC Ground-Water Treatment Facility
Ground-Water Treatment Facility Flow Rate, in MGD
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Fourth Quarter 2010
1/1/10
1/31/10
3/2/10
4/1/10
5/1/10
5/31/10
6/30/10
7/30/10
8/29/10
9/28/10
10/28/10
11/27/10
12/27/10
Date

Figure 2 - Summary of 2010 Influent TVOC Data, OBSWDC Ground-Water Treatment Facility

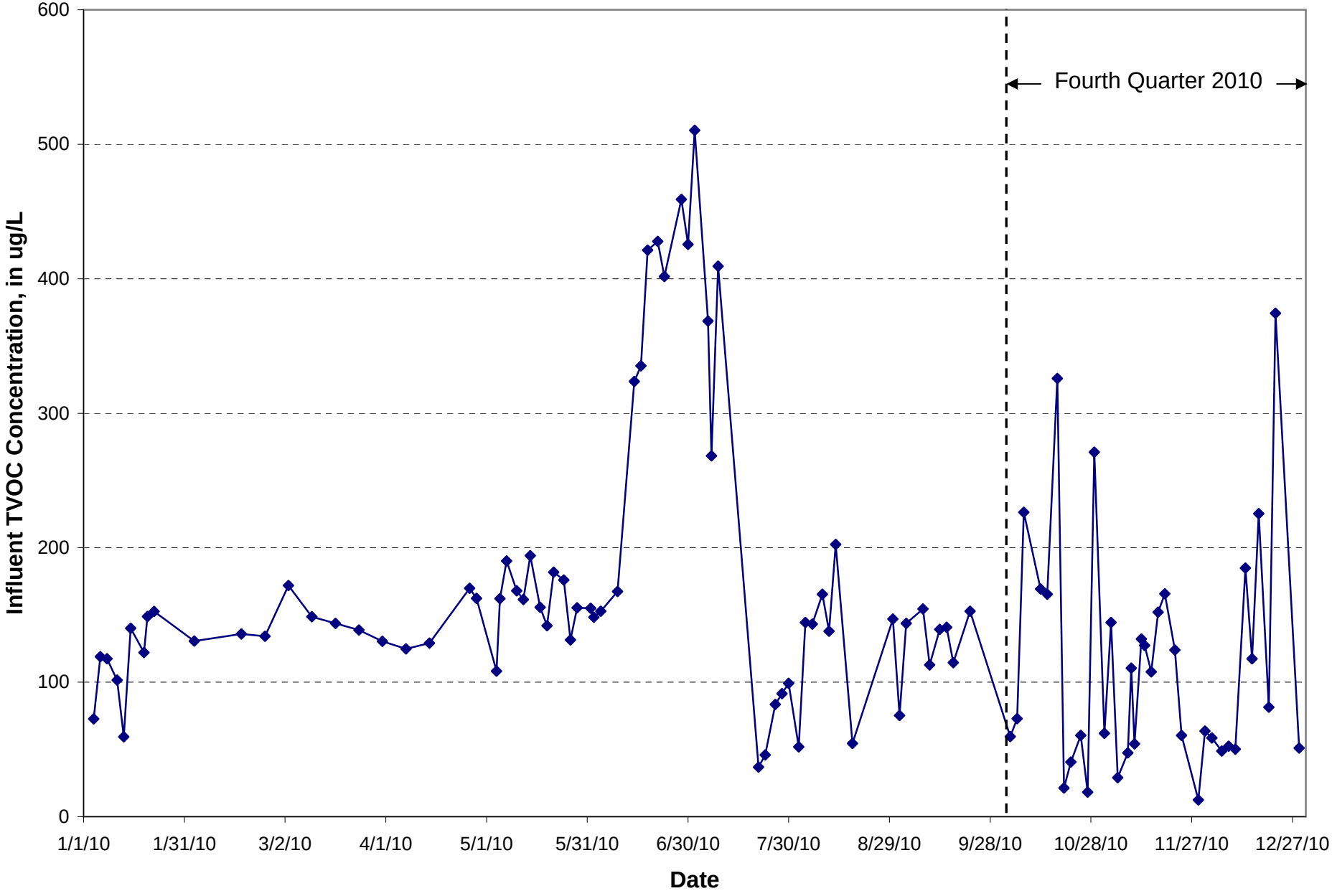
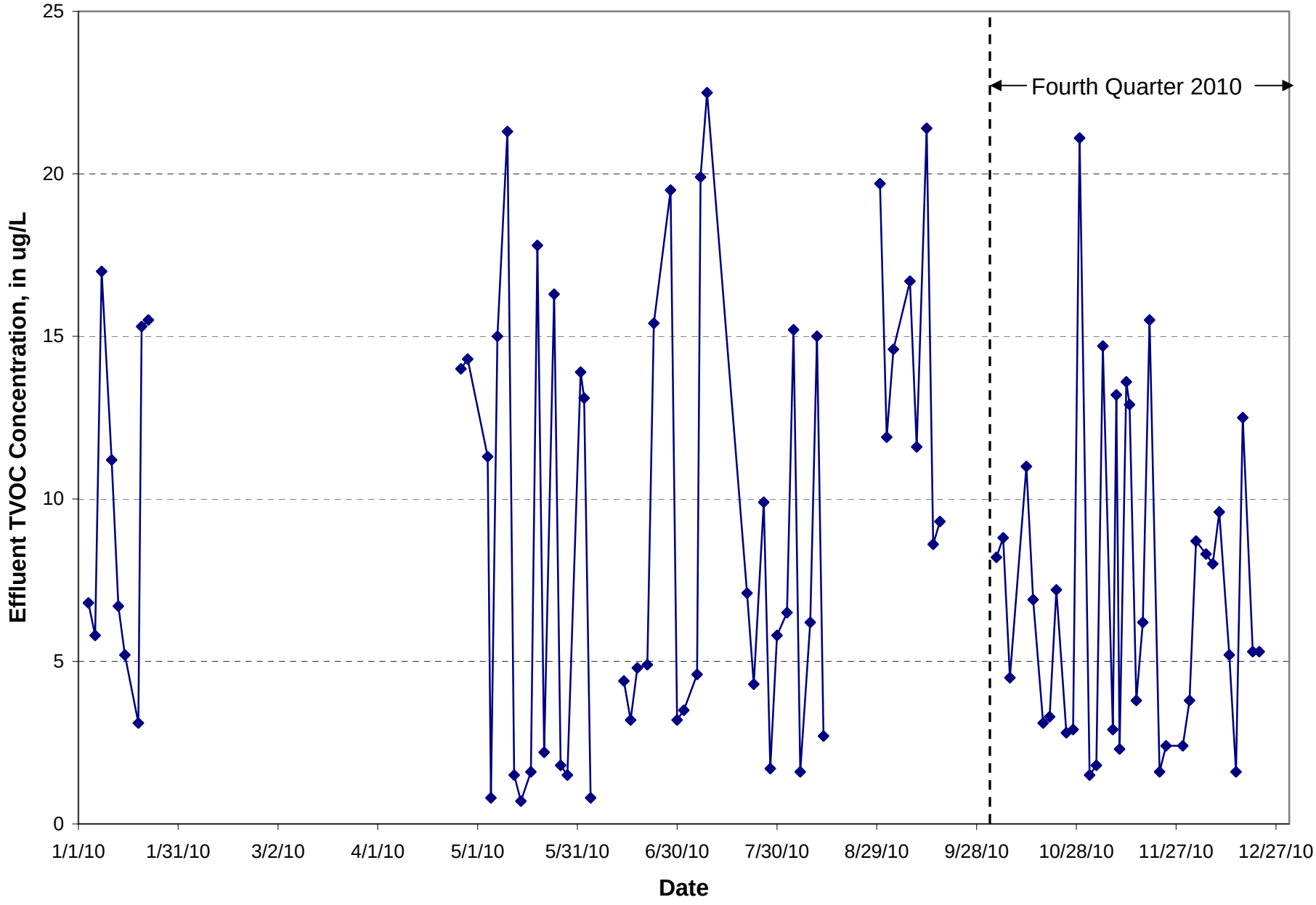


Figure 3 - Summary of 2010 Effluent TVOC Data, OBSWDC Ground-Water Treatment Facility



attributed to the variable and partial operation of the facility. Based on the 2010 self-monitoring results, influent Total VOC concentrations ranged from 12.5 to 510 ug/L, and averaged 154 ug/L.

As shown in Figure 2, effluent Total VOC concentrations exhibited a fluctuating pattern during all of 2010. This fluctuation is attributed to the need to acid-rinse the air-stripper internals to remove accumulated iron bacteria deposits. Based on the 2010 self-monitoring results, effluent Total VOC concentrations ranged from 0.7 to 22.5 ug/L, and averaged 8.5 ug/L. The facility's removal efficiency ranged from 49.3 to 99.6 %, and averaged 92.2 %. The lowest treatment efficiencies occurred only sporadically, and when influent Total VOC concentrations were lowest.

Samples from each of the five recovery wells (RW-1 through RW-5) were collected on an approximately weekly basis during 2010, weather and access conditions permitting, and analyzed for VOCs. The results for the fourth quarter 2010 are provided in Appendix C, and the key findings for this quarter are summarized below:

- Total VOC concentrations in RW-1 ranged from 0.0 to 12.6 ug/L, and averaged 3.6 ug/L.
- Total VOC concentrations in RW-2 ranged from 0.0 to 8.2 ug/L, and averaged 1.5 ug/L.
- Total VOC concentrations in RW-3 ranged from1.1 to 161 ug/L, and averaged 14.7 ug/L.
- Total VOC concentrations in RW-4 ranged from 18 to 236 ug/L, and averaged 85.6 ug/L.
- Total VOC concentrations in RW-5 ranged from 48 to 430 ug/L, and averaged 148 ug/L.

The VOC detected at highest concentration in Recovery Wells RW-3, RW-4 and RW-5 was trichloroethene (TCE), followed by tetrachloroethene (PCE). The concentrations of TCE, PCE and cis-1,2-dichloroethene in Recovery Wells RW-4 and RW-5 were generally higher than the 5-ug/L limit for these VOCs. TCE concentrations in Recovery Well RW-3 also slightly exceeded this limit early in the quarter. Total VOCs in these three recovery wells exhibited generally decreasing trends, but these trends are attributed to partial operation of the facility this quarter. Individual VOC concentrations were less than their respective limits in RW-1 and RW-2. However, it should be noted that a portion of the ground water collected by each recovery well enters from its downgradient side. Last quarter's results from Well MW-9D continue to indicate the presence of VOCs downgradient of the Landfill and upgradient of the recovery wellfield.

The 2010 Total VOC, TCE and PCE results for the five recovery wells are summarized in Figures 4, 5 and 6, respectively. Review of these figures indicates that they are consistent with the influent Total VOC results summarized in Figure 2, and all show a similar pattern. Specifically, Total VOCs, TCE and PCE concentrations are all highest in Recovery Well RW-4, followed by Recovery Wells RW-5 and RW-3, respectively. Total VOC, TCE and PCE concentrations in Recovery Wells RW-1 and RW-2 are much lower. Review of these figures also indicates that Total VOC, TCE and PCE concentrations in Recovery Wells RW-3, RW-4 and RW-5, exhibited slight downward trends during 2010, which is consistent with the long-term data for all five wells, but may also reflect the variable, partial operation of the facility during the second half of 2010.

To assess emissions from the air stripper stack, the average stack emission concentration of each VOC detected on a regular basis in the facility influent was calculated utilizing the data from the on-site laboratory and the pumpage data maintained by the Town. The results are compared to the stack emissions limits from Table 1 in Appendix A of the Consent Decree in Table 2. As shown in Table 2, except for vinyl chloride, VOC concentrations were well below the

TABLE 2
COMPARISON OF AVERAGE STACK CONCENTRATIONS TO STACK DISCHARGE REQUIREMENTS

Parameter	Average Stack Concentration* (ug/m^3)	Stack Discharge Requirements** (ug/m^3)
Benzene	1.3	100
Bromodichloromethane	ND	0.03
Bromoform	ND	16.7
Carbon Tetrachloride	ND	100
Chlorobenzene	ND	1,170
Chloroethane	ND	52,000
Chloroform	ND	167
Dibromochloromethane	ND	0.03
1,2-Dichlorobenzene (o)	ND	1,000
1,3-Dichlorobenzene (m)	ND	0.03
1,4-Dichlorobenzene (p)	ND	1,500
1,1-Dichloroethane	0.4	2,700
1,2-Dichloroethane	1.0	20
1,1-Dichloroethene	7.7	66.7
1,2-Dichloroethene	34.7	2,630***
1,2-Dichloropropane	ND	1,170
Ethylbenzene	ND	1,450
Methylene Chloride	ND	1,170
Tetrachloroethene	54.5	1,120
Toluene	ND	7,500
1,1,1-Trichloroethane	7.3	38,000
Trichloroethene	335	900
Vinyl Chloride	5.2	0.4
Xylenes (Total)	ND	1,450

FOOTNOTES:

* mass-balance calculation, based on average influent/effluent concentrations and flow rates.

** per Table 1 of Consent Decree.

*** total for cis- and trans- isomers.

ND = not detectable.

ug/m^3 = micrograms per cubic meter.

Shaded values are higher than their respective stack discharge limit.

Figure 4 - Summary of 2010 Recovery Well TVOC Data, OBSWDC Ground-Water Treatment Facility

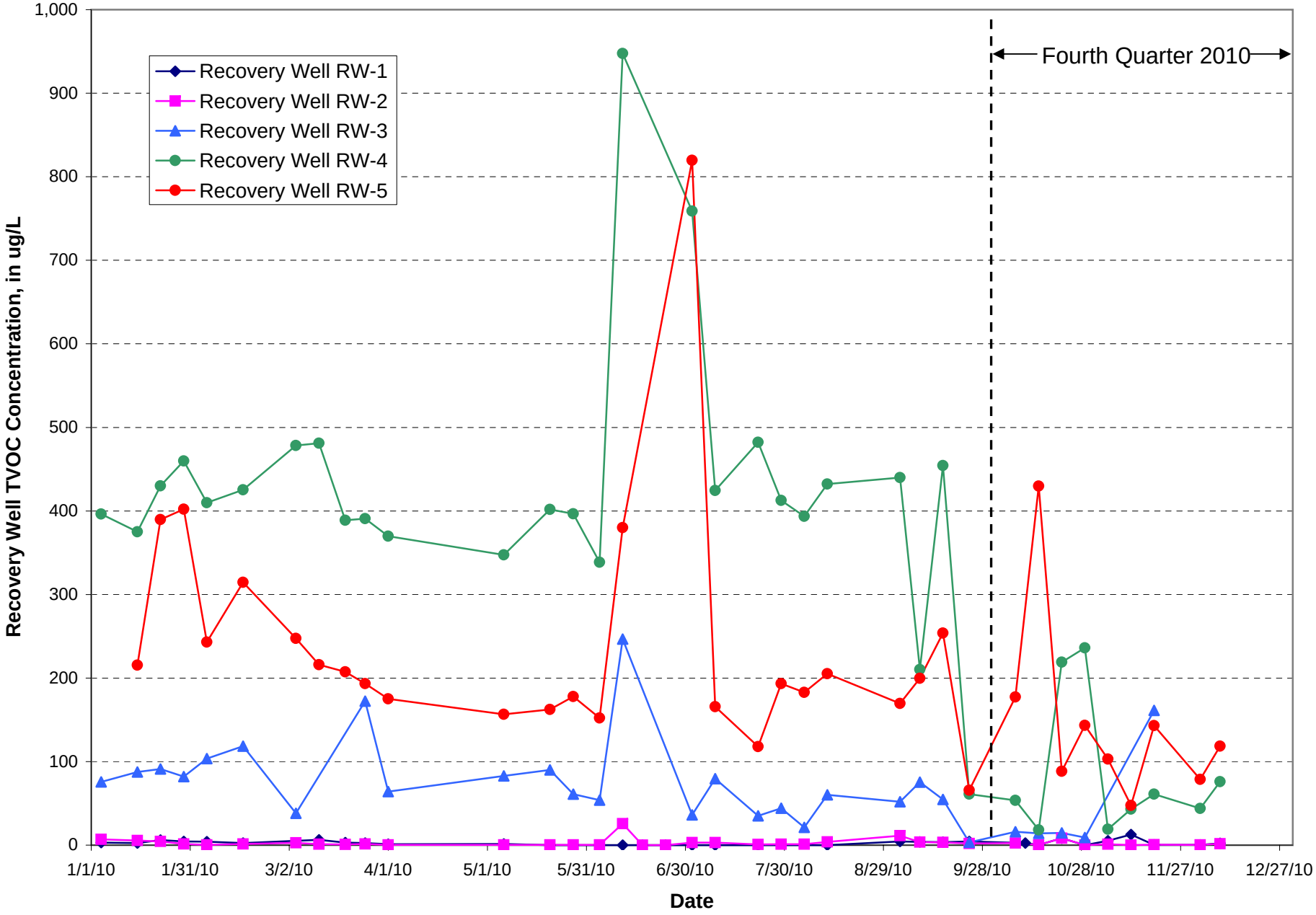


Figure 5 - Summary of 2010 Recovery Well TCE Data, OBSWDC Ground-Water Treatment Facility

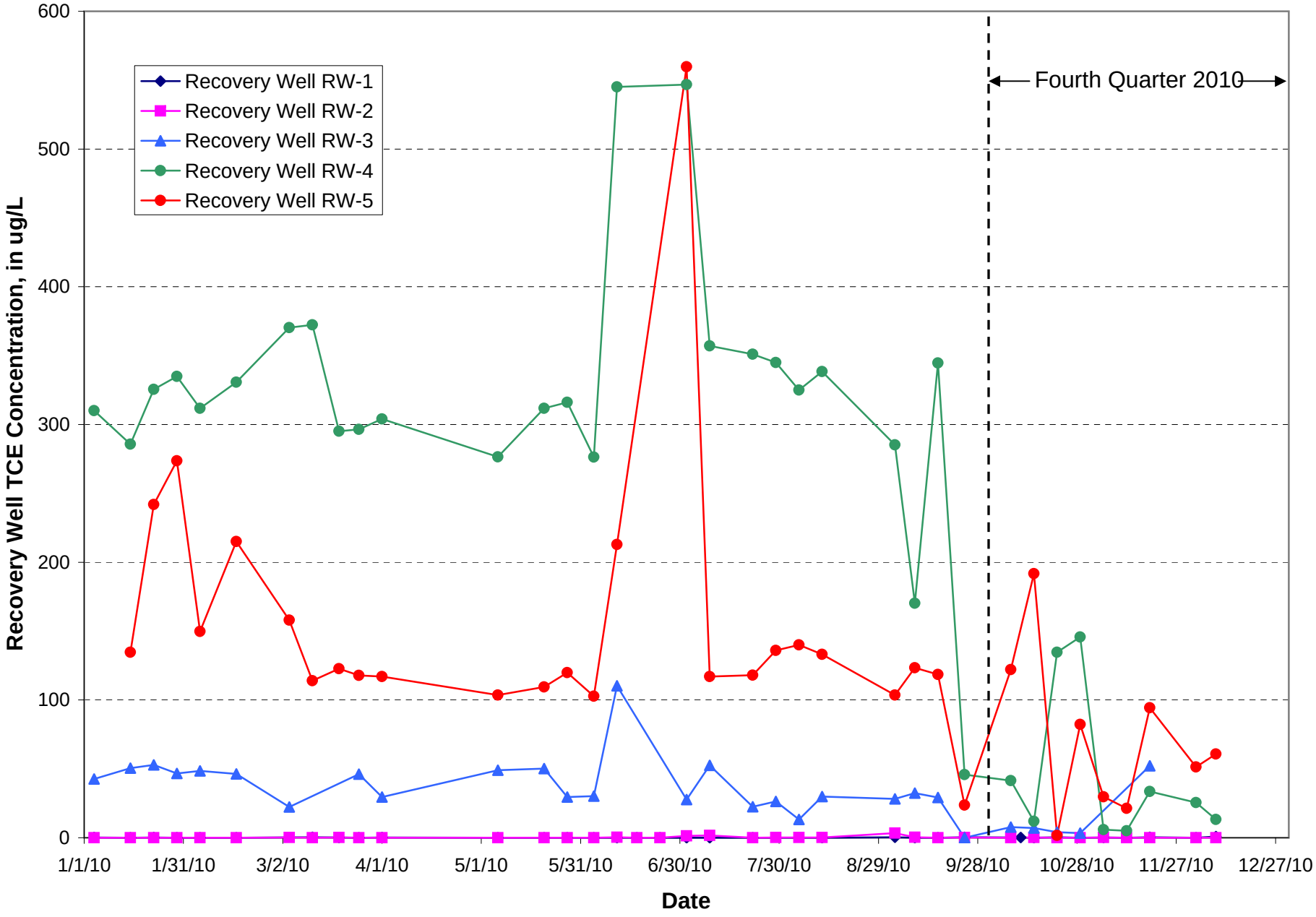
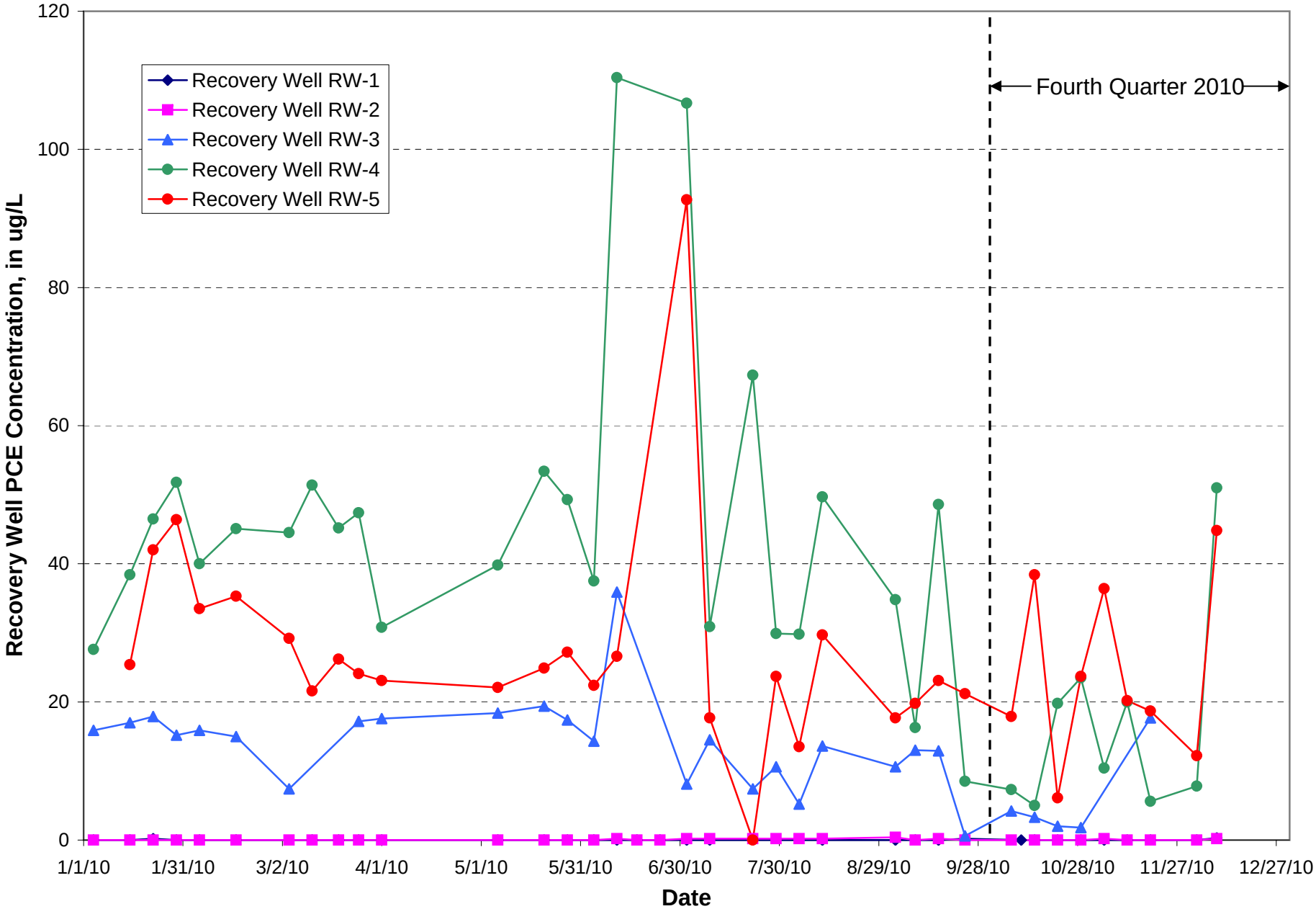


Figure 6 - Summary of 2010 Recovery Well PCE Data, OBSWDC Ground-Water Treatment Facility



stack discharge limits this quarter. Previous dispersion modeling of the stack discharge has shown that this concentration of vinyl chloride should not exceed DAR-1 limits at the downwind property boundary. This finding is consistent with the results of the ambient-air monitoring reported below in Section 3.1, specifically to the fact that elevated levels of vinyl chloride were not detected in the ambient air samples collected this quarter.

The fourth quarter stack emission results are consistent with the results for the previous three quarters of 2010. Specifically, vinyl chloride emissions exceeded the stack emission limit during the previous three quarters. During the first and second quarters of 2010, TCE emissions also exceeded the stack emission limit. However, as noted below in Section 3.1, elevated levels of vinyl chloride were not detected in the 2010 ambient-air samples, and the TCE detected in certain downwind samples was attributed to off-site commercial/industrial sources located north and east of the OBSWDC.

2.3 Ground Water-Quality Monitoring

The fourth quarter 2010 ground-water monitoring round was performed on November 2nd, 4th, 5th and 11th. A synoptic round of water-level measurements was collected, and the 16 wells required to be monitored were sampled and analyzed for VOCs and the Part 360 leachate indicator and inorganic parameters. The monitoring subconsultant's quarterly report is provided in Appendix D. The VOC results for the fourth quarter of 2010 are summarized by well and parameter group in the table below:

Well Number	Total VOCs	Total VHOs*	Total Aromatics	PCE / TCE
LF-1	2.5	0.3	2.0	0.2 / ND
M-30B-R	ND	ND	ND	ND / ND
MW-5B	ND	ND	ND	ND / ND
MW-6A	0.4	ND	ND	ND / 0.4
MW-6B	37.5	1.3	27.5	0.4 / 0.6
MW-6C	8.5	0.6	7.4	0.2 / 0.3
MW-6E	2.0	0.7	0.8	0.2 / 0.3
MW-6F	ND	ND	ND	ND / ND
MW-7B-R	310	40	ND	14.4 / 256
MW-8A	11.1	ND	ND	10.3 / 0.8
MW-8B	0.8	ND	ND	0.6 / 0.2
MW-9B	0.5	ND	0.3	0.2 / ND
MW-9C	ND	ND	ND	ND / ND
MW-11A	2.5	1.1	0.5	0.6 / 0.3
MW-11B	0.5	0.5	ND	ND / ND
OBS-1	9.1	1.5	6.6	0.7 / 0.3

Notes: Results are in micrograms per Liter (ug/L).
VHO = Volatile Halogenated Organics.
*Excluding PCE and TCE.
PCE / TCE = Tetrachloroethene / Trichloroethene.
ND = Not Detected.

Review of the above table indicates that VOCs were at non-detectable or very low levels (i.e., < 5 ug/L) in 11 of the 16 monitoring wells required to be monitored on a quarterly basis, and that Total VOC concentrations in three of the five other wells are currently less than 20 ug/L. The

Total VOC concentration in Monitoring Well MW-7B-R is approximately one order of magnitude higher, primarily due to the high concentration of TCE in this well. In contrast, Total VOC concentrations in Wells MW-6B, MW-6C and OBS-1 are primarily due to aromatic hydrocarbons, and the Total VOC concentration in Well MW-8A is primarily due to PCE.

Moreover, based on the laboratory reports included in Appendix D, the following exceedances of the Class GA standards for individual VOCs occurred in the monitoring wells this quarter:

- Benzene, chlorobenzene and o-xylene in Well MW-6B.
- cis-1,2-Dichloroethene, tetrachloroethene and trichloroethene in Well MW-7B-R.
- Tetrachloroethene in Well MW-8A.

However, with the exception of the exceedances in Well MW-7B, these exceedances were relatively low in magnitude.

Review of the leachate indicator and inorganic parameter results included in Appendix D indicates that most of these parameters were not detected, or only detected sporadically at low concentrations below their respective Class GA standard or guidance value. The highest concentration(s) of each detected parameter, as well as the majority of the exceedances, occurred in wells located directly downgradient of the Landfill and within the capture zone of the Town's recovery wellfield. The specific exceedances noted this quarter are listed below by well and parameter:

- Well LF-1 – Ammonia
- Well M-30B-R – Iron and sodium
- Well MW-5B – Manganese and sodium
- Well MW-6A – Iron
- Well MW-6B – Ammonia, chloride, iron, sodium and total dissolved solids (TDS)
- Well MW-6C – Ammonia, chloride, iron, sodium and TDS
- Well MW-6E – Ammonia, iron, manganese and sodium
- Well MW-6F – Sodium and TDS
- Well MW-6F – Sodium and TDS
- Well MW-7B – Iron (very slight)
- Well MW-8A – Iron (very slight)
- Well MW-8B – Manganese and sodium
- Well MW-9B – Manganese (very slight) and sodium
- Well MW-9C – Ammonia and sodium
- Well OBS-1 – Ammonia, manganese and sodium

No exceedances of the Class GA inorganic/leachate indicator parameter standards occurred in Wells MW-11A and MW-11B, which are located downgradient of the capture zone of the Town's recovery wellfield, this quarter.

Figures 1 through 6 in Appendix D depict the ground water-flow patterns and plume boundaries within each of the three aquifer zones based on the Town's fourth quarter 2010 monitoring data

and water-level data for selected County monitoring wells for the Fireman's Training Center. Review of these figures indicates the following key findings:

- Ground water-flow directions in the shallow (water-table) zone of the aquifer continue to be generally from northwest to southeast, consistent with the regional ground water-flow direction reported by the U.S. Geological Survey in Scientific Investigations Map 3066 (Water-Table and Potentiometric-Surface Altitudes of the Upper Glacial, Magothy, and Lloyd Aquifers beneath Long Island, New York, March-April 2006, Water-Table – SHEET 1 of 4).
- Ground water-flow directions in the intermediate and deep potentiometric zones of the aquifer also continue to be generally from northwest to southeast, except in the vicinity of the capture zone of the Town's recovery wellfield. It should be noted that facility was only being operated in manual mode, one shift per day, during the several days preceding the date on which the water-level data were collected, and therefore the capture zone was not well-developed at that time. Under normal operating conditions, the capture zone is well-developed and encompasses all five recovery wells and the immediately adjacent areas.
- The distribution of Total VOCs in the shallow (water-table) zone of the aquifer is limited to the area immediately downgradient of the Claremont Site (Well MW-8A).
- The distribution of Total VOCs in the intermediate and deep zones of the aquifer includes the areas downgradient of the Landfill and the Claremont Site, and within the capture zone of the Town's recovery wellfield. As noted in previous RAP reports, based on available data a portion of the VOC plume from the Claremont Site is too far to the north to be captured by the Town's recovery wellfield. Moreover, it should be noted that although Figures 2, 3, 4 and 6 in Appendix D show the plume boundary extending downgradient to Well Cluster MW-11, Total VOC concentrations in these two wells are in fact very low (2.5 ug/L and 0.5 ug/L, respectively) and are not attributed to the Landfill.

Overall, the ground water-monitoring results for this quarter are consistent with the monitoring results for the first three quarters of 2010, which indicated that ground-water quality is continuing to improve in response to the ongoing remediation. The monitoring consultant's annual summary report for 2010 is provided in Appendix E. Review of that report indicates the following additional findings:

- Water-level data, provided by Nassau County, for the 21 Fireman Service Academy monitoring wells that are screened in the same aquifer zones as the Town's monitoring wells, have been identified and incorporated into the Town's water-level maps.
- Monitoring Well MW-7B, which was evaluated and found to have a compromised casing, was properly abandoned and replaced in-kind with adjacent Monitoring Well MW-7B-R.
- The measuring point for each of the Town's monitoring wells was re-surveyed.
- Monitoring Well MW-9D, which is not required to be monitored, was sampled voluntarily by the Town during the third quarter of 2010, in keeping with a previous recommendation.
- Split-samples, provided by SAIC during the first, second and third quarters of 2010 for selected Claremont Site monitoring wells, were analyzed for VOCS and the results incorporated into the quarterly reports.
- Water-level elevations in the various monitoring wells increased during the first half of 2010, but then decreased during the second half of 2010. This pattern is attributed to natural variation in recharge to the aquifer from precipitation, which tends to be higher during the first half of the year. Overall, water-level elevations in the monitoring wells decreased by an

average of 0.86 feet during 2010. The largest decreases occurred in the wells located furthest downgradient of the Landfill, specifically Wells MW-11A, MW-11B and N-9980.

- Vertical hydraulic gradients tended to be downward, which is the natural gradient pattern, at monitoring well clusters located outside the influence of the Town's, the County's, or the Claremont Site's recovery well fields (e.g., Well Cluster MW-10). Vertical hydraulic gradients tend to be upward at well clusters located within the area of influence of one of these well fields (e.g., Well Cluster MW-9). The depth(s) of the upward gradient(s) depends on the screen interval(s) of the recovery well field.
- Figures 1, 2 and 3 in Appendix E show the first quarter total volatile halogenated organics (VHOs), total aromatic hydrocarbons and PCE results, respectively, overlain with the fourth quarter results. As shown in these figures, the approximate extent and distribution of each is similar for the first and fourth quarters of 2010. The majority of the variation on the east side of the plume is due to the fact that split-sample data for the Claremont Site wells are not available for the fourth quarter. Figures 1 and 3 show the plumes extending downgradient to Well MW-11A, however actual VOC concentrations in this well were very low and are not attributed to the Landfill.
- VHO concentrations were non-detectable or very low in the majority of the monitoring wells sampled during 2010. The highest concentrations of VHOs, primarily consisting of TCE, were detected in Well MW-7B-R, and several VHOs in this well typically exceeded their ground water-quality standard. VHOs had the greatest areal extent and highest concentrations of the three parameter groups. In the monitoring wells in which VHOs were detected, concentrations were relatively stable except for Wells MW-6B and MW-6C, which exhibited slightly increasing trends during 2010.
- Aromatic hydrocarbon concentrations were also non-detectable or very low in the majority of the monitoring wells sampled during 2010. The highest concentrations were detected in Wells MW-6B and MW-6C, and several compounds in these wells typically exceeded their ground water-quality standard. Aromatic hydrocarbons had the smallest areal extent and lowest concentrations of the three parameter groups. In the monitoring wells in which aromatic hydrocarbons were detected, concentrations were also relatively stable except for Well MW-6B, which exhibited fluctuation, Well MW-6C, which exhibited a slightly increasing trend, and Well MW-8A, which decreased to low/non-detectable levels after the first quarter. The elevated total aromatic hydrocarbon concentration detected in Well MW-7B during the second quarter appears to be spurious and not representative of water-quality conditions at this location.
- PCE concentrations were also non-detectable or very low in the majority of the monitoring wells sampled during 2010. The highest concentrations of PCE were detected in Wells MW-7B-R and MW-8A. In the monitoring wells in which PCE was detected, concentrations were also relatively stable except for Well MW-7B/MW-7B-R, which exhibited fluctuation. The fluctuating results for this well are attributed to its replacement in mid 2010.

3.0 RESULTS OF AMBIENT-AIR AND SOIL-GAS MONITORING

3.1 Ambient Air-Monitoring Results

The scope of this monitoring entailed quarterly sorbent-tube sampling for VOCs at one upwind and two downwind locations over a 24-hour period during a low/falling barometer, laboratory analysis of the samples, and comparison of the results to the NYSDEC DAR-1 short-term (8-hour) and long-term (annual) guideline concentrations (a.k.a., SGCs and AGCs, respectively).

Sample locations were pre-selected based on National Weather Service forecast. Meteorological conditions were monitored during sampling for comparison to forecasted conditions.

The fourth quarter 2010 monitoring round was performed on November 29th and 30th, 2010. The upwind sample was collected at the golf course south of the Landfill. The downwind samples were collected along the forecasted downwind (west) boundary of the Landfill. A copy of the monitoring subconsultant's quarterly monitoring report is provided in Appendix F.

The downwind samplers were downwind of the Landfill for the majority of the test period, although there were notable fluctuations in the wind direction, and Downwind Samplers D1/D2 may also have been downwind of commercial/industrial sources located north and east of the OBSWDC during a portion of the test period. The barometer fell relatively steadily during most of the test period, and dropped by a total of 0.15 inches of mercury. A number of VOCs were detected at similar, low concentrations in both the upwind and downwind samples. All VOC detections were much lower than the DAR-1 SGCs. Ten VOCs (benzaldehyde, benzene, carbon tetrachloride, chloroform, 1,4-dichlorobenzene, 1,2-dichloroethane, 2/4-ethyltoluene, PCE, TCE and C3 substituted benzene) were detected in at least one sample at concentrations exceeding the DAR-1 AGCs. However, except for TCE, their upwind and downwind concentrations were similar. TCE concentrations appeared to be slightly higher in Downwind Samplers D1/D2.

Based on the results, except for TCE, VOC detections in ambient air this quarter are attributed to background ambient air quality. The monitoring subconsultant attributed the TCE detections to a paint spray booth operation in the industrial park to the north and east of the Landfill.

Overall, the ambient air-monitoring results for this quarter are consistent with the monitoring results for the first three quarters of 2010. The monitoring consultant's annual summary report for 2010 is provided in Appendix G. Review of this report indicates the following additional findings:

- Thermal inversions, which are unavoidable natural events that result in periods of light to calm winds of variable direction, occurred during the overnight hours during each of the 2010 monitoring rounds, and may have influenced the results. Specifically, the thermal inversions may have caused the downwind samples to be under the influence of off-site sources during a portion of each test.

- During 2010, no VOCs exceeded the DAR-1 SGCs. The concentrations of eight VOCs routinely exceeded the DAR-1 AGCs, but upwind and downwind concentrations were similar except for TCE, which was higher in certain downwind samples but attributed to commercial/industrial sources located north and east of the OBSWDC.

3.2 Soil-Gas Quality Monitoring Results

The scope of this monitoring entailed quarterly sorbent-tube grab-sampling for VOCs at 15 perimeter gas monitoring well locations, including multiple-depth sampling at one location (Well M9), and comparison of the results to the NYSDEC DAR-1 SGCs and AGCs (Note: This is done for informational purposes only, there are no New York State standards for VOCs in soil gas.) The results of this monitoring are included in Appendix F.

The fourth quarter 2010 monitoring round was performed on November 29th. All wells were sampled except Well M21, which was not accessible. A number of VOCs were detected at generally low concentrations, in a majority of the soil-gas samples. All VOC detections were much lower than the DAR-1 SGCs, and only seven were detected at a concentration higher than their DAR-1 AGC. Most of these "exceedances" were sporadic and relatively low in magnitude. PCE concentrations increased with depth in Well M9. This trend is attributed to shallow ground-water contamination originating offsite. TCE was only detected in one soil-gas sample.

Based on the results, overall, VOC concentrations in soil gas are low, and consistent with an old MSW landfill with a perimeter gas collection system, and are not a concern for construction-related excavation, should it be required. Accordingly, the only recommendation this quarter is for the Town to attempt to restore access to Well M21.

3.3 Soil-Gas Pressure Monitoring Results

The scope of this monitoring entailed quarterly field measurement of pressure (vacuum) in 12 gas monitoring wells at three locations around the Landfill utilizing an inclined manometer to verify zero or negative pressure readings in the vicinity of the perimeter landfill gas collection system. The fourth quarter 2010 monitoring round was performed on November 30th. The results of this monitoring are included in Appendix F.

Zero to slightly negative pressure readings were measured in the 12 gas wells at the three locations monitored. Based on the results for these two locations, the perimeter land gas collection system is functioning properly and is preventing off-site migration. This determination is consistent with the results of three prior 2010 quarterly monitoring rounds; and the 2010 annual zero percent gas migration survey, which did not detect off-site migration of landfill gas.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The conclusions of this RAP Report, based on the above information, are:

1. The facility was operated and monitored as fully as possible during 2010 given the need to assess and repair the damage to the control panel caused by the repeated lightning strikes that occurred early in the third quarter and required the facility to be operated part-time in manual mode for the remainder of the year.
2. The average Total VOC concentration of the facility influent continued to exceed the 50-ug/L Total VOC limit for ground water listed in Appendix A, Table 2 of the Consent Decree; and the concentrations of individual VOCs in certain monitoring wells continued to exceed their respective Class GA standards. Therefore, continued operation of the facility was warranted. It is recognized, however, that the majority of the VOC loading to the facility was associated with the Claremont Site, and possibly other nearby sources of ground-water contamination that are not related to the Landfill.
3. The average Total VOC concentration of the facility effluent continues to be well below the 100-ug/L Total VOC limit for discharge listed in Appendix A, Table 2 of the Consent Decree. However, the concentrations of TCE in the influent at the facility periodically exceeded the 5-ug/L limit for VOCs. Under normal operation, the air stripper can remove the levels of TCE

that entered the facility in 2010. The lower than expected removal is attributed to the need for an acid-wash of the air stripper internals, which should be performed.

4. Except for vinyl chloride, and TCE during the first and second quarters only, individual VOC levels in the air stripper stack exhaust were much lower than the limits in Appendix A, Table 1 of the Consent Decree. Based on previous dispersion modeling of the stack discharge, the current emissions should not result in an exceedance of the NYSDEC DAR-1 guideline concentrations at the downwind property line. This determination is consistent with ambient air monitoring results, which did not detect elevated levels of vinyl chloride in ambient air. The TCE detected in certain downgradient wells, when the wind was blowing from the north and east, was attributed to commercial industrial sources upwind of the OBSWDC.
5. Elevated VOC concentrations continued to be present in Recovery Wells RW-3, RW-4 and RW-5. VOC concentrations in Recovery Wells RW-1 and RW-2 were lower than Consent Decree and Class GA standards. However, a portion of the ground water collected by each recovery well is from its downgradient side. Moreover, the third quarter results for Well MW-9D continue to indicate the presence of VOCs downgradient of the Landfill and upgradient of the recovery wellfield. Therefore, continued operation of Recovery Wells RW-1 and RW-2 is also warranted.
6. Elevated concentrations of certain inorganic/leachate indicator parameters continued to be present to certain wells located downgradient of the Landfill and upgradient of the Town's recovery wellfield. No elevated concentrations of these parameters were detected at Well Cluster MW-11, which is located downgradient of the Town's recovery well field.
7. The results of the ambient-air and soil-qas monitoring performed this quarter continue to indicate that the Landfill is not a significant source of VOCs in ambient air.

Accordingly, this RAP Report recommends the following for the upcoming calendar quarter:

1. Continue to operate and monitor the facility in accordance with the RAP in Appendix A of the Consent Decree, and subsequent related protocols.
2. Perform an acid-rinse of the facility air stripper internals as soon as possible to restore the treatment efficiency to optimal levels.
3. Continue to analyze split-samples from selected Claremont Site monitoring wells for VOCs to provide current ground-water VOC data for these locations.
4. Continue to incorporate water-level data from selected County monitoring wells for the Fireman's Training Center to augment the Town's water-level data for the area.

APPENDIX A

DAILY OPERATIONS REPORTS
October through December, 2010

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/1/10

	WELL FIELD OPERATION (GALLONS PER MINUTE)						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	COMBINED FLOW GPM	PRESSURE FIL. FLOW GPM	TREATMENT AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW GALLONS	SUPERVISORY OPERATOR INITIALS
7 AM												JS
8 AM												
9 AM												
10 AM		*	See	comments								
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS Run only 7 hrs.

* Main control panel down, five wells running via overide in manual. Est. eff. flow total 350,000 gal. in approx 7 hrs.

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

10/1/10

Comb Tol 3-11

DATE _____

	WELL FLOW TOTALS GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW GALLONS	SUPERVISOR OPERATOR INITIALS
3 PM	DOWN	ON							NOT	NOT		
4 PM	FOR	NO							NO WORKING	WORKING		
5 PM	REPAIR	READING							*********	*********		
6 PM	*********	******							*********	*********		
7 PM	*********	******							*********	*********		
8 PM	*********	*******							*********	*********		
9 PM	*********	*******							*********	*********		
10 PM	*********	*******							*********	*********		
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant Down water to high.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/2/10

Cembrale

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manual. main control panel. with overire switch.
ERR flow total 300,000 gallons.

Shut down plant at 3pm. 7-3 shift

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/3/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATOR INITIALS
7 AM												Combine
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running MANUAL overire
300,000 eff Flow.

Plant running 7AM - 2:30pm

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/4/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												KS
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

* See comments

REMARKS Ran only 7 hrs

~~wells~~
* main control panel down, five wells running via overide in manual. Est. eff. flow total 350,000 gals in approx 7 hours

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/5/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												JS
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

* See comments

REMARKS Ran only 7 hrs

*Main Control panel down, five wells running via override in manual. Est. eff. flow total 350,000 gallons in approx: 7 hrs.

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/6/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 3 FLOW	WELL 5 FLOW	WELL 6 FLOW	WELL 4 FLOW	WELL 1 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												SS
8 AM												
9 AM	*	See	comments									
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

*main control panel down, running 5 wells via overide in manual. Est. eff. total flows 350,000 gal. in aproxx 7 hrs.

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 10/6/10

	WELL FLOW GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW GPM	AIR PRESSURE INCHES WC	EFFLUENT FLOW BLOCKS	SUPERVISOR OPERATOR INITIALS
3 PM	DOWN	ON							NOT	NOT		Combale.
4 PM	FOR	NO							NO WORKING	WORKING		
5 PM	REPAIR	READING							*********	*********		
6 PM	*********	******							*********	*********		
7 PM	*********	******							*********	*********		
8 PM	*********	*******							*********	*********		
9 PM	*********	*******							*********	*********		
10 PM	*********	*******							*********	*********		
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

300,000 ERR
Running manual overrule
State Park

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/7/10

Joe Swenek

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL. FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Manual overire
err to 352,000 gallons

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 8/ 10/7/10

Cembrale

	WELL FLOW TO BOX GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW TOTALS	SUPERVISOR/ OPERATOR INITIALS
3 PM	DOWN	ON							NOT	NOT		
4 PM	FOR	NO							NO WORKING	WORKING		
5 PM	REPAIR	READING							*********	*********		
6 PM	*********	*********							*********	*********		
7 PM	*********	*********							*********	*********		
8 PM	*********	*********							*********	*********		
9 PM	*********	*********							*********	*********		
10 PM	*********	*********							*********	*********		
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Manual overrir Plant running.

300,000 gallons off.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/8/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												Joe Smith
8 AM												
9 AM		* see comments										
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

* Main control panel down running wells via overide in manual. Est. eff. flow 350,000 gal. in aprox: 7 hrs

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 10/8/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW IN GALS	SUPERVISOR OPERATOR INITIALS
3 PM	DOWN	ON							NOT	NOT		Cem Bale
4 PM	FOR	NO							NO WORKING	WORKING		
5 PM	REPAIR	READING							*********	**********		
6 PM	*********	*******							*********	**********		
7 PM	*********	*******							*********	**********		
8 PM	*********	*******							*********	**********		
9 PM	*********	*******							*********	**********		
10 PM	*********	*******							*********	**********		
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

ok + 300,000 gallons.

Running manually. overire in state park.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/9/10 Corbell 7.3

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant DN Manually
STATE Park 300,00 Off gallon
MAIN Panel Down

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/10/10 Combie 7-3 pm

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant runny Manuelle
300,000 gallons EFR

Main Paul Down.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/12/10

88

	WELLFIELD OPERATION (GALLONS PER MINUTE)						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESSURE FIL. FLOW GPM	SECTIONS AIR FLOW CFM	AIR PRESSURE INCHES WC	SYSTEM FLOW GALLONS	OPERATOR INITIALS
7 AM												
8 AM												
9 AM	* See comments											
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

* Main control panel down, Wells one – five running via overide. Est eff. total 350,000 gal. in approx. 7 hrs.

A.S. 3 tripped 1255 pm

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/13/10

	[illegible]						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	[illegible] FLOW	STRIPPER FLOW GPM	PRESSURE FIL. FLOW GPM	SECONDARY AIR FLOW CFM	AIR PRESSURE INCHES WC	[illegible] FLOW GALLS	[illegible] DETAILS
7 AM												
8 AM												
9 AM		*	see	comments								
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

* Main control panel down, running wells via manual overide. Est. eff. flow 350,000 gal. in aprox: 7 hrs

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 10/13/16 Ambole

	WELL & FLOW OPERATOR DAILY OPERATIONS						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES/WC	EFFLUENT FLOW GALS	SUPERVISOR/ OPERATOR INITIALS
3 PM	DOWN	ON							NOT	NOT		
4 PM	FOR	NO							NO WORKING	WORKING		
5 PM	REPAIR	READING							*********	*********		
6 PM	*********	******							*********	*********		
7 PM	*********	******							*********	*********		
8 PM	*********	*******							*********	*********		
9 PM	*********	*******							*********	*********		
10 PM	*********	*******							*********	*********		
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually.
EFF 300,000
Main panel Down.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	10-14-10

AM Shift

	WELLFIELD OPERATION BALLOONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M-GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS * Plant Main Control Console Down (Non functional)

- Run Plant/wells on manual override
- Approx 51,000 GAL per/HR x 7 HR.
- Effluent to Basin 33
- AS-2 Tripped AM. (Reset)

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF O[illegible]TER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 10/14/10 Cembale ~~3-3~~ 3-11 pm

TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		DOWN	ON	ON					NOT	NOT		
[illegible]		NO	NO	NO					WORKING	WORKING		
[illegible]		READING	READING	READING					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]		******	*******	******					*******	*******		
[illegible]		******	*****	******					*******	*******		
[illegible]		*******	******	******					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant runs nearly
Main Panel Down
300,000 exp.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

Joe Sunk. 10/15/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WG	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running MANNUALLY.
300,000 ERR
MAN panel Down

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF O\ TER BAY

DEPARTMENT OF PUBLIC WORKS

GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET

EVENING SHIFT

DATE 10/15/10. Cembrale

TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		DOWN	ON	ON					NOT	NOT		
[illegible]		NO	NO	NO					WORKING	WORKING		
[illegible]		READING	READING	READING					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]		******	*******	******					*******	*******		
[illegible]		******	*****	******					*******	*******		
[illegible]		*******	******	******					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]												
[illegible]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Est 30,000 gallons
Plant running manually
Main panel Down

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

Cembrale VACATION

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/16/17 Plant Down

	[illegible]						[illegible]					
TIME	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] GPM	[illegible] GPM	[illegible] GPM	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

Plant Pump
Carbon vacuum

[illegible]	
DATE:	10/17/10

TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/18/10

Time	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												JS
8 AM												
9 AM												
10 AM	* See Comments											
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

* Plant running in manual overide
Est. eff flow 350,000 gals in approx. 7 hrs.
main control panel down
Eff to basin 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

[illegible]	
DATE	

10/19/10

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM											SS
8 AM											
9 AM	See comments										
10 AM											
11 AM											
12 PM											
1 PM											
2 PM											
3 PM											
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

REMARKS

Main panel down plant running in manual
est eff flow 3500 gals in aprox: 7 hrs

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/20/10

	[illegible]						[illegible]					
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM	*	see	comments									
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

* main control panel down, running all five wells via overide. Est. eff flow aprox 350,000 gal in 7 hrs

EFF to Basin 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF O\ TER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 10/20/10

	[illegible]						[illegible]					
TIME	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible]	[illegible]	[illegible] FLOW	[illegible] OPERATOR INITIALS
[illegible]		DOWN	ON	ON					NOT	NOT		CEMBOL
[illegible]		NO	NO	NO					WORKING	WORKING		
[illegible]		READING	READING	READING					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]		******	*******	******					*******	*******		
[illegible]		******	*****	******					*******	*******		
[illegible]		*******	******	******					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]												
[illegible]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually
overfill 300,000 ltr
Main Panel Down.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/21/10

Time	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												Joe Swinick.
8 AM												
9 AM	See comments											
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Main control panel down, running all wells via overide, Est. eff flow for aprox 7 hrs - 350,000 gal.

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF O\ TER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 10/21/10

TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	SUPERVISOR/ OPERATOR INITIALS
[illegible]		DOWN	ON	ON					NOT	NOT		CmBle
[illegible]		NO	NO	NO					WORKING	WORKING		
[illegible]		READING	READING	READING					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]		******	*******	******					*******	*******		
[illegible]		******	*****	******					*******	*******		
[illegible]		*******	******	******					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]												
[illegible]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running Manually.

300,000 gallons est.

MAIN Panel Down.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/22/10 Joe Sarnek

[illegible]							[illegible]					
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												JS
8 AM	* see comments											
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

* Main control panel down, running all wells via overide, Est. eff. flow in aprox 7 hrs - 350,000 gal.

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF O\ TER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 10/22/10 CenBrule

TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		DOWN	ON	ON					NOT	NOT		
		NO	NO	NO					WORKING	WORKING		
		READING	READING	READING					*******	*******		
		******	******	******					*******	*******		
		******	******	******					*******	*******		
		******	*****	******					*******	*******		
		*******	******	******					*******	*******		
		******	******	******					*******	*******		
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually
Main panel Down
300,000 gallons exit.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/23/10

Cembrale

[illegible]							[illegible]					
TIME	[illegible] FLOW	[illegible]	[illegible] FLOW	[illegible] FLOW	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually.
Jan, on ekk gallons.
Main panel. Down.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/24/10 Cambrole

[illegible]							[illegible]					
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running on manual
State park
300,000 gallons

Main panel Down.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/25/10

[illegible]							[illegible]					
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												SS
8 AM												
9 AM	* See comments											
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

* Main control panel down, wells running via overide.
Est. EFF. FLOW 350,000 gals in aprox; 7 hrs

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

[illegible]	
DATE	

10/26/10

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												75
8 AM												
9 AM	* See comments											
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

* Main panel down, wells running in manual
est. eff. flow 350,000 gal in approx 7 hrs

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/27/10

[illegible]							[illegible]					
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												JJ
8 AM												
9 AM	* see comments											
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

*main control panel down est eff flow 350000 gal. in aprox 7 hrs

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE _____

10/27/10

Cpm Brole

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL FLOW	WELL FLOW	WELL FLOW	WELL FLOW	WELL FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISORY OPERATOR INITIALS
3 PM		DOWN	ON	ON					NOT	NOT		
4 PM		NO	NO	NO					WORKING	WORKING		
5 PM		READING	READING	READING					********	**********		
6 PM		******	******	******					********	**********		
7 PM		******	******	******					********	**********		
8 PM		******	******	******					********	**********		
9 PM		******	******	******					********	**********		
10 PM		******	******	******					********	**********		
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running on manual
Main panel Down
Buyout etc.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

[illegible]	
DATE	

10/28/10

TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												JS
8 AM	* see	comments										
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

* Main control panel down, wells running in manual at an est. eff flow of 350,000 gals in aprox. 7 hrs.

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 10/28/10

Cembrale 3-11pm

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.G.A.L.	SUPERVISOR/ OPERATOR INITIALS
3 PM		DOWN	ON	ON					NOT	NOT		
4 PM		NO	NO	NO					WORKING	WORKING		
5 PM		READING	READING	READING					*********	**********		
6 PM		*******	*******	*******					*********	**********		
7 PM		*******	*******	*******					*********	**********		
8 PM		*******	*******	*******					*********	**********		
9 PM		*******	*******	*******					*********	**********		
10 PM		*******	*******	*******					*********	**********		
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manual.
Main panel Down
300,000 ltr gallons

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	10/29/10

TIME	[redacted]						[redacted]					
7 AM												
8 AM	& see comments											
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

& Main Control panel down, running all wells in manual

Est. eff flow 350,000 gals in approx: 7 hrs

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DATE 10/29/10

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

Cembrole -

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
3 PM		DOWN	ON	ON					NOT	NOT		
4 PM		NO	NO	NO					WORKING	WORKING		
5 PM		READING	READING	READING					*********	**********		
6 PM		*******	*******	*******					*********	**********		
7 PM		*******	*******	*******					*********	**********		
8 PM		*******	*******	*******					*********	**********		
9 PM		*******	*******	*******					*********	**********		
10 PM		*******	*******	*******					*********	**********		
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Wells on manually -
MAIN panel. Down
300,000 gallons ERR.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/30/10 Cembrale 7-3

	[illegible]						[illegible]					
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant on line manually.
MAIN panel. Down
30400 gallons

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

10/31/10 Cembrale

TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually.
Main panel Down
3W, one gallon ext.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILLED BY:	
DATE:	

11/1/10

TIME	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
7 AM												HS
8 AM	*see	comments										
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

*main panel down running wells in manual est eff flow 352,000 gals in aprox 7 hrs.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

11/2/10

Cembrel

FILE ID:	
DATE:	

[illegible]							[illegible]					
TIME	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant runing Manually
Main panel Down
300,000 gallons ERR.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

Joe Sweet. 11/3/10

	[illegible]						[illegible]					
TIME	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually
MAIN panel Down
300,000 gallons ex

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE _____

11/3/10 Cambridge

	WELL FIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
3 PM		DOWN	ON	ON					NOT	NOT		
4 PM		NO	NO	NO					WORKING	WORKING		
5 PM		READING	READING	READING					*********	**********		
6 PM		*******	*******	*******					*********	**********		
7 PM		*******	*******	*******					*********	**********		
8 PM		*******	*******	*******					*********	**********		
9 PM		*******	*******	*******					*********	**********		
10 PM		*******	*******	*******					*********	**********		
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually.
MAN panel Down.
ERR Sa,000 gallons.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

11/4/10

15

	[illegible]						[illegible]					
Time	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM	*	See	comments									
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

* Main panel down all wells running in manual est eff flow 350,000 gals in aprox 7 hrs

Eff to Basin 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	10/5/10

TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												JS
8 AM	* See comments											
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

* Main panel down Wells running in manual ~~at~~ est eff flow 352000 gals in approx 7 hrs.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF (TER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 11/5/10

TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		DOWN	ON	ON					NOT	NOT		Cembale
[illegible]		NO	NO	NO					WORKING	WORKING		
[illegible]		READING	READING	READING					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]		******	*******	******					*******	*******		
[illegible]		******	*****	******					*******	*******		
[illegible]		*******	******	******					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]												
[illegible]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

MAIN panel Down.
Running Plant manually.
30,000 gallons

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

11/6/10

CenBook

FILE ID:	
DATE:	

	[illegible]						[illegible]					
Time	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually.
Main panel Down.
300,000 gallons est.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

Cembrale 11/7/10

	[illegible]						[illegible]					
TIME	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW GPM	[illegible] FLOW GPM	[illegible] GPM	[illegible]	[illegible]	[illegible] INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant on line manually.
Main panel down
300,000 gallon sets

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

11/8/10

	[illegible]						[illegible]					
TIME	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM	*see comments											JS
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

*Main panel down running all wells in Manual est eff flow 350,000gals in aprox 7 hrs

EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

11/9/10

	[illegible]						[illegible]					
TIME	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] DETAILS
7 AM												Gurpal
8 AM												Swinah
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running. Manually.
MAIN pump Down.
300,000 gallons EXR.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

11/10/10 Joe Swick

TIME												
7 AM												18
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual

350000 gals est eff flow in 7 hrs

BFF TO BAS IN 35

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE _____ Cembrale 11/10/10

	WELL FLOW OPERATIONS GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESSURE FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISOR OPERATOR INITIALS
3 PM		DOWN	ON	ON					NOT	NOT		Cembrale
4 PM		NO	NO	NO					WORKING	WORKING		
5 PM		READING	READING	READING					**********	**********		
6 PM		*******	*******	*******					**********	**********		
7 PM		*******	*******	*******					**********	**********		
8 PM		*******	*******	*******					**********	**********		
9 PM		*******	*******	*******					**********	**********		
10 PM		*******	*******	*******					**********	**********		
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually
Main panel Down
300,000 gallons EEE

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

11/11/10

TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant not running due to Hol.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	11/12/10

Time	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM	*	see	comments									
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

* Main panel down plant running in manual est. eff. flow aprox 350000 gals in 7 hrs.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE _____

11/12/10 Cambrle

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
3 PM		DOWN	ON	ON					NOT	NOT		
4 PM		NO	NO	NO					WORKING	WORKING		
5 PM		READING	READING	READING					*********	**********		
6 PM		*******	*******	*******					*********	**********		
7 PM		*******	*******	*******					*********	**********		
8 PM		*******	*******	*******					*********	**********		
9 PM		*******	*******	*******					*********	**********		
10 PM		*******	*******	*******					*********	**********		
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually
main panel of Down
300,000 gallon [illegible]

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

11/13/10 Cornble

[illegible]							[illegible]					
TIME	[illegible] FLOW	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant on manually
Main panel Down.
300,000 gallons on.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

11/14/10

	[redacted]						[redacted]					
TIME	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM	[redacted]											
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	[redacted]	[redacted]

REMARKS

* Plant not running, plant unmanned

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

11/15/10

	[redacted]						[redacted]					
TIME	[redacted] FLOW	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
7 AM												JS
8 AM		* See comments										
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

* Main panel down running wells in manual
est eff. flow 350000 gals in aprox. 7 hrs

EFF TO BASIN 33 WELL THREE down

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

11/16/10 Joe Swinick CEMB Role.

	[illegible]						[illegible]					
TIME	[illegible] FLOW	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually.
MAIN panel down
300,000 gallons ctr.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

Joe Swinick 11/17/10

	[illegible]						[illegible]					
TIME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually.
MAIN panel Down
300,000 gallons

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF (TER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 11/17/10 Cembale.

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		DOWN	ON	ON					NOT	NOT		
[illegible]		NO	NO	NO					WORKING	WORKING		
[illegible]		READING	READING	READING					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]		******	*******	******					*******	*******		
[illegible]		******	*****	******					*******	*******		
[illegible]		*******	******	******					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]												
[illegible]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Main panel Down.
Plant run manually.
300,000 gallons out.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

Joe Swinick. 11/18/10

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est eff flow 350000 in aprox 7 hrs

WELL 3 DOWN EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

OPERATOR:	Joe Swinick.
DATE:	11/19/10

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												JS
9 AM												
10 AM												
11 AM												
12 PM												
2 PM												
3 PM												
[illegible]												
Average	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est eff flow approx 352000 gals in 7 hrs

WELL Three down EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 11/19/10 Dean Cambale

	WELL FIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW GALLS	SUPERVISOR/ OPERATOR INITIALS
3 PM		DOWN	ON	ON					NOT	NOT		
4 PM		NO	NO	NO					WORKING	WORKING		
5 PM		READING	READING	READING					**********	**********		
6 PM		*******	*******	*******					**********	**********		
7 PM		*******	*******	*******					**********	**********		
8 PM		*******	*******	*******					**********	**********		
9 PM		*******	*******	*******					**********	**********		
10 PM		*******	*******	*******					**********	**********		
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Main panel Down
Plant running manually.
300,000 gallons GPM.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

11/20/10 Cambrale.

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Main panel Down
Plant running normally.

300,000 gallons ext.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

[illegible]	
[illegible]	

11/22/10

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7:00												JS
8:00												
9:00												
10:00												
11:00												
12:00												
1:00												
2:00												
[illegible]												
Average	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est eff. flow 350000 gals in approx 7 hrs

WELL THREE DOWN EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

[illegible]	
[illegible]	

11/23/10

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7:00												JS
8:00												
9:00												
10:00												
11:00												
12:00												
1:00												
2:00												
3:00												
[illegible]												
[illegible]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est. eff flow 350000 gals in aprox: 7 hrs

WELL THREE DOWN EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

[illegible]	
DATE	11/24/10

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]											
7:00												15
8:00												
9:00												
10:00												
11:00												
12:00												
1:00												
2:00												
3:00												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est eff. flow 350000 gals in approx 7 hrs

Well 3 down EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF [illegible]TER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE_____ Cambrde 11/24/10

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		DOWN	ON	ON					NOT	NOT		
[illegible]		NO	NO	NO					WORKING	WORKING		
[illegible]		READING	READING	READING					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]		******	*******	******					*******	*******		
[illegible]		******	*****	******					*******	*******		
[illegible]		*******	******	******					*******	*******		
[illegible]		******	******	******					*******	*******		
[illegible]												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running normally
Main panel Down
300,000 gallons [illegible]

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

11/25/10

Holiday

[illegible]	
[illegible]	

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7:00												
8:00												
9:00												
10:00												
11:00												
12:PM												
1:00												
2:00												
[illegible]												
[illegible]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

(516) 672-4544

DATE _____

Cem Bale 11/26/10

	WELL FIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISOR OPERATOR INITIALS
3 PM		DOWN	ON	ON					NOT	NOT		
4 PM		NO	NO	NO					WORKING	WORKING		
5 PM		READING	READING	READING					*********	**********		
6 PM		*******	*******	*******					*********	**********		
7 PM		*******	*******	*******					*********	**********		
8 PM		*******	*******	*******					*********	**********		
9 PM		*******	*******	*******					*********	**********		
10 PM		*******	*******	*******					*********	**********		
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running. Manually.
MAIN panel Down.
300,000 gallons off.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

[illegible]	
DATE	

Comarde 11/27/10

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7:00												
8:00												
9:00												
10:00												
11:00												
12:00												
1:00												
2:00												
[illegible]												
Average	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running normally
MAIN panel DOWN.
300,000 gallon 300,000 EKS

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

Cambrale 11/28/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually
main panel Down

300,000 gallons out.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

11/29/~~30~~ 16

Joe Swinick.

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est eff flow 350000 gals in aprox. 7 hrs.

well three down EFF TO BASIN 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

Joe Swnick

11/30/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												JS
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est. eff. flow aprox 350000 gals in 7 hrs

well three down Eff to basin 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/1/10

Joe Swinick

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

MAIN panel Down.
300,000 Gallons
plant running manually

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

12/1/10
Gonzale

	WELL FIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
3 PM												
4 PM												
5 PM												
6 PM												
7 PM												
8 PM												
9 PM												
10 PM												
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Main panel Down
Plant running manually.
300,000 gallons out.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/2/10
Joe. Swinnic

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est eff flow 350000 gal in aprox 7 hrs.

Well 3 down Eff to basin 33

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

Comprile 12/2/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
3 PM												
4 PM												
5 PM												
6 PM												
7 PM												
8 PM												
9 PM												
10 PM												
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Main panel Down.
Plant running manually.
300,000 gallon tot.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/3/10

18

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est eff flow 350000 gals in aprox 7hrs

WELL 3 DOWN EFF TO RAP BASIN

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 12/3/10 Campbell . 3-11

DOWN FOR REPAIR	ON NO READING							NOT IN WORKING	NOT WORKING		
**********	**********							**********	**********		
**********	**********							**********	**********		
**********	**********							**********	**********		
**********	**********							**********	**********		
**********	**********							**********	**********		
**********	**********							**********	**********		
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually
300,000 gallons etc.

Main panel Down.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

DATE 12/4/10 Cembale 7-3

	DOWN FOR REPAIR	ON NO READING							NOT IN WORKING	NOT WORKING		
	**********	**********							**********	**********		
	**********	**********							**********	**********		
	**********	**********							**********	**********		
	**********	**********							**********	**********		
	**********	**********							**********	**********		
	**********	**********							**********	**********		
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Main panel Down
plant running manually.
30,000 gallons off.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

Cem Brale. 12/5/10

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Wells running manually
Main panel Down
300,000 gallon ok.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

Joe Swinick. 12/6/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est eff flow 350000gals in Aprox 7 hrs

WELL 3 DOWN EFF TO RAP BASIN

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/7/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												B
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est eff. flow 350000 gals in aprox 7 hrs

WELL THREE DOWN EFF TO RAP BASIN

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/8/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												SS
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est eff flow 350000 gal in approx 7 hrs

well 3 down EFF TO RAP BASIN

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

12/8/10 Cambrale

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
3 PM												
4 PM												
5 PM												
6 PM												
7 PM												
8 PM												
9 PM												
10 PM												
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Wells running marully,
Well
Main panel Down.

30,000 gallons out

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/9/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												JS
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est eff flow 350000 gals in aprox 7 hrs

well 3 Down EFF TO ~~BA~~ RAP BASIN

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

12/9/10

Cembrale

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 4 FLOW	WELL 7 FLOW	WELL 8 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGGALS	SUPERVISOR/ OPERATOR INITIALS
3 PM												
4 PM												
5 PM												
6 PM												
7 PM												
8 PM												
9 PM												
10 PM												
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Wells running manually,
300,000 gallons out.
MAIN panel Down.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

12-10-10

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

M. Furey

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

- Main Control Consol Down
- Running on Manual Overide
- Estimated 350 gal per/7 hr shift.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

12/10/10
Cambrale.

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
3 PM												
4 PM												
5 PM												
6 PM												
7 PM												
8 PM												
9 PM												
10 PM												
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Main panel Down.
plant - running manually STATE PARK
300,000 gallons EPA.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

Cambrale 12/11/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually.
from STATE Park
main panel down 300,000 gallon GM

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/12/10
GMBrab

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually
from state park.
Main panel DOWN

300,000 gallon OKA.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

A. Sh
12-13-10
AM. Shift.
M. Furey

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

- Plant Running on Manual Override,
- Production Well 3 still offline for repair
- Approx 350 K gal @ 7 HR.
- Plant Main Control Consul Down.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

Am Shift
12-14-10
M. Furey

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

[illegible]:	
DATE:	

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

- Plant Running on Manual Overide, Plant main Control Control Down,
- Production well Three off line for Repair.
- Approx. 350 K gal per/7 hr.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

FILE ID:	
DATE:	

12/15/10 M. Fuchy.

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running on manual overall.
350 K gallons.
MAIN panel DOWN

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

12/15/16
Gombrale

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
3 PM												
4 PM												
5 PM												
6 PM												
7 PM												
8 PM												
9 PM												
10 PM												
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Main panel Down
350,K Gallons
Plant running manual SLAC pump

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

AM Shift

M. Furey

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/16/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

- Plant running manual override mode, main control consul down for repairs
- Well 3, down for repairs
- Approx 350K gal per/7 hr.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

12/16/10
GnBrk

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
3 PM												
4 PM												
5 PM												
6 PM												
7 PM												
8 PM												
9 PM												
10 PM												
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually,
NAT in panel down.
350, gallons out.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

MATT Feury. 2/17/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES H/C	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running Mcnully
MAIN panel Down Statepark
3 wyon gallon soda

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/18/10

Cembrole 7.3

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES H2O	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Main pond Down.
plant running manually state pole
300,000 gallon ERO

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/19/10 Comprele 7-3

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	[illegible] FLOW GPM	[illegible] FLOW GPM	[illegible] AIR FLOW CFM	AIR [illegible] INCHES WC	[illegible] FLOW U.GALS	[illegible] OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

MAIN panel Down.
Plant running Normally
700,000 Gallon on

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/20/10 Cembrale.

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

MAIN panel Down
Plant running manually.
300,000 gallons ext.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

12-21-10
AM Shift
M. Furey

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES W/C	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

- Plant on Manual Overide, Main Control Consul Dnt Awaiting Repair
- Well #3 Dnt
- Approx 300K, Gal per/7 Hr.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

Combine. 12/22/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
3 PM												
4 PM												
5 PM												
6 PM												
7 PM												
8 PM												
9 PM												
10 PM												
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

all wells on manually stage pul
Main panel Down
350,000 gallons.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

12-22-10
All. Shift
M. Eurey

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

- Plant on Manual Overide Main Control Counsil Auditing Repair
- Well #3 D.N.U.
- Approx 300K Gal/Per 7 HR

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/23/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESSURE FILTER FLOW GPM	STRIPPER AIR FLOW CFM	AIR PRESSURE INCHES H2O	EFFLUENT FLOW GALLS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual est. eff. flow 350000 gals in approx 7 hrs

EFF TO RAP BASIN WELL THREE DOWN

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

12/23/10 Cambrle.

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
3 PM												
4 PM												
5 PM												
6 PM												
7 PM												
8 PM												
9 PM												
10 PM												
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Main pond Down
Plant running manually state park
300,000 gallon eff.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

Joe Swinick 12/24/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES W/C	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

plant running Manuel Start plant
3 w/w gallon eff.
MAIN panel Down

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

12/24/10 Combined

J-11

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
3 PM												
4 PM												
5 PM												
6 PM												
7 PM												
8 PM												
9 PM												
10 PM												
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

MAIN panel Down.
plant running manually. STATE park
300,000 gallon est.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

Combined Holiday. 12/25/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	[illegible] FLOW GPM	PRESSURE FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR TEMPERATURE INCHES WC	EFFLUENT FLOW METALS	SUPERVISORY OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/26/10 CEMBTOL

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW CFM	PRESS FIL FLOW CFM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES H2O	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

MAIN PANEL DOWN.
Plant running manually.
300,000 gallon ERR.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/27/10

MATT Feury (AM)

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESSURE FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR TEMPERATURE DEGREES F	EFFLUENT FLOW MGALLS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant NOT IN OPERATION DUE TO BLIZZARD CONDITIONS

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/28/10

MATT Perry.

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	[illegible] FLOW GPM	[illegible] FLOW GPM	BLOWER AIR FLOW CFM	AIR [illegible] [illegible]	EFFLUENT FLOW TOTALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant DOWN

Due to STORM Blizzard

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

12-29-10

AM Shift

M. Farey

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES H2O	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant Not in operation, Access Road To Wells Has Not been Plowed

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

Cembale 12/29/10

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
3 PM												
4 PM												
5 PM												
6 PM												
7 PM												
8 PM												
9 PM												
10 PM												
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant Down
Due to Snow Storm

Wells Down State park.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/30/10

Joe Swinick.

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESSURE FILTER FLOW GPM	STRIPPER AIR FLOW CFM	AIR PRESSURE INCHES H2O	EFFLUENT FLOW GALLS	SUPERVISOR/ OPERATOR INITIALS
7 AM												JS
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running in manual

EFF TO RAP BASIN

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

12/30/10
Cembrale

	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
3 PM												
4 PM												
5 PM												
6 PM												
7 PM												
8 PM												
9 PM												
10 PM												
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually
MANU panel Down
SVAOC park.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

12/31/10

Joe Swinick

	WELLFIELD OPERATION GALLONS PER MINUTE						[illegible]					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	[illegible] FLOW	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 AM												
8 AM												
9 AM												
10 AM												
11 AM												
12 PM												
1 PM												
2 PM												
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant on Line for running manuals.
MAIN panel Down
Starter park

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.
2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
EVENING SHIFT

Combined 3-11

12/31/18

	WELL FLOW OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESS FIL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
3 PM												
4 PM												
5 PM												
6 PM												
7 PM												
8 PM												
9 PM												
10 PM												
11 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Plant running manually. Stratec panel main panel Down.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 5%.

2- EFFLUENT FLOW MEASURES THE TOTAL FLOW THROUGH THE FACILITY. OPERATOR SHALL RESET THE GAUGE TO ZERO AT THE BEGINNING OF EACH SHIFT.

APPENDIX B

FACILITY MONITORING RESULTS
October through December, 2010

Town of Oyster Bay

Old Bethpage Landfill Remedial Action Plan

Organic Self-Monitoring Results, October-December 2010

Influent and Effleunt Results, in micrograms per Liter

DATE	Influent TVOC Concentration	Summary of VOCs Detected Most Frequently and/or at Highest Concentrations									Effluent TVOC Concentration
		BENZENE	VCM	PCE	1,1-DCA	TCE	1,2-DCE	1,1-DCE	1,2-DCA	111-TCA	
10/4/10	59.6	0.4	0.2	8.3	0.2	41.1	4.5	2.1	0.6	2.2	8.2
10/6/10	72.8	0.1	0.1	10.1	0.2	52.7	5.7	1.9	0.1	1.9	8.8
10/8/10	226	0.3	1.4	25.0	0.2	171	16.7	6.1	0.1	5.9	4.5
10/13/10	169	1.4	0.7	21.3	0.8	122	13.8	3.3	3.4	3.2	11.0
10/15/10	165	0.5	0.2	20.8	0.1	125	11.4	3.4	0.0	3.6	6.9
10/18/10	326	0.5	0.3	36.8	0.0	251	25.6	7.5	0.0	4.4	3.1
10/20/10	21.4	0.2	0.1	4.1	0.2	14	1.9	0.5	0.0	0.4	3.3
10/22/10	40.6	0.8	0.4	8.7	0.1	26	3.3	0.6	0.2	0.3	7.2
10/25/10	60.5	0.5	0.3	9.9	0.5	40	4.0	2.6	1.0	1.8	2.8
10/27/10	18.2	0.2	0.2	3.4	0.1	12	1.4	0.6	0.0	0.4	2.9
10/29/10	271	0.2	0.5	32.7	0.2	211	23.8	1.8	0.0	1.4	21.1
11/1/10	62.0	0.1	0.1	9.6	0.5	41	3.5	3.3	0.3	3.6	1.5
11/3/10	144	0.4	0.6	17.9	0.0	111	11.4	2.3	0.2	0.8	1.8
11/5/10	29.0	0.1	0.1	3.3	0.2	20	2.2	1.3	0.1	1.6	14.7
11/8/10	47.5	0.1	0.1	8.7	0.3	31	2.6	2.0	0.1	2.4	2.9
11/9/10	111	0.1	5.0	15.0	0.0	79	7.5	2.0	0.0	2.0	13.2
11/10/10	54.1	0.1	0.1	7.5	0.4	36	3.5	3.3	0.2	3.0	2.3
11/12/10	132	0.8	5.4	17.8	1.0	91	9.6	2.6	1.5	3.0	13.6
11/13/10	127	0.1	4.8	17.6	0.0	92	8.2	2.5	0.0	2.5	12.9
11/15/10	108	0.7	0.3	15.3	0.0	78	8.0	1.8	1.4	2.0	3.8
11/17/10	152	0.1	0.2	22.3	0.2	112	11.8	2.6	0.3	2.7	6.2
11/19/10	166	0.1	0.1	22.0	1.3	112	9.2	10.3	0.2	10.3	15.5
11/22/10	124	0.1	0.1	16.2	0.3	91	6.4	6.4	0.0	3.6	1.6
11/24/10	60.5	0.0	0.0	9.1	0.4	40	3.7	3.2	0.1	3.7	2.4
11/29/10	12.5	0.0	0.1	1.6	0.1	8.9	0.7	0.6	0.0	0.5	2.4
12/1/10	63.7	0.1	0.3	9.0	0.4	42.8	3.6	3.6	0.2	3.7	3.8
12/3/10	58.5	0.0	0.0	10.4	0.2	38.0	6.8	1.1	0.3	1.7	8.7
12/6/10	48.9	0.2	0.2	10.5	0.0	22.7	12.1	2.4	0.0	0.8	8.3
12/8/10	52.4	0.0	0.0	9.2	0.3	33.3	3.7	2.9	0.1	2.9	8.0
12/10/10	50.2	0.1	0.1	15.5	0.0	24	9.2	0.0	0.1	1.2	9.6
12/13/10	185	0.2	0.3	19.9	0.2	140	11.3	8.5	0.2	4.1	5.2
12/15/10	117	0.3	0.2	24.1	0.0	79	7.6	4.5	0.0	1.4	1.6
12/17/10	225	0.4	0.8	30.8	0.0	170	12.6	8.8	0.0	2.4	12.5
12/20/10	81.4	0.7	3.0	18.3	0.0	51	5.0	3.6	0.2	0.0	5.3
12/22/10	374	0.7	0.6	51.2	0.0	279	31.2	8.2	0.0	3.0	5.3
12/29/10	51.0	0.1	0.3	6.5	0.1	37.6	3.0	2.3	0.0	1.1	NA
Averages:	113	0.3	0.8	15.8	0.2	81	8.5	3.3	0.3	2.5	6.9

Notes:

Consent Decree criterion for total VOCs in ground water is 50 ug/L.

Effluent concentrations are lower than Consent Decree limit of 100 ug/L total VOCs.

Town of Oyster Bay

Old Bethpage Landfill Remedial Action Plan

Inorganic Self-Monitoring Results, October-December 2011

Effleunt Results, in milligrams per Liter

Parameter	Limit	Avg. Conc.	10/6/10	10/13/10	10/20/10	10/27/10	11/3/10	11/10/10	11/17/10	11/24/10	12/1/10	12/8/10	12/15/10	12/22/10	12/30/10
pH	6.5 - 8.5	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Iron	0.6	0.04	0.02	0.01	0.08	0.00	0.09	0.00	0.02	0.00	0.03	0.05	0.05	0.05	0.09
Manganese	0.6	**1.0**	**0.8**	**0.8**	0.4	**2.4**	**0.8**	**1.1**	**1.7**	**0.7**	**0.9**	**1.0**	**0.8**	0.6	**1.1**
Iron and Manganese	1.0	1.0	0.8	0.8	0.5	**2.4**	0.9	**1.1**	**1.7**	0.7	0.9	**1.1**	0.9	0.7	**1.2**
Dissolved Oxygen	No Std.	15.6	12.0	21.0	13.2	14.0	14.9	13.7	18.0	19.6	14.9	13.7	13.9	20.2	13.1
Ammonia	No Std.	2.84	3.76	3.12	0.80	5.36	2.40	3.04	1.76	2.64	2.32	2.64	3.12	2.16	3.76
Chloride	500	106	115	108	77.6	127	85.6	111	88.8	101	110	92.8	108	90.4	162

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1010049-001A

Client Sample ID. INFLUENT

Sample Information...
Type : Aqueous

Origin: Influent

Collected : 10/4/2010 10:30:00 AM
Received : 10/4/2010 11:00:00 AM
Collected By : LKB
Copy :
CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
1,1,1-Trichloroethane	4.0		1	µg/L	E524.2	10/08/2010 1:08 PM
1,1,2,2-Tetrachloroethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
1,1,2-Trichloroethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
1,1-Dichloroethane	0.68		1	µg/L	E524.2	10/08/2010 1:08 PM
1,1-Dichloroethene	4.4		1	µg/L	E524.2	10/08/2010 1:08 PM
1,2-Dichlorobenzene	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
1,2-Dichloroethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
1,2-Dichloropropane	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
1,3-Dichlorobenzene	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
1,4-Dichlorobenzene	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Benzene	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Bromodichloromethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Bromoform	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Bromomethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Carbon tetrachloride	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Chlorobenzene	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Chloroethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Chloroform	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Chloromethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
cis-1,2-Dichloroethene	6.0		1	µg/L	E524.2	10/08/2010 1:08 PM
cis-1,3-Dichloropropene	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Dibromochloromethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Dichlorodifluoromethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Ethylbenzene	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
m,p-Xylene	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Methylene chloride	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
o-Xylene	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Tetrachloroethene	14		1	µg/L	E524.2	10/08/2010 1:08 PM
Toluene	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
trans-1,2-Dichloroethene	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
trans-1,3-Dichloropropene	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Trichloroethene	77		1	µg/L	E524.2	10/08/2010 1:08 PM
Trichlorofluoromethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM
Vinyl chloride	< 0.50		1	µg/L	E524.2	10/08/2010 1:08 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/23/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1010049-002A

Client Sample ID. EFFLUENT

Sample Information...
Type : Aqueous

Origin: Effluent

Collected : 10/4/2010 10:30:00 AM
Received : 10/4/2010 11:00:00 AM
Collected By : LKB
Copy :
CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Barium	< 0.20		1	mg/L	E200.7	10/07/2010 12:09 AM
Cadmium	< 5.00		1	µg/L	E200.7	10/07/2010 12:09 AM
Copper	< 0.02		1	mg/L	E200.7	10/07/2010 12:09 AM
Iron	0.09		1	mg/L	E200.7	10/07/2010 12:09 AM
Lead	< 5.00		1	µg/L	E200.7	10/07/2010 12:09 AM
Magnesium	6.90		1	mg/L	E200.7	10/07/2010 12:09 AM
Manganese	0.22		1	mg/L	E200.7	10/07/2010 12:09 AM
Silver	< 0.01		1	mg/L	E200.7	10/07/2010 12:09 AM
Zinc	0.02		1	mg/L	E200.7	10/07/2010 12:09 AM
Mercury	< 0.2		1	ug/L	E245.1	10/08/2010 11:45 AM
1,1,1-Trichloroethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
1,1,2,2-Tetrachloroethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
1,1,2-Trichloroethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
1,1-Dichloroethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
1,1-Dichloroethene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
1,2-Dichlorobenzene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
1,2-Dichloroethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
1,2-Dichloropropane	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
1,3-Dichlorobenzene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
1,4-Dichlorobenzene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Benzene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Bromodichloromethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Bromoform	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Bromomethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Carbon tetrachloride	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Chlorobenzene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Chloroethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Chloroform	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Chloromethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
cis-1,2-Dichloroethene	0.89		1	µg/L	E524.2	10/08/2010 1:38 PM
cis-1,3-Dichloropropene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Dibromochloromethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Dichlorodifluoromethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Ethylbenzene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
m,p-Xylene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Methylene chloride	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
o-Xylene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Tetrachloroethene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/23/2010

H2M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1010049-002A

Client Sample ID. EFFLUENT

Sample Information...
Type : Aqueous

Origin: Effluent

Collected : 10/4/2010 10:30:00 AM
Received : 10/4/2010 11:00:00 AM
Collected By : LKB
Copy :
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Toluene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
trans-1,2-Dichloroethene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
trans-1,3-Dichloropropene	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Trichloroethene	4.2		1	µg/L	E524.2	10/08/2010 1:38 PM
Trichlorofluoromethane	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Vinyl chloride	< 0.50		1	µg/L	E524.2	10/08/2010 1:38 PM
Fluoride	< 0.10		1	mg/L	E300.0	10/07/2010 6:38 PM
Chloride	98.7		5	mg/L	E300.0	10/07/2010 6:52 PM
Nitrite as N	< 0.10		1	mg/L	E300.0	10/07/2010 6:38 PM
Sulfate	23.6		1	mg/L	E300.0	10/07/2010 6:38 PM
Bromide	0.59		1	mg/L	E300.0	10/07/2010 6:38 PM
Nitrate as N	2.45		1	mg/L	E300.0	10/07/2010 6:38 PM
Ortho Phosphate	< 0.05		1	mg/L	E300.0	10/07/2010 6:38 PM
Cyanide	< 10		1	µg/L	SM4500-CN E	10/05/2010 3:18 PM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	10/05/2010 10:17 AM
Nitrogen, Ammonia (As N)	4.49	D	10	mg/L	SM4500-NH3 H	10/07/2010 12:53 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	10/05/2010 8:01 AM
Nitrate as N	2.66		10	mg/L	E353.2	10/05/2010 8:39 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	10/06/2010 9:17 AM
Total Dissolved Solids	249		1	mg/L	SM2540C	10/08/2010 10:10 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/23/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011005-001A

Client Sample ID. INFLUENT

Sample Information...
Type : Aqueous

Origin: Influent

Collected : 11/1/2010 8:15:00 AM
Received : 11/1/2010 8:34:00 AM
Collected By : LKB99
Copy :
CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
1,1,1-Trichloroethane	6.1		1	µg/L	E524.2	11/11/2010 3:48 PM
1,1,2,2-Tetrachloroethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
1,1,2-Trichloroethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
1,1-Dichloroethane	0.92		1	µg/L	E524.2	11/11/2010 3:48 PM
1,1-Dichloroethene	6.0		1	µg/L	E524.2	11/11/2010 3:48 PM
1,2-Dichlorobenzene	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
1,2-Dichloroethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
1,2-Dichloropropane	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
1,3-Dichlorobenzene	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
1,4-Dichlorobenzene	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Benzene	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Bromodichloromethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Bromoform	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Bromomethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Carbon tetrachloride	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Chlorobenzene	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Chloroethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Chloroform	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Chloromethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
cis-1,2-Dichloroethene	5.0		1	µg/L	E524.2	11/11/2010 3:48 PM
cis-1,3-Dichloropropene	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Dibromochloromethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Dichlorodifluoromethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Ethylbenzene	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
m,p-Xylene	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Methylene chloride	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
o-Xylene	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Tetrachloroethene	13		1	µg/L	E524.2	11/11/2010 3:48 PM
Toluene	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
trans-1,2-Dichloroethene	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
trans-1,3-Dichloropropene	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Trichloroethene	73		1	µg/L	E524.2	11/11/2010 3:48 PM
Trichlorofluoromethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM
Vinyl chloride	< 0.50		1	µg/L	E524.2	11/11/2010 3:48 PM

Qualifiers:
E - Value above quantitation range
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H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/15/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Aqueous

Origin: Effluent

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011005-002A

Client Sample ID. EFFLUENT

Collected : 11/1/2010 8:15:00 AM
Received : 11/1/2010 8:34:00 AM
Collected By : LKB99
Copy :
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Barium	< 0.20		1	mg/L	E200.7	11/03/2010 9:44 PM
Cadmium	< 5.00		1	µg/L	E200.7	11/03/2010 9:44 PM
Copper	< 0.02		1	mg/L	E200.7	11/03/2010 9:44 PM
Iron	0.05		1	mg/L	E200.7	11/03/2010 9:44 PM
Lead	< 5.00		1	µg/L	E200.7	11/03/2010 9:44 PM
Magnesium	7.20		1	mg/L	E200.7	11/03/2010 9:44 PM
Manganese	0.19		1	mg/L	E200.7	11/03/2010 9:44 PM
Silver	< 0.01		1	mg/L	E200.7	11/03/2010 9:44 PM
Zinc	0.02		1	mg/L	E200.7	11/03/2010 9:44 PM
Mercury	< 0.2		1	ug/L	E245.1	11/03/2010 2:16 PM
1,1,1-Trichloroethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
1,1,2,2-Tetrachloroethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
1,1,2-Trichloroethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
1,1-Dichloroethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
1,1-Dichloroethene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
1,2-Dichlorobenzene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
1,2-Dichloroethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
1,2-Dichloropropane	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
1,3-Dichlorobenzene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
1,4-Dichlorobenzene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Benzene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Bromodichloromethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Bromoform	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Bromomethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Carbon tetrachloride	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Chlorobenzene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Chloroethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Chloroform	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Chloromethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
cis-1,2-Dichloroethene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
cis-1,3-Dichloropropene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Dibromochloromethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Dichlorodifluoromethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Ethylbenzene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
m,p-Xylene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Methylene chloride	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
o-Xylene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Tetrachloroethene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM

Qualifiers:
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Joann M. Slavin
Laboratory Manager

Date Reported : 11/15/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011005-002A

Client Sample ID. EFFLUENT

Sample Information...
Type : Aqueous

Origin: Effluent

Collected : 11/1/2010 8:15:00 AM
Received : 11/1/2010 8:34:00 AM
Collected By : LKB99
Copy :
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Toluene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
trans-1,2-Dichloroethene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
trans-1,3-Dichloropropene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Trichloroethene	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Trichlorofluoromethane	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Vinyl chloride	< 0.50		1	µg/L	E524.2	11/11/2010 3:20 PM
Chloride	162	D	5	mg/L	E300.0	11/05/2010 1:18 AM
Sulfate	20.3		1	mg/L	E300.0	11/05/2010 1:04 AM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/04/2010 3:11 PM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/02/2010 7:52 AM
Nitrogen, Ammonia (As N)	2.76	D	5	mg/L	SM4500-NH3 H	11/10/2010 11:39 AM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/02/2010 6:59 AM
Nitrate as N	3.83	D	5	mg/L	E353.2	11/02/2010 8:13 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/07/2010 9:54 AM
Total Dissolved Solids	217		1	mg/L	SM2540C	11/01/2010 5:00 PM

Qualifiers:
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D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/15/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1012014-001A

Client Sample ID. INFLUENT

Sample Information...
Type : Aqueous

Origin: Influent

Collected : 12/1/2010 9:50:00 AM
Received : 12/1/2010 10:20:00 AM
Collected By : LKB99
Copy :
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
1,1,1-Trichloroethane	5.6		1	µg/L	E524.2	12/06/2010 11:55 AM
1,1,2,2-Tetrachloroethane	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
1,1,2-Trichloroethane	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
1,1-Dichloroethane	1.0		1	µg/L	E524.2	12/06/2010 11:55 AM
1,1-Dichloroethene	5.6		1	µg/L	E524.2	12/06/2010 11:55 AM
1,2-Dichlorobenzene	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
1,2-Dichloroethane	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
1,2-Dichloropropane	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
1,3-Dichlorobenzene	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
1,4-Dichlorobenzene	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Benzene	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Bromodichloromethane	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Bromoform	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Bromomethane	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Carbon tetrachloride	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Chlorobenzene	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Chloroethane	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Chloroform	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Chloromethane	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
cis-1,2-Dichloroethene	4.9		1	µg/L	E524.2	12/06/2010 11:55 AM
cis-1,3-Dichloropropene	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Dibromochloromethane	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Dichlorodifluoromethane	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Ethylbenzene	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
m,p-Xylene	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Methylene chloride	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
o-Xylene	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Tetrachloroethene	13		1	µg/L	E524.2	12/06/2010 11:55 AM
Toluene	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
trans-1,2-Dichloroethene	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
trans-1,3-Dichloropropene	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Trichloroethene	81		1	µg/L	E524.2	12/06/2010 11:55 AM
Trichlorofluoromethane	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM
Vinyl chloride	< 0.50		1	µg/L	E524.2	12/06/2010 11:55 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 12/10/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 1012014-002A

Client Sample ID. EFFLUENT

Sample Information...
Type : Aqueous

Origin: Effluent

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Collected : 12/1/2010 9:50:00 AM
Received : 12/1/2010 10:20:00 AM
Collected By : LKB99
Copy :
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Barium	< 0.20		1	mg/L	E200.7	12/03/2010 2:55 AM
Cadmium	< 5.00		1	µg/L	E200.7	12/03/2010 2:55 AM
Copper	0.02		1	mg/L	E200.7	12/03/2010 2:55 AM
Iron	0.05		1	mg/L	E200.7	12/03/2010 2:55 AM
Lead	7.08		1	µg/L	E200.7	12/03/2010 2:55 AM
Magnesium	7.69		1	mg/L	E200.7	12/03/2010 2:55 AM
Manganese	0.21		1	mg/L	E200.7	12/03/2010 2:55 AM
Silver	< 0.01		1	mg/L	E200.7	12/03/2010 2:55 AM
Zinc	0.04		1	mg/L	E200.7	12/03/2010 2:55 AM
Mercury	< 0.2		1	ug/L	E245.1	12/03/2010 4:15 PM
1,1,1-Trichloroethane	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
1,1,2,2-Tetrachloroethane	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
1,1,2-Trichloroethane	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
1,1-Dichloroethane	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
1,1-Dichloroethene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
1,2-Dichlorobenzene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
1,2-Dichloroethane	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
1,2-Dichloropropane	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
1,3-Dichlorobenzene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
1,4-Dichlorobenzene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Benzene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Bromodichloromethane	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Bromoform	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Bromomethane	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Carbon tetrachloride	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Chlorobenzene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Chloroethane	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Chloroform	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Chloromethane	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
cis-1,2-Dichloroethene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
cis-1,3-Dichloropropene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Dibromochloromethane	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Dichlorodifluoromethane	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Ethylbenzene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
m,p-Xylene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Methylene chloride	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
o-Xylene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Tetrachloroethene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 12/10/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1012014-002A

Client Sample ID. EFFLUENT

Sample Information...
Type : Aqueous

Origin: Effluent

Collected : 12/1/2010 9:50:00 AM
Received : 12/1/2010 10:20:00 AM
Collected By : LKB99
Copy :
CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Toluene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
trans-1,2-Dichloroethene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
trans-1,3-Dichloropropene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Trichloroethene	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Trichlorofluoromethane	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Vinyl chloride	< 0.50		1	µg/L	E524.2	12/06/2010 12:23 PM
Chloride	118	D	5	mg/L	E300.0	12/03/2010 9:16 PM
Sulfate	19.0		1	mg/L	E300.0	12/03/2010 9:02 PM
Cyanide	< 10		1	µg/L	SM4500-CN E	12/02/2010 3:26 PM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	12/02/2010 8:17 AM
Nitrogen, Ammonia (As N)	2.34	D	5	mg/L	SM4500-NH3 H	12/08/2010 11:41 AM
Nitrite as N	< 0.10		1	mg/L	E353.2	12/02/2010 6:58 AM
Nitrate as N	4.97	D	10	mg/L	E353.2	12/02/2010 9:03 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	12/08/2010 12:32 PM
Total Dissolved Solids	234		1	mg/L	SM2540C	12/07/2010 2:20 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 12/10/2010

APPENDIX C

RECOVERY WELL MONITORING RESULTS
October through December, 2010

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-1 (October 11, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	2.6
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	0.3
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	2.0
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	2.0
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-1 (October 15, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	0.2
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-1 (October 22, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	8.2
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	0.4
Dichlorobenzene, o,m&p	9***	1.5
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.4
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.3
Vinyl Chloride	2	<0.2
Xylene, o	5	**6.0**
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	**6.0**
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-1 (November 5, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	5.6
Benzene	1***	0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.3
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	1.0
Dichlorobenzene, o,m&p	9***	1.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.3
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.2
Vinyl Chloride	2	0.6
Xylene, o	5	2.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	2.7
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-1 (November 12, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	12.9
Benzene	1***	0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	0.8
Dichlorobenzene, o,m&p	9***	1.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.3
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	**2.4**
Xylene, o	5	**8.2**
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	**8.2**
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-1 (November 19, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	0.7
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.3
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.4
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-1 (December 3, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	0.4
Benzene	1***	0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	0.4
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-1 (December 9, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	2.3
Benzene	1***	0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	0.4
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.8
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	0.3
Toluene	5	0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.9
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-2 (October 8, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	2.4
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	0.3
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	2.4
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	2.4
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-2 (October 15, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	0.3
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-2 (October 22, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	8.5
Benzene	1***	0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	0.6
Dichlorobenzene, o,m&p	9***	1.6
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.3
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	0.2
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	**6.3**
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	**6.3**
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-2 (November 5, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	1.4
Benzene	1***	0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.2
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.1
Dichlorobenzene, o&p	6***	0.5
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.4
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.2
Vinyl Chloride	2	0.2
Xylene, o	5	**1.6**
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	**<1.8**
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-2 (November 12, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	ND
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-2 (November 19, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	0.9
Benzene	1***	0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	0.5
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.3
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	0.2
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	0.3
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-2 (December 3, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	0.2
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
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Recovery Well RW-2 (December 9, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	1.6
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	0.3
Dichlorobenzene, o,m&p	9***	1.0
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	0.3
Xylene, o	5	5.0
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	5.0
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-3 (October 8, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	16.0
Benzene	1***	0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.3
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.2
Dichlorobenzene, o&p	6***	1.2
Dichlorobenzene, o,m&p	9***	1.3
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	1.9
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	4.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	0.1
Trichloroethylene	5	**7.7**
Vinyl Chloride	2	0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

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Groundwater Treatment Facility
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Recovery Well RW-3 (October 15, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	14.0
Benzene	1***	0.2
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.3
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.3
Dichlorobenzene, o&p	6***	0.6
Dichlorobenzene, o,m&p	9***	0.9
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	1.5
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	3.3
Toluene	5	<0.1
1,1,1 Trichloroethane	5	0.1
Trichloroethylene	5	**7.1**
Vinyl Chloride	2	0.3
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-3 (October 22, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	14.7
Benzene	1***	0.3
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.3
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.5
Dichlorobenzene, o&p	6***	1.6
Dichlorobenzene, o,m&p	9***	2.1
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	1.1
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	0.2
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	2.0
Toluene	5	0.2
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	4.0
Vinyl Chloride	2	0.4
Xylene, o	5	3.4
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	3.5
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

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Groundwater Treatment Facility
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Recovery Well RW-3 (October 29, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	9.1
Benzene	1***	<0.1
Bromodichloromethane	50	0.4
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.5
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.4
Dichlorobenzene, o&p	6***	1.0
Dichlorobenzene, o,m&p	9***	1.2
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.9
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	0.6
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	1.8
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	3.3
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

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Groundwater Treatment Facility
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Recovery Well RW-3 (November 19, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	**161**
Benzene	1***	0.6
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.8
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	**26.4**
Dichlorobenzene, o,m&p	9***	**26.5**
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	0.8
cis-1,2 Dichloroethene	5	**9.4**
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	**17.7**
Toluene	5	0.1
1,1,1 Trichloroethane	5	0.7
Trichloroethylene	5	**52.2**
Vinyl Chloride	2	1.2
Xylene, o	5	**51.2**
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	**51.2**
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standards are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
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Recovery Well RW-4 (October 8, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	53.7
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.3
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	0.3
cis-1,2 Dichloroethene	5	4.0
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	**7.3**
Toluene	5	<0.1
1,1,1 Trichloroethane	5	0.3
Trichloroethylene	5	**41.4**
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standards are highlighted.

*** Revised values effective in January,1998.

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Groundwater Treatment Facility
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Recovery Well RW-4 (October 15, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	18.3
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.2
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	1.0
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	5.0
Toluene	5	<0.1
1,1,1 Trichloroethane	5	0.1
Trichloroethylene	5	**12.0**
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
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Recovery Well RW-4 (October 22, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	**219**
Benzene	1***	0.2
Bromodichloromethane	50	0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.3
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	5.9
Dichlorobenzene, o,m&p	9***	**28.6**
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	0.3
cis-1,2 Dichloroethene	5	2.0
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	0.2
Methylene Chloride	5	0.2
Tetrachloroethene	5***	**19.8**
Toluene	5	0.4
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	**135**
Vinyl Chloride	2	0.8
Xylene, o	5	**30.9**
Xylene, m&p	10***	0.3
Xylene, o,m&p	15***	**31.1**
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

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** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

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Recovery Well RW-4 (October 29, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	**236**
Benzene	1***	0.3
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	**8.1**
Dichlorobenzene, o,m&p	9***	**22.9**
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	0.3
cis-1,2 Dichloroethene	5	**14.9**
trans-1,2 Dichloroethene	5	0.6
1,2 Dichloropropane	1***	0.0
Ethylbenzene	5	0.3
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	**23.5**
Toluene	5	0.3
1,1,1 Trichloroethane	5	0.5
Trichloroethylene	5	**146**
Vinyl Chloride	2	0.9
Xylene, o	5	**25.5**
Xylene, m&p	10***	0.2
Xylene, o,m&p	15***	**25.7**
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

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** Compounds exceeding Class GA standards are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

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Recovery Well RW-4 (November 5, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	19.1
Benzene	1***	0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.4
Dichlorobenzene, o&p	6***	0.6
Dichlorobenzene, o,m&p	9***	1.0
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.7
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	0.3
Ethylbenzene	5	0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	**10.4**
Toluene	5	0.1
1,1,1 Trichloroethane	5	0.1
Trichloroethylene	5	**5.9**
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-4 (November 12, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	43.2
Benzene	1***	0.4
Bromodichloromethane	50	0.9
Bromoform	50	0.7
Carbon Tetrachloride	5	0.2
Chlorobenzene	5	0.6
Chlorodibromomethane	50	1.2
Chloroethane	5	<0.2
Chloroform	7***	1.0
Dichlorobenzene, o&p	6***	2.8
Dichlorobenzene, o,m&p	9***	4.3
1,1 Dichloroethane	5	0.3
1,2 Dichloroethane	0.6***	**1.2**
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	1.5
trans-1,2 Dichloroethene	5	0.2
1,2 Dichloropropane	1***	**1.1**
Ethylbenzene	5	0.8
Methylene Chloride	5	0.7
Tetrachloroethene	5***	**20.0**
Toluene	5	0.3
1,1,1 Trichloroethane	5	0.3
Trichloroethylene	5	5.0
Vinyl Chloride	2	0.2
Xylene, o	5	2.1
Xylene, m&p	10***	0.2
Xylene, o,m&p	15***	2.3
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-4 (November 19, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	61.0
Benzene	1***	0.2
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	3.3
Dichlorobenzene, o,m&p	9***	7.7
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	4.6
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	0.3
Methylene Chloride	5	0.7
Tetrachloroethene	5***	**5.6**
Toluene	5	0.3
1,1,1 Trichloroethane	5	0.2
Trichloroethylene	5	**33.5**
Vinyl Chloride	2	0.4
Xylene, o	5	**7.3**
Xylene, m&p	10***	0.3
Xylene, o,m&p	15***	**7.5**
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standards are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-5 (October 8, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	**177**
Benzene	1***	0.4
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.4
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	0.8
Dichlorobenzene, o,m&p	9***	1.3
1,1 Dichloroethane	5	0.6
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	**10.7**
cis-1,2 Dichloroethene	5	**8.5**
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	0.6
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	**17.9**
Toluene	5	0.4
1,1,1 Trichloroethane	5	**8.6**
Trichloroethylene	5	**122**
Vinyl Chloride	2	0.3
Xylene, o	5	4.9
Xylene, m&p	10***	0.7
Xylene, o,m&p	15***	5.6
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

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TOWN OF OYSTER BAY

Department of Public Works
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Recovery Well RW-5 (October 15, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	**403**
Benzene	1***	**2.9**
Bromodichloromethane	50	0.7
Bromoform	50	0.4
Carbon Tetrachloride	5	**10.2**
Chlorobenzene	5	4.8
Chlorodibromomethane	50	1.0
Chloroethane	5	4.0
Chloroform	7***	3.9
Dichlorobenzene, o&p	6***	**9.4**
Dichlorobenzene, o,m&p	9***	**14.5**
1,1 Dichloroethane	5	4.9
1,2 Dichloroethane	0.6***	**2.1**
1,1 Dichloroethene	5***	**25.2**
cis-1,2 Dichloroethene	5	**17.2**
trans-1,2 Dichloroethene	5	**10.2**
1,2 Dichloropropane	1***	**12.0**
Ethylbenzene	5	**8.1**
Methylene Chloride	5	1.0
Tetrachloroethene	5***	**38.4**
Toluene	5	**6.9**
1,1,1 Trichloroethane	5	**20.0**
Trichloroethylene	5	**192**
Vinyl Chloride	2	**13.6**
Xylene, o	5	2.9
Xylene, m&p	10***	6.2
Xylene, o,m&p	15***	9.0
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

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** Compounds exceeding Class GA standards are highlighted.

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-5 (October 22, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	94.4
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.2
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	0.4
Dichlorobenzene, o,m&p	9***	<0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	**1.5**
1,1 Dichloroethene	5***	**7.5**
cis-1,2 Dichloroethene	5	0.4
trans-1,2 Dichloroethene	5	0.5
1,2 Dichloropropane	1***	**2.6**
Ethylbenzene	5	0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	**6.1**
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	**75.5**
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-5 (October 29, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	**143**
Benzene	1***	0.5
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.4
Dichlorobenzene, o&p	6***	3.8
Dichlorobenzene, o,m&p	9***	7.7
1,1 Dichloroethane	5	0.6
1,2 Dichloroethane	0.6***	0.4
1,1 Dichloroethene	5***	**6.5**
cis-1,2 Dichloroethene	5	**6.1**
trans-1,2 Dichloroethene	5	0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	0.6
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	**23.7**
Toluene	5	0.6
1,1,1 Trichloroethane	5	**5.3**
Trichloroethylene	5	**82.2**
Vinyl Chloride	2	0.6
Xylene, o	5	**7.2**
Xylene, m&p	10***	0.5
Xylene, o,m&p	15***	**7.7**
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-5 (November 5, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	**103**
Benzene	1***	0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.2
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.7
Dichlorobenzene, o&p	6***	3.1
Dichlorobenzene, o,m&p	9***	**12.1**
1,1 Dichloroethane	5	0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	1.8
cis-1,2 Dichloroethene	5	4.4
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	0.2
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	**36.4**
Toluene	5	0.2
1,1,1 Trichloroethane	5	1.9
Trichloroethylene	5	**29.7**
Vinyl Chloride	2	**2.1**
Xylene, o	5	**12.9**
Xylene, m&p	10***	0.2
Xylene, o,m&p	15***	13.1
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-5 (November 12, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	47.6
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.2
Dichlorobenzene, o&p	6***	0.5
Dichlorobenzene, o,m&p	9***	1.3
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	0.9
cis-1,2 Dichloroethene	5	2.8
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	**20.2**
Toluene	5	<0.1
1,1,1 Trichloroethane	5	0.9
Trichloroethylene	5	**21.3**
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

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TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Recovery Well RW-5 (November 19, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	**143**
Benzene	1***	0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	0.4
Dichlorobenzene, o,m&p	9***	0.8
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	**8.7**
cis-1,2 Dichloroethene	5	**6.1**
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	**18.7**
Toluene	5	0.1
1,1,1 Trichloroethane	5	**7.9**
Trichloroethylene	5	**94.4**
Vinyl Chloride	2	0.2
Xylene, o	5	**5.9**
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	6.0
Dichlorodifluoromethane	5	<0.2
Isopropylbenzene	5	<0.2
n-Butylbenzene	5	<0.2
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding Class GA standard are highlighted.

*** Revised values effective in January,1998.

APPENDIX D

“Quarterly Monitoring Report
Fourth Quarter 2010 Results
Old Bethpage Landfill
Old Bethpage, New York”

Gannett Fleming, February 2011

TOWN OF OYSTER BAY

QUARTERLY MONITORING REPORT
FOURTH QUARTER 2010 RESULTS
OLD BETHPAGE LANDFILL
OLD BETHPAGE, NEW YORK

February 2011

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APPENDICES

APPENDIX A — LABORATORY DATA REPORTS

APPENDIX B — FOURTH QUARTER GROUNDWATER SAMPLING LOGS

APPENDIX C — NASSAU COUNTY MONITORING WELL DATA

APPENDIX D — GROUNDWATER SAMPLING PROTOCOLS

1.0 INTRODUCTION

This report was prepared at the request of the Town of Oyster Bay to summarize and evaluate the data collected in accordance with the requirements of the Remedial Action Plan (RAP), Appendix I of the 1988 Record of Decision (New York State Department of Environmental Conservation [NYSDEC] and the United States Environmental Protection Agency [USEPA]). The purpose of the quarterly groundwater-monitoring program is to assess the progress of the groundwater cleanup and to determine whether the termination criteria set forth in the RAP have been met.

The groundwater remediation system at the Old Bethpage Landfill commenced operation on April 1, 1992. Geraghty & Miller initiated monthly hydraulic monitoring approximately 30 days after system start-up and monthly groundwater quality monitoring three months after system start-up. The frequency of hydraulic monitoring was reduced to quarterly beginning with the October 1993 sampling round.

2.0 WATER-LEVEL MEASUREMENTS AND MAPPING

A synoptic round of water-level measurements was taken in monitoring and recovery wells by Gannett Fleming (GF) on November 2, 2010. The depth to water and water-level elevation data are summarized in Table 1. The data was used to create the water table, shallow potentiometric, and deep potentiometric zone groundwater flow maps shown on Figures 1, 2, and 3, respectively. Each map shows the water-level elevation contours, groundwater flow lines, and the approximate extent of the volatile organic compound (VOC) plume.

Water-level elevations were measured in recovery wells RW-01, RW-02, RW-03, RW-04, and RW-05. Water-level elevations in the recovery well RW-01 decreased 1.71 feet, RW-02 decreased 2.70 feet, RW-03 increased 7.72 feet, RW-04 decreased 2.67, and RW-05 increased 7.29 feet from the third quarter 2010 reporting period.

Water-level elevations in the monitoring wells decreased an average of 1.25 feet from the third quarter 2010 reporting period. The greatest change in water-level elevations occurred at monitoring well M-29A-R, where a decrease of 2.26 feet was observed.

The average system pumpage for the fourth quarter was approximately 272 gallons per minute (gpm). The fourth quarter pumpage data and recovery well downtime are summarized in Table 2.

At the request of the NYSDEC and Nassau County (NC), NC monitoring wells have been added to the modeling effort for the quarterly and annual monitoring reports. Water-level elevations from the NC wells are included on the Water Table Flow Map, Shallow Potentiometric Flow Map, and Deep Potentiometric Flow Map to enhance hydraulic monitoring of the area. The NC Department of Public Works gauged these wells on November 3, 2010, and provided GF the water level measurements. This data is included as Appendix C.

3.0 GROUNDWATER SAMPLING AND CONTAMINANT DISTRIBUTION

Gannett Fleming sampled monitoring wells LF-1, M-30B-R, MW-05B, MW-06A, MW-06B, MW-06C, MW-06E, MW-06F, MW-07B-R, MW-08A, MW-08B, MW-09B, MW-09C, MW-11A, MW-11B, and OBS-1 on November 4-5 and November 11, 2010, in accordance with the *Protocols for Sampling Groundwater under the Old Bethpage Solid Waste Disposal Complex Remedial Action Plan* prepared by Geraghty & Miller. Quality assurance/quality control (QA/QC) samples were analyzed, including one field blank, one field duplicate, and three trip blanks. Samples collected for metals and wet chemistry were analyzed by H2M Laboratories of Melville, New York. Samples for VOCs were analyzed by the Town of Oyster Bay Environmental Laboratory. The analytical results are summarized in Tables 3 through 8 and the laboratory data reports are provided in Appendix A.

A dedicated submersible pump, a Grundfos® Redi-Flo II pump, and/or disposable bailers were used to purge and sample each monitoring well. All non-dedicated, down-well equipment were decontaminated before use and after sampling each well by washing with a laboratory grade detergent solution and rinsing with potable water to minimize the possibility of cross contamination.

Field measurements of pH, temperature, conductivity, turbidity, and oxidation reduction potential (ORP) were observed following the purge of each of the three well volumes. Field observations and measurements are documented on the well sampling logs provided in Appendix B.

The analytical data was used to create the contaminant plume maps shown on Figures 4, 5, and 6. The fourth quarter analytical data are summarized below and compared to the second quarter sampling results.

3.1 Volatile Organic Compound (VOC) Plume

The extent and distribution of VOCs detected during the fourth quarter is consistent with previous sampling rounds. Total VOC concentrations detected during the fourth quarter sampling round ranged from less than the laboratory detection limit to 310 micrograms per liter (µg/L), with the highest concentration found in the sample from MW-07B-R. The sample from MW-06B had the next highest total VOC concentration followed in decreasing order by MW-08A, OBS-1, MW-06C, LF-1, MW-11A, MW-06E, MW-08B, MW-09B, MW-11B, and MW-06A. VOC concentrations were reported at less than the laboratory-detection limit at wells MW-05B, M-30B-R, MW-09C, and MW-06F.

3.1.1 Volatile Halogenated Organics (VHO) Group

According to laboratory analytical results, seven VHO compounds were detected during the fourth quarter 2010 sampling round: chloroform, 1,1-dichloroethane, cis-1,2-dichloroethene, tetrachloroethene, 1,1,1-thichloroethane, trichloroethylene, and vinyl chloride. Tetrachloroethene was found at the greatest frequency, in 10 of 16 samples. The following table presents concentrations of total VHOs found during GF's third quarter and fourth quarter 2010 sampling rounds.

Well	3rd Quarter 2010 (µg/L)	4th Quarter 2010 (µg/L)
MW-06A	0.8	0.4
MW-06B	0.5	2.3
MW-06C	0.5	1.1
MW-06E	1.2	0.4
MW-07B-R	1187.2	310.4
MW-08A	8.8	11.1
MW-08B	ND	0.8
MW-09B	ND	0.2
MW-11A	1.1	2.0
MW-11B	ND	0.5
LF-1	ND	3.0
OBS-1	3.4	2.5

VHO concentrations remained unchanged at less than the laboratory-detection limits at monitoring wells MW-05B, MW-06F, MW-09C, and M-30B-R.

Figure 4 illustrates the approximate extent and distribution of total VHOs in groundwater during the fourth quarter 2010 sampling event.

3.1.2 Aromatic Hydrocarbons

According to laboratory analytical results, nine aromatic hydrocarbons were detected during the fourth quarter 2010 sampling round: benzene, n-butylbenzene, tert-butylbenzene, chlorobenzene, dichlorobenzene-o,m&p, isopropylbenzene, toluene, m/p-xylene, and o-xylene. Benzene was found at the greatest frequency, in 6 of 16 samples. The following table shows concentrations of total aromatic hydrocarbons found during GF's third and fourth quarter 2010 sampling rounds.

Well	3rd Quarter 2010 (µg/L)	4th Quarter 2010 (µg/L)
MW-06B	8.6	27.5
MW-06C	3.5	7.4
MW-06E	0.6	0.8
MW-09B	ND	0.3
MW-11A	ND	0.5
LF-1	0.5	2.0
OBS-1	1.9	6.6

Aromatic hydrocarbon concentrations remained unchanged below the laboratory-detection limit for monitoring wells M-30B-R, MW-05B, MW-06A, MW-06F, MW-07B-R, MW-08A, MW-08B, MW-09C, and MW-11B.

Figure 5 illustrates the approximate extent and distribution of aromatic hydrocarbons during the fourth quarter 2010 sampling event.

3.1.3 Tetrachloroethene

Tetrachloroethene was detected in the samples from monitoring wells LF-1, MW-06B, MW-06C, MW-06E, MW-07B-R, MW-08A, MW-08B, MW-09B, MW-11A, and OBS-1. The following table shows changes in total tetrachloroethene from the third quarter to fourth quarter 2010.

Well	3rd Quarter 2010 (µg/L)	4th Quarter 2010 (µg/L)
LF-1	ND	0.2
MW-06B	ND	0.4
MW-06C	ND	0.2
MW-06E	ND	0.2
MW-07B-R	57.8	14.4
MW-08A	8.2	10.3
MW-08B	ND	0.6
MW-09B	ND	0.2
MW-11A	0.3	0.6
OBS-1	0.2	0.7

Tetrachloroethene concentrations remained unchanged at less than the laboratory-detection limit at wells M-30B-R, MW-05B, MW-06A, MW-06F, MW-09C, and MW-11B.

Figure 6 illustrates the approximate extent and distribution of tetrachloroethene during the fourth quarter 2010 sampling event.

3.2 Inorganic Analyte Plume

The fourth quarter 2010 sampling data reported little change in the extent and concentration of leachate parameters from previous sampling rounds. The leachate parameters were reported (in order of lowest to highest concentrations) in samples from monitoring wells MW-11A, MW-11B, MW-06A, MW-07B-R, MW-08A, MW-09B, M-30B-R, MW-08B, MW-09C, MW-05B, OBS-1, MW-06E, MW-06F, LF-1, MW-06C, and MW-06B.

3.3 Quality Assurance/Quality Control

One duplicate, one field blank, and three trip blank samples were analyzed for QA/QC purposes. The duplicate sample was collected from monitoring well MW-07B-R. All VHO compounds were in good agreement with the exception of cis-1,2-dichloroethene, which was reported to have a relative percent difference greater than 20%. There was good agreement between the sample and duplicate data for all aromatic hydrocarbon compounds. The following wet chemistry parameters were reported to have a relative percent difference greater than 20%: total alkalinity (as $CaCO_3$), bicarbonate, hardness (as $CaCO_3$), total kjeldahl nitrogen, and total dissolved solids. All results for total and dissolved metals were in good agreement with the exception of total and dissolved iron, and total zinc, which were reported to have a relative percent difference greater than 20%. The analytical results for the trip blank samples collected on November 3, November 4, and November 11, 2010 reported all VHO and aromatic hydrocarbon compounds as non-detect.

The laboratory analytical results for the field blank sample collected on November 4, 2010 reported all VHO compounds, aromatic hydrocarbon compounds, and wet chemistry parameters as non-detect. The filtered and unfiltered (dissolved) metals analysis reported slight detections of total and dissolved potassium. The samples associated with this field blank do not show elevated levels of these analytes, and therefore the data collected for the associated samples is valid.

4.0 FINDINGS

1. The average estimated system flow of 272 gallons per minute was sufficient to control the VOC plume.

2. The extent and distribution of VHOs, aromatic hydrocarbons, tetrachloroethene, and leachate parameters detected during the fourth quarter 2010 sampling round are consistent with previous sampling rounds.

3. The leachate parameters were reported (in order of lowest to highest concentrations) in samples from monitoring wells MW-11A, MW-11B, MW-06A, MW-07B-R, MW-08A, MW-09B, M-30B-R, MW-08B, MW-09C, MW-05B, OBS-1, MW-06E, MW-06F, LF-1, MW-06C, and MW-06B.

5.0 RECOMMENDATIONS

1. Continue to evaluate water-level trends and assess the operation and maintenance of the monitoring well network in response to local and regional water-level elevations.

2. Continue the quarterly hydraulic monitoring and water quality sampling to track the effectiveness of the remediation system.

TABLES

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

WATER LEVEL MEASUREMENTS - FOURTH QUARTER 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	DELTA WATER ELEV. (feet)	WATER ELEVATION (feet)
EW-01A	8/24/2010	128.59	62.29		66.30
EW-01A	11/2/2010	128.59	63.85	-1.56	64.74
EW-01B	8/24/2010	129.11	62.81		66.30
EW-01B	11/2/2010	129.11	64.12	-1.31	64.99
EW-01C	8/24/2010	129.02	62.65		66.37
EW-01C	11/2/2010	129.02	64.58	-1.93	64.44
EW-02A	8/24/2010	155.94	90.45		65.49
EW-02A	11/2/2010	155.94	91.70	-1.25	64.24
EW-02B	8/24/2010	156.33	90.71		65.62
EW-02B	11/2/2010	156.33	91.91	-1.20	64.42
EW-02C	8/24/2010	156.27	90.66		65.61
EW-02C	11/2/2010	156.27	92.15	-1.49	64.12
EW-03A	8/24/2010	157.71	93.87		63.84
EW-03A	11/2/2010	157.71	95.02	-1.15	62.69
EW-03B	8/24/2010	157.84	94.18		63.66
EW-03B	11/2/2010	157.84	95.29	-1.11	62.55
EW-03C	8/24/2010	157.72	94.10		63.62
EW-03C	11/2/2010	157.72	95.22	-1.12	62.50
M-29A-R	8/24/2010	157.83	87.48		70.35
M-29A-R	11/2/2010	157.83	89.74	-2.26	68.09

MP - Measuring Point (Typically Top of Casing)
MSL - Mean Sea Level
NM - Not Measured
N/A - Not Applicable

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

WATER LEVEL MEASUREMENTS - FOURTH QUARTER 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	DELTA WATER ELEV. (feet)	WATER ELEVATION (feet)
M-29B	8/24/2010	149.67	80.04		69.63
M-29B	11/2/2010	149.67	81.16	-1.12	68.51
MW-30A	8/24/2010	155.95	86.82		69.13
MW-30A	11/2/2010	155.95	87.85	-1.03	68.10
M-30B-R	8/24/2010	153.15	84.00		69.15
M-30B-R	11/2/2010	153.15	85.03	-1.03	68.12
MW-05A	8/24/2010	135.83	70.07		65.76
MW-05A	11/2/2010	135.83	71.62	-1.55	64.21
MW-05B	8/24/2010	137.05	71.31		65.74
MW-05B	11/2/2010	137.05	72.81	-1.50	64.24
MW-06A	8/24/2010	158.74	93.62		65.12
MW-06A	11/2/2010	158.74	94.95	-1.33	63.79
MW-06B	8/24/2010	159.02	93.91		65.11
MW-06B	11/2/2010	159.02	95.22	-1.31	63.80
MW-06C	8/24/2010	158.59	93.43		65.16
MW-06C	11/2/2010	158.59	94.81	-1.38	63.78
MW-06D	8/24/2010	158.90	94.90		64.00
MW-06D	11/2/2010	158.90	95.14	-0.24	63.76
MW-06E	8/24/2010	159.69	94.77		64.92
MW-06E	11/2/2010	159.69	96.00	-1.23	63.69

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N/A - Not Applicable

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

WATER LEVEL MEASUREMENTS - FOURTH QUARTER 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	DELTA WATER ELEV. (feet)	WATER ELEVATION (feet)
MW-06F	8/24/2010	158.66	94.05		64.61
MW-06F	11/2/2010	158.66	95.14	-1.09	63.52
MW-07A	8/24/2010	147.09	85.02		62.07
MW-07A	11/2/2010	147.09	86.26	-1.24	60.83
MW-07B-R	8/24/2010	146.42	86.08		60.34
MW-07B-R	11/2/2010	146.42	86.95	-0.87	59.47
MW-08A	8/24/2010	133.55	68.19		65.36
MW-08A	11/2/2010	133.55	69.44	-1.25	64.11
MW-08B	8/24/2010	132.85	67.87		64.98
MW-08B	11/2/2010	132.85	68.78	-0.91	64.07
MW-08C	8/24/2010	134.34	68.55		65.79
MW-08C	11/2/2010	134.34	69.76	-1.21	64.58
MW-09A	8/24/2010	151.98	88.24		63.74
MW-09A	11/2/2010	151.98	89.55	-1.31	62.43
MW-09B	8/24/2010	152.07	89.99		62.08
MW-09B	11/2/2010	152.07	91.15	-1.16	60.92
MW-09C	8/24/2010	152.23	91.28		60.95
MW-09C	11/2/2010	152.23	92.37	-1.09	59.86
MW-09D	8/24/2010	151.68	90.38		61.30
MW-09D	11/2/2010	151.68	91.44	-1.06	60.24

MP - Measuring Point (Typically Top of Casing)
MSL - Mean Sea Level
NM - Not Measured
N/A - Not Applicable

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

WATER LEVEL MEASUREMENTS - FOURTH QUARTER 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	DELTA WATER ELEV. (feet)	WATER ELEVATION (feet)
MW-10A	8/24/2010	159.82	94.79		65.03
MW-10A	11/2/2010	159.82	95.94	-1.15	63.88
MW-10B	8/24/2010	160.01	95.20		64.81
MW-10B	11/2/2010	160.01	96.21	-1.01	63.80
MW-10C	8/24/2010	159.00	94.41		64.59
MW-10C	11/2/2010	159.00	95.34	-0.93	63.66
MW-10D	8/24/2010	159.81	95.51		64.30
MW-10D	11/2/2010	159.81	96.49	-0.98	63.32
MW-11A	8/24/2010	78.71	22.62		56.09
MW-11A	11/2/2010	78.71	24.24	-1.62	54.47
MW-11B	8/24/2010	78.51	22.71		55.80
MW-11B	11/2/2010	78.51	24.03	-1.32	54.48
N-9980	8/24/2010	80.14	23.69		56.45
N-9980	11/2/2010	80.14	25.24	-1.55	54.90
OBS-1	8/24/2010	108.59	47.79		60.80
OBS-1	11/2/2010	108.59	49.29	-1.50	59.30
RW-01	8/24/2010	110.94	57.02		53.92
RW-01	11/2/2010	110.94	58.73	-1.71	52.21
RW-02	8/24/2010	145.31	93.51		51.80
RW-02	11/2/2010	145.31	96.21	-2.70	49.10

MP - Measuring Point (Typically Top of Casing)
MSL - Mean Sea Level
NM - Not Measured
N/A - Not Applicable

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

WATER LEVEL MEASUREMENTS - FOURTH QUARTER 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	DELTA WATER ELEV. (feet)	WATER ELEVATION (feet)
RW-03	8/24/2010	120.92	66.91		54.01
RW-03	11/2/2010	120.92	59.19	7.72	61.73
RW-04	8/24/2010	144.82	86.33		58.49
RW-04	11/2/2010	144.82	89.00	-2.67	55.82
RW-05	8/24/2010	149.74	93.15		56.59
RW-05	11/2/2010	149.74	85.86	7.29	63.88
TW-1	8/24/2010	119.56	50.31		69.25
TW-1	11/2/2010	119.56	51.87	-1.56	67.69
TW-2	8/24/2010	116.02	49.00		67.02
TW-2	11/2/2010	116.02	50.35	-1.35	65.67
TW-3-R	8/24/2010	132.82	66.09		66.73
TW-3-R	11/2/2010	132.82	67.27	-1.18	65.55
LF-1	8/24/2010	109.92	43.30		66.62
LF-1	11/2/2010	109.92	44.53	-1.23	65.39
LF-2	8/24/2010	117.26	50.81		66.45
LF-2	11/2/2010	117.26	52.03	-1.22	65.23
LF-3	8/24/2010	124.95	56.15		68.80
LF-3	11/2/2010	124.95	57.28	-1.13	67.67
LF-4	8/24/2010	149.93	NM		N/A
LF-4	11/2/2010	149.93	NM	N/A	N/A

MP - Measuring Point (Typically Top of Casing)
MSL - Mean Sea Level
NM - Not Measured
N/A - Not Applicable

TABLE 2
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER REMEDIATION SYSTEM PUMPAGE RECORDS
OCTOBER THROUGH DECEMBER 2010

PERIOD: From 10/1/2010 to 12/31/2010 - Inclusive

Date	System Flow (gpm)	Remarks
10/1/10 - 10/6/10	226	GTF on-line 7 hours per day.
10/7/10-10/8/10	451	GTF on-line 14 hours per day.
10/9/10-10/10/10	208	GTF on-line 7 hours per day.
10/11/10	0	GTF off-line.
10/12/10	243	GTF on-line 7 hours.
10/13/10-10/15/10	451	GTF on-line 14 hours per day.
10/16/10-10/17/10	0	GTF off-line.
10/18/10-10/19/10	243	GTF on-line 7 hours per day.
10/20-10-10/22/10	451	GTF on-line 14 hours per day.
10/23/10-10/26/10	226	GTF on-line 7 hours per day.
10/27/10-10/29/10	451	GTF on-line 14 hours per day.
10/30/10-11/2/10	217	GTF on-line 7 hours per day.
11/3/10	417	GTF on-line 14 hours.
11/4/10	243	GTF on-line 7 hours.
11/5/10	451	GTF on-line 14 hours.
11/6/10-11/9/10	217	GTF on-line 7 hours per day.
11/10/10	451	GTF on-line 14 hours.
11/11/10	0	GTF off-line.
11/12/10	451	GTF on-line 14 hours.
11/13/10	208	GTF on-line 7 hours.
11/14/10	0	GTF off-line.
11/15/10-11/16/10	226	GTF on-line 7 hours per day.
11/17/10	417	GTF on-line 14 hours.
11/18/10	243	GTF on-line 7 hours.
11/19/10	451	GTF on-line 14 hours.
11/20/10-11/23/10	234	GTF on-line 7 hours per day.
11/24/10	451	GTF on-line 14 hours.
11/25/10	0	GTF off-line.
11/26/10-11/30/10	222	GTF on-line 7 hours per day.
12/1/10-12/3/10	440	GTF on-line 14 hours per day.

TABLE 2
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER REMEDIATION SYSTEM PUMPAGE RECORDS
OCTOBER THROUGH DECEMBER 2010

PERIOD: From 10/1/2010 to 12/31/2010 - Inclusive

Date	System Flow (gpm)	Remarks
12/4/10-12/7/10	226	GTF on-line 7 hours per day, RW-3 off-line.
12/8/20-12/10/10	451	GTF on-line 14 hours per day, RW-3 off-line.
12/11/10-12/14/10	226	GTF on-line 7 hours per day, RW-3 off-line.
12/15/10-12/16/10	486	GTF on-line 14 hours per day, RW-3 off-line.
12/17/10-12/21/10	208	GTF on-line 7 hours per day, RW-3 off-line.
12/22/10-12/24/10	440	GTF on-line 14 hours per day, RW-3 off-line.
12/25/10	0	GTF off-line.
12/26/10	208	GTF on-line 7 hours, RW-3 off-line.
12/27/10-12/29/10	0	GTF off-line.
12/30/10	208	GTF on-line 7 hours, RW-3 off-line.
12/31/10	417	GTF on-line 14 hours, RW-3 off-line.
Average Flow	272	

TABLE 3
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
VOLATILE HALOGENATED ORGANIC COMPOUNDS

CONSTITUENT	M-30B-R 11/3/2010	MW-05B 11/11/2010	MW-06A 11/3/2010	MW-06B 11/3/2010	MW-06C 11/3/2010	MW-06E 11/3/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.5	0.3	0.4
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.4	0.2	0.2
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethylene	0.2 U	0.2 U	0.4	0.6	0.3	0.3
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.8	0.3	0.2 U
Sum of Constituents	ND	ND	0.4	2.3	1.1	1.2

Notes:
All concentrations in micrograms per liter (µg/L) or parts per billion (ppb)
U - Analyzed for but not detected
J - Estimated Value
ND - Not Detected
NA - Not Analyzed
Results appearing bold indicate concentrations greater than the action level

TABLE 3
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
VOLATILE HALOGENATED ORGANIC COMPOUNDS

CONSTITUENT	MW-06F 11/3/2010	MW-07B-R 11/4/2010	MW-07B-R DUP 11/4/2010	MW-08A 11/3/2010	MW-08B 11/3/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.2 U	**40.0**	**52.0**	0.2 U	0.2 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	**14.4**	**13.4**	**10.3**	0.6
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethylene	0.2 U	**256**	**232**	0.8	0.2
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	ND	310.4	297.4	11.1	0.8

Notes:
All concentrations in micrograms per liter (µg/L) or parts per billion (ppb)
U - Analyzed for but not detected
J - Estimated Value
ND - Not Detected
NA - Not Analyzed
Results appearing bold indicate concentrations greater than the action level

TABLE 3
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
VOLATILE HALOGENATED ORGANIC COMPOUNDS

CONSTITUENT	MW-09B 11/4/2010	MW-09C 11/4/2010	MW-11A 11/4/2010	MW-11B 11/4/2010	LF-1 11/4/2010	OBS-1 11/4/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.2	0.1	0.1 U	0.3
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.9	0.4	0.3	0.8
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2	0.2 U	0.6	0.2 U	0.2	0.7
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4
Trichloroethylene	0.2 U	0.2 U	0.3	0.2 U	0.2 U	0.3
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	0.2	ND	2.0	0.5	0.5	2.5

Notes:
All concentrations in micrograms per liter (µg/L) or parts per billion (ppb)
U - Analyzed for but not detected
J - Estimated Value
ND - Not Detected
NA - Not Analyzed
Results appearing bold indicate concentrations greater than the action level

TABLE 3
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
VOLATILE HALOGENATED ORGANIC COMPOUNDS

CONSTITUENT	Field Blank 11/4/2010	Trip Blank 11/3/2010	Trip Blank 11/4/2010	Trip Blank 11/11/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethylene	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	ND	ND	ND	ND

Notes:
All concentrations in micrograms per liter (µg/L) or parts per billion (ppb)
U - Analyzed for but not detected
J - Estimated Value
ND - Not Detected
NA - Not Analyzed
Results appearing bold indicate concentrations greater than the action level

TABLE 4
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
AROMATIC HYDROCARBONS

CONSTITUENT	M-30B-R 11/3/2010	MW-05B 11/11/2010	MW-06A 11/3/2010	MW-06B 11/3/2010	MW-06C 11/3/2010	MW-06E 11/3/2010
Benzene	0.1 U	0.1 U	0.1 U	**1.9**	0.7	0.2
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.5	0.5	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.3	0.3	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	**5.1**	2.1	0.5
Dichlorobenzene, o&p	0.3 U	0.3 U	0.3 U	6.0	1.7	0.3 U
Dichlorobenzene, o,m&p	0.4 U	0.4 U	0.4 U	6.3	1.9	0.4 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	3.9	1.9	0.1
Toluene	0.1 U	0.1 U	0.1 U	0.3	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.4	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	1.6 U	**8.8**	1.6 U	1.6 U
Sum of Constituents	ND	ND	ND	27.5	7.4	0.8

Notes:
ND - Not Detected
U - Analyzed for but not detected
J - Estimated Value
NA - Not Analyzed
All concentrations in micrograms per liter (µg/L) or parts per billion (ppb)
Results appearing bold indicate concentrations greater than the action level

TABLE 4
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
AROMATIC HYDROCARBONS

CONSTITUENT	MW-06F 11/3/2010	MW-07B-R 11/4/2010	MW-07B-R DUP 11/4/2010	MW-08A 11/3/2010	MW-08B 11/3/2010
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorobenzene, o&p	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Dichlorobenzene, o,m&p	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Sum of Constituents	ND	ND	ND	ND	ND

Notes:
ND - Not Detected
U - Analyzed for but not detected
J - Estimated Value
NA - Not Analyzed
All concentrations in micrograms per liter (µg/L) or parts per billion (ppb)
Results appearing bold indicate concentrations greater than the action level

TABLE 4
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
AROMATIC HYDROCARBONS

CONSTITUENT	MW-09B 11/4/2010	MW-09C 11/4/2010	MW-11A 11/4/2010	MW-11B 11/4/2010	LF-1 11/4/2010	OBS-1 11/4/2010
Benzene	0.3	0.1 U	0.5	0.1 U	0.1 U	0.4
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	1.4	0.7
Dichlorobenzene, o&p	0.3 U	0.3 U	0.3 U	0.3 U	0.6	3.0
Dichlorobenzene, o,m&p	0.4 U	0.4 U	0.4 U	0.4 U	0.6	3.5
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Sum of Constituents	0.3	ND	0.5	ND	2.0	6.6

Notes:
ND - Not Detected
U - Analyzed for but not detected
J - Estimated Value
NA - Not Analyzed
All concentrations in micrograms per liter (µg/L) or parts per billion (ppb)
Results appearing bold indicate concentrations greater than the action level

TABLE 4
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
AROMATIC HYDROCARBONS

CONSTITUENT	Field Blank 11/4/2010	Trip Blank 11/3/2010	Trip Blank 11/4/2010	Trip Blank 11/11/2010
Benzene	0.1 U	0.1 U	0.1 U	0.1 U
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorobenzene, o&p	0.3 U	0.3 U	0.3 U	0.3 U
Dichlorobenzene, o,m&p	0.4 U	0.4 U	0.4 U	0.4 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U
Sum of Constituents	ND	ND	ND	ND

Notes:
ND - Not Detected
U - Analyzed for but not detected
J - Estimated Value
NA - Not Analyzed
All concentrations in micrograms per liter (µg/L) or parts per billion (ppb)
Results appearing bold indicate concentrations greater than the action level

TABLE 5
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
TETRACHLOROETHENE

CONSTITUENT	SAMPLE ID DATE	LF-1 11/4/2010	M-30B-R 11/3/2010	MW-05B 11/11/2010	MW-06A 11/3/2010	MW-06B 11/3/2010	MW-06C 11/3/2010	MW-06E 11/3/2010
Tetrachloroethene		0.2	0.2 U	0.2 U	0.2 U	0.4	0.2	0.2

CONSTITUENT	SAMPLE ID DATE	MW-06F 11/3/2010	MW-07B-R 11/4/2010	MW-07B-R DUP 11/4/2010	MW-08A 11/3/2010	MW-08B 11/3/2010	MW-09B 11/4/2010	MW-09C 11/4/2010
Tetrachloroethene		0.2 U	**14.4**	**13.4**	**10.3**	0.6	0.2	0.2 U

CONSTITUENT	SAMPLE ID DATE	OBS-1 11/4/2010	MW-11A 11/4/2010	MW-11B 11/4/2010	FIELD BLANK 11/4/2010	TRIP BLANK 11/3/2010	TRIP BLANK 11/4/2010	TRIP BLANK 11/11/2010
Tetrachloroethene		0.7	0.6	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

Notes:
All concentrations in micrograms per liter (µg/L) or parts per billion (ppb)
ND - Not Detected
U - Analyzed for but not detected
J - Estimated Value
NA - Not Analyzed
Bold indicates concentration exceeds NYSDEC TOGS 1.1.1 Ambient Water Quality Standards

TABLE 6
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
RECOVERY WELL SAMPLING RESULTS - FOURTH QUARTER 2010
VOLATILE HALOGENATED ORGANIC COMPOUNDS

CONSTITUENT	RW-01 11/5/2010	RW-02 11/5/2010	RW-03 10/29/2010	RW-04 11/5/2010	RW-05 11/5/2010
Bromodichloromethane	0.3 U	0.3 U	0.4	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1	0.4	0.4	0.7
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	1.8
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.3	0.4	0.9	0.7	4.4
1,2-Dichloropropane	0.1 U	0.1 U	0.6	0.3	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2	1.8	**10.4**	**36.4**
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1	1.9
Trichloroethylene	0.2	0.2	3.3	**5.9**	**29.7**
Vinyl chloride	0.6	0.2	0.2 U	0.2 U	**2.1**
Sum of Constituents	1.1	1.1	7.4	17.8	77.2

Notes:
All units are micrograms per liter (µg/L) or parts per billion (ppb)
ND - Not Detected
U - Analyzed for but not detected
Results appearing bold indicate concentrations greater than the action level

TABLE 6
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
RECOVERY WELL SAMPLING RESULTS - FOURTH QUARTER 2010
AROMATIC HYDROCARBONS

CONSTITUENT	RW-01 11/5/2010	RW-02 11/5/2010	RW-03 10/29/2010	RW-04 11/5/2010	RW-05 11/5/2010
Benzene	0.1	0.1	0.1 U	0.1	0.1
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.3	0.1	0.5	0.1 U	0.2
Dichlorobenzene, o&p	1.0	0.1	1.0	0.6	3.1
Dichlorobenzene, o,m&p	1.4	0.5	1.2	1.0	12.1
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1	0.2
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1	0.2
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2
o-Xylene	2.6	1.6	1.6 U	1.6 U	**12.9**
Sum of Constituents	4.4	2.3	1.7	1.3	25.9

Notes:
All units are micrograms per liter (µg/L) or parts per billion (ppb)
ND - Not Detected
U - Analyzed for but not detected
Results appearing bold indicate concentrations greater than the action level

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

CONSTITUENT	UNITS	LF-1 11/4/2010	M-30B-R 11/3/2010	MW-05B 11/11/2010	MW-06A 11/3/2010	MW-06B 11/3/2010
Alkalinity, Total (As $CaCO_3$)	(mg/l)	196 D	4.60	40.0 D	3.50	817 D
Aluminum	(mg/l)	NA	0.30	0.20 U	0.67	0.20 U
Barium	(mg/l)	NA	0.20 U	0.20 U	0.20 U	0.20 U
Bicarbonate	(mg/l)	196 D	4.6	40.0 D	3.5	816 D
Calcium	(mg/l)	NA	11.5	16.6	1.44	16.9
Carbonate	(mg/l)	5.0 U	1.0 U	2.0 U	1.0 U	20.0 U
Chloride	(mg/l)	189 D	70.4 D	116 D	7.46	315 D
Chromium	(mg/l)	NA	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	(mg/l)	NA	0.02 U	0.02 U	0.02 U	0.02 U
Copper	(mg/l)	NA	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	(µg/l)	10 U	10 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	(mg/l)	140 D	52.0 D	80.0 D	8.00	124 D
Iron	(mg/l)	NA	0.38	0.02	0.99	8.01
Lead	(µg/l)	NA	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	(mg/l)	NA	5.29	7.65	1.25	16.9
Manganese	(mg/l)	NA	0.02 U	5.54	0.02	0.05
Mercury	(µg/l)	NA	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	(mg/l)	NA	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	(mg/l)	0.10 U	2.92 D	2.48 D	0.92 D	0.10 U
Nitrite as N	(mg/l)	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	(mg/l)	16.9 D	0.10 U	0.17	0.22	98.7 D
Nitrogen, Kjeldahl, Total	(mg/l)	21.1 D	0.50 U	0.47	0.59 D	133 D
Phenolics, Total Recoverable	(µg/l)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	(mg/l)	NA	2.95	9.67	2.20	116
Sodium	(mg/l)	NA	40.1	57.1	5.83	258
Sulfate	(mg/l)	21.4	20.3	26.3	5.00 U	5.00 U
Total Dissolved Solids	(mg/l)	456	219	272	41	1120
Zinc	(mg/l)	NA	0.02 U	0.02 U	0.02	0.02 U

Notes:
NA - Not Analyzed
U - Analyzed for but not detected
D - Results for Dilution
µg/l - micrograms per liter or parts per billion (ppb)
mg/l - milligrams per liter or parts per million (ppm)

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

CONSTITUENT	UNITS	MW-06C 11/3/2010	MW-06E 11/3/2010	MW-06F 11/3/2010	MW-07B-R 11/4/2010	MW-07B-R DUP 11/4/2010
Alkalinity, Total (As $CaCO_3$)	(mg/l)	470 D	108 D	1.00 U	1.60	1.10
Aluminum	(mg/l)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Barium	(mg/l)	0.20 U	0.20 U	0.22	0.20 U	0.20 U
Bicarbonate	(mg/l)	470 D	108 D	1.0 U	1.6	1.1
Calcium	(mg/l)	45.5	17.0	38.8	4.14	4.16
Carbonate	(mg/l)	20.0 U	4.0 U	1.0 U	1.0 U	1.0 U
Chloride	(mg/l)	260 D	141 D	237 D	17.5	17.1
Chromium	(mg/l)	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	(mg/l)	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	(mg/l)	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	(µg/l)	10 U	10 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	(mg/l)	170 D	78.0 D	165 D	29.0	20.0
Iron	(mg/l)	5.66	3.54	0.10	0.49	0.88
Lead	(µg/l)	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	(mg/l)	12.5	8.35	16.6	2.21	2.28
Manganese	(mg/l)	0.07	0.43	0.09	0.09	0.09
Mercury	(µg/l)	0.2 U	0.2 U	0.3	0.2 U	0.2 U
Nickel	(mg/l)	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	(mg/l)	0.10 U	0.21	3.00 D	1.45 D	1.36
Nitrite as N	(mg/l)	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	(mg/l)	36.2 D	15.8 D	0.29	0.11	0.13
Nitrogen, Kjeldahl, Total	(mg/l)	51.1 D	21.8 D	0.10 U	0.37	0.55
Phenolics, Total Recoverable	(µg/l)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	(mg/l)	62.8	29.0	5.46	2.26	2.39
Sodium	(mg/l)	233	86.2	84.5	10.6	11.0
Sulfate	(mg/l)	41.3	33.1	5.00 U	12.7	13.2
Total Dissolved Solids	(mg/l)	920	388	617	75	60
Zinc	(mg/l)	0.02 U	0.03	0.04	0.05	0.04

Notes:
NA - Not Analyzed
U - Analyzed for but not detected
D - Results for Dilution
µg/l - micrograms per liter or parts per billion (ppb)
mg/l - milligrams per liter or parts per million (ppm)

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

CONSTITUENT	UNITS	MW-08A 11/3/2010	MW-08B 11/3/2010	MW-09B 11/4/2010	MW-09C 11/4/2010
Alkalinity, Total (As $CaCO_3$)	(mg/l)	1.75	9.20	15.6	46.0
Aluminum	(mg/l)	0.35	0.20 U	0.20 U	0.20 U
Barium	(mg/l)	0.20 U	0.20 U	0.20 U	0.20 U
Bicarbonate	(mg/l)	1.7	9.2	15.5	46.0
Calcium	(mg/l)	1.87	14.0	10.9	5.42
Carbonate	(mg/l)	1.0 U	1.0 U	1.0 U	1.0 U
Chloride	(mg/l)	9.11	63.3 D	55.6 D	81.8 D
Chromium	(mg/l)	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	(mg/l)	0.02 U	0.02 U	0.02 U	0.02 U
Copper	(mg/l)	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	(µg/l)	10 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	(mg/l)	9.00	54.0 D	52.0 D	44.0 D
Iron	(mg/l)	0.57	0.02 U	0.02 U	0.13
Lead	(µg/l)	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	(mg/l)	1.55	4.46	5.80	8.29
Manganese	(mg/l)	0.02 U	0.52	0.32	0.11
Mercury	(µg/l)	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	(mg/l)	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	(mg/l)	0.47 D	2.73 D	4.22 D	0.57
Nitrite as N	(mg/l)	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	(mg/l)	0.10 U	0.32	0.86	4.23 D
Nitrogen, Kjeldahl, Total	(mg/l)	0.10 U	0.2 U	0.10 U	5.78 D
Phenolics, Total Recoverable	(µg/l)	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	(mg/l)	2.54	10.7 U	7.94	13.7
Sodium	(mg/l)	5.45	33.4	34.0	48.4
Sulfate	(mg/l)	5.00 U	25.0 U	18.8	17.0
Total Dissolved Solids	(mg/l)	135	221	148	266
Zinc	(mg/l)	0.02 U	0.05	0.02 U	0.02 U

Notes:
NA - Not Analyzed
U - Analyzed for but not detected
D - Results for Dilution
µg/l - micrograms per liter or parts per billion (ppb)
mg/l - milligrams per liter or parts per million (ppm)

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

CONSTITUENT	UNITS	MW-11A 11/4/2010	MW-11B 11/4/2010	OBS-1 11/4/2010	Field Blank 11/4/2010
Alkalinity, Total (As $CaCO_3$)	(mg/l)	1.00 U	1.00 U	120 D	1.00 U
Aluminum	(mg/l)	0.20 U	0.20 U	0.20 U	0.20 U
Barium	(mg/l)	0.20 U	0.20 U	0.20 U	0.20 U
Bicarbonate	(mg/l)	1.0 U	1.0 U	120 D	1.0 U
Calcium	(mg/l)	3.31	2.70	20.0	0.20 U
Carbonate	(mg/l)	1.0 U	1.0 U	4.0 U	1.0 U
Chloride	(mg/l)	8.51	14.4	90.3 D	2.00 U
Chromium	(mg/l)	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	(mg/l)	0.02 U	0.02 U	0.02 U	0.02 U
Copper	(mg/l)	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	(µg/l)	10 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	(mg/l)	13.0	13.0	115 D	5.00 U
Iron	(mg/l)	0.03	0.05	0.04	0.02 U
Lead	(µg/l)	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	(mg/l)	1.98	1.52	14.0	0.20 U
Manganese	(mg/l)	0.02 U	0.02 U	2.18	0.02 U
Mercury	(µg/l)	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	(mg/l)	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	(mg/l)	3.04 D	1.27	0.36	0.10 U
Nitrite as N	(mg/l)	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	(mg/l)	0.10 U	0.17	9.40 D	0.10 U
Nitrogen, Kjeldahl, Total	(mg/l)	0.50 U	0.50 U	13.3 D	0.1 U
Phenolics, Total Recoverable	(µg/l)	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	(mg/l)	1.41	1.43	17.7	0.42
Sodium	(mg/l)	4.26	5.94	69.5	0.20 U
Sulfate	(mg/l)	5.00 U	5.00 U	58.2 D	5.00 U
Total Dissolved Solids	(mg/l)	26	31	309	10 U
Zinc	(mg/l)	0.02	0.02 U	0.02 U	0.02 U

Notes:
NA - Not Analyzed
U - Analyzed for but not detected
D - Results for Dilution
µg/l - micrograms per liter or parts per billion (ppb)
mg/l - milligrams per liter or parts per million (ppm)

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
DISSOLVED (FILTERED) METALS

CONSTITUENT	UNITS	LF-1 11/4/2010	M-30B-R 11/3/2010	MW-05B 11/11/2010	MW-06A 11/3/2010	MW-06B 11/3/2010
Aluminum	(mg/l)	NA	0.20 U	0.20 U	0.20 U	0.20 U
Barium	(mg/l)	NA	0.20 U	0.20 U	0.20 U	0.20 U
Calcium	(mg/l)	NA	12.0	14.0	1.37	17.9
Chromium	(mg/l)	NA	0.01 U	0.02	0.01 U	0.01 U
Chromium, Hexavalent (Diss.)	(mg/l)	NA	0.02 U	NA	0.02 U	0.02 U
Copper	(mg/l)	NA	0.02 U	0.02 U	0.02 U	0.02 U
Iron	(mg/l)	NA	0.03	0.17	0.02	0.86
Lead	(µg/l)	NA	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	(mg/l)	NA	5.50	6.70	1.21	18.0
Manganese	(mg/l)	NA	0.02 U	4.42	0.02 U	0.06
Mercury	(µg/l)	NA	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	(mg/l)	NA	0.04 U	0.10	0.04 U	0.04 U
Potassium	(mg/l)	NA	2.94	7.88	2.42	122
Sodium	(mg/l)	NA	41.4	48.5	6.82	273
Zinc	(mg/l)	NA	0.02 U	0.10	0.02 U	0.02 U

Notes:
µg/l - micrograms per liter or parts per billion (ppb)
mg/l - milligrams per liter or parts per million (ppm)
NA - Not Analyzed
U - Analyzed for but not detected

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
DISSOLVED (FILTERED) METALS

CONSTITUENT	UNITS	MW-06C 11/3/2010	MW-06E 11/3/2010	MW-06F 11/3/2010	MW-07B-R 11/4/2010	MW-07B-R DUP 11/4/2010
Aluminum	(mg/l)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Barium	(mg/l)	0.20 U	0.20 U	0.22	0.20 U	0.20 U
Calcium	(mg/l)	46.2	16.0	39.4	4.20	4.44
Chromium	(mg/l)	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent (Diss.)	(mg/l)	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	(mg/l)	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Iron	(mg/l)	1.17	3.25	0.10	0.03	0.18
Lead	(µg/l)	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	(mg/l)	12.8	7.91	17.0	2.40	2.45
Manganese	(mg/l)	0.07	0.40	0.09	0.09	0.10
Mercury	(µg/l)	0.20 U	0.20 U	0.24	0.20 U	0.20 U
Nickel	(mg/l)	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	(mg/l)	63.2	27.1	5.50	2.65	2.53
Sodium	(mg/l)	235	81.2	85.5	12.1	12.0
Zinc	(mg/l)	0.02 U	0.03	0.04	0.04	0.04

Notes:
µg/l - micrograms per liter or parts per billion (ppb)
mg/l - milligrams per liter or parts per million (ppm)
NA - Not Analyzed
U - Analyzed for but not detected

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
DISSOLVED (FILTERED) METALS

CONSTITUENT	UNITS	MW-08A 11/3/2010	MW-08B 11/3/2010	MW-09B 11/4/2010	MW-09C 11/4/2010
Aluminum	(mg/l)	0.20 U	0.20 U	0.20 U	0.20 U
Barium	(mg/l)	0.20 U	0.20 U	0.20 U	0.20 U
Calcium	(mg/l)	1.78	14.0	11.6	5.77
Chromium	(mg/l)	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent (Diss.)	(mg/l)	0.02 U	0.02 U	0.02 U	0.02 U
Copper	(mg/l)	0.02 U	0.02 U	0.02 U	0.02 U
Iron	(mg/l)	0.02	0.02 U	0.02 U	0.11
Lead	(µg/l)	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	(mg/l)	1.43	4.46	6.17	8.90
Manganese	(mg/l)	0.02 U	0.50	0.34	0.12
Mercury	(µg/l)	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	(mg/l)	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	(mg/l)	2.34	10.6	8.33	14.6
Sodium	(mg/l)	5.18	33.5	36.0	51.9
Zinc	(mg/l)	0.02 U	0.05	0.02 U	0.02 U

Notes:
µg/l - micrograms per liter or parts per billion (ppb)
mg/l - milligrams per liter or parts per million (ppm)
NA - Not Analyzed
U - Analyzed for but not detected

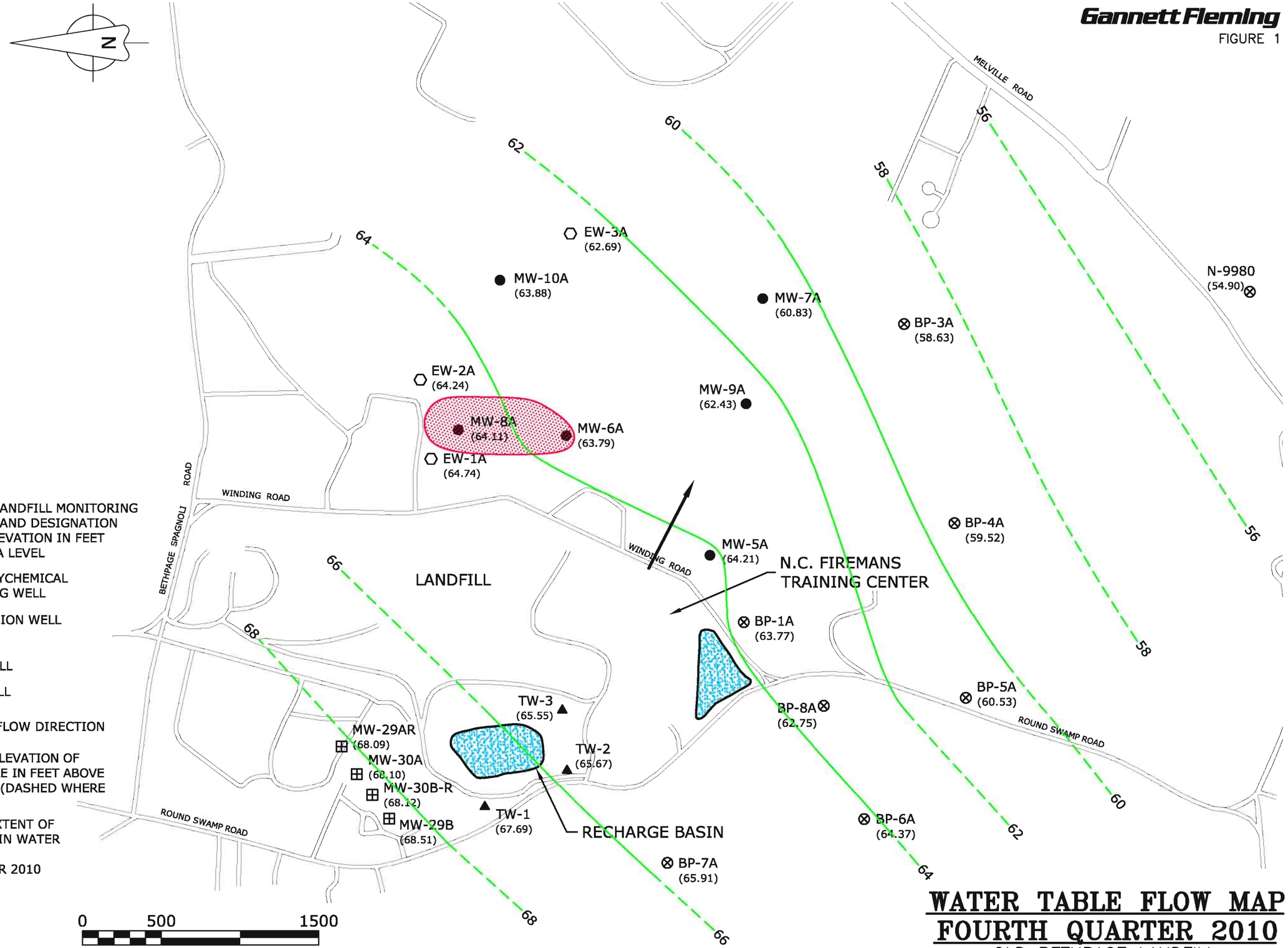
TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - FOURTH QUARTER 2010
DISSOLVED (FILTERED) METALS

CONSTITUENT	UNITS	MW-11A 11/4/2010	MW-11B 11/4/2010	OBS-1 11/4/2010	Field Blank 11/4/2010
Aluminum	(mg/l)	0.20 U	0.20 U	0.20 U	0.20 U
Barium	(mg/l)	0.20 U	0.20 U	0.20 U	0.20 U
Calcium	(mg/l)	3.22	2.98	20.1	0.20 U
Chromium	(mg/l)	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent (Diss.)	(mg/l)	0.02 U	0.02 U	0.02 U	0.02 U
Copper	(mg/l)	0.02 U	0.02 U	0.02 U	0.02 U
Iron	(mg/l)	0.02 U	0.02	0.03	0.02 U
Lead	(µg/l)	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	(mg/l)	1.92	1.66	14.1	0.20 U
Manganese	(mg/l)	0.02 U	0.02 U	2.15	0.02 U
Mercury	(µg/l)	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	(mg/l)	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	(mg/l)	1.35	1.42	17.8	0.59
Sodium	(mg/l)	4.19	6.56	69.9	0.20 U
Zinc	(mg/l)	0.02	0.02 U	0.02 U	0.02 U

Notes:
µg/l - micrograms per liter or parts per billion (ppb)
mg/l - milligrams per liter or parts per million (ppm)
NA - Not Analyzed
U - Analyzed for but not detected

Gannett Fleming

FIGURE 1



LEGEND

MW-5A (64.21) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
EW-3A ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
TW-2 ▲	PHASE II EXTENSION WELL
BP-1A ⊗	NASSAU COUNTY MONITORING WELL
M-29B ⊞	UPGRADIENT WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - FOURTH QUARTER 2010
(NM)	NOT MEASURED

WATER TABLE FLOW MAP FOURTH QUARTER 2010

OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

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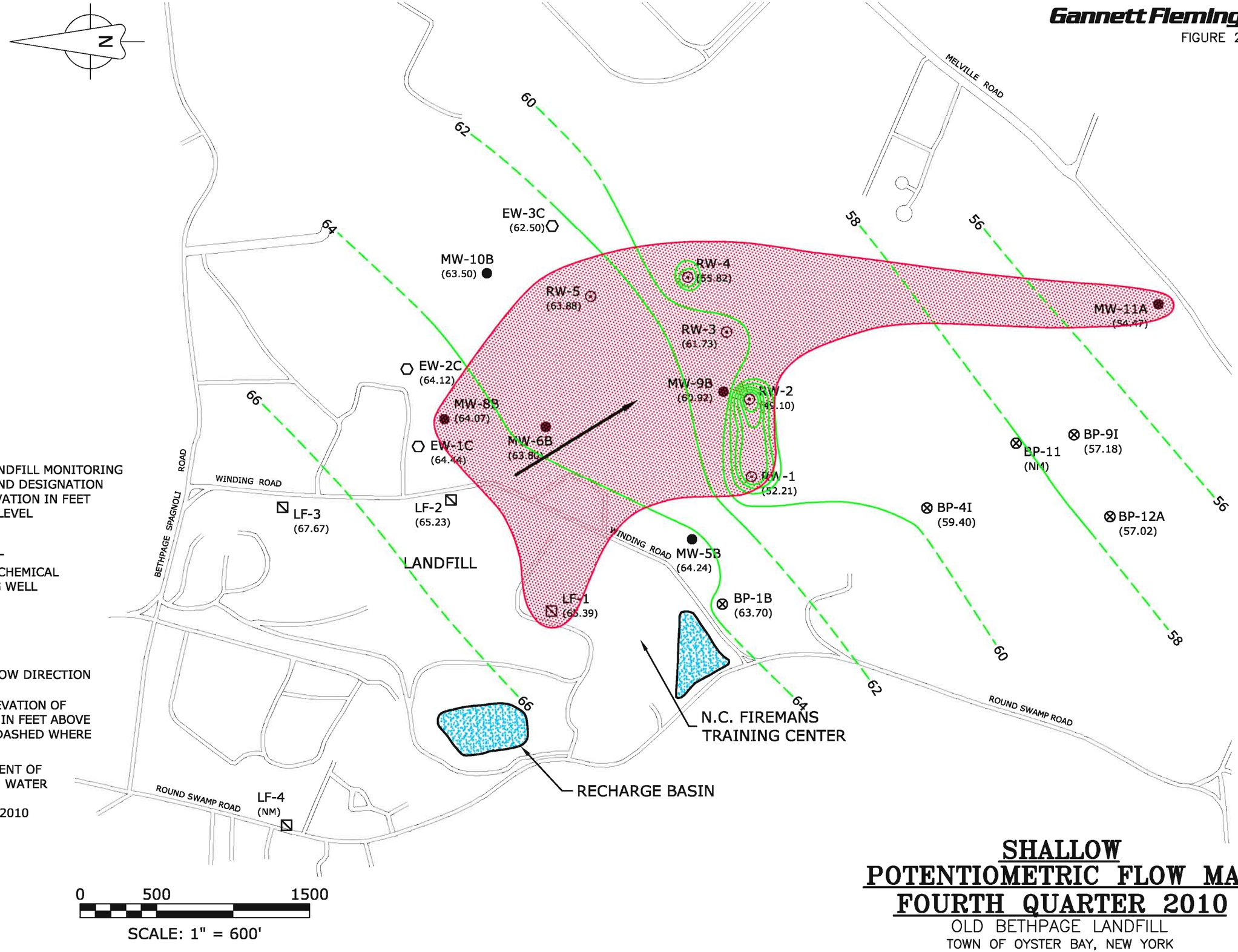
FIGURE 2



LEGEND

MW-5B (64.24) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
BP-4I ⊗	NASSAU COUNTY MONITORING WELL
EW-1C ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
RW-2 ⊙	RECOVERY WELL
LF-2 ⧅	PHASE III WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - FOURTH QUARTER 2010
(NM)	NOT MEASURED

SHALLOW POTENTIOMETRIC FLOW MAP FOURTH QUARTER 2010

OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

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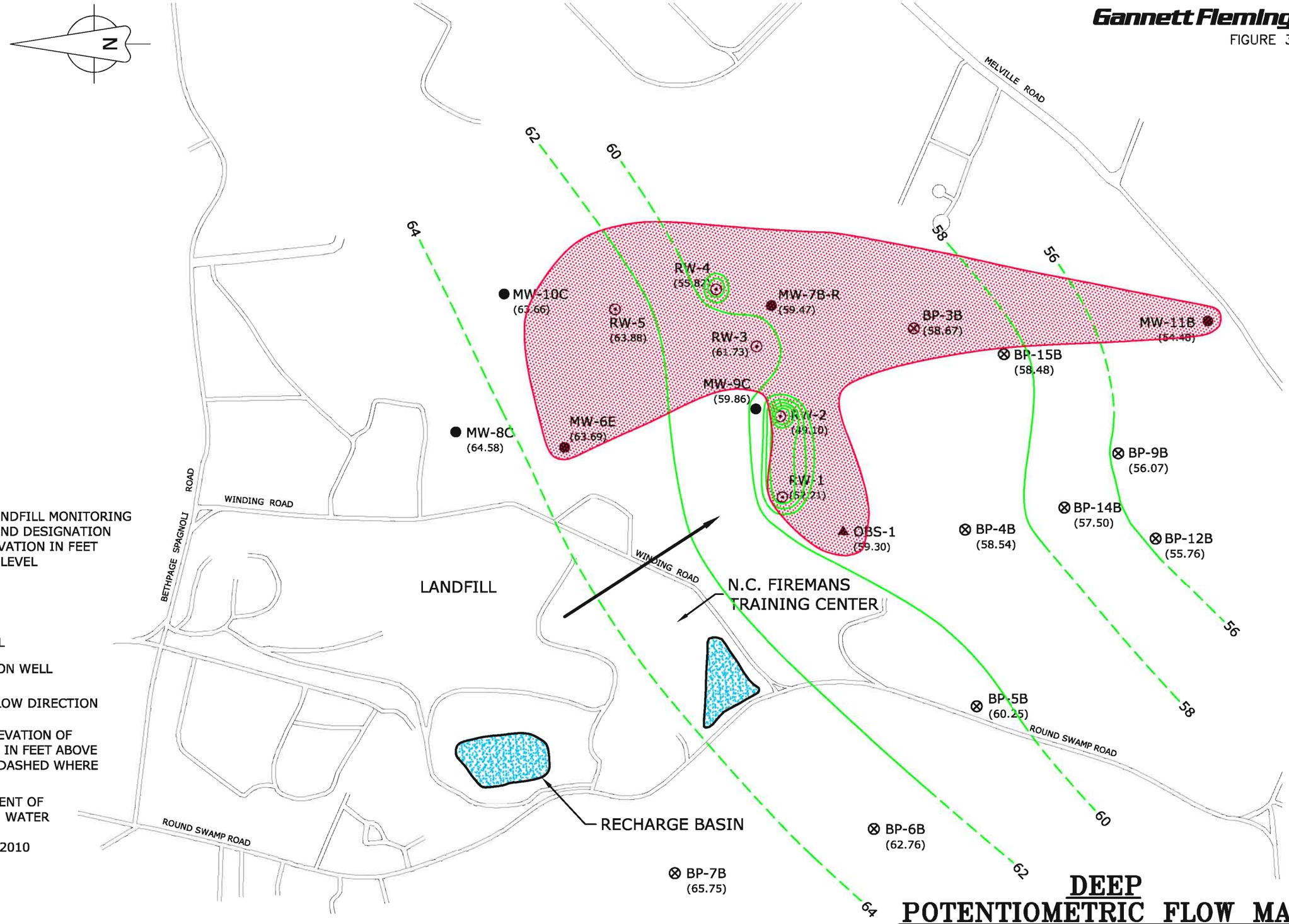
FIGURE 3



LEGEND

MW-8C (64.58) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
RW-2 ⊙	RECOVERY WELL
BP-4I ⊗	NASSAU COUNTY MONITORING WELL
OBS-1 ▲	PHASE II EXTENSION WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - FOURTH QUARTER 2010
(NM)	NOT MEASURED

DEEP POTENTIOMETRIC FLOW MAP FOURTH QUARTER 2010

OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

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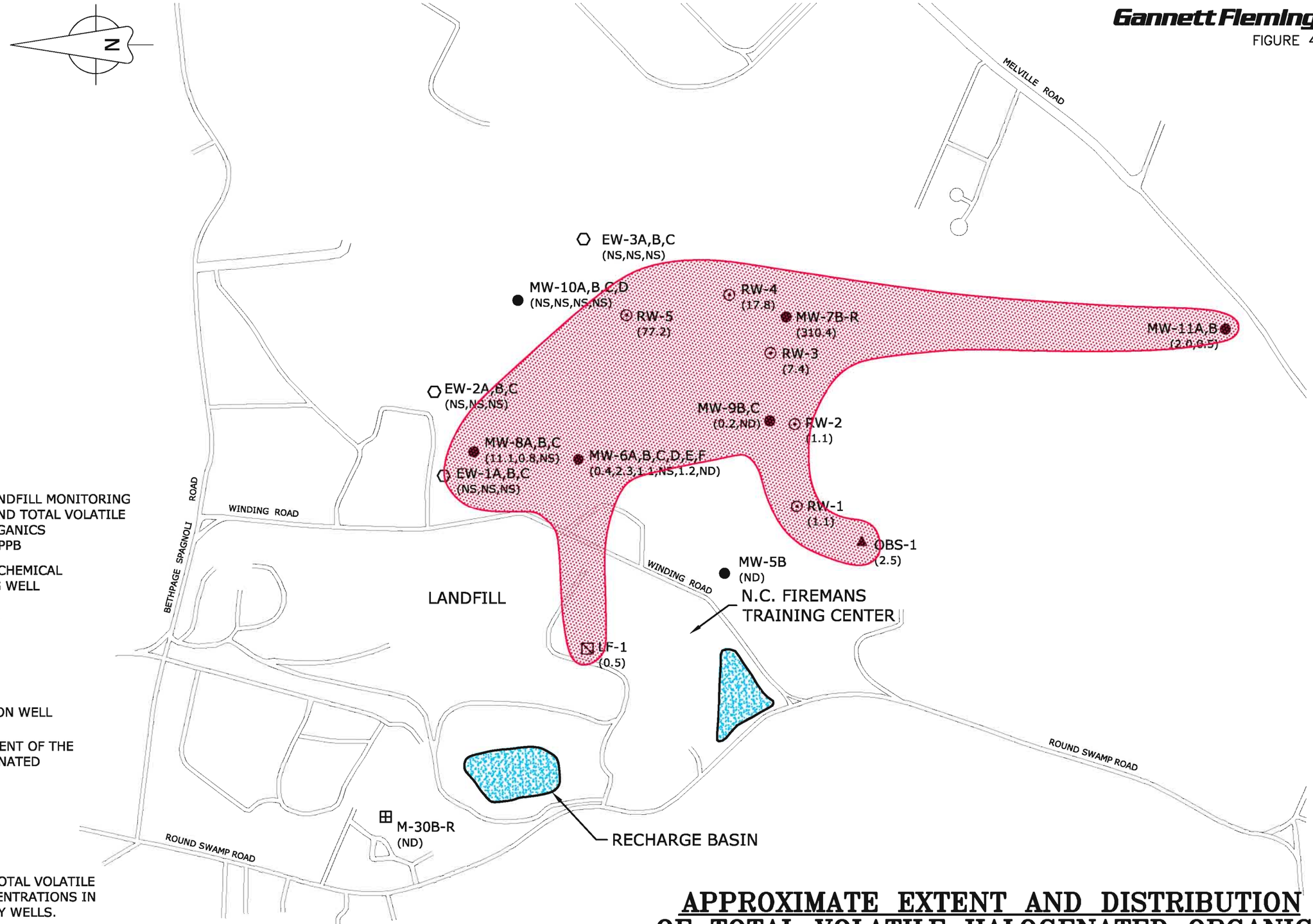
FIGURE 4



LEGEND

MW-5B (ND) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND TOTAL VOLATILE HALOGENATED ORGANICS CONCENTRATION, PPB
EW-1C ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
M-30B-R ⊞	UPGRADIENT WELL
RW-2 ⊙	RECOVERY WELL
LF-2 ⧅	PHASE III WELL
OBS-1 ▲	PHASE II EXTENSION WELL
	APPROXIMATE EXTENT OF THE VOLATILE HALOGENATED ORGANIC PLUME
(NS)	NOT SAMPLED
(ND)	NOT DETECTED

NOTE:

PLUME CONTOUR IS BASED ON TOTAL VOLATILE HALOGENATED ORGANICS CONCENTRATIONS IN THE MONITORING AND RECOVERY WELLS.

0 500 1500

SCALE: 1" = 600'

APPROXIMATE EXTENT AND DISTRIBUTION OF TOTAL VOLATILE HALOGENATED ORGANICS FOURTH QUARTER 2010

OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

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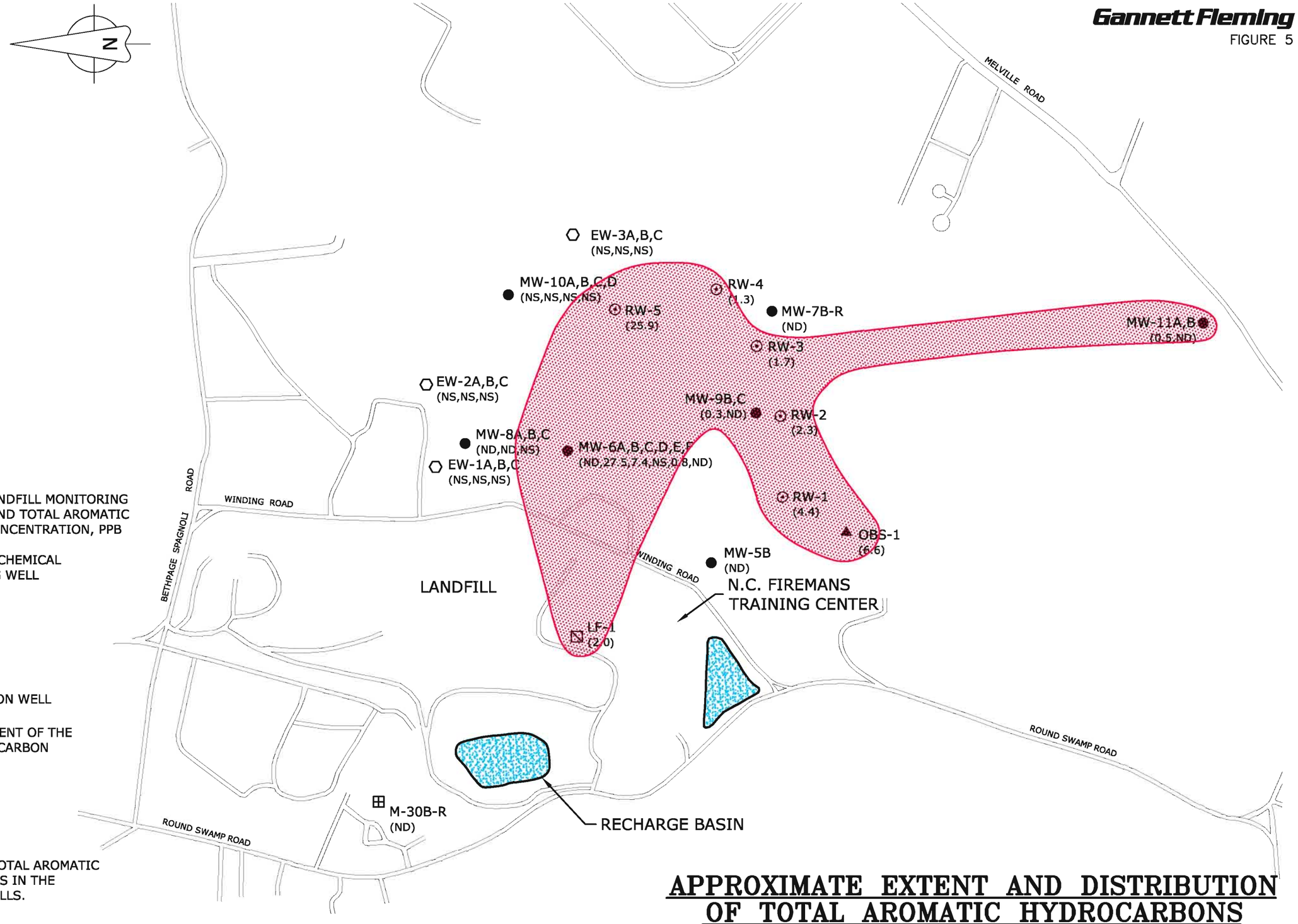
FIGURE 5



LEGEND

MW-5B (ND) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND TOTAL AROMATIC HYDROCARBON CONCENTRATION, PPB
EW-1C ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
M-30B-R ⊞	UPGRADIENT WELL
RW-2 ⊙	RECOVERY WELL
LF-2 ⧅	PHASE III WELL
OBS-1 ▲	PHASE II EXTENSION WELL
	APPROXIMATE EXTENT OF THE AROMATIC HYDROCARBON PLUME
(NS)	NOT SAMPLED
(ND)	NOT DETECTED

NOTE:

PLUME CONTOUR IS BASED ON TOTAL AROMATIC HYDROCARBON CONCENTRATIONS IN THE MONITORING AND RECOVERY WELLS.

0 500 1500

SCALE: 1" = 600'

APPROXIMATE EXTENT AND DISTRIBUTION OF TOTAL AROMATIC HYDROCARBONS FOURTH QUARTER 2010

OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

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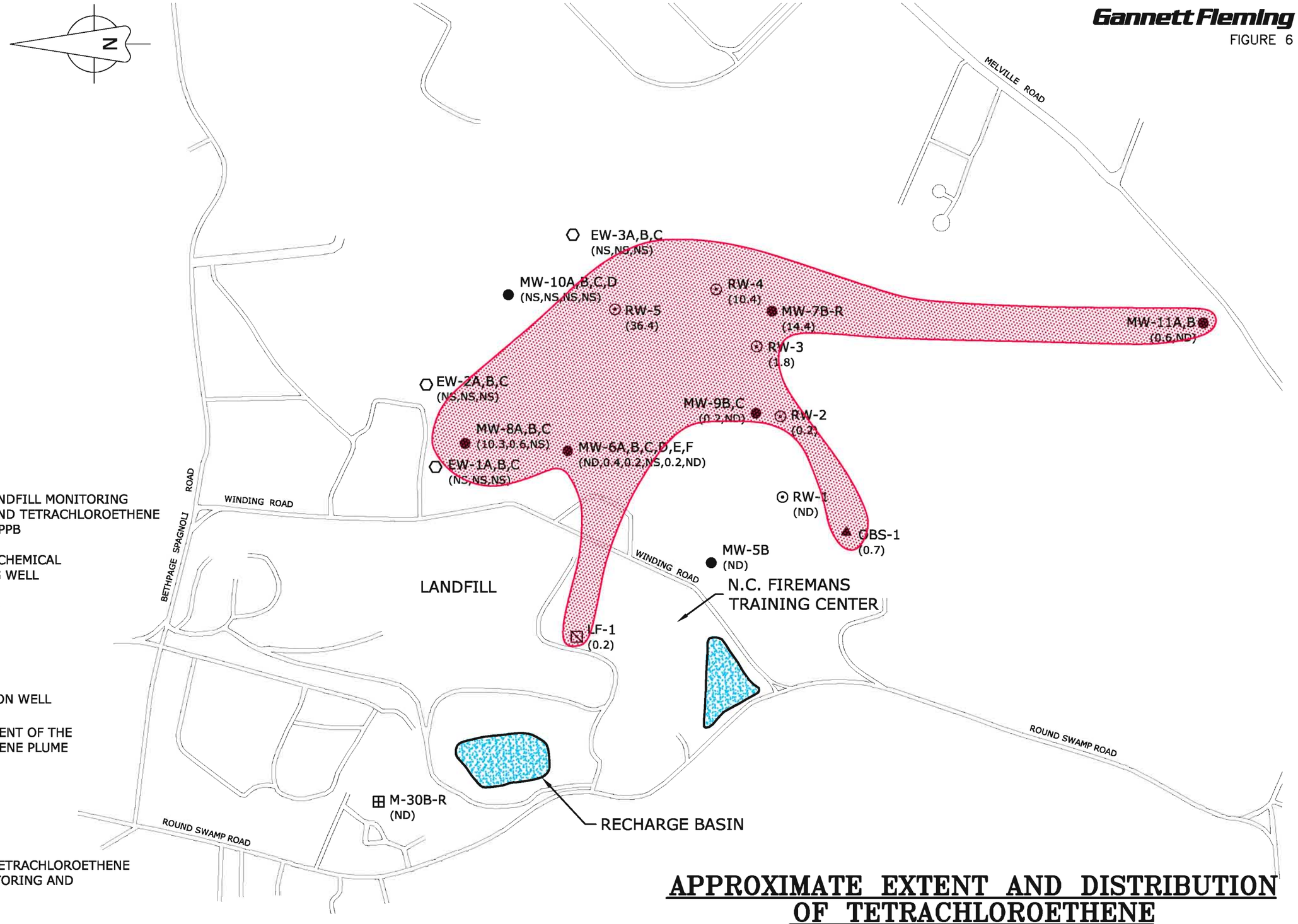
Gannett Fleming

FIGURE 6



LEGEND

MW-5B (ND) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND TETRACHLOROETHENE CONCENTRATION, PPB
EW-1C ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
M-30B-R ⊞	UPGRADIENT WELL
RW-2 ⊙	RECOVERY WELL
LF-2 ⧅	PHASE III WELL
OBS-1 ▲	PHASE II EXTENSION WELL
	APPROXIMATE EXTENT OF THE TETRACHLOROETHENE PLUME
(NS)	NOT SAMPLED
(ND)	NOT DETECTED

NOTE:

PLUME CONTOUR IS BASED ON TETRACHLOROETHENE CONCENTRATIONS IN THE MONITORING AND RECOVERY WELLS.

0 500 1500

SCALE: 1" = 600'

APPROXIMATE EXTENT AND DISTRIBUTION OF TETRACHLOROETHENE FOURTH QUARTER 2010

OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

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APPENDIX A

LABORATORY DATA REPORTS

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Duplicate (November 4, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	297
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	**52.0**
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	**13.4**
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	**232**
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Field Blank (November 4, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	ND
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Monitoring Well LF-1 (November 4, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	2.5
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	1.4
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	0.6
Dichlorobenzene, o,m&p	9***	0.6
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.3
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

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Monitoring Well M-30B-R (November 3, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	ND
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

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Monitoring Well MW-5B (November 11, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	ND
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

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Monitoring Well MW-6A (November 3, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	0.4
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.4
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

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Monitoring Well MW-6B (November 3, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	20.6
Benzene	1***	**1.9**
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	**5.1**
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	6.0
Dichlorobenzene, o,m&p	9***	6.3
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.5
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	0.4
Toluene	5	0.3
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.6
Vinyl Chloride	2	0.8
Xylene, o	5	**8.8**
Xylene, m&p	10***	0.4
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	3.9
n-Butylbenzene	5	0.5
tert-Butylbenzene	5	0.3

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

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Monitoring Well MW-6C (November 3, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	8.5
Benzene	1***	0.7
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	2.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	1.7
Dichlorobenzene, o,m&p	9***	1.9
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.3
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.3
Vinyl Chloride	2	0.3
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	1.9
n-Butylbenzene	5	0.5
tert-Butylbenzene	5	0.3

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

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Monitoring Well MW-6E (November 3, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	2.0
Benzene	1***	0.2
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.5
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.4
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.3
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

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Monitoring Well MW-6F (November 3, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	ND
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
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Monitoring Well MW-7B-R (November 4, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	**310**
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	**40.0**
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	**14.4**
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	**256**
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

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Monitoring Well MW-8A (November 3, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	11.1
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	**10.3**
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.8
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
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Monitoring Well MW-8B (November 3, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	0.8
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	0.6
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

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Monitoring Well MW-9B (November 4, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	0.5
Benzene	1***	0.3
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

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Monitoring Well MW-9C (November 4, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	ND
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
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Monitoring Well MW-11A (November 4, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	2.5
Benzene	1***	0.5
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.2
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.9
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	0.6
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.3
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Monitoring Well MW-11B (November 4, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	0.5
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.4
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Monitoring Well OBS-1 (November 4, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	8.7
Benzene	1***	0.4
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	0.7
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	0.3
Dichlorobenzene, o&p	6***	3.0
Dichlorobenzene, o,m&p	9***	3.5
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.8
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	0.7
Toluene	5	0.4
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.3
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	0.5
n-Butylbenzene	5	0.5
tert-Butylbenzene	5	0.6

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Trip Blank (November 11, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	ND
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Trip Blank (November 3, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	ND
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Trip Blank (November 4, 2010)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	ND
Benzene	1***	<0.1
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<0.2
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	<1.6
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
tert-Butylbenzene	5	<0.1

* Regulatory effluent discharge standards as specified in the Consent Decree and modified by 11/10/88 letter to the Town.

** Compounds exceeding allowable EFFLUENT concentrations are highlighted.

*** Revised values effective in January,1998.

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-001A

Client Sample ID. M30B-R

Collected : 11/3/2010 9:21:00 AM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	0.30		1	mg/L	E200.7	11/04/2010 10:00 PM
Barium	< 0.20		1	mg/L	E200.7	11/04/2010 10:00 PM
Calcium	11.5		1	mg/L	E200.7	11/04/2010 10:00 PM
Chromium	< 0.01		1	mg/L	E200.7	11/04/2010 10:00 PM
Copper	< 0.02		1	mg/L	E200.7	11/04/2010 10:00 PM
Iron	0.38		1	mg/L	E200.7	11/04/2010 10:00 PM
Lead	< 5.00		1	µg/L	E200.7	11/04/2010 10:00 PM
Magnesium	5.29		1	mg/L	E200.7	11/04/2010 10:00 PM
Manganese	< 0.02		1	mg/L	E200.7	11/04/2010 10:00 PM
Nickel	< 0.04		1	mg/L	E200.7	11/04/2010 10:00 PM
Potassium	2.95		1	mg/L	E200.7	11/04/2010 10:00 PM
Sodium	40.1		1	mg/L	E200.7	11/04/2010 10:00 PM
Zinc	< 0.02		1	mg/L	E200.7	11/04/2010 10:00 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 3:53 PM
Alkalinity, Total (As CaCO3)	4.60		1	mg/L	SM2320B	11/08/2010 12:57 PM
Chloride	70.4	D	5	mg/L	E300.0	11/11/2010 12:16 AM
Sulfate	20.3		1	mg/L	E300.0	11/11/2010 12:02 AM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/04/2010 3:12 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:31 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:32 AM
Hardness (As CaCO3)	52.0	D	2	mg/L	SM2340C	11/09/2010 12:20 PM
Bicarbonate	4.6		1	mg/L	M4500-CO2D	11/09/2010 10:31 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	11/16/2010 12:18 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/04/2010 6:45 AM
Nitrate as N	2.92	D	5	mg/L	E353.2	11/04/2010 8:29 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/07/2010 9:57 AM
Total Dissolved Solids	219		1	mg/L	SM2540C	11/04/2010 12:15 PM
Nitrogen, Kjeldahl, Total	< 0.50	D	5	mg/L	E351.2	11/11/2010 3:31 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-001B

Client Sample ID. M30B-R

Collected : 11/3/2010 9:21:00 AM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/05/2010 12:10 AM
Barium	< 0.20		1	mg/L	E200.7	11/05/2010 12:10 AM
Calcium	12.0		1	mg/L	E200.7	11/05/2010 12:10 AM
Chromium	< 0.01		1	mg/L	E200.7	11/05/2010 12:10 AM
Copper	< 0.02		1	mg/L	E200.7	11/05/2010 12:10 AM
Iron	0.03		1	mg/L	E200.7	11/05/2010 12:10 AM
Lead	< 5.00		1	µg/L	E200.7	11/05/2010 12:10 AM
Magnesium	5.50		1	mg/L	E200.7	11/05/2010 12:10 AM
Manganese	< 0.02		1	mg/L	E200.7	11/05/2010 12:10 AM
Nickel	< 0.04		1	mg/L	E200.7	11/05/2010 12:10 AM
Potassium	2.94		1	mg/L	E200.7	11/05/2010 12:10 AM
Sodium	41.4		1	mg/L	E200.7	11/05/2010 12:10 AM
Zinc	< 0.02		1	mg/L	E200.7	11/05/2010 12:10 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:02 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:42 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-002A

Client Sample ID. MW-6B

Collected : 11/3/2010 10:13:00 AM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/04/2010 10:30 PM
Barium	< 0.20		1	mg/L	E200.7	11/04/2010 10:30 PM
Calcium	16.9		1	mg/L	E200.7	11/04/2010 10:30 PM
Chromium	< 0.01		1	mg/L	E200.7	11/04/2010 10:30 PM
Copper	< 0.02		1	mg/L	E200.7	11/04/2010 10:30 PM
Iron	8.01		1	mg/L	E200.7	11/04/2010 10:30 PM
Lead	< 5.00		1	µg/L	E200.7	11/04/2010 10:30 PM
Magnesium	16.9		1	mg/L	E200.7	11/04/2010 10:30 PM
Manganese	0.05		1	mg/L	E200.7	11/04/2010 10:30 PM
Nickel	< 0.04		1	mg/L	E200.7	11/04/2010 10:30 PM
Potassium	116		1	mg/L	E200.7	11/04/2010 10:30 PM
Sodium	258		1	mg/L	E200.7	11/04/2010 10:30 PM
Zinc	< 0.02		1	mg/L	E200.7	11/04/2010 10:30 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 3:58 PM
Alkalinity, Total (As CaCO3)	817	D	20	mg/L	SM2320B	11/08/2010 1:02 PM
Chloride	315	D	10	mg/L	E300.0	11/11/2010 1:10 AM
Sulfate	< 5.00		1	mg/L	E300.0	11/11/2010 12:29 AM
Sulfate	< 50.0	D	10	mg/L	E300.0	11/11/2010 1:10 AM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/04/2010 3:13 PM
Carbonate	< 20.0	D	20	mg/L	M4500-CO2D	11/09/2010 10:32 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:35 AM
Hardness (As CaCO3)	124	D	4	mg/L	SM2340C	11/09/2010 12:25 PM
Bicarbonate	816	D	20	mg/L	M4500-CO2D	11/09/2010 10:32 AM
Nitrogen, Ammonia (As N)	98.7	D	50	mg/L	SM4500-NH3 H	11/16/2010 12:19 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/04/2010 6:46 AM
Nitrate as N	< 0.10		1	mg/L	E353.2	11/04/2010 8:30 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/07/2010 9:58 AM
Total Dissolved Solids	1,120		1	mg/L	SM2540C	11/04/2010 12:18 PM
Nitrogen, Kjeldahl, Total	133	D	50	mg/L	E351.2	11/11/2010 3:10 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-002B

Client Sample ID. MW-6B

Collected : 11/3/2010 10:13:00 AM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/05/2010 1:03 AM
Barium	< 0.20		1	mg/L	E200.7	11/05/2010 1:03 AM
Calcium	17.9		1	mg/L	E200.7	11/05/2010 1:03 AM
Chromium	< 0.01		1	mg/L	E200.7	11/05/2010 1:03 AM
Copper	< 0.02		1	mg/L	E200.7	11/05/2010 1:03 AM
Iron	0.86		1	mg/L	E200.7	11/05/2010 1:03 AM
Lead	< 5.00		1	µg/L	E200.7	11/05/2010 1:03 AM
Magnesium	18.0		1	mg/L	E200.7	11/05/2010 1:03 AM
Manganese	0.06		1	mg/L	E200.7	11/05/2010 1:03 AM
Nickel	< 0.04		1	mg/L	E200.7	11/05/2010 1:03 AM
Potassium	122		1	mg/L	E200.7	11/05/2010 1:03 AM
Sodium	273		1	mg/L	E200.7	11/05/2010 1:03 AM
Zinc	< 0.02		1	mg/L	E200.7	11/05/2010 1:03 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:12 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:43 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-003A

Client Sample ID. MW-6A

Collected : 11/3/2010 10:15:00 AM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	0.67		1	mg/L	E200.7	11/04/2010 10:38 PM
Barium	< 0.20		1	mg/L	E200.7	11/04/2010 10:38 PM
Calcium	1.44		1	mg/L	E200.7	11/04/2010 10:38 PM
Chromium	< 0.01		1	mg/L	E200.7	11/04/2010 10:38 PM
Copper	< 0.02		1	mg/L	E200.7	11/04/2010 10:38 PM
Iron	0.99		1	mg/L	E200.7	11/04/2010 10:38 PM
Lead	< 5.00		1	µg/L	E200.7	11/04/2010 10:38 PM
Magnesium	1.25		1	mg/L	E200.7	11/04/2010 10:38 PM
Manganese	0.02		1	mg/L	E200.7	11/04/2010 10:38 PM
Nickel	< 0.04		1	mg/L	E200.7	11/04/2010 10:38 PM
Potassium	2.20		1	mg/L	E200.7	11/04/2010 10:38 PM
Sodium	5.83		1	mg/L	E200.7	11/04/2010 10:38 PM
Zinc	0.02		1	mg/L	E200.7	11/04/2010 10:38 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 4:00 PM
Alkalinity, Total (As CaCO3)	3.50		1	mg/L	SM2320B	11/08/2010 1:35 PM
Chloride	7.46		1	mg/L	E300.0	11/11/2010 1:23 AM
Sulfate	< 5.00		1	mg/L	E300.0	11/11/2010 1:23 AM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/04/2010 3:14 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:33 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:36 AM
Hardness (As CaCO3)	8.00		1	mg/L	SM2340C	11/09/2010 12:30 PM
Bicarbonate	3.5		1	mg/L	M4500-CO2D	11/09/2010 10:33 AM
Nitrogen, Ammonia (As N)	0.22		1	mg/L	SM4500-NH3 H	11/16/2010 12:21 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/04/2010 6:47 AM
Nitrate as N	0.92	D	5	mg/L	E353.2	11/04/2010 8:31 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/07/2010 9:59 AM
Total Dissolved Solids	41		1	mg/L	SM2540C	11/04/2010 12:21 PM
Nitrogen, Kjeldahl, Total	0.59	D	5	mg/L	E351.2	11/11/2010 3:10 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-003B

Client Sample ID. MW-6A

Collected : 11/3/2010 10:15:00 AM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F

DISSOLVED

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/05/2010 1:11 AM
Barium	< 0.20		1	mg/L	E200.7	11/05/2010 1:11 AM
Calcium	1.37		1	mg/L	E200.7	11/05/2010 1:11 AM
Chromium	< 0.01		1	mg/L	E200.7	11/05/2010 1:11 AM
Copper	< 0.02		1	mg/L	E200.7	11/05/2010 1:11 AM
Iron	0.02		1	mg/L	E200.7	11/05/2010 1:11 AM
Lead	< 5.00		1	µg/L	E200.7	11/05/2010 1:11 AM
Magnesium	1.21		1	mg/L	E200.7	11/05/2010 1:11 AM
Manganese	< 0.02		1	mg/L	E200.7	11/05/2010 1:11 AM
Nickel	< 0.04		1	mg/L	E200.7	11/05/2010 1:11 AM
Potassium	2.42		1	mg/L	E200.7	11/05/2010 1:11 AM
Sodium	6.82		1	mg/L	E200.7	11/05/2010 1:11 AM
Zinc	< 0.02		1	mg/L	E200.7	11/05/2010 1:11 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:14 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:44 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-004A

Client Sample ID. MW-6E

Collected : 11/3/2010 11:15:00 AM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F
Copy :
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/04/2010 10:46 PM
Barium	< 0.20		1	mg/L	E200.7	11/04/2010 10:46 PM
Calcium	17.0		1	mg/L	E200.7	11/04/2010 10:46 PM
Chromium	< 0.01		1	mg/L	E200.7	11/04/2010 10:46 PM
Copper	< 0.02		1	mg/L	E200.7	11/04/2010 10:46 PM
Iron	3.54		1	mg/L	E200.7	11/04/2010 10:46 PM
Lead	< 5.00		1	µg/L	E200.7	11/04/2010 10:46 PM
Magnesium	8.35		1	mg/L	E200.7	11/04/2010 10:46 PM
Manganese	0.43		1	mg/L	E200.7	11/04/2010 10:46 PM
Nickel	< 0.04		1	mg/L	E200.7	11/04/2010 10:46 PM
Potassium	29.0		1	mg/L	E200.7	11/04/2010 10:46 PM
Sodium	86.2		1	mg/L	E200.7	11/04/2010 10:46 PM
Zinc	0.03		1	mg/L	E200.7	11/04/2010 10:46 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 4:02 PM
Alkalinity, Total (As CaCO3)	108	D	4	mg/L	SM2320B	11/08/2010 1:54 PM
Chloride	141	D	10	mg/L	E300.0	11/11/2010 1:50 AM
Sulfate	33.1		1	mg/L	E300.0	11/11/2010 1:37 AM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/04/2010 3:15 PM
Carbonate	< 4.0	D	4	mg/L	M4500-CO2D	11/09/2010 10:34 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:37 AM
Hardness (As CaCO3)	78.0	D	2	mg/L	SM2340C	11/09/2010 12:35 PM
Bicarbonate	108	D	4	mg/L	M4500-CO2D	11/09/2010 10:34 AM
Nitrogen, Ammonia (As N)	15.8	D	10	mg/L	SM4500-NH3 H	11/16/2010 12:22 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/04/2010 6:48 AM
Nitrate as N	0.21		1	mg/L	E353.2	11/04/2010 8:32 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/07/2010 10:00 AM
Total Dissolved Solids	388		1	mg/L	SM2540C	11/04/2010 12:24 PM
Nitrogen, Kjeldahl, Total	21.8	D	5	mg/L	E351.2	11/11/2010 3:11 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-004B

Client Sample ID. MW-6E

Collected : 11/3/2010 11:15:00 AM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/05/2010 1:18 AM
Barium	< 0.20		1	mg/L	E200.7	11/05/2010 1:18 AM
Calcium	16.0		1	mg/L	E200.7	11/05/2010 1:18 AM
Chromium	< 0.01		1	mg/L	E200.7	11/05/2010 1:18 AM
Copper	< 0.02		1	mg/L	E200.7	11/05/2010 1:18 AM
Iron	3.25		1	mg/L	E200.7	11/05/2010 1:18 AM
Lead	< 5.00		1	µg/L	E200.7	11/05/2010 1:18 AM
Magnesium	7.91		1	mg/L	E200.7	11/05/2010 1:18 AM
Manganese	0.40		1	mg/L	E200.7	11/05/2010 1:18 AM
Nickel	< 0.04		1	mg/L	E200.7	11/05/2010 1:18 AM
Potassium	27.1		1	mg/L	E200.7	11/05/2010 1:18 AM
Sodium	81.2		1	mg/L	E200.7	11/05/2010 1:18 AM
Zinc	0.03		1	mg/L	E200.7	11/05/2010 1:18 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:15 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:45 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-005A

Client Sample ID. MW-6F

Collected : 11/3/2010 11:17:00 AM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/04/2010 11:16 PM
Barium	0.22		1	mg/L	E200.7	11/04/2010 11:16 PM
Calcium	38.8		1	mg/L	E200.7	11/04/2010 11:16 PM
Chromium	< 0.01		1	mg/L	E200.7	11/04/2010 11:16 PM
Copper	< 0.02		1	mg/L	E200.7	11/04/2010 11:16 PM
Iron	0.10		1	mg/L	E200.7	11/04/2010 11:16 PM
Lead	< 5.00		1	µg/L	E200.7	11/04/2010 11:16 PM
Magnesium	16.6		1	mg/L	E200.7	11/04/2010 11:16 PM
Manganese	0.09		1	mg/L	E200.7	11/04/2010 11:16 PM
Nickel	< 0.04		1	mg/L	E200.7	11/04/2010 11:16 PM
Potassium	5.46		1	mg/L	E200.7	11/04/2010 11:16 PM
Sodium	84.5		1	mg/L	E200.7	11/04/2010 11:16 PM
Zinc	0.04		1	mg/L	E200.7	11/04/2010 11:16 PM
Mercury	0.3		1	ug/L	E245.1	11/10/2010 4:04 PM
Alkalinity, Total (As CaCO3)	< 1.00		1	mg/L	SM2320B	11/08/2010 2:00 PM
Chloride	237	D	10	mg/L	E300.0	11/11/2010 2:17 AM
Sulfate	< 5.00		1	mg/L	E300.0	11/11/2010 2:04 AM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/04/2010 3:16 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:35 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:38 AM
Hardness (As CaCO3)	165	D	5	mg/L	SM2340C	11/09/2010 12:40 PM
Bicarbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:35 AM
Nitrogen, Ammonia (As N)	0.29		1	mg/L	SM4500-NH3 H	11/16/2010 12:36 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/04/2010 6:52 AM
Nitrate as N	3.00	D	10	mg/L	E353.2	11/04/2010 8:33 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/07/2010 10:01 AM
Total Dissolved Solids	617		1	mg/L	SM2540C	11/04/2010 12:27 PM
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	E351.2	11/17/2010 3:20 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-005B

Client Sample ID. MW-6F

Collected : 11/3/2010 11:17:00 AM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/05/2010 1:26 AM
Barium	0.22		1	mg/L	E200.7	11/05/2010 1:26 AM
Calcium	39.4		1	mg/L	E200.7	11/05/2010 1:26 AM
Chromium	< 0.01		1	mg/L	E200.7	11/05/2010 1:26 AM
Copper	< 0.02		1	mg/L	E200.7	11/05/2010 1:26 AM
Iron	0.10		1	mg/L	E200.7	11/05/2010 1:26 AM
Lead	< 5.00		1	µg/L	E200.7	11/05/2010 1:26 AM
Magnesium	17.0		1	mg/L	E200.7	11/05/2010 1:26 AM
Manganese	0.09		1	mg/L	E200.7	11/05/2010 1:26 AM
Nickel	< 0.04		1	mg/L	E200.7	11/05/2010 1:26 AM
Potassium	5.50		1	mg/L	E200.7	11/05/2010 1:26 AM
Sodium	85.5		1	mg/L	E200.7	11/05/2010 1:26 AM
Zinc	0.04		1	mg/L	E200.7	11/05/2010 1:26 AM
Mercury	0.24		1	ug/L	E245.1	11/10/2010 3:17 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:46 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-006A

Client Sample ID. MW-6C

Collected : 11/3/2010 11:46:00 AM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/04/2010 11:24 PM
Barium	< 0.20		1	mg/L	E200.7	11/04/2010 11:24 PM
Calcium	45.5		1	mg/L	E200.7	11/04/2010 11:24 PM
Chromium	< 0.01		1	mg/L	E200.7	11/04/2010 11:24 PM
Copper	< 0.02		1	mg/L	E200.7	11/04/2010 11:24 PM
Iron	5.66		1	mg/L	E200.7	11/04/2010 11:24 PM
Lead	< 5.00		1	µg/L	E200.7	11/04/2010 11:24 PM
Magnesium	12.5		1	mg/L	E200.7	11/04/2010 11:24 PM
Manganese	0.07		1	mg/L	E200.7	11/04/2010 11:24 PM
Nickel	< 0.04		1	mg/L	E200.7	11/04/2010 11:24 PM
Potassium	62.8		1	mg/L	E200.7	11/04/2010 11:24 PM
Sodium	233		1	mg/L	E200.7	11/04/2010 11:24 PM
Zinc	< 0.02		1	mg/L	E200.7	11/04/2010 11:24 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 4:06 PM
Alkalinity, Total (As CaCO3)	470	D	20	mg/L	SM2320B	11/08/2010 2:04 PM
Chloride	260	D	10	mg/L	E300.0	11/11/2010 2:31 AM
Sulfate	41.3		1	mg/L	E300.0	11/12/2010 6:16 AM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/04/2010 3:17 PM
Carbonate	< 20.0	D	20	mg/L	M4500-CO2D	11/09/2010 10:36 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:39 AM
Hardness (As CaCO3)	170	D	5	mg/L	SM2340C	11/09/2010 12:55 PM
Bicarbonate	470	D	20	mg/L	M4500-CO2D	11/09/2010 10:36 AM
Nitrogen, Ammonia (As N)	36.2	D	20	mg/L	SM4500-NH3 H	11/16/2010 12:27 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/04/2010 6:53 AM
Nitrate as N	< 0.10		1	mg/L	E353.2	11/04/2010 8:34 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/07/2010 10:02 AM
Total Dissolved Solids	920		1	mg/L	SM2540C	11/04/2010 12:30 PM
Nitrogen, Kjeldahl, Total	51.1	D	20	mg/L	E351.2	11/11/2010 3:32 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-006B

Client Sample ID. MW-6C

Collected : 11/3/2010 11:46:00 AM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/05/2010 1:34 AM
Barium	< 0.20		1	mg/L	E200.7	11/05/2010 1:34 AM
Calcium	46.2		1	mg/L	E200.7	11/05/2010 1:34 AM
Chromium	< 0.01		1	mg/L	E200.7	11/05/2010 1:34 AM
Copper	< 0.02		1	mg/L	E200.7	11/05/2010 1:34 AM
Iron	1.17		1	mg/L	E200.7	11/05/2010 1:34 AM
Lead	< 5.00		1	µg/L	E200.7	11/05/2010 1:34 AM
Magnesium	12.8		1	mg/L	E200.7	11/05/2010 1:34 AM
Manganese	0.07		1	mg/L	E200.7	11/05/2010 1:34 AM
Nickel	< 0.04		1	mg/L	E200.7	11/05/2010 1:34 AM
Potassium	63.2		1	mg/L	E200.7	11/05/2010 1:34 AM
Sodium	235		1	mg/L	E200.7	11/05/2010 1:34 AM
Zinc	< 0.02		1	mg/L	E200.7	11/05/2010 1:34 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:19 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:47 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-007A

Client Sample ID. MW-8A

Collected : 11/3/2010 12:30:00 PM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	0.35		1	mg/L	E200.7	11/04/2010 11:31 PM
Barium	< 0.20		1	mg/L	E200.7	11/04/2010 11:31 PM
Calcium	1.87		1	mg/L	E200.7	11/04/2010 11:31 PM
Chromium	< 0.01		1	mg/L	E200.7	11/04/2010 11:31 PM
Copper	< 0.02		1	mg/L	E200.7	11/04/2010 11:31 PM
Iron	0.57		1	mg/L	E200.7	11/04/2010 11:31 PM
Lead	< 5.00		1	µg/L	E200.7	11/04/2010 11:31 PM
Magnesium	1.55		1	mg/L	E200.7	11/04/2010 11:31 PM
Manganese	< 0.02		1	mg/L	E200.7	11/04/2010 11:31 PM
Nickel	< 0.04		1	mg/L	E200.7	11/04/2010 11:31 PM
Potassium	2.54		1	mg/L	E200.7	11/04/2010 11:31 PM
Sodium	5.45		1	mg/L	E200.7	11/04/2010 11:31 PM
Zinc	< 0.02		1	mg/L	E200.7	11/04/2010 11:31 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 4:08 PM
Alkalinity, Total (As CaCO3)	1.75		1	mg/L	SM2320B	11/08/2010 2:12 PM
Chloride	9.11		1	mg/L	E300.0	11/11/2010 2:44 AM
Sulfate	< 5.00		1	mg/L	E300.0	11/11/2010 2:44 AM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/04/2010 3:18 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:37 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:40 AM
Hardness (As CaCO3)	9.00		1	mg/L	SM2340C	11/09/2010 1:00 PM
Bicarbonate	1.7		1	mg/L	M4500-CO2D	11/09/2010 10:37 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	11/16/2010 12:28 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/04/2010 6:54 AM
Nitrate as N	0.47	D	2	mg/L	E353.2	11/04/2010 8:36 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/07/2010 10:03 AM
Total Dissolved Solids	135		1	mg/L	SM2540C	11/04/2010 12:33 PM
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	E351.2	11/11/2010 3:14 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-007B

Client Sample ID. MW-8A

Collected : 11/3/2010 12:30:00 PM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F

DISSOLVED

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/05/2010 1:41 AM
Barium	< 0.20		1	mg/L	E200.7	11/05/2010 1:41 AM
Calcium	1.78		1	mg/L	E200.7	11/05/2010 1:41 AM
Chromium	< 0.01		1	mg/L	E200.7	11/05/2010 1:41 AM
Copper	< 0.02		1	mg/L	E200.7	11/05/2010 1:41 AM
Iron	0.02		1	mg/L	E200.7	11/05/2010 1:41 AM
Lead	< 5.00		1	µg/L	E200.7	11/05/2010 1:41 AM
Magnesium	1.43		1	mg/L	E200.7	11/05/2010 1:41 AM
Manganese	< 0.02		1	mg/L	E200.7	11/05/2010 1:41 AM
Nickel	< 0.04		1	mg/L	E200.7	11/05/2010 1:41 AM
Potassium	2.34		1	mg/L	E200.7	11/05/2010 1:41 AM
Sodium	5.18		1	mg/L	E200.7	11/05/2010 1:41 AM
Zinc	< 0.02		1	mg/L	E200.7	11/05/2010 1:41 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:21 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:48 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-008A

Client Sample ID. MW-8B

Collected : 11/3/2010 12:34:00 PM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F
Copy :
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/04/2010 11:39 PM
Barium	< 0.20		1	mg/L	E200.7	11/04/2010 11:39 PM
Calcium	14.0		1	mg/L	E200.7	11/04/2010 11:39 PM
Chromium	< 0.01		1	mg/L	E200.7	11/04/2010 11:39 PM
Copper	< 0.02		1	mg/L	E200.7	11/04/2010 11:39 PM
Iron	< 0.02		1	mg/L	E200.7	11/04/2010 11:39 PM
Lead	< 5.00		1	µg/L	E200.7	11/04/2010 11:39 PM
Magnesium	4.46		1	mg/L	E200.7	11/04/2010 11:39 PM
Manganese	0.52		1	mg/L	E200.7	11/04/2010 11:39 PM
Nickel	< 0.04		1	mg/L	E200.7	11/04/2010 11:39 PM
Potassium	10.7		1	mg/L	E200.7	11/04/2010 11:39 PM
Sodium	33.4		1	mg/L	E200.7	11/04/2010 11:39 PM
Zinc	0.05		1	mg/L	E200.7	11/04/2010 11:39 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 4:15 PM
Alkalinity, Total (As CaCO3)	9.20		1	mg/L	SM2320B	11/08/2010 2:16 PM
Chloride	63.3	D	5	mg/L	E300.0	11/11/2010 3:11 AM
Sulfate	19.8		1	mg/L	E300.0	11/11/2010 2:57 AM
Sulfate	< 25.0	D	5	mg/L	E300.0	11/11/2010 3:11 AM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/04/2010 3:19 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:38 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:41 AM
Hardness (As CaCO3)	54.0	D	2	mg/L	SM2340C	11/09/2010 1:05 PM
Bicarbonate	9.2		1	mg/L	M4500-CO2D	11/09/2010 10:38 AM
Nitrogen, Ammonia (As N)	0.32		1	mg/L	SM4500-NH3 H	11/16/2010 12:29 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/04/2010 6:56 AM
Nitrate as N	2.73	D	5	mg/L	E353.2	11/04/2010 8:37 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/07/2010 10:04 AM
Total Dissolved Solids	221		1	mg/L	SM2540C	11/04/2010 12:36 PM
Nitrogen, Kjeldahl, Total	< 0.20	D	2	mg/L	E351.2	11/11/2010 3:33 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011100-008B

Client Sample ID. MW-8B

Collected : 11/3/2010 12:34:00 PM
Received : 11/3/2010 1:55:00 PM
Collected By : G&F

DISSOLVED

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/05/2010 1:49 AM
Barium	< 0.20		1	mg/L	E200.7	11/05/2010 1:49 AM
Calcium	14.0		1	mg/L	E200.7	11/05/2010 1:49 AM
Chromium	< 0.01		1	mg/L	E200.7	11/05/2010 1:49 AM
Copper	< 0.02		1	mg/L	E200.7	11/05/2010 1:49 AM
Iron	< 0.02		1	mg/L	E200.7	11/05/2010 1:49 AM
Lead	< 5.00		1	µg/L	E200.7	11/05/2010 1:49 AM
Magnesium	4.46		1	mg/L	E200.7	11/05/2010 1:49 AM
Manganese	0.50		1	mg/L	E200.7	11/05/2010 1:49 AM
Nickel	< 0.04		1	mg/L	E200.7	11/05/2010 1:49 AM
Potassium	10.6		1	mg/L	E200.7	11/05/2010 1:49 AM
Sodium	33.5		1	mg/L	E200.7	11/05/2010 1:49 AM
Zinc	0.05		1	mg/L	E200.7	11/05/2010 1:49 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:23 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 7:49 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/24/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-001A

Client Sample ID. LF-1

Sample Information...
Type : Groundwater

Origin:

Collected : 11/4/2010 9:32:00 AM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Alkalinity, Total (As CaCO3)	196	D	5	mg/L	SM2320B	11/08/2010 2:22 PM
Chloride	189	D	5	mg/L	E300.0	11/11/2010 9:29 PM
Sulfate	21.4		1	mg/L	E300.0	11/11/2010 9:16 PM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/05/2010 3:12 PM
Carbonate	< 5.0	D	5	mg/L	M4500-CO2D	11/09/2010 10:39 AM
Hardness (As CaCO3)	140	D	5	mg/L	SM2340C	11/15/2010 4:04 PM
Bicarbonate	196	D	5	mg/L	M4500-CO2D	11/09/2010 10:39 AM
Nitrogen, Ammonia (As N)	16.9	D	10	mg/L	SM4500-NH3 H	11/19/2010 2:02 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/05/2010 7:40 AM
Nitrate as N	< 0.10		1	mg/L	E353.2	11/05/2010 8:54 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/08/2010 9:18 AM
Total Dissolved Solids	456		1	mg/L	SM2540C	11/08/2010 8:51 AM
Nitrogen, Kjeldahl, Total	21.1	D	20	mg/L	E351.2	11/17/2010 3:36 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-002A

Client Sample ID. MW-11A

Collected : 11/4/2010 10:30:00 AM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/08/2010 9:51 PM
Barium	< 0.20		1	mg/L	E200.7	11/08/2010 9:51 PM
Calcium	3.31		1	mg/L	E200.7	11/08/2010 9:51 PM
Chromium	< 0.01		1	mg/L	E200.7	11/08/2010 9:51 PM
Copper	< 0.02		1	mg/L	E200.7	11/08/2010 9:51 PM
Iron	0.03		1	mg/L	E200.7	11/08/2010 9:51 PM
Lead	< 5.00		1	µg/L	E200.7	11/08/2010 9:51 PM
Magnesium	1.98		1	mg/L	E200.7	11/08/2010 9:51 PM
Manganese	< 0.02		1	mg/L	E200.7	11/08/2010 9:51 PM
Nickel	< 0.04		1	mg/L	E200.7	11/08/2010 9:51 PM
Potassium	1.41		1	mg/L	E200.7	11/08/2010 9:51 PM
Sodium	4.26		1	mg/L	E200.7	11/08/2010 9:51 PM
Zinc	0.02		1	mg/L	E200.7	11/08/2010 9:51 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 4:18 PM
Alkalinity, Total (As CaCO3)	< 1.00		1	mg/L	SM2320B	11/08/2010 2:30 PM
Chloride	8.51		1	mg/L	E300.0	11/11/2010 9:43 PM
Sulfate	< 5.00		1	mg/L	E300.0	11/11/2010 9:43 PM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/05/2010 3:13 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:40 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:17 PM
Hardness (As CaCO3)	13.0		1	mg/L	SM2340C	11/15/2010 4:06 PM
Bicarbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:40 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	11/19/2010 2:03 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/05/2010 7:41 AM
Nitrate as N	3.04	D	10	mg/L	E353.2	11/05/2010 8:55 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/08/2010 9:19 AM
Total Dissolved Solids	26		1	mg/L	SM2540C	11/08/2010 8:54 AM
Nitrogen, Kjeldahl, Total	< 0.50	D	5	mg/L	E351.2	11/17/2010 4:09 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-002B

Client Sample ID. MW-11A

Collected : 11/4/2010 10:30:00 AM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/09/2010 12:47 AM
Barium	< 0.20		1	mg/L	E200.7	11/09/2010 12:47 AM
Calcium	3.22		1	mg/L	E200.7	11/09/2010 12:47 AM
Chromium	< 0.01		1	mg/L	E200.7	11/09/2010 12:47 AM
Copper	< 0.02		1	mg/L	E200.7	11/09/2010 12:47 AM
Iron	< 0.02		1	mg/L	E200.7	11/09/2010 12:47 AM
Lead	< 5.00		1	µg/L	E200.7	11/09/2010 12:47 AM
Magnesium	1.92		1	mg/L	E200.7	11/09/2010 12:47 AM
Manganese	< 0.02		1	mg/L	E200.7	11/09/2010 12:47 AM
Nickel	< 0.04		1	mg/L	E200.7	11/09/2010 12:47 AM
Potassium	1.35		1	mg/L	E200.7	11/09/2010 12:47 AM
Sodium	4.19		1	mg/L	E200.7	11/09/2010 12:47 AM
Zinc	0.02		1	mg/L	E200.7	11/09/2010 12:47 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:29 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:27 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-003A

Client Sample ID. MW-11B

Collected : 11/4/2010 10:31:00 AM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/08/2010 9:59 PM
Barium	< 0.20		1	mg/L	E200.7	11/08/2010 9:59 PM
Calcium	2.70		1	mg/L	E200.7	11/08/2010 9:59 PM
Chromium	< 0.01		1	mg/L	E200.7	11/08/2010 9:59 PM
Copper	< 0.02		1	mg/L	E200.7	11/08/2010 9:59 PM
Iron	0.05		1	mg/L	E200.7	11/08/2010 9:59 PM
Lead	< 5.00		1	µg/L	E200.7	11/08/2010 9:59 PM
Magnesium	1.52		1	mg/L	E200.7	11/08/2010 9:59 PM
Manganese	< 0.02		1	mg/L	E200.7	11/08/2010 9:59 PM
Nickel	< 0.04		1	mg/L	E200.7	11/08/2010 9:59 PM
Potassium	1.43		1	mg/L	E200.7	11/08/2010 9:59 PM
Sodium	5.94		1	mg/L	E200.7	11/08/2010 9:59 PM
Zinc	< 0.02		1	mg/L	E200.7	11/08/2010 9:59 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 4:21 PM
Alkalinity, Total (As CaCO3)	< 1.00		1	mg/L	SM2320B	11/08/2010 2:52 PM
Chloride	14.4		1	mg/L	E300.0	11/11/2010 9:56 PM
Sulfate	< 5.00		1	mg/L	E300.0	11/11/2010 9:56 PM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/05/2010 3:16 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:41 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:18 PM
Hardness (As CaCO3)	13.0		1	mg/L	SM2340C	11/15/2010 4:08 PM
Bicarbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:41 AM
Nitrogen, Ammonia (As N)	0.17		1	mg/L	SM4500-NH3 H	11/19/2010 2:04 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/05/2010 7:42 AM
Nitrate as N	1.27		1	mg/L	E353.2	11/05/2010 8:57 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/14/2010 9:27 AM
Total Dissolved Solids	31		1	mg/L	SM2540C	11/08/2010 8:57 AM
Nitrogen, Kjeldahl, Total	< 0.50	D	5	mg/L	E351.2	11/17/2010 4:10 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-003B

Client Sample ID. MW-11B

Collected : 11/4/2010 10:31:00 AM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/09/2010 1:18 AM
Barium	< 0.20		1	mg/L	E200.7	11/09/2010 1:18 AM
Calcium	2.98		1	mg/L	E200.7	11/09/2010 1:18 AM
Chromium	< 0.01		1	mg/L	E200.7	11/09/2010 1:18 AM
Copper	< 0.02		1	mg/L	E200.7	11/09/2010 1:18 AM
Iron	0.02		1	mg/L	E200.7	11/09/2010 1:18 AM
Lead	< 5.00		1	µg/L	E200.7	11/09/2010 1:18 AM
Magnesium	1.66		1	mg/L	E200.7	11/09/2010 1:18 AM
Manganese	< 0.02		1	mg/L	E200.7	11/09/2010 1:18 AM
Nickel	< 0.04		1	mg/L	E200.7	11/09/2010 1:18 AM
Potassium	1.42		1	mg/L	E200.7	11/09/2010 1:18 AM
Sodium	6.56		1	mg/L	E200.7	11/09/2010 1:18 AM
Zinc	< 0.02		1	mg/L	E200.7	11/09/2010 1:18 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:32 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:28 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-004A

Client Sample ID. OBS-1

Collected : 11/4/2010 11:22:00 AM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/08/2010 10:07 PM
Barium	< 0.20		1	mg/L	E200.7	11/08/2010 10:07 PM
Calcium	20.0		1	mg/L	E200.7	11/08/2010 10:07 PM
Chromium	< 0.01		1	mg/L	E200.7	11/08/2010 10:07 PM
Copper	< 0.02		1	mg/L	E200.7	11/08/2010 10:07 PM
Iron	0.04		1	mg/L	E200.7	11/08/2010 10:07 PM
Lead	< 5.00		1	µg/L	E200.7	11/08/2010 10:07 PM
Magnesium	14.0		1	mg/L	E200.7	11/08/2010 10:07 PM
Manganese	2.18		1	mg/L	E200.7	11/08/2010 10:07 PM
Nickel	< 0.04		1	mg/L	E200.7	11/08/2010 10:07 PM
Potassium	17.7		1	mg/L	E200.7	11/08/2010 10:07 PM
Sodium	69.5		1	mg/L	E200.7	11/08/2010 10:07 PM
Zinc	< 0.02		1	mg/L	E200.7	11/08/2010 10:07 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 4:22 PM
Alkalinity, Total (As CaCO3)	120	D	4	mg/L	SM2320B	11/08/2010 2:56 PM
Chloride	90.3	D	5	mg/L	E300.0	11/11/2010 10:10 PM
Sulfate	58.2	D	5	mg/L	E300.0	11/11/2010 10:10 PM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/05/2010 3:17 PM
Carbonate	< 4.0	D	4	mg/L	M4500-CO2D	11/09/2010 10:42 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:19 PM
Hardness (As CaCO3)	115	D	5	mg/L	SM2340C	11/15/2010 4:10 PM
Bicarbonate	120	D	4	mg/L	M4500-CO2D	11/09/2010 10:42 AM
Nitrogen, Ammonia (As N)	9.40	D	10	mg/L	SM4500-NH3 H	11/19/2010 2:05 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/05/2010 7:44 AM
Nitrate as N	0.36		1	mg/L	E353.2	11/05/2010 9:00 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/14/2010 9:28 AM
Total Dissolved Solids	309		1	mg/L	SM2540C	11/08/2010 9:00 AM
Nitrogen, Kjeldahl, Total	13.3	D	5	mg/L	E351.2	11/17/2010 3:38 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-004B

Client Sample ID. OBS-1

Collected : 11/4/2010 11:22:00 AM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F

DISSOLVED

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/09/2010 1:25 AM
Barium	< 0.20		1	mg/L	E200.7	11/09/2010 1:25 AM
Calcium	20.1		1	mg/L	E200.7	11/09/2010 1:25 AM
Chromium	< 0.01		1	mg/L	E200.7	11/09/2010 1:25 AM
Copper	< 0.02		1	mg/L	E200.7	11/09/2010 1:25 AM
Iron	0.03		1	mg/L	E200.7	11/09/2010 1:25 AM
Lead	< 5.00		1	µg/L	E200.7	11/09/2010 1:25 AM
Magnesium	14.1		1	mg/L	E200.7	11/09/2010 1:25 AM
Manganese	2.15		1	mg/L	E200.7	11/09/2010 1:25 AM
Nickel	< 0.04		1	mg/L	E200.7	11/09/2010 1:25 AM
Potassium	17.8		1	mg/L	E200.7	11/09/2010 1:25 AM
Sodium	69.9		1	mg/L	E200.7	11/09/2010 1:25 AM
Zinc	< 0.02		1	mg/L	E200.7	11/09/2010 1:25 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:33 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:29 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-005A

Client Sample ID. MW-9B

Collected : 11/4/2010 12:10:00 PM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/08/2010 10:14 PM
Barium	< 0.20		1	mg/L	E200.7	11/08/2010 10:14 PM
Calcium	10.9		1	mg/L	E200.7	11/08/2010 10:14 PM
Chromium	< 0.01		1	mg/L	E200.7	11/08/2010 10:14 PM
Copper	< 0.02		1	mg/L	E200.7	11/08/2010 10:14 PM
Iron	< 0.02		1	mg/L	E200.7	11/08/2010 10:14 PM
Lead	< 5.00		1	µg/L	E200.7	11/08/2010 10:14 PM
Magnesium	5.80		1	mg/L	E200.7	11/08/2010 10:14 PM
Manganese	0.32		1	mg/L	E200.7	11/08/2010 10:14 PM
Nickel	< 0.04		1	mg/L	E200.7	11/08/2010 10:14 PM
Potassium	7.94		1	mg/L	E200.7	11/08/2010 10:14 PM
Sodium	34.0		1	mg/L	E200.7	11/08/2010 10:14 PM
Zinc	< 0.02		1	mg/L	E200.7	11/08/2010 10:14 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 4:24 PM
Alkalinity, Total (As CaCO3)	15.6		1	mg/L	SM2320B	11/08/2010 3:04 PM
Chloride	55.6	D	5	mg/L	E300.0	11/11/2010 10:37 PM
Sulfate	18.8		1	mg/L	E300.0	11/11/2010 10:23 PM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/05/2010 3:18 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:43 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:20 PM
Hardness (As CaCO3)	52.0	D	2	mg/L	SM2340C	11/15/2010 4:16 PM
Bicarbonate	15.5		1	mg/L	M4500-CO2D	11/09/2010 10:43 AM
Nitrogen, Ammonia (As N)	0.86		1	mg/L	SM4500-NH3 H	11/19/2010 2:06 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/05/2010 7:45 AM
Nitrate as N	4.22	D	10	mg/L	E353.2	11/05/2010 9:01 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/14/2010 9:29 AM
Total Dissolved Solids	148		1	mg/L	SM2540C	11/08/2010 9:03 AM
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	E351.2	11/17/2010 3:39 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-005B

Client Sample ID. MW-9B

Collected : 11/4/2010 12:10:00 PM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F

DISSOLVED

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/09/2010 1:33 AM
Barium	< 0.20		1	mg/L	E200.7	11/09/2010 1:33 AM
Calcium	11.6		1	mg/L	E200.7	11/09/2010 1:33 AM
Chromium	< 0.01		1	mg/L	E200.7	11/09/2010 1:33 AM
Copper	< 0.02		1	mg/L	E200.7	11/09/2010 1:33 AM
Iron	< 0.02		1	mg/L	E200.7	11/09/2010 1:33 AM
Lead	< 5.00		1	µg/L	E200.7	11/09/2010 1:33 AM
Magnesium	6.17		1	mg/L	E200.7	11/09/2010 1:33 AM
Manganese	0.34		1	mg/L	E200.7	11/09/2010 1:33 AM
Nickel	< 0.04		1	mg/L	E200.7	11/09/2010 1:33 AM
Potassium	8.33		1	mg/L	E200.7	11/09/2010 1:33 AM
Sodium	36.0		1	mg/L	E200.7	11/09/2010 1:33 AM
Zinc	< 0.02		1	mg/L	E200.7	11/09/2010 1:33 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:35 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:30 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-006A

Client Sample ID. MW-9C

Collected : 11/4/2010 1:06:00 PM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/08/2010 10:22 PM
Barium	< 0.20		1	mg/L	E200.7	11/08/2010 10:22 PM
Calcium	5.42		1	mg/L	E200.7	11/08/2010 10:22 PM
Chromium	< 0.01		1	mg/L	E200.7	11/08/2010 10:22 PM
Copper	< 0.02		1	mg/L	E200.7	11/08/2010 10:22 PM
Iron	0.13		1	mg/L	E200.7	11/08/2010 10:22 PM
Lead	< 5.00		1	µg/L	E200.7	11/08/2010 10:22 PM
Magnesium	8.29		1	mg/L	E200.7	11/08/2010 10:22 PM
Manganese	0.11		1	mg/L	E200.7	11/08/2010 10:22 PM
Nickel	< 0.04		1	mg/L	E200.7	11/08/2010 10:22 PM
Potassium	13.7		1	mg/L	E200.7	11/08/2010 10:22 PM
Sodium	48.4		1	mg/L	E200.7	11/08/2010 10:22 PM
Zinc	< 0.02		1	mg/L	E200.7	11/08/2010 10:22 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 4:26 PM
Alkalinity, Total (As CaCO3)	46.0		1	mg/L	SM2320B	11/08/2010 3:11 PM
Chloride	81.8	D	5	mg/L	E300.0	11/11/2010 11:31 PM
Sulfate	17.0		1	mg/L	E300.0	11/11/2010 10:50 PM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/05/2010 3:19 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:44 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:21 PM
Hardness (As CaCO3)	44.0	D	2	mg/L	SM2340C	11/15/2010 4:18 PM
Bicarbonate	46.0		1	mg/L	M4500-CO2D	11/09/2010 10:44 AM
Nitrogen, Ammonia (As N)	4.23	D	10	mg/L	SM4500-NH3 H	11/22/2010 10:35 AM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/05/2010 7:48 AM
Nitrate as N	0.57		1	mg/L	E353.2	11/05/2010 9:02 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/14/2010 9:30 AM
Total Dissolved Solids	266		1	mg/L	SM2540C	11/08/2010 9:06 AM
Nitrogen, Kjeldahl, Total	5.78	D	5	mg/L	E351.2	11/23/2010 3:52 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-006B

Client Sample ID. MW-9C

Collected : 11/4/2010 1:06:00 PM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/09/2010 1:40 AM
Barium	< 0.20		1	mg/L	E200.7	11/09/2010 1:40 AM
Calcium	5.77		1	mg/L	E200.7	11/09/2010 1:40 AM
Chromium	< 0.01		1	mg/L	E200.7	11/09/2010 1:40 AM
Copper	< 0.02		1	mg/L	E200.7	11/09/2010 1:40 AM
Iron	0.11		1	mg/L	E200.7	11/09/2010 1:40 AM
Lead	< 5.00		1	µg/L	E200.7	11/09/2010 1:40 AM
Magnesium	8.90		1	mg/L	E200.7	11/09/2010 1:40 AM
Manganese	0.12		1	mg/L	E200.7	11/09/2010 1:40 AM
Nickel	< 0.04		1	mg/L	E200.7	11/09/2010 1:40 AM
Potassium	14.6		1	mg/L	E200.7	11/09/2010 1:40 AM
Sodium	51.9		1	mg/L	E200.7	11/09/2010 1:40 AM
Zinc	< 0.02		1	mg/L	E200.7	11/09/2010 1:40 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:37 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:31 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-007A

Client Sample ID. MW-7B-R

Collected : 11/4/2010 2:16:00 PM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/08/2010 10:30 PM
Barium	< 0.20		1	mg/L	E200.7	11/08/2010 10:30 PM
Calcium	4.14		1	mg/L	E200.7	11/08/2010 10:30 PM
Chromium	< 0.01		1	mg/L	E200.7	11/08/2010 10:30 PM
Copper	< 0.02		1	mg/L	E200.7	11/08/2010 10:30 PM
Iron	0.49		1	mg/L	E200.7	11/08/2010 10:30 PM
Lead	< 5.00		1	µg/L	E200.7	11/08/2010 10:30 PM
Magnesium	2.21		1	mg/L	E200.7	11/08/2010 10:30 PM
Manganese	0.09		1	mg/L	E200.7	11/08/2010 10:30 PM
Nickel	< 0.04		1	mg/L	E200.7	11/08/2010 10:30 PM
Potassium	2.26		1	mg/L	E200.7	11/08/2010 10:30 PM
Sodium	10.6		1	mg/L	E200.7	11/08/2010 10:30 PM
Zinc	0.05		1	mg/L	E200.7	11/08/2010 10:30 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 4:28 PM
Alkalinity, Total (As CaCO3)	1.60		1	mg/L	SM2320B	11/08/2010 3:19 PM
Chloride	17.5		1	mg/L	E300.0	11/11/2010 11:44 PM
Sulfate	12.7		1	mg/L	E300.0	11/11/2010 11:44 PM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/05/2010 3:22 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:45 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:22 PM
Hardness (As CaCO3)	29.0		1	mg/L	SM2340C	11/15/2010 4:20 PM
Bicarbonate	1.6		1	mg/L	M4500-CO2D	11/09/2010 10:45 AM
Nitrogen, Ammonia (As N)	0.11		1	mg/L	SM4500-NH3 H	11/22/2010 10:16 AM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/05/2010 7:50 AM
Nitrate as N	1.45	D	10	mg/L	E353.2	11/05/2010 9:04 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/14/2010 9:31 AM
Total Dissolved Solids	75		1	mg/L	SM2540C	11/08/2010 9:09 AM
Nitrogen, Kjeldahl, Total	0.37		1	mg/L	E351.2	11/17/2010 3:43 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-007B

Client Sample ID. MW-7B-R

Collected : 11/4/2010 2:16:00 PM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/09/2010 1:48 AM
Barium	< 0.20		1	mg/L	E200.7	11/09/2010 1:48 AM
Calcium	4.20		1	mg/L	E200.7	11/09/2010 1:48 AM
Chromium	< 0.01		1	mg/L	E200.7	11/09/2010 1:48 AM
Copper	< 0.02		1	mg/L	E200.7	11/09/2010 1:48 AM
Iron	0.03		1	mg/L	E200.7	11/09/2010 1:48 AM
Lead	< 5.00		1	µg/L	E200.7	11/09/2010 1:48 AM
Magnesium	2.40		1	mg/L	E200.7	11/09/2010 1:48 AM
Manganese	0.09		1	mg/L	E200.7	11/09/2010 1:48 AM
Nickel	< 0.04		1	mg/L	E200.7	11/09/2010 1:48 AM
Potassium	2.65		1	mg/L	E200.7	11/09/2010 1:48 AM
Sodium	12.1		1	mg/L	E200.7	11/09/2010 1:48 AM
Zinc	0.04		1	mg/L	E200.7	11/09/2010 1:48 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:39 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:32 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-008A

Client Sample ID. FIELD BLANK-110410

Collected : 11/4/2010 1:45:00 PM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/08/2010 10:37 PM
Barium	< 0.20		1	mg/L	E200.7	11/08/2010 10:37 PM
Calcium	< 0.20		1	mg/L	E200.7	11/08/2010 10:37 PM
Chromium	< 0.01		1	mg/L	E200.7	11/08/2010 10:37 PM
Copper	< 0.02		1	mg/L	E200.7	11/08/2010 10:37 PM
Iron	< 0.02		1	mg/L	E200.7	11/08/2010 10:37 PM
Lead	< 5.00		1	µg/L	E200.7	11/08/2010 10:37 PM
Magnesium	< 0.20		1	mg/L	E200.7	11/08/2010 10:37 PM
Manganese	< 0.02		1	mg/L	E200.7	11/08/2010 10:37 PM
Nickel	< 0.04		1	mg/L	E200.7	11/08/2010 10:37 PM
Potassium	0.42		1	mg/L	E200.7	11/08/2010 10:37 PM
Sodium	< 0.20		1	mg/L	E200.7	11/08/2010 10:37 PM
Zinc	< 0.02		1	mg/L	E200.7	11/08/2010 10:37 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 4:30 PM
Alkalinity, Total (As CaCO3)	< 1.00		1	mg/L	SM2320B	11/08/2010 3:24 PM
Chloride	< 2.00		1	mg/L	E300.0	11/11/2010 11:58 PM
Sulfate	< 5.00		1	mg/L	E300.0	11/11/2010 11:58 PM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/05/2010 3:23 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:46 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:23 PM
Hardness (As CaCO3)	< 5.00		1	mg/L	SM2340C	11/15/2010 4:22 PM
Bicarbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:46 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	11/22/2010 10:17 AM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/05/2010 7:51 AM
Nitrate as N	< 0.10		1	mg/L	E353.2	11/05/2010 9:05 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/14/2010 9:32 AM
Total Dissolved Solids	< 10		1	mg/L	SM2540C	11/08/2010 9:12 AM
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	E351.2	11/17/2010 3:43 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-008B

Client Sample ID. FIELD BLANK-110410

Collected : 11/4/2010 1:45:00 PM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F

DISSOLVED

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/09/2010 1:56 AM
Barium	< 0.20		1	mg/L	E200.7	11/09/2010 1:56 AM
Calcium	< 0.20		1	mg/L	E200.7	11/09/2010 1:56 AM
Chromium	< 0.01		1	mg/L	E200.7	11/09/2010 1:56 AM
Copper	< 0.02		1	mg/L	E200.7	11/09/2010 1:56 AM
Iron	< 0.02		1	mg/L	E200.7	11/09/2010 1:56 AM
Lead	< 5.00		1	µg/L	E200.7	11/09/2010 1:56 AM
Magnesium	< 0.20		1	mg/L	E200.7	11/09/2010 1:56 AM
Manganese	< 0.02		1	mg/L	E200.7	11/09/2010 1:56 AM
Nickel	< 0.04		1	mg/L	E200.7	11/09/2010 1:56 AM
Potassium	0.59		1	mg/L	E200.7	11/09/2010 1:56 AM
Sodium	< 0.20		1	mg/L	E200.7	11/09/2010 1:56 AM
Zinc	< 0.02		1	mg/L	E200.7	11/09/2010 1:56 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:40 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:33 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-009A

Client Sample ID. DUP-110410

Collected : 11/4/2010 12:00:00 PM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/08/2010 10:45 PM
Barium	< 0.20		1	mg/L	E200.7	11/08/2010 10:45 PM
Calcium	4.16		1	mg/L	E200.7	11/08/2010 10:45 PM
Chromium	< 0.01		1	mg/L	E200.7	11/08/2010 10:45 PM
Copper	< 0.02		1	mg/L	E200.7	11/08/2010 10:45 PM
Iron	0.88		1	mg/L	E200.7	11/08/2010 10:45 PM
Lead	< 5.00		1	µg/L	E200.7	11/08/2010 10:45 PM
Magnesium	2.28		1	mg/L	E200.7	11/08/2010 10:45 PM
Manganese	0.09		1	mg/L	E200.7	11/08/2010 10:45 PM
Nickel	< 0.04		1	mg/L	E200.7	11/08/2010 10:45 PM
Potassium	2.39		1	mg/L	E200.7	11/08/2010 10:45 PM
Sodium	11.0		1	mg/L	E200.7	11/08/2010 10:45 PM
Zinc	0.04		1	mg/L	E200.7	11/08/2010 10:45 PM
Mercury	< 0.2		1	ug/L	E245.1	11/10/2010 4:32 PM
Alkalinity, Total (As CaCO3)	1.10		1	mg/L	SM2320B	11/08/2010 3:28 PM
Chloride	17.1		1	mg/L	E300.0	11/12/2010 12:11 AM
Sulfate	13.2		1	mg/L	E300.0	11/12/2010 12:11 AM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/05/2010 3:24 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	11/09/2010 10:47 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:24 PM
Hardness (As CaCO3)	20.0		1	mg/L	SM2340C	11/15/2010 4:24 PM
Bicarbonate	1.1		1	mg/L	M4500-CO2D	11/09/2010 10:47 AM
Nitrogen, Ammonia (As N)	0.13		1	mg/L	SM4500-NH3 H	11/22/2010 10:18 AM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/05/2010 7:52 AM
Nitrate as N	1.36		1	mg/L	E353.2	11/05/2010 9:06 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/14/2010 9:33 AM
Total Dissolved Solids	60		1	mg/L	SM2540C	11/08/2010 9:15 AM
Nitrogen, Kjeldahl, Total	0.55		1	mg/L	E351.2	11/17/2010 3:44 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011202-009B

Client Sample ID. DUP-110410

Collected : 11/4/2010 12:00:00 PM
Received : 11/4/2010 3:15:00 PM
Collected By : G&F

DISSOLVED

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/09/2010 2:26 AM
Barium	< 0.20		1	mg/L	E200.7	11/09/2010 2:26 AM
Calcium	4.44		1	mg/L	E200.7	11/09/2010 2:26 AM
Chromium	< 0.01		1	mg/L	E200.7	11/09/2010 2:26 AM
Copper	< 0.02		1	mg/L	E200.7	11/09/2010 2:26 AM
Iron	0.18		1	mg/L	E200.7	11/09/2010 2:26 AM
Lead	< 5.00		1	µg/L	E200.7	11/09/2010 2:26 AM
Magnesium	2.45		1	mg/L	E200.7	11/09/2010 2:26 AM
Manganese	0.10		1	mg/L	E200.7	11/09/2010 2:26 AM
Nickel	< 0.04		1	mg/L	E200.7	11/09/2010 2:26 AM
Potassium	2.53		1	mg/L	E200.7	11/09/2010 2:26 AM
Sodium	12.0		1	mg/L	E200.7	11/09/2010 2:26 AM
Zinc	0.04		1	mg/L	E200.7	11/09/2010 2:26 AM
Mercury	< 0.20		1	ug/L	E245.1	11/10/2010 3:42 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	11/04/2010 5:34 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/30/2010

H2M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011459-001A

Client Sample ID. MW-5B

Collected : 11/11/2010 9:57:00 AM
Received : 11/11/2010 10:20:00 AM
Collected By : G&F
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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/17/2010 11:48 PM
Barium	< 0.20		1	mg/L	E200.7	11/17/2010 11:48 PM
Calcium	16.6		1	mg/L	E200.7	11/17/2010 11:48 PM
Chromium	< 0.01		1	mg/L	E200.7	11/17/2010 11:48 PM
Copper	< 0.02		1	mg/L	E200.7	11/17/2010 11:48 PM
Iron	0.02		1	mg/L	E200.7	11/17/2010 11:48 PM
Lead	< 5.00		1	µg/L	E200.7	11/17/2010 11:48 PM
Magnesium	7.65		1	mg/L	E200.7	11/17/2010 11:48 PM
Manganese	5.54		1	mg/L	E200.7	11/17/2010 11:48 PM
Nickel	< 0.04		1	mg/L	E200.7	11/17/2010 11:48 PM
Potassium	9.67		1	mg/L	E200.7	11/17/2010 11:48 PM
Sodium	57.1		1	mg/L	E200.7	11/17/2010 11:48 PM
Zinc	< 0.02		1	mg/L	E200.7	11/17/2010 11:48 PM
Mercury	< 0.2		1	ug/L	E245.1	11/18/2010 4:30 PM
Alkalinity, Total (As CaCO3)	40.0	D	2	mg/L	SM2320B	11/12/2010 2:07 PM
Chloride	116	D	5	mg/L	E300.0	11/18/2010 2:38 AM
Sulfate	26.3		1	mg/L	E300.0	11/18/2010 2:25 AM
Cyanide	< 10		1	µg/L	SM4500-CN E	11/12/2010 2:41 PM
Carbonate	< 2.0	D	2	mg/L	M4500-CO2D	11/22/2010 11:11 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	11/11/2010 2:47 PM
Hardness (As CaCO3)	80.0	D	2	mg/L	SM2340C	11/15/2010 4:26 PM
Bicarbonate	40.0	D	2	mg/L	M4500-CO2D	11/22/2010 11:16 AM
Nitrogen, Ammonia (As N)	0.17		1	mg/L	SM4500-NH3 H	11/16/2010 12:35 PM
Nitrite as N	< 0.10		1	mg/l	E353.2	11/12/2010 6:09 AM
Nitrate as N	2.48	D	5	mg/L	E353.2	11/12/2010 7:36 AM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	11/15/2010 9:49 AM
Total Dissolved Solids	272		1	mg/L	SM2540C	11/17/2010 12:36 PM
Nitrogen, Kjeldahl, Total	0.47		1	mg/L	E351.2	11/18/2010 4:53 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/22/2010

H 2 M labs
575 Broad Hollow Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Sample Information...
Type : Groundwater

Origin:

TOWN OF OYSTER BAY
150 MILLER PLACE
SYOSSET, NY 11791
Attn To : JAMES BYRNE, P.E.

Lab No. : 1011459-001B

Client Sample ID. MW-5B

Collected : 11/11/2010 9:57:00 AM
Received : 11/11/2010 10:20:00 AM
Collected By : G&F

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	11/17/2010 11:55 PM
Barium	< 0.20		1	mg/L	E200.7	11/17/2010 11:55 PM
Calcium	14.0		1	mg/L	E200.7	11/17/2010 11:55 PM
Chromium	0.02		1	mg/L	E200.7	11/17/2010 11:55 PM
Copper	< 0.02		1	mg/L	E200.7	11/17/2010 11:55 PM
Iron	0.17		1	mg/L	E200.7	11/17/2010 11:55 PM
Lead	< 5.00		1	µg/L	E200.7	11/17/2010 11:55 PM
Magnesium	6.70		1	mg/L	E200.7	11/17/2010 11:55 PM
Manganese	4.42		1	mg/L	E200.7	11/17/2010 11:55 PM
Nickel	0.10		1	mg/L	E200.7	11/17/2010 11:55 PM
Potassium	7.88		1	mg/L	E200.7	11/17/2010 11:55 PM
Sodium	48.5		1	mg/L	E200.7	11/17/2010 11:55 PM
Zinc	0.10		1	mg/L	E200.7	11/17/2010 11:55 PM
Mercury	< 0.20		1	ug/L	E245.1	11/18/2010 4:32 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Received/analyzed outside of analytical holding time

Joann M. Slavin
Laboratory Manager

Date Reported : 11/22/2010

APPENDIX B

FOURTH QUARTER 2010 GROUNDWATER SAMPLING LOGS

GANNETT FLEMING ENGINEERS, P.C.

100 Crossways Park West – Suite 300

Woodbury, New York 11797

CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001				
WELL NO./ OWNER	LF-1/ Town of Oyster Bay				
SAMPLING POINT	Monitoring Well LF-1				
SAMPLE I.D. NO.	LF-1			SAMPLED BY	BT/MN/PP
DATE SAMPLED	11/04/2010			TIME	0932
WELL USE	Groundwater Monitoring				
STATIC WATER ELEV.	44.53	FT.	BELOW MEASURING POINT		TOC
WELL DIAMETER	6.0	INCHES			
TOTAL WELL DEPTH	72.44 (depth to pump blockage)	FT.	BELOW MEASURING POINT		TOC

SAMPLING INFORMATION

PURGING METHOD	Dedicated 4" Submersible Pump				
PURGING RATE	12	GAL/ MIN	PURGING TIME	22	MIN
NO. CASING VOLUMES REMOVED	3		GALLONS	264	
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	1175	pH	7.44	DO (mg/l)	-
TEMPERATURE (°C)	17.8	TURBIDITY (NTU)	0.12	ORP (mV)	(107)
SAMPLES ANALYZED FOR	Leachate Parameters				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/04/2010				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.24	7.45	7.44
CONDUCTIVITY (µS/cm)	1207	1185	1175
TEMPERATURE (°C)	13.8	17.2	17.8
DO (mg/l)	-	-	-
TURBIDITY (NTU)	3.36	0.00	0.12
ORP (mV)	(46)	(99)	(107)

GANNETT FLEMING ENGINEERS, P.C.

100 Crossways Park West – Suite 300

Woodbury, New York 11797

CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	M-30B-R/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well M-30B-R		
SAMPLE I.D. NO.	M-30B-R	SAMPLED BY	BT/MN
DATE SAMPLED	11/03/2010	TIME	0921
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	85.03 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	2.0 INCHES		
TOTAL WELL DEPTH	123.70 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump				
PURGING RATE	3 GAL/ MIN	PURGING TIME	7 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	21		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	397	pH	8.73	DO (mg/l)	-
TEMPERATURE (°C)	13.5	TURBIDITY (NTU)	25.27	ORP (mV)	99
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/03/2010				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	9.21	9.19	8.73
CONDUCTIVITY (µS/cm)	408	401	397
TEMPERATURE (°C)	13.6	13.1	13.5
DO (mg/l)	-	-	-
TURBIDITY (NTU)	74	36.92	25.27
ORP (mV)	(32)	21	99

GANNETT FLEMING ENGINEERS, P.C.

100 Crossways Park West – Suite 300

Woodbury, New York 11797

CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	MW-05B/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-05B		
SAMPLE I.D. NO.	MW-05B	SAMPLED BY	MN/PP
DATE SAMPLED	11/11/2010	TIME	0957
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	72.81 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	122 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump				
PURGING RATE	6 GAL/ MIN	PURGING TIME	16 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	96		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	552	pH	7.68	DO (mg/l)	-
TEMPERATURE (°C)	14.5	TURBIDITY (NTU)	0.00	ORP (mV)	103
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/11/2010				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	8.22	7.74	7.68
CONDUCTIVITY (µS/cm)	547	552	552
TEMPERATURE (°C)	14.3	14.4	14.5
DO (mg/l)	-	-	-
TURBIDITY (NTU)	0.64	0.00	0.00
ORP (mV)	92	94	103

GANNETT FLEMING ENGINEERS, P.C.

100 Crossways Park West – Suite 300

Woodbury, New York 11797

CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	MW-06A/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-06A		
SAMPLE I.D. NO.	MW-06A	SAMPLED BY	BT/MN
DATE SAMPLED	11/03/2010	TIME	1015
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	94.95 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	112 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	4" disposable bailer		
PURGING RATE	- GAL/ MIN	PURGING TIME	- MIN
NO. CASING VOLUMES REMOVED	3	GALLONS	34
WELL DRAWDOWN/ RECOVERY	Good		
SAMPLE APPEARANCE	Clear		
ODORS OBSERVED	None		
CONDUCTIVITY (µS/cm)	183	pH 7.79	DO (mg/l) -
TEMPERATURE (°C)	21.69	TURBIDITY (NTU) 21.69	ORP (mV) (67)
SAMPLES ANALYZED FOR	See Chain of Custody		
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/03/2010		

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	8.03	7.51	7.79
CONDUCTIVITY (µS/cm)	80	78	183
TEMPERATURE (°C)	14.8	13.8	16.0
DO (mg/l)	-	-	-
TURBIDITY (NTU)	36.75	40.75	21.69
ORP (mV)	91	114	(67)

GANNETT FLEMING ENGINEERS, P.C.

100 Crossways Park West – Suite 300

Woodbury, New York 11797

CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	MW-06B/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-06B		
SAMPLE I.D. NO.	MW-06B	SAMPLED BY	BT/MN
DATE SAMPLED	11/03/2010	TIME	1013
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	95.22 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	135 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	Dedicated 4" Submersible Pump				
PURGING RATE	10 GAL/ MIN	PURGING TIME	8 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	80		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	Yes, Sulfur Odor				
CONDUCTIVITY (µS/cm)	>2000	pH	7.91	DO (mg/l)	-
TEMPERATURE (°C)	18.0	TURBIDITY (NTU)	8.02	ORP (mV)	(143)
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/03/2010				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.42	7.97	7.91
CONDUCTIVITY (µS/cm)	>2000	>2000	>2000
TEMPERATURE (°C)	15.8	17.2	18.0
DO (mg/l)	-	-	-
TURBIDITY (NTU)	3.09	3.30	8.02
ORP (mV)	(121)	(135)	(143)

GANNETT FLEMING ENGINEERS, P.C.

100 Crossways Park West – Suite 300

Woodbury, New York 11797

CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	MW-06C/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-06C		
SAMPLE I.D. NO.	MW-06C	SAMPLED BY	BT/MN
DATE SAMPLED	11/03/2010	TIME	1146
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	94.81 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	169 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump				
PURGING RATE	7 GAL/ MIN	PURGING TIME	19 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	133		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	1927	pH	7.94	DO (mg/l)	-
TEMPERATURE (°C)	17.7	TURBIDITY (NTU)	0.96	ORP (mV)	(124)
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/03/2010				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.21	7.97	7.94
CONDUCTIVITY (µS/cm)	1773	1923	1927
TEMPERATURE (°C)	15.5	16.4	17.7
DO (mg/l)	-	-	-
TURBIDITY (NTU)	0.37	3.19	0.96
ORP (mV)	(81)	(118)	(124)

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	MW-06E/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-06E		
SAMPLE I.D. NO.	MW-06E	SAMPLED BY	BT/MN
DATE SAMPLED	11/03/2010	TIME	1115
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	96.00 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	251 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	Dedicated 4" Submersible Pump		
PURGING RATE	6 GAL/ MIN	PURGING TIME	51 MIN
NO. CASING VOLUMES REMOVED	3	GALLONS	306
WELL DRAWDOWN/ RECOVERY	Good		
SAMPLE APPEARANCE	Clear		
ODORS OBSERVED	Yes		
CONDUCTIVITY (µS/cm)	958	pH 7.71	DO (mg/l) -
TEMPERATURE (°C)	15.6	TURBIDITY (NTU) 0.00	ORP (mV) 9
SAMPLES ANALYZED FOR	See Chain of Custody		
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/03/2010		

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.45	7.18	7.71
CONDUCTIVITY (µS/cm)	1249	960	958
TEMPERATURE (°C)	17.0	15.6	15.6
DO (mg/l)	-	-	-
TURBIDITY (NTU)	3.19	0.00	0.00
ORP (mV)	(130)	(112)	9

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	MW-06F/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-06F		
SAMPLE I.D. NO.	MW-06F	SAMPLED BY	BT/MN
DATE SAMPLED	11/03/2010	TIME	1117
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	95.14 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	350 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump				
PURGING RATE	6 GAL/ MIN	PURGING TIME	84 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	504		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	878	pH	7.23	DO (mg/l)	-
TEMPERATURE (°C)	14.3	TURBIDITY (NTU)	0.00	ORP (mV)	105
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 11/03/2010				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	6.00	7.31	7.23
CONDUCTIVITY (µS/cm)	919	927	878
TEMPERATURE (°C)	15.5	14.9	14.3
DO (mg/l)	-	-	-
TURBIDITY (NTU)	0.74	0.00	0.00
ORP (mV)	142	124	105

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	MW-07B-R/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-07B-R		
SAMPLE I.D. NO.	MW-07B-R/DUP	SAMPLED BY	MN/BT/PP
DATE SAMPLED	11/04/2010	TIME	1416
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	86.95 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	241 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump				
PURGING RATE	6 GAL/ MIN	PURGING TIME	50 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	300		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	143	pH	5.15	DO (mg/l)	-
TEMPERATURE (°C)	12.9	TURBIDITY (NTU)	10.87	ORP (mV)	161
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/04/2010				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.16	5.75	5.15
CONDUCTIVITY (µS/cm)	746	155	143
TEMPERATURE (°C)	12.1	12.9	12.9
DO (mg/l)	-	-	-
TURBIDITY (NTU)	0.00	0.00	10.87
ORP (mV)	192	207	161

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725.001		
WELL NO./ OWNER	MW-08A/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-08A		
SAMPLE I.D. NO.	MW-08A	SAMPLED BY	MN/BT
DATE SAMPLED	11/03/2010	TIME	1230
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	69.44 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	81 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	3" Disposable Bailer		
PURGING RATE	- GAL/ MIN	PURGING TIME	- MIN
NO. CASING VOLUMES REMOVED	3	GALLONS	25
WELL DRAWDOWN/ RECOVERY	Good		
SAMPLE APPEARANCE	Clear		
ODORS OBSERVED	None		
CONDUCTIVITY (µS/cm)	90	pH 5.55	DO (mg/l) -
TEMPERATURE (°C)	12.9	TURBIDITY (NTU) 3.20	ORP (mV) 200
SAMPLES ANALYZED FOR	See Chain of Custody		
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/03/2010		

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	8.65	6.57	5.55
CONDUCTIVITY (µS/cm)	97	89	90
TEMPERATURE (°C)	12.2	12.8	12.9
DO (mg/l)	-	-	-
TURBIDITY (NTU)	0.27	3.96	3.20
ORP (mV)	34	179	200

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	MW-08B/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-08B		
SAMPLE I.D. NO.	MW-08B	SAMPLED BY	BT/MN
DATE SAMPLED	11/03/2010	TIME	1234
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	68.78 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	166 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump				
PURGING RATE	6 GAL/ MIN	PURGING TIME	30 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	180		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	393	pH	5.54	DO (mg/l)	-
TEMPERATURE (°C)	13.9	TURBIDITY (NTU)	0.00	ORP (mV)	206
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab -11/03/2010				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.80	5.84	5.54
CONDUCTIVITY (µS/cm)	406	397	393
TEMPERATURE (°C)	13.2	13.7	13.9
DO (mg/l)	-	-	-
TURBIDITY (NTU)	0.00	0.00	0.00
ORP (mV)	123	184	206

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	MW-09B/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-09B		
SAMPLE I.D. NO.	MW-09B	SAMPLED BY	BT/MN/PP
DATE SAMPLED	11/04/2010	TIME	1210
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	91.15 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	174 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump		
PURGING RATE	6 GAL/ MIN	PURGING TIME	27 MIN
NO. CASING VOLUMES REMOVED	3	GALLONS	162
WELL DRAWDOWN/ RECOVERY	Good		
SAMPLE APPEARANCE	Clear		
ODORS OBSERVED	None		
CONDUCTIVITY (µS/cm)	378	pH 7.24	DO (mg/l) -
TEMPERATURE (°C)	13.9	TURBIDITY (NTU) 0.00	ORP (mV) 137
SAMPLES ANALYZED FOR	See Chain of Custody		
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/04/2010		

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.85	7.52	7.24
CONDUCTIVITY (µS/cm)	461	408	378
TEMPERATURE (°C)	13.1	13.6	13.9
DO (mg/l)	-	-	-
TURBIDITY (NTU)	0.36	0.00	0.00
ORP (mV)	103	122	137

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	MW-09C/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-09C		
SAMPLE I.D. NO.	MW-09C	SAMPLED BY	BT/MN/PP
DATE SAMPLED	11/04/2010	TIME	1306
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	92.37 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	235 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump		
PURGING RATE	6 GAL/ MIN	PURGING TIME	44 MIN
NO. CASING VOLUMES REMOVED	3	GALLONS	264
WELL DRAWDOWN/ RECOVERY	Good		
SAMPLE APPEARANCE	Clear		
ODORS OBSERVED	None		
CONDUCTIVITY (µS/cm)	490	pH 7.34	DO (mg/l) -
TEMPERATURE (°C)	18.3	TURBIDITY (NTU) 1.71	ORP (mV) 70
SAMPLES ANALYZED FOR	See Chain of Custody		
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/04/2010		

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.18	7.20	7.34
CONDUCTIVITY (µS/cm)	447	488	490
TEMPERATURE (°C)	15.2	16.5	18.3
DO (mg/l)	-	-	-
TURBIDITY (NTU)	0.00	0.00	1.71
ORP (mV)	(87)	(5)	70

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	MW-11A/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-11A		
SAMPLE I.D. NO.	MW-11A	SAMPLED BY	BT/MN/PP
DATE SAMPLED	11/04/2010	TIME	1030
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	24.24 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	145 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump		
PURGING RATE	6 GAL/ MIN	PURGING TIME	39 MIN
NO. CASING VOLUMES REMOVED	3	GALLONS	234
WELL DRAWDOWN/ RECOVERY	Good		
SAMPLE APPEARANCE	Clear		
ODORS OBSERVED	None		
CONDUCTIVITY (µS/cm)	86	pH 5.01	DO (mg/l) -
TEMPERATURE (°C)	10.9	TURBIDITY (NTU) 1.49	ORP (mV) 224
SAMPLES ANALYZED FOR	See Chain of Custody		
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/04/2010		

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.57	5.35	5.01
CONDUCTIVITY (µS/cm)	84	86	86
TEMPERATURE (°C)	10.8	10.7	10.9
DO (mg/l)	-	-	-
TURBIDITY (NTU)	2.12	2.38	1.49
ORP (mV)	169	211	224

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	MW-11B/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-11B		
SAMPLE I.D. NO.	MW-11B	SAMPLED BY	BT/MN/PP
DATE SAMPLED	11/04/10	TIME	1031
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	24.03 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	241 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	Dedicated 4" Submersible Pump		
PURGING RATE	10 GAL/ MIN	PURGING TIME	43 MIN
NO. CASING VOLUMES REMOVED	3	GALLONS	430
WELL DRAWDOWN/ RECOVERY	Good		
SAMPLE APPEARANCE	Clear		
ODORS OBSERVED	None		
CONDUCTIVITY (µS/cm)	95	pH 4.70	DO (mg/l) -
TEMPERATURE (°C)	10.5	TURBIDITY (NTU) 0.58	ORP (mV) 234
SAMPLES ANALYZED FOR	See Chain of Custody		
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/04/10		

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	8.34	5.85	4.70
CONDUCTIVITY (µS/cm)	94	96	95
TEMPERATURE (°C)	10.7	10.6	10.5
DO (mg/l)	-	-	-
TURBIDITY (NTU)	1.26	1.52	0.58
ORP (mV)	112	207	234

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 53085.001		
WELL NO./ OWNER	OBS-1/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well OBS-1		
SAMPLE I.D. NO.	OBS-1	SAMPLED BY	BT/MN/PP
DATE SAMPLED	11/04/2010	TIME	1122
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	60.80 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	195 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	Dedicated 4" Submersible Pump		
PURGING RATE	10 GAL/ MIN	PURGING TIME	28 MIN
NO. CASING VOLUMES REMOVED	3	GALLONS	280
WELL DRAWDOWN/ RECOVERY	Good		
SAMPLE APPEARANCE	Clear		
ODORS OBSERVED	None		
CONDUCTIVITY (µS/cm)	792	pH 7.25	DO (mg/l) -
TEMPERATURE (°C)	13.8	TURBIDITY (NTU) 0.23	ORP (mV) 142
SAMPLES ANALYZED FOR	See Chain of Custody		
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 11/04/2010		

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	6.06	7.04	7.25
CONDUCTIVITY (µS/cm)	772	786	792
TEMPERATURE (°C)	13.9	13.9	13.8
DO (mg/l)	-	-	-
TURBIDITY (NTU)	0.00	0.00	0.23
ORP (mV)	171	149	142

APPENDIX C

NASSAU COUNTY MONITORING WELL DATA

GROUNDWATER ELEVATIONS
BETHPAGE STATE PARK
WATER LEVEL MEASUREMENTS

November 3, 2010 MF

WELL	TIME	MEASURING POINT ELEV	DEPTH TO WATER	WATER TABLE	ORW FLOW RATE	COMMENTS
BP-1A	1428	109.77	46.00	63.77		
BP-1B	1430	109.53	45.83	63.70		
BP-1C	1433	109.37	45.52	63.85		
BP-2A	1358	151.00	85.82	65.18		
BP-2B*	1401	151.13	87.17	63.96		
BP-3A	1055	124.54	62.03*	124.54		***No pump MP TOC***
BP-3B	1057	123.57	64.90	58.67		
BP-3C	1059	123.68	65.05*	123.68		***No pump MP TOC***
BP-4A	1347	92.69	33.17	59.52		
BP-4B*	1349	91.92	33.38	58.54		
BP-4C*	1351	91.68	32.45	59.23		
BP-4I	1355	92.10	32.70	59.40		
BP-5A	1419	96.34	35.81	60.53		
BP-5B	1422	96.48	36.23	60.25		
BP-5C	1425	96.28	36.21	60.07		
BP-6A	1134	102.55	38.18	64.37		
BP-6B	1137	102.58	39.82	62.76		
BP-6C	1140	102.35	38.41	63.94		
BP-7A	1144	147.54	81.63	65.91		
BP-7B	1146	148.76	83.01	65.75		
BP-7C	1150	148.40	82.75	65.65		
BP-8A	1120	89.88	27.13	62.75		
BP-8B	1122	89.82	26.89	62.93		
BP-8C	1125	89.53	27.48	62.05		
BP-9B*	1224	85.09	29.02	56.07		
BP-9C*	1226	84.88	28.28*	84.88		***No pump MP TOC***
BP-9I	1230	85.18	28.00*	85.18		
BP-10B*	1259	81.21	25.42	55.79		
BP-10C*	1302	80.94	26.93	54.01		
BP-11	NR	81.76	NR	NR		***HORNETS' NEST!***
BP-12A*	1213	78.33	21.31	57.02		
BP-12B*	1215	78.24	22.48	55.76		
BP-12C*	1220	78.56	22.08	56.48		
BP-13B*	1200	133.37	77.30	56.07		
BP-13C*	1203	133.67	78.32	55.35		
BP-14B*	1336	81.50	24.00	57.50		
BP-14C*	1340	81.48	24.10	57.38		
BP-15B	1318	98.38	39.90	58.48		
BP-15C	1321	98.45	39.86	58.59		
OBV-1B	0948	157.26	85.81	71.45		
OBV-1C	0950	156.69	85.80	70.89		
W-7A	1451	104.44	38.77	65.67		
W-7B	1449	104.55	39.75	64.80		
W-7C	1453	104.68	40.03	64.65		***(west)***
W-7D	1455	104.58	40.40	64.18		***(east)***
RB-1	1000	135.02	64.50	70.52		
UM-1	1207	115.64	50.52	65.12		***Curb Box Damaged***
U-6A	0938	153.94	82.55	71.39		
ORW-1	NR	*147.68*	NR	NR	Off	***MP @ GRADE***
ORW-2	NR	*97.88*	NR	NR	Off	***MP @ GRADE***
ORW-3	1530	*91.39*	55.57	35.82	178 GPM	***MP @ GRADE***
ORW-4	1520	*88.88*	70.54	18.34	155 GPM	***MP @ GRADE***
ORW-5A	1410	*100.38*	43.02	57.36	Off	
ORW-6	1514	*83.42*	52.33	31.09	140 GPM	***MP @ GRADE***
ORW-7	1507	*76.14*	94.82	-18.68	110 gpm	***MP @ GRADE***

* = NO DEDICATOR PUMP IN WELL

APPENDIX D

GROUNDWATER SAMPLING PROTOCOLS

PROTOCOLS FOR SAMPLING GROUNDWATER UNDER THE OLD BETHPAGE SOLID WATER DISPOSAL COMPLEX REMEDIAL ACTION PLAN

Equipment

Generator
Extension Cord
Water Level Meter (M-Scope) or
Steel Tape and Chalk
Sample/Discharge Fitting
Beakers
Graduated Bucker
Gloves (Latex Nitrile or equivalent)
Nylon or Polypropylene Cord
Cooler with Ice
Teflon Tape
PVC Bailer

Distilled Water
Polyethylene Tubing
Rags
MICRO™ Laboratory Cleaner
Sample Containers
(Including duplicate field and trip blanks)
Plastic Sheeting
Flow-through Cell
Conductivity Meter
Thermometer
Scrub Brush
Grundfos® Stainless Steel Submersible Pump

Procedure: Wells equipped with permanent submersible pumps.

1. Unlock the well and measure the depth to water to the hundredth of a foot with a water level meter (m-scope) or steel tape and chalk. Record this measurement on the Water Sampling Log and calculate the amount of water standing in the well.

2. Lay plastic sheeting down around well. Clean the sample/discharge fitting and the flow-through cell in 2% MICRO™ solution and rinse with distilled water.

3. Connect the sample/discharge fitting to the flow-through cell. Connect this assemblage to the riser pipe. Use Teflon tape where needed. Start generator and plug extension cord in: connect extension cord to the pump power cable. Record the time pumping began on the Water Sampling Log.

4. Close the valve on the fitting to the flow-through cell. Using the other valve, adjust the pumping rate so that it does not continuously draw down to the pump intake (consult sampling logs from previous sampling rounds for pumping rates). Periodically measure the flow rate using a graduated bucket. Record pumping rate on the Water Sampling Log.

5. Pump three times the amount of standing water from the well. If necessary, evacuate Well No 8B by pumping dry three times allowing time for recovery between each pumping. Water pumped from Well No. 6B is to be discharged away from the well to prevent possible contamination of the less contaminated water table zone tapped by Well No. 6A. A minimum of 100 feet of polyethylene tubing will be used to direct discharge away from the well cluster. Note: the flow through cell is not used to sample Well No. 6B. Label and tape the sample containers.

6. When the wells is nearly ready for sampling, put on protective gloves and open the valve to the flow-through cell. Insert thermometer, pH 4 and 7 buffers, and the conductivity electrode into the flow-through cell and allow a few minutes for thermal equilibration. Read and record temperature; set pH and conductivity meters with buffers. Remove vials containing buffers and insert pH electrode into the flow-through cell. Record pH, temperature, and conductivity on Water Sampling Log.

7. Adjust valve so that flow from the sample discharge (polyethylene tubing) is a trickle. Fill VOC vials making sure that there are no trapped air bubbles, and place in a cooler with ice.

8. Fill remaining containers and place in a cooler with ice. Note: do not rinse bottles with sample water before filling, as some bottles contain preservative.

9. Complete Water Sampling Log and Chain-of-Custody Form. Affix Chain-of-Custody Seal to cooler.

10. Remove sample/discharge fitting and flow-through cell, replace all plugs, and lock the well. Discard plastic sheeting and gloves. Deliver samples to laboratory as soon as possible. Obtain signature from receiver at laboratory on Chain-of-Custody Form.

Procedure: Wells not equipped with a permanent submersible pump.

1. Wells that are not equipped with permanent submersible pumps will be evacuated with a submersible pump or PVC bailer, and sampled with PVC bailer.

2. Open the Well and clean off any surficial dirt from protective casing. Remove well cap.

3. Measure the depth to water to the hundredth of a foot with a water level recorder (m-scope) or steel tape and chalk. Record this measurement on the Water Sampling Log, and calculate the amount of water standing in the well.

4. Lay plastic sheeting down around well. Label and tape the sample containers.

5. Disassemble the bailer, if appropriate, and immerse the bailer and/or submersible pump in a 2% solution of MICRO™, or pour the solution in and over the bailer/pump. Scrub the bailer/pump with a brush to remove surficial contaminants. Rinse the bailer/pump with copious amounts of distilled water. Wear clean gloves when handling a clean bailer/pump.

6. Reassemble the bailer and place on the plastic sheeting. Attach an appropriate length of nylon or polypropylene cord to the bailer using a secure knot. Tie loose end of cord to

well casing. Attach the appropriate lengths of nylon or polypropylene cord and polyethylene tubing to the submersible pump. New cord and tubing will be used at each well.

7. If a bailer is being used to evacuate the well, lower the bailer into the well and into the water column gradually, to minimize turbulence. Allow the bailer to sink and become fully submerged. Recover the bailer from the well and empty into the graduated bucket. If the submersible pump is being used to evacuate the well, lower the pump below the water table, secure the safety line, and plug into generator.

8. Bail/pump three times the amount of standing water from the well or bail/pump well dry and allow to recover. Bailer cord can be held in hand or laid on plastic sheeting while bailing. Following evacuation, pull pump out of well slowly while pump is still operating. This will ensure that any water remaining above the pump has been evacuated from the well.

9. All samples for wells without dedicated pumps will be collected with a PVC bailer. Slowly lower clean bailer into well to minimize turbulence. Fill the 40-mi vials for VOCs analysis insuring that there are no air bubbles. Place vials in cooler with ice.

10. Fill remaining sample containers and place in cooler with ice. Note: do not rinse containers with sample, as some containers contain preservatives.

11. Lock well. Discard cord, tubing, gloves, and sheeting.

12. Fill out remaining data on Water Sampling Log and complete Chain-of-Custody Form. Affix Chain-of-Custody Seal to cooler. Deliver samples to the lab as soon as possible and obtain receiver's signature on Chain-of-Custody Form.

<u>Procedure</u>: (Field Blank and Trip Blank)

1. Label and tape one of the 40-mi vials filled with lab water as “Trip Blank”, and store unopened in a cooler on ice. One trip blank will accompany each day’s samples.

2. Label and tape one of the empty 40-mi vials as “Field Blank” and store it and the remaining two 40-mi vials filled with lab water, unopened with the other empty sample containers.

3. On the last day of sampling, two Field Blanks will be collected by running the two vials of lab water through (1) the sample/discharge fitting and (2) the bailer used in the sampling round (the fitting and bailer will be decontaminated prior to sample collection following the identical procedure used between sampling different wells). Make sure that there is no trapped air bubbles in the sample vial Place blank in cooler with ice.

4. Complete Water Sampling Log and Chain-of-Custody Form. Affix Chain-of-Custody Seal to cooler.

5. Deliver samples to laboratory as soon as possible. Obtain signature from receiver at laboratory on Chain-of-Custody Form.

APPENDIX E

"2010 Annual Monitoring Report
January through December 2010
Old Bethpage Landfill
Old Bethpage, New York"

Gannett Fleming, August 2011

TOWN OF OYSTER BAY

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2010 ANNUAL MONITORING REPORT
JANUARY THROUGH DECEMBER 2010
OLD BETHPAGE LANDFILL
OLD BETHPAGE, NEW YORK

August 2011

Gannett Fleming

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1.0 INTRODUCTION

This report summarizes the groundwater monitoring activities for 2010 at the Old Bethpage Solid Waste Disposal Complex (OBSWDC). The 2010 monitoring period covers the seventeenth year of operation of the Old Bethpage Landfill Groundwater Treatment Facility (GTF). Quarterly groundwater monitoring was performed accordance with the requirements of the Protocols for Sampling Groundwater under the Old Bethpage Solid Waste Disposal Complex Remedial Action Plan (RAP) prepared by Geraghty & Miller, Appendix I of the 1988 Record of Decision (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 monitoring round. The 2010 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 well MW-09D was 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.

Monitoring well water levels increased an average of 0.83 feet between the first and fourth quarter gauging events, with an average variance of 1.51 feet during this annual monitoring period. During the first half of 2010, the recovery system was operating at its full capacity except when the groundwater treatment facility (GTF) and recovery wells were off-line for repairs. During the second half of 2010, the recovery system operated only intermittently in manual mode due to lighting-strike damage to the control system. 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. The shallow and deep potentiometric groundwater flows toward the recovery wells in the capture zone area.

2.1 NYSDEC Modifications & Additional Scope

At the request of the New York State Department of Environmental Conservation (NYSDEC), Nassau County (NC) monitoring wells have been added to the modeling effort for the quarterly and annual monitoring reports. Water-level elevations from select NC wells are included on the Water Table Flow Maps, Shallow Potentiometric Flow Maps, and Deep Potentiometric Flow Maps to enhance hydraulic monitoring of the area. The selection of these wells was based on definitions from the 1990 Remedial Investigation Report (RI) by Geraghty and Miller. The definitions are as follows:

- Water Table – Wells screened between 76 ft to 43 ft above MSL
- Shallow Potentiometric – Wells screened between 30 ft above MSL and 30 ft below MSL
- Deep Potentiomentric – Wells screened between 65 ft to 157 ft below MSL

Based on these definitions, the following NC monitoring wells have been added to the three flow maps using survey data provided by the NC Department of Public Works:

Water Table	Shallow Potentiometric	Deep Potentiometric
N-9980	BP-1B	BP-3B
BP-3A	BP-4I	BP-4B
BP-4A	BP-9I	BP-5B
BP-5A	BP-11	BP-6B
BP-6A	BP-12A	BP-7B
BP-7A		BP-9B
BP-8A		BP-12B
		BP-14B
		BP-15B

The NC Department of Public Works performed synoptic well gauging, and provided GF with the water-level measurements. Observed water level elevations, well construction logs, and survey data furnished by the NC Department of Public Works, is provided as Appendix C.

From June 21 through June 25, 2010, GF and Aquifer Drilling and Testing of New Hyde Park, New York (ADT) properly decommissioned monitoring well MW-07B as per NYSDEC Groundwater Monitoring Well Decommissioning Policy CP-43 (CP-43). This work was performed at the request of the NYSDEC due to the failure of the former well. This monitoring well was replaced at a location 10 feet to the southwest of the former well and installation was completed on June 25, 2010. The well construction log, well development log, and photos of the installation of the new well, MW-07B-R, are included as Appendix D.

The NYSDEC requested GF attempt to locate monitoring well OBS-2, which has not been sampled or gauged since July 2006. On June 22, 2010, NAEVA Geophysics of Congers, New York (NAEVA) used ground penetrating radar (GPR) and metal detection equipment to locate potential subsurface anomalies in the area of monitoring well OBS-2. NAEVA marked out one

anomaly. On June 25, 2010, ADT excavated to five (5) feet below ground surface (BGS) in the area around this anomaly and no evidence of a monitoring well was observed. Following this excavation, Mr. John Gerlach (LKB) contacted a former construction inspector familiar with the monitoring well locations. The inspector marked out the location where he had recalled OBS-2 was located. On July 23, 2010, Gannett Fleming scientists attempted to locate OBS-2 based on the mark-out location. OBS-2 could not be located.

From July 7 through 9, 2010, Naik Consultant Group, PC of New York, NY (Naik) was onsite to survey the newly installed monitoring well MW-07B-R, resurvey all of the existing monitoring wells gauged quarterly by Gannett Fleming, and survey select NC monitoring wells. The resurvey was performed due to the recent removal of down-well equipment and replacement of surface well caps. This survey data has been incorporated into the water level elevation table. The survey data provided by Naik is provided as Appendix E.

3.0 GROUNDWATER SAMPLING AND CONTAMINANT DISTRIBUTION

Gannett Fleming sampled monitoring wells M-30B-R, MW-05B, MW-06A, MW-06B, MW-06C, MW-06E, MW-06F, MW-08A, MW-08B, MW-09B, MW-09C, MW-11A, MW-11B, OBS-1, and LF-1 during the first, second, third, and fourth quarters of 2010 in accordance with the RAP. At the request of LKB, monitoring well MW-09D was sampled during the third quarter sampling round. Former monitoring well MW-07B was sampled with a QED bladder pump during the first quarter of 2010. This sample was only analyzed for volatile organic compounds (VOCs) due to the limited recovery of sample water. Following the first quarter, MW-07B was properly decommissioned, and monitoring well MW-07B-R was installed 10 feet to the southwest of the former location to the specifications of the former well. Monitoring well MW-07B-R was sampled in the second, third, and fourth quarter monitoring rounds.

Field blanks and field duplicates (DUPs) were collected by Gannett Fleming environmental scientists and analyzed for quality assurance/quality control (QA/QC) purposes. Trip blanks were prepared by the laboratory for QA/QC purposes. Samples collected for VOC analysis were analyzed by the Town of Oyster Bay Environmental Laboratory. Metals and leachate parameters in the samples were analyzed by H2M Laboratories of Melville, New York (H2M). The quarterly analytical results are summarized in Tables 3 through 8. Raw laboratory data and well sampling logs are included in the quarterly reports prepared by Gannett Fleming.

A dedicated submersible pump, a two-inch Grundfos pump, and/or a disposable bailer were used to purge and sample the monitoring wells. All non-dedicated down-well equipment was decontaminated 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 yearly summary plume maps as shown on Figures 1 through 3.

Groundwater flow maps were completed for each quarter of 2010 and have been included as Appendix A.

In addition to the wells sampled by GF, VOC analytical data from the adjacent Claremont Polychemical National Priorities List (NPL) site (EPA ID # NYD002044584) has been provided by LKB and incorporated into the figures presented in this report.

3.1 Volatile Organic Compound (VOC) Plume

The VOCs are divided into three groups: volatile halogenated hydrocarbons (VHOs), volatile aromatic hydrocarbons (AH), and tetrachloroethene (PCE). Changes in chemical constituent concentrations between the first and fourth quarter sampling rounds are discussed below. The trend of concentrations of contaminants in the water table, shallow potentiometric and deep potentiometric zones are presented in Appendix B, Figures 1 through 9. All VOC data for 2010 has been summarized in tables 3 through 6.

3.1.1 Volatile Halogenated Compounds (VHO) Group

Ten VHO compounds were detected during 2010. The location and monitoring round during which the highest concentration was reported are listed on the table below.

Compound	Peak Concentration (micrograms per liter [ug/L])	Quarter	Location
Chloroethane	1.7	3rd	MW-09D
Chloroform	23.3	2nd	MW-07B-R
Dichlorodifluoromethane	0.8	3rd	MW-09D
1,1-Dichloroethane	3.3	2nd	MW-07B-R
1,1-Dichloroethene	30.4	2nd	MW-07B-R
cis-1,2-Dichloroethene	578	2nd	MW-07B-R
PCE	222	2nd	MW07B-R
1,1,1-Trichloroethane	36.1	2nd	MW-07B-R
Trichloroethylene	954	3rd	MW-07B-R
Vinyl chloride	0.8	4th	MW-06B

Total VHO concentrations decreased through 2010 in monitoring well MW-06F from 0.3 ug/L to non-detect and in MW-07B-R from 893.1 ug/L to 310.4 ug/L (data from second, third, and fourth quarters only). Concentrations of VHOs decreased in MW-09D when compared to third quarter of 2009 (15.4 ug/L to 7.5 ug/L). Concentrations of VHOs increased during 2010 in MW-06A (0.3 ug/L to 0.4 ug/L), MW-06B (0.3 ug/L to 2.3 ug/L), MW-06C (non-detect to 1.1 ug/L), MW-06E (non-detect to 1.2 ug/L), MW-08A (9.4 ug/L to 11.1 ug/L), MW-08B (0.2 ug/L to 0.8 ug/L), MW-09B (non-detect to 0.2 ug/l), MW-11A (1.1 ug/L to 2.0 ug/L), MW-11B (non-detect to 0.5 ug/L), OBS-1 (1.2 ug/L to 2.0 ug/L), and LF-1 (non-detect to 0.5 ug/L). VHO concentrations remained at less than the laboratory reporting limits in monitoring wells M-30B-R, MW-05B, and MW-09C for all groundwater samples collected in 2010.

For the year, concentrations of VHOs remained below NYSDEC Technical & Operational Guidance Series (TOGS) 1.1.1 Class GA Ambient Water Quality Standards (AWQSs) at the water table, shallow potentiometric zone, and deep potentiometric zone with the exception of samples collected from monitoring wells MW-07B-R and MW-08A. The sample from monitoring well MW-07B-R in the second quarter reported chloroform, 1,1-dichloroethene, cis-1,2-dichloroethene, PCE, and 1,1,1-trichloroethane at concentrations greater than NYSDEC TOGS 1.1.1 Class GA AWQSs. The sample from monitoring well MW-07B-R in the third quarter reported 1,1-dichloroethene, cis-1,2-dichloroethene, PCE, 1,1,1-trichloroethane, and trichloroethylene at concentrations greater than the NYSDEC Class GA AWQSs. The sample from monitoring well MW-07B-R in the fourth quarter reported cis-1,2-dichloroethene, PCE, and trichloroethylene at concentrations greater than the NYSDEC Class GA AWQSs. The sample from MW-08A reported PCE at concentrations greater than the NYSDEC Class GA AWQS for all four quarters during 2010.

Figure 1 shows the overall distribution of VHOs during 2010. Concentrations of total VHOs in each aquifer zone are presented in Figures 1 through 3 in Appendix B.

3.1.2 Aromatic Hydrocarbons

Ten aromatic hydrocarbons were detected during the 2010 monitoring period. The location and monitoring round during which the highest concentration of each compound were reported are listed in the following table:

Compound	Peak Concentration (ug/L)	Quarter	Location
Benzene	2.5	2nd	MW-06B
n-Butylbenzene	1.0	2nd	MW-06B
Tert-Butylbenzene	0.6	4th	OBS-1
Chlorobenzene	5.9	2nd	MW-06B
o,m&p-dichlorobenzene	9.0	2nd	MW-06B
Ethylbenzene	0.3	2nd	MW-06E
Isopropylbenzene	5.2	2nd	MW-06B
Toluene	1,000	2nd	MW-07B-R
m/p-Xylene	0.6	2nd	MW-06B
o-Xylene	9.2	1st	MW-08A

Total aromatic hydrocarbon concentrations decreased through 2010 in monitoring wells MW-06E (1.5 ug/L to 0.8 ug/L), MW-08A (11.9 ug/L to non-detect), MW-08B (0.4 ug/L to non-detect), MW-07B-R (1,000 ug/L to non-detect [data from second, third, and fourth quarters only]), MW-09B (2.4 ug/L to 0.3 ug/L), and MW-09C (1.7 ug/L to non-detect). Concentrations of aromatic hydrocarbons decreased in MW-09D when compared to third quarter of 2009 (40.8 ug/L to 3.8 ug/L). Concentrations of aromatic hydrocarbons increased during 2010 in LF-1 (non-detect to 2.0 ug/L), OBS-1 (3.4 ug/L to 6.6 ug/L), MW-06B (11.8 ug/L to 27.5 ug/L), MW-06C (1.8 ug/L to 7.4 ug/L), and MW-11A (non-detect to 0.5 ug/L). Aromatic hydrocarbon concentrations remained at less than the laboratory reporting limits in wells M-30B-R, MW-05B, MW-06A, MW-06F, and MW-11B from the first through the fourth quarter sampling rounds.

Aromatic hydrocarbons concentrations were reported by the analytical laboratory as non-detect or remained at concentrations below NYSDEC Class GA AWQSs at the water table. Aromatic

hydrocarbon concentrations in the shallow and deep potentiometric zones decreased or remained at less than the laboratory reporting limits between the first and fourth quarter monitoring rounds with the exception of samples collected from monitoring wells MW-06B, MW-07B-R, and MW-09D. The sample from monitoring well MW-06B in the first quarter reported benzene at a concentration greater than the NYSDEC Class GA AWQS. The sample from monitoring well MW-06B in the second quarter reported benzene, chlorobenzene, o&p- dichlorobenzene, o,m&p-dichlorobenzene, and isopropylbenzene at concentrations greater than the NYSDEC Class GA AWQSs. The sample from monitoring well MW-06B in the fourth quarter reported benzene, chlorobenzene, and o-xylene at concentrations greater than the NYSDEC Class GA Ambient AWQSs. The sample from monitoring well MW-07B-R in the second quarter reported toluene at a concentration greater than the NYSDEC Class GA AWQS. The sample from monitoring well MW-09D in the third quarter reported benzene at a concentration greater than the NYSDEC Class GA AWQS.

Figure 2 shows the overall distribution of aromatic hydrocarbons during 2010. Concentrations of total aromatic hydrocarbons in each potentiometric zone are shown in Figures 4 through 6 in Appendix B.

3.1.3 Tetrachloroethene

PCE was detected at the highest concentration of 222 ug/L during the second quarter sampling round in monitoring well MW-07B-R.

PCE concentrations decreased through 2010 in monitoring well MW-07B-R (222 ug/l to 14.4 ug/L [samples were collected during second, third and fourth quarters only]). Concentrations of PCE decreased in MW-09D when compared to the third quarter of 2009 (1.3 ug/L to 0.4 ug/L). PCE concentrations increased in LF-1 (non-detect to 0.2 ug/L), MW-06B (non-detect to 0.4 ug/L), MW-06C (non-detect to 0.2 ug/L), MW-06E (non-detect to 0.2 ug/L), MW-08A (9.1 ug/L to 10.3 ug/L), MW-08B (0.2 ug/L to 0.6 ug/L), MW-09B (non-detect to 0.2 ug/L), MW-11A (0.2 ug/L to 0.6 ug/l), and OBS-1 (non-detect to 0.7 ug/L). PCE concentrations remained at less than the laboratory reporting limits in wells M-30B-R, MW-05B, MW-06A, MW-06F, MW-09C, and MW-11B from the first through the fourth quarter sampling rounds.

PCE was reported at concentrations exceeding the NYSDEC Class GA AWQS of 5.0 ug/L in all samples collected from groundwater monitoring wells MW-07B-R and MW-08A. PCE was not detected or the concentrations remained below NYSDEC Class GA AWQS in all additional water table, shallow and deep potentiometric monitoring wells.

Figure 3 shows the approximate, extent distribution of PCE during 2010. Concentrations of PCE in each potentiometric zone are shown in Figures 7 through 9 in Appendix B.

3.2 Inorganic Analyte Plume

The 2010 inorganic compound data reports little change in the extent and concentration of the leachate parameters for the duration of the year. The highest leachate parameter concentrations were reported in decreasing order in the samples from wells MW-06B, MW-06C, LF-1, MW-06F, MW-06E OBS-1, MW-05B, MW-09C, MW-08B, MW-09B, M-30B-R, MW-07B-R, MW-08A, MW-06A, MW-11A, and MW-11B.

4.0 FINDINGS

1. The average system pumpage in 2010 appeared sufficient to control the VOC plume.

2. Concentrations of VHOs increased in LF-1, OBS-1, MW-06B, MW-06C and MW-11A. Total VHO concentrations decreased in monitoring wells MW-06E, MW-08A, MW-08B, MW-07B-R (data from second, third, and fourth quarters only), MW-09B, and MW-09C compared to third quarter 2009. VHO concentrations remained at less than the laboratory reporting limit in wells M-30B-R, MW-05B, MW-06A, MW-06F, and MW-11B from the first through the fourth quarter sampling rounds.

3. Concentrations of aromatic hydrocarbons increased during 2010 in LF-1, OBS-1, MW-06B, MW-06C, and MW-11A. Total aromatic hydrocarbon concentrations decreased through 2010 in MW-06E, MW-08A, MW-08B, MW-07B-R (data from second, third, and fourth quarters only), MW-09B, and MW-09C. Concentrations of aromatic hydrocarbons decreased in MW-09D when compared to third quarter of 2009. Aromatic hydrocarbon concentrations remained at less than the laboratory reporting limit in wells M-30B-R, MW-05B, MW-06A, MW-06F, and MW-11B from the first through the fourth quarter sampling rounds

4. PCE concentrations increased in monitoring well MW-07B-R (data from second, third, and fourth quarters only). Concentrations of PCE decreased in MW-09D when compared to the third quarter of 2009. PCE concentrations remained at less than the laboratory reporting limit in wells M-30B-R, MW-05B, MW-06A, MW-06F, MW-09C, and MW-11B from the first through the fourth quarter sampling rounds.

5. The distribution and concentration of inorganic compounds show little overall change in the extent and concentration of leachate parameters during 2010.

6. Monitoring well OBS-2 could not be located using geophysical equipment and historical information.

5.0 RECOMMENDATIONS

1. Continue pump operation to assure hydraulic control as per the 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.

4. Begin biennial sampling of Nassau County well BP 15B in the first quarter of 2011 to replace the data previously analyzed at OBS-2, which cannot be located.

TABLES

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	CHANGE IN WATER ELEV. (feet)	WATER ELEVATION (feet)
EW-01A	3/31/2010	128.59	NM	N/A	N/A
EW-01A	6/29/2010	128.59	NM	N/A	N/A
EW-01A	8/24/2010	128.59	62.29	N/A	66.30
EW-01A	11/2/2010	128.59	63.85	-1.56	64.74
EW-01B	3/31/2010	129.11	NM	N/A	N/A
EW-01B	6/29/2010	129.11	NM	N/A	N/A
EW-01B	8/24/2010	129.11	62.81	N/A	66.30
EW-01B	11/2/2010	129.11	64.12	-1.31	64.99
EW-01C	3/31/2010	129.02	NM	N/A	N/A
EW-01C	6/29/2010	129.02	NM	N/A	N/A
EW-01C	8/24/2010	129.02	62.65	N/A	66.37
EW-01C	11/2/2010	129.02	64.58	-1.93	64.44
EW-02A	3/31/2010	155.94	91.62	0.73	64.32
EW-02A	6/29/2010	155.94	89.26	2.36	66.68
EW-02A	8/24/2010	155.94	90.45	-1.19	65.49
EW-02A	11/2/2010	155.94	91.70	-1.25	64.24
EW-02B	3/31/2010	156.33	91.52	1.03	64.81
EW-02B	6/29/2010	156.33	89.45	2.07	66.88
EW-02B	8/24/2010	156.33	90.71	-1.26	65.62
EW-02B	11/2/2010	156.33	91.91	-1.20	64.42
EW-02C	3/31/2010	156.27	91.49	0.89	64.78
EW-02C	6/29/2010	156.27	89.72	1.77	66.55
EW-02C	8/24/2010	156.27	90.66	-0.94	65.61
EW-02C	11/2/2010	156.27	92.15	-1.49	64.12

MP - Measuring Point (Typically Top of Casing)
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TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	CHANGE IN WATER ELEV. (feet)	WATER ELEVATION (feet)
EW-03A	3/31/2010	157.71	94.63	1.02	63.08
EW-03A	6/29/2010	157.71	92.47	2.16	65.24
EW-03A	8/24/2010	157.71	93.87	-1.40	63.84
EW-03A	11/2/2010	157.71	95.02	-1.15	62.69
EW-03B	3/31/2010	157.84	94.71	1.15	63.13
EW-03B	6/29/2010	157.84	92.61	2.10	65.23
EW-03B	8/24/2010	157.84	94.18	-1.57	63.66
EW-03B	11/2/2010	157.84	95.29	-1.11	62.55
EW-03C	3/31/2010	157.72	94.70	1.05	63.02
EW-03C	6/29/2010	157.72	92.52	2.18	65.20
EW-03C	8/24/2010	157.72	94.10	-1.58	63.62
EW-03C	11/2/2010	157.72	95.22	-1.12	62.50
MW-05A	3/31/2010	135.83	71.40	2.15	64.43
MW-05A	6/29/2010	135.83	68.75	2.65	67.08
MW-05A	8/24/2010	135.83	70.07	-1.32	65.76
MW-05A	11/2/2010	135.83	71.62	-1.55	64.21
MW-05B	3/31/2010	137.05	72.75	-0.32	64.30
MW-05B	6/29/2010	137.05	69.99	2.76	67.06
MW-05B	8/24/2010	137.05	71.31	-1.32	65.74
MW-05B	11/2/2010	137.05	72.81	-1.50	64.24
MW-06A	3/31/2010	158.74	94.73	0.82	64.01
MW-06A	6/29/2010	158.74	92.29	2.44	66.45
MW-06A	8/24/2010	158.74	93.62	-1.33	65.12
MW-06A	11/2/2010	158.74	94.95	-1.33	63.79

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TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	CHANGE IN WATER ELEV. (feet)	WATER ELEVATION (feet)
MW-06B	3/31/2010	159.02	95.00	0.80	64.02
MW-06B	6/29/2010	159.02	92.71	2.29	66.31
MW-06B	8/24/2010	159.02	93.91	-1.20	65.11
MW-06B	11/2/2010	159.02	95.22	-1.31	63.80
MW-06C	3/31/2010	158.59	94.29	1.04	64.30
MW-06C	6/29/2010	158.59	92.09	2.20	66.50
MW-06C	8/24/2010	158.59	93.43	-1.34	65.16
MW-06C	11/2/2010	158.59	94.81	-1.38	63.78
MW-06D	3/31/2010	158.90	94.63	1.12	64.27
MW-06D	6/29/2010	158.90	92.55	2.08	66.35
MW-06D	8/24/2010	158.90	94.90	-2.35	64.00
MW-06D	11/2/2010	158.90	95.14	-0.24	63.76
MW-06E	3/31/2010	159.69	95.34	1.21	64.35
MW-06E	6/29/2010	159.69	93.36	1.98	66.33
MW-06E	8/24/2010	159.69	94.77	-1.41	64.92
MW-06E	11/2/2010	159.69	96.00	-1.23	63.69
MW-06F	3/31/2010	158.66	94.34	1.42	64.32
MW-06F	6/29/2010	158.66	92.78	1.56	65.88
MW-06F	8/24/2010	158.66	94.05	-1.27	64.61
MW-06F	11/2/2010	158.66	95.14	-1.09	63.52
MW-07A	3/31/2010	147.09	85.86	1.12	61.23
MW-07A	6/29/2010	147.09	83.45	2.41	63.64
MW-07A	8/24/2010	147.09	85.02	-1.57	62.07
MW-07A	11/2/2010	147.09	86.26	-1.24	60.83

MP - Measuring Point (Typically Top of Casing)
MSL - Mean Sea Level
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N/A - Not Applicable

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	CHANGE IN WATER ELEV. (feet)	WATER ELEVATION (feet)
MW-07B	3/31/2010	147.94	85.38	1.12	62.56
MW-07B-R	6/29/2010	146.42	84.70	0.68	61.72
MW-07B-R	8/24/2010	146.42	86.08	-1.38	60.34
MW-07B-R	11/2/2010	146.42	86.95	-0.87	59.47
MW-08A	3/31/2010	133.55	69.13	0.80	64.42
MW-08A	6/29/2010	133.55	66.39	2.74	67.16
MW-08A	8/24/2010	133.55	68.19	-1.80	65.36
MW-08A	11/2/2010	133.55	69.44	-1.25	64.11
MW-08B	3/31/2010	132.85	67.66	1.09	65.19
MW-08B	6/29/2010	132.85	65.82	1.84	67.03
MW-08B	8/24/2010	132.85	67.87	-2.05	64.98
MW-08B	11/2/2010	132.85	68.78	-0.91	64.07
MW-08C	3/31/2010	134.34	68.85	2.65	65.49
MW-08C	6/29/2010	134.34	67.25	1.60	67.09
MW-08C	8/24/2010	134.34	68.55	-1.30	65.79
MW-08C	11/2/2010	134.34	69.76	-1.21	64.58
MW-09A	3/31/2010	151.98	89.88	0.64	62.10
MW-09A	6/29/2010	151.98	86.67	3.21	65.31
MW-09A	8/24/2010	151.98	88.24	-1.57	63.74
MW-09A	11/2/2010	151.98	89.55	-1.31	62.43
MW-09B	3/31/2010	152.07	90.69	1.21	61.38
MW-09B	6/29/2010	152.07	88.47	2.22	63.60
MW-09B	8/24/2010	152.07	89.99	-1.52	62.08
MW-09B	11/2/2010	152.07	91.15	-1.16	60.92

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TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	CHANGE IN WATER ELEV. (feet)	WATER ELEVATION (feet)
MW-09C	3/31/2010	152.23	91.71	1.39	60.52
MW-09C	6/29/2010	152.23	89.80	1.91	62.43
MW-09C	8/24/2010	152.23	91.28	-1.48	60.95
MW-09C	11/2/2010	152.23	92.37	-1.09	59.86
MW-09D	3/31/2010	151.68	90.03	2.22	61.65
MW-09D	6/29/2010	151.68	88.96	1.07	62.72
MW-09D	8/24/2010	151.68	90.38	-1.42	61.30
MW-09D	11/2/2010	151.68	91.44	-1.06	60.24
MW-10A	3/31/2010	159.82	94.55	1.95	65.27
MW-10A	6/29/2010	159.82	93.12	1.43	66.70
MW-10A	8/24/2010	159.82	94.79	-1.67	65.03
MW-10A	11/2/2010	159.82	95.94	-1.15	63.88
MW-10B	3/31/2010	160.01	95.64	1.21	64.37
MW-10B	6/29/2010	160.01	93.59	2.05	66.42
MW-10B	8/24/2010	160.01	95.20	-1.61	64.81
MW-10B	11/2/2010	160.01	96.21	-1.01	63.80
MW-10C	3/31/2010	159.00	95.54	0.44	63.46
MW-10C	6/29/2010	159.00	92.92	2.62	66.08
MW-10C	8/24/2010	159.00	94.41	-1.49	64.59
MW-10C	11/2/2010	159.00	95.34	-0.93	63.66
MW-10D	3/31/2010	159.81	95.08	1.92	64.73
MW-10D	6/29/2010	159.81	94.26	0.82	65.55
MW-10D	8/24/2010	159.81	95.51	-1.25	64.30
MW-10D	11/2/2010	159.81	96.49	-0.98	63.32

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NM - Not Measured
N/A - Not Applicable

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	CHANGE IN WATER ELEV. (feet)	WATER ELEVATION (feet)
MW-11A	3/31/2010	78.71	20.11	3.60	58.60
MW-11A	6/29/2010	78.71	20.71	-0.60	58.00
MW-11A	8/24/2010	78.71	22.62	-1.91	56.09
MW-11A	11/2/2010	78.71	24.24	-1.62	54.47
MW-11B	3/31/2010	78.51	20.19	3.09	58.32
MW-11B	6/29/2010	78.51	20.68	-0.49	57.83
MW-11B	8/24/2010	78.51	22.71	-2.03	55.80
MW-11B	11/2/2010	78.51	24.03	-1.32	54.48
N-9980	3/31/2010	79.15	20.82	3.59	58.33
N-9980	6/29/2010	79.15	21.79	-0.97	57.36
N-9980	8/24/2010	79.15	23.69	-1.90	55.46
N-9980	11/2/2010	79.15	25.24	-1.55	53.91
OBS-1	3/31/2010	108.59	47.93	1.72	60.66
OBS-1	6/29/2010	108.59	45.90	2.03	62.69
OBS-1	8/24/2010	108.59	47.79	-1.89	60.80
OBS-1	11/2/2010	108.59	49.29	-1.50	59.30
OBS-2	3/31/2010	105.26	NM	N/A	N/A
OBS-2	6/29/2010	105.26	NM	N/A	N/A
OBS-2	8/24/2010	105.26	NM	N/A	N/A
OBS-2	11/2/2010	105.26	NM	N/A	N/A
M-29A-R	3/31/2010	157.83	89.44	1.04	68.39
M-29A-R	6/29/2010	157.83	87.48	1.96	70.35
M-29A-R	8/24/2010	157.83	88.72	-1.24	69.11
M-29A-R	11/2/2010	157.83	89.74	-1.02	68.09

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TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	CHANGE IN WATER ELEV. (feet)	WATER ELEVATION (feet)
M-29B	3/31/2010	149.67	80.96	0.89	68.71
M-29B	6/29/2010	149.67	78.82	2.14	70.85
M-29B	8/24/2010	149.67	80.04	-1.22	69.63
M-29B	11/2/2010	149.67	81.16	-1.12	68.51
MW-30A	3/31/2010	155.95	NM	N/A	N/A
MW-30A	6/29/2010	155.95	NM	N/A	N/A
MW-30A	8/24/2010	155.95	86.82	N/A	69.13
MW-30A	11/2/2010	155.95	87.85	-1.03	68.10
M-30B-R	3/31/2010	153.15	84.89	0.26	68.26
M-30B-R	6/29/2010	153.15	82.69	2.20	70.46
M-30B-R	8/24/2010	153.15	84.00	-1.31	69.15
M-30B-R	11/2/2010	153.15	85.03	-1.03	68.12
TW-1	3/31/2010	119.56	51.01	1.39	68.55
TW-1	6/29/2010	119.56	49.20	1.81	70.36
TW-1	8/24/2010	119.56	50.31	-1.11	69.25
TW-1	11/2/2010	119.56	51.87	-1.56	67.69
TW-2	3/31/2010	116.02	50.05	0.85	65.97
TW-2	6/29/2010	116.02	47.83	2.22	68.19
TW-2	8/24/2010	116.02	49.00	-1.17	67.02
TW-2	11/2/2010	116.02	50.35	-1.35	65.67
TW-3-R	3/31/2010	132.82	66.93	0.92	65.89
TW-3-R	6/29/2010	132.82	64.72	2.21	68.10
TW-3-R	8/24/2010	132.82	66.09	-1.37	66.73
TW-3-R	11/2/2010	132.82	67.27	-1.18	65.55

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TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	CHANGE IN WATER ELEV. (feet)	WATER ELEVATION (feet)
LF-1	3/31/2010	109.92	44.25	0.95	65.67
LF-1	6/29/2010	109.92	42.12	2.13	67.80
LF-1	8/24/2010	109.92	43.30	-1.18	66.62
LF-1	11/2/2010	109.92	44.53	-1.23	65.39
LF-2	3/31/2010	117.26	51.65	0.88	65.61
LF-2	6/29/2010	117.26	49.38	2.27	67.88
LF-2	8/24/2010	117.26	50.81	N/A	66.45
LF-2	11/2/2010	117.26	52.03	-1.22	65.23
LF-3	3/31/2010	124.95	56.62	1.03	68.33
LF-3	6/29/2010	124.95	NM	N/A	N/A
LF-3	8/24/2010	124.95	56.15	N/A	68.80
LF-3	11/2/2010	124.95	57.28	-1.13	67.67
LF-4	3/31/2010	149.93	NM	N/A	N/A
LF-4	6/29/2010	149.93	NM	N/A	N/A
LF-4	8/24/2010	149.93	NM	N/A	N/A
LF-4	11/2/2010	149.93	NM	N/A	N/A
RW-01	3/31/2010	110.94	54.37	1.43	56.57
RW-01	6/29/2010	110.94	NM	N/A	N/A
RW-01	8/24/2010	110.94	57.02	N/A	53.92
RW-01	11/2/2010	110.94	58.73	-1.71	52.21
RW-02	3/31/2010	145.31	94.06	1.79	51.25
RW-02	6/29/2010	145.31	93.89	0.17	51.42
RW-02	8/24/2010	145.31	93.51	0.38	51.80
RW-02	11/2/2010	145.31	96.21	-2.70	49.10

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TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL WATER LEVEL MEASUREMENTS - 2010

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	CHANGE IN WATER ELEV. (feet)	WATER ELEVATION (feet)
RW-03	3/31/2010	120.92	68.50	N/A	52.42
RW-03	6/29/2010	120.92	57.42	11.08	63.50
RW-03	8/24/2010	120.92	66.91	-9.49	54.01
RW-03	11/2/2010	120.92	59.19	7.72	61.73
RW-04	3/31/2010	144.82	86.21	1.59	58.61
RW-04	6/29/2010	144.82	85.00	1.21	59.82
RW-04	8/24/2010	144.82	86.33	-1.33	58.49
RW-04	11/2/2010	144.82	89.00	-2.67	55.82
RW-05	3/31/2010	149.74	92.51	1.37	57.23
RW-05	6/29/2010	149.74	93.47	-0.96	56.27
RW-05	8/24/2010	149.74	93.15	0.32	56.59
RW-05	11/2/2010	149.74	85.86	7.29	63.88

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TABLE 2
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER REMEDIATION SYSTEM PUMPAGE RECORDS - 2010

Date	System Flow (gpm)	Remarks
1/1/10 - 1/4/10	825	RW-5 off-line due to pump failure.
1/5	347	GTF off-line 16 hours to replace RW-5 pump.
1/6/10 - 1/23/10	853	GTF on-line.
1/24	417	GTF off-line 16 hours for misc. repairs.
1/25/10 - 2/22/10	879	GTF on-line.
2/23	875	GTF off-line 1 hour due to power outage.
2/24/10 - 3/1/10	888	GTF on-line.
3/2/10 - 3/3/10	347	GTF off-line 24 hours for misc. repairs.
3/4/10 - 3/31/10	901	GTF on-line.
First Quarter Average:	856	
4/1/10 - 4/6/10	903	GTF on-line.
4/7/2010	896	GTF off-line 0.5 hours for maintenance.
4/8/10 - 5/4/10	882	GTF on-line.
5/5/2010	875	RW-1 off-line 10.5 hours.
5/6/10 - 6/23/10	792	RW-1off-line.
6/24/2010	639	GTF off-line 8 hours due to electrical storm.
6/25/10 - 6/27/10	0	GTF off-line for repairs and maintenance.
6/28/10 - 6/30/10	840	RW-1 off-line.
Second Quarter Average:	806	
7/1/10 - 7/10/10	867	RW-1 off-line.
7/11/10	243	GTF on-line 8 hours.
7/12/10 - 7/20/10	0	GTF off-line.
7/21/120-7/23/10	208	GTF on-line 8 hours per day, RW-1 off-line.
7/24/10 - 7/25/10	0	GTF off-line.
7/26/10-8/5/10	232	GTF on-line 8 hours per day, RW-1 off-line.
8/6/10 -8/8/10	875	RW-1 off-line.
8/9/10-8/10/10	585	GTF on-line 16 hours per day.
8/11/10-8/12/10	769	RW-1 off-line.
8/13/10-8/14/10	903	GTF on-line.
8/15/10-8/18/10	284	GTF on-line 8 hours per day.
8/19/10	519	GTF on-line 16 hours.
8/20/10-8/21/10	834	GTF on-line.
8/22/10	619	GTF on-line 16 hours.
8/23/10-8/25/10	273	GTF on-line 8 hours per day.
8/26/10	915	GTF on-line.
8/27/10	881	RW-1 off-line 15 hours.
8/28/11	372	GTF on-line 10 hours, RW-1 off-line.
8/29/10-8/30/10	890	RW-1 off-line.
8/31/10	603	GTF on-line 16 hours.
9/1/10	813	GTF on-line.
9/2/10-9/3/10	587	GTF on-line 16 hours per day.
9/4/10	869	GTF on-line.
9/5//10-9/6/10	693	GTF on-line 16 hours per day.
9/7/10-9/11/10	907	GTF on-line.
9/12/10-9/13/10	331	GTF on-line 7 hours per day.
9/14/10-9/15/10	944	GTF on-line.
9/16/10	410	GTF on-line 12 hours.
9/17/10-9/19/10	889	GTF on-line.
9/20/10	442	GTF on-line 14 hours.

TABLE 2
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

ANNUAL GROUNDWATER REMEDIATION SYSTEM PUMPAGE RECORDS - 2010

Date	System Flow (gpm)	Remarks
9/21/10	911	GTF on-line.
9/22/11	597	GTF on-line 16 hours.
9/23/11	955	GTF on-line.
9/24/10	434	GTF on-line 12 hours.
9/25/10-9/29/10	0	GTF off-line.
9/30/10	521	GTF on-line 14 hours.
Third Quarter Average:	509	
10/1/10 - 10/6/10	226	GTF on-line 7 hours per day.
10/7/10-10/8/10	451	GTF on-line 14 hours per day.
10/9/10-10/10/10	208	GTF on-line 7 hours per day.
10/11/10	0	GTF off-line.
10/12/10	243	GTF on-line 7 hours.
10/13/10-10/15/10	451	GTF on-line 14 hours per day.
10/16/10-10/17/10	0	GTF off-line.
10/18/10-10/19/10	243	GTF on-line 7 hours per day.
10/20-10-10/22/10	451	GTF on-line 14 hours per day.
10/23/10-10/26/10	226	GTF on-line 7 hours per day.
10/27/10-10/29/10	451	GTF on-line 14 hours per day.
10/30/10-11/2/10	217	GTF on-line 7 hours per day.
11/3/10	417	GTF on-line 14 hours.
11/4/10	243	GTF on-line 7 hours.
11/5/10	451	GTF on-line 14 hours.
11/6/10-11/9/10	217	GTF on-line 7 hours per day.
11/10/10	451	GTF on-line 14 hours.
11/11/10	0	GTF off-line.
11/12/10	451	GTF on-line 14 hours.
11/13/10	208	GTF on-line 7 hours.
11/14/10	0	GTF off-line.
11/15/10-11/16/10	226	GTF on-line 7 hours per day.
11/17/10	417	GTF on-line 14 hours.
11/18/10	243	GTF on-line 7 hours.
11/19/10	451	GTF on-line 14 hours.
11/20/10-11/23/10	234	GTF on-line 7 hours per day.
11/24/10	451	GTF on-line 14 hours.
11/25/10	0	GTF off-line.
11/26/10-11/30/10	222	GTF on-line 7 hours per day.
12/1/10-12/3/10	440	GTF on-line 14 hours per day.
12/4/10-12/7/10	226	GTF on-line 7 hours per day, RW-3 off-line.
12/8/20-12/10/10	451	GTF on-line 14 hours per day, RW-3 off-line.
12/11/10-12/14/10	226	GTF on-line 7 hours per day, RW-3 off-line.
12/15/10-12/16/10	486	GTF on-line 14 hours per day, RW-3 off-line.
12/17/10-12/21/10	208	GTF on-line 7 hours per day, RW-3 off-line.
12/22/10-12/24/10	440	GTF on-line 14 hours per day, RW-3 off-line.
12/25/10	0	GTF off-line.
12/26/10	208	GTF on-line 7 hours, RW-3 off-line.
12/27/10-12/29/10	0	GTF off-line.
12/30/10	208	GTF on-line 7 hours, RW-3 off-line.
12/31/10	417	GTF on-line 14 hours, RW-3 off-line.
Fourth Quarter Average:	272	gpm

Notes: gpm- gallons per minute

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: DATE:	LF-1 4/1/2010	LF-1 6/30/2010	LF-1 8/25/2010	LF-1 11/4/2010	M-30B-R 4/2/2010	M-30B-R 6/30/2010	M-30B-R 8/25/2010	M-30B-R 11/3/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.2 U	0.3 J	0.2 U	0.3	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2 J	0.2 U	0.2	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethylene	0.2 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	ND	0.8	ND	0.5	ND	ND	ND	ND

Notes:

All concentrations in micrograms per liter (µg/L)

U- The analyte was not detected above the sample reporting limit
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
ND - Not Detected
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: DATE:	OBS-1 4/1/2010	OBS-1 6/30/2010	OBS-1 8/25/2010	OBS-1 11/4/2010	MW-05B 4/2/2010	MW-05B 6/30/2010	MW-05B 8/25/2010	MW-05B 11/11/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.1 U	0.3	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	1.0	1.5 J	1.7	0.8	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.5	0.2	0.7	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.4	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethylene	0.2	0.5 J	1.7	0.3	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride	0.2 U	0.5 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	1.2	3.0	3.4	2.5	ND	ND	ND	ND

Notes:

All concentrations in micrograms per liter (µg/L)

U- The analyte was not detected above the sample reporting limit
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
ND - Not Detected
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: DATE:	MW-06A 4/1/2010	MW-06A 7/1/2010	MW-06A 8/27/2010	MW-06A 11/3/2010	MW-06B 4/1/2010	MW-06B 6/30/2010	MW-06B 8/26/2010	MW-06B 11/3/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethylene	0.3	0.2 U	0.8	0.4	0.3	0.3	0.2 U	0.6
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5	0.8
Sum of Constituents	0.3	ND	0.8	0.4	0.3	0.3	0.5	2.3

Notes:

All concentrations in micrograms per liter (µg/L)

U- The analyte was not detected above the sample reporting limit
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
ND - Not Detected
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: DATE:	MW-06C 4/2/2010	MW-06C 7/1/2010	MW-06C 8/26/2010	MW-06C 11/3/2010	MW-06E 4/1/2010	MW-06E 7/1/2010	MW-06E 8/26/2010	MW-06E 11/3/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2	0.3	0.2 U	0.4 J	0.2	0.4
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2	0.2 U	0.4 J	0.2 U	0.2
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethylene	0.2 U	0.4 J	0.4	0.3	0.2 U	1.7 J	0.2	0.3
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.3	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	ND	0.4	0.6	1.1	ND	2.5	0.4	1.2

Notes:

All concentrations in micrograms per liter (µg/L)

U- The analyte was not detected above the sample reporting limit
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
ND - Not Detected
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: DATE:	MW-06F 4/1/2010	MW-06F 7/1/2010	MW-06F 8/26/2010	MW-06F 11/3/2010	MW-07B 4/2/2010	MW-07B-R 7/1/2010	MW-07B-R 8/27/2010	MW-07B-R 11/4/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**23.3 J**	6.4	0.1 U
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3.3	0.2 U	0.2 U
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**30.4 J**	**11.2**	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**578 J**	**146**	**40.0**
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**222 J**	**57.8**	**14.4**
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**36.1 J**	**11.8**	0.1 U
Trichloroethylene	0.3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**954**	**256**
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	0.3	ND	ND	ND	ND	893.1	1187.2	310.4

Notes:

All concentrations in micrograms per liter (µg/L)

U- The analyte was not detected above the sample reporting limit
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
ND - Not Detected
Bold indicates concentrations exceeds Class GA Ambient Water Quality Standards

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: DATE:	MW-08A 4/1/2010	MW-08A 7/1/2010	MW-08A 8/26/2010	MW-08A 11/3/2010	MW-08B 4/1/2010	MW-08B 7/1/2010	MW-08B 8/26/2010	MW-08B 11/3/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.2 U	1.1 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	**9.1**	**10.6 J**	**8.2**	**10.3**	0.2	0.7 J	0.2 U	0.6
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethylene	0.3	4.0 J	0.4	0.8	0.2 U	0.6 J	0.2 U	0.2
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	9.4	16.1	8.8	11.1	0.2	1.3	ND	0.8

Notes:

All concentrations in micrograms per liter (µg/L)

U- The analyte was not detected above the sample reporting limit
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
ND - Not Detected
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: DATE:	MW-09B 4/1/2010	MW-09B 6/30/2010	MW-09B 8/27/2010	MW-09B 11/4/2010	MW-09C 4/1/2010	MW-09C 6/30/2010	MW-09C 8/27/2010	MW-09C 11/4/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	ND	ND	ND	0.2	ND	ND	ND	ND

Notes:

All concentrations in micrograms per liter (µg/L)

U- The analyte was not detected above the sample reporting limit
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
ND - Not Detected
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: DATE:	MW-11A 4/2/2010	MW-11A 6/30/2010	MW-11A 8/26/2010	MW-11A 11/4/2010	MW-11B 4/1/2010	MW-11B 6/30/2010	MW-11B 8/26/2010	MW-11B 11/4/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1	0.5 J	0.1 U	0.2	0.1 U	0.1 U	0.1 U	0.1
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.5	1.2 J	0.5	0.9	0.2 U	0.2 U	0.2 U	0.4
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2	1.1 J	0.3	0.6	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethylene	0.3	1.0 J	0.3	0.3	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	1.1	3.9	1.1	2.0	ND	ND	ND	0.5

Notes:

All concentrations in micrograms per liter (µg/L)

U- The analyte was not detected above the sample reporting limit
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
ND - Not Detected
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: DATE:	*MW-09D 8/27/2010	MW-06E DUP 4/1/2010	MW-06B DUP 6/30/2010	MW-07B-R DUP 8/27/2010	MW-07B-R DUP 11/4/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.1 U	0.6 U
Chloroethane	1.7	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.1 U	3.7	0.1 U
Dichlorodifluoromethane	0.8	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	2.2	0.2 U	0.2 U	1.2	0.2 U
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	**9.9**	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	1.4	0.2 U	0.2 U	**143**	**52.0 U**
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.4	0.2 U	0.3 J	**56**	**13.4 U**
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	**11.2**	0.1 U
Trichloroethylene	0.6	0.2 U	0.7 J	**1000 J**	**232**
Vinyl chloride	0.4	0.2 U	0.5 J	0.2 U	0.2 U
Sum of Constituents	7.5	ND	1.5	1224.7	297.4

Notes:

DUP- Duplicate Sample

All concentrations in micrograms per liter (µg/L)

U- The analyte was not detected above the sample reporting limit
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
ND - Not Detected
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards
* Sampled in the third quarter as requested by LKB

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: DATE:	FIELD BLANK 4/2/2010	FIELD BLANK 7/1/2010	FIELD BLANK 8/26/2010	FIELD BLANK 11/4/2010	TRIP BLANK 4/1/2010	TRIP BLANK 4/2/2010	TRIP BLANK 6/30/2010	TRIP BLANK 7/1/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J	0.8 J
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	ND	ND	ND	ND	ND	ND	0.3	0.8

Notes:

All concentrations in micrograms per liter (µg/L)

U- The analyte was not detected above the sample reporting limit
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
ND - Not Detected
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 3

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
VOLATILE HALOGENATED ORGANICS

SAMPLE DESIGNATION: DATE:	TRIP BLANK 8/25/2010	TRIP BLANK 8/26/2010	TRIP BLANK 8/27/2010	TRIP BLANK 11/3/2010	TRIP BLANK 11/4/2010	TRIP BLANK 11/11/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	ND	ND	ND	ND	ND	ND

Notes:

All concentrations in micrograms per liter (µg/L)

U- The analyte was not detected above the sample reporting limit
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
ND - Not Detected
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION: DATE:	LF-1 4/1/2010	LF-1 6/30/2010	LF-1 8/25/2010	LF-1 11/4/2010	M-30B-R 4/2/2010	M-30B-R 6/30/2010	M-30B-R 8/25/2010	M-30B-R 11/3/2010
Benzene	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	1.1 J	0.4	1.4	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorobenzene, o&p	0.3 U	0.3 U	0.3 U	0.6	0.3 U	0.3 U	0.3 U	0.3 U
Dichlorobenzene, o,m&p	0.4 U	0.4 U	0.4 U	0.6	0.4 U	0.4 U	0.4 U	0.4 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Sum of Constituents	ND	2.3	0.4	2.0	ND	ND	ND	ND

Notes:

ND - Not Detected

U- The analyte was not detected above the sample reporting limit

J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL

All concentrations in micrograms per liter (µg/L)

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION: DATE:	OBS-1 4/1/2010	OBS-1 6/30/2010	OBS-1 8/25/2010	OBS-1 11/4/2010	MW-05B 4/2/2010	MW-05B 6/30/2010	MW-05B 8/25/2010	MW-05B 11/11/2010
Benzene	0.2	0.5 J	0.2	0.4	0.1 U	0.1 U	0.1 U	0.1 U
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.5	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.6	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.5	1.0 J	0.5	0.7	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorobenzene, o&p	2.7	4.1 J	1.2	3.0	0.3 U	0.3 U	0.3 U	0.3 U
Dichlorobenzene, o,m&p	2.7	4.1 J	1.2	3.5	0.4 U	0.4 U	0.4 U	0.4 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.5	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.4	0.1 U	0.1 U	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Sum of Constituents	3.4	5.6	1.9	6.6	ND	ND	ND	ND

Notes:

ND - Not Detected

U- The analyte was not detected above the sample reporting limit

J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL

All concentrations in micrograms per liter (µg/L)

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION: DATE:	MW-06A 4/1/2010	MW-06A 7/1/2010	MW-06A 8/27/2010	MW-06A 11/3/2010	MW-06B 4/1/2010	MW-06B 6/30/2010	MW-06B 8/26/2010	MW-06B 11/3/2010
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	**1.4**	**2.5 J**	1.0	**1.9**
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.4	1.0 J	0.1 U	0.5
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	3.7	**5.9 J**	2.9	**5.1**
Dichlorobenzene, o&p	0.3 U	0.3 U	0.3 U	0.3 U	4.6	**9.0 J**	2.5	6.0
Dichlorobenzene, o,m&p	0.4 U	0.4 U	0.4 U	0.4 U	4.6	**9.0 J**	2.5	6.3
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	1.6	**5.2 J**	2.2	3.9
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.3 J	0.1 U	0.3
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.6 J	0.2 U	0.4
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	4.7 J	1.6 U	**8.8**
Sum of Constituents	ND	ND	ND	ND	11.8	29.2	8.6	27.5

Notes:

ND - Not Detected

U- The analyte was not detected above the sample reporting limit

J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL

All concentrations in micrograms per liter (µg/L)

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION: DATE:	MW-06C 4/2/2010	MW-06C 7/1/2010	MW-06C 8/26/2010	MW-06C 11/3/2010	MW-06E 4/1/2010	MW-06E 7/1/2010	MW-06E 8/26/2010	MW-06E 11/3/2010
Benzene	0.1 U	0.2 J	0.1 U	0.7	0.1 U	0.2 J	0.1 U	0.2
n-Butylbenzene	0.1	0.1 U	0.1 U	0.5	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.2	0.1 U	0.2	0.3	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.2	0.2 J	0.2	2.1	0.1 U	0.1 U	0.3	0.5
Dichlorobenzene, o&p	0.8	0.3 U	2.1	1.7	1.5	0.3 U	0.3	0.3 U
Dichlorobenzene, o,m&p	0.8	0.4 U	2.4	1.9	1.5	0.4 U	0.4 U	0.4 U
Ethylbenzene	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U
Isopropylbenzene	0.5	0.1 U	0.7	1.9	0.1 U	0.1 U	0.1 U	0.1
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Sum of Constituents	1.8	0.6	3.5	7.4	1.5	0.5	0.6	0.8

Notes:

ND - Not Detected

U- The analyte was not detected above the sample reporting limit

J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL

All concentrations in micrograms per liter (µg/L)

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION: DATE:	MW-06F 4/1/2010	MW-06F 7/1/2010	MW-06F 8/26/2010	MW-06F 11/3/2010	MW-07B 4/2/2010	MW-07B-R 7/1/2010	MW-07B-R 8/27/2010	MW-07B-R 11/4/2010
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorobenzene, o&p	0.3 U	0.3 U	0.3 U	0.3 U	1.8	0.3 U	0.3 U	0.3 U
Dichlorobenzene, o,m&p	0.4 U	0.4 U	0.4 U	0.4 U	1.8	0.4 U	0.4 U	0.4 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.2	**1000 J**	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Sum of Constituents	ND	ND	ND	ND	2.0	1000	ND	ND

Notes:

ND - Not Detected

U- The analyte was not detected above the sample reporting limit

J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL

All concentrations in micrograms per liter (µg/L)

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION: DATE:	MW-08A 4/1/2010	MW-08A 7/1/2010	MW-08A 8/26/2010	MW-08A 11/3/2010	MW-08B 4/1/2010	MW-08B 7/1/2010	MW-08B 8/26/2010	MW-08B 11/3/2010
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorobenzene, o&p	2.7	0.3 U	0.3 U	0.3 U	0.4	0.3 U	0.3 U	0.3 U
Dichlorobenzene, o,m&p	2.7	0.4 U	0.4 U	0.4 U	0.4	0.4 U	0.4 U	0.4 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	**9.2**	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Sum of Constituents	11.9	ND	ND	ND	0.4	ND	ND	ND

Notes:

ND - Not Detected

U- The analyte was not detected above the sample reporting limit

J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL

All concentrations in micrograms per liter (µg/L)

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION: DATE:	MW-09B 4/1/2010	MW-09B 6/30/2010	MW-09B 8/27/2010	MW-09B 11/4/2010	MW-09C 4/1/2010	MW-09C 6/30/2010	MW-09C 8/27/2010	MW-09C 11/4/2010
Benzene	0.1 U	0.1 U	0.1 U	0.3	0.1 U	0.1 U	0.1 U	0.1 U
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorobenzene, o&p	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Dichlorobenzene, o,m&p	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	2.4	1.6 U	1.6 U	1.6 U	1.7	1.6 U	1.6 U	1.6 U
Sum of Constituents	2.4	ND	ND	0.3	1.7	ND	ND	ND

Notes:

ND - Not Detected

U- The analyte was not detected above the sample reporting limit

J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL

All concentrations in micrograms per liter (µg/L)

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION: / DATE:	MW-11A 4/2/2010	MW-11A 6/30/2010	MW-11A 8/26/2010	MW-11A 11/4/2010	MW-11B 4/1/2010	MW-11B 6/30/2010	MW-11B 8/26/2010	MW-11B 11/4/2010
Benzene	0.1 U	0.1 U	0.1 U	0.5	0.1 U	0.1 U	0.1 U	0.1 U
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorobenzene, o&p	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Dichlorobenzene, o,m&p	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Sum of Constituents	ND	0.6	ND	0.5	ND	ND	ND	ND

Notes:

ND - Not Detected

U- The analyte was not detected above the sample reporting limit

J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL

All concentrations in micrograms per liter (µg/L)

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION:	*MW-09D	MW-06E DUP	MW-06B DUP	MW-07B-R DUP	MW-07B-R DUP
DATE:	8/27/2010	4/1/2010	6/30/2010	8/27/2010	11/4/2010
Benzene	**1.3**	0.1 U	**2.4 J**	0.1 U	0.1 U
n-Butylbenzene	0.1 U	0.1 U	1.1 J	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U
Chlorobenzene	0.6	0.1 U	**5.6 J**	0.1 U	0.1 U
Dichlorobenzene, o&p	1.1	0.3 U	5.6 J	0.3 U	0.3 U
Dichlorobenzene, o,m&p	1.1	0.4 U	5.6 J	0.4 U	0.4 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.8	0.1 U	**5.1 J**	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.6 J	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	3.6 J	1.6 U	1.6 U
Sum of Constituents	3.8	ND	24.5	ND	ND

Notes:

DUP- Duplicate Sample

ND - Not Detected

U- The analyte was not detected above the sample reporting limit

J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL

All concentrations in micrograms per liter (µg/L)

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

* Sampled in the third quarter as requested by LKB

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION:	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
DATE:	4/2/2010	7/1/2010	8/26/2010	11/4/2010	4/1/2010	4/2/2010	6/30/2010	7/1/2010
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorobenzene, o&p	0.5	0.3 U	0.3 U	0.3 U	1.3	0.6	0.3 U	0.3 U
Dichlorobenzene, o,m&p	0.5	0.4 U	0.4 U	0.4 U	1.3	0.6	0.4 U	0.4 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Sum of Constituents	0.5	ND	ND	ND	1.3	0.6	ND	ND

Notes:

ND - Not Detected

U- The analyte was not detected above the sample reporting limit

J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL

All concentrations in micrograms per liter (µg/L)

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 4

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
AROMATIC HYDROCARBONS

SAMPLE DESIGNATION: DATE:	TRIP BLANK 8/25/2010	TRIP BLANK 8/26/2010	TRIP BLANK 8/27/2010	TRIP BLANK 11/3/2010	TRIP BLANK 11/4/2010	TRIP BLANK 11/11/2010
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dichlorobenzene, o&p	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Dichlorobenzene, o,m&p	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Sum of Constituents	ND	ND	ND	ND	ND	ND

Notes:

ND - Not Detected

U- The analyte was not detected above the sample reporting limit

J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL

All concentrations in micrograms per liter (µg/L)

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 5

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TETRACHLOROETHENE

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

SAMPLE ID:	LF-1	LF-1	LF-1	LF-1	M-30B-R	M-30B-R	M-30B-R	M-30B-R
DATE:	4/1/2010	6/30/2010	8/25/2010	11/4/2010	4/2/2010	6/30/2010	8/25/2010	11/3/2010
Tetrachloroethene	0.2 U	0.2 J	0.2 U	0.2	0.2 U	0.2 U	0.2 U	0.3 U
SAMPLE ID:	MW-05B	MW-05B	MW-05B	MW-05B	MW-06A	MW-06A	MW-06A	MW-06A
DATE:	4/2/2010	6/30/2010	8/25/2010	11/11/2010	4/1/2010	7/1/2010	8/27/2010	11/3/2010
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
SAMPLE ID:	MW-06B	MW-06B	MW-06B	MW-06B	MW-06C	MW-06C	MW-06C	MW-06C
DATE:	4/1/2010	6/30/2010	8/26/2010	11/3/2010	4/2/2010	7/1/2010	8/26/2010	11/3/2010
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.4	0.2 U	0.2 U	0.2 U	0.2

Notes:

All concentrations in micrograms per liter (µg/L)
ND - Not Detected
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standard

TABLE 5

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TETRACHLOROETHENE

SAMPLE ID:	MW-06E	MW-06E	MW-06E	MW-06E	MW-06F	MW-06F	MW-06F	MW-06F
DATE:	4/1/2010	7/1/2010	8/26/2010	11/3/2010	4/1/2010	7/1/2010	8/26/2010	11/3/2010
Tetrachloroethene	0.2 U	0.4 J	0.2 U	0.2	0.2 U	0.2 U	0.2 U	0.2 U
SAMPLE ID:	MW-07B	MW-07B-R	MW-07B-R	MW-07B-R	MW-08A	MW-08A	MW-08A	MW-08A
DATE:	4/2/2010	7/1/2010	8/27/2010	11/4/2010	4/1/2010	7/1/2010	8/26/2010	11/3/2010
Tetrachloroethene	0.2 U	**222 J**	**57.8**	**14.4**	**9.1**	**10.6 J**	**8.2**	**10.3**
SAMPLE ID:	MW-08B	MW-08B	MW-08B	MW-08B	MW-09B	MW-09B	MW-09B	MW-09B
DATE:	4/1/2010	7/1/2010	8/26/2010	11/3/2010	4/1/2010	6/30/2010	8/27/2010	11/4/2010
Tetrachloroethene	0.2	0.7 J	0.2 U	0.6	0.2 U	0.2 U	0.2 U	0.2

Notes:

All concentrations in micrograms per liter (µg/L)
ND - Not Detected
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standard

TABLE 5

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TETRACHLOROETHENE

SAMPLE ID:	MW-09C	MW-09C	MW-09C	MW-09C	MW-11A	MW-11A	MW-11A	MW-11A
DATE:	4/1/2010	6/30/2010	8/27/2010	11/4/2010	4/1/2010	6/30/2010	8/26/2010	11/4/2010
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2	1.1 J	0.3	0.6

SAMPLE ID:	MW-11B	MW-11B	MW-11B	MW-11B	OBS-1	OBS-1	OBS-1	OBS-1
DATE:	4/2/2010	6/30/2010	8/26/2010	11/4/2010	4/1/2010	6/30/2010	8/25/2010	11/4/2010
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5	0.2	0.7

SAMPLE ID:	*MW-09D	MW-06E DUP	MW-06B DUP	MW-07B-R DUP	MW-07B-R DUP
DATE:	8/27/2010	4/1/2010	6/30/2010	8/27/2010	11/4/2010
Tetrachloroethene	0.4	0.2 U	0.3 J	**56.0**	**13.4**

Notes:

Dup- Duplicate Sample

All concentrations in micrograms per liter (µg/L)
ND - Not Detected
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
* Sampled in the third quarter as requested by LKB
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standard

TABLE 5

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TETRACHLOROETHENE

SAMPLE ID:	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
DATE:	4/2/2010	7/1/2010	8/26/2010	11/4/2010	4/1/2010	4/2/2010	6/30/2010	7/1/2010
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

SAMPLE ID:	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
DATE:	8/25/2010	8/26/2010	8/27/2010	11/3/2010	11/4/2010	11/11/2010
Tetrachloroethene	0.2 U	0.2 U	0.2 U	.2U	0.2 U	0.2 U

Notes:
All concentrations in micrograms per liter (mg/L)
ND - Not Detected
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standard

TABLE 6

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL RECOVERY WELL SAMPLING RESULTS - 2010
VOLATILE ORGANIC COMPOUNDS

SAMPLE DESIGNATION: DATE:	RW-1 4/1/2010	RW-2 4/1/2010	RW-3 4/1/2010	RW-4 4/1/2010	RW-5 4/1/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1 U	0.8	1.3	0.7
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.3	0.2 U	1.1
1,1-Dichloroethene	0.3 U	0.3 U	0.6	0.4	**10.0**
1,2-Dichloroethane	0.3 U	0.3 U	0.3	0.3 U	**0.7**
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.3	0.4	**8.3**	**29.6**	**9.8**
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2 U	**17.6**	**30.8**	**23.1**
1,1,1-Trichloroethane	0.1 U	0.1 U	1.2	3.7	**12.7**
Trichloroethylene	0.2	0.2 U	**44.1**	**304**	**117**
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzene	0.1	0.2	0.4	0.1 U	0.1 U
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.4	0.2	0.6	0.1 U	0.1 U
Dichlorobenzene, o&p	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Dichlorobenzene, o,m&p	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Total VOCs	1.0	0.8	73.8	369.8	175.1

Notes:

All units are micrograms per liter (µg/L)

ND - Not Detected

J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL

U- The analyte was not detected above the sample reporting limit

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 6

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL RECOVERY WELL SAMPLING RESULTS - 2010
VOLATILE ORGANIC COMPOUNDS

SAMPLE DESIGNATION: DATE:	RW-1 Not Sampled	RW-2 7/2/2010	RW-3 7/2/2010	RW-4 7/9/2010	RW-5 7/9/2010
Bromodichloromethane		0.3 U	0.3 U	0.3 U	0.3 U
Bromoform		0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride		0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane		0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane		0.2 U	0.2 U	0.2 U	0.2 U
Chloroform		0.1 U	0.1 U	1.3	0.4
Dichlorodifluoromethane		0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane		0.3 U	0.2 U	0.3	1.1
1,1-Dichloroethene		0.6 J	0.3 U	2.9	**8.6**
1,2-Dichloroethane		0.3 U	0.3 U	0.3 U	**0.7**
trans-1,2-Dichloroethene		0.1 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene		0.3 U	4.2	**29.0**	**8.0**
1,2-Dichloropropane		0.1 U	0.1 U	0.1 U	0.1 U
Methylene chloride		0.2	0.2 U	0.2 U	0.2 U
Tetrachloroethene		0.1 U	**8.1**	**30.9**	**17.7**
1,1,1-Trichloroethane		1.4 J	0.1 U	3.1	**12.1**
Trichloroethylene		0.2 U	**27.7**	**357**	**117**
Vinyl chloride		1.6 U	0.2 U	0.2 U	0.2 U
Benzene		0.3 J	0.3	0.1 U	0.1 U
n-Butylbenzene		0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene		0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene		0.4 J	0.1 U	0.1 U	0.1 U
Dichlorobenzene, o&p		0.8 U	0.3 U	0.3 U	0.3 U
Dichlorobenzene, o,m&p		0.2 U	0.8 U	0.8 U	0.8 U
Ethylbenzene		0.2 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene		0.1 U	0.1 U	0.1 U	0.1 U
Toluene		0.1 U	0.1 U	0.1 U	0.1 U
m/p-Xylene		1.8 U	0.2 U	0.2 U	0.2 U
o-Xylene		0.2 U	1.6 U	1.6 U	1.6 U
Total VOCs	Not Sampled	2.9	40.3	424.5	165.6

Notes:

All units are micrograms per liter (µg/L)

ND - Not Detected

J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL

U- The analyte was not detected above the sample reporting limit

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 6

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL RECOVERY WELL SAMPLING RESULTS - 2010
VOLATILE ORGANIC COMPOUNDS

SAMPLE DESIGNATION: DATE:	RW-1 8/20/2010	RW-2 8/20/2010	RW-3 8/20/2010	RW-4 8/20/2010	RW-5 8/20/2010
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.3	0.2	0.2	0.5
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2	0.4	1.0
1,1-Dichloroethene	0.3 U	0.3 U	0.5	2.6	**11.4**
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.3	0.4	**6.2**	**28.2**	**9.7**
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	1.0	**1.5**
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2 U	**11.3**	**33.9**	**20.1**
1,1,1-Trichloroethane	0.1 U	0.1 U	0.4	2.7	**9.0**
Trichloroethylene	0.2	0.2	**27.9**	**349**	**192**
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzene	0.1	0.2	0.4	0.1 U	0.1 U
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.2	0.3	0.6	0.4	0.1 U
Dichlorobenzene, o&p	0.3 U	0.3	1.2	0.3 U	0.3 U
Dichlorobenzene, o,m&p	0.8 U	0.8 U	1.3	0.8 U	0.8 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Total VOCs	0.8	1.7	49.0	418.4	245.2

Notes:

All units are micrograms per liter (µg/L)

ND - Not Detected

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U- The analyte was not detected above the sample reporting limit

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 6

TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL RECOVERY WELL SAMPLING RESULTS - 2010
VOLATILE ORGANIC COMPOUNDS

SAMPLE DESIGNATION: DATE:	RW-1 11/5/2010	RW-2 11/5/2010	RW-3 11/5/2010	RW-4 11/5/2010	RW-5 11/5/2010
Bromodichloromethane	0.3 U	0.3 U	0.4	0.3 U	0.3 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorodibromomethane	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.1 U	0.1	0.4	0.4	0.7
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2
1,1-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	1.8
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.3	0.4	0.9	0.7	4.4
1,2-Dichloropropane	0.1 U	0.1 U	0.6	0.3	0.1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2	1.8	**10.4**	**36.4**
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1	1.9
Trichloroethylene	0.2	0.2	3.3	**5.9**	**29.7**
Vinyl chloride	0.6	0.2	0.2 U	0.2 U	2.1
Benzene	0.1	0.1	0.1 U	0.1	0.1
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.3	0.2	0.5	0.1 U	0.2
Dichlorobenzene, o&p	1.0	0.5	1.0	0.6	3.1
Dichlorobenzene, o,m&p	1.4	0.8 U	1.2	1.0	12.1
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1	0.2
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1	0.2
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2
o-Xylene	2.6	1.6	1.6 U	1.6 U	**12.9**
Total VOCs	6.5	3.5	10.1	19.7	106.2

Notes:

All units are micrograms per liter (µg/L)

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U- The analyte was not detected above the sample reporting limit

Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

CONSTITUENT / **SITE** / **DATE**	LF-1 4/1/2010	LF-1 6/30/2010	LF-1 8/25/2010	LF-1 11/4/2010	M-30B-R 4/2/2010	M-30B-R 6/30/2010	M-30B-R 8/25/2010	M-30B-R 11/3/2010
Alkalinity, Total (As $CaCO_3$)	138	188	181	196 D	3.75	4.50	4.25	4.60
Aluminum	NA	NA	NA	NA	0.20 U	0.20 U	0.21	0.30
Barium	NA	NA	NA	NA	0.20 U	0.20 U	0.20 U	0.20 U
Bicarbonate	137	187	181	196 D	3.7	4.5	4.2	4.6
Calcium	NA	NA	NA	NA	10.2	9.93	11.7	11.5
Carbonate	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloride	205	201	155	189 D	65.2	61.4	57.3	70.4 D
Chromium	NA	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	NA	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U
Copper	NA	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	10.0 U	10 U	10 U	10 U	10.0 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	140	132	140	140 D	42.0	38.0	45.0	52.0 D
Iron	NA	NA	NA	NA	0.19	0.24	0.06	0.38
Lead	NA	NA	NA	NA	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	NA	NA	NA	NA	4.73	4.05	5.15	5.29
Manganese	NA	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U
Mercury	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	NA	NA	NA	NA	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	0.30	0.10 U	0.10 U	0.10 U	1.45	1.77	2.61	2.92 D
Nitrite as N	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	9.48	11.2	16.6	16.9 D	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Kjeldahl, Total	14.3	18.1	20.6	21.1 D	0.10 U	0.10 U	0.10 U	0.50 U
Phenolics, Total Recoverable	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	NA	NA	NA	NA	3.02	2.66	3.31	2.95
Sodium	NA	NA	NA	NA	43.0	40.8	43.8	40.1
Sulfate	26.5	25.5	18.7	21.4	23.1	24.5	21.4	20.3
Total Dissolved Solids	459	488	474	456	181	179	181	219
Zinc	NA	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
NA - Not analyzed
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury, cyanide, lead and phenolics are reported in micrograms per liter (µg/L)
All other constituents are reported in milligrams per liter (mg/L)
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

CONSTITUENT / **SITE** / **DATE**	MW-05B 4/2/2010	MW-05B 6/30/2010	MW-05B 8/25/2010	MW-05B 11/11/2010	MW-06A 4/1/2010	MW-06A 7/1/2010	MW-06A 8/27/2010	MW-06A 11/3/2010
Alkalinity, Total (As $CaCO_3$)	53.6	54.0	46.5	40.0 D	6.05	3.60	3.50	3.50
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U	0.60	0.29	0.20 U	0.67
Barium	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Bicarbonate	53.6	54.0	46.5	40.0 D	6.0	3.6	3.5	3.5
Calcium	16.7	17.9	19.1	16.6	1.79	1.39	1.23	1.44
Carbonate	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloride	85.5	94.6	80.3	116 D	28.6	10.8	6.12	7.46
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	10.0 U	10 U	10 U	10 U	10.0 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	75.0	90.0	85.0	80.0 D	18.0	10.0	7.00	8.00
Iron	0.03	0.02	0.03	0.02	1.39	0.83	0.67	0.99
Lead	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.80	5.00 U	5.00 U
Magnesium	8.34	7.62	8.93	7.65	4.04	1.53	1.36	1.25
Manganese	4.92	5.35	5.85	5.54	0.03	0.02 U	0.02 U	0.02
Mercury	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	1.15	1.31	1.98	2.48 D	1.57	1.02	1.25	0.92 D
Nitrite as N	0.10 U	0.12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	0.10 U	0.10 U	0.10 U	0.17	0.34	0.10 U	0.10 U	0.22
Nitrogen, Kjeldahl, Total	0.18	0.32	0.31	0.47	4.85	0.15	0.61	0.59 D
Phenolics, Total Recoverable	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	10.1	8.69	11.2	9.67	5.89	2.16	2.03	2.20
Sodium	55.9	54.8	56.4	57.1	14.9	7.24	5.91	5.83
Sulfate	25.4	22.7	18.8	26.3	5.00 U	5.00 U	5.00 U	5.00 U
Total Dissolved Solids	239	266	252	272	93	62	58	41
Zinc	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02

Notes:
NA - Not analyzed
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury, cyanide, lead and phenolics are reported in micrograms per liter (µg/L)
All other constituents are reported in milligrams per liter (mg/L)
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

SITE / **CONSTITUENT** / **DATE**	MW-06B 4/1/2010	MW-06B 6/30/2010	MW-06B 8/26/2010	MW-06B 11/3/2010	MW-06C 4/2/2010	MW-06C 7/1/2010	MW-06C 8/26/2010	MW-06C 11/3/2010
Alkalinity, Total (As $CaCO_3$)	964	994	905	817 D	462	352	372	470 D
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Bicarbonate	946	994	904	816 D	462	352	372	470 D
Calcium	23.6	24.7	24.1	16.9	37.0	37.0	38.0	45.5
Carbonate	1.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Chloride	434	410	297	315 D	270	232	195	260 D
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	10.0 U	10 U	10 U	10 U	10.0 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	140	148	150	124 D	140	132	130	170 D
Iron	10.2	10.4	10.5	8.01	5.42	4.99	4.99	5.66
Lead	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	23.5	21.5	23.3	16.9	10.6	9.05	10.2	12.5
Manganese	0.08	0.08	0.08	0.05	0.07	0.06	0.06	0.07
Mercury	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.14	0.10 U	0.10 U
Nitrite as N	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	137	111	119	98.7 D	30.4	19.5	21.8	36.2 D
Nitrogen, Kjeldahl, Total	186	155	149	133 D	36.0	26.5	28.6	51.1 D
Phenolics, Total Recoverable	5.0 U	8.3	8.3	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	167	134	151	116	56.6	39.3	53.6	62.8
Sodium	390	357	347	258	304	272	256	233
Sulfate	5.00 U	5.00 U	5.00 U	5.00 U	62.1	59.0	57.7	41.3
Total Dissolved Solids	1320	1360	1220	1120	949	890	836	920
Zinc	0.02 U	0.02 U	0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
NA - Not analyzed
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury, cyanide, lead and phenolics are reported in micrograms per liter (µg/L)
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Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

CONSTITUENT / **SITE** / **DATE**	MW-06E 4/1/2010	MW-06E 7/1/2010	MW-06E 8/26/2010	MW-06E 11/3/2010	MW-06F 4/1/2010	MW-06F 7/1/2010	MW-06F 8/26/2010	MW-06F 11/3/2010
Alkalinity, Total (As $CaCO_3$)	7.55	48.8	119	108 D	29.1	2.00 U	1.00 U	1.00 U
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.21	0.20 U
Barium	0.22	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.24	0.22
Bicarbonate	7.5	48.8	119	108 D	29.1	1.0 U	1.0 U	1.0 U
Calcium	37.4	22.4	20.0	17.0	22.5	37.6	42.1	38.8
Carbonate	1.0 U	2.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloride	222	169	138	141 D	162	239	210	237 D
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	10.0 U	10 U	10 U	10 U	10.0 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	170	88.0	85.0	78.0 D	105	156	160	165 D
Iron	1.71	1.59	3.00	3.54	2.59	0.16	0.13	0.10
Lead	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	17.0	9.14	9.55	8.35	10.7	14.7	18.1	16.6
Manganese	0.15	0.42	0.46	0.43	0.42	0.10	0.12	0.09
Mercury	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2	0.3
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	0.50 U	0.10	0.18	0.21	0.12	16.3	3.32	3.00 D
Nitrite as N	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	0.46	7.37	18.2	15.8 D	2.36	0.10 U	0.10 U	0.29
Nitrogen, Kjeldahl, Total	0.99	10.7	24.0	21.8 D	6.61	0.17	0.10 U	0.10 U
Phenolics, Total Recoverable	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	6.23	18.3	34.9	29.0	19.0	4.84	7.33	5.46
Sodium	73.8	85.2	95.9	86.2	79.4	75.4	90	84.5
Sulfate	5.00 U	36.5	26.4	33.1	34.7	5.00 U	5.00 U	5.00 U
Total Dissolved Solids	582	474	395	388	411	636	799	617
Zinc	0.03	0.09	0.04	0.03	0.07	0.03	0.04	0.04

Notes:
NA - Not analyzed
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury, cyanide, lead and phenolics are reported in micrograms per liter (µg/L)
All other constituents are reported in milligrams per liter (mg/L)
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

CONSTITUENT / **SITE** / **DATE**	MW-07B 4/2/2010	MW-07B-R 7/1/2010	MW-07B-R 8/27/2010	MW-07B-R 11/4/2010	MW-08A 4/1/2010	MW-08A 7/1/2010	MW-08A 8/26/2010	MW-08A 11/3/2010
Alkalinity, Total (As $CaCO_3$)	NA	4.50	3.40	1.60	1.00 U	1.15	2.10	1.75
Aluminum	NA	0.20 U	0.20 U	0.20 U	0.56	0.53	0.32	0.35
Barium	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Bicarbonate	NA	4.5	3.4	1.6	1.0 U	1.1	2.1	1.7
Calcium	NA	5.37	5.17	4.14	4.11	2.49	2.37	1.87
Carbonate	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloride	NA	27.4	20.0	17.5	17.8	13.8	9.55	9.11
Chromium	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	NA	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	NA	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	NA	10 U	10 U	10 U	10.0 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	NA	22.0 U	21.0	29.0	25.0 U	13.0	11.0	9.00
Iron	NA	0.03	0.02 U	0.49	0.70 U	0.95	0.11	0.57
Lead	NA	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	NA	2.53	2.77	2.21	4.24	1.93	1.92	1.55
Manganese	NA	0.06	0.08	0.09	0.04	0.03	0.02	0.02 U
Mercury	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	NA	2.99	2.81	1.45 D	3.47	1.24	0.91	0.47 D
Nitrite as N	NA	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	NA	0.10 U	0.10 U	0.11	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Kjeldahl, Total	NA	0.10 U	0.10 U	0.37	0.42	0.61	0.49	0.10 U
Phenolics, Total Recoverable	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	NA	1.65	1.8	2.26	3.42	3.73	4.5	2.54
Sodium	NA	15.1	12.8	10.6	8.29	6.97	6.48	5.45
Sulfate	NA	5.00 U	5.00 U	12.7	5.00 U	5.23	5.00 U	5.00 U
Total Dissolved Solids	NA	117	120	75	85	70	59	135
Zinc	NA	0.02	0.04	0.05	0.02 U	0.02 U	0.02	0.02 U

Notes:
NA - Not analyzed
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury, cyanide, lead and phenolics are reported in micrograms per liter (µg/L)
All other constituents are reported in milligrams per liter (mg/L)
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

CONSTITUENT / **SITE** / **DATE**	MW-08B 4/1/2010	MW-08B 7/1/2010	MW-08B 8/26/2010	MW-08B 11/3/2010	MW-09B 4/1/2010	MW-09B 6/30/2010	MW-09B 8/27/2010	MW-09B 11/4/2010
Alkalinity, Total (As $CaCO_3$)	6.85	1.25	2.75	9.20	8.25	14.0	14.2	15.6
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Bicarbonate	6.8	1.2	2.7	9.2	8.2	13.9	14.2	15.5
Calcium	14.4	12.6	12.6	14.0	13.0	13.1	12.3	10.9
Carbonate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloride	63.8	71.3	48.6	63.3 D	50.8	62.5	53.9	55.6 D
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	10.0 U	10 U	10 U	10 U	10.0 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	50.0	47.0	41.0	54.0 D	52.0	50.0	50.0	52.0 D
Iron	0.74	0.05	0.03	0.02 U	0.02 U	0.02	0.10	0.02 U
Lead	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	4.74	3.88	4.31	4.46	5.93	5.13	6.33	5.80
Manganese	0.49	0.59	0.56	0.52	0.10	0.12	0.17	0.32
Mercury	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	2.62	2.31	2.59	2.73 D	4.43	3.82	4.01	4.22 D
Nitrite as N	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	0.22	0.10 U	0.51	0.32	0.15	0.85	0.95	0.86
Nitrogen, Kjeldahl, Total	0.53	0.10 U	0.75	0.2 U	0.39	0.90	1.05	0.10 U
Phenolics, Total Recoverable	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	13.0	9.99	12.1	10.7 U	7.01	7.82	8.87	7.94
Sodium	37.3	32.8	31.5	33.4	32.0	37.6	38.8	34.0
Sulfate	24.0	25.0 U	16.9	25.0 U	18.8	21.6	18.1	18.8
Total Dissolved Solids	201	253	206	221	185	192	261	148
Zinc	0.05	0.06	0.05	0.05	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
NA - Not analyzed
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury, cyanide, lead and phenolics are reported in micrograms per liter (µg/L)
All other constituents are reported in milligrams per liter (mg/L)
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

CONSTITUENT / **SITE** / **DATE**	MW-09C 4/1/2010	MW-09C 6/30/2010	MW-09C 8/27/2010	MW-09C 11/4/2010	MW-11A 4/2/2010	MW-11A 6/30/2010	MW-11A 8/26/2010	MW-11A 11/4/2010
Alkalinity, Total (As $CaCO_3$)	45.0	51.6	46.7	46.0	1.00 U	1.00 U	1.00 U	1.00 U
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Bicarbonate	45.0	51.6	46.7	46.0	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	3.97	5.39	5.45	5.42	3.52	3.40	3.71	3.31
Carbonate	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloride	80.5	88.7	70.1	81.8 D	8.87	8.88	7.22	8.51
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	10.0 U	10 U	10 U	10 U	10.0 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	34.0	46.0	44.0	44.0 D	15.0	15.0	15.0	13.0
Iron	0.14	0.23	0.20	0.13	0.10	0.03	0.02 U	0.03
Lead	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	6.81	8.04	8.96	8.29	2.05	1.76	2.15	1.98
Manganese	0.08	0.11	0.11	0.11	0.02 U	0.02 U	0.02 U	0.02 U
Mercury	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	0.46	0.15	0.31	0.57	3.44	3.29	3.44	3.04 D
Nitrite as N	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	7.09	4.30	4.22	4.23 D	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Kjeldahl, Total	8.51	5.81	5.44	5.78 D	0.10 U	0.10 U	0.10 U	0.50 U
Phenolics, Total Recoverable	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	19.9	14.2	14.9	13.7	1.38	1.15	1.64	1.41
Sodium	54.8	53.2	51	48.4	4.49	4.62	4.96	4.26
Sulfate	25.0 U	14.1	12.5	17.0	5.00 U	5.00 U	5.00 U	5.00 U
Total Dissolved Solids	189	193	216	266	57	102	73	26
Zinc	0.02 U	0.02 U	0.02 U	0.02 U	0.02	0.02 U	0.02 U	0.02

Notes:
NA - Not analyzed
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury, cyanide, lead and phenolics are reported in micrograms per liter (µg/L)
All other constituents are reported in milligrams per liter (mg/L)
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

CONSTITUENT / **SITE** / **DATE**	MW-11B 4/1/2010	MW-11B 6/30/2010	MW-11B 8/26/2010	MW-11B 11/4/2010	OBS-1 4/1/2010	OBS-1 6/30/2010	OBS-1 8/25/2010	OBS-1 11/4/2010
Alkalinity, Total (As $CaCO_3$)	1.00 U	1.00 U	1.00 U	1.00 U	63.2	90.5	113	120 D
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Bicarbonate	1.0 U	1.0 U	1.0 U	1.0 U	63.2	90.5	113	120 D
Calcium	2.47	2.83	2.89	2.70	18.6	21.3	20.9	20.0
Carbonate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 U	4.0 U
Chloride	12.9	14.1	11.6	14.4	121	118	82.7	90.3 D
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Hardness (As $CaCO_3$)	9.00	11.0	11.0	13.0	120	105	105	115 D
Iron	0.05	0.06	0.02 U	0.05	0.09	0.10	0.04	0.04
Lead	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	1.42	1.34	1.56	1.52	17.3	13.2	15.1	14.0
Manganese	0.02 U	0.02 U	0.02 U	0.02 U	1.45	2.38	2.51	2.18
Mercury	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	1.13	1.25	1.33	1.27	0.10 U	0.11	0.22	0.36
Nitrite as N	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	0.11	0.10 U	0.10 U	0.17	5.26	6.56	10.5	9.40 D
Nitrogen, Kjeldahl, Total	0.62	0.11	0.28	0.50 U	6.24	9.45	13	13.3 D
Phenolics, Total Recoverable	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	1.38	1.15	1.47	1.43	12.2	12.4	19.7	17.7
Sodium	6.14	6.74	6.55	5.94	88.8	83.3	78.2	69.5
Sulfate	5.00 U	5.00 U	5.00 U	5.00 U	61.0	58.7	49.9	58.2 D
Total Dissolved Solids	46	51	63	31	357	356	324	309
Zinc	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
NA - Not analyzed
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury, cyanide, lead and phenolics are reported in micrograms per liter (µg/L)
All other constituents are reported in milligrams per liter (mg/L)
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

CONSTITUENT / **SITE** / **DATE**	*MW-09D 8/27/2010	MW-06E DUP 4/1/2010	MW-06B DUP 6/30/2010	MW-07B-R DUP 8/27/2010	MW-07B-R DUP 11/4/2010
Alkalinity, Total (As $CaCO_3$)	1.00 U	7.10	968	3.30	1.10
Aluminum	0.53	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.25	0.23	0.20 U	0.20 U	0.20 U
Bicarbonate	1.0 U	7.1	968	3.4	1.1
Calcium	17.5	38.8	25.1	5.39	4.16
Carbonate	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U
Chloride	196	221	414	20.0	17.1
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	10 U	10 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	100	140	168	21.0	20.0
Iron	0.99	1.40	10.4	0.02	0.88
Lead	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	14.4	17.6	22.0	2.89	2.28
Manganese	0.17	0.15	0.08	0.08	0.09
Mercury	1.2	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	0.1 U	0.39	0.10 U	2.81	1.36
Nitrite as N	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	2.28	0.47	106	0.10 U	0.13
Nitrogen, Kjeldahl, Total	3.2	0.62	168	0.10 U	0.55
Phenolics, Total Recoverable	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	5.75	6.29	137	1.89	2.39
Sodium	102	76.5	366	13.3	11.0
Sulfate	5.00 U	5.00 U	5.00 U	5.00 U	13.2
Total Dissolved Solids	593	598	1260	133	60
Zinc	0.08	0.03	0.02 U	0.03	0.04

Notes:
DUP-Duplicate Sample
NA - Not analyzed
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury, cyanide, lead and phenolics are reported in micrograms per liter (µg/L)
All other constituents are reported in milligrams per liter (mg/L)
* Sampled in the third quarter as requested by LKB
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 7
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

CONSTITUENT / **SITE** / **DATE**	FIELD BLANK 4/2/2010	FIELD BLANK 7/1/2010	FIELD BLANK 8/26/2010	FIELD BLANK 11/4/2010
Alkalinity, Total (As $CaCO_3$)	1.00 U	1.00 U	1.00 U	1.00 U
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.20 U	0.20 U	0.20 U	0.20 U
Bicarbonate	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	0.20 U	0.20 U	0.20 U	0.20 U
Carbonate	1.0 U	1.0 U	1.0 U	1.0 U
Chloride	2.00 U	2.00 U	2.00 U	2.00 U
Chromium	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U
Cyanide	10.0 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	5.00 U	5.00 U	5.00 U	5.00 U
Iron	0.02 U	0.11	0.02 U	0.02 U
Lead	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	0.20 U	0.20 U	0.20 U	0.20 U
Manganese	0.02 U	0.02 U	0.02 U	0.02 U
Mercury	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	0.10 U	0.10 U	0.10 U	0.10 U
Nitrite as N	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Ammonia (As N)	0.10 U	0.10 U	0.10 U	0.10 U
Nitrogen, Kjeldahl, Total	0.10 U	0.10 U	0.37	0.1 U
Phenolics, Total Recoverable	5.0 U	5.0 U	5.0 U	5.0 U
Potassium	0.35	0.30	0.37	0.42
Sodium	0.20 U	0.43	0.20 U	0.20 U
Sulfate	5.00 U	5.00 U	5.00 U	5.00 U
Total Dissolved Solids	43	10 U	10 U	10 U
Zinc	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
NA - Not analyzed
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury, cyanide, lead and phenolics are reported in micrograms per liter (µg/L)
All other constituents are reported in milligrams per liter (mg/L)
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
DISSOLVED (FILTERED) METALS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

SITE / **CONSTITUENT** / **DATE**	LF-1 4/1/2010	LF-1 6/30/2010	LF-1 8/25/2010	LF-1 11/4/2010	M-30B-R 4/2/2010	M-30B-R 6/30/2010	M-30B-R 8/25/2010	M-30B-R 11/3/2010
Aluminum	NA	NA	NA	NA	0.20 U	0.20 U	0.20 U	0.20 U
Barium	NA	NA	NA	NA	0.20 U	0.20 U	0.20 U	0.20 U
Calcium	NA	NA	NA	NA	10.3	9.81	10.3	12.0
Chromium	NA	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	NA	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U
Copper	NA	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U
Iron	NA	NA	NA	NA	0.02 U	0.03	0.02	0.03
Lead	NA	NA	NA	NA	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	NA	NA	NA	NA	4.68	4.05	4.57	5.50
Manganese	NA	NA	NA	NA	0.02 U	0.02	0.02 U	0.02 U
Mercury	NA	NA	NA	NA	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	NA	NA	NA	NA	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	NA	NA	NA	NA	2.93	2.65	2.7	2.94
Sodium	NA	NA	NA	NA	41.2	39.3	38.1	41.4
Zinc	NA	NA	NA	NA	0.02 U	0.02 U	0.03	0.02 U

Notes:
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Mercury and Lead are reported in micrograms per liter (µg/L)
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Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
DISSOLVED (FILTERED) METALS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

SITE / **CONSTITUENT** / **DATE**	MW-05B 4/2/2010	MW-05B 6/30/2010	MW-05B 8/25/2010	MW-05B 11/11/2010	MW-06A 4/1/2010	MW-06A 7/1/2010	MW-06A 8/27/2010	MW-06A 11/3/2010
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Calcium	16.9	17.2	16.4	14.0	1.67	1.34	1.16	1.37
Chromium	0.01 U	0.01 U	0.01 U	0.02	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	NA	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.05	0.02 U	0.02 U
Iron	0.02	0.03	0.02 U	0.17	0.02 U	0.03	0.27	0.02
Lead	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	8.40	7.45	7.78	6.70	3.75	1.37	1.23	1.21
Manganese	4.99	5.24	5.09	4.42	0.02 U	0.02 U	0.02 U	0.02 U
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	0.04 U	0.04 U	0.04 U	0.10	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	10.1	9.00	8.98	7.88	5.34	1.96	1.86	2.42
Sodium	55.6	54.2	49.2	48.5	14.3	6.86	5.41	6.82
Zinc	0.02 U	0.02 U	0.02 U	0.10	0.02 U	0.04	0.03	0.02 U

Notes:
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U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury and Lead are reported in micrograms per liter (µg/L)
All other constituents are reported in milligrams per liter (mg/L)
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
DISSOLVED (FILTERED) METALS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

SITE / **CONSTITUENT** / **DATE**	MW-06B 4/1/2010	MW-06B 6/30/2010	MW-06B 8/26/2010	MW-06B 11/3/2010	MW-06C 4/2/2010	MW-06C 7/1/2010	MW-06C 8/26/2010	MW-06C 11/3/2010
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Calcium	22.7	23.6	20.9	17.9	35.8	31.1	33.8	46.2
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Iron	0.20	1.25	0.11	0.86	0.11	0.41	0.04	1.17
Lead	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	22.7	21.2	20.6	18.0	10.2	8.69	9.2	12.8
Manganese	0.08	0.08	0.07	0.06	0.07	0.06	0.05	0.07
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	161	136	131	122	55.1	38.9	45.5	63.2
Sodium	378	351	307	273	290	225	228	235
Zinc	0.02 U	0.02 U	0.02	0.02 U	0.02 U	0.03	0.02	0.02 U

Notes:
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U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury and Lead are reported in micrograms per liter (µg/L)
All other constituents are reported in milligrams per liter (mg/L)
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TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
DISSOLVED (FILTERED) METALS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

SITE / **CONSTITUENT** / **DATE**	MW-06E 4/1/2010	MW-06E 7/1/2010	MW-06E 8/26/2010	MW-06E 11/3/2010	MW-06F 4/1/2010	MW-06F 7/1/2010	MW-06F 8/26/2010	MW-06F 11/3/2010
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.23	0.20 U	0.20 U	0.20 U	0.21	0.20 U	0.22	0.22
Calcium	39.2	21.5	18	16.0	23.8	37.8	38.7	39.4
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Iron	1.71	1.32	2.55	3.25	2.69	0.15	0.15	0.10
Lead	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	7.80	5.00 U	5.00 U
Magnesium	17.8	8.73	8.72	7.91	11.3	14.7	16.8	17.0
Manganese	0.16	0.41	0.42	0.40	0.45	0.10	0.11	0.09
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.24
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	6.46	17.3	29.9	27.1	20.2	4.89	6.35	5.50
Sodium	77.4	80.8	87.1	81.2	83.3	75.2	82.6	85.5
Zinc	0.04	0.07	0.04	0.03	0.08	0.05	0.07	0.04

Notes:
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TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
DISSOLVED (FILTERED) METALS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

SITE / **CONSTITUENT** / **DATE**	MW-07B 4/2/2010	MW-07B-R 7/1/2010	MW-07B-R 8/27/2010	MW-07B-R 11/4/2010	MW-08A 4/1/2010	MW-08A 7/1/2010	MW-08A 8/26/2010	MW-08A 11/3/2010
Aluminum	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Barium	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Calcium	NA	5.16	4.85	4.20	3.95	2.56	2.08	1.78
Chromium	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	NA	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	NA	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Iron	NA	0.05	0.02 U	0.03	0.02 U	0.08	0.02 U	0.02
Lead	NA	5.76	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	NA	2.41	2.57	2.40	4.04	1.88	1.76	1.43
Manganese	NA	0.06	0.08	0.09	0.04	0.02	0.02	0.02 U
Mercury	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	NA	1.59	1.59	2.65	3.18	3.78	4.14	2.34
Sodium	NA	14.5	11.7	12.1	8.08	6.68	600	5.18
Zinc	NA	0.03	0.05	0.04	0.02 U	0.03	0.02	0.02 U

Notes:
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TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
DISSOLVED (FILTERED) METALS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

SITE / **CONSTITUENT** / **DATE**	MW-08B 4/1/2010	MW-08B 7/1/2010	MW-08B 8/26/2010	MW-08B 11/3/2010	MW-09B 4/1/2010	MW-09B 6/30/2010	MW-09B 8/27/2010	MW-09B 11/4/2010
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Calcium	14.2	12.0	10.9	14.0	13.4	12.2	11.4	11.6
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Iron	0.02 U	0.04	0.02	0.02 U	0.02 U	0.07	0.02 U	0.02 U
Lead	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	4.60	3.71	3.76	4.46	6.07	4.86	5.76	6.17
Manganese	0.48	0.54	0.48	0.50	0.10	0.12	0.16	0.34
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	0.041 U	0.04 U	0.041 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	12.1	9.52	9.7	10.6	7.20 U	7.79	8	8.33
Sodium	36.7	31.2	27.5	33.5	32.7	35.8	35	36.0
Zinc	0.05	0.06	0.06	0.05	0.02 U	0.02	0.03	0.02 U

Notes:
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TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
DISSOLVED (FILTERED) METALS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

SITE / **CONSTITUENT** / **DATE**	MW-09C 4/1/2010	MW-09C 6/30/2010	MW-09C 8/27/2010	MW-09C 11/4/2010	MW-11A 4/2/2010	MW-11A 6/30/2010	MW-11A 8/26/2010	MW-11A 11/4/2010
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Calcium	3.99	5.16	5.22	5.77	3.62	3.42	3.14	3.22
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Iron	0.11	0.22	0.18	0.11	0.02 U	0.02 U	0.36	0.02 U
Lead	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	6.80	7.68	8.43	8.90	2.12	1.81	1.85	1.92
Manganese	0.09	0.10	0.1	0.12	0.02 U	0.02 U	0.04	0.02 U
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	19.5 U	13.8	13.9 U	14.6	1.39	1.25	1.37	1.35
Sodium	54.6	50.8	47.4	51.9	4.66	4.66	4.35	4.19
Zinc	0.02 U	0.02 U	0.03	0.02 U	0.02 U	0.02 U	0.03	0.02

Notes:
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U- The analyte was not detected above the sample reporting limit
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TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
DISSOLVED (FILTERED) METALS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

SITE / **CONSTITUENT** / **DATE**	MW-11B 4/1/2010	MW-11B 6/30/2010	MW-11B 8/26/2010	MW-11B 11/4/2010	OBS-1 4/1/2010	OBS-1 6/30/2010	OBS-1 8/25/2010	OBS-1 11/4/2010
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Calcium	2.52	2.81	2.72	2.98	18.3	20.3	18.5	20.1
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Iron	0.03	0.03	0.02	0.02	0.04	0.04	0.04	0.03
Lead	5.00 U	5.13	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	1.43	1.37	1.51	1.66	17.0	12.8	13.4	14.1
Manganese	0.02 U	0.02 U	0.02 U	0.02 U	1.44	2.34	2.24	2.15
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	1.37	1.16	1.3	1.42	11.7	12.2	16.4	17.8
Sodium	6.14	6.73	6.18	6.56	87.9	79.4	69.3	69.9
Zinc	0.02 U	0.02 U	0.02	0.02 U	0.02 U	0.02	0.02	0.02 U

Notes:
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OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
DISSOLVED (FILTERED) METALS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

SITE / **CONSTITUENT** / **DATE**	*MW-09D 8/27/2010	MW-06E DUP 4/1/2010	MW-06B DUP 6/30/2010	MW-07B-R DUP 8/27/2010	MW-07B-R DUP 11/4/2010
Aluminum	0.47	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.23	0.22	0.20 U	0.20 U	0.20 U
Calcium	16.2	38.4	24.3	5.05	4.44
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Iron	0.92	1.32	0.71	0.02 U	0.18
Lead	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	13	17.4	21.9	2.62	2.45
Manganese	0.16	0.15	0.08	0.08	0.10
Mercury	0.39	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	5.19	6.19	140	1.73	2.53
Sodium	90.6	75.3	359	12.1	12.0
Zinc	0.08	0.03	0.02 U	0.04	0.04

Notes:
DUP-Duplicate Sample
NA - Not analyzed
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury and Lead are reported in micrograms per liter (µg/L)
All other constituents are reported in milligrams per liter (mg/L)
* Sampled in the third quarter as requested by LKB
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
ANNUAL GROUNDWATER ANALYTICAL RESULTS - 2010
DISSOLVED (FILTERED) METALS

PERIOD: From 1/1/2010 to 12/31/2010 - Inclusive

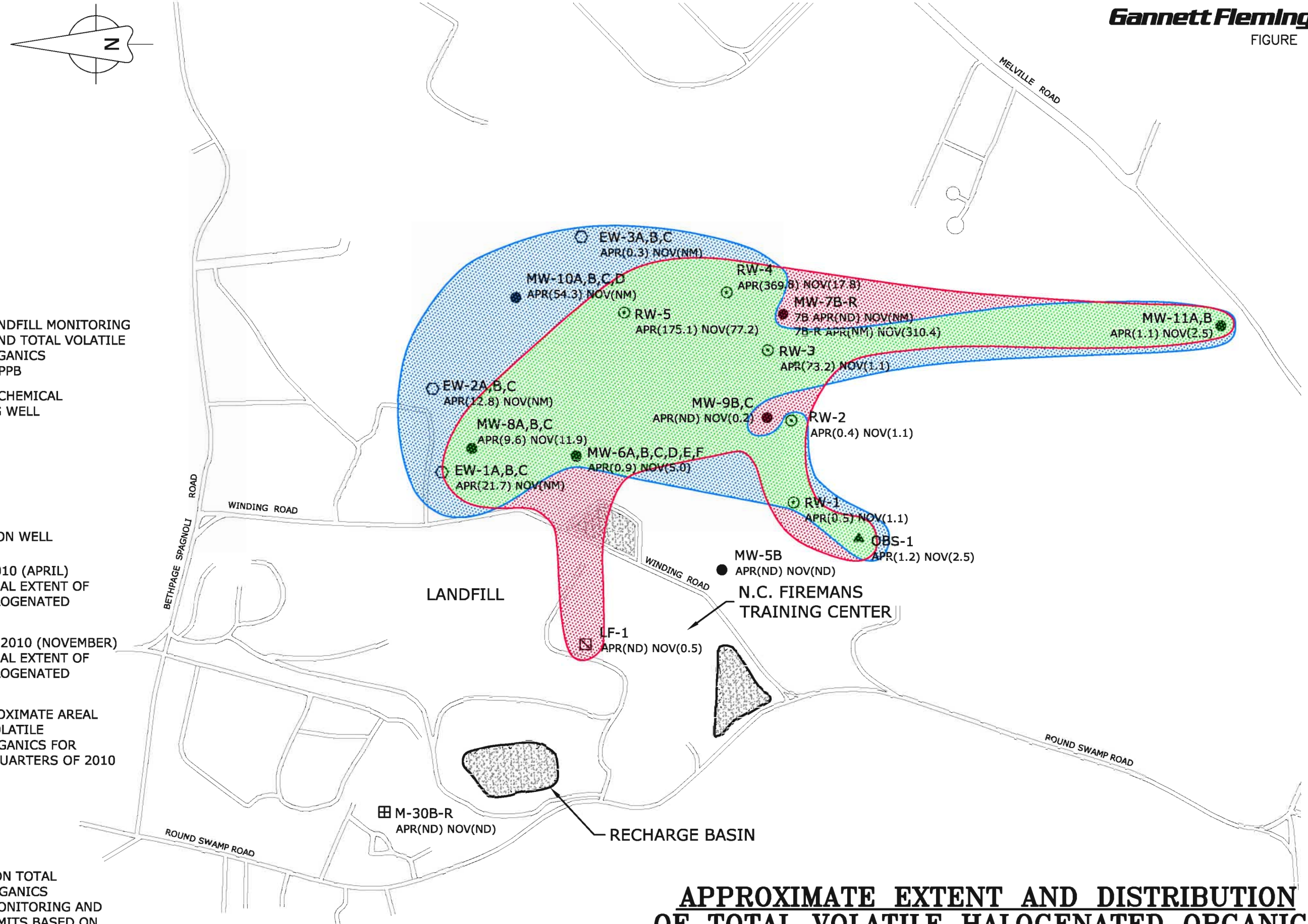
SITE / **CONSTITUENT** / **DATE**	FIELD BLANK 4/2/2010	FIELD BLANK 7/1/2010	FIELD BLANK 8/26/2010	FIELD BLANK 11/4/2010
Aluminum	0.20 U	0.20 U	0.20 U	0.20 U
Barium	0.20 U	0.20 U	0.20 U	0.20 U
Calcium	0.20 U	0.20 U	0.20 U	0.20 U
Chromium	0.01 U	0.01 U	0.01 U	0.01 U
Chromium, Hexavalent	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U
Iron	0.02 U	0.02 U	0.02 U	0.02 U
Lead	5.00 U	5.00 U	5.00 U	5.00 U
Magnesium	0.20 U	0.20 U	0.20 U	0.20 U
Manganese	0.02 U	0.02 U	0.02 U	0.02 U
Mercury	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	0.29	0.25	0.47	0.59
Sodium	0.20 U	0.20 U	0.20 U	0.20 U
Zinc	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
NA - Not analyzed
J - Data indicates the presence of a compound that meets the identification criteria- the result is less than the quanitation limit, but greater than the MDL
U- The analyte was not detected above the sample reporting limit
D - Results for Dilution
Mercury and Lead are reported in micrograms per liter (µg/L)
All other constituents are reported in milligrams per liter (mg/L)
Bold indicates concentrations exceeds NYSDEC Class GA Ambient Water Quality Standards

FIGURES

Gannett Fleming

FIGURE 1



LEGEND

MW-11A (1.1) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND TOTAL VOLATILE HALOGENATED ORGANICS CONCENTRATION, PPB
EW-1C ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
M-30B-R ⊞	UPGRADIENT WELL
RW-2 ⊙	RECOVERY WELL
LF-2 ⧅	PHASE III WELL
OBS-1 ▲	PHASE II EXTENSION WELL
	FIRST QUARTER 2010 (APRIL) APPROXIMATE AREAL EXTENT OF THE VOLATILE HALOGENATED ORGANICS PLUME
	FOURTH QUARTER 2010 (NOVEMBER) APPROXIMATE AREAL EXTENT OF THE VOLATILE HALOGENATED ORGANICS PLUME
	OVERLAP OF APPROXIMATE AREAL EXTENT OF THE VOLATILE HALOGENATED ORGANICS FOR FIRST & FOURTH QUARTERS OF 2010
(NS)	NOT SAMPLED
(ND)	NOT DETECTED

NOTE:

1. PLUME CONTOUR IS BASED ON TOTAL VOLATILE HALOGENATED ORGANICS CONCENTRATIONS IN THE MONITORING AND RECOVERY WELLS. PLUME LIMITS BASED ON MOST RECENT AVAILABLE DATA AS NOTED.
2. MONITORING WELL 7B WAS REPLACED BY MONITORING WELL 7B-R FOR THE FOURTH QUARTER OF 2010.

APPROXIMATE EXTENT AND DISTRIBUTION OF TOTAL VOLATILE HALOGENATED ORGANICS ANNUAL 2010

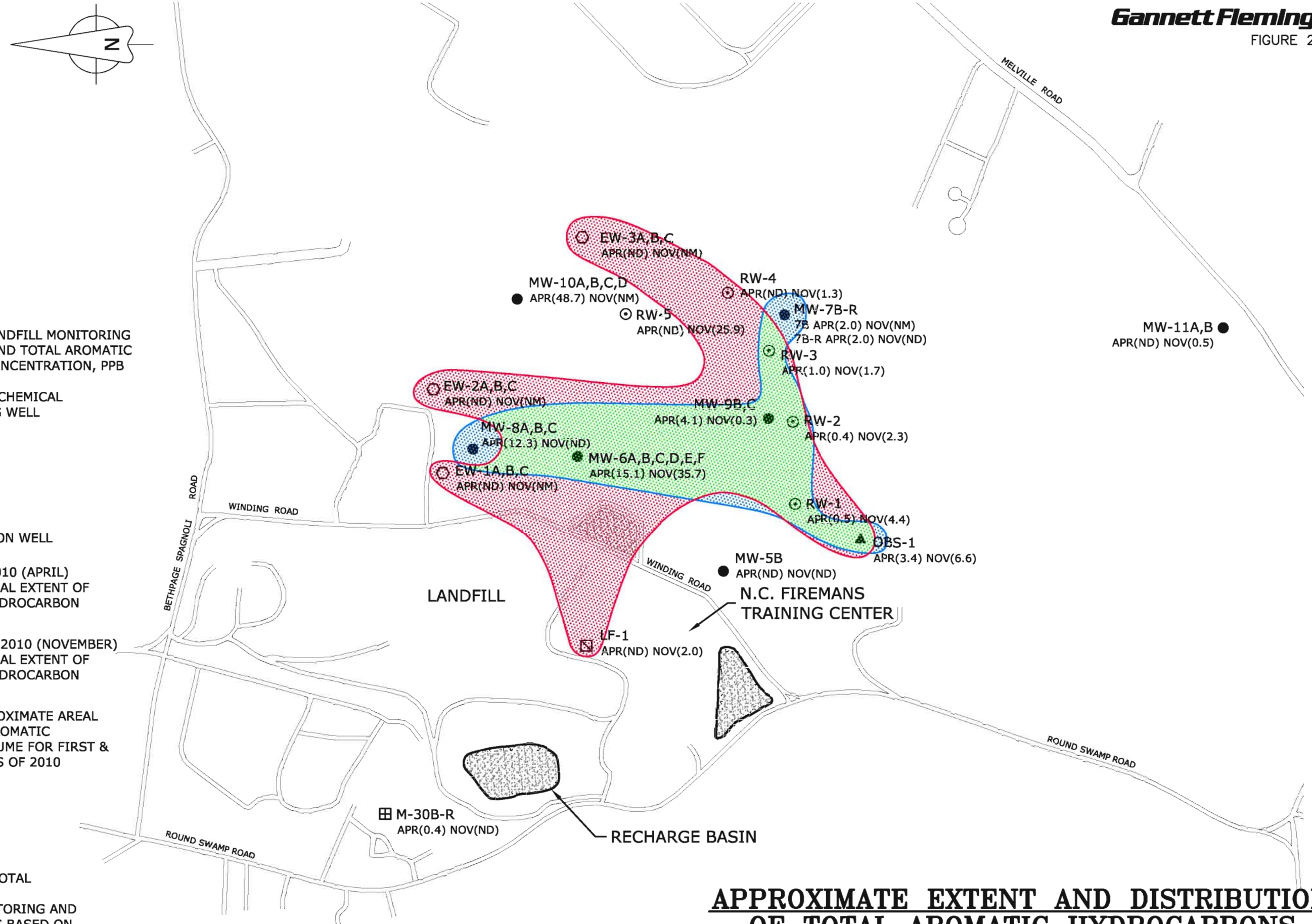
OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

08/16/11 8:45am FILE= K:\PROJECTS\53000\53085\002\Annual 2010\F-1 Annual 2010.dwg by MDOHERTY XREFs=site base,

Gannett Fleming

FIGURE 2



LEGEND

MW-7B (2.0) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND TOTAL AROMATIC HYDROCARBON CONCENTRATION, PPB
EW-1C ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
M-30B-R ⊞	UPGRADIENT WELL
RW-2 ⊙	RECOVERY WELL
LF-2 ⧅	PHASE III WELL
OBS-1 ▲	PHASE II EXTENSION WELL
	FIRST QUARTER 2010 (APRIL) APPROXIMATE AREAL EXTENT OF THE AROMATIC HYDROCARBON PLUME
	FOURTH QUARTER 2010 (NOVEMBER) APPROXIMATE AREAL EXTENT OF THE AROMATIC HYDROCARBON PLUME
	OVERLAP OF APPROXIMATE AREAL EXTENT OF THE AROMATIC HYDROCARBON PLUME FOR FIRST & FOURTH QUARTERS OF 2010
(NS)	NOT SAMPLED
(ND)	NOT DETECTED

NOTE:

1. PLUME CONTOUR IS BASED ON TOTAL AROMATIC HYDROCARBON CONCENTRATIONS IN THE MONITORING AND RECOVERY WELLS. PLUME LIMITS BASED ON MOST RECENT AVAILABLE DATA AS NOTED.
2. MONITORING WELL 7B WAS REPLACED BY MONITORING WELL 7B-R FOR THE FOURTH QUARTER OF 2010.

0 500 1500

SCALE: 1" = 600'

APPROXIMATE EXTENT AND DISTRIBUTION OF TOTAL AROMATIC HYDROCARBONS ANNUAL 2010

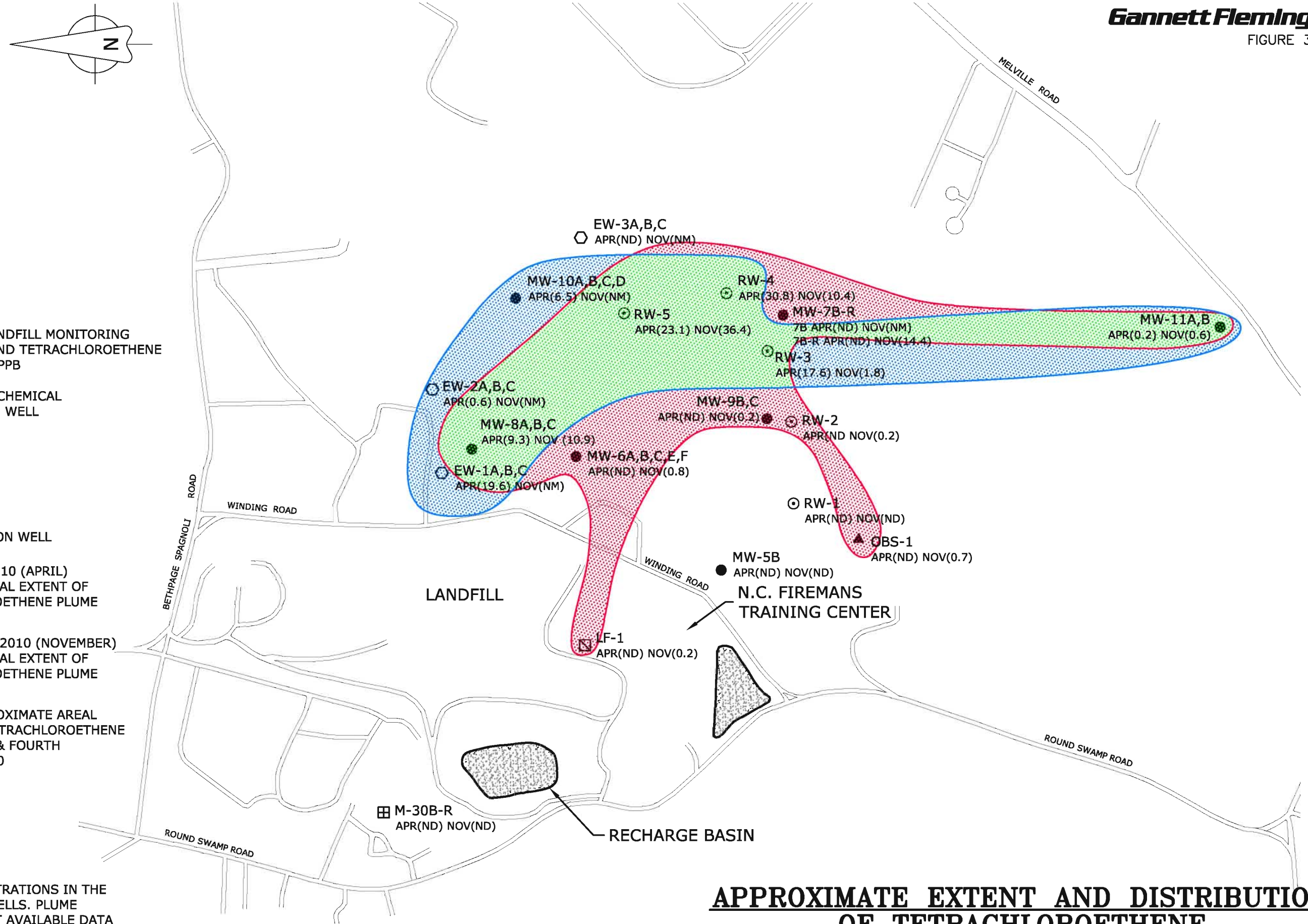
OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

08/16/11 9:55am FILE= K:\PROJECTS\53000\53085\002\Annual 2010\F-2 Annual 2010.dwg by MDOHERTY XREFs=site base,

Gannett Fleming

FIGURE 3



LEGEND

MW-5B (ND) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND TETRACHLOROETHENE CONCENTRATION, PPB
EW-1C ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
M-30B-R ⊞	UPGRADIENT WELL
RW-2 ⊙	RECOVERY WELL
LF-2 ⧅	PHASE III WELL
OBS-1 ▲	PHASE II EXTENSION WELL
	FIRST QUARTER 2010 (APRIL) APPROXIMATE AREAL EXTENT OF THE TETRACHLOROETHENE PLUME
	FOURTH QUARTER 2010 (NOVEMBER) APPROXIMATE AREAL EXTENT OF THE TETRACHLOROETHENE PLUME
	OVERLAP OF APPROXIMATE AREAL EXTENT OF THE TETRACHLOROETHENE PLUME FOR FIRST & FOURTH QUARTERS OF 2010
(NS)	NOT SAMPLED
(ND)	NOT DETECTED

NOTE:

1. PLUME CONTOUR IS BASED ON TETRACHLOROETHENE CONCENTRATIONS IN THE MONITORING AND RECOVERY WELLS. PLUME LIMITS BASED ON MOST RECENT AVAILABLE DATA AS NOTED.
2. MONITORING WELL 7B WAS REPLACED BY MONITORING WELL 7B-R FOR THE FOURTH QUARTER OF 2010.

APPROXIMATE EXTENT AND DISTRIBUTION OF TETRACHLOROETHENE ANNUAL 2010

OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

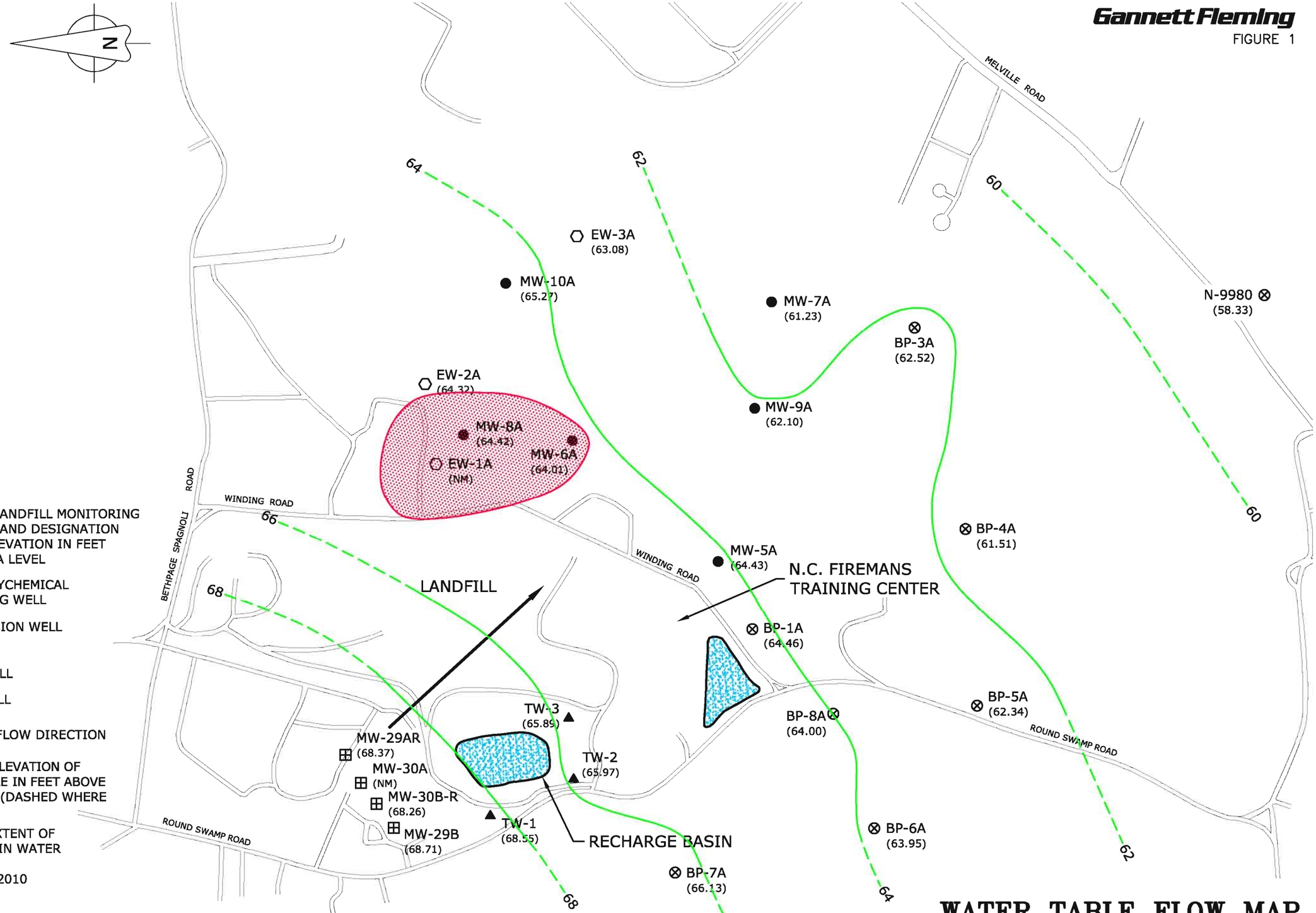
08/04/11 1:57pm FILE= K:\PROJECTS\53000\53085\002\Annual 2010\F-3 Annual 2010.dwg by MDOHERTY XREFs=site base,

APPENDIX A

QUARTERLY GROUNDWATER FLOW MAPS

Gannett Fleming

FIGURE 1



LEGEND

MW-5A (64.43) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
EW-1A ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
TW-2 ▲	PHASE II EXTENSION WELL
BP-1A ⊗	NASSAU COUNTY MONITORING WELL
M-29B ⊞	UPGRADIENT WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - FIRST QUARTER 2010
(NM)	NOT MEASURED

0 500 1500

SCALE: 1" = 600'

WATER TABLE FLOW MAP
FIRST QUARTER 2010

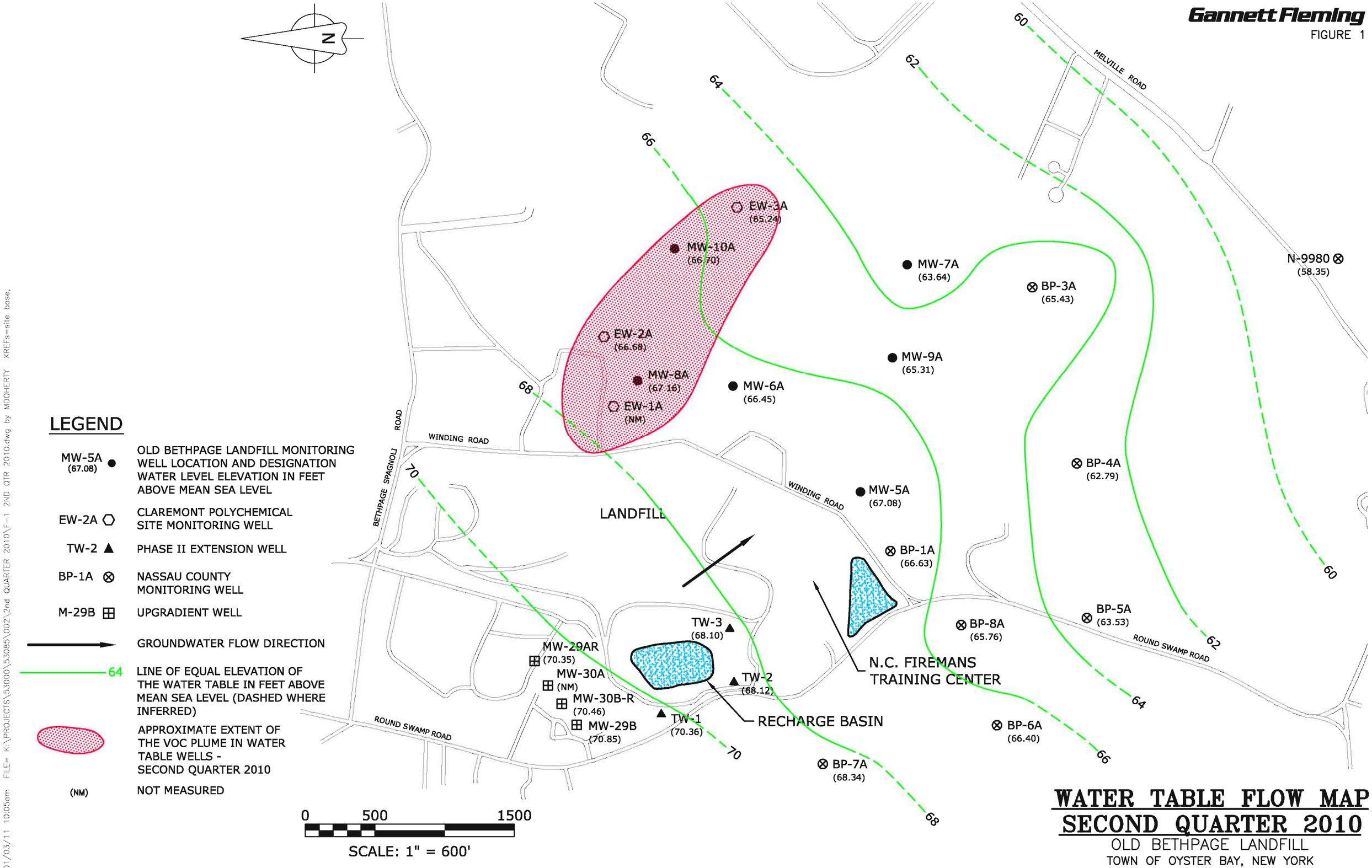
OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

12/07/10 8:21am FILE= K:\PROJECTS\53000\53085\002\1ST QUARTER 2010\F-1 1ST QTR 2010.dwg by MDOHERTY XREFs=site base,

Gannett Fleming

FIGURE 1



LEGEND

MW-5A (67.08) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
EW-2A ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
TW-2 ▲	PHASE II EXTENSION WELL
BP-1A ⊗	NASSAU COUNTY MONITORING WELL
M-29B ⊞	UPGRADIENT WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - SECOND QUARTER 2010
(NM)	NOT MEASURED

WATER TABLE FLOW MAP
SECOND QUARTER 2010

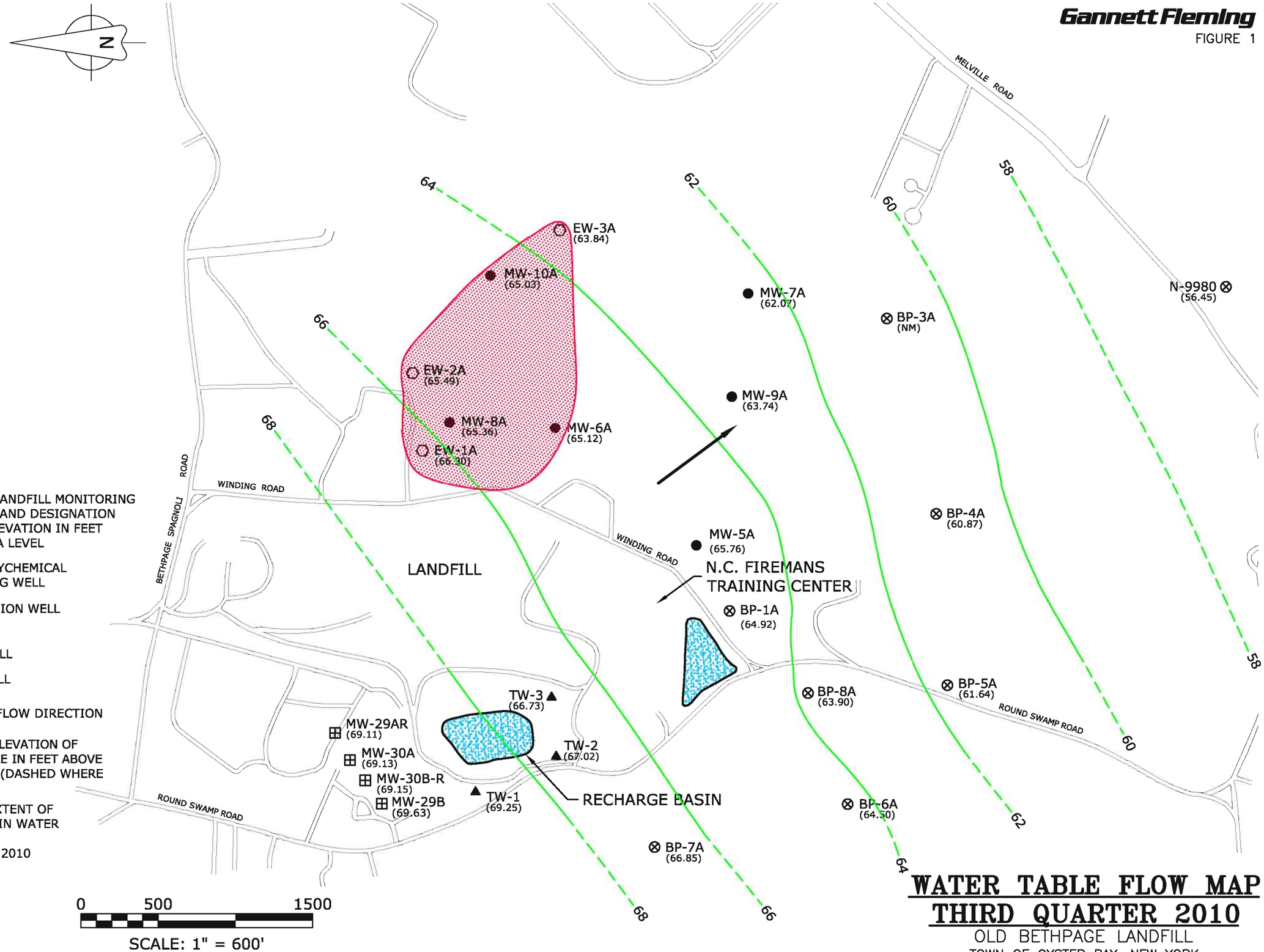
OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

01/03/11 10:05am FILE= K:\PROJECTS\53000\53085\002\2nd QUARTER 2010\F-1 2ND QTR 2010.dwg by MDOHERTY XREFs=site base,

Gannett Fleming

FIGURE 1



LEGEND

MW-5A (65.76) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
EW-1A ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
TW-2 ▲	PHASE II EXTENSION WELL
BP-1A ⊗	NASSAU COUNTY MONITORING WELL
M-29B ⊞	UPGRADIENT WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - THIRD QUARTER 2010
(NM)	NOT MEASURED

WATER TABLE FLOW MAP
THIRD QUARTER 2010

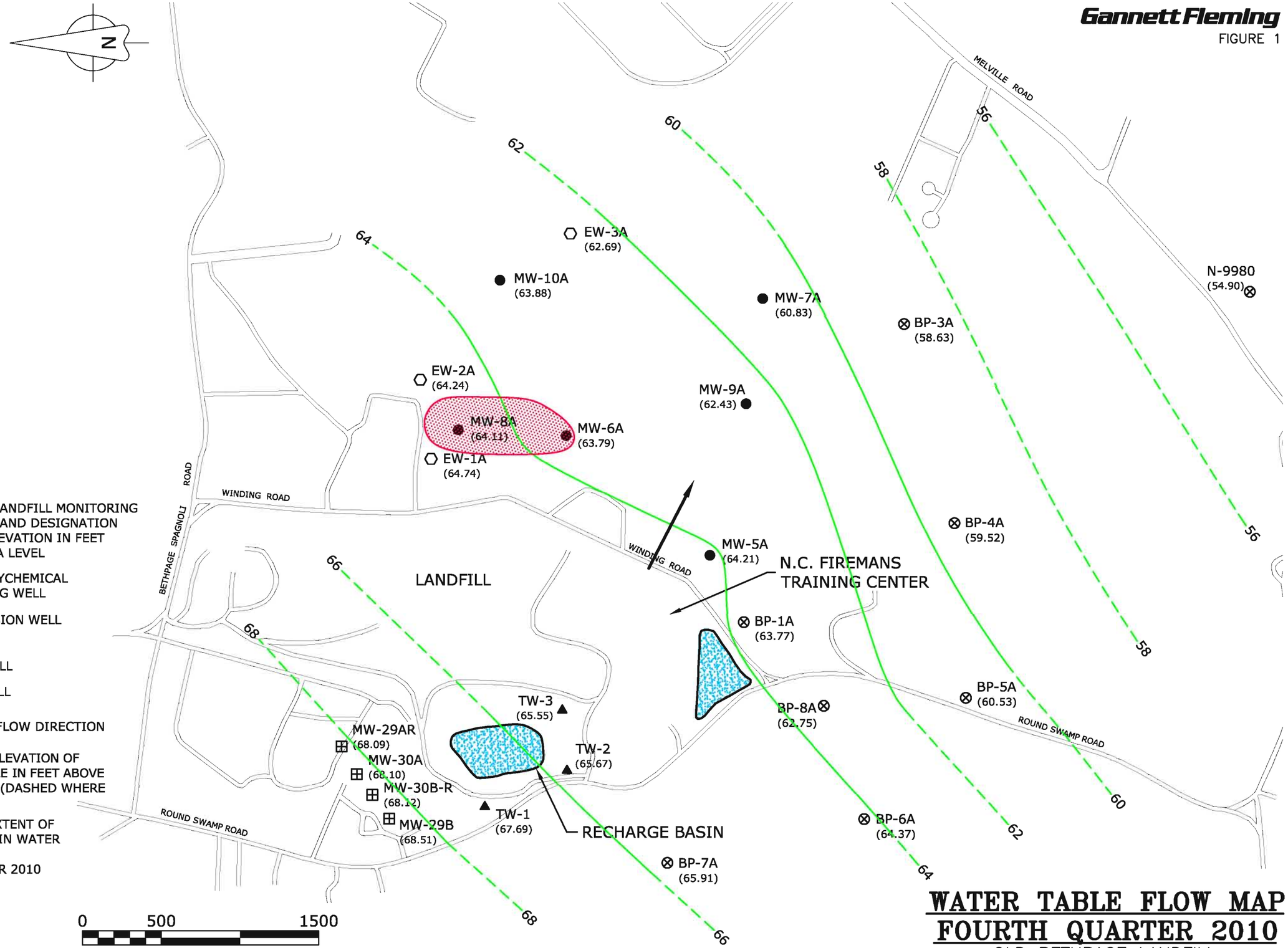
OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

01/07/11 1:26pm FILE= K:\PROJECTS\53000\53085\002\3rd QUARTER 2010\F-1 3RD QTR 2010.dwg by MDOHERTY XREFs=site base,

Gannett Fleming

FIGURE 1



LEGEND

MW-5A (64.21) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
EW-3A ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
TW-2 ▲	PHASE II EXTENSION WELL
BP-1A ⊗	NASSAU COUNTY MONITORING WELL
M-29B ⊞	UPGRADIENT WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - FOURTH QUARTER 2010
(NM)	NOT MEASURED

WATER TABLE FLOW MAP FOURTH QUARTER 2010

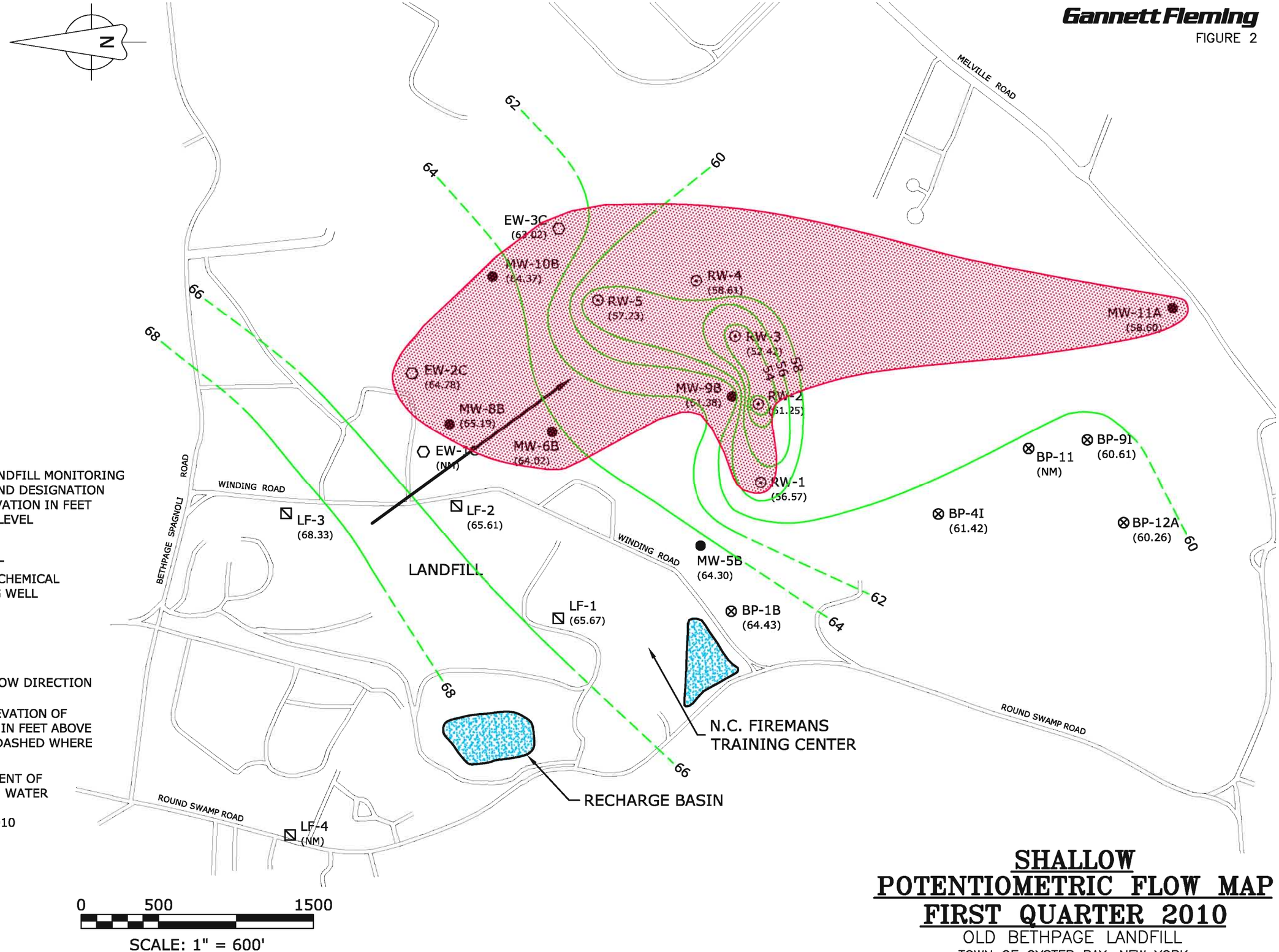
OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

02/02/11 11:52am FILE= K:\PROJECTS\53000\53085\002\4th QUARTER 2010\F-1 4TH QTR 2010.dwg by MDOHERTY XREFs=site base,

Gannett Fleming

FIGURE 2



LEGEND

MW-5B (64.30) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
BP-4I ⊗	NASSAU COUNTY MONITORING WELL
EW-1C ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
RW-2 ⊙	RECOVERY WELL
LF-2 ⧅	PHASE III WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - FIRST QUARTER 2010
(NM)	NOT MEASURED

SHALLOW POTENTIOMETRIC FLOW MAP FIRST QUARTER 2010

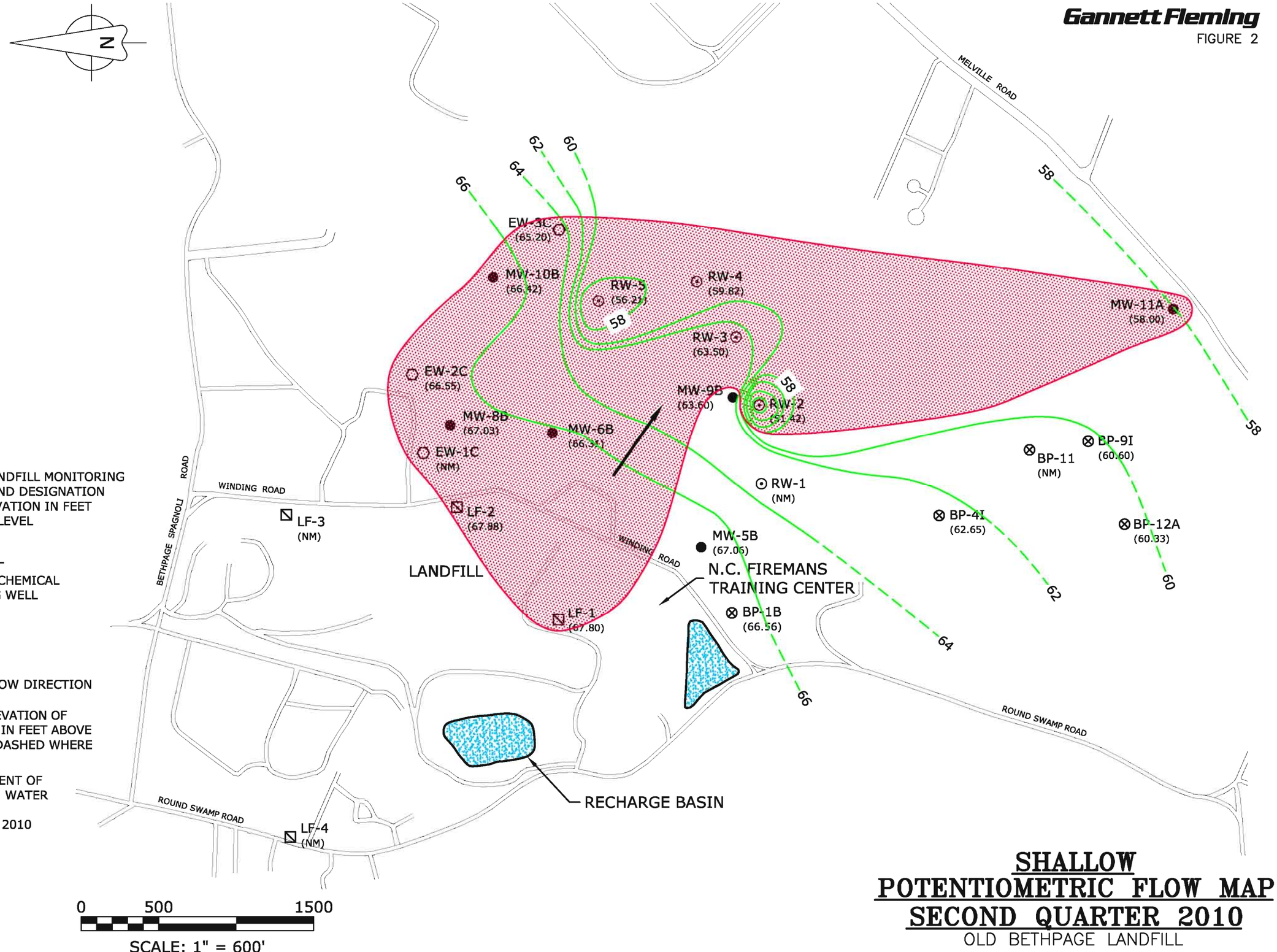
OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

12/07/10 8:27am FILE= K:\PROJECTS\53000\53085\002\1ST QUARTER 2010\F-2 1ST QTR 2010.dwg by MDOHERTY XREFs=site base,

Gannett Fleming

FIGURE 2



LEGEND

MW-5B (67.06) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
BP-4I ⊗	NASSAU COUNTY MONITORING WELL
EW-1C ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
RW-2 ⊙	RECOVERY WELL
LF-2 ⧅	PHASE III WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - SECOND QUARTER 2010
(NM)	NOT MEASURED

SHALLOW POTENTIOMETRIC FLOW MAP SECOND QUARTER 2010

OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

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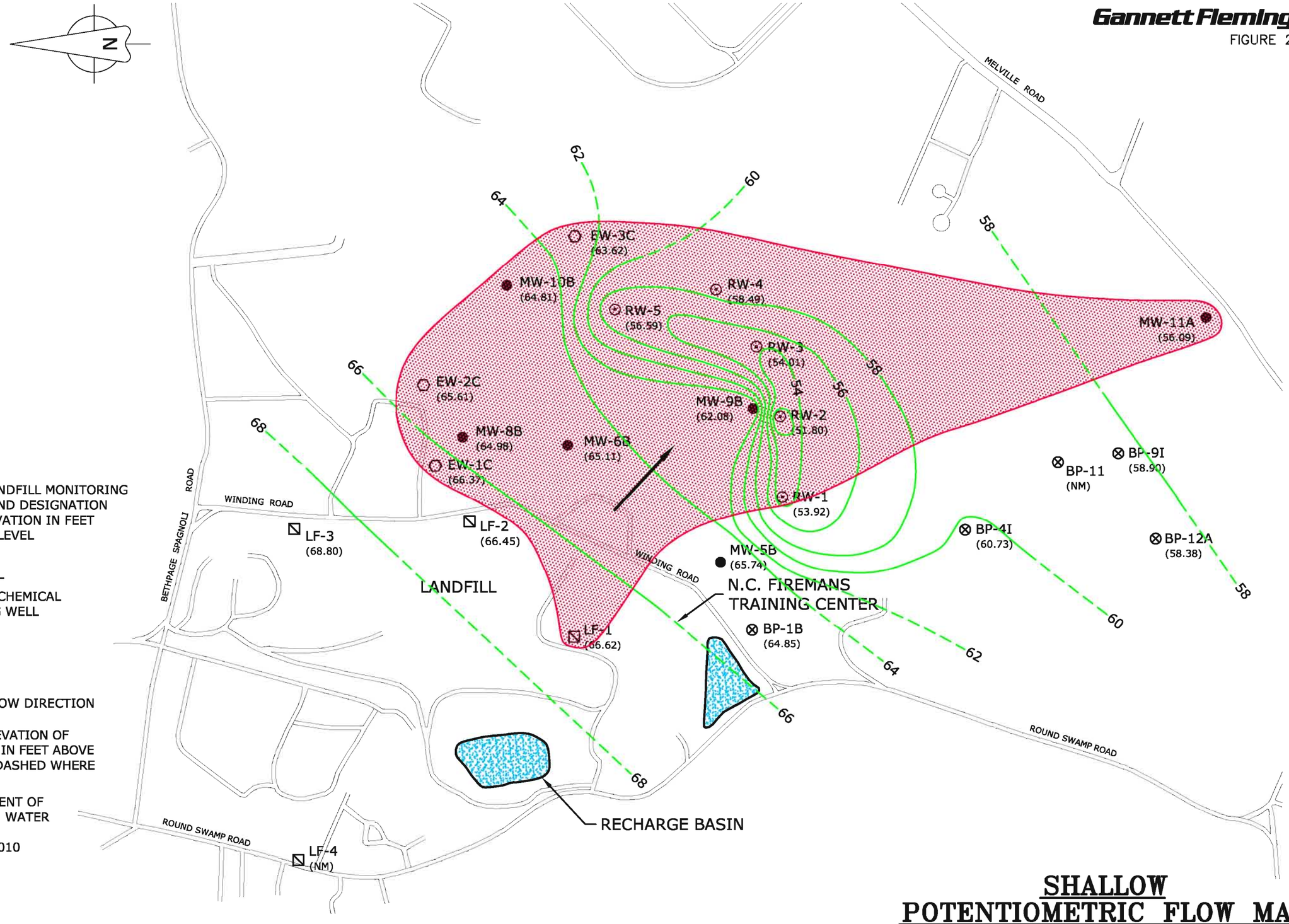
Gannett Fleming

FIGURE 2



LEGEND

MW-5B (65.74) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
BP-4I ⊗	NASSAU COUNTY MONITORING WELL
EW-1C ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
RW-2 ⊙	RECOVERY WELL
LF-2 ⧅	PHASE III WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - THIRD QUARTER 2010
(NM)	NOT MEASURED

0 500 1500

SCALE: 1" = 600'

SHALLOW POTENTIOMETRIC FLOW MAP THIRD QUARTER 2010

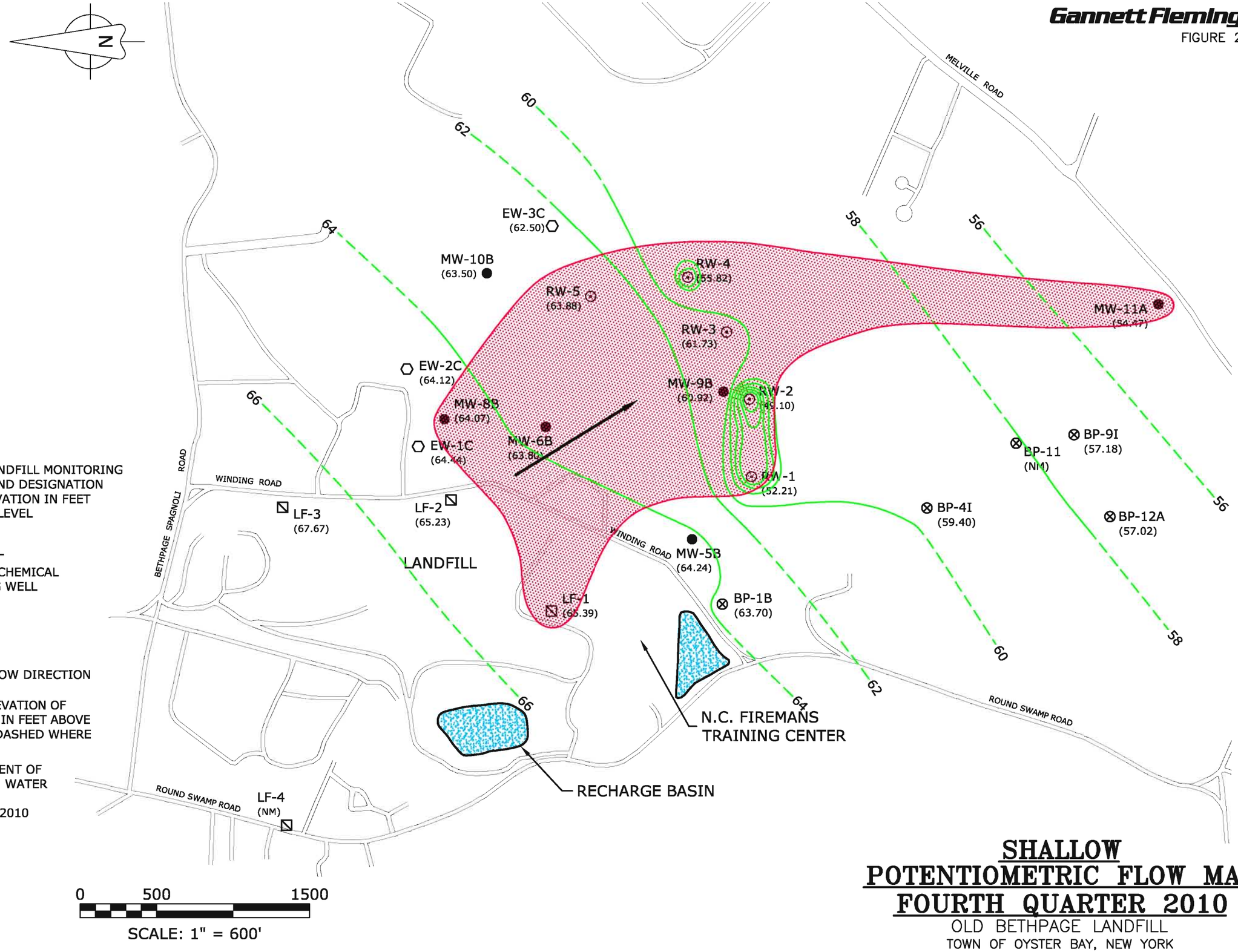
OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

01/10/11 3:50pm FILE= K:\PROJECTS\53000\53085\002\3rd QUARTER 2010\F-2 3RD QTR 2010.dwg by MDOHERTY XREFs=site base,

Gannett Fleming

FIGURE 2



LEGEND

MW-5B (64.24) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
BP-4I ⊗	NASSAU COUNTY MONITORING WELL
EW-1C ⬡	CLAREMONT POLYCHEMICAL SITE MONITORING WELL
RW-2 ⊙	RECOVERY WELL
LF-2 ⧅	PHASE III WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - FOURTH QUARTER 2010
(NM)	NOT MEASURED

SHALLOW POTENTIOMETRIC FLOW MAP FOURTH QUARTER 2010

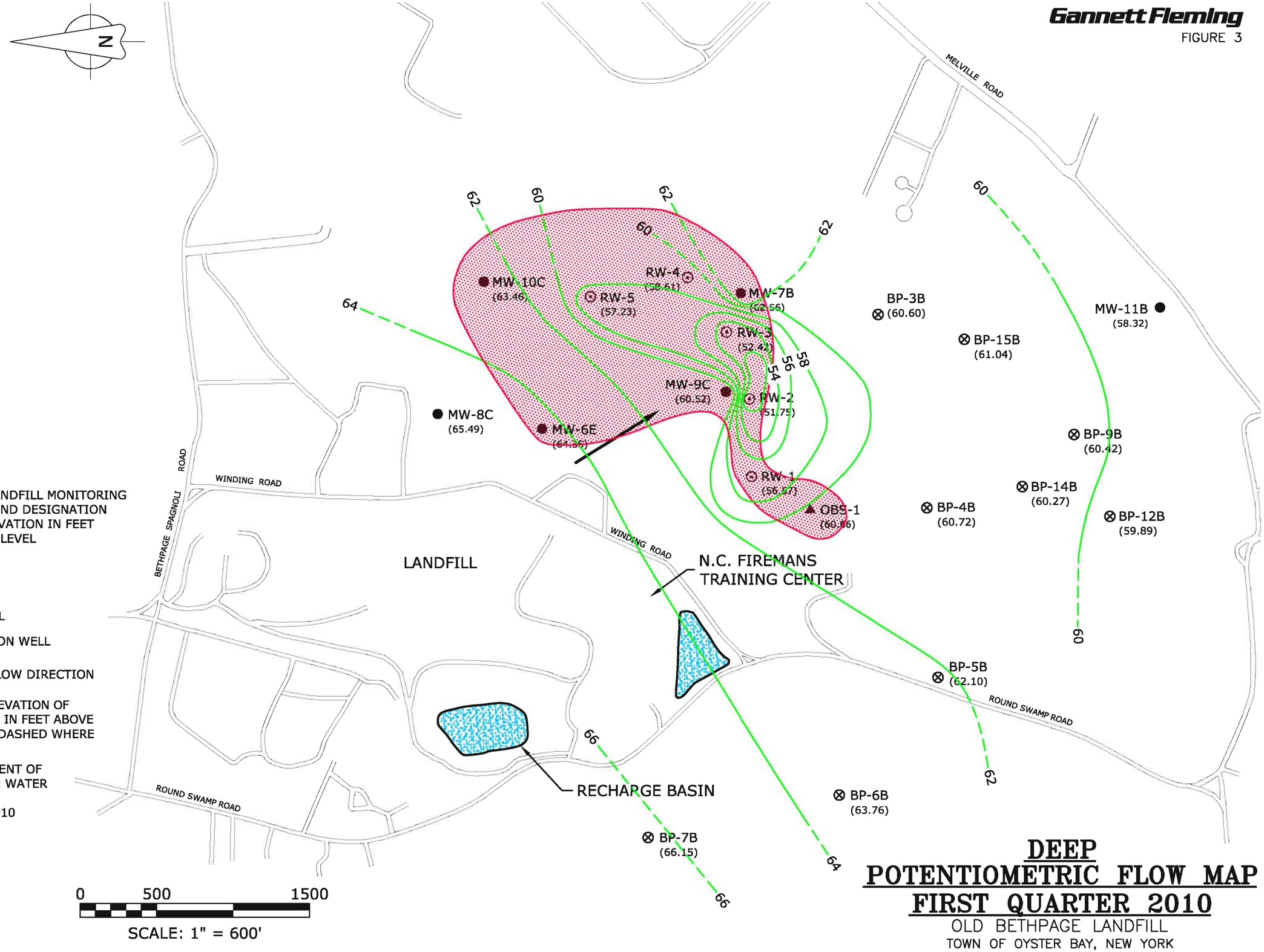
OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

02/02/11 11:53am FILE= K:\PROJECTS\53000\53085\002\4th QUARTER 2010\F-2 4TH QTR 2010.dwg by MDOHERTY XREFs=site base,

Gannett Fleming

FIGURE 3



LEGEND

MW-8C (65.49) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
RW-2 ⊙	RECOVERY WELL
BP-4I ⊗	NASSAU COUNTY MONITORING WELL
OBS-1 ▲	PHASE II EXTENSION WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - FIRST QUARTER 2010
(NM)	NOT MEASURED

DEEP POTENTIOMETRIC FLOW MAP FIRST QUARTER 2010

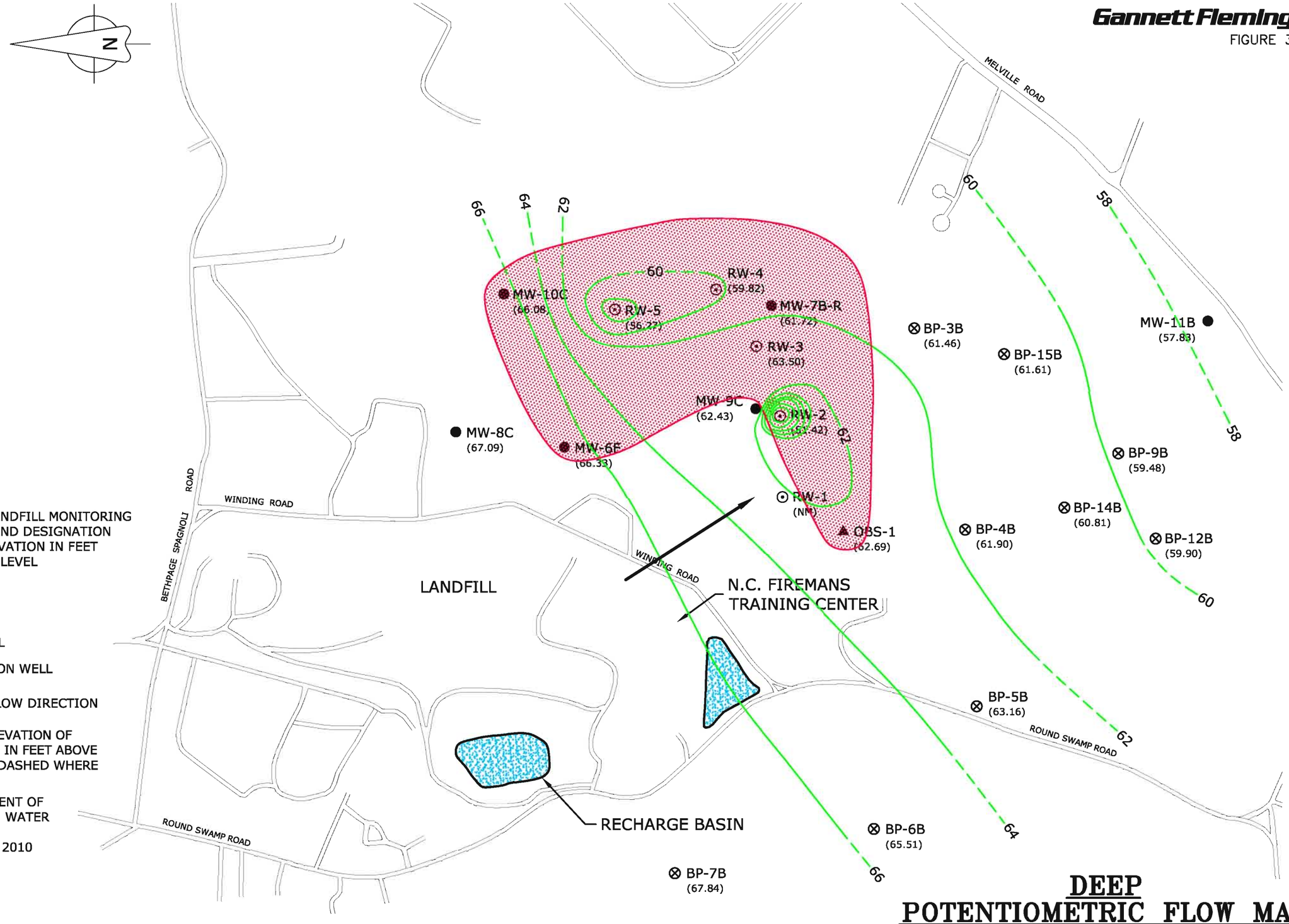
OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

12/07/10 8:34am FILE= K:\PROJECTS\53000\53085\002\1ST QUARTER 2010\F-3 1ST QTR 2010.dwg by MDOHERTY XREFs=site base,

Gannett Fleming

FIGURE 3



LEGEND

MW-7B-R (61.72) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
RW-2 ⊙	RECOVERY WELL
BP-4I ⊗	NASSAU COUNTY MONITORING WELL
OBS-1 ▲	PHASE II EXTENSION WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - SECOND QUARTER 2010
(NM)	NOT MEASURED

DEEP POTENTIOMETRIC FLOW MAP SECOND QUARTER 2010

OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

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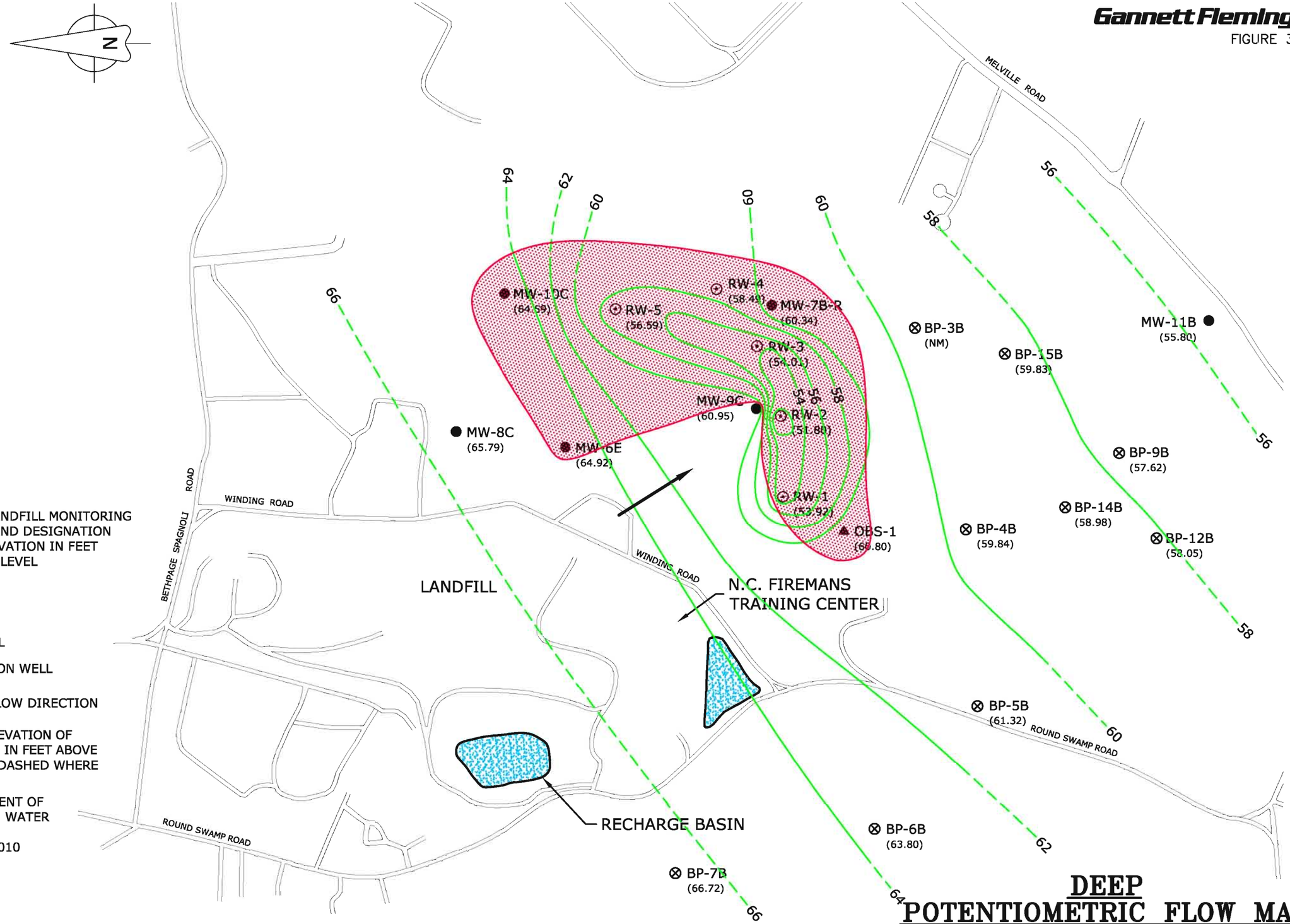
Gannett Fleming

FIGURE 3



LEGEND

MW-7B-R (60.34) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
RW-2 ⊙	RECOVERY WELL
BP-4I ⊗	NASSAU COUNTY MONITORING WELL
OBS-1 ▲	PHASE II EXTENSION WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - THIRD QUARTER 2010
(NM)	NOT MEASURED

DEEP POTENTIOMETRIC FLOW MAP THIRD QUARTER 2010

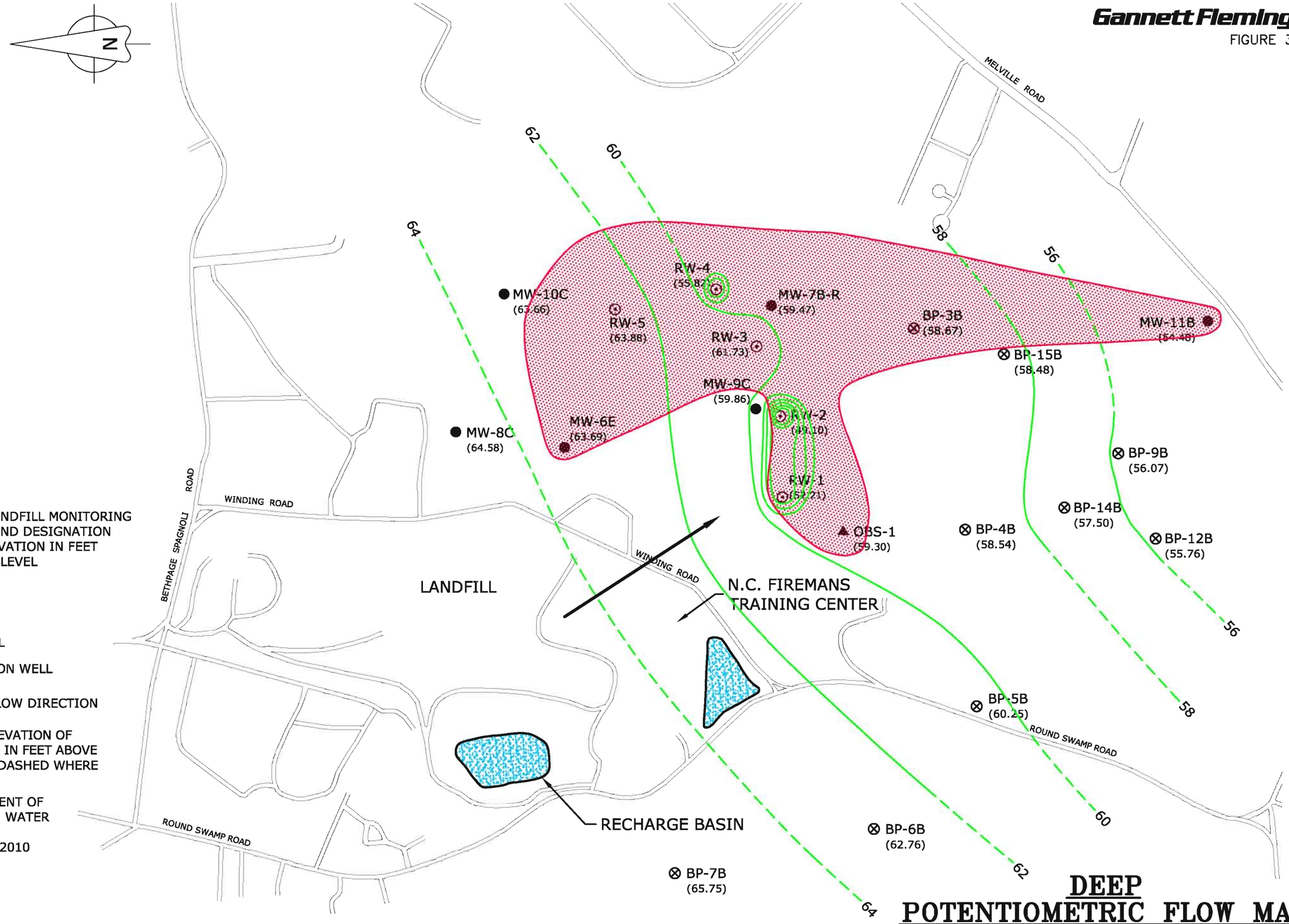
OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

01/10/11 3:52pm FILE= K:\PROJECTS\53000\53085\002\3rd QUARTER 2010\F-3 3RD QTR 2010.dwg by MDOHERTY XREFs=site base,

Gannett Fleming

FIGURE 3



LEGEND

MW-8C (64.58) ●	OLD BETHPAGE LANDFILL MONITORING WELL LOCATION AND DESIGNATION WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL
RW-2 ⊙	RECOVERY WELL
BP-4I ⊗	NASSAU COUNTY MONITORING WELL
OBS-1 ▲	PHASE II EXTENSION WELL
→	GROUNDWATER FLOW DIRECTION
64	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 - FOURTH QUARTER 2010
(NM)	NOT MEASURED

DEEP POTENTIOMETRIC FLOW MAP FOURTH QUARTER 2010

OLD BETHPAGE LANDFILL

TOWN OF OYSTER BAY, NEW YORK

02/02/11 11:53am FILE= K:\PROJECTS\53000\53085\002\4th QUARTER 2010\F-3 4TH QTR 2010.dwg by MDOHERTY XREFs=site base,

APPENDIX B

CONTAMINATE CONCENTRATION CHARTS

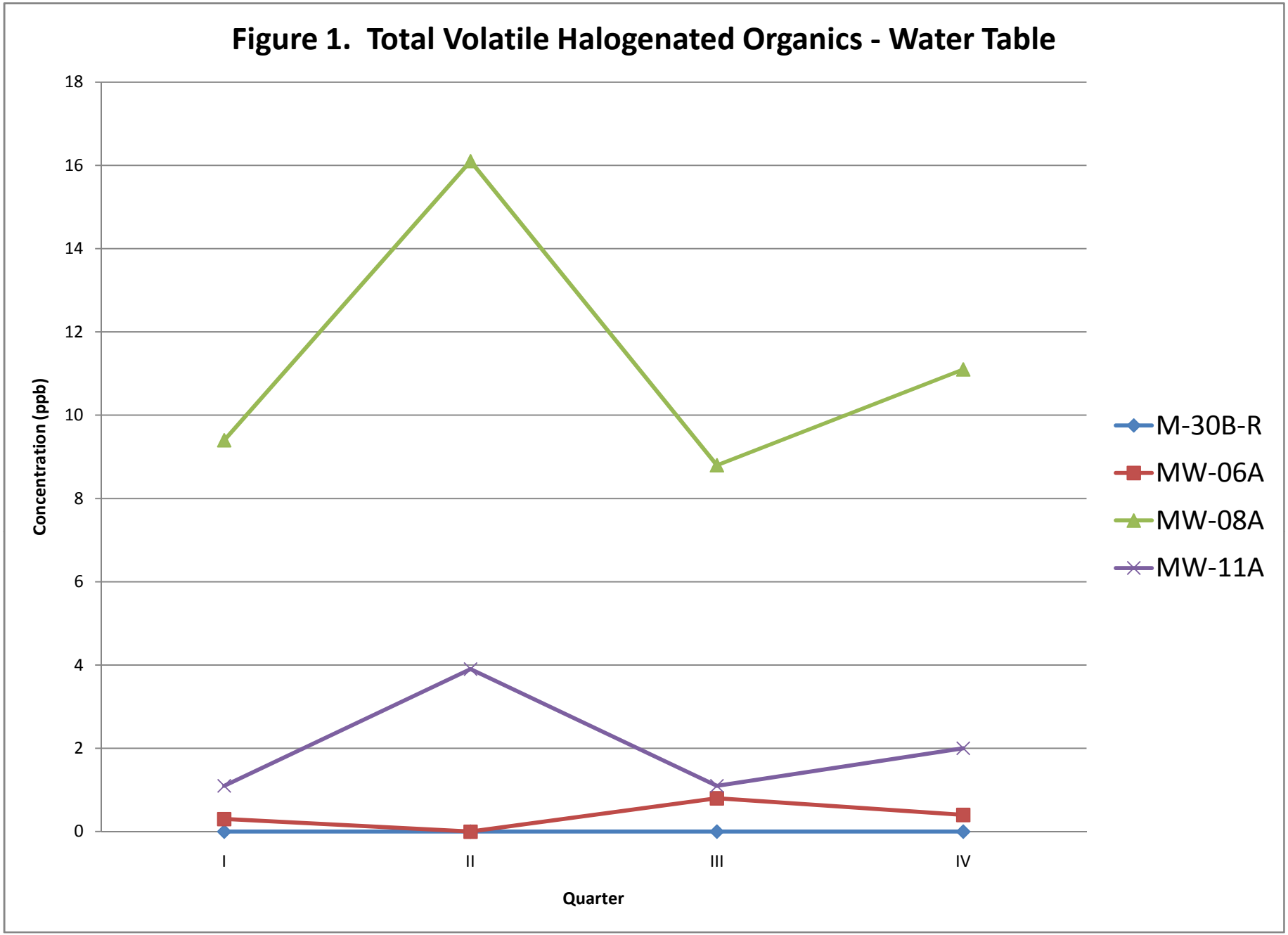


Figure 1. Total Volatile Halogenated Organics - Water Table
18
16
14
12
10
8
6
4
2
0
Concentration (ppb)
I
II
III
IV
Quarter
M-30B-R
MW-06A
MW-08A
MW-11A

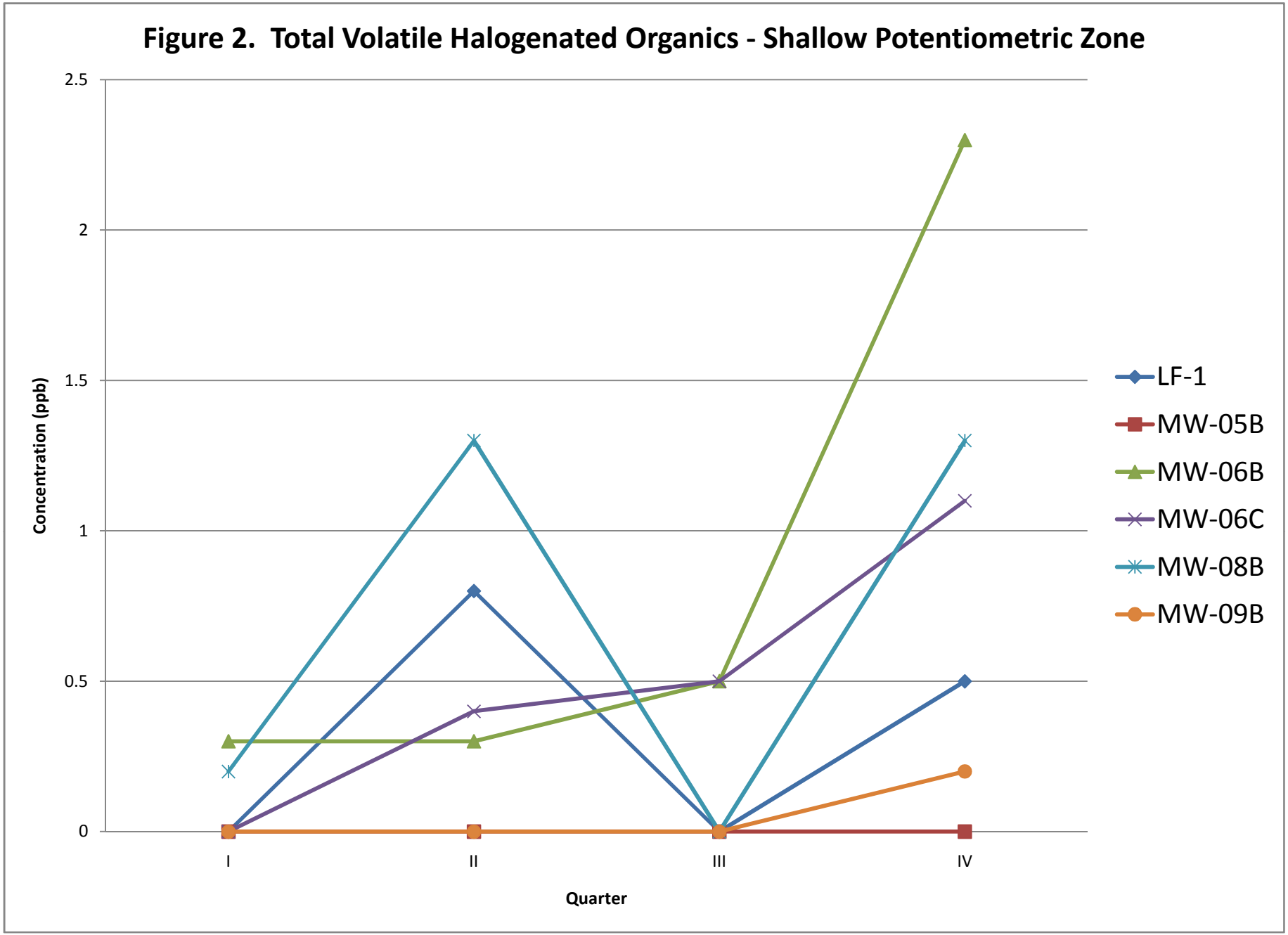


Figure 2. Total Volatile Halogenated Organics - Shallow Potentiometric Zone
2.5
2
1.5
1
0.5
0
Concentration (ppb)
I
II
III
IV
Quarter
LF-1
MW-05B
MW-06B
MW-06C
MW-08B
MW-09B

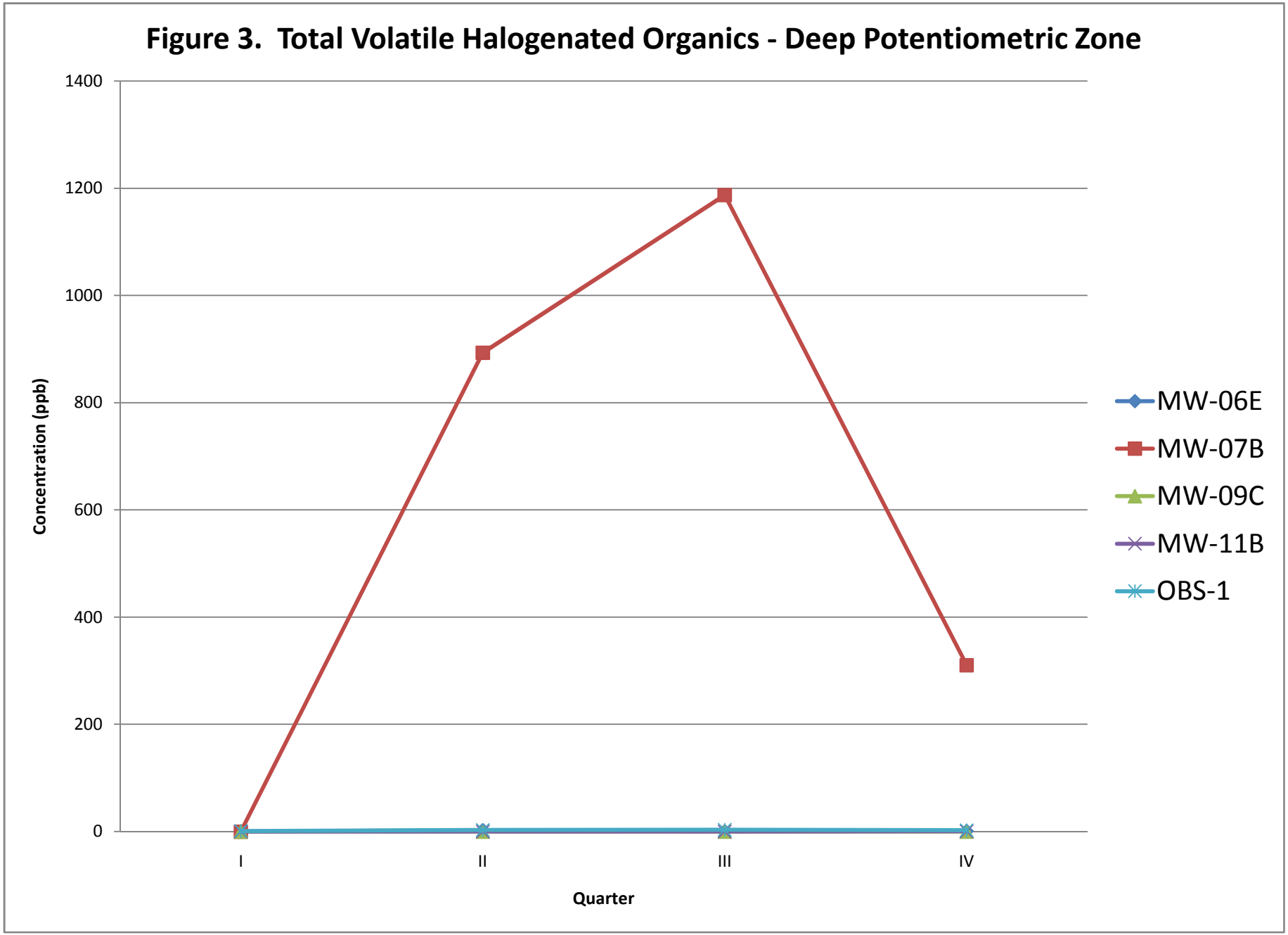


Figure 3. Total Volatile Halogenated Organics - Deep Potentiometric Zone
1400
1200
1000
800
600
400
200
0
Concentration (ppb)
I
II
III
IV
Quarter
MW-06E
MW-07B
MW-09C
MW-11B
OBS-1

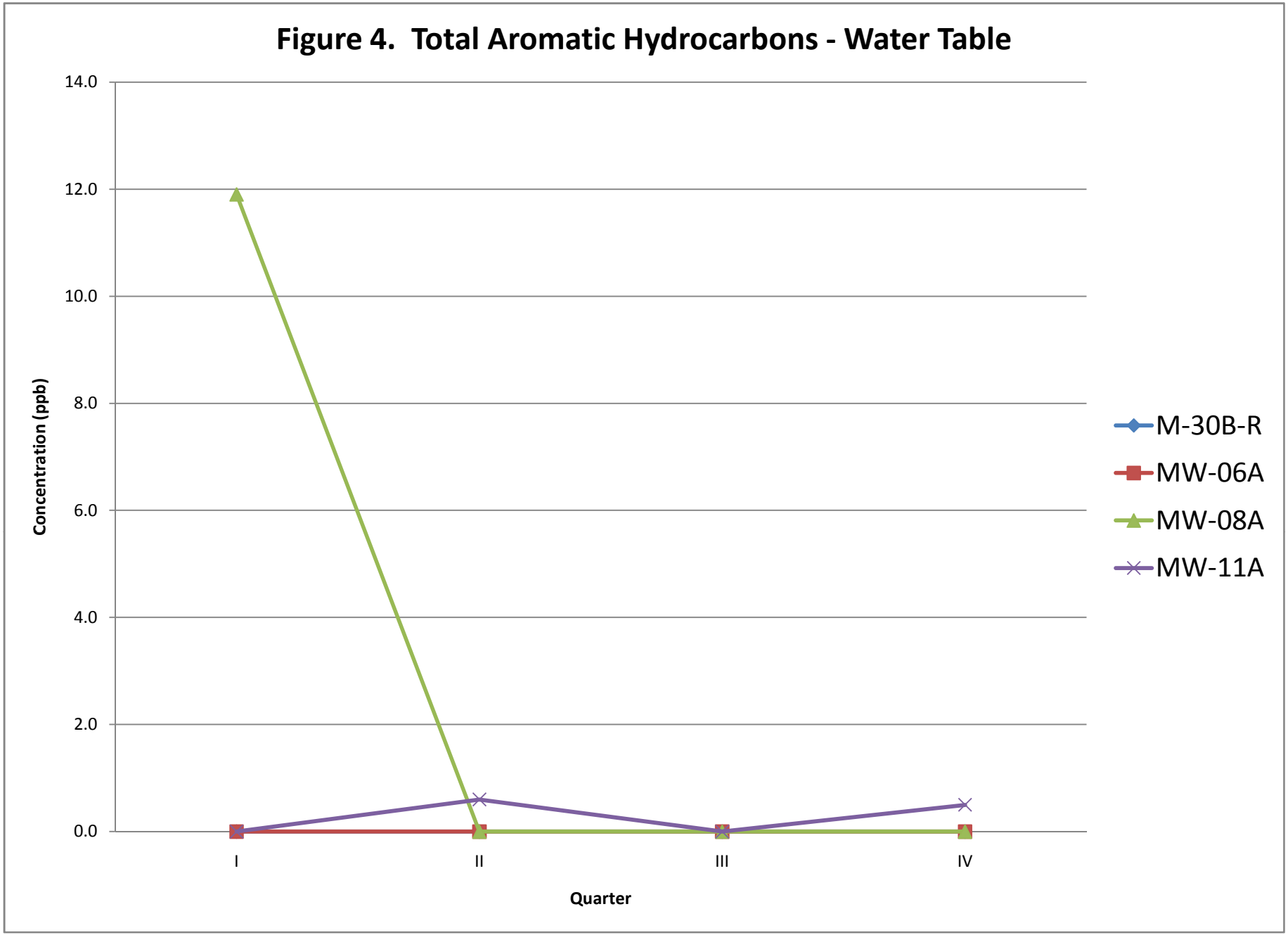


Figure 4. Total Aromatic Hydrocarbons - Water Table
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Concentration (ppb)
I
II
III
IV
Quarter
M-30B-R
MW-06A
MW-08A
MW-11A

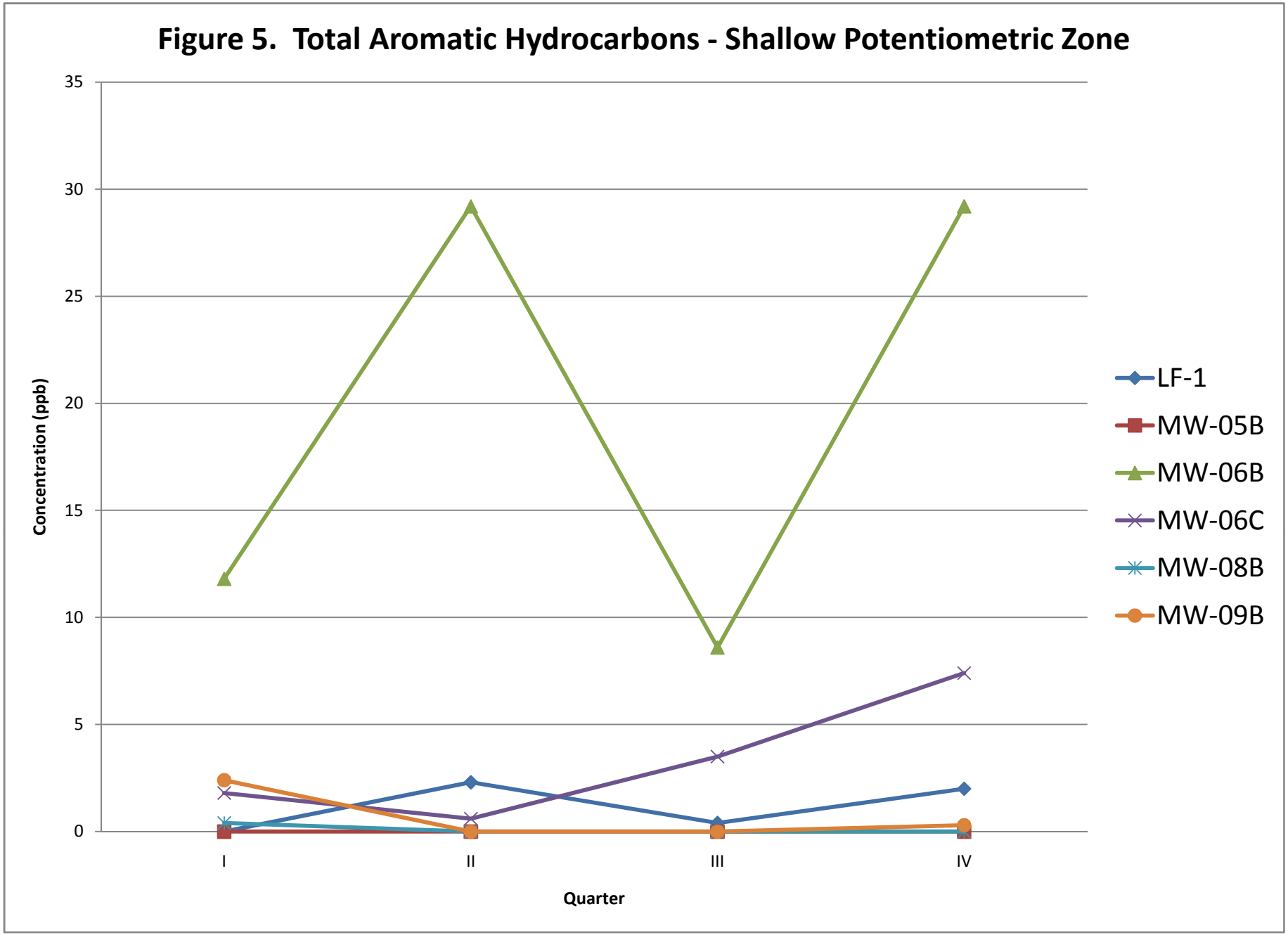


Figure 5. Total Aromatic Hydrocarbons - Shallow Potentiometric Zone
35
30
25
20
15
10
5
0
Concentration (ppb)
I
II
III
IV
Quarter
LF-1
MW-05B
MW-06B
MW-06C
MW-08B
MW-09B

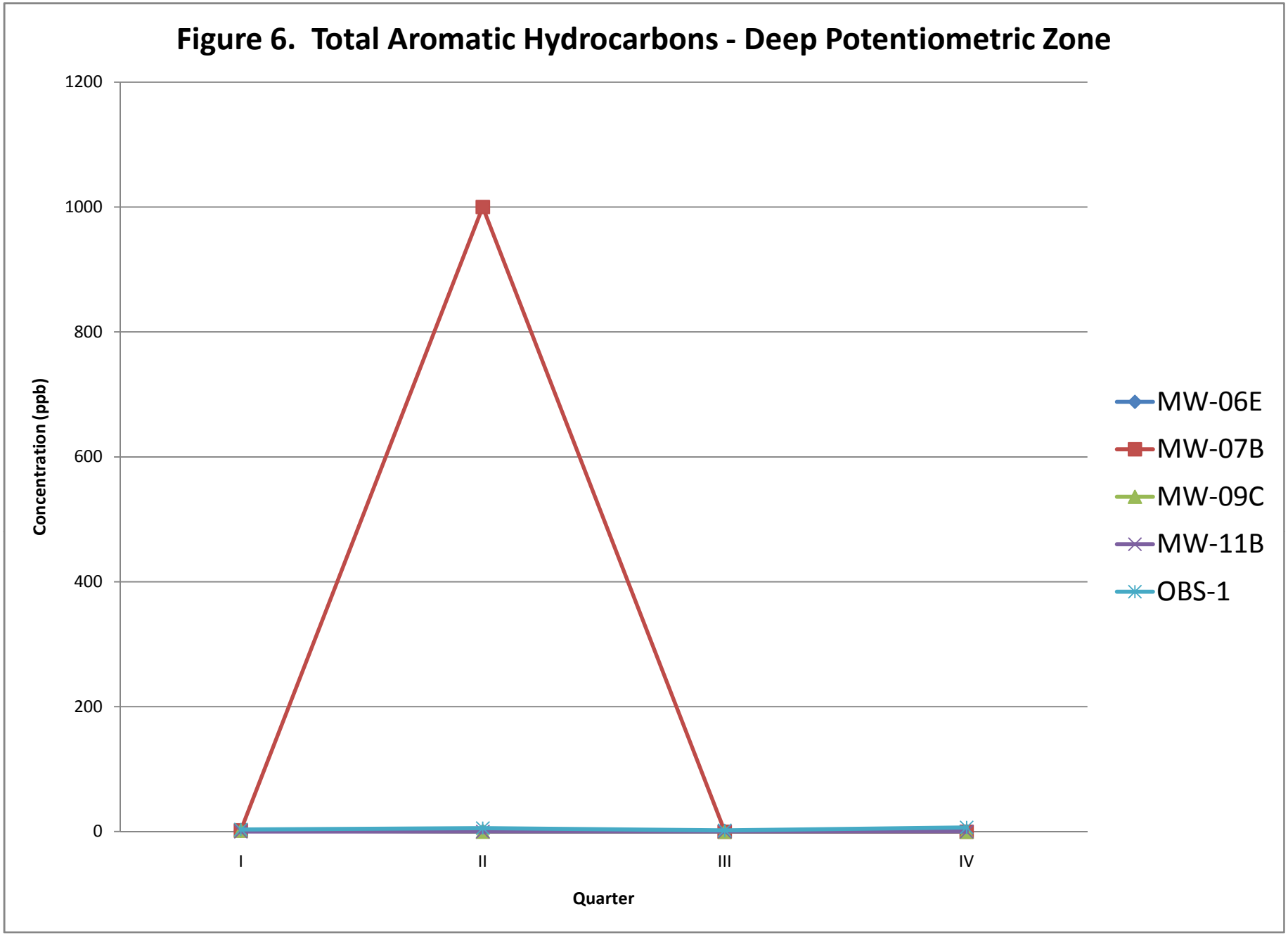


Figure 6. Total Aromatic Hydrocarbons - Deep Potentiometric Zone
1200
1000
800
600
400
200
0
Concentration (ppb)
I
II
III
IV
Quarter
MW-06E
MW-07B
MW-09C
MW-11B
OBS-1

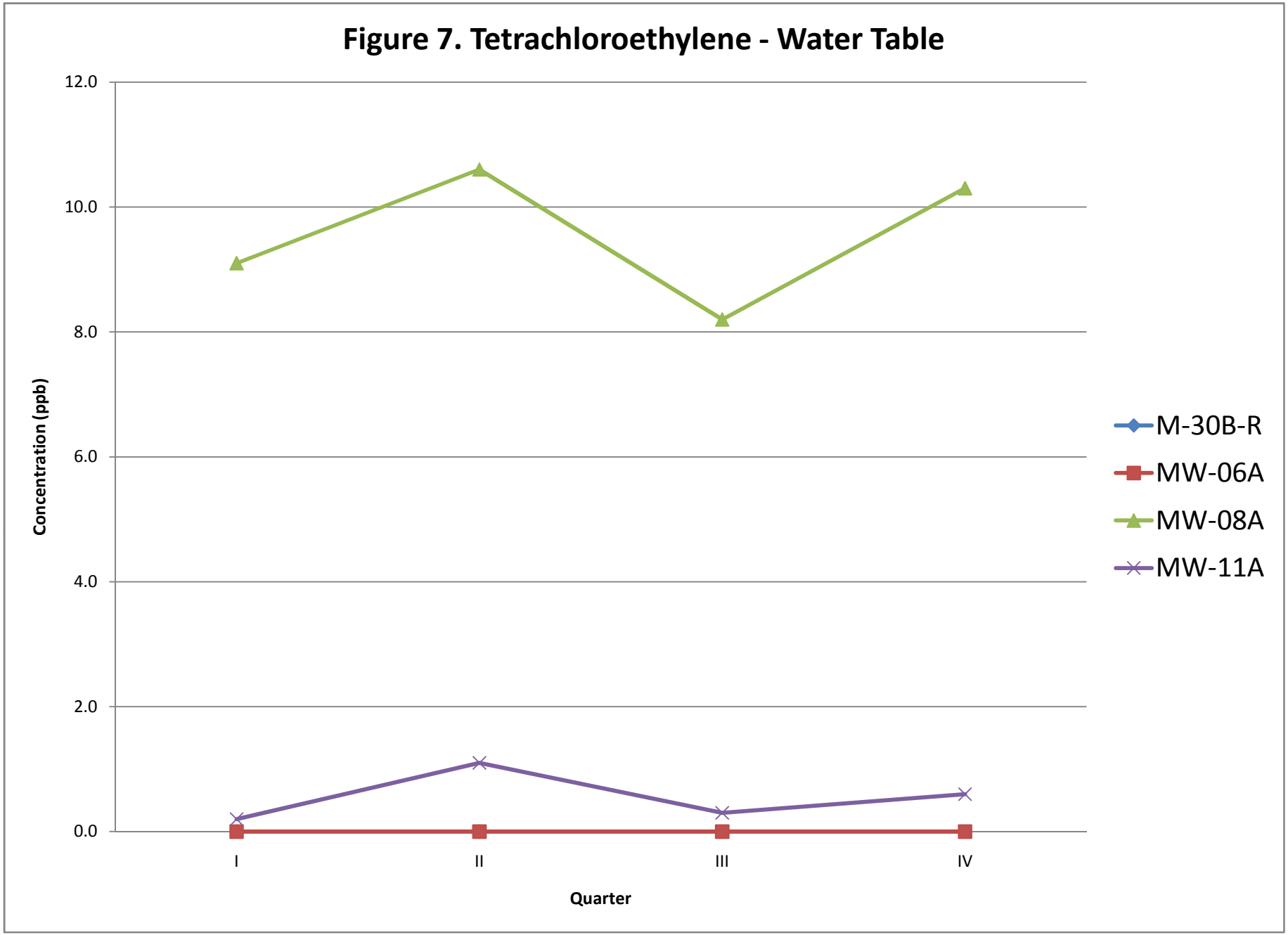


Figure 7. Tetrachloroethylene - Water Table
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Concentration (ppb)
I
II
III
IV
Quarter
M-30B-R
MW-06A
MW-08A
MW-11A

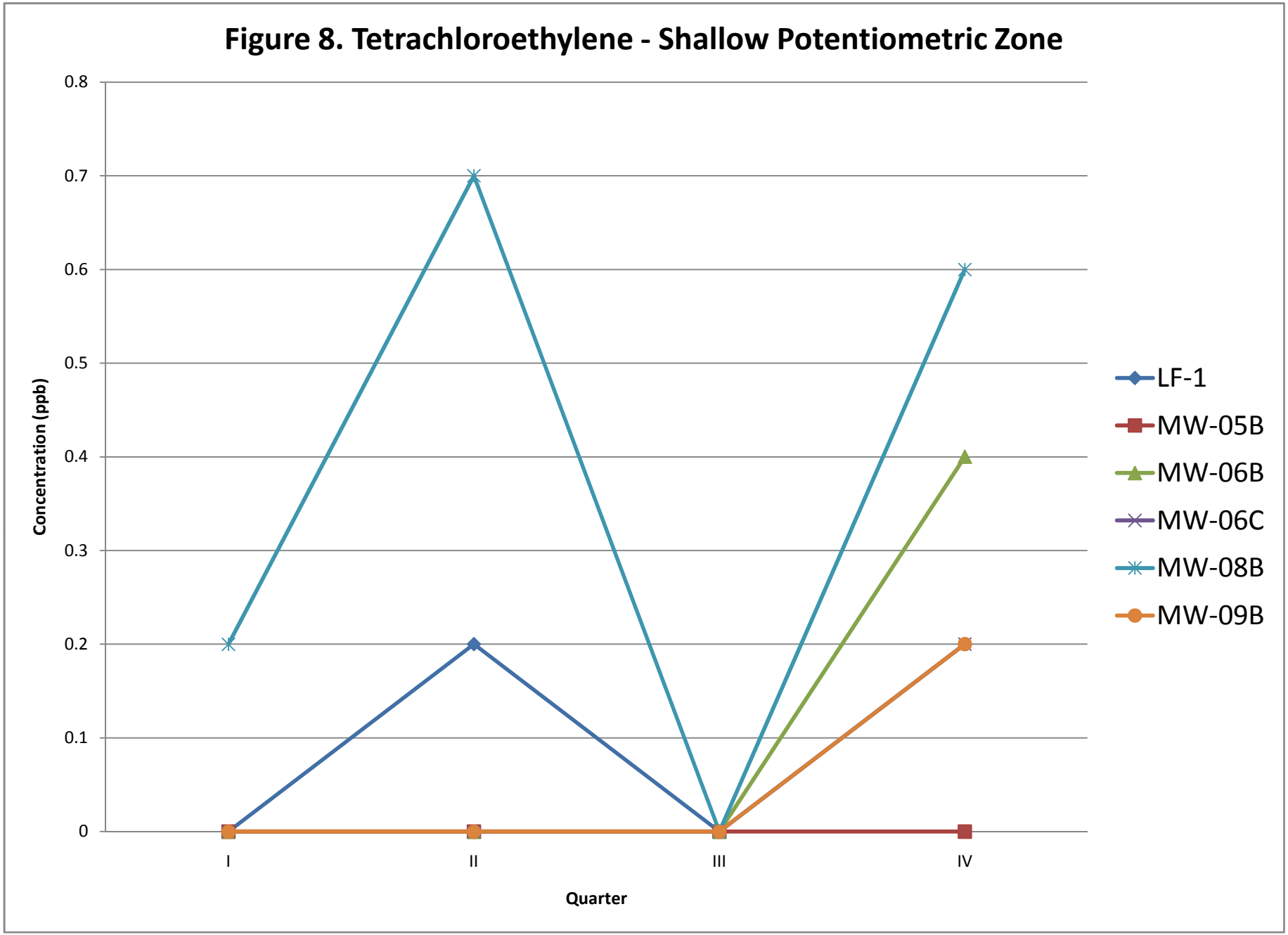


Figure 8. Tetrachloroethylene - Shallow Potentiometric Zone
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Concentration (ppb)
I
II
III
IV
Quarter
LF-1
MW-05B
MW-06B
MW-06C
MW-08B
MW-09B

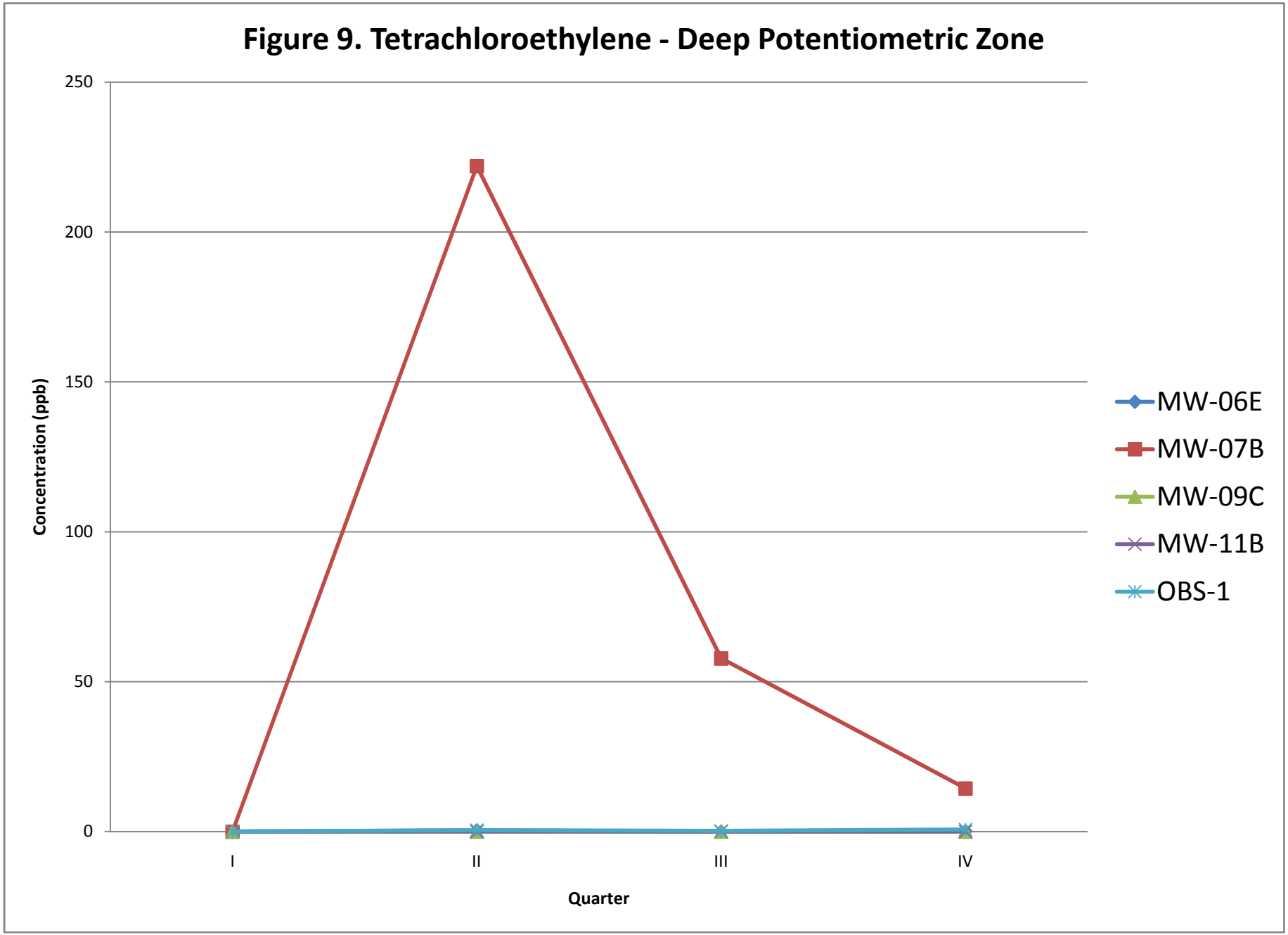


Figure 9. Tetrachloroethylene - Deep Potentiometric Zone
250
200
150
100
50
0
Concentration (ppb)
I
II
III
IV
Quarter
MW-06E
MW-07B
MW-09C
MW-11B
OBS-1

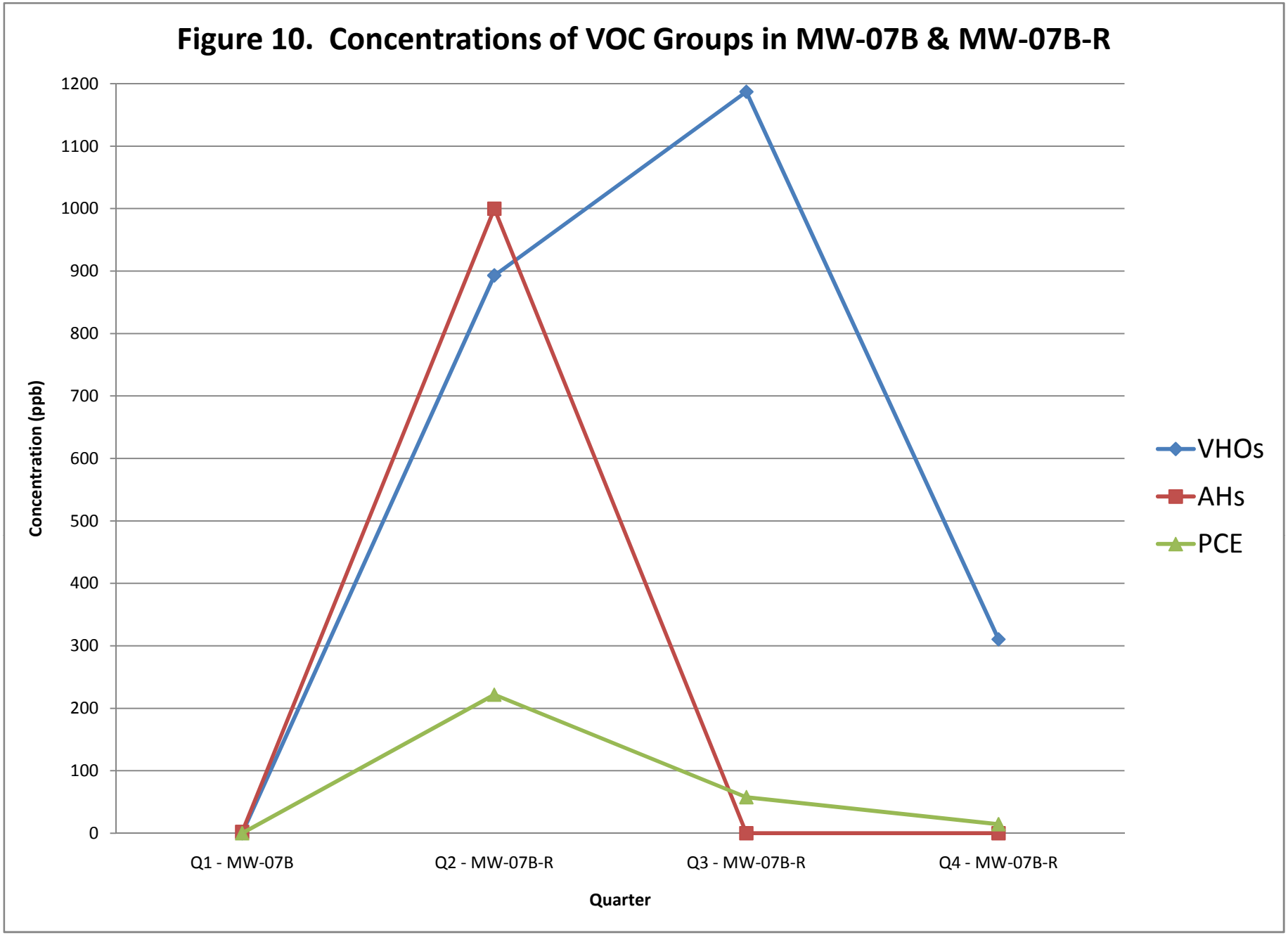


Figure 10. Concentrations of VOC Groups in MW-07B & MW-07B-R
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
Concentration (ppb)
Q1 - MW-07B
Q2 - MW-07B-R
Q3 - MW-07B-R
Q4 - MW-07B-R
Quarter
VHOs
AHs
PCE

APPENDIX C

NASSAU COUNTY MONITORING WELL DATA

GROUNDWATER ELEVATIONS
BETHPAGE STATE PARK
WATER LEVEL MEASUREMENTS

March 31, 2010 MF

WELL	TIME	MEASURING POINT ELEV	DEPTH TO WATER	WATER TABLE	ORW FLOW RATE	COMMENTS
BP-1A	1500	109.77	45.31	64.46		
BP-1B	1504	109.53	45.10	64.43		
BP-1C	1508	109.37	44.77	64.60		
BP-2A	1343	151.00	85.70	65.30		
BP-2B*	1348	151.13	86.75	64.38		*"MOUSETRAP"*
BP-3A	1041	124.54	62.02	62.52		
BP-3B	1044	123.57	62.97	60.60		*NO PUMP / TOP OF CASING*
BP-3C	1048	123.68	63.03	60.65		
BP-4A	1356	92.69	31.18	61.51		
BP-4B*	1401	91.92	31.20	60.72		
BP-4C*	1405	91.68	30.34	61.34		
BP-4I	1408	92.10	30.68	61.42		*ADD "J-PLUG"*
BP-5A	1335	96.34	34.00	62.34		
BP-5B	1338	96.48	34.38	62.10		
BP-5C	1340	96.28	34.38	61.90		
BP-6A	1107	102.55	38.60	63.95		
BP-6B	1110	102.58	38.82	63.76		
BP-6C	1114	102.35	38.40	63.95		
BP-7A	1116	147.54	81.41	66.13		
BP-7B	1119	148.76	82.61	66.15		
BP-7C	1122	148.40	82.20	66.20		
BP-8A	1130	89.88	25.88	64.00		
BP-8B	1136	89.82	25.82	64.00		
BP-8C	1144	89.53	26.30	63.23		
BP-9B*	1445	85.09	24.67	60.42		
BP-9C*	1449	84.88	25.39	59.49		*ADD "J-PLUG"*
BP-9I	1454	85.18	24.57	60.61		
BP-10B*	1427	81.21	21.48	59.73		
BP-10C*	1432	80.94	23.31	57.63		
BP-11	NR	81.76	NR	81.76		
BP-12A*	1319	78.33	18.07	60.26		
BP-12B*	1325	78.24	18.35	59.89		
BP-12C*	1328	78.56	19.37	59.19		
BP-13B*	1310	133.37	74.65	58.72		
BP-13C*	1314	133.67	75.75	57.92		
BP-14B*	1412	81.50	21.23	60.27		
BP-14C*	1417	81.48	21.47	60.01		
BP-15B	1420	98.38	37.34	61.04		
BP-15C	NR	98.45	NR	98.45		
OBV-1B	1011	157.26	85.85	71.41		
OBV-1C	1015	156.69	85.53	71.16		
W-7A	1510	104.44	38.86	65.58		
W-7B	1512	104.55	39.22	65.33		
W-7C	1517	104.68	39.26	65.42		
W-7D	1522	104.58	39.57	65.01		
RB-1	1025	135.02	64.13	70.89		
UM-1	NR	115.64	NR	115.64		
U-6A	0957	153.94	82.61	71.33		
ORW-1		141.28	78.67	62.61	Off	*WELL MEASURED 4/1/10*
ORW-2		91.88	29.65	62.23	Off	*WELL MEASURED 4/1/10*
ORW-3		85.09	41.25	43.84	210 gpm	
ORW-4		82.68	74.95	7.73	165 gpm	
ORW-5A	1331	100.38	40.30	60.08	Off	
ORW-6		77.02	16.40	60.62	Off	*WELL MEASURED 4/1/10*
ORW-7	1437	69.84	85.58	-15.74	130 gpm	

* = DEDICATOR PUMP IN WELL

GROUNDWATER ELEVATIONS
BETHPAGE STATE PARK
WATER LEVEL MEASUREMENTS

June 29, 2010 MF & "A" Team

WELL	TIME	MEASURING POINT ELEV	DEPTH TO WATER	WATER TABLE	ORW FLOW RATE	COMMENTS
BP-1A	13:50	109.77	43.14	66.63		
BP-1B	13:48	109.53	42.97	66.56		
BP-1C	13:47	109.37	42.68	66.69		
BP-2A	11:40	151.00	82.89	68.11		
BP-2B*	11:42	151.13	84.24	66.89		
BP-3A	14:59	124.54	59.11	65.43		
BP-3B	14:58	123.57	62.11	61.46		
BP-3C	14:57	123.68	62.29	61.39		
BP-4A	11:53	92.69	29.90	62.79		
BP-4B*	11:52	91.92	30.02	61.90		
BP-4C*	11:50	91.68	29.84	61.84		
BP-4I	11:49	92.10	29.45	62.65		
BP-5A	11:30	96.34	32.81	63.53		***NEEDS LOCK***
BP-5B	11:32	96.48	33.32	63.16		
BP-5C	11:29	96.28	33.50	62.78		***NEEDS LOCK***
BP-6A	10:40	102.55	36.15	66.40		
BP-6B	10:42	102.58	37.07	65.51		
BP-6C	10:44	102.35	37.05	65.30		
BP-7A	10:55	147.54	79.20	68.34		
BP-7B	10:53	148.76	80.92	67.84		
BP-7C	10:52	148.40	81.08	67.32		
BP-8A	11:05	89.88	24.12	65.76		
BP-8B	11:10	89.82	24.03	65.79		
BP-8C	11:08	89.53	24.87	64.66		
BP-9B*	13:30	85.09	25.61	59.48		
BP-9C*	13:32	84.88	25.91	58.97		***NEEDS LOCK***
BP-9I	13:34	85.18	24.58	60.60		
BP-10B*	13:20	81.21	22.03	59.18		
BP-10C*	13:22	80.94	24.66	56.28		
BP-11	NR	81.76	NR	81.76		***HORNETS' NEST!***
BP-12A*	13:35	78.33	18.00	60.33		
BP-12B*	13:37	78.24	18.34	59.90		
BP-12C*	13:38	78.56	19.65	58.91		
BP-13B*	11:20	133.37	74.70	58.67		
BP-13C*	11:22	133.67	76.19	57.48		
BP-14B*	13:05	81.50	20.69	60.81		
BP-14C*	13:06	81.48	21.58	59.90		
BP-15B	13:13	98.38	36.77	61.61		
BP-15C	13:14	98.45	36.78	61.67		
OBV-1B	14:20	157.26	84.22	73.04		
OBV-1C	14:22	156.69	84.35	72.34		
W-7A	10:15	104.44	35.93	68.51		
W-7B	10:17	104.55	36.99	67.56		
W-7C	10:19	104.68	37.32	67.36		
W-7D	10:20	104.58	37.73	66.85		
RB-1	14:05	135.02	62.53	72.49		
UM-1	NR	115.64	NR	115.64		***BOLTS STRIPPED***
U-6A	14:00	153.94	80.76	73.18		
ORW-1	NA	141.28	77.92	63.36	Off	
ORW-2	NA	91.88	28.65	63.23	Off	
ORW-3	NA	85.09	40.85	44.24	200 gpm	
ORW-4	NA	82.68	21.20	61.48	Off	
ORW-5A	NA	100.38	39.95	60.43	Off	
ORW-6	NA	77.02	41.80	35.22	160 gpm	
ORW-7	NA	69.84	72.85	-3.01	120 gpm	

* = DEDICATOR PUMP IN WELL

GROUNDWATER ELEVATIONS
BETHPAGE STATE PARK
WATER LEVEL MEASUREMENTS

August 24, 2010 MF

WELL	TIME	MEASURING POINT ELEV	DEPTH TO WATER	WATER TABLE	ORW FLOW RATE	COMMENTS
BP-1A	13:50	109.77	44.85	64.92		
BP-1B	13:48	109.53	44.68	64.85		
BP-1C	13:47	109.37	44.37	65.00		
BP-2A	11:40	151.00	84.40	66.60		
BP-2B*	11:42	151.13	85.86	65.27		
BP-3A	14:59	124.54	NR	NR		*No 4-wheel drve*
BP-3B	14:58	123.57	NR	NR		*No 4-wheel drve*
BP-3C	14:57	123.68	NR	NR		*No 4-wheel drve*
BP-4A	11:53	92.69	31.82	60.87		
BP-4B*	11:52	91.92	32.08	59.84		
BP-4C*	11:50	91.68	31.36	60.32		
BP-4I	11:49	92.10	31.37	60.73		
BP-5A	11:30	96.34	34.70	61.64		*NEEDS LOCK*
BP-5B	11:32	96.48	35.16	61.32		
BP-5C	11:29	96.28	35.21	61.07		*NEEDS LOCK*
BP-6A	10:40	102.55	38.05	64.50		
BP-6B	10:42	102.58	38.78	63.80		
BP-6C	10:44	102.35	38.44	63.91		
BP-7A	10:55	147.54	80.69	66.85		
BP-7B	10:53	148.76	82.04	66.72		
BP-7C	10:52	148.40	81.81	66.59		
BP-8A	11:05	89.88	25.98	63.90		
BP-8B	11:10	89.82	25.77	64.05		
BP-8C	11:08	89.53	26.42	63.11		
BP-9B*	13:30	85.09	27.47	57.62		
BP-9C*	13:32	84.88	27.08	57.80		*NEEDS LOCK*
BP-9I	13:34	85.18	26.48	58.70		
BP-10B*	13:20	81.21	23.94	57.27		
BP-10C*	13:22	80.94	25.45	55.49		
BP-11	NR	81.76	NR	NR		*HORNETS' NEST!*
BP-12A*	13:35	78.33	19.95	58.38		
BP-12B*	13:37	78.24	20.19	58.05		
BP-12C*	13:38	78.56	21.00	57.56		
BP-13B*	11:20	133.37	76.81	56.56		
BP-13C*	11:22	133.67	78.03	55.64		
BP-14B*	13:05	81.50	22.52	58.98		
BP-14C*	13:06	81.48	23.02	58.46		
BP-15B	13:13	98.38	38.55	59.83		
BP-15C	13:14	98.45	38.52	59.93		
OBV-1B	14:20	157.26	85.18	72.08		
OBV-1C	14:22	156.69	85.79	70.90		
W-7A	10:15	104.44	37.47	66.97		
W-7B	10:17	104.55	38.56	65.99		
W-7C	10:19	104.68	38.88	65.80		
W-7D	10:20	104.58	39.26	65.32		
RB-1	14:05	135.02	NR	NR		
UM-1	NR	115.64	NR	NR		*BOLTS STRIPPED*
U-6A	14:00	153.94	NR	NR		
ORW-1	NA	*147.68*	85.16	62.52	Off	*MP @ GRADE*
ORW-2	NA	*97.88*	36.53	61.35	Off	*MP @ GRADE*
ORW-3	NA	*91.39*	54.86	36.53	NR (on)	*MP @ GRADE*
ORW-4	NA	*88.88*	29.35	59.53	Off	*MP @ GRADE*
ORW-5A	NA	*100.38*	41.77	58.61	Off	
ORW-6	NA	*83.42*	50.54	32.88	145 gpm	*MP @ GRADE*
ORW-7	NA	*76.14*	94.97	-18.83	110 gpm	*MP @ GRADE*

* = DEDICATOR PUMP IN WELL

GROUNDWATER ELEVATIONS
BETHPAGE STATE PARK
WATER LEVEL MEASUREMENTS

November 3, 2010 MF

WELL	TIME	MEASURING POINT ELEV	DEPTH TO WATER	WATER TABLE	ORW FLOW RATE	COMMENTS
BP-1A	1428	109.77	46.00	63.77		
BP-1B	1430	109.53	45.83	63.70		
BP-1C	1433	109.37	45.52	63.85		
BP-2A	1358	151.00	85.82	65.18		
BP-2B*	1401	151.13	87.17	63.96		
BP-3A	1055	124.54	62.03*	124.54		***No pump MP TOC***
BP-3B	1057	123.57	64.90	58.67		
BP-3C	1059	123.68	65.05*	123.68		***No pump MP TOC***
BP-4A	1347	92.69	33.17	59.52		
BP-4B*	1349	91.92	33.38	58.54		
BP-4C*	1351	91.68	32.45	59.23		
BP-4I	1355	92.10	32.70	59.40		
BP-5A	1419	96.34	35.81	60.53		
BP-5B	1422	96.48	36.23	60.25		
BP-5C	1425	96.28	36.21	60.07		
BP-6A	1134	102.55	38.18	64.37		
BP-6B	1137	102.58	39.82	62.76		
BP-6C	1140	102.35	38.41	63.94		
BP-7A	1144	147.54	81.63	65.91		
BP-7B	1146	148.76	83.01	65.75		
BP-7C	1150	148.40	82.75	65.65		
BP-8A	1120	89.88	27.13	62.75		
BP-8B	1122	89.82	26.89	62.93		
BP-8C	1125	89.53	27.48	62.05		
BP-9B*	1224	85.09	29.02	56.07		
BP-9C*	1226	84.88	28.28*	84.88		***No pump MP TOC***
BP-9I	1230	85.18	28.00*	85.18		
BP-10B*	1259	81.21	25.42	55.79		
BP-10C*	1302	80.94	26.93	54.01		
BP-11	NR	81.76	NR	NR		***HORNETS' NEST!***
BP-12A*	1213	78.33	21.31	57.02		
BP-12B*	1215	78.24	22.48	55.76		
BP-12C*	1220	78.56	22.08	56.48		
BP-13B*	1200	133.37	77.30	56.07		
BP-13C*	1203	133.67	78.32	55.35		
BP-14B*	1336	81.50	24.00	57.50		
BP-14C*	1340	81.48	24.10	57.38		
BP-15B	1318	98.38	39.90	58.48		
BP-15C	1321	98.45	39.86	58.59		
OBV-1B	0948	157.26	85.81	71.45		
OBV-1C	0950	156.69	85.80	70.89		
W-7A	1451	104.44	38.77	65.67		
W-7B	1449	104.55	39.75	64.80		
W-7C	1453	104.68	40.03	64.65		***(west)***
W-7D	1455	104.58	40.40	64.18		***(east)***
RB-1	1000	135.02	64.50	70.52		
UM-1	1207	115.64	50.52	65.12		***Curb Box Damaged***
U-6A	0938	153.94	82.55	71.39		
ORW-1	NR	*147.68*	NR	NR	Off	***MP @ GRADE***
ORW-2	NR	*97.88*	NR	NR	Off	***MP @ GRADE***
ORW-3	1530	*91.39*	55.57	35.82	178 GPM	***MP @ GRADE***
ORW-4	1520	*88.88*	70.54	18.34	155 GPM	***MP @ GRADE***
ORW-5A	1410	*100.38*	43.02	57.36	Off	
ORW-6	1514	*83.42*	52.33	31.09	140 GPM	***MP @ GRADE***
ORW-7	1507	*76.14*	94.82	-18.68	110 gpm	***MP @ GRADE***

* = NO DEDICATOR PUMP IN WELL

FIREMAN'S TRAINING CENTER
OFF-SITE MONITORING WELL CONSTRUCTION DETAILS

Monitoring Well	MP Elevation (Feet Above Mean Sea Level)	Date Installed	Method Of Drilling	Screen Interval (Feet Below Ground Surface)		Casing	Screen
				Top Of Screen	Bottom Of Screen		
W-39	114.50	05/08/90	Auger	41	60	Black Steel	Stainless Steel
BP-1A	109.77	01/07/87	Mud Rotary	55	75	PVC	PVC
BP-1B	109.53	01/15/87	Mud Rotary	90	110	PVC	PVC
BP-1C	109.37	03/13/87	Mud Rotary	132	162	PVC	PVC
BP-2A	151.00	01/20/87	Mud Rotary	91	111	PVC	PVC
BP-2B	151.13	01/22/87	Mud Rotary	140	160	PVC	PVC
BP-3A	124.54	08/15/90	Auger	54	74	Black Steel	Stainless Steel
BP-3B	123.57	07/19/90	Modified Mud/Water Rotary	215	235	Stainless Steel	Stainless Steel
BP-3C	123.68	07/26/90	Modified Mud/Water Rotary	280	300	Stainless Steel	Stainless Steel
BP-4A	92.69	08/20/90	Auger	19	39	Black Steel	Stainless Steel
BP-4B	91.72	08/29/90	Modified Mud/Water Rotary	170	190	Stainless Steel	Stainless Steel
BP-4C	91.57	08/30/90	Modified Mud/Water Rotary	280	300	Stainless Steel	Stainless Steel
BP-4I	92.10	04/12/94	Modified Mud/Water Rotary	82	102	PVC	Stainless Steel
BP-5A	96.34	09/26/90	Auger	29	49	Black Steel	Stainless Steel
BP-5B	96.58	09/24/90	Modified Mud/Water Rotary	180	200	Stainless Steel	Stainless Steel
BP-5C	96.28	09/25/90	Modified Mud/Water Rotary	250	270	Stainless Steel	Stainless Steel
BP-6A	102.55	09/28/90	Auger	24	44	Black Steel	Stainless Steel
BP-6B	102.58	08/16/90	Modified Mud/Water Rotary	180	200	Stainless Steel	Stainless Steel
BP-6C	102.35	08/20/90	Modified Mud/Water Rotary	256	276	Stainless Steel	Stainless Steel
BP-7A	148.35	10/03/90	Auger	75	95	Black Steel	Stainless Steel
BP-7B	147.90	09/12/90	Modified Mud/Water Rotary	228	248	Stainless Steel	Stainless Steel
BP-7C	148.40	09/13/90	Modified Mud/Water Rotary	310	330	Stainless Steel	Stainless Steel
BP-8A	92.29	08/16/90	Auger	20	40	Black Steel	Stainless Steel
BP-8B	91.43	08/06/90	Modified Mud/Water Rotary	130	150	Stainless Steel	Stainless Steel
BP-8C	91.48	08/08/90	Modified Mud/Water Rotary	260	280	Stainless Steel	Stainless Steel
BP-9I	85.18	04/15/94	Auger	84	104	PVC	Stainless Steel
BP-9B	85.09	12/19/91	Modified Mud/Water Rotary	184	204	Black Steel	Stainless Steel
BP-9C	84.88	12/22/91	Modified Mud/Water Rotary	322	342	Black Steel	Stainless Steel
BP-10B	81.21	02/16/92	Modified Mud/Water Rotary	210	230	PVC	Stainless Steel
BP-10C	80.94	02/10/92	Modified Mud/Water Rotary	360	380	PVC	Stainless Steel
BP-11	81.76	04/22/94	Auger	78	98	Black Steel	Stainless Steel
BP-12A	78.33	04/19/94	Auger	69	89	PVC	Stainless Steel
BP-12B	78.24	06/10/96	Mud/Water Rotary	181	201	Black Steel	Stainless Steel
BP-12C	78.56	12/16/99	Mud/Water Rotary	370	390	PVC	Stainless Steel
BP-13B	133.37	11/13/00	Mud/Water Rotary	280	310	PVC	Stainless Steel
BP-13C	133.67	01/07/00	Mud/Water Rotary	455	475	PVC	Stainless Steel
BP-14B	81.50	12/18/01	Mud/Water Rotary	200	240	PVC	Stainless Steel
BP-14C	81.48	12/13/01	Mud/Water Rotary	310	350	PVC	Stainless Steel
BP-15B	98.38	10/12/05	Mud Rotary	210	230	PVC	Stainless Steel
BP-15C	98.45	10/06/05	Mud Rotary	255	295	PVC	Stainless Steel
OBV-1B	157.26	09/01/05	Mud Rotary	168	188	PVC	Stainless Steel
OBV-1C	156.69	08/23/05	Mud Rotary	255	275	PVC	Stainless Steel

FIREMAN'S TRAINING CENTER
ON-SITE MONITORING WELL CONSTRUCTION DETAILS (Pg.1)

Monitoring Well	MP Elevation (Feet Above Mean Sea Level)	Date Installed	Method Of Drilling	Screen Interval (Feet Below Ground Surface)		Casing	Screen
				Top Of Screen	Bottom Of Screen		
FTC-W-1	105.62	12/12/85	Auger	39	49	Black Steel	Stainless Steel
FTC-W-2	104.27	12/14/85	Auger	39	49	Black Steel	Stainless Steel
FTC-W-3	103.02	12/30/85	Auger	37	47	Black Steel	Stainless Steel
FTC-W-4A	109.21	12/18/85	Auger	42	52	Black Steel	Stainless Steel
FTC-W-4B	109.65	06/04/86	Mud Rotary	57	77	PVC	PVC
FTC-W-5D	106.74	05/20/86	Auger	36	46	PVC	PVC
FTC-W-6	112.06	05/19/86	Auger	41	51	PVC	PVC
FTC-W-7A	104.44	05/21/86	Auger	34	44	PVC	PVC
FTC-W-7B	104.52	06/17/86	Mud Rotary	79	99	PVC	PVC
FTC-W-8A	106.03	05/22/86	Auger	37	47	PVC	PVC
FTC-W-8B	107.36	06/15/86	Mud Rotary	77	97	PVC	PVC
FTC-W-9A	115.31	05/23/86	Auger	48	58	PVC	PVC
FTC-W-9B	115.23	06/10/86	Mud Rotary	97	117	PVC	PVC
FTC-W-10D	103.57	12/05/86	Auger	35	55	PVC	PVC
FTC-W-11	103.69	11/05/86	Mud Rotary	36	56	PVC	PVC
FTC-W-12	102.38	10/29/86	Mud Rotary	34	54	PVC	PVC
FTC-W-13	102.80	10/31/86	Mud Rotary	34	54	PVC	PVC
FTC-W-14A	103.51	11/03/86	Auger	35	55	PVC	PVC
FTC-W-14B	103.33	12/23/86	Mud Rotary	81	101	PVC	PVC
FTC-W-15	105.25	12/06/86	Auger	34	54	PVC	PVC
FTC-W-16	104.59	12/19/86	Auger	46	66	PVC	PVC
FTC-W-17	105.74	12/30/86	Auger	37	57	PVC	PVC
FTC-W-18	105.85	01/28/87	Auger	35	55	PVC	PVC
FTC-W-19	105.51	01/31/87	Auger	34	54	PVC	PVC
FTC-W-20A	113.17	06/22/87	Mud Rotary	56	76	PVC	PVC
FTC-W-20B	113.50	06/08/87	Mud Rotary	93	113	PVC	PVC
FTC-W-20C	112.91	11/06/87	Mud Rotary	155	175	Black Steel	Stainless Steel
FTC-W-20D	113.15	10/29/87	Mud Rotary	219	239	Black Steel	Stainless Steel
FTC-W-21A	100.95	06/03/87	Mud Rotary	45	66	PVC	PVC
FTC-W-21B	100.10	05/29/87	Mud Rotary	91	111	PVC	PVC
FTC-W-21C	100.73	11/20/87	Mud Rotary	139	159	Black Steel	Stainless Steel
FTC-W-21D	100.44	11/13/87	Mud Rotary	219	239	Black Steel	Stainless Steel
FTC-W-22	103.90	10/28/87	Auger	33	55	Black Steel	Stainless Steel
FTC-W-23	102.98	10/29/87	Auger	36	56	Black Steel	Stainless Steel
FTC-W-24	105.92	06/02/88	Auger	38	58	Black Steel	Stainless Steel
FTC-W-25	105.94	06/02/88	Auger	38	58	Black Steel	Stainless Steel
FTC-W-26	105.29	06/06/88	Auger	38	58	Black Steel	Stainless Steel

FIREMAN'S TRAINING CENTER
ON-SITE MONITORING WELL CONSTRUCTION DETAILS (Pg.2)

Monitoring Well	MP Elevation (Feet Above Mean Sea Level)	Date Installed	Method Of Drilling	Screen Interval (Feet Below Ground Surface)		Casing	Screen
				Top Of Screen	Bottom Of Screen		
FTC-W-27	105.61	06/07/88	Auger	38	58	Black Steel	Stainless Steel
FTC-W-28	104.05	06/07/88	Auger	37	57	Black Steel	Stainless Steel
FTC-W-29	101.77	06/08/88	Auger	37	57	Black Steel	Stainless Steel
FTC-W-30	103.60	06/08/88	Auger	37	57	Black Steel	Stainless Steel
FTC-W-31	103.07	06/08/88	Auger	37	57	Black Steel	Stainless Steel
FTC-W-32	103.07	06/09/88	Auger	36	56	Black Steel	Stainless Steel
FTC-W-33	114.00	06/09/88	Auger	46	66	Black Steel	Stainless Steel
FTC-W-34	104.10	04/18/90	Auger	32	52	Black Steel	Stainless Steel
FTC-W-35	104.20	04/19/90	Auger	31	51	Black Steel	Stainless Steel
FTC-W-36	103.49	04/13/90	Auger	30	50	Black Steel	Stainless Steel
FTC-W-37	102.88	04/06/90	Auger	29	49	Black Steel	Stainless Steel
FTC-W-38	103.80	04/17/90	Auger	28	48	Black Steel	Stainless Steel
FTC-W-40	106.43	04/12/90	Auger	33	53	Black Steel	Stainless Steel
FTC-W-7C	104.58	05/03/90	Mud / Water Rotary	150	170	Stainless Steel	Stainless Steel
FTC-W-7D	104.68	04/27/90	Mud / Water Rotary	220	240	Stainless Steel	Stainless Steel
BMW-1	99.81	09/21/81	Auger	35	40	PVC	PVC
BMW-2	99.53	09/22/81	Auger	35	40	PVC	PVC
GW-1D	101.77	05/26/88	Auger	20	45	PVC	PVC
GW-2D	101.83	05/26/88	Auger	23	45	PVC	PVC
GW-4D	102.21	05/26/88	Auger	15	47	PVC	PVC
GW-5D	102.84	05/26/88	Auger	14	46	PVC	PVC
GW-6D	103.65	05/27/88	Auger	18	48	PVC	PVC
GW-7D	104.42	05/27/88	Auger	30	50	PVC	PVC
GW-8D	105.65	05/31/88	Auger	30	50	PVC	PVC
GW-9D	105.39	05/31/88	Auger	29	49	PVC	PVC
GW-10D	111.46	06/01/88	Auger	35	55	PVC	PVC
GW-11D	112.75	06/01/88	Auger	35	55	PVC	PVC
GW-12D	116.59	06/06/88	Auger	30	60	PVC	PVC

HYDROGEOLOGIC INTERVALS
ZONE A

Well	Screened Intervals (Elevation in Feet)
W-20A	+57 to +37
W-21A	+55 to +35
BP-1A	+55 to +35
BP-2A	+60 to +40
BP-3A	+71 to +51
BP-4A	+74 to +54
BP-5A	+67 to +47
BP-6A	+79 to +59
BP-7A	+73 to +53
BP-8A	+72 to +52
TU-3	+35 to +30
OSEB 1 (5A)	+52 to +47
OSEB 2 (6A)	+60 to +55
OSEB 3 (7A)	+73 to +58
OSEB 4 (8A)	+50 to +45
OSEB 5 (9A)	+75 to +60
OSEB 6 (10A)	+61 to +56
BP-11	+4 to -16
BP-12A	+9 to -11

HYDROGEOLOGIC INTERVALS
ZONE B

Well	Screened Interval (Elevation in Feet)
BP-3B	-91 to -111
BP-4B	-78 to -98
BP-5B	-84 to -104
BP-6B	-77 to -97
BP-7B	-80 to -100
BP-8B	-39 to -59
BP-9B	-99 to -119
BP-10B	-129 to -149
W-7B	+25 to +5
W-7C	-45 to -65
W-20B	+20 to 0
W-20C	-42 to -62
W-21B	+9 to -11
W-21C	-38 to -58
BP-1B	+20 to 0
BP-1C	-23 to -53
BP-2B	+11 to -9
Melville Rd. Site #7 (11A)	-55 to -60
OSEB 2 (6E)	-85 to -90
OSEB 3 (7B)	-82 to -87
OSEB 4 (8C)	-110 to -115
OSEB 5 (9C)	-67 to -72
OSEB 6 (10C)	-113 to -118
UM-1	-35 to -4
OBS-2	-64 to -84
N00189	-5 to -38
N00167	-4 to -34
BP-12B	-103 to -123
BP-13B	-147 to -311
BP-14B	-119 to -159
EW-5	-31 to -41
EW-6C	-30 to -39

HYDROGEOLOGIC INTERVALS
ZONE C

Well	Screened Interval (Elevation in Feet)
BP-3C	-156 to -176
BP-4C	-188 to -208
BP-5C	-154 to -174
BP-6C	-154 to -174
BP-7C	-162 to -182
BP-8C	-169 to -189
BP-9C	-239 to -259
BP-10C	-276 to -296
Melville Rd. Site #7 (11B)	-150 to -155
W-20D	-106 to -126
W-21D	-119 to -139
W-7D	-116 to -136
OSEB 2 (6F)	-185 to -190
OSEB 5 (9D)	-158 to -163
OSEB 6 (10D)	-148 to -153
BP-12C	-291 to -311
BP-13C	-321 to -341
BP-14C	-229 to -269

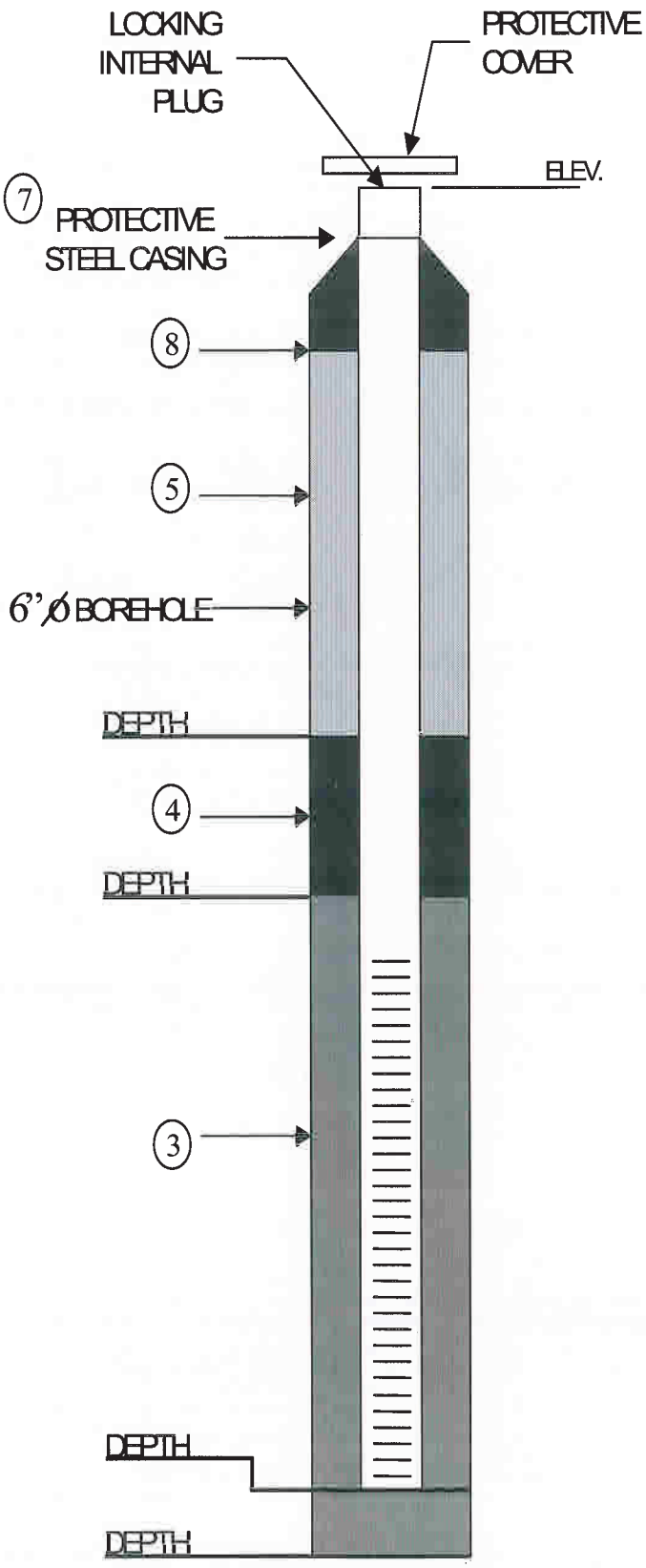
APPENDIX D

MONITORING WELL MW-07B-R CONSTRUCTION DATA

Town of Oyster Bay – Old Bethpage Landfill
MW-07B-R Monitoring Well Reinstallation – June 2010

Work Location for MW-07B-R Well Reinstallation (June 2010)

Drillers Installing MW-07B-R (June 2010)



Gannett Fleming

MONITORING WELL CONSTRUCTION INFORMATION

JOB No. : 53085.004 CLIENT : Town of Oyster Bay

LOCATION : Old Bethpage Landfill (OBL) - Monitoring Well located within Bethpage State Park

DATE : 06/25/10 WELL No.: MW-07B-R

HYDROGEOLOGIST : Michael Nahmias

DRILLING CONTRACTOR : Aquifer Drilling & Testing (ADT)

1). SCREEN TYPE : PVC

SLOTTED LENGTH : 5 feet

SLOT SIZE : 0.020 inch

2). SOLID PIPE TYPE : PVC

SOLID PIPE LENGTH : 235 feet

PIPE & SCREEN DIA. : 4 inch Schedule 40

JOINT TYPE-SLIP / GLUED : ☐ THREADED ☑

3). TYPE OF BACKFILL AROUND SCREEN : #2 Morie Sand

4). TYPE OF SEAL (IF INSTALLED) : Bentonite

5). TYPE OF BACKFILL: Grout

HOW INSTALLED: Tremie Pipe

6). TYPE OF SURFACE SEAL (IF INSTALLED): Cement

7). PROTECTIVE CASING: YES ☑ NO ☐

LOCKING CAP: YES ☑ NO ☐

8). CONCRETE SEAL: YES ☑ NO ☐

9). DRILLING METHOD: Hollow Stem Auger

10). ADDITIVES USED (IF ANY):

WATER LEVELCHECKS*

DATE	TIME	DEPTH TO WATER	REMARKS
06/25/10	13:15	85.01 ft	
06/29/10	13:35	84.70 ft	

* FROM TOP OF WELL

Well Development Log
Town of Oyster Bay - Old Bethpage Landfill
Old Bethpage, New York

Well ID	Date	Depth to Product (feet)	Depth to Water (feet)	Depth to Bottom (feet)	Screened Interval (feet)	One Well Volume (gallons)	Ten Well Volumes (gallons)	Amount Purged (gallons)	Turbidity at End of purge (ntu)	Comments
MW-7B-R	6/25/2010	NA	85.01	240	5	101	1,010	~2,500	10.82	Approx. 1,100 gallons of water was pumped into the well to disturb fines

APPENDIX E

MONITORING WELL SURVEY DATA

LOCATION OF MONITORING WELLS - BETHPAGE - NASSAU COUNTY, NY

COORDINATES ARE NAD83 LONG ISLAND ZONE (ft)
ELEVATIONS ARE NAVD88 (ft)

POINT	NORTHING	EASTING	ELEV.	DESC.
1001	214315.349	1136011.202	116.02	TW2
1004	214942.451	1135735.390	119.56	TW1
1006	215918.209	1135984.130	155.95	MW-30A
1007	215800.105	1135825.985	153.15	MW-30B-R
1009	215670.695	1135645.139	149.67	M-29B
1011	209534.041	1139467.968	78.51	MW-11B
1012	209546.579	1139492.824	78.71	MW-11A
1015	209122.003	1139734.581	79.15	N9980
1017	211130.697	1136520.482	95.24	BP5A
1018	211092.060	1136534.306	95.39	BP5B
1019	211122.453	1136538.066	95.16	BP5C
1021	210262.209	1138506.567	85.07	BP9A
1022	210254.418	1138515.508	83.49	BP9C
1023	210269.094	1138517.006	84.03	BP9B
1025	212280.069	1137878.540	108.59	OBS-1
1028	215351.850	1138385.289	128.59	EW-1A
1029	215361.206	1138389.850	129.11	EW-1B
1030	215354.873	1138378.667	129.02	EW-1C
1033	215433.473	1138987.556	155.94	EW-2A
1034	215446.335	1138992.685	156.33	EW-2B
1035	215443.714	1138985.344	156.27	EW-2C
1037	212824.127	1139606.681	147.09	MW-7A
1038	212822.992	1139582.905	146.42	MW-7B
1041	212951.064	1138805.193	151.98	MW-9A
1042	212959.636	1138809.189	152.07	MW-9B
1043	212940.725	1138805.597	152.23	MW-9C
1044	212941.126	1138733.976	151.68	MW-9D
1047	213226.790	1137651.491	135.83	MW-5A
1048	213206.131	1137650.654	137.05	MW-5B
1050	215144.202	1138606.195	133.55	GW-8A
1051	215149.954	1138593.601	132.85	GW-8B
1052	215201.773	1138632.095	134.34	GW-8C
1054	214336.323	1138451.626	158.66	MW-6F
1055	214336.894	1138469.118	158.59	MW-6C
1056	214340.234	1138488.763	158.90	MW-6D
1057	214380.073	1138517.125	159.69	MW-6E
1058	214356.653	1138532.892	159.02	MW-6B
1059	214325.081	1138562.406	158.74	MW-6A
1061	214816.598	1139737.405	160.01	MW-10B
1062	214837.516	1139671.046	159.00	MW-10C

LOCATION OF MONITORING WELLS - BETHPAGE - NASSAU COUNTY, NY

COORDINATES ARE NAD83 LONG ISLAND ZONE (ft)
ELEVATIONS ARE NAVD88 (ft)

POINT	NORTHING	EASTING	ELEV.	DESC.
1063	214823.809	1139672.889	159.81	MW-10D
1064	214827.014	1139746.759	159.82	MW-10A
1066	214290.171	1140101.154	157.71	MW-3A
1067	214305.484	1140101.794	157.84	MW-3B
1068	214303.872	1140107.729	157.72	MW-3C
2000	214309.439	1137087.055	109.92	LF1
2001	216419.454	1137900.720	124.95	LF3
2002	215098.466	1137959.020	117.26	LF2
2004	214352.075	1136471.078	132.82	TW3
2005	216034.369	1136194.253	157.83	M-29A-R
2006	209917.086	1137838.761	77.28	BP12A
2007	209926.733	1137826.990	77.27	BP12B
2008	209954.879	1137822.273	78.08	BP12C

APPENDIX F

"Town of Oyster Bay, Old Bethpage Solid Waste Disposal Complex
Ambient Air Quality Survey and Soil Gas Quality Survey
2010 Fourth Quarter Report"

RTP Environmental Associates, Inc.
March 2011

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX
AMBIENT AIR QUALITY SURVEY
AND
SOIL GAS QUALITY SURVEY

2010 Fourth Quarter 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 2011

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX
AMBIENT AIR QUALITY SURVEY AND SOIL GAS QUALITY SURVEY

2010 Fourth Quarter Report

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B - Chronology - Ambient Air, Soil Gas and Well Pressure Sampling Events
C - Analytical Results
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TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX
AMBIENT AIR QUALITY SURVEY AND SOIL GAS QUALITY SURVEY

2010 Fourth Quarter Report

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TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX
AMBIENT AIR QUALITY SURVEY AND SOIL GAS QUALITY SURVEY

2010 Fourth Quarter Report

1.0 INTRODUCTION

RTP Environmental Associates, Inc. (RTP) was contracted by the Town of Oyster Bay (Town) to perform the sampling and analysis of ambient air, soil gas and soil gas pressure in areas at and surrounding the Old Bethpage Landfill at the Old Bethpage Solid Waste Disposal Complex (OBSWDC). The general scope of the program was defined in the Remedial Action Plan (RAP) Attachment 2 of the Final Consent Decree. Since the Consent Decree was not explicit as to the specific methodology and testing protocols to be followed, RTP, in conjunction with the Town, Lockwood, Kessler & Bartlett (LKB), the New York State Department of Environmental Conservation (NYSDEC) and analytical laboratories, developed a complete protocol and analysis strategy for meeting the general requirements stipulated by the Consent Decree.

As stipulated in the Consent Decree, the ambient air quality, soil gas quality and soil gas pressure were to be monitored at several positions around the landfill. The ambient air and soil gas samples were to be analyzed for volatile organic compounds (VOCs) according to the protocol and the results were to be tabulated. Four sampling events were conducted during each of the previous years of the program and four (4) monitoring events were conducted in 2010.

This report contains the results obtained during the fourth quarter sampling event of the 2010 monitoring program. The sampling occurred on November 29 and 30, 2010 when the forecasted meteorology was expected to be within protocol requirements. Section 2.0 of this report contains the sampling protocol and investigation methodology for air and soil gas. Section 3.0 includes sample collection, sample handling and analytical procedures applied for this program. Section 4.0 provides a discussion of results. Section 5.0 contains the soil gas pressure sampling procedures and test results. Section 6.0 contains a summary and conclusions for this sampling effort. Appendices containing supporting data and analyses are attached.

2.0 METHODOLOGY AND PROTOCOLS

2.1 Program Definition

In conformance with the RAP Attachment 2 of the Consent Decree (83 CIV 5357), the Town of Oyster Bay initiated an investigation of the ambient air quality and soil gas quality in the vicinity of the Old Bethpage Landfill. This report provides data and analyses for four of the components listed in the RAP: (1) ambient air sampling; (2) 30-inch deep subsurface gas sampling; (3) subsurface gas sampling at various depths; and (4) soil gas pressure readings. The ambient air, soil gas and well pressure sampling procedures used during the field event, in general, follow those developed during the second year of sampling.

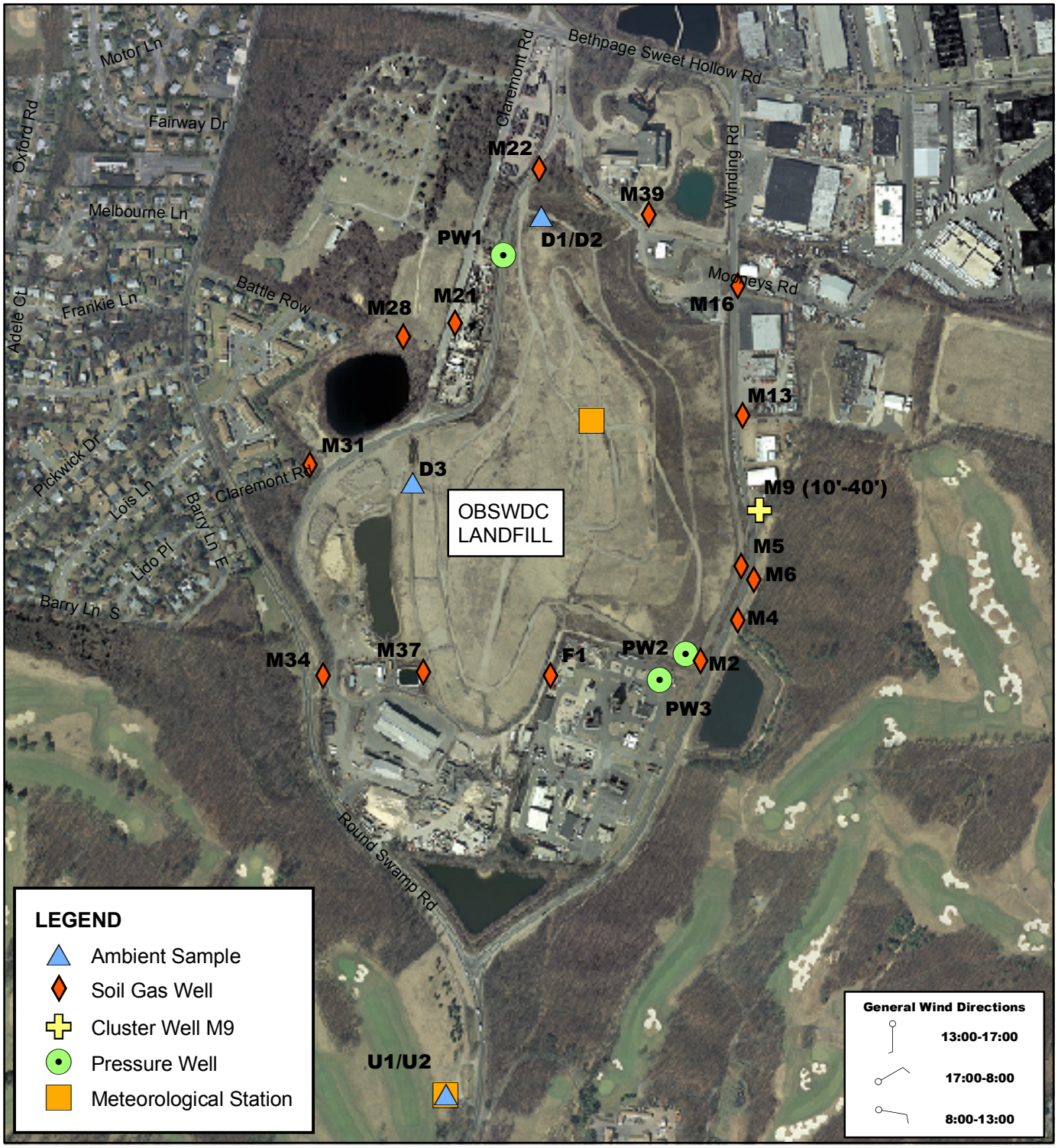
The primary objective of the sampling program is to examine the ambient air concentrations of trace VOCs in the vicinity of the Old Bethpage Landfill. During the 2010 fourth quarter sampling event, five ambient air Volatile Organic Sampling Train (VOST) samples were collected over a 24-hour period at three locations; two collocated samplers located at one upwind location, two collocated samplers located at one downwind location and another sampler located at an additional location downwind of the Old Bethpage Landfill. Short-term (approximately ten minute) subsurface soil gas samples were collected at 14 of the 15 locations specified in the Consent Decree. A sample was not collected at soil gas well M21 due to a concrete wall obstruction, making the well location inaccessible. Soil gas well M21 has not been sampled since the third quarter 2003 sampling event. Soil gas pressure readings were taken at three locations. All of these sampling locations are provided in Figure 2.1.

The program also involves the collection of meteorological data from two locations, one atop the landfill and another at the upwind sampling location. This data is used to specifically define the meteorological conditions existing during ambient air and subsurface soil gas sampling events and during the soil gas pressure measurement period. Information regarding meteorological data is provided as Section 2.3 of this report.

2.2 Ambient Air and Soil Gas Sampling

2.2.1 General Scope

Three (3) of the four (4) components of the RAP relate to air quality and soil gas quality. The first RAP



NOTES:

ORTHOIMAGERY SOURCE:
NYSGIS Clearinnghouse 2007

TESTING DATES:
November 29 - 30, 2010

N

0 375 750 1,500 Feet

RTP Environmental Associates, Inc.
Westbury, New York

FIGURE 2.1

FOURTH QUARTER 2010 AMBIENT AIR AND SOIL GAS MONITORING LOCATIONS

TOWN OF OYSTER BAY LANDFILL
BETHPAGE, NEW YORK

component states ambient air samples are to be collected over a 24-hour period at three (3) locations around the landfill. Additionally, the RAP states that samples should be collected quarterly during the initial year of the program and be analyzed for VOCs. Sampling is to continue on a quarterly basis, unless the monitoring program is modified by a change to the Consent Decree. The sample collection program has been modified as discussed in the previous quarterly reports. Changes were made to the ambient air sampling scope stated in the RAP to account for site geometry. The selected ambient air sampling locations for this quarter (U1/2, D1/2 and D3) are shown in Figure 2.1. All ambient air samplers were set to run concurrently for a 24-hour period. Samplers U1 and U2 (U1/2) were collocated upwind of the landfill and set to operate at 0.25 liters per minute (Lpm). Samplers D1 and D2 (D1/2) were collocated downwind of the landfill and also set to operate at 0.25 Lpm. Additionally, sampler D3 was located at an alternate location downwind of the landfill and was set to operate at 0.25 Lpm. The samplers were set at a volumetric sampling rate of 0.25 Lpm to minimize problems related to potential breakthrough and mass loading limits on the sorbent cartridges. This sampling rate also provides an acceptable analytical sensitivity for the target compounds relative to the ambient air guideline values.

The second RAP component requires the collection and analysis of subsurface gas samples from fourteen (14) 30-inch deep wells at individual locations surrounding the landfill on a quarterly basis. The 2010 monitoring program includes the quarterly collection of these soil gas samples. All 30-inch wells listed in the Consent Decree were sampled during this 2010 fourth quarter sampling event, except soil gas well M21. These included well locations M2, M4, M5, M6, M13, M16, M22, M28, M31, M34, M37, M39 and F1 as identified in Figure 2.1. Soil gas well M21 was inaccessible due to a concrete barrier along Claremont Road that precluded access during the time of sampling. The sampling methodology used in the previous sampling events was utilized for this effort.

The third RAP component requires subsurface gas samples to be collected from 10, 20, 30 and 40-foot depths at the M9 cluster well shown in Figure 2.1. Sampling has been required on a quarterly basis since the initial year of the program from the four depths at the cluster well and all subsequent sampling efforts. The 2010 monitoring program includes the quarterly sampling from all four depths at cluster well M9.

As in the initial year of sampling, a modified VOST method had been applied as the sampling procedure. The modified VOST approach was elected for several reasons:

- Due to the volatility of many organic compounds, standard absorbent cartridges for ambient air sampling may miss several compounds at ambient temperatures. By cooling the absorbent cartridges to less than 68°F, the modified method would likely allow the cartridges to capture compounds that

might normally go undetected.

- Using a VOST cartridge series would provide data directly compatible within the Supplemental Gas Monitoring Program being performed as part of the Consent Decree.

- A methodology for the collection of large volumes was developed to identify low VOC concentrations in ambient air.

- Large volumes of ambient air are necessary because of the analytical limitations posed by standard gas chromatograph-mass spectrographic (GC/MS) methods.

- Evacuated canister methods were reviewed in the initial year and deemed unacceptable because of low total volume capacity, potential leaks and contamination.

- The potential problems associated with whole-air sample bags and glass bulb methods were deemed unacceptable, and therefore, were avoided.

- The VOST series cartridges are applicable for both ambient air and soil gas monitoring.

The target compound list (TCL) of VOCs that can be evaluated using the modified VOST methodology are presented in Table 2.1 along with their corresponding NYSDEC ambient short-term and annual (SGC and AGC) air guideline concentrations. Decane was added as a targeted tentatively identified compound (TIC) during the 2003 monitoring program. The current NYSDEC air guideline concentrations were revised in October 2010 and are presented in this report for comparison to monitored values.

Four (4) TCL compounds continue to not have assigned AGC values, and as such, an Interim AGC value was assigned to these compounds using NYSDEC DAR-1 policy guidance. The compounds benzaldehyde, chloroethyl vinyl ether, dibromochloromethane and 2/4 ethyltoluene (total) have been assigned an Interim AGC value of 0.1 $\mu g/m^3$, which represents the DAR-1 Moderate Toxicity "de minimis" limit. The AGC/SGC guidelines were updated by the NYSDEC on October 18, 2010. The previous update occurred in September 2007. Several compounds have changed their AGC and SGC values. Most notably, the bromodichloromethane AGC value was increased from 0.02 $\mu g/m^3$ to 70.0 $\mu g/m^3$. Also, the carbon tetrachloride AGC value was increased from 0.067 $\mu g/m^3$ to 0.17 $\mu g/m^3$. As stated above, the most up-to-date AGC/SGC guidelines are provided in Table 2.1 and have been applied in this report.

TABLE 2.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

PROGRAM TARGET COMPOUND LIST
AND NYSDEC AMBIENT AIR GUIDELINE CONCENTRATIONS

FOURTH QUARTER 2010

CHEMICAL NAME	CAS NUMBER	AIRS CODE	SGC ug/m3	W (SGC)	AGC ug/m3	W (AGC)	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	30,000	H	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	---		70.0	D	M															
Bromoform	00075-25-2	4	---		0.91	E	M			H	I											
Bromomethane	00074-83-9	4	3,900	D	5.0	E	M			H	I											
2-Butanone	00078-93-3	4	13,000	D	5,000	E	M															
Carbon Disulfide	00075-15-0	6	6,200	D	700	E	M			H	I											
Carbon Tetrachloride	00056-23-5	4	1,900	D	0.17	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	---		700	A	M										R					
Dibromochloromethane	00124-48-1	4	---		0.10	d	M															
1,2-Dichlorobenzene (o)	00095-50-1	4	30,000	Z	200	H	M				I											
1,3-Dichlorobenzene (m)	00541-73-1	4	---		10	H	M															
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	U		H	I											
1,2-Dichloroethane	00107-06-2	4	---		0.038	E	M	U		H	I											
1,1-Dichloroethene	00075-35-4	4	---		70	D	M			H	I											
cis-1,2-Dichloroethene	00156-59-2	4	---		63	D	M															
trans-1,2-Dichloroethene	00156-60-5	4	----		63	D	M															
1,2-Dichloropropane	00078-87-5	4	----		4.0	E	M			H												
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	I											
2/4 Ethyltoluene (total)	611-14-3/622-96-8		----		0.10	d																
Freon 13	00075-72-9	4	9,000	A	5,000	A	L										R	R				
2-Hexanone	00591-78-6	4	4,000	Z	30	E																
Methylene Chloride	00075-09-2	6	14,000	D	2.1	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	Z	1,000	E	M			H	I											
1,1,2,2-Tetrachloroethane	00079-34-5	4	---		16	T	M			H	I											
Tetrachloroethene	00127-18-4	4	1,000	H	1.0	H	M	U		H	I											
Toluene	00108-88-3	4	37,000	D	5,000	E	L			H	I											
1,1,1-Trichloroethane	00071-55-6	6	9,000	E	5,000	E	L			H	I											
1,1,2-Trichloroethane	00079-00-5	4	---		1.40	D	M			H	I											
Trichloroethene	00079-01-6	4	14,000	Z	0.50	D	M	U		H	B											
Trichlorofluoromethane	00075-69-4	6	9,000	A	5,000	A	L								R	R						
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 2.1
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

PROGRAM TARGET COMPOUND LIST
AND NYSDEC AMBIENT AIR GUIDELINE CONCENTRATIONS

FOURTH QUARTER 2010

NOTES:

*** AGC/SGC Values updated October 2010 and still current as of March 2011.**

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.
(T) AGC based upon AGCIH TLV.
(Z) SGC is based on AGCIH STEL.
(d) No AGC is available, and therefore, the DAR-1 Moderate Toxicity "de minimis" limit was assigned.
(----) There is no SGC for this compound.

-----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) AGCIH Human Carcinogen.
(B) AGCIH Suspected Human Carcinogen.
(C) AGCIH Ceiling Limit.
(G) AGCIH Simple Asphyxiant.
(I) Refer to AGCIH Handbook.
(K) Multiple TLVs assigned in AGCIH 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.

\\Rtpdc01\public\Projects\Projects\Town of Oyster Bay\OBL Monitoring\2010\OBL10-4\Obl10-4_POST

2.2.2 Modified VOST Sampler

The VOST is one of three EPA methods identified to collect VOCs from point sources. A schematic diagram of the principal components of the standard VOST is shown in Figure 2.2. The VOST consists of a quartz or glass lined probe with a glass wool particulate plug, an isolation valve, an ice water cooled gas coiled condenser with a thermocouple placed at the outlet to monitor gas stream temperature, a pre-conditioned primary sorbent cartridge containing Tenax, an empty impinger for potential condensate collection, a fourth ice water cooled glass straight condenser, a pre-conditioned secondary sorbent cartridge containing Tenax and Anasorb® 747, a synthetic based carbon (3:1 by volume; approximately 1 gram of each), a silica gel drying tube, a calibrated rotameter, a sampling pump, a dry gas meter and a water circulation pump. Petroleum-based charcoal was utilized in the secondary sorbent cartridge in previous sampling events; however, for the past few years, including this quarterly event, Anasorb® 747, a synthetic-based carbon, was used rather than the petroleum-based charcoal. This change in sorbent material was based on EPA recommendations after conducting a study testing various specifications of VOST test method charcoal.

The standard VOST is not designed for field portable ambient air monitoring. It is designed to extract and concentrate volatile organic compounds with boiling points less than or equal to one-hundred degrees Centigrade (100°C) from stack gas effluents. The major difficulties with using a standard VOST in the field for ambient air quality work are the power requirements, setup and assembly problems and the potential breakage of glassware. As such, RTP modified the EPA standard VOST unit to make it portable and to account for air flow volumes necessary to achieve the analytical sensitivity required in both ambient air and subsurface soil gas sampling programs that are required by the Consent Decree. These VOST modifications include the use of a Teflon lined sampling cane, a pre-conditioned primary sorbent Tenax cartridge, an empty glass impinger for potential condensate collection, a pre-conditioned secondary sorbent Tenax and synthetic-based carbon (Tenax/Anasorb®) cartridge, a sealed T-connection port for monitoring back-pressure across the sorbent cartridges, an in-line calibrated rotameter, a flow splitter, a personal sampling pump, a gel cell power supply, an insulated container, an ice pack and a high-low thermometer to measure the temperature extremes. Figure 2.3 illustrates the RTP modified VOST. An SKC sampling pump, portable battery backup and rotameter were used instead of the standard VOST flow controlled sampling pump and dry gas meter. Packed ice and a condensate impinger were used instead of the circulating ice water through two condensers in the EPA reference method.

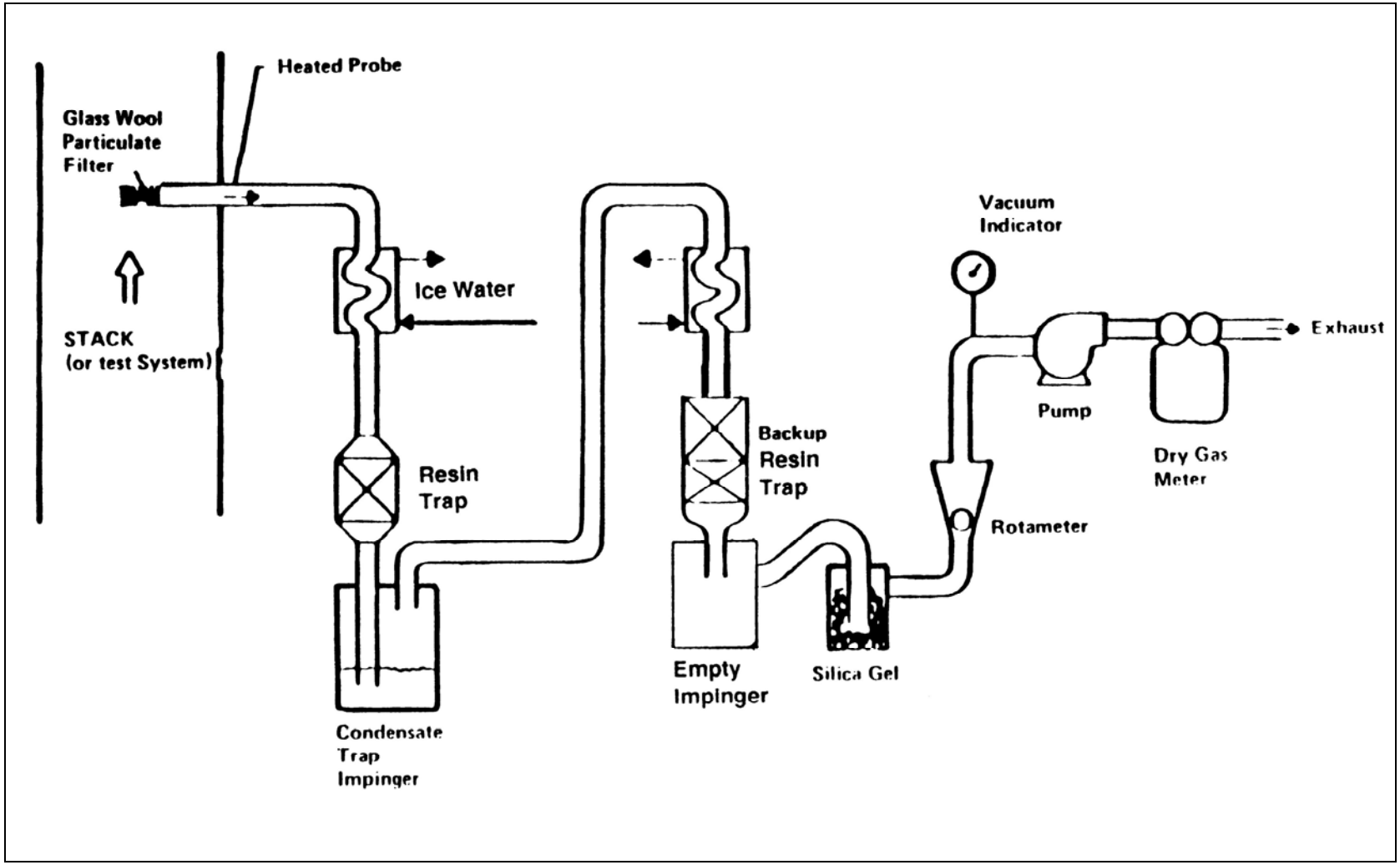
During the 2010 fourth quarter field test, pre-conditioned Tenax cartridge and Tenax/Anasorb® cartridges in series were used for the ambient air samplers and were set to run at a nominal flow rate of 0.25 Lpm.

FIGURE 2.2

TOWN OF OYSTER BAY
SOLID WASTE DISPOSAL FACILITY

SCHEMATIC OF EPA REFERENCED VOLATILE ORGANIC SAMPLING TRAIN (VOST)

FOURTH QUARTER 2010



Source: http://www.epa.gov/epaoswer/hazwaste/test/pdfs/0030.pdf

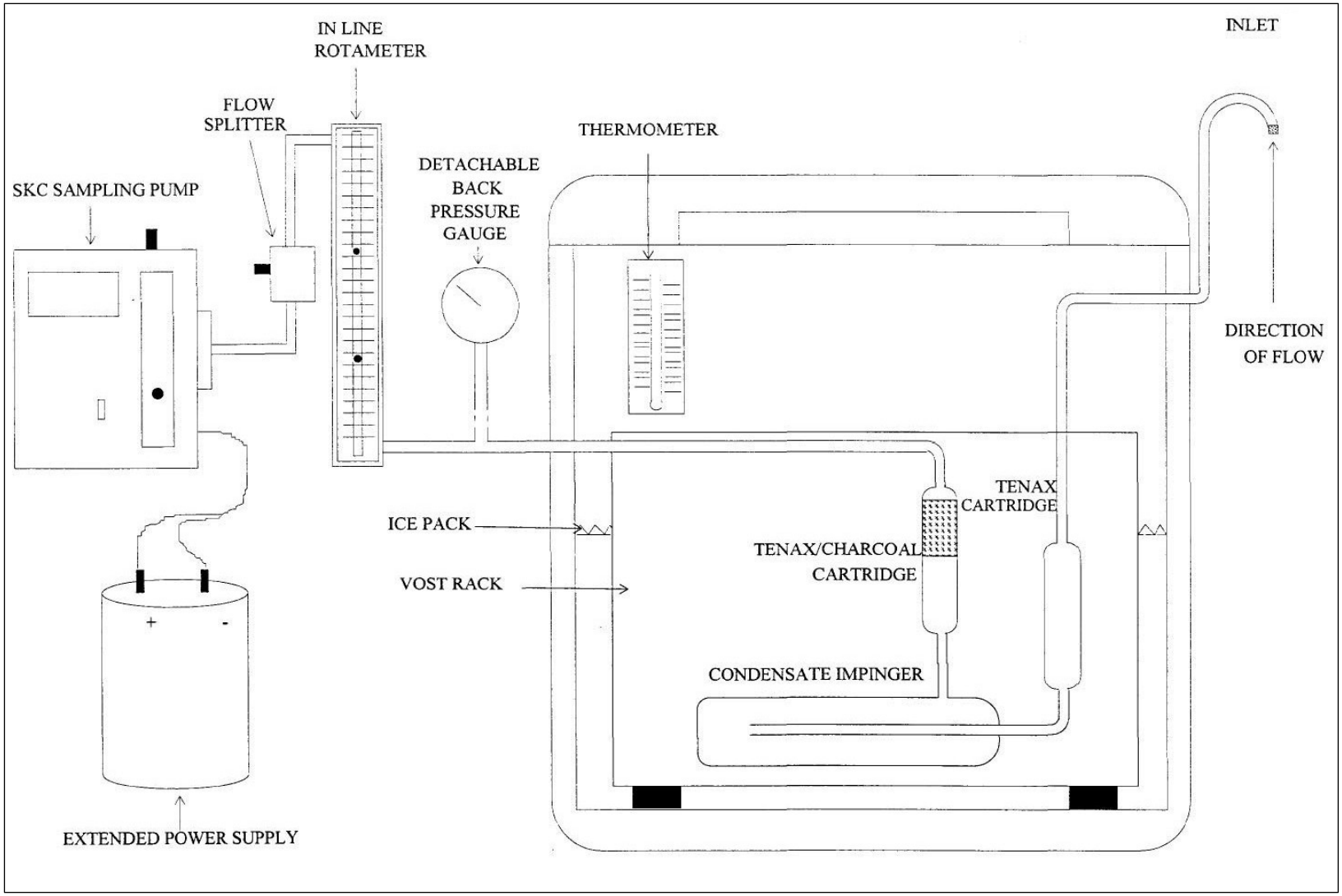
RTP Environmental Associates, Inc.

FIGURE 2.3

TOWN OF OYSTER BAY
SOLID WASTE DISPOSAL FACILITY

MODIFIED PORTABLE VOST SAMPLER

FOURTH QUARTER 2010



RTP Environmental Associates, Inc.

The VOST Tenax and Tenax/Anasorb® sorbent cartridges used in the modified sampling train are similar to those used in the VOST EPA Reference Method 0030.

2.2.3 VOST Sample Volume Selection

The selection of sample volumes for the ambient air and soil gas samples for this study was investigated. In general, the sample volume or sample size is limited by the analytical instrumentation being applied at the host laboratory and the period of sampling required in the Consent Decree. Since sample quantitation is based on nanogram concentrations of constituents, appropriate sample volumes were necessary to provide the desired analytical sensitivity.

In general, analytical instruments can detect between a few nanograms to thousands of nanograms of individual constituents in a sample. The analytical instrument's lower quantitation limit was set at 5 nanograms (ng) for the majority of the TCL constituents in the ambient VOST samples and soil gas VOST samples. Five TCL constituents (acetone, bromoform, 2-butanone, 2-hexanone and 4-methyl-2-pentanone) in the ambient VOST samples and soil gas VOST samples were analyzed at an 8 ng lower quantitation limit (LQL) due to the poor responses generally given by these constituents during laboratory analysis. During this fourth quarter VOST analysis, low level calibrations for methylene chloride, acetone and 2-butanone were excluded from the average response computation due to interference by contamination. Additionally, one TCL constituent, methylene chloride, in the ambient VOST samples and soil gas VOST samples were analyzed at a 10 ng LQL due to the generally poor response when using a GC/MS analysis. Additional tentatively identified compounds (TICs); chlorotrifluoromethane (Freon 13), chloroethyl vinyl ether, benzaldehyde and decane were analyzed at levels equivalent to or greater than 25 ng based on low responses for these compounds. The upper quantitation limit (calibration limit) for a splitless analysis was nominally set at 1,000 ng for both ambient and soil gas VOST samples for TCL and TIC constituents. Therefore, in order to provide the correct mass loading of constituents on the sample substrate, sample volumes were approximated based on the history of compound constituent identifications and corresponding concentrations detected at these locations and on Photoionization Detector (PID) values as presented in Table 2.2. Since the PID has a lower limit of detection of 0.1 parts per million (ppm), it was not always possible to specify the exact sample volume required to consistently achieve the proper mass loading on each sampling cartridge. Therefore, to minimize constituent non-detection because of insufficient sample volume for ambient air samples, a moderate sample volume (approximately 360 liters) was selected.

It has been estimated that a maximum 10 liter sample volume (based on the approximate volume contained within a 30-inch soil gas well) would be appropriate for sampling shallow soil gas wells. Removing more than a 10 liter sample potentially would introduce ambient air from the surface into the well being sampled.

TABLE 2.2

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

GENERAL RELATIONSHIP BETWEEN PHOTOIONIZATION DETECTOR (PID) READINGS AND SAMPLE VOLUME

FOURTH QUARTER 2010

PID READINGS (ppm)	SAMPLE VOLUME (liters)
<0.1 to 0.5	1,000 to 10
0.5 to 2	10 to 1
2 to 5	1
5 to 10	0.5
10 to 15	0.1
15 to 20	0.05
>20	0.01

Notes:

- ppm: parts per million
- Actual sample volumes collected may not correspond to their respective PID readings listed above when a history of constituent concentrations at the sampling site has been established.

Further, 10 liter sample volumes have also been selected for the 10, 20, 30 and 40-foot deep subsurface wells at the M9 sampling location for a direct comparison.

2.2.4 Other Sampling Equipment

The SKC sampling pumps used in this study are Model 224-PCXR7/8 universal exhaust pumps. These automatically shut down for low battery voltage and excessive back pressure. The accuracy of the sampling pumps is about +/- 5% of the set nominal flow rate.

SKC sampling pumps can be programmed to operate continuously and intermittently. They can be used to collect different total sample volumes at different flow rates. The pumps can be programmed to continuously draw samples at a desired flow rate over a preassigned time period. This capability is particularly important in the ambient air sampling event. It is possible to collect ambient air samples over a 24-hour total elapsed time period to give an integrated 24-hour average VOC concentration as specified in the Consent Decree. The only factor that limits the overall sampling time is the pump battery capacity. This capacity has been expanded by attaching a 6-volt gel cell battery to the pump battery, thus providing a longer lasting power source.

A Bios DryCal® DC Lite digital flow calibrator (Model DCL-MH) was used before and after this sampling event to calibrate ten (10) Supelco rotameters in conjunction with the SKC sampling pumps to a desired nominal flow rate. This was performed to establish a relationship between actual pump volume flow rates and their corresponding rotameter readings. Inconsistencies between pre-test and post-test rotameter calibrations could reveal a leak in a rotameter. The calibration data together with the Supelco rotameter readings recorded during sampling are then used to establish the precise sample volumes collected during each test. The Bios flow calibrator is a digital air flow meter consisting of a piston and a precision encoder system (two finely collimated infrared light beams). The piston rises at the rate of evacuation (or pressurization) and once the piston travels past the two infrared light beams a flow reading is calculated. The Bios flow calibrator has been checked against a NIST traceable standard and was last calibrated on February 11, 2010. The flow calibration sheets and the calibration certificate for the Bios unit are located in Appendix E. The combined accuracy of this calibrator and the Supelco rotameters used for the 2010 fourth quarter event is +/- 1%.

A calibrated PID is generally used during the monitoring program before and after each sampling event to measure the total ambient and soil gas VOC concentration. It is a hand held instantaneously reading analyzer that measures the total concentration of all ionizable compounds in ppm. The PID can be used to verify and adjust the appropriate sample volumes according to the general relationship between PID

readings and sample volumes shown on Table 2.2, at sampling sites where the compound constituent identifications and corresponding concentrations are unknown. However, the actual ambient air and soil gas well sample volumes collected during this sampling event may not correspond to their respective PID readings listed on Table 2.2 because a history of compound constituent identifications and corresponding concentrations have already been established at the Town of Oyster Bay Old Bethpage Solid Waste Disposal Complex. During the fourth quarter sampling event, PID readings were not taken at 10 of the 17 soil gas wells sampled due to PID battery issues during the soil gas sampling. PID measurements were taken at the initiation and conclusion of the effort at all ambient samplers. Additionally, it appeared as if the PIDs were exhibiting a slight positive baseline drift for the low level VOCs.

2.3 Meteorological Data

Meteorological data was collected at two (2) separate locations during the ambient air quality, soil gas and pressure well tests. Meteorological instruments provide localized information on ambient weather conditions occurring during a test. The meteorological parameters of interest in this program include: wind speed, wind direction, temperature, relative humidity, turbulence, barometric pressure and precipitation. The main meteorological station, located atop the landfill, consists of a Climatronics All-in-One (A10) compact weather unit, which includes a sonic anemometer and Sonimometer™ for wind speed and direction measurement, a multi-element temperature sensor, capacitive relative humidity sensor, barometric pressure sensor and an internal flux-gate compass. In addition to the A10, a tipping bucket rain gauge and vertical wind sensor (propeller type) are also part of the weather station. All data is recorded using a Campbell Scientific CR850 datalogger. The CR850 data logger is enclosed inside a portable instrument case while the remainder of the equipment is mounted on a 12-foot tripod.

The same meteorological parameters were collected at an upwind station that was collocated with the upwind ambient air samplers. The upwind meteorological station consisted of the same data logging hardware as the other station. The data loggers from both stations calculate horizontal and vertical turbulence based on wind measurements. The stations were positioned atop and upwind of the landfill and operated for the entire 24-hour test. The data collected at both meteorological stations correlate well with other local observations, except as noted below.

Weather conditions for the November 29 and 30, 2010 fourth quarter sampling event were forecasted by the National Weather Service to include southerly to southeasterly winds at light speeds with a steady to falling barometric pressure. The actual wind conditions recorded onsite during the 24-hour test were generally from easterly directions for the majority of the testing period based on data recorded at the station atop of the landfill. Recorded onsite conditions included some winds from the south southwest to southerly

directions at light speeds earlier in the testing period, then the winds shifted to easterly directions and ranged between southeast to east northeasterly and eventually east southeasterly for the remainder of the test based on data from the meteorological site atop the landfill. Winds from the north to northeasterly direction were recorded for 15 hours of the testing period, and these were recorded during the evening and overnight hours, based on data from the meteorological station positioned upwind of the landfill. Recorded directions from the station upwind of the landfill consisted of southerly winds until approximately 1700 hours on November 29, 2010, when the wind speed decreased to between 1 and 2 mph. Under very light wind speeds, the direction shifted north to northeasterly until 0500 hours on November 30 and varied between southeasterly to east southeasterly for the remainder of the testing period. In general, wind speeds were light to moderate during the sampling period at the station atop the landfill and somewhat lighter at the upwind meteorological station. The wind speeds and recorded temperatures were consistent with a moderate thermal inversion between 1700 hours on November 29 and 0900 hours on November 30. The peak temperature difference during the event was roughly 7.36°F and occurred at 1900 hours on November 29. The barometric pressure fell fairly steadily a total of 0.15 inches of Hg during the 24-hour testing period.

In addition, a light precipitation event began during the final half hour of the sampling period on November 30. The precipitation was very light during this short period and only a slight trace of accumulation was noted during the final 15 minutes of the testing period at the upwind station. The atop meteorological station did not record any precipitation. Since the precipitation was only experienced for a short interval during the testing period, one can estimate that only minor amounts of pollutants, at best, would have been removed from the ambient air due to absorption into raindrops.

Based on the wind direction observations recorded during the sampling period, the downwind sampler D3 was under the influence of landfill sources for the majority 24-hour test period. However, downwind samplers D1/2 may have been under the influence of only a small portion the landfill for the majority of the 24-hour testing period. The initial southerly winds allowed these collocated downwind samplers to measure a majority of the landfill sources for about 5 hours, but the shift to the easterly wind directions would have likely caused samplers D1/2 to be under the influence of industrial sources to the north and east for a majority of the testing period. Additionally, upwind samplers may have been influenced by the landfill and industrial sources to the northeast during a portion of the test when the inversion was present. A summary of the meteorological monitoring data for the sampling period is provided in Appendix A.

3.0 SAMPLING AND ANALYSIS

3.1 Background

The program's scope of work for sampling and analysis of ambient VOC levels in the vicinity of the Old Bethpage Landfill is principally guided by the Consent Decree. As mentioned in Section 2.0, the EPA reference sampling method was modified to account for site conditions and monitoring requirements. The sampling locations specified in the Consent Decree were adjusted slightly to account for expected meteorological conditions during the 24-hour sampling period.

Analytical laboratory services provided mass loading levels on specific substrates within the sampling cartridges from which concentrations were derived. Thus, it is important to determine the pollutant mass contained in each sample from both soil gas wells and ambient air locations. Traditionally, a portable VOC detection monitor (PID), having a detection range down to 0.1 ppm, is used in this case to assist in estimating sample loadings. Historical data was used to generally define what specific ambient VOC levels were to be expected at the soil gas and ambient downwind sampling locations.

3.2 Ambient Air Sampling

The 2010 fourth quarter ambient air sampling event was conducted on November 29-30, 2010. Three (3) locations at the Old Bethpage Landfill were selected as illustrated on Figure 2.1, based on weather forecast data that indicated persistent winds from south to southeasterly directions and site accessibility. All ambient air samples were collected using the modified VOST sampler at a calibrated flow rate of approximately 0.25 Lpm. The critical sampling parameters for the ambient VOST samplers and subsurface soil gas samplers are summarized in Table 3.1.

The ambient sampling trains were partially assembled at the RTP Westbury office according to protocol prior to taking the five (5) ambient air VOST samplers to their respective field locations. The Supelco rotameters were calibrated; the SKC sampling pumps and gel cell battery packs were charged. Both the pumps and battery packs were positioned and connected; aluminum cartridge holders were positioned, sampling canes were mounted onto coolers and the sampling train inlets and exhausts were sealed. The VOST cartridges were removed from their protective cases and then the end caps and fittings were removed. The sample cartridges were installed and the samplers were then taken to their respective positions as shown in Figure 2.1. Leak checks were performed prior to sample initiation and these data were recorded on individual field data sheets located in Appendix D. The sampler design for the tests has been described in Section 2.2. The samplers for location U1/2 were collocated near the 15th hole fairway of the Bethpage

TABLE 3.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF AMBIENT AIR AND SUBSURFACE SOIL GAS SAMPLING

FOURTH QUARTER 2010

SITE ID[1]	SAMPLE ID	TESTING DATE	DURATION (minutes)	SAMPLING HEIGHT (inches)	NOMINAL FLOWRATE (l/min)	DESIRED QUANTITY (liter)	SAMPLE VOLUME[2] ($liter_{STD}$)
U1	OBL10-4:U1	11/29/10-11/30/10	1,440	40	0.25	360	406
U2	OBL10-4:U2	11/29/10-11/30/10	983	40	0.25	360	269
D1	OBL10-4:D1	11/29/10-11/30/10	1,440	40	0.25	360	425
D2	OBL10-4:D2	11/29/10-11/30/10	1,440	40	0.25	360	415
D3	OBL10-4:D3	11/29/10-11/30/10	1,440	40	0.25	360	420

SUMMARY OF SUBSURFACE SOIL GAS SAMPLING

SITE ID[1]	SAMPLE ID	TESTING DATE	DURATION (minutes)	WELL DEPTH (inches)	NOMINAL FLOWRATE (l/min)	DESIRED QUANTITY (liter)	SAMPLE VOLUME[2] ($liter_{STD}$)
F1	OBL10-4:F1	11/29/2010	10	30	1.0	10	10.58
M2	OBL10-4:M2	11/29/2010	10	30	1.0	10	10.58
M4	OBL10-4:M4	11/29/2010	10	30	1.0	10	10.58
M5	OBL10-4:M5	11/29/2010	10	30	1.0	10	10.59
M6	OBL10-4:M6	11/29/2010	10	30	1.0	10	10.59
M9 (10')	OBL10-4:M9(10)	11/29/2010	10	120	1.0	10	10.60
M9 (20')	OBL10-4:M9(20)	11/29/2010	10	240	1.0	10	10.62
M9 (30')	OBL10-4:M9(30)	11/29/2010	10	360	1.0	10	10.62
M9 (40')	OBL10-4:M9(40)	11/29/2010	10	480	1.0	10	10.59
M13	OBL10-4:M13	11/29/2010	10	30	1.0	10	10.66
M16	OBL10-4:M16	11/29/2010	10	30	1.0	10	10.64
M21	OBL10-4:M21	**WELL NOT SAMPLED DUE TO INACCESSIBILITY CAUSED BY CONCRETE WALL**					
M22	OBL10-4:M22	11/29/2010	10	30	1.0	10	10.60
M28	OBL10-4:M28	11/29/2010	10	30	1.0	10	10.52
M31	OBL10-4:M31	11/29/2010	10	30	1.0	10	10.57
M34	OBL10-4:M34	11/29/2010	10	30	1.0	10	10.48
M37	OBL10-4:M37	11/29/2010	10	30	1.0	10	10.56
M39	OBL10-4:M39	11/29/2010	15	30	1.0	10	15.70

NOTES:

[1] See Figure 2.1 for ambient air and soil gas sampling locations.

U1/U2: Ambient upwind samplers collocated on the 15th hole fairway of the Bethpage State Black Golf Course approximately 200 feet west of Round Swamp Road.

D1/D2: Ambient downwind samplers collocated on the northern edge of the landfill approximately 200' east of Haul Road.

D3: Ambient downwind sampler was located along a landfill access road on the southwestern edge of the landfill, north of the yard waste area.

[2] Corrected to standard conditions; 25° C and 29.92 in. Hg.

State Black Golf Course approximately 200 feet west of Round Swamp Road. Samplers for location D1/2 were collocated on the northern edge of the landfill approximately 200' east of Haul Road. Sampler D3 was located along a landfill access road on the southwestern edge of the landfill, north of the yard waste area. Sampler locations for sites U1, U2, D1, D2 and D3 are shown in Figure 2.1.

The ambient air samplers were set to continuously collect at a 0.25 Lpm nominal flow rate over a 24-hour period. The rotameter were set at 0.25 Lpm in order to allow the collection of a total air volume of approximately 360 liters over the 24-hour period. To achieve this low flow, an in-line sampling manifold was constructed and installed with two (2) SKC single stage universal constant-flow controllers in parallel.

RTP currently uses two (2) connected single port flow splitters to stabilize the sample flow for the ambient samples because sampling is occurring at lower flow rates. A Supelco low flow rotameter is installed in-line, downstream of the sorbent cartridges, prior to the flow splitter and SKC pump inlet. The flow splitter is positioned in-line, upstream of the SKC pump and downstream of the Supelco rotameter, with the port open to the atmosphere. The adjustment pod to the flow splitter port is adjusted to register the desired 0.25 Lpm flow rate on the in-line rotameter. The remaining flow splitter port was adjusted to maintain the total flow to the SKC sampling pump within the pump operating range. This allows for the continuous collection of an integrated nominal 360 liter sample over the 24-hour sampling period. Sample volumes are presented in Table 3.1.

Total ambient VOC concentrations were monitored at the start and finish of the sampling period at each ambient site using a PID. Total ambient VOC concentrations were measured at 0.0 ppm at the initiation of sampling at U1/2, D1/2 and D3. Therefore, flow rates were initially set at 0.25 Lpm for all ambient samplers. These flow rates should achieve the desired range in sample volumes necessary for analytical sensitivity requirements over the 24-hour period. The sampling volumes recorded during the fourth quarter 2010 were slightly higher that the target 360 liters for all samples, except for sample U2 due to pump fault causing the sampler to only run for 983 minutes of the desired 1,440 minute sampling period. Despite these volume variations, recorded sample volumes for the fourth quarter 2010 were generally within an acceptable range.

Periodic checks were made at all ambient air sampling locations. Pump operations were monitored and VOST train integrity and station flow rates at the samplers were also checked. In all, each sampler was checked approximately every 1 to 6 hours during the sampling period. Rotameter readings during these site checks were either within established ranges or adjusted to be within the operating window for all ambient samplers. All ambient samplers ran continuously for the total 24-hour sampling period except for U2. A

battery connector failure at upwind sampler U2 caused the sampler to shut down and resulted in a collected volume of 269 standard liters (L_{STD}), 75% of the target volume 360 L_{STD}. Pump elapsed run time readings were recorded throughout the sampling period for all sites. A chronology of the ambient air sampling event is presented in Appendix B.

Upon completion of sampling, leak checks were performed and the VOST cartridges were removed, sealed and placed in their respective labeled shipping tubes. All sorbent cartridges were inventoried, packed and shipped to the analytical laboratory as per established protocol. No collectable condensate was present, and therefore, no condensate samples were collected or reported.

The analytical laboratory for this event was H2M Labs, Inc (H2M). The laboratory received all ambient sorbent cartridges in good condition. The analytical results along with the data observed during the sampling event will be discussed in Section 4.0. The H2M analytical report is provided in Appendix C. Field data forms and equipment calibrations are provided in Appendix D and E, respectively.

3.3 Soil Gas Sampling

The soil gas sampling elements of the Consent Decree require soil gas samples to be extracted from several 30-inch deep subsurface gas wells and from 10, 20, 30 and 40-foot deep subsurface gas wells at one location (M9). The Decree does not specify the sample volume, constituents to be analyzed, time period for collection, conditions for collection, analytical instrumentation, minimum level of detection or other parameters necessary to specifically define the nature of the tests and the applicability of test results. Based on the elements of the work scope in the Consent Decree, RAP Attachment 2, RTP developed the protocols and procedures outlined in Section 2.2 of this report which were based on protocols approved by the NYSDEC.

The first step in the soil gas test was to assemble the sampling trains onsite. The sampler design used for the soil gas samples is similar to that used for the ambient air samples. However, the design differs slightly because flow splitters are not used in parallel with the rotameter and back pressure readings are not taken. This design is used to achieve a nominal flow rate of 1 Lpm. Furthermore, the sample probe was modified to include a 36-inch long, ¼-inch diameter, stainless steel probe that was attached to a Teflon sampler inlet line in place of the sampling cane. Prior to use, the stainless steel sample probes were heated to +500°F to decontaminate the probes. They were then individually wrapped in aluminum foil and sealed to prevent inadvertent exposure to trace VOCs. The rotameters, in conjunction with the sampling pumps, were calibrated for specific flow rates at each soil gas sampling point based on data obtained from previous quarterly tests. Total well VOC concentrations are typically measured using a PID before and after the soil

gas test at the ambient area surrounding and inside the soil gas wells. Wells F1, M2, M4, M5, M6, M13 and the entire M9 cluster were unable to be sampled due to a battery fault on one of the PID units. The majority of the wells measured some low level VOCs; however, these values could have been the PID experiencing a slight drift during the testing period. It is worth noting that soil gas well M16 detected a higher than average concentration inside the soil gas well during this fourth quarter sampling period. However, the well concentrations of target compounds or TICs were not appreciably different to other well concentrations. Thus, the levels of VOCs detected in the wells from the PID may not have been an accurate representation of actual conditions during the time of testing. During previous testing events, RTP has noted moisture interferences that may be causing high PID readings inside wells. Complete details of the specific well and ambient air VOC concentrations recorded during this fourth quarter sampling event have been included in Appendix B.

Soil gas samples were collected at F1, M2, M4, M5, M6, M13, M16, M22, M28, M31, M34, M37, M39 and M9 (10, 20, 30 and 40-foot depths) as shown on Figure 2.1 and summarized in Table 3.1. As previously stated, soil gas well M21 was not sampled during this quarter's sampling period due an obstructing wall along Claremont Road making the well location inaccessible. Future consultation between the Town and the NYSDEC may determine if soil gas well M21 will be relocated and sampling resumed. All 30-inch soil gas wells were temporarily sealed with Teflon tape and a Tygon tubing/metal plug at least 24-hours prior to the collection of the soil gas samples. M9 wells have individual shut-off valves which were all closed prior to the sampling event.

RTP has developed a site specific procedure for collecting a soil gas sample. First, the soil gas well seal is removed from the well and the well is purged of stagnant gases. This is accomplished by using a pump, operated at 1 Lpm for 30 seconds to extract the stagnant well gases in the 30-inch well. A sampling pump is also used to extract stagnant gases from the M9 wells for longer intervals. The duration of pump operation at the M9 cluster well depends on the depth of each soil gas well. The stainless steel sampling probe is attached to the inlet of the VOST train. A leak check is performed. The probe is then inserted into the well to a depth of approximately 24-inches and sealed from the atmosphere using a Teflon screw-on nut and ferrule. Sampling commences when the sampling pump attached to the outlet of the VOST sampling train is activated. Two (2) VOST sampling trains were used during this effort to sample a total of 17 soil gas wells. The sampling pumps during soil gas sample collection were nominally set at a rate of 1.0 Lpm and ran for 10 minutes at each well site except for soil gas well M39 due to a connection failure. This procedure resulted in approximately 10 liters of soil gas being drawn through the VOST cartridges at each well. At the end of the sampling period at each well, a leak check was performed. M39 failed its leak check at 10 minutes and was run for an additional 5 minutes for a total of 15 minutes and collected 14.8 L_{STD} sample volume.

Following the sampling of a well, the VOST cartridges were removed from the train, labeled and packed for shipment to the analytical laboratory. The laboratory received all soil gas sorbent cartridges in good condition and samples were recovered normally.

A chronology of the soil gas sampling is presented in Appendix B. The H2M analytical summary report is provided in Appendix C. Field data forms and equipment calibrations are provided in Appendices D and E, respectively.

3.4 Analytical Laboratory Procedures

H2M provided the GC/MS analytical services that identify and quantify all constituents listed on the TCL and plus additional TICs. H2M applied EPA SW846 Method 5041 in conjunction with EPA SW846 Method 8260 for analyzing the collected samples. Method 5041 provides the methodology for determining volatile organic compounds collected on Tenax and Tenax/ Anasorb® sorbent cartridges. Method 8260 is used to quantify volatile organic compounds with boiling points below 200 degrees Centigrade and is based on purge-and-trap GC/MS procedures. Further details of the analyses are provided in the analytical results in Appendix C.

Newly desorbed VOST cartridges were supplied by Air Toxics Ltd. (Air Toxics) for use in this study. As previously stated, RTP has been using Tenax/Anasorb® back half VOST cartridges in lieu of Tenax/Charcoal back half VOST cartridges over the past several years and for this fourth quarter sampling effort. This decision was based on recommendations from an EPA publication, which studied different VOST trap charcoal specifications. Anasorb®, known for its organic vapor adsorbent properties and spherical shape was chosen over powdered charcoal, which has been used in the past. The use of Anasorb® began during the 2005 third quarter test. The cartridges are conditioned by Air Toxics and were shipped with a verification certificate. Upon receipt at RTP, the sampling cartridges were examined for breakage and kept in cool storage until their use in the field program.

H2M was forwarded a target compound list of VOCs for this monitoring program. RTP's laboratory letter suggested sample splitting and breakthrough results for a limited set of VOST cartridge pairs be reported prior to analyzing the remaining samples. RTP requested that splitless analyses be performed on field blank samples FB1, FB2 and FB3 prior to any other sample analyses for the presence of any unforeseen contamination. RTP monitors blank cartridge concentrations for contamination and Quality Assurance/Quality Control (QA/QC) purposes. In addition, RTP recommended a separate front and back cartridge analysis of ambient samples U2 and D3 and soil gas wells M9(30) and M39 were performed to

determine breakthrough and mass loading. Based on the initial results, it was recommended that H2M perform a non-dilution (splitless) combined front and back sample analysis for all remaining ambient air and soil gas samples.

4.0 DISCUSSION OF RESULTS

4.1 Ambient Air Concentrations

For the 2010 fourth quarter sampling event at the Old Bethpage Landfill, the ambient air concentrations at selected sites were monitored for 24 consecutive hours on November 29-30, 2010. The sites have been identified and the monitoring and analytical methods were discussed in preceding sections of this report. Laboratory analytical results provided are combined with other field data and translated into ambient air concentrations in this section.

Table 4.1 contains a summary of the air sample analytical results. These values are in micrograms per standard cubic meter (µg/std-m^3) and have been adjusted for flow volumes (as calibrated from the digital flow meter), temperature and barometric pressure. Table 4.1 also includes the lower quantitation limit (LQL) for each sample and the current AGCs and SGCs (current as of March 2011). A total of nine (9) TCL constituents exceeded the level of their assigned AGC values as shown in Table 4.1. Compounds include: benzaldehyde, benzene, carbon tetrachloride, chloroform, 1,4-dichlorobenzene (p), 1,2-dichloroethane, 2/4-ethyltoluene (total), tetrachloroethene and trichloroethene. Six of the exceeding compounds, benzaldehyde, benzene, carbon tetrachloride, chloroform, 1,2-dichloroethane and 2/4-ethyltoluene (total), were found in excess of their respective AGC guideline values in all five (5) ambient samples. All ambient samplers, except for the downwind sampler D3, detected 1,4-dichlorobenzene (p) in excess of its AGC guidance value. All upwind samples and downwind sample D3 detected tetrachloroethene in excess of its AGC guidance value. Finally, trichloroethene was found in excess of its AGC guideline values in all ambient samples, except for U1. Additionally, one (1) TIC C3 substituted benzene, was detected in excess of its respective AGC guideline values. The sample constituent concentrations appear reasonably representative of the areas tested based on preceding quarterly tests.

It is important to note that a single 24-hour average value greater than an AGC should not be interpreted as exceedance of the stated annual ambient air guideline. Further, concentrations of many compounds detected in the upwind samples were similar, if not greater, when compared to the downwind samples. Shaded values in Table 4.1 indicate an exceedance of the level of the assigned AGC. The analytical results are presented in Appendix C.

TABLE 4.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

FOURTH QUARTER 2010

	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION[1]	U1	U2	D1	D2	D3	FB3	TB1	AGC	SGC[4]
LOWER QUANTITATION LIMIT (LQL)	0.0246	0.0372	0.0235	0.0241	0.0238	5	5		
PRACTICAL QUANTITATION LIMIT (PQL)	0.0394	0.0595	0.0376	0.0386	0.0381	8	8		
TARGETED TIC LQL	0.1232	0.1859	0.1176	0.1205	0.119	25	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(ng)	(µg/m^3)	(µg/m^3)
Acetone[2]	0.70	1.34	0.68	0.84	0.78			30,000	180,000
Benzaldehyde[3]	**< 1.00**	**< 2.12**	**< 0.98**	**< 1.17**	**< 0.42**			0.10	----
Benzene	**1.17**	**< 1.36**	**1.25**	**1.33**	**1.14**			0.13	1,300
Bromodichloromethane								70.0	---
Bromoform[2]	< 0.04	< 0.05	< 0.04	< 0.04				0.91	---
Bromomethane								5.00	3,900
2-Butanone[2]	0.40	< 0.55	0.65	0.70	0.60			5,000	13,000
Carbon Disulfide			< 0.03	< 0.03	< 0.02			700	6,200
Carbon Tetrachloride	**0.66**	**0.63**	**0.62**	**0.64**	**0.65**			0.170	1,900
Chlorobenzene								110	---
Chloroethane								10,000	---
Chloroethyl Vinyl Ether[3]			0.03					0.10	----
Chloroform	**0.13**	**0.14**	**0.12**	**0.13**	**0.12**			0.043	150
Chloromethane	< 0.06	< 0.13	< 0.04	< 0.05	< 0.05			90.0	22,000
Dibromochloromethane								0.10	---
1,2-Dichlorobenzene (o)								200	30,000
1,3-Dichlorobenzene (m)								10.0	---
1,4-Dichlorobenzene (p)	**< 0.10**	**< 0.12**	**< 0.12**	**< 0.13**	< 0.05			0.09	---
1,1-Dichloroethane								0.63	---
1,2-Dichloroethane	**< 0.08**	**< 0.09**	**< 0.07**	**< 0.08**	**< 0.08**			0.038	**---**
1,1-Dichloroethene								70.0	---
cis-1,2-Dichloroethene								63.0	---
trans-1,2-Dichloroethene				< 0.02	< 0.02			63.0	----
1,2-Dichloropropane	< 0.03	< 0.04	< 0.03	< 0.03	< 0.03			4.00	----
1,3-Dichloropropene, cis & trans isomers								0.25	---
Ethylbenzene	< 0.41	< 0.54	< 0.48	< 0.54	< 0.42			1,000	54,000
2/4-Ethyltoluene (total)	**< 0.28**	**< 0.38**	**< 0.32**	**< 0.42**	**< 0.13**			0.10	----
Freon 13[3]								5,000	9,000
2-Hexanone[2]								30.0	4,000
Methylene Chloride	0.48	0.66	0.53	0.62	0.52	15		2.10	14,000
4-Methyl-2-Pentanone[2]	< 0.11	< 0.17	< 0.18	< 0.21	< 0.11			3,000	31,000
Styrene	< 0.04	< 0.18	< 0.03	< 0.07	< 0.03			1,000	17,000
1,1,2,2-Tetrachloroethane								16.0	---
Tetrachloroethene	**< 1.79**	**< 2.32**	< 0.93	< 0.98	**< 1.06**			1.00	1,000
Toluene	< 2.48	< 3.29	< 2.60	2.66	< 2.63			5,000	37,000
1,1,1-Trichloroethane	0.11	0.13	0.08	0.08	0.08			5,000	9,000
1,1,2-Trichloroethane								1.40	---
Trichloroethene	0.46	**< 0.61**	**5.27**	**5.25**	**1.15**			0.50	14,000
Trichlorofluoromethane	1.45	1.64	1.16	1.37	1.34			5,000	9,000
Vinyl Chloride								0.11	180,000
Xylenes (Total)	< 1.88	< 2.29	< 2.15	< 2.35	< 1.87			100	4,300
Decane[3]	< 0.65	< 0.72	< 0.88	< 0.90	< 0.70			700	---

TABLE 4.1
Continued

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

FOURTH QUARTER 2010

SAMPLE TYPE	**24-HR AMBIENT AIR SAMPLE**					BLANK		CURRENT AGC	24-HOUR SGC[4]
SAMPLE IDENTIFICATION (1)	U1	U2	D1	D2	D3	FB3	TB1		
ADDITIONAL TIC LQL	0.123	0.186	0.118	0.120	0.119	25	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(ng)	(µg/m^3)	(µg/m^3)
2-Methyl-pentane	2.49	2.83	4.05	< 2.40	2.31			4,200	350,000
3-Methyl-pentane			< 0.51	< 1.05				4,200	350,000
Pentane	< 1.59	3.20	2.71	3.18	< 1.73			---	4,200
C3 subst. Benzene	**< 0.65**			**< 0.81**	**< 0.49**			0.13	1,300
2-Methyl-butane	< 2.33	4.65	3.29	3.88	< 2.68			42,000	---
Hexane	2.32	< 2.47	< 2.11	< 2.16	< 1.82			700	---
Isobutane				< 2.71	< 2.27			57,000	---
Dichlorodifluoromethane	< 1.29	< 2.88	< 1.09	< 1.29	< 1.25			12,000	---
Ethane, 1,1,2-trichloro-1,2,2-triflu		< 0.61			< 0.54			180,000	960,000
Heptane	< 0.63				< 0.68			---	---
2-Methyl-Hexane	< 1.64	< 2.17	< 1.94		< 1.61			---	---
Butane	< 2.38	< 3.22	< 2.41	< 2.71	< 2.42			57,000	---
Acetic acid, methyl ester				< 1.67				3,400	---
Cyclopentane, methyl	< 0.97	< 1.39	< 1.05	< 1.10	< 0.89			700	---
Propane	< 0.53	< 3.33	< 0.65	< 0.83				12,000	---

NOTES:

[1] See Figure 2.1 for ambient air sampling locations.

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

[3] 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.

[4] This 24-hour guideline concentration was calculated by multiplying the current SGC value (last revised October 2010 and still current as of March 2011) by 0.4 (EPA averaging time adjustment factor).

U1/U2: Ambient upwind samplers collocated on the 15th hole fairway of the Bethpage State Black Golf Course
D1/D2: Ambient downwind samplers collocated on the northern edge of the landfill approximately 200' east of Haul Road.
D3: Ambient downwind sampler was located along a landfill access road on the southwestern edge of the landfill, north of the yard waste area.

- All values are reported in micrograms per standard cubic meter (µg/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 October 2010 and still current as of March 2011) 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.
- (µg/std-m^3): micrograms per standard cubic meter
- (ng): nanograms

The short-term guideline concentrations (SGCs) are also provided in Table 4.1 for all TCL constituents and additional TICs (where available). In order to compare the observed 24-hour concentrations to the SGC values, the 24-hour values would need to be divided by a 0.4 adjustment factor. No calculated short-term values exceed the SGC guidelines when the observed values are adjusted to represent worst case 1-hour concentrations.

One (1) target compound, methylene chloride, was detected in a minor amount in the ambient field blank sample, FB3. As previously stated, methylene chloride (as well as acetone) is a known laboratory contaminant that is almost always detected in all ambient samples (as well as soil gas samples), including field blank samples during quarterly monitoring events. The trip blanks were not analyzed since other field blank samples only recorded similar low level contamination for methylene chloride. FB1 and FB2 reported one (1) additional compound, acetone, at only slightly above the minimum detection limit (MDL). The field blank concentrations are reported in Appendix C. These concentrations were not subtracted from the reported ambient air or soil gas concentrations so that conservative concentrations would be reported.

The source(s) of the methylene chloride and acetone cannot be specified since the compounds also appear in both ambient and soil gas samples for this fourth quarter sampling event. It is difficult to quantify the difference between the concentrations detected in the blank samples that may be caused by media or laboratory contamination and the concentrations that may also be associated with OBSWDC contamination at the RTP Office or other industrial activities; but in this case, the net effect is expected to be minimal due to the low values in the blank samples.

No collectable condensate was present in the ambient air sample impingers. If small quantities were present, they are normally placed on the front trap to avoid influencing the sample MDL.

Some LQLs exceeded the value of respective AGCs; therefore, in addition to those noted above, other well concentrations may have exceeded the level of the ambient air AGC for compounds with an AGC value lower than the highest practical quantitation limit (PQL) (0.0595 µg/std-m^3). The collection of a soil gas sample volume significantly greater than 360 liters would be required to reduce the PQL; however, a significantly larger sample volume greater than 360 liters is not recommended due to media loading restrictions.

From the ambient data collected during the 2010 fourth quarter sampling event, background TCL constituent concentrations (upwind samples averaged TCL constituent concentrations) were subtracted from the average TCL constituent concentrations recorded at locations downwind of the landfill in order to

provide an estimate of the net impacts that the landfill, and all other OBSWDC activities taken together, have on local VOC levels. This analysis is done only for the constituents that exceeded their respective guideline values. The net impact analysis showed that out of all of the exceeding compounds this quarter, only trichloroethene exceeded its current AGC value after subtracting the upwind concentrations from the downwind concentrations.

A more detailed comparison of the two different downwind locations (again only for TCLs that exceeded their respective AGC value or assigned Interim AGC value) was also prepared to determine the net impacts. When comparing downwind location D1/2 to the average concentration of U1/2 for exceeding target and TIC compounds, benzene and trichloroethene exceed their respective AGC values. When comparing downwind location D3 to the average concentrations of U1/2 for exceeding target and TIC compounds, trichloroethene and the TIC C3 Substituted Benzene exceeded their respective AGC values. It is worth noting that many of the concentrations detected in the upwind samples are the same, if not slightly higher, than the concentrations detected in the collocated downwind samples D1/2 and the downwind sample D3, with notable exception of trichloroethene. Therefore, the bulk of the other constituents detected in excess of their AGC standards during this fourth quarter test may not necessarily be attributed to the landfill, but considered to be the impact from background sources. Periods of calm and persistent winds from northerly and easterly directions could have caused sources to the north and east to affect the upwind and collocated downwind monitoring sites. Additionally, the upwind samples were probably under the influence of the landfill during periods where the winds at the base of the landfill were from northerly directions. In particular, the compound trichloroethene may be attributed to a paint spray booth operation in the industrial park to the north and east of the landfill, and not necessarily concentrations contributed from landfill sources.

The results indicated consistency between collocated samples, although a few minor discrepancies between concentrations of certain compounds when comparing the results between collocated samples (U1 to U2 and D1 to D2) were noted. The target compounds, when detected, were present in both collocated samples at nearly equivalent concentrations. Additionally, the presence and concentration of specific TICs were somewhat consistent between U1/2 and D1/2. This difference is also likely attributed to the ability for split samples to report only seven TICs for each sample. RTP continues to monitor the difference in compounds detected and their concentrations between collocated samples to determine if inconsistencies exist or not, and if so, what may be causing the inconsistencies.

In general, VOC concentrations in the ambient air for the fourth quarter test were slightly lower for some compounds but have greatly increased in others, particularly trichloroethene, when compared to the previous quarters of 2010. In general, the total number of target compounds exceeding their respective AGC

standards was higher than documented in recent years. The difference between concentrations detected in the previous sampling effort versus the current test results may be due to the wind and meteorological conditions causing industrial source impacts from the north and east, as previously stated. It does not appear that the light precipitation event occurring during the final moments of the sampling event on November 30 affected the concentrations detected in the ambient samples. It is worth noting that the thermal oxidizer was not operational, and the venting the perimeter gas collection wells untreated could have affected the concentrations reported in the fourth quarter test.

It is important to note that the impact associated with the landfill as determined by the recorded concentrations is only an approximation. The upwind concentrations are taken to represent the general background in the area upwind of the landfill on the day of the sampling; however, there is diffusion (dilution) of those concentrations as the wind moves from an upwind sample point to a downwind sample point. Simply put, diffusion is a process that reduces higher atmospheric concentrations to lower concentrations. Diffusion rates can vary depending on, for example, the source release characteristics as well as the ambient turbulence. Therefore, because of diffusion, the downwind sample concentrations should be lower when compared to coincident upwind values, if the landfill was not there. Thus, the concentration as reported in the downwind sample data should be a conservative estimate of the actual impact of landfill sources on surrounding areas.

As a final note on the ambient levels, the meteorological conditions during the test were characterized by a moderate thermal inversion that caused the wind conditions at the base of the landfill to be light and variable from northerly and easterly directions, thus leaving the possibility that the samplers could have been under the influence of the landfill or other local sources of air pollutants beginning in the early evening hours on November 29 and lasting into the morning of November 30. Because of this occurrence, the description of relative impacts of landfill sources may not provide a precise analysis of all sources and their influence on ambient concentrations.

4.2 Soil Gas Concentrations

Soil gas concentrations were monitored on November 29, 2010 at all soil gas well sites identified in the Consent Decree except for well M21, which was not tested due to the inaccessibility of the well location. Table 4.2 provides a summary of soil gas well VOC concentrations. These concentration values are reported in µg/std-m^3 of soil gas. Table 4.2 also includes the lower quantification limit for each sample. All soil gas well cartridge sets were sent to H2M laboratories for analytical analysis. There are currently no State or

TABLE 4.2

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
FOURTH QUARTER 2010

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	FB1	Current	Current
LOWER QUANTITATION LIMIT (LQL)	0.473	0.473	0.473	0.472	0.472	0.472	0.471	0.942	0.472	5	AGC	SGC
PRACTICAL QUANTITATION LIMIT (PQL)	0.756	0.756	0.756	0.755	0.755	0.755	0.753	1.507	0.76	8	---	---
TARGETED TIC LQL	2.36	2.36	2.36	2.36	2.36	2.36	2.35	4.71	2.36	25	---	---
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(µg/m^3)	(µg/m^3)
Acetone*	1.23	2.36	1.42	1.23	1.32	1.51	1.41	3.86	1.79	9	30,000	180,000
Benzaldehyde**	**4.82**	**6.24**	**5.29**						**3.97**		0.10	----
Benzene											0.13	1300
Bromodichloromethane											70.0	---
Bromoform*											0.91	---
Bromomethane											5.00	3900
2-Butanone*		0.95	1.61								5000	13,000
Carbon Disulfide	0.47			0.57							700	6200
Carbon Tetrachloride		**0.57**		**0.47**							0.17	1,900
Chlorobenzene											110	---
Chloroethane											10,000	---
Chloroethyl Vinyl Ether**											0.10	----
Chloroform	**0.66**				**0.76**	**0.57**	**0.75**	**< 1.13**	**0.85**		0.043	150
Chloromethane											90.0	22,000
Dibromochloromethane											0.10	---
1,2-Dichlorobenzene (o)											200	30,000
1,3-Dichlorobenzene (m)											10.0	---
1,4-Dichlorobenzene (p)											0.09	---
1,1-Dichloroethane											0.63	---
1,2-Dichloroethane											0.038	---
1,1-Dichloroethene											70.0	---
cis-1,2-Dichloroethene											63.0	---
trans-1,2-Dichloroethene									0.85		63.0	----
1,2-Dichloropropane											4.00	----
1,3-Dichloropropene, cis & trans isomers											0.25	---
Ethylbenzene											1,000	54,000
2/4-Ethyltoluene (total)											0.10	----
Freon 13**											5000	9,000
2-Hexanone*											30.0	4000
Methylene Chloride	1.89	1.80	1.98	1.23	1.13	1.13	1.22		2.08		2.10	14,000
4-Methyl-2-Pentanone*											3,000	31,000
Styrene											1,000	17,000
1,1,2,2-Tetrachloroethane											16.0	---
Tetrachloroethene	**2.46**			0.76		**6.23**	**7.91**	**< 9.60**	**50.99**		1.00	1,000
Toluene											5,000	37,000
1,1,1-Trichloroethane									0.76		5,000	9,000
1,1,2-Trichloroethane											1.40	---
Trichloroethene				**1.32**							0.50	14,000
Trichlorofluoromethane	1.51	1.32	1.32	1.13	1.32	2.08	2.26	< 2.45	2.74		5,000	9,000
Vinyl Chloride											0.11	180,000
Xylenes (Total)											100	4,300
Decane**	4.82	6.24	5.29						3.97		700	---

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 2010

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	FB1	Current	Current
ADDITIONAL TIC LQL	2.36	2.36	2.36	2.36	2.36	2.36	2.35	4.71	2.36	25	AGC	SGC
VOC COMPOUND NAME	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(ng)	(µg/m³)	(µg/m³)
Pentane											---	4,200
2-Methyl-butane											42,000	---
Ethane, 1,1-difluoro-											40,000	---
Ethane, 1,1-dichloro-1,1,2,2-tetrafluoro									2.46		17,000	---
Hexane							26.37				700	---
Santolina triene											---	---
alpha-Pinene isomer (RT: 10.68)				41.55							---	---
Isobutane											57,000	---
Dichlorodifluoromethane	3.31	3.12	4.82	3.21	3.02	3.30	3.20	< 5.74	6.04		12,000	---
1,1-Dichloro-1-fluoroethane	16.07					5.47					---	---
beta-Pinene isomer (RT:11.35)				3.97							95.0	6,000
Undecane											---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu									2.74		180,000	960,000
Butane											57,000	---
Cyclotrisiloxane, hexamethyl-	2.65	3.31	3.78	4.06	11.33	3.77	3.20		2.64		---	---
Ethane, 1,2-dichloro-1-fluoro											---	---
Cyclotetrasiloxane, octamethyl-					2.46						3,300	---
3-Cyclohepten-1-one				17.94							25,000	---
Propane											12,000	---

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
FOURTH QUARTER 2010

SOIL GAS WELL IE	M13	M16	M21	M22	M28	M31	M34	M37	M39	FB2	Current AGC	Current SGC
LOWER QUANTITATION LIMIT (LQL	0.469	0.470	-	0.472	0.475	0.473	0.477	0.473	0.637	5		
PRACTICAL QUANTITATION LIMIT (PQL	0.750	0.752	-	0.755	0.760	0.76	0.763	0.758	1.019	8		
TARGETED TIC LQL	2.35	2.35	-	2.36	2.38	2.37	2.39	2.37	3.18	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(µg/m^3)	(µg/m^3)
Acetone*	1.31	1.13		1.79	1.33	2.37	2.29	1.70	3.44	9	30,000	180,000
Benzaldehyde**							**5.34**	**4.07**			0.10	----
Benzene							**0.57**		< **1.46**		0.13	1300
Bromodichloromethane											70.0	---
Bromoform*											0.91	---
Bromomethane											5.00	3900
2-Butanone*									< 0.96		5000	13,000
Carbon Disulfide											700	6200
Carbon Tetrachloride				**0.57**	**0.57**			**0.47**	< **0.70**		0.17	1,900
Chlorobenzene											110	---
Chloroethane											10,000	---
Chloroethyl Vinyl Ether**											0.10	----
Chloroform	**1.31**	**0.75**				**1.70**			< **0.76**		0.043	150
Chloromethane				0.66			1.05				90.0	22,000
Dibromochloromethane											0.10	---
1,2-Dichlorobenzene (o)											200	30,000
1,3-Dichlorobenzene (m)											10.0	---
1,4-Dichlorobenzene (p)											0.09	---
1,1-Dichloroethane											0.63	---
1,2-Dichloroethane											0.038	---
1,1-Dichloroethene											70.0	---
cis-1,2-Dichloroethene											63.0	---
trans-1,2-Dichloroethene											63.0	----
1,2-Dichloropropane											4.00	----
1,3-Dichloropropene, cis & trans isomers											0.25	---
Ethylbenzene											1,000	54,000
2/4-Ethyltoluene (total)											0.10	----
Freon 13**											5,000	9,000
2-Hexanone*											30.0	4000
Methylene Chloride	**2.91**				1.43		1.72		< 1.21	13	2.10	14,000
4-Methyl-2-Pentanone*											3,000	31,000
Styrene											1,000	17,000
1,1,2,2-Tetrachloroethane											16.0	---
Tetrachloroethene	**6.47**	**6.39**			0.48		**1.05**	**3.88**	< **4.01**		1.00	1,000
Toluene							0.57		< 1.34		5,000	37,000
1,1,1-Trichloroethane	0.66							0.57			5,000	9,000
1,1,2-Trichloroethane											1.40	---
Trichloroethene											0.50	14,000
Trichlorofluoromethane	1.50	1.88		1.42	1.43	1.23	1.24	1.70	1.46		5,000	9,000
Vinyl Chloride											0.11	180,000
Xylenes (Total)											100	4,300
Decane**											700	---

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 2010

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	FB2	Current	Current
ADDITIONAL TIC LQL	2.35	2.35	-	2.36	2.38	2.37	2.39	2.37	3.18	25	AGC	SGC
VOC COMPOUND NAME	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(ng)	(µg/m³)	(µg/m³)
Pentane							3.53		< 8.60		---	4,200
2-Methyl-butane							5.06	3.31	< 3.38		42,000	---
Ethane, 1,1-difluoro-								9.47			40,000	---
Ethane, 1,1-dichloro-1,1,2,2-tetrafluoro											17,000	---
Hexane									< 10.51		700	---
Santolina triene									< 78.03		---	---
alpha-Pinene isomer (RT: 10.68)									< 46.82		---	---
Isobutane								6.34	< 3.89		57,000	---
Dichlorodifluoromethane	3.00	4.32				2.84					12,000	---
1,1-Dichloro-1-fluoroethane											---	---
beta-Pinene isomer (RT:11.35)									< 11.15		95.0	6,000
Undecane									< 11.15		---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu											180,000	960,000
Butane							4.39	3.98	7.58		57,000	---
Cyclotrisiloxane, hexamethyl-	3.28	3.10		3.02	3.33	3.03	3.63	3.13			---	---
Ethane, 1,2-dichloro-1-fluoro								6.16			---	---
Cyclotetrasiloxane, octamethyl-											3,300	---
3-Cyclohepten-1-one											25,000	---
Propane									< 4.97		12,000	---

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 (µg/std-m^3).
- 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 October 2010 and still current as of March 2011) 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.
- (µg/std-m^3): micrograms per standard cubic meter
- (ng): nanograms

Federal guidelines for permissible soil gas concentrations of VOCs; however, New York State is considering vadose zone limits. Nassau County does not have guidelines or standards at this time. For a relative comparison, Table 4.2 provides the AGCs and SGCs for ambient air quality. The shaded values indicate soil gas concentrations that exceed the respective level of the current NYSDEC AGC for ambient air. A value in excess of the level of the AGC or SGC should not be interpreted as an exceedance of the ambient air guideline since the measured values are soil gas concentrations, not ambient air concentrations.

As shown on Table 4.2, seven (7) target VOCs (benzaldehyde, benzene, carbon tetrachloride, chloroform, methylene chloride, tetrachloroethene and trichloroethene) were measured in excess of the level of their respective ambient air AGC value at one or more soil gas well locations. Benzaldehyde measured in excess of its current AGC standard at soil gas wells F1, M2, M4, M9(40), M34 and M37. Benzene was measured in excess of its AGC standard at soil gas wells M34 and M39. Carbon tetrachloride was measured in excess of its current AGC standard at soil gas wells M2, M5, M22, M28, M37 and M39. Chloroform was measured in excess of its respective ambient air AGC value at all soil gas wells, except M2, M4, M5, M22 M28, M34 and M37. Methylene chloride was measured in excess of its current AGC standard at soil gas well M13. Tetrachloroethene was measured in excess of its respective ambient air AGC value at all soil gas wells except M2, M4, M5, M22, M28 and M31. Finally, trichloroethene was measured in excess of its AGC standard at soil gas well M5. No TICs were detected in excess of their respective AGC guideline values, and no compounds (both TCL and TICs) were found in excess of their respective SGC guideline values. The detections of methylene chloride and acetone are possibly associated with laboratory contamination and may not necessarily be associated with the soil gas since the mass loading of blank samples are in the range of mass loading in many of the soil gas samples.

The soil gas sample results for concentrations recorded at cluster well M9, including wells M9(10), M9(20), M9(30) and M9(40), historically show an increase in certain constituent concentrations as well depth increases, which may be attributed to groundwater conditions at this location, particularly with tetrachloroethene. During this fourth quarter test, the M9 cluster did demonstrate a consistent increase with depth of tetrachloroethene. Levels of most other compounds detected at the varying depths at this location did not display a similar trend.

When comparing the results of various compounds at M9(40) from this fourth quarterly test of 2010 with the other quarterly tests of 2010, concentrations are relatively similar with some compounds increasing and some decreasing. It appears that tetrachloroethene was previously increasing from the values detected since 2006; although the results during this fourth quarter test are slightly lower than previous quarters recorded in the past three years at location M9(40), the number of wells that have detected the compound

tetrachloroethene over the MDL has slightly increased. When comparing the results to historical data, it appears that the concentrations are less unusual than previously noted. The emergence of concentrations of tetrachloroethene in soil gas wells onsite as well as along Winding Road noted during recent quarterly tests will be closely monitored during future sampling events.

As with the ambient samples, some LQLs exceeded the value of respective AGCs; therefore, in addition to those noted above, other well concentrations may have exceeded the level of the ambient air AGC for compounds with an AGC value lower than the highest LQL (0.942 µg/std-m^3) or PQL (1.507 µg/std-m^3). The collection of a soil gas sample volume significantly greater than 10 liters would be required to reduce the LQL; however, a significantly larger sample volume greater than 10 liters is not recommended due to well volume restrictions.

Target compounds in soil gas wells that exceeded the level of their respective ambient air AGCs during the 2010 fourth quarter have increased slightly when compared to those of previous quarterly tests. In addition, the variety of compounds detected have also increased. The variety of TICs identified in the soil gas results remained fairly consistent when compared to previous quarterly efforts. One TIC in particular, hexamethylcyclotrisiloxane, was present in almost all soil gas wells during this fourth quarter test. This compound was noted during the second and third quarter tests of 2010 and was also detected in almost every soil gas well. Prior to the second quarter, this compound has not been detected since the third quarter of 2008. It is unknown what the cause of this compounds resurgence; however, RTP will continue to monitor its concentration in future quarterly efforts.

As shown in Table 4.2, no targeted compounds were measured in excess of their respective current SGC value. One should note that such comparisons are extremely conservative since soil gas concentrations are being compared to ambient air guideline values, and as such, no true exceedance of the ambient guidelines were measured. As stated, soil gas concentrations from most wells sampled were fairly comparable to the previous quarterly tests of 2010.

5.0 SOIL GAS PRESSURE READINGS

As required by the Consent Decree, pressure readings are to be taken on a quarterly basis at the following three locations around the perimeter of the gas collection system: (1) northwest of landfill between LGV16 and LGV17, (2) southeast of the landfill between TGV-1 and LGV-9 and (3) south of the landfill on the Nassau County Fire Service Academy at either F-6 or F-9. Figure 2.1 illustrates the locations of the three soil gas pressure wells PW1, PW2 and PW3.

A 10-inch inclined manometer, manufactured by Dwyer Instruments, Inc. was used to monitor soil gas pressures at each well. The 0-1-inch inclined portion is divided into 0.01-inch increments with the remaining portion (1 to 10-inches) marked in 0.1-inch increments. The inclined manometer is zeroed prior to taking measurements at each of the three (3) wells. There are two soil gas pressure probes at different depths (10-foot and 20-foot) at each location.

Pressure readings were taken from each of the six (6) probes. Table 5.1 provides a summary of the soil gas pressure tests. Pressure wells were initially tested from 0749 hours through 0806 hours on November 30th; however, due to a motor malfunction, the blower station was not operating during the initial tests. Therefore, the pressure wells were re-tested once the blower station came back online on November 30th from 1037 hours to 1051 hours. Zero pressure levels were recorded for all pressure wells at 10-foot depths, and negative pressure readings were recorded for all pressure wells at 20-foot depths. Pressure well PW1 measured -0.06 and -0.05 inches of water at the 20-foot depth. PW2 measured -0.07 and -0.08 inches of water at the 20-foot depth. Finally, PW3 measured -0.35 inches of water at the 20-foot depth during both measurements for this fourth quarter 2010 sampling event. It is difficult to determine whether the results were due to changes in atmospheric pressure or the operation of the perimeter collection system. Based on a landfill gas collection and perimeter system assessment prepared by LKB, substantial damage throughout the system was previously documented. Repairs to the landfill gas perimeter system were largely completed prior to the soil gas pressure measurements during this fourth quarter effort, which is most likely the reason for the negative pressure observed during this quarter. It is worth noting that the thermal oxidizer was not operating during the fourth quarter test and has not operated since May 2008; however, the perimeter collection system remains under some negative pressure as the blowers applying negative pressures to the collection system continue to operate. In the recent past, LKB staff have closed several vents along the perimeter collection system which in turn should improve soil gas vacuum levels. RTP will continue to monitor these pressure wells and monitor the results for any inconsistent values.

TABLE 5.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF SOIL GAS PRESSURE TESTS

FOURTH QUARTER 2010

SAMPLE ID	DATE (mm/dd/yy)	TIME (EDT)	WELL ID	WELL LOCATION	WELL DEPTH (feet)	READINGS (INCHES H2O)
P1	11/30/10	10:37 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P2	11/30/10	10:37 AM	PW1	NW corner of the landfill on Haul Road	20	-0.06
P3	11/30/10	10:38 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P4	11/30/10	10:38 AM	PW1	NW corner of the landfill on Haul Road	20	-0.05
P5	11/30/10	10:51 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P6	11/30/10	10:51 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.07
P7	11/30/10	10:52 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P8	11/30/10	10:52 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.08
P9	11/30/10	10:44 AM	PW3	Nassau County Fire Service Academy	10	0.00
P10	11/30/10	10:44 AM	PW3	Nassau County Fire Service Academy	20	-0.35
P11	11/30/10	10:45 AM	PW3	Nassau County Fire Service Academy	10	0.00
P12	11/30/10	10:45 AM	PW3	Nassau County Fire Service Academy	20	-0.35

NOTES:

- Measurements taken using a ten inch Dwyer inclined manometer.
- Leak checks were performed on manometer before testing each well.
- The blower station was not operating during the initial pressure well tests from 0749 through 0806 hours on November 30, 2010 due to a motor malfunction. Therefore, the pressure wells were retested once the blower station came back online. The above values represent testing that occurred during that time.

6.0 SUMMARY AND CONCLUSIONS

The 2010 fourth quarter ambient air, soil gas and soil gas pressure monitoring event was performed by RTP on November 29-30, 2010. Ambient air VOC concentrations and meteorology were monitored during the 24-hour sampling period. In accordance with the Consent Decree, ambient air VOC samples were collected at locations both upwind and downwind of the landfill. The ambient air quality test results indicate that nine (9) constituents on the program TCL and one (1) TIC exceeded the level of their respective ambient air AGCs or assigned Interim AGC values at the upwind and downwind locations. The compounds benzaldehyde, benzene, carbon tetrachloride, chloroform, 1,4-dichlorobenzene (p), 1/2-dichloroethane, 2/4-ethyltoluene (total), tetrachloroethene, trichloroethene and the TIC C3 substituted benzene exceeded the level of their respective ambient air AGCs and de minimus guideline values. It is worth noting that these compounds were similar in magnitude in upwind and downwind samples, with the exception of trichloroethene. Additionally, no measured values exceeded their respective SGC values.

These results are based on 24-hour samples, and therefore, an exceedance of an AGC does not necessarily indicate an exceedance of a respective annual guideline value. Looking at the net impact values (averaged downwind concentrations minus averaged upwind concentrations) for the fourth quarter test, it appears the landfill may have had little impact on the constituents that exceeded AGC values. Sources generally north and east of the landfill could also have had an influence based on the comparison of concentrations detected in samples upwind of the landfill versus downwind. In general, VOC concentrations in the ambient air for the fourth quarter test of 2010 were slightly lower for some constituents, while others have increased when compared to the previous quarterly test of 2010.

On-site meteorological data from atop the landfill and upwind of the landfill were recorded for use in this analysis. As discussed, some periods of light but persistent northerly to north northeasterly wind conditions at the base of the landfill during the thermal inversion which probably caused non-OBSWDC sources to influence the upwind and downwind samples. A light precipitation event occurred at the end of the sampling event on November 30, 2010, but it does not appear that the precipitation affected compound levels detected during this quarterly sampling event.

Comparing upwind versus downwind samples demonstrates that landfill emissions, including those associated with daily activities at the OBSWDC and the lack of landfill gas combustion controls, may in part be contributors to some of the observed constituent levels. However, based on the observed concentrations for the fourth quarter 2010, off-site sources are likely significant sources of the compound concentrations detected at both the upwind and downwind locations. Again, the exceedances of the ambient

air target or tentatively identified compound concentrations relative to the state guidelines are based on comparisons of 24-hour sample results to annual guidelines. It should also be noted that no measured target or tentatively identified compound concentrations exceeded their short term guidance value.

Soil gas well concentrations were monitored at specific locations surrounding the landfill. All soil gas well samples were collected and analyzed successfully. Soil gas sample results show several target compounds were present in the soil gas surrounding the landfill. Although no applicable guidelines are currently available for soil gas concentration readings, New York State is currently considering introducing vadose zone limits. The soil gas well target compound constituents that exceeded the level of their respective ambient air AGCs during the 2010 fourth quarter have increased slightly when compared to the previous quarterly tests of 2010.

Additionally, TIC detections in soil gas samples for this quarter have remained fairly consistent with those collected in the same wells during previous efforts. No target or tentatively identified compound in the soil gas exceeded the level of their respective ambient air SGC guideline values. Generally, soil gas concentrations from a majority of the wells sampled were fairly comparable to the previous quarterly tests of 2010. RTP will continue testing in 2011 and monitor the wells for any notable trends.

The methylene chloride and acetone observed in soil gas samples are at least partially attributed to laboratory contamination. Ambient field blank samples also detected methylene chloride slightly above the MDL. It is unknown what caused the presence of these compounds. Methylene chloride and acetone are known laboratory contaminants often found in all ambient and soil gas samples, including field blanks, during quarterly monitoring events. It is difficult to determine the quantity of methylene chloride and/or acetone associated with landfill activities since they are used in laboratories and may also be associated with OBSWDC activities. RTP will continue to monitor field blanks for their presence in the future.

Finally, soil gas pressures were measured at three (3) pressure well locations surrounding the landfill. Pressure wells were initially tested from 0749 hours through 0806 hours on November 30th; however, due to a motor malfunction, the blower station was not operating during the initial tests. Therefore, the pressure wells were re-tested once the blower station came back online on November 30th from 1037 hours to 1051 hours. Zero pressure levels were recorded for all pressure wells at 10-foot depths, and negative pressure readings were recorded for all pressure wells at 20-foot depths. Pressure well PW1 measured -0.06 and -0.05 inches of water at the 20-foot depth. PW2 measured -0.07 and -0.08 inches of water at the 20-foot depth. Finally, PW3 measured -0.35 inches of water at the 20-foot depth during both measurements for this fourth quarter 2010 sampling event. It is difficult to determine whether the results were due to changes in atmospheric pressure or the operation of the perimeter collection system. Based on a landfill gas collection

and perimeter system assessment by LKB, substantial damage throughout the system was previously documented. Repairs to the landfill gas perimeter system were largely completed prior to the soil gas pressure measurements during this fourth quarter effort, which is most likely the reason for the negative pressure observed during this quarter. It is worth noting that the thermal oxidizer was not operating during the fourth quarter test and has not operated since May 2008; however, the perimeter collection system remains under some negative pressure as the blowers applying negative pressures to the collection system continue to operate. In response to the thermal oxidizer being offline, the NYSDEC has requested samples of the perimeter system vent be collected and analyzed for the same set of target compounds analyzed in this report. Those results will be reported in the 2010 Zero Gas Migration Report. As previously stated, LKB staff have closed several vents along the perimeter collection system which, in turn, would improve soil gas vacuum levels.

A summary of the 2010 fourth quarter ambient, soil gas and pressure well quarterly monitoring results will be provided in the 2010 annual report.

APPENDIX A

METEOROLOGICAL MONITORING DATA

Table A-1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF TOP OF LANDFILL METEOROLOGICAL DATA

FOURTH QUARTER 2010
(November 29 and 30, 2010)

EST (HH:MM)	MWS (MPH)	MWD (Degrees)	SDWD (Degrees)	TEMP (Deg F)	RH (%)	PRESS (in. Hg)	PRECIP (in.)
13:00	3.6	191.6	57.5	48.0	43.7	30.22	0.00
14:00	6.5	186.5	29.1	47.4	45.7	30.21	0.00
15:00	7.3	187.4	15.6	46.6	46.2	30.20	0.00
16:00	6.7	198.8	10.3	45.0	49.0	30.21	0.00
17:00	3.6	183.5	10.3	43.0	55.8	30.21	0.00
18:00	3.5	137.9	20.9	42.3	60.4	30.20	0.00
19:00	2.8	89.9	13.8	40.8	65.5	30.20	0.00
20:00	3.7	75.0	11.6	39.7	68.6	30.20	0.00
21:00	5.3	78.2	5.7	39.0	72.8	30.18	0.00
22:00	5.8	75.7	5.3	39.2	75.8	30.18	0.00
23:00	5.7	77.0	6.2	39.3	77.9	30.17	0.00
0:00	4.6	81.3	10.8	40.4	78.9	30.17	0.00
1:00	4.6	76.8	10.9	42.1	78.3	30.16	0.00
2:00	5.1	87.9	8.2	43.8	78.4	30.16	0.00
3:00	4.4	84.5	5.5	44.1	79.3	30.16	0.00
4:00	5.8	90.9	9.2	44.4	79.1	30.15	0.00
5:00	6.3	105.1	10.8	45.4	80.0	30.14	0.00
6:00	5.9	102.6	10.0	46.3	81.1	30.13	0.00
7:00	5.7	85.4	6.0	46.1	82.5	30.13	0.00
8:00	7.3	103.2	8.7	47.3	83.2	30.12	0.00
9:00	10.5	120.2	10.3	50.3	80.8	30.12	0.00
10:00	11.9	120.1	9.9	51.6	77.4	30.13	0.00
11:00	12.2	119.4	11.0	51.8	78.2	30.13	0.00
12:00	14.1	119.4	10.6	51.9	78.2	30.10	0.00
13:00	14.0	118.3	10.7	52.0	78.1	30.07	0.00

Notes:

EST: Eastern Standard Time.
MWS: Mean Wind Speed, miles per hour.
MWD: Mean Wind Direction, corrected for wind direction reference.
- 360 degrees is due North (Grid North).
SDWD: Standard Deviation of Wind Direction.
TEMP: Ambient Temperature, degrees Fahrenheit.
RH: Relative Humidity, percent.
PRESS: Atmospheric Pressure, inches of mercury.
PRECIP: Precipitation, inches of water column.

Table A-1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF UPWIND METEOROLOGICAL DATA

FOURTH QUARTER 2010
(November 29 and 30, 2010)

EST (HH:MM)	MWS (MPH)	MWD (Degrees)	SDWD (Degrees)	TEMP (Deg F)	RH (%)	PRESS (in. Hg)	PRECIP (in.)
13:00	1.8	5.8	57.8	60.0	32.0	30.41	0.01
14:00	4.8	179.6	38.2	48.2	42.3	30.44	0.00
15:00	5.3	179.4	28.2	47.2	43.7	30.44	0.00
16:00	5.2	185.2	16.8	45.1	47.9	30.45	0.00
17:00	1.4	155.2	66.8	41.1	59.5	30.45	0.00
18:00	1.0	354.6	47.1	36.1	75.4	30.45	0.00
19:00	1.1	357.9	41.4	33.5	84.2	30.45	0.00
20:00	1.2	13.7	30.1	32.8	89.2	30.44	0.00
21:00	1.1	0.6	74.4	31.7	92.0	30.43	0.00
22:00	1.2	21.8	44.3	32.1	92.9	30.43	0.00
23:00	1.2	15.7	60.9	32.5	94.1	30.42	0.00
0:00	1.4	38.9	57.6	37.0	89.7	30.41	0.00
1:00	1.7	23.2	28.9	39.1	86.9	30.41	0.00
2:00	1.4	23.0	32.8	39.6	87.6	30.40	0.00
3:00	1.4	30.1	43.4	39.4	90.3	30.40	0.00
4:00	1.4	28.2	45.6	40.1	91.0	30.39	0.00
5:00	1.4	34.7	30.9	39.9	91.6	30.38	0.00
6:00	1.2	35.2	55.5	41.0	92.8	30.37	0.00
7:00	1.6	34.6	18.3	43.0	91.5	30.37	0.00
8:00	1.6	12.7	38.6	45.2	89.1	30.36	0.00
9:00	2.6	132.2	59.4	50.3	82.5	30.35	0.00
10:00	3.8	125.4	44.3	52.1	76.6	30.36	0.00
11:00	3.9	124.6	49.1	52.2	77.3	30.36	0.00
12:00	4.5	122.6	51.1	52.6	76.8	30.33	0.00
13:00	3.9	114.0	57.6	52.6	77.0	30.30	T

Notes:

EST: Eastern Standard Time.
MWS: Mean Wind Speed, miles per hour.
MWD: Mean Wind Direction, corrected for wind direction reference.
- 360 degrees is due North (Grid North).
SDWD: Standard Deviation of Wind Direction.
TEMP: Ambient Temperature, degrees Fahrenheit.
RH: Relative Humidity, percent.
PRESS: Atmospheric Pressure, inches of mercury.
PRECIP: Precipitation, inches of water column.
T: Trace Precipitation

APPENDIX B

CHRONOLOGY

AMBIENT AIR, SOIL GAS AND WELL PRESSURE SAMPLING EVENTS

CHRONOLOGY FOR AMBIENT AIR, SOIL GAS AND WELL PRESSURE SAMPLING EVENTS

Ambient Air Monitoring

A total of five ambient air monitoring stations were used to collect ambient air quality samples for VOCs during the 2010 fourth quarter test effort. The following discussion provides a chronology of events during this quarterly test event.

The samplers for location U1/2 were collocated near the15th hole fairway of the Bethpage State Black Golf Course approximately 200 feet west of Round Swamp Road. Both units were assembled at the RTP Westbury, New York office, transported to the monitoring sites and U1/2 were started at 12:53 PM (1253 hours) and 12:54 PM (1254 hours), respectively, on November 29, 2010. Upwind sampler U1 ran continuously until 1253 hours on November 30, 2010 for a total of 1,440 minutes (100% of the 24-hour sampling period). Eight (8) site inspections were performed for sampler U1 over the sampling period where a couple of adjustments were necessary to maintain the optimum flow rate for the collection of samples. Upwind sampler U2 ran continuously for 946 minutes where it stopped and was restarted at 0627 hours on November 30. It ran for an additional 12 minutes before failing again. At 0845 hours on November 30 the pump was discovered to be down again and the battery was changed. It was restarted, but only ran for an additional 10 minutes. The sampler was restarted at 1021 hours, but stopped after 7 minutes. It was restarted at 1241 hours and ran for the last 12 minutes of the sampling period for a total of 983 minutes (68.3% of the 24-hour sampling period). Nine (9) site inspections were performed for sampler U1 over the sampling period where several of adjustments were necessary to maintain the optimum flow rate for the collection of samples. In the end, a faulty battery connector was likely the cause of the pump failures at U2. Samples U1/2 were recovered normally and the samples were forwarded to the laboratory as per protocol. Condensate in quantities available for collection was not present from either sampler.

Samplers for location D1/2 were collocated on the northern edge of the landfill approximately 200 feet east of Haul Road. Samplers D1/2 were assembled as above and were started at 12:22 PM (1222 hours) on November 29, 2010. Downwind samplers D1 & D2 ran continuously until 1222 hours on November 30, 2010 for a total of 1,440 minutes (100% of the 24-hour sampling period). Eight (8) site inspections took place for samplers D1/2 over the sampling period where several adjustments were necessary to the flow meters for downwind samplers D1 and D2 in order to maintain an optimum flow rate for the collection of samples throughout the duration of the sampling effort. Samples D1/2 were recovered normally and forwarded to the laboratory as per protocol. Again, condensate in quantities available for collection was not present from either sampler.

Sampler D3 was located along the landfill access road on the southwestern edge of the landfill, north of the

yard waste area. This sampler was assembled as noted above and started at 12:31 PM (1231 hours) on November 29, 2010 and ran continuously until 1231 hours on November 30 for a total 1,440 minutes (100% of the 24-hour sampling period). Eight (8) site inspections took place for sampler D3 over the sampling period where no adjustments were necessary in order to maintain an optimum flow rate for the collection of the sample throughout the duration of the sampling effort. The sample was recovered normally and was forwarded to the laboratory as per protocol. Once again, condensate in quantities available for collection was not present.

Field blanks for the program were collected according to the protocol. Ambient field blank sample TOBOBL10-4:FB3.f&b was collected inside the RTP Westbury, New York office where the ambient sampling trains were assembled prior to the commencement of the testing effort. All samples were forwarded to the laboratory as per protocol.

Soil Gas Monitoring

Two field samplers were deployed for the soil gas monitoring portion of the program. Soil gas samples were collected according to the soil gas sampling protocol, except for soil gas well M21 due to well inaccessibility. All other soil gas wells for the fourth quarter 2010 test were collected and forwarded to the laboratory according to the protocol. Soil gas sampling was initiated at 1:11 PM (1311 hours) on November 29, 2010 and the last sample was collected at 4:32 PM (1632 hours) on that same day. The sampling procedures required 10 liter samples to be collected. Soil gas field blank TOBOBL10-4:FB1.f&b was collected at soil gas cluster well M9 and TOBOBL10-4: FB2.f&b was collected at soil gas well M39. All samples were recovered normally and forwarded to the laboratory as per protocol.

Soil Gas Pressure Readings

Soil gas pressure readings were taken at the three (3) primary pressure wells surrounding the landfill. Initial sampling was performed on November 30, 2010 from 0749 through 0806 hours. The blower station was not operating during the initial pressure well tests from on November 30, 2010 due to a motor malfunction. The pressure wells were re-tested once the blower station came back online on November 30th from 1037 hours to 1051 hours. Four readings were taken at each well (two per 10-foot depth and two per 20-foot depth) using a Dwyer 10-inch inclined manometer. The inclined manometer was zeroed and leak checked prior to collecting samples at each well. Sampling followed the previously established protocol.

Photo-Ionization Detector (PID) Readings

Total ambient VOC concentrations were monitored at the start and finish of the sampling period at each

ambient site using a PID. Total ambient VOC concentrations were measured at 0.0 ppm at the initiation and conclusion of sampling at all ambient sample locations. Since these measured levels of VOCs were minimal, flow rates were initially set at 0.25 Lpm for all ambient samplers.

No measurable concentrations of VOCs in the ambient air were detected at any soil gas well locations for the fourth quarter 2010. VOCs were, however, detected inside every well monitored using the PID during this fourth quarter sampling effort. Soil gas well M16 measured 8.2 ppm at the initiation and 6.0 ppm at the conclusion of sampling inside the well. Soil gas well M22 measured 0.0 ppm at the initiation of sampling inside the well, and 0.5 ppm at the conclusion of sampling inside the well. M28 respectively measured 0.3 ppm at the initiation and 0.1 ppm inside the soil gas well at the conclusion of the sampling period. M31 measured 0.5 ppm initially and 0.0 ppm at the conclusion of sampling inside the well. M34 measured 1.5 ppm initially and 0.8 ppm at the conclusion of sampling inside the well. Soil gas well M37 measured 0.1 inside the soil gas well at the initiation and conclusion of sampling. Finally, soil gas well M39 measured 0.7 ppm of VOCs at the initiation of the sampling period inside of the well and measured 1.0 ppm at the conclusion of the sampling period. All other wells were not able to be sampled due to PID battery faults.

APPENDIX C

ANALYTICAL RESULTS

Analytical Data Package For

RTP ENVIRONMENTAL ASSOCIATES, INC.
4th QUARTER AMBIENT AIR
SDG NO: TOY130

Air Samples
Received: 11/30/10

SAMPLE DATA SUMMARY PACKAGE

NOVEMBER 2010

H2M LABS, INC.
Environmental Testing Laboratories
575 Broad Hollow Road, Melville, N.Y. 11747

H2M LABS, INC.

SAMPLE DATA SUMMARY PACKAGE

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SAMPLES RECEIVED: 11/30/10
SDG NO.: TOY130

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2. **CHAIN OF CUSTODY DOCUMENTATION**

3. **SDG NARRATIVES**

4. **SAMPLE REPORTS**
   4.1 VOLATILES

5. **SURROGATE SPIKE ANALYSIS RESULTS**
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6. **BLANK SUMMARY DATA AND RESULTS**
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7. **INTERNAL STANDARD AREA DATA**
   7.1 VOLATILES

TOY130 S1

1. NYS DEC SUMMARY FORMS

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: TOY130

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	MSVOA
D1.B	1012011-001	X
D2.B	1012011-002	X
D2.F	1012011-003	X
D3.B	1012011-004	X
D3.F	1012011-005	X
F1.F+B	1012011-006	X
FB1.F+B	1012011-007	X
FB2.F+B	1012011-008	X
FB3.F+B	1012011-009	X
M2.F+B	1012011-010	X
M4.F+B	1012011-011	X
M5.F+B	1012011-012	X
M6.F+B	1012011-013	X
M9(10).F+B	1012011-014	X
M9(20).F+B	1012011-015	X
M9(30).B	1012011-016	X
M9(30).F	1012011-017	X
M9(40).F+B	1012011-018	X
M13.F+B	1012011-019	X
M16.F+B	1012011-020	X
M22.F+B	1012011-021	X
M28.F+B	1012011-022	X
M31.F+B	1012011-023	X
M34.F+B	1012011-024	X
M37.F+B	1012011-025	X
M39.B	1012011-026	X
M39.F	1012011-027	X
U1.B	1012011-030	X
U2.B	1012011-031	X
U2.F	1012011-032	X
D1.F	1012011-033	X
U1.F	1012011-034	X

CLP, Non-CLP (Please indicate year of protocol)
TCL/TAL, HSL, Priority Pollutant,

ASP B 2000
CG 12/20/10

TOY130 S3

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

SDG: TOY130

Laboratory Samp ID	Client Sample ID	Matrix	Analytical Protocol	Date Collected	DateRecd at Lab	Date Extracted	Date Analyzed	Extraction Method	DF	Level	Aux Cleanup
1012011-001A	D1.B	Air	5041	30-Nov-10	30-Nov-10		09-Dec-10		1	LOW	
1012011-002A	D2.B	Air	5041	30-Nov-10	30-Nov-10		03-Dec-10		1	LOW	
1012011-003A	D2.F	Air	5041	30-Nov-10	30-Nov-10		03-Dec-10		1	LOW	
1012011-004A	D3.B	Air	5041	30-Nov-10	30-Nov-10		03-Dec-10		1	LOW	
1012011-005A	D3.F	Air	5041	30-Nov-10	30-Nov-10		03-Dec-10		1	LOW	
1012011-006A	F1.F+B	Air	5041	30-Nov-10	30-Nov-10		07-Dec-10		1	LOW	
1012011-007A	FB1.F+B	Air	5041	30-Nov-10	30-Nov-10		03-Dec-10		1	LOW	
1012011-008A	FB2.F+B	Air	5041	30-Nov-10	30-Nov-10		03-Dec-10		1	LOW	
1012011-009A	FB3.F+B	Air	5041	30-Nov-10	30-Nov-10		03-Dec-10		1	LOW	
1012011-010A	M2.F+B	Air	5041	30-Nov-10	30-Nov-10		07-Dec-10		1	LOW	
1012011-011A	M4.F+B	Air	5041	30-Nov-10	30-Nov-10		07-Dec-10		1	LOW	
1012011-012A	M5.F+B	Air	5041	30-Nov-10	30-Nov-10		07-Dec-10		1	LOW	
1012011-013A	M6.F+B	Air	5041	30-Nov-10	30-Nov-10		07-Dec-10		1	LOW	
1012011-014A	M9(10).F+B	Air	5041	30-Nov-10	30-Nov-10		08-Dec-10		1	LOW	
1012011-015A	M9(20).F+B	Air	5041	30-Nov-10	30-Nov-10		08-Dec-10		1	LOW	
1012011-016A	M9(30).B	Air	5041	30-Nov-10	30-Nov-10		03-Dec-10		1	LOW	
1012011-017A	M9(30).F	Air	5041	30-Nov-10	30-Nov-10		03-Dec-10		1	LOW	
1012011-018A	M9(40).F+B	Air	5041	30-Nov-10	30-Nov-10		08-Dec-10		1	LOW	
1012011-019A	M13.F+B	Air	5041	30-Nov-10	30-Nov-10		08-Dec-10		1	LOW	
1012011-020A	M16.F+B	Air	5041	30-Nov-10	30-Nov-10		08-Dec-10		1	LOW	
1012011-021A	M22.F+B	Air	5041	30-Nov-10	30-Nov-10		08-Dec-10		1	LOW	
1012011-022A	M28.F+B	Air	5041	30-Nov-10	30-Nov-10		08-Dec-10		1	LOW	
1012011-023A	M31.F+B	Air	5041	30-Nov-10	30-Nov-10		08-Dec-10		1	LOW	
1012011-024A	M34.F+B	Air	5041	30-Nov-10	30-Nov-10		08-Dec-10		1	LOW	
1012011-025A	M37.F+B	Air	5041	30-Nov-10	30-Nov-10		09-Dec-10		1	LOW	
1012011-026A	M39.B	Air	5041	30-Nov-10	30-Nov-10		03-Dec-10		1	LOW	
1012011-027A	M39.F	Air	5041	30-Nov-10	30-Nov-10		03-Dec-10		1	LOW	
1012011-030A	U1.B	Air	5041	30-Nov-10	30-Nov-10		09-Dec-10		1	LOW	

Laboratory Samp ID	Client Sample ID	Matrix	Analytical Protocol	Date Collected	DateRecd at Lab	Date Extracted	Date Analyzed	Extraction Method	DF	Level	Aux Cleanup
1012011-031A	U2.B	Air	5041	30-Nov-10	30-Nov-10		03-Dec-10		1	LOW	
1012011-032A	U2.F	Air	5041	30-Nov-10	30-Nov-10		03-Dec-10		1	LOW	
1012011-033A	D1.F	Air	5041	30-Nov-10	30-Nov-10		09-Dec-10		1	LOW	
1012011-034A	U1.F	Air	5041	30-Nov-10	30-Nov-10		09-Dec-10		1	LOW	

2. CHAIN OF CUSTODY DOCUMENTATION

CHAIN OF CUSTODY RECORD

1012011 (001- 032)

RTP Environmental Associates, Inc.
400 Post Avenue, Suite 105
Westbury, NY 11590
Ph: (516) 333-4526
Fax: (516) 333-4571

Project name: TOBOBL10-4
Project ID: TOBOBL10-4
Project Location: TOB Landfill
Laboratory: H2M
Samplers: (Signature) J Buckley

Test ID	Sample ID	Matrix (A, L, S)	Date	Time	Sample Method	Sample Duration	Number of Containers	Analysis Requested			
TOBOBL10-4	TOB-OBL-10-4: U1.f	A	11/30/10	1341	VOST	24 hours	1				
	U1.b						1				
	U2.f						1				
	U2.b						1				
	D1.f						1				
	D1.b						1				
	D2.f						1				
	D2.b						1				
	D3.f						1				
	D3.b						1				
	F1.f					10 mins	1				
	F1.b						1				
	M2.f						1				
	M2.b						1				
	M4.f						1				
	M4.b						1				

Relinquished by: (Signature)	Date/Time:	Received By: (Signature)	Date/Time:
J Buckley	11/30/10 14:06	[signature]	11/30/10 14:06
Relinquished by: (Signature)	Date/Time:	Received By: (Signature)	Date/Time:
[signature]			

Remarks:

Delivery Method: Drop-off

Custody Seals Intact: Yes No

\\Pinde01\public\Projects\Projects\Town of Oyster Bay\OBL Monitoring\2010\OBL10-4\GC06_01

TOY130 S7

CHAIN OF CUSTODY RECORD

RTP Environmental Associates, Inc.
400 Post Avenue, Suite 105
Westbury, NY 11590
Ph: (516) 333-4526
Fax: (516) 333-4571

Project name:	TOBOBL10-4
Project ID:	TOBOBL10-4
Project Location:	TOB Landfill
Laboratory:	H2M
Samplers: (Signature)	J. Buchley

Test ID	Sample ID	Matrix (A, L, S)	Date	Time	Sample Method	Sample Duration	Number of Containers	Analysis Requested			
TOBOBL10-4	TOB-OBL10-4: M5.f	A	11/30/10	13:43	VOST	10 MINS	1				
	M5.b						1				
	M6.f						1				
	M6.b						1				
	M9(10).f						1				
	M9(10).b						1				
	M9(20).f						1				
	M9(20).b						1				
	M9(30).f						1				
	M9(30).b						1				
	M9(40).f						1				
	M9(40).b						1				
	M13.f						1				
	M13.b						1				
	M16.f						1				
	M16.b						1				

Relinquished by: (Signature)	Date/Time:	Received By: (Signature)	Date/Time:
J. Buchley	11/30/10 14:06	[signature]	11/30/10 14:06
Relinquished by: (Signature)	Date/Time:	Received By: (Signature)	Date/Time:
[signature]			

Remarks:

Delivery Method: Drop-off

Custody Seals Intact: Yes No

\\Rtpds01\public\Projects\Projects\Town of Oyster Bay\OBL Monitoring\2010\OBL10-4\COC-Q4

TOY130 S8

CHAIN OF CUSTODY RECORD

RTP Environmental Associates, Inc.
400 Post Avenue, Suite 105
Westbury, NY 11590
Ph: (516) 333-4526
Fax: (516) 333-4571

Project name: TOBOBL10-4
Project ID: TOBOBL10-4
Project Location: TOB Landfill
Laboratory: H2M
Samplers: (Signature) J. Buckley

Test ID	Sample ID	Matrix (A, L, S)	Date	Time	Sample Method	Sample Duration	Number of Containers	Analysis Requested			
TOBOBL10-4	TOB-OBL10-4-M22.f	A	11/30/10	13:47	VOST	10 MINS	1				
	M22.b						1				
	M28.f						1				
	M28.b						1				
	M31.f						1				
	M31.b						1				
	M34.f						1				
	M34.b						1				
	M37.f						1				
	M37.b						1				
	M39.f						1				
	M39.b						1				
	FB1.f					1 MIN	1				
	FB1.b						1				
	FB2.f						1				
	FB2.b						1				

Relinquished by: (Signature)	Date/Time:	Received By: (Signature)	Date/Time:
J. Buckley	11/30/10 14:06	[signature]	11/30/10 14:06
Relinquished by: (Signature)	Date/Time:	Received By: (Signature)	Date/Time:
[signature]		[signature]	

Remarks:

Delivery Method: Drop-off

Custody Seals Intact: Yes No

\\Pluto01\public\Projects\Projects\Town of Oyster Bay\OBL Monitoring\2010\OBL10-4\GCC-01

TOY130 S9

CHAIN OF CUSTODY RECORD

RTP Environmental Associates, Inc.
400 Post Avenue, Suite 105
Westbury, NY 11590
Ph: (516) 333-4526
Fax: (516) 333-4571

Project name: TOBOBL10-4
Project ID: TOBOBL10-4
Project Location: TOB Landfill
Laboratory: H2M
Samplers: (Signature) J Buckley

Test ID	Sample ID	Matrix (A, L, S)	Date	Time	Sample Method	Sample Duration	Number of Containers	Analysis Requested			
TOBOBL10-4	TOB-OBL10-4:FB3.f	A	11/30/10	13:49	VOST	1 MIN	1				
	FB3.b						1				
	TB1.f						1				
	TB1.b						1				
	TB2.f						1				
	TB2.b						1				
							1				
							1				
							1				
							1				
							1				
							1				
							1				
							1				
							1				
							1				
							1				

Relinquished by: (Signature)	Date/Time:	Received By: (Signature)	Date/Time:
J Buckley	11/30/10 14:06	[signature]	11/30/10 14:06
[signature]		[signature]	

Remarks:

Delivery Method: Drop-off

Custody Seals Intact: Yes No

\\Rtpdc01\public\Projects\Projects\Town of Oyster Bay\OBL-Monitoring\2010\OBL10-4\COC_01

TOY130 S10

TOY 130

H2M labs

H2M LABS INC
575 Broad Hollow Road
Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436
Website: www.h2mlabs.com

Sample Receipt Checklist

Client Name: TOY

Date and Time Received: 11/30/2010 2:06:00 PM

Work Order Number 1012011 RcptNo: 1

Received by: Tamika Ricks

Completed by: J. Ri

Reviewed by: JH

Completed Date: 12-1-10

Reviewed Date: 12/2/10

Carrier name: Client

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☑	No ☐	
Response when temperature is outside of range:	Samples were collected the same day and chilled.		
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☑	To °
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	No Water ☑
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: TOY130 SAS:

Adjusted? _____ Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section below.

TOY130 S11

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH
1012011-001A	Container-01 of 01	Bottle				
1012011-002A	Container-01 of 01	Bottle				
1012011-003A	Container-01 of 01	Bottle				
1012011-004A	Container-01 of 01	Bottle				
1012011-005A	Container-01 of 01	Bottle				
1012011-006A	Container-01 of 01	Bottle				
1012011-007A	Container-01 of 01	Bottle				
1012011-008A	Container-01 of 01	Bottle				
1012011-009A	Container-01 of 01	Bottle				
1012011-010A	Container-01 of 01	Bottle				
1012011-011A	Container-01 of 01	Bottle				
1012011-012A	Container-01 of 01	Bottle				
1012011-013A	Container-01 of 01	Bottle				
1012011-014A	Container-01 of 01	Bottle				
1012011-015A	Container-01 of 01	Bottle				
1012011-016A	Container-01 of 01	Bottle				
1012011-017A	Container-01 of 01	Bottle				
1012011-018A	Container-01 of 01	Bottle				
1012011-019A	Container-01 of 01	Bottle				
1012011-020A	Container-01 of 01	Bottle				
1012011-021A	Container-01 of 01	Bottle				
1012011-022A	Container-01 of 01	Bottle				
1012011-023A	Container-01 of 01	Bottle				
1012011-024A	Container-01 of 01	Bottle				
1012011-025A	Container-01 of 01	Bottle				
1012011-026A	Container-01 of 01	Bottle				
1012011-027A	Container-01 of 01	Bottle				
1012011-028A	Container-01 of 01	Bottle				
1012011-029A	Container-01 of 01	Bottle				
1012011-030A	Container-01 of 01	Bottle				
1012011-031A	Container-01 of 01	Bottle				
1012011-032A	Container-01 of 01	Bottle				

TOY130 S12

SampID	ContainerID	Type	Org pH	Adj pH	Req Min pH	Req Max pH

Adjusted? _____ Checked by _____

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client Contacted? ☐ Yes ☑ No Person Contacted: Comments:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

TOY130 S13

H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

CLIENT: TOY DELIVERABLES: BS 70 D TURN AROUND TIME: 21 Days

SDG #: TOY 130 CASE #: _____ MATRIX: Air pH CHECK Y or N

REMARKS: _____

RECEIVED BY: THR SIGNATURE: [signature] DATE: 11/30/10 TIME: 14:06

*Samples accessioned 12-1-10

CLIENT ID	H2M LAB # 12/3/10	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
D1.F+B	1012011 TR ~~1013001~~ -001A	11/30/10	VOST	1	Toy_Air
D2.B	-002A				
D2.F	-003A				
D3.B	-004A				
D3.F	-005A				
F1.F+B	-006A				
FB1.F+B	007A				
FB2.F+B	-008A				
FB3.F+B	-009A				
M2.F+B	-010A				
M4.F+B	-011A				
M5.F+B	-012A				
M6.F+B	-013A				
M9(10).F+B	-014A				
M9(20).F+B	-015A				
M9(30).B	-016A				
M9(30).F	-017A				
M9(40).F+B	-018A				
M13.F+B	-019A				
M16.F+B	-020A				

VOLATILE

TOY130 S14

H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

CLIENT: TOY DELIVERABLES: B5-70b TURN AROUND TIME: 21 Days

SDG #: TOY130 CASE #: _____ MATRIX: Air pH CHECK Y or (N)

REMARKS: _____

RECEIVED BY: TLR SIGNATURE: J.K. DATE: 11/30/10 TIME: 14:06

* Samples accessioned 12-1-10

CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
M22.F+B	1012011-021A	11/30/10	VOST	1	TOY-AIR
M28.F+B	-022A				
M31.F+B	-023A				
M34.F+B	-024A				
M37.F+B	-025A				
M39.B	-026A				
M39.F	-027A				
TB1.F+B	-028A				
TB2.F+B	-029A				
U1.F+B	-030A				
U2.B	-031A				
U2.F	-032A				
"					
"					
"					
"					
"					
"					
"					
"					

12-3-10 TLR

VOLATILE

TOY130 S15

PG 3 of 3

H2M LABS, INC.

CLIENT: TOY

SDG #: TOY 130

INTERNAL CHAIN OF CUSTODY

DATE	TIME	SAMPLE RELINQUISHED BY	SAMPLE RECEIVED BY	BOTTLE TYPE	PURPOSE OF CHANGE OF CUSTODY	INIT
12/1/10	13:00	SIGN J. Li	SIGN B Bhagwan	VOST	analysis	
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
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		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			

VOLATILE

TOY130 S16

3. SDG NARRATIVES

H2M LABS, INC.

SDG NARRATIVE FOR VOST ANALYSIS
PROJECT: 2010 AMBIENT AIR AND SOIL GAS
SAMPLES RECEIVED: 11/3010
SDG #: TOY130

For Samples:

D1.B	FB2.F+B	M9(20).F+B	M22.F+B	M39.F
D2.B	FB3.F+B	M9(30).B	M28.F+B	U1.B
D2.F	M2.F+B	M9(30).F	M31.F+B	U2.B
D3.B	M4.F+B	M9(40).F+B	M34.F+B	U2.F
D3.F	M5.F+B	M13.F+B	M37.F+B	D1.F
F1.F+B	M6.F+B	M16.F+B	M39.B	U1.F
FB1.F+B	M9(10).F+B			

The fourth quarter ambient air and soil gas VOST samples were analyzed according to EPA Method 5041. The reporting format follows the requirements of the NYSDEC Analytical Service Protocol (ASP), Rev. 10/95.

QC DATA

The method blanks contained low levels of acetone, methylene chloride and 2-butanone. These analytes were flagged with a "B" qualifier if present in samples associated with the blanks.

TUNING / CALIBRATION

Tuning and calibration were performed according to EPA method 5041.

Multi-point calibration at three concentration levels from 5 to 1000 ng was performed with internal standard calibration. The low level calibrations for methylene chloride, acetone, and 2-butanone were excluded from the average response computation due to interference by contamination.

Chlorotrifluoromethane, 2-chloroethylvinyl ether and decane are reported to a quantification limit (PQL) of 25 ng and benzaldehyde to 25 ng based on the low responses for these analytes.

An "X" qualifier is applied to TICs which appear to be due to septa/column bleed.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: December 15, 2010
Date Revised: January 18, 2011

****
* *
* *
****

Ursula Middel
Technical Manager

4. SAMPLE REPORTS

4.1 VOLATILES

H2M LABS, INC.

QUALIFIERS FOR REPORTING ORGANICS DATA

Value - If the result is a value greater than or equal to the quantification limit, report the value.

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(300\ U)}{D} \text{ x df where } D = \frac{100\%moisture}{100}$$

and df - dilution factor

For example, at 24% moisture, $D = \frac{100-24}{100} = 0.76$

$$\frac{(300\ U)}{.76} \text{ x 10 - 4300 U rounded to the appropriate number of significant figures}$$

For semivolatile soil samples, the extract must be concentrated to 0.5 mL, and the sensitivity of the analysis is not compromised by the cleanup procedures. Similarly, pesticide samples subjected to GPC are concentrated to 5.0 mL. Therefore, the CRQL values in Exhibit C will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specified volume (see Exhibit C), this fact must be accounted for in reporting the sample quantitation limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified quantification limit but greater than zero. (e.g.: If limit of quantification is 10 ug/L and a concentration of 3 ug/L is calculated, report as 3J.) The sample quantitation limit must be adjusted for dilution as discussed for the U flag.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported of Form I with a "P".

C - This flag applies to pesticide results when the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag, instead use a Laboratory defined flag, discussed below.

TOY130 S20

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified target compound.

E - This flag identified compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration ranges in the second analysis, then the results of both analyses shall be reported on separate copies of Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number. NOTE: For total xylenes, where three isomers are quantified as two peaks, the calibration range of each peak should be considered separately, e.g. a diluted analysis is not required for total xylenes unless the concentration of the peak representing the single isomer exceed 200 ug/L or the peak representing the two coeluting isomers on that GC column exceed 400 ug/L. Similarly, if the two 1,2-Dichloroethene isomers coelute, a diluted analysis is not required unless the concentration exceed 400 ug/L.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - Other specific flags may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the SDG narrative. Begin by using "X". If more than one flag is required use "Y" and "Z" as needed. If more than five qualifiers are required for a sample result, used the "X" flag to combine several flags as needed. For instance, the "X" flag might combine "A", "B", and "D" flags for some samples. The laboratory defined flags limited to the letters "X", "Y" and "Z".

The combination of flags "BU' or "UB" is expressly prohibited. Blank contaminants are flagged "B" only when they are detected in the sample.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D1.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-001A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0183.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	13	
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	410	
67-64-1	Acetone	190	B
75-15-0	Carbon disulfide	6	
75-09-2	Methylene chloride	180	
78-93-3	2-Butanone	47	B
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	15	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	9	
56-23-5	Carbon tetrachloride	64	
79-01-6	Trichloroethene	140	
71-43-2	Benzene	43	
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S22

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D1.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-001A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0183.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S23

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

D1.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-001A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0183.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 71 BDL 12/13/10 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000074-98-6	Propane	1.22	250	JN
2. 000075-71-8	Dichlorodifluoromethane	1.25	440	JN
3. 000106-97-8	Butane	1.49	1000	JN
4. 000078-78-4	Butane, 2-methyl-	1.94	1100	JN
5. 000109-66-0	Pentane	2.19	800	JN
6. 000107-83-5	Pentane, 2-methyl-	3.25	730	JN
7. 000096-14-0	Pentane, 3-methyl-	3.60	190	JN

TOY130 S24

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D2.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-002A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0148.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	17	
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	480	
67-64-1	Acetone	240	B
75-15-0	Carbon disulfide	6	
75-09-2	Methylene chloride	210	
78-93-3	2-Butanone	42	B
156-60-5	trans-1,2-Dichloroethene	5	
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	16	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	10	
56-23-5	Carbon tetrachloride	65	
79-01-6	Trichloroethene	180	
71-43-2	Benzene	53	
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S25

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D2.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-002A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0148.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S26

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

D2.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-002A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0148.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 7 BPC 12/3/10 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000074-98-6	Propane	1.24	320	JN
2. 000075-71-8	Dichlorodifluoromethane	1.27	510	JN
3. 000075-28-5	Isobutane	1.38	1100	JN
4. 000106-97-8	Butane	1.50	1100	JN
5. 000078-78-4	Butane, 2-methyl-	1.96	1300	JN
6. 000109-66-0	Pentane	2.21	970	JN
7. 000079-20-9	Acetic acid, methyl ester	3.26	670	JN

TOY130 S27

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D2.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-003A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0153.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	90	
67-64-1	Acetone	110	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	47	
78-93-3	2-Butanone	250	B
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	36	
107-06-2	1,2-Dichloroethane	27	
71-55-6	1,1,1-Trichloroethane	23	
56-23-5	Carbon tetrachloride	200	
79-01-6	Trichloroethene	2000	E
71-43-2	Benzene	500	
78-87-5	1,2-Dichloropropane	9	
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	80	
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	1100	E
127-18-4	Tetrachloroethene	400	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	220	
1330-20-7	Xylene (total)	970	
100-42-5	Styrene	26	
75-25-2	Bromoform	9	
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S28

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D2.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-003A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0153.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	170	
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	49	
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	480	
124-18-5	Decane	350	

TOY130 S29

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

D2.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-003A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0153.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 17 BPL 12/13/10 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000078-78-4	Butane, 2-methyl-	1.96	310	JN
2. 000109-66-0	Pentane	2.21	350	JN
3. 000107-83-5	Pentane, 2-methyl-	3.27	970	JN
4. 000096-14-0	Pentane, 3-methyl-	3.61	410	JN
5. 000110-54-3	Hexane	4.05	870	JN
6. 000096-37-7	Cyclopentane, methyl-	4.93	430	JN
7.	c3 substituted benzene	11.71	310	J

TOY130 S30

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D3.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-004A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0151.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	17	
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	490	
67-64-1	Acetone	240	B
75-15-0	Carbon disulfide	5	
75-09-2	Methylene chloride	180	
78-93-3	2-Butanone	33	B
156-60-5	trans-1,2-Dichloroethene	5	
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	15	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	11	
56-23-5	Carbon tetrachloride	64	
79-01-6	Trichloroethene	11	
71-43-2	Benzene	29	
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S31

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D3.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-004A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0151.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S32

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

D3.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-004A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0151.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 2 7 RPC 12/13/10 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.25	500	JN
2. 000075-28-5	Isobutane	1.36	930	JN
3. 000106-97-8	Butane	1.49	990	JN
4. 000078-78-4	Butane, 2-methyl-	1.94	1100	JN
5. 000109-66-0	Pentane	2.19	700	JN
6. 000076-13-1	Ethane, 1,1,2-trichloro-1,2,2-trifl	2.67	200	JN
7. 000107-83-5	Pentane, 2-methyl-	3.26	350	JN

TOY130 S33

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D3.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-005A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0154.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	74	
67-64-1	Acetone	87	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	38	
78-93-3	2-Butanone	220	B
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	34	
107-06-2	1,2-Dichloroethane	27	
71-55-6	1,1,1-Trichloroethane	24	
56-23-5	Carbon tetrachloride	210	
79-01-6	Trichloroethene	470	
71-43-2	Benzene	450	
78-87-5	1,2-Dichloropropane	9	
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	39	
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	1100	E
127-18-4	Tetrachloroethene	440	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	170	
1330-20-7	Xylene (total)	780	
100-42-5	Styrene	7	
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S34

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D3.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-005A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0154.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	48	
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	18	
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	170	
124-18-5	Decane	270	

TOY130 S35

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

D3.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-005A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0154.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 17 BK 12/13/10 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000107-83-5	Pentane, 2-methyl-	3.26	620	JN
2. 000096-14-0	Pentane, 3-methyl-	3.60	340	JN
3. 000110-54-3	Hexane	4.04	740	JN
4. 000096-37-7	Cyclopentane, methyl-	4.92	350	JN
5. 000591-76-4	Hexane, 2-methyl-	5.77	650	JN
6. 000142-82-5	Heptane	6.52	260	JN
7.	c3 substituted benzene	11.71	180	J

TOY130 S36

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F1.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-006A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0161.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	16	
67-64-1	Acetone	13	B
75-15-0	Carbon disulfide	5	
75-09-2	Methylene chloride	20	B
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	7	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	26	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S37

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F1.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-006A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0161.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	51	
124-18-5	Decane	25	U

TOY130 S38

1F

EPA SAMPLE NO.

F1.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-006A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0161.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 3 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.25	35	JN
2. 001717-00-6	1,1-Dichloro-1-fluoroethane	2.45	170	JN
3. 000541-05-9	Cyclotrisiloxane, hexamethyl-	8.75	28	JNX

TOY130 S39

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB1.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-007A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0143.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	5	U
67-64-1	Acetone	9	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	10	U
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S40

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB1.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-007A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0143.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S41

1F

EPA SAMPLE NO.

FB1.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-007A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0143.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

TOY130 S42

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB2.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-008A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0144.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	5	U
67-64-1	Acetone	9	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	13	
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S43

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB2.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-008A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0144.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S44

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FB2.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-008A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0144.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

TOY130 S45

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB3.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-009A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0145.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	5	U
67-64-1	Acetone	8	U
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	15	
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S46

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB3.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-009A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0145.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S47

1F

EPA SAMPLE NO.

FB3.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-009A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0145.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

TOY130 S48

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M2.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-010A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0162.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	14	
67-64-1	Acetone	25	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	19	B
78-93-3	2-Butanone	10	B
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	6	
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S49

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M2.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-010A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0162.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	66	
124-18-5	Decane	25	U

TOY130 S50

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M2.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-010A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0162.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 2 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.25	33	JN
2. 000541-05-9	Cyclotrisiloxane, hexamethyl-	8.74	35	JNX

TOY130 S51

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M4.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-011A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0163.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	14	
67-64-1	Acetone	15	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	21	B
78-93-3	2-Butanone	17	B
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S52

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M4.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-011A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0163.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	56	
124-18-5	Decane	25	U

TOY130 S53

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M4.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-011A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0163.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 2 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.29	51	JN
2. 000541-05-9	Cyclotrisiloxane, hexamethyl-	8.75	40	JNX

TOY130 S54

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M5.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-012A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0164.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	12	
67-64-1	Acetone	13	B
75-15-0	Carbon disulfide	6	
75-09-2	Methylene chloride	13	B
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	
79-01-6	Trichloroethene	14	
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	8	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S55

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M5.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-012A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0164.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S56

1F

EPA SAMPLE NO.

M5.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-012A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0164.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 5 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.25	34	JN
2. 000541-05-9	Cyclotrisiloxane, hexamethyl-	8.75	43	JNX
3. 001121-64-8	3-Cyclohepten-1-one	9.06	190	JN
4.	.alpha.-Pinene isomer	10.68	440	J
5.	.beta.-Pinene isomer	11.35	42	J

RPL 12/10/10

TOY130 S57

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M6.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-013A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0165.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	14	
67-64-1	Acetone	14	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	12	B
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	8	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S58

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M6.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-013A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0165.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S59

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M6.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-013A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0165.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 3 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.27	32	JN
2. 000541-05-9	Cyclotrisiloxane, hexamethyl-	8.74	120	JNX
3. 000556-67-2	Cyclotetrasiloxane, octamethyl-	11.04	26	JNX

BPC
12/13/10

TOY130 S60

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M9(10).F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-014A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0166.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	22	
67-64-1	Acetone	16	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	12	B
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	6	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	66	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S61

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M9(10).F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-014A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0166.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S62

1F

EPA SAMPLE NO.

M9(10).F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-014A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0166.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 3 (µg/L or µg/Kg) ng

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	000075-71-8	Dichlorodifluoromethane	1.25	35	JN
2.	001717-00-6	1,1-Dichloro-1-fluoroethane	2.44	58	JN
3.	000541-05-9	Cyclotrisiloxane, hexamethyl-	8.75	40	JNX

TOY130 S63

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M9(20).F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-015A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0171.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	24	
67-64-1	Acetone	15	
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	13	B
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	8	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	84	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S64

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M9(20).F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-015A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0171.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S65

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M9(20).F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-015A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0171.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 32 BK 12/13/10 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.25	34	JN
2. 000110-54-3	Hexane	4.03	280	JN
3. 000541-05-9	Cyclotrisiloxane, hexamethyl-	8.75	34	JNX

TOY130 S66

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M9(30).B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-016A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0150.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	5	U
67-64-1	Acetone	9	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	10	U
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S67

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M9(30).B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-016A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0150.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S68

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M9(30).B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-016A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0150.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 1 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.25	36	JN

TOY130 S69

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M9(30).F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-017A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0152.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	21	
67-64-1	Acetone	32	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	10	U
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	7	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	97	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S70

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M9(30).F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-017A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0152.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S71

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M9(30).F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-017A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0152.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

TOY130 S72

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M9(40).F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-018A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0172.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	29	
67-64-1	Acetone	19	
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	22	B
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	9	
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	9	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	8	
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	540	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S73

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M9(40).F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-018A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0172.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	42	
124-18-5	Decane	25	U

TOY130 S74

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M9(40).F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-018A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0172.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 4 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.25	64	JN
2. 000076-14-2	Ethane, 1,2-dichloro-1,1,2,2-tetraf	1.36	26	JN
3. 000076-13-1	Ethane, 1,1,2-trichloro-1,2,2-trifl	2.68	29	JN
4. 000541-05-9	Cyclotrisiloxane, hexamethyl-	8.75	28	JNX

TOY130 S75

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M13.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-019A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0173.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	16	
67-64-1	Acetone	14	
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	31	B
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	14	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	7	
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	69	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S76

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M13.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-019A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0173.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S77

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M13.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-019A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0173.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 2 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.25	32	JN
2. 000541-05-9	Cyclotrisiloxane, hexamethyl-	8.75	35	JNX

TOY130 S78

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M16.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-020A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0174.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	20	
67-64-1	Acetone	12	
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	10	U
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	8	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	68	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S79

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M16.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-020A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0174.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S80

1F

EPA SAMPLE NO.

M16.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-020A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0174.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 2 (µg/L or µg/Kg) ng

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	000075-71-8	Dichlorodifluoromethane	1.27	46	JN
2.	000541-05-9	Cyclotrisiloxane, hexamethyl-	8.74	33	JNX

TOY130 S81

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M22.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-021A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0175.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	7	
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	15	
67-64-1	Acetone	19	
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	10	U
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	6	
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

Revised CLG 18-Jan-11

TOY130 V335

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M22.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-021A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0175.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S83

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M22.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-021A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0175.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 1 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000541-05-9	Cyclotrisiloxane, hexamethyl-	8.74	32	JNX

TOY130 S84

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M28.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-022A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0176.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	15	
67-64-1	Acetone	14	
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	15	B
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	6	
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S85

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M28.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-022A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0176.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	44	
124-18-5	Decane	25	U

TOY130 S86

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M28.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-022A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0176.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 1 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000541-05-9	Cyclotrisiloxane, hexamethyl-	8.74	35	JNX

TOY130 S87

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M31.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-023A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0177.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	13	
67-64-1	Acetone	25	
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	10	U
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	18	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S88

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M31.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-023A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0177.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	45	
124-18-5	Decane	25	U

TOY130 S89

1F

EPA SAMPLE NO.

M31.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-023A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0177.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 2 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.25	30	JN
2. 000541-05-9	Cyclotrisiloxane, hexamethyl-	8.74	32	JNX

TOY130 S90

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M34.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-024A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0178.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	11	
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	13	
67-64-1	Acetone	24	
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	18	B
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	6	
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	6	
127-18-4	Tetrachloroethene	11	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S91

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M34.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-024A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0178.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	56	
124-18-5	Decane	25	U

TOY130 S92

1F

EPA SAMPLE NO.

M34.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-024A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0178.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 14 AK 12/18/10 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000106-97-8	Butane	1.48	46	JN
2. 000078-78-4	Butane, 2-methyl-	1.94	53	JN
3. 000109-66-0	Pentane	2.19	37	JN
4. 000541-05-9	Cyclotrisiloxane, hexamethyl-	8.75	38	JNX

TOY130 S93

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M37.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-025A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0179.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	18	
67-64-1	Acetone	18	
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	10	U
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	6	
56-23-5	Carbon tetrachloride	5	
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	41	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S94

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M37.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-025A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0179.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	43	
124-18-5	Decane	25	U

TOY130 S95

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M37.F+B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-025A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0179.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 3 ~~6~~ BPL 12/13/10 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-37-6	Ethane, 1,1-difluoro-	1.23	100	JN
2. 000075-28-5	Isobutane	1.36	67	JN
3. 000106-97-8	Butane	1.49	42	JN
4. 000078-78-4	Butane, 2-methyl-	1.94	35	JN
5. 000430-57-9	Ethane, 1,2-dichloro-1-fluoro-	2.45	65	JN
6. 000541-05-9	Cyclotrisiloxane, hexamethyl-	8.74	33	JNX

TOY130 S96

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M39.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-026A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0147.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	6	
67-64-1	Acetone	9	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	10	U
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S97

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M39.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-026A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0147.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S98

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M39.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-026A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0147.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 04 BK 12/18/10 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000074-98-6	Propane	1.22	53	JN
2. 000075-28-5	Isobutane	1.36	36	JN
3. 000106-97-8	Butane	1.49	31	JN
4. 000078-78-4	Butane, 2-methyl-	1.94	28	JN

TOY130 S99

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M39.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-027A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0146.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	17	
67-64-1	Acetone	45	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	14	
78-93-3	2-Butanone	7	BJ
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	7	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	6	
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	18	
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	16	
127-18-4	Tetrachloroethene	58	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S100

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M39.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-027A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0146.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S101

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M39.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-027A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0146.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 73 BK 1/10/11

CONCENTRATION UNITS: (µg/L or µg/Kg) ng

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	000106-97-8	Butane	1.52	88	JN
2.	000109-66-0	Pentane	2.22	110	JN
3.	000110-54-3	Hexane	4.07	140	JN
4.	2153-66-4	Santolina triene	10.23	1200	JN
5.		.alpha.-Pinene isomer	10.68	710	JN
6.		.beta.-Pinene isomer	11.35	150	J
7.	001120-21-4	Undecane	12.48	150	JN

Revised CLG 18-Jan-11

TOY130 V412

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

U1.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-030A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0184.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	20	
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	450	
67-64-1	Acetone	190	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	160	
78-93-3	2-Butanone	31	B
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	16	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	15	
56-23-5	Carbon tetrachloride	68	
79-01-6	Trichloroethene	7	
71-43-2	Benzene	35	
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S103

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

U1.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-030A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0184.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S104

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

U1.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-030A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0184.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 17 BM 12/12/10 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000074-98-6	Propane	1.22	190	JN
2. 000075-71-8	Dichlorodifluoromethane	1.25	500	JN
3. 000106-97-8	Butane	1.49	940	JN
4. 000078-78-4	Butane, 2-methyl-	1.94	920	JN
5. 000109-66-0	Pentane	2.19	620	JN
6. 000107-83-5	Pentane, 2-methyl-	3.25	390	JN
7. 000110-54-3	Hexane	4.03	200	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

U2.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-031A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0149.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	30	
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	330	
67-64-1	Acetone	160	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	100	
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	8	
56-23-5	Carbon tetrachloride	29	
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S106

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

U2.B

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-031A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0149.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S107

1F

EPA SAMPLE NO.

U2.B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-031A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0149.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 27 BPK 12/13/10 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000074-98-6	Propane	1.23	870	JN
2. 000075-71-8	Dichlorodifluoromethane	1.25	750	JN
3. 000106-97-8	Butane	1.49	840	JN
4. 000078-78-4	Butane, 2-methyl-	1.94	790	JN
5. 000109-66-0	Pentane	2.19	410	JN
6. 000076-13-1	Ethane, 1,1,2-trichloro-1,2,2-trifl	2.67	140	JN
7. 000107-83-5	Pentane, 2-methyl-	3.25	180	JN

TOY130 S108

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

U2.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-032A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0155.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	110	
67-64-1	Acetone	200	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	77	
78-93-3	2-Butanone	140	B
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	32	
107-06-2	1,2-Dichloroethane	18	
71-55-6	1,1,1-Trichloroethane	27	
56-23-5	Carbon tetrachloride	140	
79-01-6	Trichloroethene	160	
71-43-2	Benzene	360	
78-87-5	1,2-Dichloropropane	6	
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	37	
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	880	
127-18-4	Tetrachloroethene	620	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	140	
1330-20-7	Xylene (total)	610	
100-42-5	Styrene	44	
75-25-2	Bromoform	6	J
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S109

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

U2.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-032A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0155.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	97	
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	28	
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	520	
124-18-5	Decane	170	

TOY130 S110

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

U2.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-032A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0155.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 ~~7~~ BPL 12/13/10 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000078-78-4	Butane, 2-methyl-	1.94	460	JN
2. 000109-66-0	Pentane	2.19	450	JN
3. 000107-83-5	Pentane, 2-methyl-	3.26	640	JN
4. 000096-14-0	Pentane, 3-methyl-	3.60	350	JN
5. 000110-54-3	Hexane	4.03	640	JN
6. 000096-37-7	Cyclopentane, methyl-	4.92	350	JN
7. 000591-76-4	Hexane, 2-methyl-	5.77	560	JN

TOY130 S111

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D1.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-033A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0186.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	84	
67-64-1	Acetone	100	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	47	
78-93-3	2-Butanone	230	B
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	35	
107-06-2	1,2-Dichloroethane	26	
71-55-6	1,1,1-Trichloroethane	24	
56-23-5	Carbon tetrachloride	200	
79-01-6	Trichloroethene	2100	E
71-43-2	Benzene	490	
78-87-5	1,2-Dichloropropane	8	
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	69	
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	1100	E
127-18-4	Tetrachloroethene	390	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	200	
1330-20-7	Xylene (total)	910	
100-42-5	Styrene	9	
75-25-2	Bromoform	9	
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130S112

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D1.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-033A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0186.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	130	
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	46	
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	410	
124-18-5	Decane	350	

TOY130 S113

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

D1.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-033A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0186.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 07 BDL [illegible] (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000078-78-4	Butane, 2-methyl-	1.94	300	JN
2. 000109-66-0	Pentane	2.19	350	JN
3. 000107-83-5	Pentane, 2-methyl-	3.25	990	JN
4. 000096-14-0	Pentane, 3-methyl-	3.59	410	JN
5. 000110-54-3	Hexane	4.03	870	JN
6. 000096-37-7	Cyclopentane, methyl-	4.92	420	JN
7. 000591-76-4	Hexane, 2-methyl-	5.77	800	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

U1.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-034A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0185.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	140	
67-64-1	Acetone	94	B
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	33	
78-93-3	2-Butanone	130	B
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	35	
107-06-2	1,2-Dichloroethane	26	
71-55-6	1,1,1-Trichloroethane	30	
56-23-5	Carbon tetrachloride	200	
79-01-6	Trichloroethene	180	
71-43-2	Benzene	440	
78-87-5	1,2-Dichloropropane	9	
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	37	
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	1000	E
127-18-4	Tetrachloroethene	720	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	160	
1330-20-7	Xylene (total)	760	
100-42-5	Styrene	10	
75-25-2	Bromoform	8	
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S115

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

U1.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-034A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0185.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	110	
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	37	
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	400	
124-18-5	Decane	240	

TOY130 S116

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

U1.F

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: 1012011-034A

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0185.D

Level: (low/med) LOW Date Received: 11/30/10

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 17 BPL 12/13/10 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000107-83-5	Pentane, 2-methyl-	3.29	620	JN
2. 000096-14-0	Pentane, 3-methyl-	3.63	350	JN
3. 000110-54-3	Hexane	4.06	740	JN
4. 000096-37-7	Cyclopentane, methyl-	4.94	370	JN
5. 000591-76-4	Hexane, 2-methyl-	5.78	640	JN
6. 000142-82-5	Heptane	6.53	230	JN
7.	c3 substituted benzene	11.72	240	J

TOY130 S117

5. SURROGATE SPIKE ANALYSIS RESULTS

5.1 VOLATILES

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Level: (low/med) LOW

	EPA SAMPLE NO.	1 DCA #	2 BFB #	3 TOL #	OTHER	TOT OUT
01	VBLK120310	99	98	100		0
02	FB1.F+B	106	108	98		0
03	FB2.F+B	103	103	98		0
04	FB3.F+B	100	104	99		0
05	M39.F	102	125	99		0
06	M39.B	105	105	100		0
07	D2.B	103	106	99		0
08	U2.B	100	103	99		0
09	M9(30).B	102	104	100		0
10	D3.B	103	106	99		0
11	M9(30).F	103	105	98		0
12	D2.F	103	110	100		0
13	D3.F	98	92	100		0
14	U2.F	101	107	100		0
15	VBLK120710	100	98	98		0
16	F1.F+B	98	103	99		0
17	M2.F+B	100	102	98		0
18	M4.F+B	101	100	98		0
19	M5.F+B	101	110	98		0
20	M6.F+B	100	98	97		0
21	M9(10).F+B	102	100	97		0
22	VBLK120810	104	123	125		0
23	M9(20).F+B	101	97	97		0
24	M9(40).F+B	103	101	98		0
25	M13.F+B	103	99	97		0
26	M16.F+B	103	99	98		0
27	M22.F+B	107	102	99		0
28	M28.F+B	106	92	92		0
29	M31.F+B	107	99	98		0

			QC Limit
1	DCA	= 1,2-Dichloroethane-d4	(70-190)
2	BFB	= 4-Bromofluorobenzene	(69-145)
3	TOL	= Toluene-d8	(81-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Level: (low/med) LOW

	EPA SAMPLE NO.	1 DCA #	2 BFB #	3 TOL #	OTHER	TOT OUT
31	M34.F+B	105	102	98		0
32	M37.F+B	104	101	97		0
33	VBLK120910	102	99	98		0
34	D1.B	106	102	98		0
35	U1.B	104	98	98		0
36	U1.F	107	103	99		0
37	D1.F	101	103	98		0

			QC Limit
1	DCA	= 1,2-Dichloroethane-d4	(70-190)
2	BFB	= 4-Bromofluorobenzene	(69-145)
3	TOL	= Toluene-d8	(81-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

6. BLANK SUMMARY DATA AND RESULTS

6.1 VOLATILES

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK120310

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Lab File ID: 10\H0142.D Lab Sample ID: VBLK120310

Date Analyzed: 12/03/10 Time Analyzed: 15:09

GC Column: Rtx-624 ID: .18 (mm) Heated Purge: (Y/N) Y

Instrument ID: HP5973-2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	FB1.F+B	1012011-007A	10\H0143.D	15:45
02	FB2.F+B	1012011-008A	10\H0144.D	16:19
03	FB3.F+B	1012011-009A	10\H0145.D	16:54
04	M39.F	1012011-027A	10\H0146.D	17:30
05	M39.B	1012011-026A	10\H0147.D	18:05
06	D2.B	1012011-002A	10\H0148.D	18:40
07	U2.B	1012011-031A	10\H0149.D	19:15
08	M9(30).B	1012011-016A	10\H0150.D	19:50
09	D3.B	1012011-004A	10\H0151.D	20:25
10	M9(30).F	1012011-017A	10\H0152.D	21:02
11	D2.F	1012011-003A	10\H0153.D	21:40
12	D3.F	1012011-005A	10\H0154.D	22:15
13	U2.F	1012011-032A	10\H0155.D	22:51

COMMENTS: _____

FORM IV VOA OLM04.2

TOY130 S122

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK120310

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: VBLK120310

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0142.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	5	U
67-64-1	Acetone	16	
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	10	U
78-93-3	2-Butanone	16	
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S123

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK120310

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: VBLK120310

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0142.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S124

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK120310

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: VBLK120310

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0142.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/03/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

TOY130 S125

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK120710

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Lab File ID: 10\H0160.D Lab Sample ID: VBLK120710

Date Analyzed: 12/07/10 Time Analyzed: 20:36

GC Column: Rtx-624 ID: .18 (mm) Heated Purge: (Y/N) Y

Instrument ID: HP5973-2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	F1.F+B	1012011-006A	10\H0161.D	21:11
02	M2.F+B	1012011-010A	10\H0162.D	21:48
03	M4.F+B	1012011-011A	10\H0163.D	22:24
04	M5.F+B	1012011-012A	10\H0164.D	23:00
05	M6.F+B	1012011-013A	10\H0165.D	23:39
06	M9(10).F+B	1012011-014A	10\H0166.D	0:15

COMMENTS: _____

FORM IV VOA OLM04.2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK120710

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: VBLK120710

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0160.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	5	U
67-64-1	Acetone	17	
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	17	
78-93-3	2-Butanone	17	
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S127

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK120710

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: VBLK120710

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0160.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S128

1F

EPA SAMPLE NO.

VBLK120710

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: VBLK120710

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0160.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/07/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

TOY130 S129

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK120810

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Lab File ID: 10\H0170.D Lab Sample ID: VBLK120810

Date Analyzed: 12/08/10 Time Analyzed: 18:45

GC Column: Rtx-624 ID: .18 (mm) Heated Purge: (Y/N) Y

Instrument ID: HP5973-2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	M9(20).F+B	1012011-015A	10\H0171.D	19:23
02	M9(40).F+B	1012011-018A	10\H0172.D	19:58
03	M13.F+B	1012011-019A	10\H0173.D	20:35
04	M16.F+B	1012011-020A	10\H0174.D	21:11
05	M22.F+B	1012011-021A	10\H0175.D	21:46
06	M28.F+B	1012011-022A	10\H0176.D	22:25
07	M31.F+B	1012011-023A	10\H0177.D	23:01
08	M34.F+B	1012011-024A	10\H0178.D	23:38
09	M37.F+B	1012011-025A	10\H0179.D	0:14

COMMENTS: _____

FORM IV VOA OLM04.2

TOY130 S130

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK120810

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: VBLK120810

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0170.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	5	U
67-64-1	Acetone	8	U
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	21	
78-93-3	2-Butanone	8	U
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130S131

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK120810

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: VBLK120810

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0170.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S132

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK120810

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: VBLK120810

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0170.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/08/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

TOY130 S133

4A

EPA SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

VBLK120910

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Lab File ID: 10\H0182.D Lab Sample ID: VBLK120910

Date Analyzed: 12/09/10 Time Analyzed: 20:58

GC Column: Rtx-624 ID: .18 (mm) Heated Purge: (Y/N) Y

Instrument ID: HP5973-2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	D1.B	1012011-001A	10\H0183.D	21:33
02	U1.B	1012011-030A	10\H0184.D	22:24
03	U1.F	1012011-034A	10\H0185.D	22:58
04	D1.F	1012011-033A	10\H0186.D	23:32

COMMENTS: _____

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FORM IV VOA OLM04.2

TOY130 S134

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK120910

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: VBLK120910

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0182.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-69-4	Trichlorofluoromethane	5	U
67-64-1	Acetone	15	
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	10	U
78-93-3	2-Butanone	13	
156-60-5	trans-1,2-Dichloroethene	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-pentanone	8	U
591-78-6	2-Hexanone	8	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	8	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TOY130 S135

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK120910

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: VBLK120910

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0182.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ng	Q
	2/4-Ethyltoluene (total)	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
75-72-9	Chlorotrifluoromethane	25	U
110-75-8	2-Chloroethylvinyl ether	25	U
100-52-7	Benzaldehyde	25	U
124-18-5	Decane	25	U

TOY130 S136

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK120910

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Matrix: (soil/water) AIR Lab Sample ID: VBLK120910

Sample wt/vol: 5 (g/mL) G Lab File ID: 10\H0182.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/09/10

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

TOY130 S137

7. INTERNAL STANDARD AREA DATA

7.1 VOLATILES

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Lab File ID (Standard): 10\H0141.D Date Analyzed: 12/03/10

EPA Sample No.(VSTD050##): VSTD250NG Time Analyzed: 14:03

Instrument ID: HP5973-2 Heated Purge: (Y/N) Y

GC Column: Rtx-624 ID: .18 (mm)

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 (CBZ) AREA #	RT #
	12 HOUR STD	207184	5.61	1455069	6.81	937846	9.76
	UPPER LIMIT	414368	6.11	2910138	7.31	1875692	10.26
	LOWER LIMIT	103592	5.11	727535	6.31	468923	9.26
	EPA SAMPLE						
01	VBLK120310	179380	5.61	1227910	6.81	885796	9.76
02	FB1.F+B	173451	5.59	1235570	6.80	922520	9.76
03	FB2.F+B	167882	5.57	1184231	6.79	865023	9.76
04	FB3.F+B	165365	5.59	1140101	6.80	843347	9.76
05	M39.F	174106	5.59	1225902	6.80	906622	9.76
06	M39.B	172418	5.57	1219621	6.79	905309	9.76
07	D2.B	174735	5.59	1241743	6.79	912911	9.76
08	U2.B	172891	5.57	1219643	6.79	896560	9.76
09	M9(30).B	172918	5.58	1199223	6.79	904038	9.76
10	D3.B	170330	5.57	1213658	6.79	889304	9.76
11	M9(30).F	171345	5.57	1208914	6.79	891245	9.76
12	D2.F	172390	5.59	1221361	6.80	908677	9.76
13	D3.F	176595	5.57	1231902	6.79	878547	9.76
14	U2.F	179319	5.57	1237802	6.79	904662	9.76

IS1 = Bromochloromethane
IS2 = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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FORM VIII VOA OLM04.2

TOY130 S139

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Lab File ID (Standard): 10\H0159.D Date Analyzed: 12/07/10

EPA Sample No.(VSTD050##): VSTD250NG Time Analyzed: 19:24

Instrument ID: HP5973-2 Heated Purge: (Y/N) Y

GC Column: Rtx-624 ID: .18 (mm)

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 (CBZ) AREA #	RT #
	12 HOUR STD	189939	5.6	1335767	6.8	976704	9.77
	UPPER LIMIT	379878	6.1	2671534	7.3	1953408	10.27
	LOWER LIMIT	94970	5.1	667884	6.3	488352	9.27
	EPA SAMPLE						
01	VBLK120710	191487	5.60	1323842	6.80	946156	9.77
02	F1.F+B	178864	5.58	1233947	6.79	893757	9.76
03	M2.F+B	171350	5.57	1234239	6.79	892887	9.76
04	M4.F+B	180051	5.59	1251476	6.80	902726	9.77
05	M5.F+B	173783	5.57	1233287	6.79	894368	9.76
06	M6.F+B	181484	5.59	1236788	6.80	886893	9.77
07	M9(10).F+B	170595	5.58	1210211	6.79	875061	9.76

IS1 = Bromochloromethane
IS2 = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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TOY130 S140

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Lab File ID (Standard): 10\H0168.D Date Analyzed: 12/08/10

EPA Sample No.(VSTD050##): VSTD250NG Time Analyzed: 16:26

Instrument ID: HP5973-2 Heated Purge: (Y/N) Y

GC Column: Rtx-624 ID: .18 (mm)

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 (CBZ) AREA #	RT #
	12 HOUR STD	172643	5.61	1261728	6.81	955078	9.76
	UPPER LIMIT	345286	6.11	2523456	7.31	1910156	10.26
	LOWER LIMIT	86322	5.11	630864	6.31	477539	9.26
	EPA SAMPLE						
01	VBLK120810	97328	5.58	707586	6.79	673964	9.76
02	M9(20).F+B	167865	5.58	1148912	6.79	813238	9.76
03	M9(40).F+B	169282	5.58	1206067	6.79	873846	9.76
04	M13.F+B	163233	5.58	1176885	6.79	856587	9.76
05	M16.F+B	161626	5.59	1160174	6.80	840525	9.76
06	M22.F+B	164873	5.58	1150506	6.79	852746	9.76
07	M28.F+B	159037	5.57	1065921	6.79	663392	9.76
08	M31.F+B	167389	5.58	1163286	6.79	849897	9.76
09	M34.F+B	166915	5.58	1145925	6.79	836705	9.76
10	M37.F+B	159841	5.57	1129534	6.79	820845	9.76

IS1 = Bromochloromethane
IS2 = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: TOY SAS No.: _____ SDG No.: TOY130

Lab File ID (Standard): 10\H0181.D Date Analyzed: 12/09/10

EPA Sample No.(VSTD050##): VSTD250NG Time Analyzed: 19:41

Instrument ID: HP5973-2 Heated Purge: (Y/N) Y

GC Column: Rtx-624 ID: .18 (mm)

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 (CBZ) AREA #	RT #
	12 HOUR STD	167387	5.57	1172551	6.79	857453	9.76
	UPPER LIMIT	334774	6.07	2345102	7.29	1714906	10.26
	LOWER LIMIT	83694	5.07	586276	6.29	428727	9.26
	EPA SAMPLE						
01	VBLK120910	169472	5.57	1173201	6.79	851681	9.76
02	D1.B	163744	5.58	1154564	6.79	837258	9.76
03	U1.B	155082	5.57	1104831	6.79	803163	9.76
04	U1.F	166172	5.59	1181847	6.79	861150	9.76
05	D1.F	168220	5.57	1186752	6.79	871459	9.76

IS1 = Bromochloromethane
IS2 = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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APPENDIX D

FIELD DATA FORMS

AMBIENT AIR SAMPLING DATA SHEET

Project: TOBOBL10-4 | Date: 11/29/10
Project Site TOBOBSWDC | Operators: KJS, BA, JKB, JB, VV
General Weather Conditions: Fair, Winds SW @ ~5mph

Sample ID: TOBOBL10-4: U1 | Sample Location: 15th Hole Fairway
Pump ID: R8 | Nominal Flow Rate: 0.25 LPM
Sampler ID {R- 8 } | Nominal Sample Volume: 360 liters

Initial Ambient VOC Conc. (ppm): 0.0
Leak Check: ok
Sampling Start Time: 12:53
Initial Rotameter Reading (Bottom of the S.S. Ball): 60
Initial Pressure Drop Across Traps: 7
Initial Max/Min Temperature Inside Cooler: 60/60

Rotameter Reading	Total Elapse Time	Local Time
60	3	1256
58	84	1417
55	~~[illegible]~~ 204	~~[illegible]~~ 1617
60	205	1618
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~
60	469	2045

Rotameter Reading	Total Elapse Time	Local Time
60	129	102
61	1054	626
60	1290	~~[illegible]~~ 10:21
60	1429	12:42

Final Leak Check: ok
Sample Stop Time: 12:53
Final Rotameter Reading: 60
Total Elapse Time: 1440
Final Ambient VOC Conc. (ppm): 0.3
Final Pressure Drop Across Traps: 9
Final Max/Min Temperature Inside Cooler: ~~[illegible]~~ 62/26

Comments: .f = 26A
.b= 26B

AMBIENT AIR SAMPLING DATA SHEET

Project: TOBOBL10-4 | Date: 11/29/10
Project Site TOBOBSWDC | Operators: KJS, BA, JKB, JB, VV
General Weather Conditions: Fair, Winds SW @ 25 mph

Sample ID: TOBOBL10-4: U2 | Sample Location: 15th Hole Fairway
Pump ID: R9 | Nominal Flow Rate: 0.25 LPM
Sampler ID {R- 9 } | Nominal Sample Volume: 360 liters

Initial Ambient VOC Conc. (ppm): 0.0
Leak Check: ok
Sampling Start Time: 12:54
Initial Rotameter Reading (Bottom of the S.S. Ball): 60
Initial Pressure Drop Across Traps: 7
Initial Max/Min Temperature Inside Cooler: 70/68

Rotameter Reading	Total Elapse Time	Local Time
60	3	1257
59	83	1417
58	205	1618
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~
60	469	2045
60	721	102

Rotameter Reading	Total Elapse Time	Local Time
0	946	626
60	947	627
0	959	844
60	960	845
0	969	10:21
60	970	10:22
0	976	12:41
60	977	12:42

changed Battery

Final Leak Check: ok
Sample Stop Time: 12:54
Final Rotameter Reading: 60
Total Elapse Time: 983
Final Ambient VOC Conc. (ppm): 0.3
Final Pressure Drop Across Traps: 8
Final Max/Min Temperature Inside Cooler: 70

Comments: .f = 28A
.b= 28B

Loose Screw - adjusted pump @ 10:23

AMBIENT AIR SAMPLING DATA SHEET

Project: TOBOBL10-4 | Date: 11/29/10
Project Site TOBOBSWDC | Operators: KJS, BA, JKB, JB, VN
General Weather Conditions: 50° Sun

Sample ID: TOBOBL10-4: D1 | Sample Location: 200' East of Hail Rd, Northern edge of fill
Pump ID: R1 | Nominal Flow Rate: 0.25 LPM
Sampler ID {R- | } | Nominal Sample Volume: 360 liters

Initial Ambient VOC Conc. (ppm): 0
Leak Check: OK
Sampling Start Time: 12:22
Initial Rotameter Reading (Bottom of the S.S. Ball): 59
Initial Pressure Drop Across Traps: 6
Initial Max/Min Temperature Inside Cooler:

Rotameter Reading	Total Elapse Time	Local Time
62	2	12:24
100	108	1409
59	230	1411
72	309	2053
60	510	2054
56	766	107
60	767	108

Rotameter Reading	Total Elapse Time	Local Time
60	1071	606
59	1328	10:29
59	1437	12:19

Final Leak Check: ok
Sample Stop Time: 12:22
Final Rotameter Reading: 59
Total Elapse Time: 1440
Final Ambient VOC Conc. (ppm): 0.7
Final Pressure Drop Across Traps: 0.7
Final Max/Min Temperature Inside Cooler: ~~[illegible]~~ 80/31

Comments: .f = 16A
.b= 16B

AMBIENT AIR SAMPLING DATA SHEET

Project: TOBOBL10-4 | Date: 11/29/10
Project Site TOBOBSWDC | Operators: KJS, BA, JKB, JB, ~~XX~~
General Weather Conditions: 50° Sun

Sample ID: TOBOBL10-4: D2 | Sample Location: 200' E of Hand Rd, Northern edge of fill
Pump ID: R2 | Nominal Flow Rate: 0.25 LPM
Sampler ID {R- 2 } | Nominal Sample Volume: 360 liters

Initial Ambient VOC Conc. (ppm): 0
Leak Check: OK
Sampling Start Time: 10:22
Initial Rotameter Reading (Bottom of the S.S. Ball): 60
Initial Pressure Drop Across Traps: 6
Initial Max/Min Temperature Inside Cooler:

Rotameter Reading	Total Elapse Time	Local Time
61	2	10:24
100	108	1409
100	231	1412
88	510	2054
60	511	2055
35	707	108
61	708	109

Rotameter Reading	Total Elapse Time	Local Time
64	1070	605
55	1329	10:29
63	1330	10:30
63	1437	12:19

Final Leak Check: ok
Sample Stop Time: 12:22
Final Rotameter Reading: 63
Total Elapse Time: 1440
Final Ambient VOC Conc. (ppm): ~~0.0~~ 1.7
Final Pressure Drop Across Traps: 7
Final Max/Min Temperature Inside Cooler: ~~70/22~~ 71/29

Comments: .f = 4A
.b= 4B

AMBIENT AIR SAMPLING DATA SHEET

Project: TOBOBL10-4 | Date: 11/29/10
Project Site TOBOBSWDC | Operators: KJS, BA, JKB, JB, VV
General Weather Conditions: 50° Sun

Sample ID: TOBOBL10-4: D3 | Sample Location: Southern edge of landfill, N of yard waste area
Pump ID: R10 | Nominal Flow Rate: 0.25 LPM
Sampler ID {R- 10} | Nominal Sample Volume: 360 liters

Initial Ambient VOC Conc. (ppm): 0
Leak Check: OK
Sampling Start Time: 12:31
Initial Rotameter Reading (Bottom of the S.S. Ball): 47
Initial Pressure Drop Across Traps: 46
Initial Max/Min Temperature Inside Cooler:

Rotameter Reading	Total Elapse Time	Local Time
46	2	12:33
46	89	14:00
43	218	16:08
45	505	20:59
45	762	112
45	1066	615
45	1322	10:31

Rotameter Reading	Total Elapse Time	Local Time
45	1435	12:25

Final Leak Check:
Sample Stop Time: 12:31
Final Rotameter Reading: 45
Total Elapse Time: 1440
Final Ambient VOC Conc. (ppm): 1.8
Final Pressure Drop Across Traps: 41
Final Max/Min Temperature Inside Cooler: 85/33

Comments: .f = 25A
.b= 25B

43 L/M pump set at!

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date Nov 29, 2010

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions FMR 80s

SAMPLE ID TOBOBL10-4 SAMPLER ID (R-4)

PUMP ID R4 SAMPLE LOCATION F-1

WELL ID F-1 WELL DEPTH 30' or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK AOK PID ID /

INITIAL AMBIENT VOC READING — INITIAL WELL VOC READING —

INITIAL INLET LINE VOC READING — SAMPLE START TIME 1328

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 120

FINAL AMBIENT VOC READING — FINAL WELL VOC READING —

SAMPLE STOP TIME 1338 DURATION 10 min

FINAL ROTAMETER READING 120 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK AOK

Comments: FRONT TRAP ID: 24A

BACK TRAP ID: 24B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date Nov 29. 10

Invesitgators (RJS), BA, JKB, JB, VV

General Weather Conditions FMC SSW-5

SAMPLE ID TOBOBL10-4 SAMPLER ID (R-4)

PUMP ID R4 SAMPLE LOCATION M2

WELL ID M2 WELL DEPTH (30") or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK AOK PID ID —

INITIAL AMBIENT VOC READING — INITIAL WELL VOC READING —

INITIAL INLET LINE VOC READING — SAMPLE START TIME 1348

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 120

FINAL AMBIENT VOC READING — FINAL WELL VOC READING —

SAMPLE STOP TIME 1358 DURATION 10 min

FINAL ROTAMETER READING 120 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK AOK

Comments: FRONT TRAP ID: 15A

BACK TRAP ID: 15B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date Nov 29, 10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions FAIR 50s

SAMPLE ID TOBOBL10-4 SAMPLER ID (R-4)

PUMP ID R-4 SAMPLE LOCATION M-4

WELL ID M-4 WELL DEPTH (30") or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK AOK PID ID -

INITIAL AMBIENT VOC READING - INITIAL WELL VOC READING -

INITIAL INLET LINE VOC READING - SAMPLE START TIME 1405

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 120

FINAL AMBIENT VOC READING - FINAL WELL VOC READING -

SAMPLE STOP TIME 1415 DURATION 10 min

FINAL ROTAMETER READING 120 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK AOK

Comments: FRONT TRAP ID: 2A

BACK TRAP ID: 2B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date Nov 29, 2010

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions FAIR SSW 6

SAMPLE ID TOBOBL10-4 SAMPLER ID (R - 4)

PUMP ID R-4 SAMPLE LOCATION M-5

WELL ID M-5 WELL DEPTH (30") or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK AOK PID ID –

INITIAL AMBIENT VOC READING – INITIAL WELL VOC READING –

INITIAL INLET LINE VOC READING – SAMPLE START TIME 1437

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 120

FINAL AMBIENT VOC READING _____ FINAL WELL VOC READING _____

SAMPLE STOP TIME 1447 DURATION 10 min

FINAL ROTAMETER READING 120 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK AOK

Comments: FRONT TRAP ID: 01A

BACK TRAP ID: 01B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date Nov 29. 10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions FAIR 50's

SAMPLE ID TOBOBL10-4 SAMPLER ID (R - 4)

PUMP ID R4 SAMPLE LOCATION M6

WELL ID M6 WELL DEPTH 30' or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK AOK PID ID –

INITIAL AMBIENT VOC READING – INITIAL WELL VOC READING –

INITIAL INLET LINE VOC READING – SAMPLE START TIME 1419

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 120

FINAL AMBIENT VOC READING – FINAL WELL VOC READING –

SAMPLE STOP TIME 1429 DURATION 10 min

FINAL ROTAMETER READING 120 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK AOK

Comments: FRONT TRAP ID: 17A

BACK TRAP ID: 17B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date 11/29/10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Fair, SW-SE winds ~ 5-10 mph, ~ 48° F

SAMPLE ID TOBOBL10-4 SAMPLER ID (R - 4)

PUMP ID 34 SAMPLE LOCATION M9 cluster

WELL ID M9 (10) WELL DEPTH 30" or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK _____ PID ID —

INITIAL AMBIENT VOC READING — INITIAL WELL VOC READING —

INITIAL INLET LINE VOC READING — SAMPLE START TIME 15:01

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 120

FINAL AMBIENT VOC READING — FINAL WELL VOC READING —

SAMPLE STOP TIME 15:11 DURATION 10 MINS

FINAL ROTAMETER READING _____ BOTTOM OF THE S.S BALL

FINAL LEAK CHECK _____

Comments: FRONT TRAP ID: 8A

BACK TRAP ID: 8B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date 11/29/10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Fair Clear, SW-SE Winds ~5-10mph, ~48°F

SAMPLE ID TOBOBL10-4 SAMPLER ID (R-4)

PUMP ID R4 SAMPLE LOCATION M9 cluster

WELL ID M9(20) WELL DEPTH 30" or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK ok PID ID —

INITIAL AMBIENT VOC READING — INITIAL WELL VOC READING —

INITIAL INLET LINE VOC READING — SAMPLE START TIME 15:15

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 120

FINAL AMBIENT VOC READING — FINAL WELL VOC READING —

SAMPLE STOP TIME 15:25 DURATION 10 mins

FINAL ROTAMETER READING 120 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK ok

Comments: FRONT TRAP ID: 6A

BACK TRAP ID: 6B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date 11/29/10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Fair, SW-SE winds ~5 mph, ~48°F

SAMPLE ID TOBOBL10-4 SAMPLER ID (R-4)

PUMP ID R4 SAMPLE LOCATION M9 cluster

WELL ID M9(30) WELL DEPTH 30" or 10', 20', 30' or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK ok PID ID –

INITIAL AMBIENT VOC READING – INITIAL WELL VOC READING –

INITIAL INLET LINE VOC READING – SAMPLE START TIME 15:30

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 120

FINAL AMBIENT VOC READING – FINAL WELL VOC READING –

SAMPLE STOP TIME 15:40 DURATION 10 MINS

FINAL ROTAMETER READING 120 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK ok

Comments: FRONT TRAP ID: 13A

BACK TRAP ID: 13B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date 11/29/10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Fair, SW-SE winds ~5 mph, ~48°F

SAMPLE ID TOBOBL10-4 SAMPLER ID (R-4)

PUMP ID R4 SAMPLE LOCATION M9 cluster

WELL ID M9 (40) WELL DEPTH 30" or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK _____ PID ID _____

INITIAL AMBIENT VOC READING — INITIAL WELL VOC READING —

INITIAL INLET LINE VOC READING — SAMPLE START TIME 1544

INITIAL ROTAMETER READING 119 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 119

FINAL AMBIENT VOC READING — FINAL WELL VOC READING —

SAMPLE STOP TIME 1554 DURATION 10 mins

FINAL ROTAMETER READING 120 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK ok

Comments: FRONT TRAP ID: 20A

BACK TRAP ID: 20B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date Nov 29, 2010

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions FAIR 50s

SAMPLE ID TOBOBL10-4 SAMPLER ID (R-4)

PUMP ID R4 SAMPLE LOCATION M-13

WELL ID M-13 WELL DEPTH 30" or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK OK PID ID —

INITIAL AMBIENT VOC READING — INITIAL WELL VOC READING —

INITIAL INLET LINE VOC READING — SAMPLE START TIME 16:10

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 120

FINAL AMBIENT VOC READING — FINAL WELL VOC READING —

SAMPLE STOP TIME 16:20 DURATION 10 min

FINAL ROTAMETER READING _____ BOTTOM OF THE S.S BALL

FINAL LEAK CHECK A

Comments: FRONT TRAP ID: 11A

BACK TRAP ID: 11B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date 11/29/10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions 39° Cool

SAMPLE ID TOBOBL10-4 M16 SAMPLER ID (R - 3

PUMP ID 3 SAMPLE LOCATION M16

WELL ID M16 WELL DEPTH 30" or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK OK PID ID

INITIAL AMBIENT VOC READING 0 INITIAL WELL VOC READING 8.2

INITIAL INLET LINE VOC READING SAMPLE START TIME 16:32

INITIAL ROTAMETER READING 125 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 126

FINAL AMBIENT VOC READING 0 FINAL WELL VOC READING 6.0

SAMPLE STOP TIME 16:42 DURATION

FINAL ROTAMETER READING 120 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK OK

Comments: FRONT TRAP ID: 7A

BACK TRAP ID: 7B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date 11/29/10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Fair & cool, temp ~48°F, winds S 5-10 mph

SAMPLE ID TOBOBL10-4 M22 SAMPLER ID (R-3)

PUMP ID 3 SAMPLE LOCATION M22

WELL ID M22 WELL DEPTH 30" or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK O/C PID ID No. 1

INITIAL AMBIENT VOC READING 0 INITIAL WELL VOC READING 0

INITIAL INLET LINE VOC READING _____ SAMPLE START TIME 1538

INITIAL ROTAMETER READING 126 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 126

FINAL AMBIENT VOC READING 0 FINAL WELL VOC READING 0.5

SAMPLE STOP TIME 1548 DURATION 10 min

FINAL ROTAMETER READING 126 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK O/C

Comments: FRONT TRAP ID: 18A

BACK TRAP ID: 18B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date 11/29/10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Fair + cool, temp ~ 48°F, winds S 5-10 mph

SAMPLE ID TOBOBL10-4 M28 SAMPLER ID (R - 3

PUMP ID 3 SAMPLE LOCATION M28

WELL ID M28 WELL DEPTH 30' or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK O/C PID ID

INITIAL AMBIENT VOC READING 0 INITIAL WELL VOC READING 0.3

INITIAL INLET LINE VOC READING — SAMPLE START TIME 15:16

INITIAL ROTAMETER READING 125 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 125

FINAL AMBIENT VOC READING 0 FINAL WELL VOC READING 0.1

SAMPLE STOP TIME 15:26 DURATION 10 min

FINAL ROTAMETER READING 125 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK O/C

Comments: FRONT TRAP ID: 22A

BACK TRAP ID: 22B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date 11/29/10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Fair & cool, temp = 50°F, winds S 5-10 mph

SAMPLE ID TOBOBL10-4 M31 SAMPLER ID (R - 3)

PUMP ID 3 SAMPLE LOCATION M31

WELL ID M31 WELL DEPTH 30" or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK OK PID ID No. 1

INITIAL AMBIENT VOC READING 0 INITIAL WELL VOC READING 0.5

INITIAL INLET LINE VOC READING — SAMPLE START TIME 1451

INITIAL ROTAMETER READING 126 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 126

FINAL AMBIENT VOC READING 0 FINAL WELL VOC READING 0

SAMPLE STOP TIME 1501 DURATION 10 min

FINAL ROTAMETER READING 126 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK OK

Comments: FRONT TRAP ID: 21A

BACK TRAP ID: 21B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date 11/29/10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Fair & cool, temp = 50°F, winds S 5-10 mph

SAMPLE ID TOBOBL10-4 M34 SAMPLER ID (R - 3)

PUMP ID 3 SAMPLE LOCATION M34

WELL ID M34 WELL DEPTH 30" or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK O/K PID ID No. 1

INITIAL AMBIENT VOC READING 0 INITIAL WELL VOC READING 1.5

INITIAL INLET LINE VOC READING — SAMPLE START TIME 1333

INITIAL ROTAMETER READING 125 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 125

FINAL AMBIENT VOC READING 0 FINAL WELL VOC READING 0.8

SAMPLE STOP TIME 1343 DURATION 10 min

FINAL ROTAMETER READING 125 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK O/K

Comments: FRONT TRAP ID: 3A

BACK TRAP ID: 3B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date 11/29/10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Fair & cool, temp = 50°F, winds S 5-10 mph

SAMPLE ID TOBOBL10-4/M37 SAMPLER ID (R - 3)

PUMP ID 3 SAMPLE LOCATION M37

WELL ID M37 WELL DEPTH 30" or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK OK PID ID No. 1

INITIAL AMBIENT VOC READING 0.0 INITIAL WELL VOC READING ~~0.6~~ 0.1

INITIAL INLET LINE VOC READING — SAMPLE START TIME 13:11

INITIAL ROTAMETER READING 127 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 126

FINAL AMBIENT VOC READING 0 FINAL WELL VOC READING 0.1

SAMPLE STOP TIME 13:21 DURATION 10 min

FINAL ROTAMETER READING 126 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK OK

Comments: FRONT TRAP ID: 23A

BACK TRAP ID: 23B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date 11/29/10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions 46° Cool

SAMPLE ID TOBOBL10-4 M39 SAMPLER ID (R-3)

PUMP ID B SAMPLE LOCATION M39

WELL ID M39 WELL DEPTH 30" or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK ok PID ID

INITIAL AMBIENT VOC READING 0 INITIAL WELL VOC READING 0.7

INITIAL INLET LINE VOC READING — SAMPLE START TIME 15:58

INITIAL ROTAMETER READING 125 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 124

FINAL AMBIENT VOC READING 0 FINAL WELL VOC READING 1.0

SAMPLE STOP TIME 16:13 DURATION 15 ~~10~~ min

FINAL ROTAMETER READING 124 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK ~~OK~~ - no sound @ 10 min, run for another 5 min

Comments: FRONT TRAP ID: 19A

BACK TRAP ID: 19B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date 11/29/10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Fair, SW-SE winds ~5mph, ~48°F

SAMPLE ID TOBOBL10-4 SAMPLER ID (R -)

PUMP ID SAMPLE LOCATION M9 cluster

WELL ID WELL DEPTH 30" or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK PID ID

INITIAL AMBIENT VOC READING INITIAL WELL VOC READING

INITIAL INLET LINE VOC READING SAMPLE START TIME

INITIAL ROTAMETER READING BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING

FINAL AMBIENT VOC READING FINAL WELL VOC READING

SAMPLE STOP TIME DURATION

FINAL ROTAMETER READING BOTTOM OF THE S.S BALL

FINAL LEAK CHECK

Comments: FRONT TRAP ID: 9A

BACK TRAP ID: 9B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL10-4 Location TOBOBSWDC Date 11/29/10

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions 46° Cold

SAMPLE ID TOBOBL10-4 FB2 SAMPLER ID (R -)

PUMP ID SAMPLE LOCATION 139

WELL ID — WELL DEPTH 30" or 10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK PID ID

INITIAL AMBIENT VOC READING INITIAL WELL VOC READING

INITIAL INLET LINE VOC READING SAMPLE START TIME 16:02

INITIAL ROTAMETER READING BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING

FB2

FINAL AMBIENT VOC READING FINAL WELL VOC READING

SAMPLE STOP TIME DURATION

FINAL ROTAMETER READING BOTTOM OF THE S.S BALL

FINAL LEAK CHECK

FB2

Comments: FRONT TRAP ID:

BACK TRAP ID:

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

AMBIENT AIR SAMPLING DATA SHEET

Project: TOBOBL10-4 | Date: 11/29/10
Project Site TOBOBSWDC | Operators: KJS, BA, JKB, JB, VV
General Weather Conditions:

Sample ID: TOBOBL10-4: FB3 | Sample Location: RTP OFFICE, WESTBURY, NY
Pump ID: | Nominal Flow Rate: 0.25 LPM
Sampler ID {R- } | Nominal Sample Volume: 360 liters

Initial Ambient VOC Conc. (ppm): —
Leak Check: —
Sampling Start Time: 10:56
Initial Rotameter Reading (Bottom of the S.S. Ball): —
Initial Pressure Drop Across Traps: —
Initial Max/Min Temperature Inside Cooler: —

Rotameter Reading	Total Elapse Time	Local Time

Rotameter Reading	Total Elapse Time	Local Time

Final Leak Check: —
Sample Stop Time: 10:57
Final Rotameter Reading: —
Total Elapse Time: —
Final Ambient VOC Conc. (ppm): —
Final Pressure Drop Across Traps: —
Final Max/Min Temperature Inside Cooler: —

Comments: .f = 27A
.b= 27B

PRESSURE WELL READING DATA SHEET

Project ID: TOBOBL10-4

Project Site: TOBOBSWDC

Date: Nov 30, 2010

General Weather Condition: Cloudy, SE @ 3-5 mph, ~ 50°F

Equipment ID: Dwyer 10" inclined manometer

Operators: KJS, BA, JKB, JB, VV

Well ID	Pressure Well Location	Color Code	Time	Reading
PW1	NW corner of landfill	blue	1037	0.00
		green	1037	-0.05
		blue	1038	0.00
		green	1038	-0.05
Well ID	**Pressure Well Location**	**Color Code**	**Time**	**Reading**
PW2	SE corner of landfill	blue	1051	0.00
		green	1051	-0.07
		blue	1052	0.00
		green	1052	-0.08
Well ID	**Pressure Well Location**	**Color Code**	**Time**	**Reading**
PW3	FTC	blue	1044	0.00
		green	1044	-0.35
		blue	1045	0.00
		green	1045	-0.35
Well ID	**Pressure Well Location**	**Color Code**	**Time**	**Reading**

Comments: Retest, Blower was not operating during previous data collection

BLUE (Short) = 10' GREEN (Long) = 20'

PRESSURE WELL READING DATA SHEET

Project ID: TOBOBL10-4

Project Site: TOBOBSWDC

Date: Nov 30, 2010

General Weather Condition: Cldy SE@ 2-5

Equipment ID: Dwyer 10" inclined manometer

Operators: KJS, BA, JKB, JB, VV

Well ID	Pressure Well Location	Color Code	Time	Reading
PW1		blue	805	0
	NW corner of landfill	green	805	0
		blue	806	0
		green	806	0
Well ID	**Pressure Well Location**	**Color Code**	**Time**	**Reading**
PW2		blue	759	0
	SE corner of landfill	green	759	-0.01
		blue	800	0
		green	800	-0.01
Well ID	**Pressure Well Location**	**Color Code**	**Time**	**Reading**
PW3		blue	749	+0.02
	FTC	green	749	+0.02
		blue	750	+0.02
		green	750	+0.02
Well ID	**Pressure Well Location**	**Color Code**	**Time**	**Reading**

Comments: Need to ck if blower is operating! - was off, re tested @ 10:37.
See other sheet for most recent test

BLUE (Short) = 10' GREEN (Long) = 20'

METEOROLOGICAL EQUIPMENT SITING DATA SHEET

Project: TDB - 4th Q. AIR/SOIL GAS TEST

Project Site: OBSWDC.

Operators: KJS, BA, VV, JB

Instrument No.1 (Wind Mark III)	Instrument No.2 (All-In-One)
Location: Upwind 15th Fairway	**Location:** TOP OF FILL
Initial Battery Voltage: 13.00	**Initial Battery Voltage:** 12.89
Wind Dir. Reference: Compass N.	**Wind Dir. Reference:** Compass N
True WD = Measured WD +/- ( ) =	**True WD = Measured WD +/- ( ) =**
Date & Julian Day to Set Up:	**Date & Julian Day to Set Up:**
Start Time (Local): 1230	**Start Time (Local):** 1200
Date & Julian Day to Take Down:	**Date & Julian Day to Take Down:**
Stop Time (Local):	**Stop Time (Local):**
Remarks:	**Remarks:**

APPENDIX E

EQUIPMENT CALIBRATIONS

ROTAMETER ONE : R1

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**11/18/2010**
Pump I.D.:	**625226**	Time (EDT):	**9:34**
Rotameter R- ?:	**1**	Barometric Pressure (in. Hg):	**30.05**
PRE- or POST- ?	PRE	Temperature (deg. F):	**72.9**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	40	**50**	**60**	**70**	**80**		
	Sampling Medium						
T-T/C FOR LOW FLOW WITH SPLITTER BOTTOM OF SS BALL							
	Actual Liters Per Minute, ALPM						
1	**0.138**	**0.197**	**0.267**	**0.332**	**0.406**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1380	0.1970	0.2670	0.3320	0.4060	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1357	0.1937	0.2625	0.3264	0.3992	#DIV/0!	#DIV/0!

REMARKS:

Ta °C=	23
P_v a=	0.83
std Press in. Hg	**29.92**
Tstd °C =	**25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**12/7/2010**
Pump I.D.:	**625226**	Time (EDT):	**9:52**
Rotameter R- ?:	**1**	Barometric Pressure (in. Hg):	**29.52**
PRE- or POST- ?	POST	Temperature (deg. F):	**68.6**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	40	**50**	**60**	**70**	**80**		
	Sampling Medium						
T-T/C WITH FLOW SPLITTER BOTTOM OF SS BALL							
	Actual Liters Per Minute, ALPM						
1	**0.139**	**0.197**	**0.266**	**0.338**	**0.403**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1390	0.1970	0.2660	0.3380	0.4030	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1362	0.1931	0.2607	0.3312	0.3949	#DIV/0!	#DIV/0!

REMARKS:

Ta °C=	20
P_v a=	0.69
std Press in. Hg	29.92
Tstd °C =	25

ACCURACY CHECK BETWEEN CALIBRATIONS ACCORDING TO STANDARD FLOWS USING PRE- AS REFERENCE

POINT #:	POINT 1	POINT 2	POINT 3	POINT 4	POINT 5	POINT 6	POINT 7
RR Reading:	40	50	60	70	80	0	0
ACCURACY:	0.368	-0.31	-0.686	1.471	-1.077	#DIV/0!	#DIV/0!
PRE Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
POST Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

ROTAMETER TWO : R2

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**11/18/2010**
Pump I.D.:	**625232**	Time (EDT):	**9:49**
Rotameter R- ?:	**2**	Barometric Pressure (in. Hg):	**30.05**
PRE- or POST- ?	PRE	Temperature (deg. F):	**74.7**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	40	**50**	**60**	**70**	**80**		
Sampling Medium							
T-T/C WITH FLOW SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1	**0.134**	**0.193**	**0.265**	**0.329**	**0.393**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1340	0.1930	0.2650	0.3290	0.3930	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1311	0.1888	0.2592	0.3218	0.3844	#DIV/0!	#DIV/0!

REMARKS:

Ta ^oC=	24
P_v a=	0.88
std Press in. Hg	**29.92**
Tstd ^oC =	**25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**12/7/2010**
Pump I.D.:	**625232**	Time (EDT):	**10:14**
Rotameter R- ?:	**2**	Barometric Pressure (in. Hg):	**29.52**
PRE- or POST- ?	POST	Temperature (deg. F):	**68.7**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	40	**50**	**60**	**70**	**80**	**90**	
Sampling Medium							
T-T/C WITH FLOW SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1	**0.138**	**0.202**	**0.266**	**0.333**	**0.408**	**0.477**	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1380	0.2020	0.2660	0.3330	0.4080	0.4770	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1352	0.1980	0.2607	0.3263	0.3998	0.4675	#DIV/0!

REMARKS:

Ta ^oC=	20
P_v a=	0.69
std Press in. Hg	29.92
Tstd ^oC =	25

ACCURACY CHECK BETWEEN CALIBRATIONS ACCORDING TO STANDARD FLOWS USING PRE- AS REFERENCE

POINT #:	POINT 1	POINT 2	POINT 3	POINT 4	POINT 5	POINT 6	POINT 7
RR Reading:	40	50	60	70	80	0	0
ACCURACY:	3.127	4.873	0.579	1.398	4.006	#DIV/0!	#DIV/0!
PRE Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
POST Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

ROTAMETER THREE : R3

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**11/18/2010**
Pump I.D.:	**522574**	Time (EDT):	**12:23**
Rotameter R- ?:	**3**	Barometric Pressure (in. Hg):	**30.01**
PRE- or POST- ?	PRE	Temperature (deg. F):	**74.5**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
				110	**120**	**130**	**140**
Sampling Medium							
T-T/C FOR AMBIENT AIR BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1				**0.870**	**0.964**	**1.043**	**1.114**
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.8700	0.9640	1.0430	1.1140
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.8499	0.9417	1.0189	1.0882

REMARKS:

Ta ^{o}C=	24
P_v a=	0.88
std Press in. Hg	**29.92**
Tstd ^{o}C =	**25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**12/7/2010**
Pump I.D.:	**522574**	Time (EDT):	**10:38**
Rotameter R- ?:	**3**	Barometric Pressure (in. Hg):	**29.52**
PRE- or POST- ?	POST	Temperature (deg. F):	**69.9**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
				110	**120**	**130**	**140**
Sampling Medium							
T-T/C FOR AMBIENT AIR BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1				**0.872**	**0.971**	**1.041**	**1.123**
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.8720	0.9710	1.0410	1.1230
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.8505	0.9470	1.0153	1.0953

REMARKS:

Ta ^{o}C=	21
P_v a=	0.73
std Press in. Hg	29.92
Tstd ^{o}C =	25

ACCURACY CHECK BETWEEN CALIBRATIONS ACCORDING TO STANDARD FLOWS USING PRE- AS REFERENCE

POINT #:	POINT 1	POINT 2	POINT 3	POINT 4	POINT 5	POINT 6	POINT 7
RR Reading:	0	0	0	110	120	130	140
ACCURACY:	#DIV/0!	#DIV/0!	#DIV/0!	0.071	0.563	-0.353	0.652
PRE Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
POST Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

ROTAMETER FOUR : R4

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**11/18/2010**
Pump I.D.:	**545761**	Time (EDT):	**12:32**
Rotameter R- ?:	**4**	Barometric Pressure (in. Hg):	**30.01**
PRE- or POST- ?	PRE	Temperature (deg. F):	**74.6**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
				110	**120**	**130**	**140**
Sampling Medium							
T-T/C FOR AMBIENT AIR BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1				**0.926**	**1.014**	**1.089**	**1.167**
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.9260	1.0140	1.0890	1.1670
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.9046	0.9906	1.0638	1.1400

REMARKS:

Ta °C=	24
P_v a=	0.88
std Press in. Hg	**29.92**
Tstd °C =	**25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**12/7/2010**
Pump I.D.:	**545761**	Time (EDT):	**10:57**
Rotameter R- ?:	**4**	Barometric Pressure (in. Hg):	**29.52**
PRE- or POST- ?	POST	Temperature (deg. F):	**70.1**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
				110	**120**	**130**	**140**
Sampling Medium							
T-T/C FOR AMBIENT AIR BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1				**0.931**	**1.014**	**1.099**	**1.172**
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average Actual Liters Per Minute (ALPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.9310	1.0140	1.0990	1.1720
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.9080	0.9890	1.0719	1.1431

REMARKS:

Ta °C=	21
P_v a=	0.73
std Press in. Hg	29.92
Tstd °C =	25

ACCURACY CHECK BETWEEN CALIBRATIONS ACCORDING TO STANDARD FLOWS USING PRE- AS REFERENCE

POINT #:	POINT 1	POINT 2	POINT 3	POINT 4	POINT 5	POINT 6	POINT 7	
RR Reading:	0	0	0	110	120	130	140	
ACCURACY:	#DIV/0!	#DIV/0!	#DIV/0!	0.376	-0.162	0.761	0.272	
PRE Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
POST Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

ROTAMETER FIVE : R5

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	
Pump I.D.:	**625239**	Time (EDT):	
Rotameter R- ?:	**5**	Barometric Pressure (in. Hg):	
PRE- or POST- ?	PRE	Temperature (deg. F):	
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	40	**50**	**60**	**70**	**80**		
Sampling Medium							
T-T/C FOR LOW FLOW WITH SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

REMARKS:

Ta °C=	-18
P_v a=	#N/A
std Press in. Hg	**29.92**
Tstd °C =	**25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	
Pump I.D.:	**625239**	Time (EDT):	
Rotameter R- ?:	**5**	Barometric Pressure (in. Hg):	
PRE- or POST- ?	POST	Temperature (deg. F):	
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	40	**50**	**60**	**70**	**80**		
Sampling Medium							
T-T/C FOR AMBIENT AIR BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average Actual Liters Per Minute (ALPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

REMARKS:

Ta °C=	-18
P_v a=	#N/A
std Press in. Hg	29.92
Tstd °C =	25

ACCURACY CHECK BETWEEN CALIBRATIONS ACCORDING TO STANDARD FLOWS USING PRE- AS REFERENCE

POINT #:	POINT 1	POINT 2	POINT 3	POINT 4	POINT 5	POINT 6	POINT 7	
RR Reading:	40	50	60	70	80	0	0	
ACCURACY:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PRE Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
POST Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

ROTAMETER SIX : R6

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**11/18/2010**
Pump I.D.:	**545774**	Time (EDT):	**13:05**
Rotameter R- ?:	**6**	Barometric Pressure (in. Hg):	**30.01**
PRE- or POST- ?	PRE	Temperature (deg. F):	**75.1**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
				110	**120**	**130**	**140**
Sampling Medium							
T-T/C FOR LOW FLOW WITH SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1				**0.899**	**0.982**	**1.071**	**1.142**
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.8990	0.9820	1.0710	1.1420
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.8782	0.9593	1.0462	1.1156

REMARKS:
Ta °C= 24
P_v a= 0.88
std Press in. Hg **29.92**
Tstd °C = **25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**12/7/2010**
Pump I.D.:	**545774**	Time (EDT):	**11:17**
Rotameter R- ?:	**6**	Barometric Pressure (in. Hg):	**29.51**
PRE- or POST- ?	POST	Temperature (deg. F):	**70.6**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
			100	**110**	**120**	**130**	**140**
Sampling Medium							
T-T/C FOR LOW FLOW WITH SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1				**0.907**	**0.993**	**1.077**	**1.154**
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average Actual Liters Per Minute (ALPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.9070	0.9930	1.0770	1.1540
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.8843	0.9682	1.0501	1.1251

REMARKS:
Ta °C= 21
P_v a= 0.73
std Press in. Hg 29.92
Tstd °C = 25

ACCURACY CHECK BETWEEN CALIBRATIONS ACCORDING TO STANDARD FLOWS USING PRE- AS REFERENCE

POINT #:	POINT 1	POINT 2	POINT 3	POINT 4	POINT 5	POINT 6	POINT 7
RR Reading:	0	0	0	110	120	130	140
ACCURACY:	#DIV/0!	#DIV/0!	#DIV/0!	0.695	0.928	0.373	0.852
PRE Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
POST Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

ROTAMETER SEVEN : R7

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	
Pump I.D.:	**538819**	Time (EDT):	
Rotameter R- ?:	**7**	Barometric Pressure (in. Hg):	
PRE- or POST- ?	PRE	Temperature (deg. F):	
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	30	**40**	**50**	**60**	**70**		
Sampling Medium							
T-T/C FOR LOW FLOW WITH SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

REMARKS:	Ta ^{o}C=	-18
	P_v a=	#N/A
	std Press in. Hg	**29.92**
	Tstd ^{o}C =	**25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	
Pump I.D.:	**538819**	Time (EDT):	
Rotameter R- ?:	**7**	Barometric Pressure (in. Hg):	
PRE- or POST- ?	POST	Temperature (deg. F):	
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	30	**40**	**50**	**60**	**70**		
Sampling Medium							
T-T/C FOR LOW FLOW WITH SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average Actual Liters Per Minute (ALPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

REMARKS:	Ta ^{o}C=	-18
	P_v a=	#N/A
	std Press in. Hg	29.92
	Tstd ^{o}C =	25

ACCURACY CHECK BETWEEN CALIBRATIONS ACCORDING TO STANDARD FLOWS USING PRE- AS REFERENCE

POINT #:	POINT 1	POINT 2	POINT 3	POINT 4	POINT 5	POINT 6	POINT 7	
RR Reading:	30	40	50	60	70			
ACCURACY:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PRE Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
POST Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

ROTAMETER EIGHT : R8

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**11/18/2010**
Pump I.D.:	**625239**	Time (EDT):	**13:22**
Rotameter R- ?:	**8**	Barometric Pressure (in. Hg):	**29.99**
PRE- or POST- ?	PRE	Temperature (deg. F):	**74.6**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	40	**50**	**60**	**70**	**80**		
Sampling Medium							
T/T-C FOR LOW FLOW WITH SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1	**0.140**	**0.200**	**0.269**	**0.338**	**0.407**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1400	0.2000	0.2690	0.3380	0.4070	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1367	0.1952	0.2626	0.3300	0.3973	#DIV/0!	#DIV/0!

REMARKS:

Ta ^oC=	24
P_v a=	0.88
std Press in. Hg	**29.92**
Tstd ^oC =	**25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**12/7/2010**
Pump I.D.:	**625239**	Time (EDT):	**11:41**
Rotameter R- ?:	**8**	Barometric Pressure (in. Hg):	**29.51**
PRE- or POST- ?	POST	Temperature (deg. F):	**71.4**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	40	**50**	**60**	**70**	**80**		
Sampling Medium							
T/T-C FOR LOW FLOW WITH SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1	**0.143**	**0.203**	**0.273**	**0.338**			
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average Actual Liters Per Minute (ALPM)							
	0.1430	0.2030	0.2730	0.3380	#DIV/0!	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1387	0.1969	0.2648	0.3279	#DIV/0!	#DIV/0!	#DIV/0!

REMARKS:

Ta ^oC=	22
P_v a=	0.78
std Press in. Hg	29.92
Tstd ^oC =	25

ACCURACY CHECK BETWEEN CALIBRATIONS ACCORDING TO STANDARD FLOWS USING PRE- AS REFERENCE

POINT #:	POINT 1	POINT 2	POINT 3	POINT 4	POINT 5	POINT 6	POINT 7
RR Reading:	40	50	60	70	80	0	
ACCURACY:	1.463	0.871	0.838	-0.636	#DIV/0!	#DIV/0!	#DIV/0!
PRE Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
POST Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

ROTAMETER NINE : R9

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**11/18/2010**
Pump I.D.:	**625277**	Time (EDT):	**13:47**
Rotameter R- ?:	**9**	Barometric Pressure (in. Hg):	**29.99**
PRE- or POST- ?	PRE	Temperature (deg. F):	**73.7**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	40	**50**	**60**	**70**	**80**		
Sampling Medium							
T/T-C LOW FLOW WITH SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1	**0.139**	**0.196**	**0.264**	**0.331**	**0.398**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1390	0.1960	0.2640	0.3310	0.3980	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1364	0.1923	0.2590	0.3248	0.3905	#DIV/0!	#DIV/0!

REMARKS:

Ta ^oC=	23
P_v a=	0.83
std Press in. Hg	**29.92**
Tstd ^oC =	**25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**12/7/2010**
Pump I.D.:	**625277**	Time (EDT):	**13:02**
Rotameter R- ?:	**9**	Barometric Pressure (in. Hg):	**29.50**
PRE- or POST- ?	POST	Temperature (deg. F):	**73.2**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	40	**50**	**60**	**70**	**80**		
Sampling Medium							
T/T-C FOR LOW FLOW WITH SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1	**0.135**	**0.193**	**0.262**	**0.330**			
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average Actual Liters Per Minute (ALPM)							
	0.1350	0.1930	0.2620	0.3300	#DIV/0!	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1302	0.1862	0.2528	0.3183	#DIV/0!	#DIV/0!	#DIV/0!

REMARKS:

Ta ^oC=	23
P_v a=	0.83
std Press in. Hg	29.92
Tstd ^oC =	25

ACCURACY CHECK BETWEEN CALIBRATIONS ACCORDING TO STANDARD FLOWS USING PRE- AS REFERENCE

POINT #:	POINT 1	POINT 2	POINT 3	POINT 4	POINT 5	POINT 6	POINT 7
RR Reading:	40	50	60	70	80	0	
ACCURACY:	-4.545	-3.172	-2.394	-2.001	#DIV/0!	#DIV/0!	#DIV/0!
PRE Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
POST Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

ROTAMETER TEN : R10

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**11/18/2010**
Pump I.D.:	**545767**	Time (EDT):	**14:05**
Rotameter R- ?:	**10**	Barometric Pressure (in. Hg):	**29.99**
PRE- or POST- ?	PRE	Temperature (deg. F):	**73.7**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	30	**35**	**40**	**45**	**50**	**55**	
Sampling Medium							
T/T-C LOW FLOW WITH SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1	**0.155**	**0.188**	**0.233**	**0.278**	**0.329**	**0.381**	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1550	0.1880	0.2330	0.2780	0.3290	0.3810	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1521	0.1845	0.2286	0.2728	0.3228	0.3738	#DIV/0!

REMARKS	Ta oC=	23
	Pv a=	0.83
	std Press in. Hg	**29.92**
	Tstd oC =	**25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL10-4**	Date:	**12/7/2010**
Pump I.D.:	**545767**	Time (EDT):	**13:31**
Rotameter R- ?:	**10**	Barometric Pressure (in. Hg):	**29.50**
PRE- or POST- ?	POST	Temperature (deg. F):	**74.5**
Calibrator Model:	**DryCal**	Calibrator I.D.:	**101996**

Rotameter Reading (Bottom of the SS, R, B Ball)							
	30	**35**	**40**	**45**	**50**		
Sampling Medium							
T/T-C FOR LOW FLOW WITH SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1		**0.188**	**0.228**	**0.283**	**0.335**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average Actual Liters Per Minute (ALPM)							
	#DIV/0!	0.1880	0.2280	0.2830	0.3350	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	0.1804	0.2188	0.2716	0.3215	#DIV/0!	#DIV/0!

REMARKS	Ta oC=	24
	Pv a=	0.88
	std Press in. Hg	29.92
	Tstd oC =	25

ACCURACY CHECK BETWEEN CALIBRATIONS ACCORDING TO STANDARD FLOWS USING PRE- AS REFERENCE

POINT #:	POINT 1	POINT 2	POINT 3	POINT 4	POINT 5	POINT 6	POINT 7
RR Reading:	40	50	60	70	0	0	
ACCURACY:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
PRE Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
POST Precision:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

NVLAP Lab Code 200661

Bios

Driving a Higher Standard in Flow Measurement℠

Calibration Certificate

Certificate No.	44242	**Sold to:**	RTP Environmental Associates - Westbury
Product	DryCal DC-Lite Medium High		400 Post Ave Suite 105
Serial No.	101996		Westbury, NY 11590
Cal. Date	2/11/2010		USA

All calibrations are performed in accordance with ISO 17025 at Bios International Corporation, 10 Park Place, Butler, NJ, 07405, 800-663-4977, an ISO 17025:2005 – accredited laboratory through NVLAP. This report shall not be reproduced except in full without the written approval of the laboratory. Results only relate to the items calibrated. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

All units tested in accordance with Bios International Corporation test number PR05-2 or PR01-10 using high-purity bottled nitrogen or dry filtered laboratory air.

As Received Calibration Data

Technician David Strathearn

Lab. Pressure 760 mmHg
Lab. Temperature 22.5 °C

Instrument Reading	Lab Standard Reading	Deviation	Allowable Deviation	As Received
200.4ccm	200.19ccm	0.1%	1.00%	In Tolerance
5012ccm	4999.25ccm	0.26%	1.00%	In Tolerance
16990ccm	17024ccm	-0.2%	1.00%	In Tolerance

Bios International Standards Used

Description	Standard Serial Number	Calibration Date	Calibration Due Date
ML_500_10	113778	11/13/2009	11/13/2010
ML_500_44	113761	4/23/2009	4/23/2010

Bios

Driving a Higher Standard in Flow Measurement℠

As Shipped Calibration Data

Certificate No. 44242
Technician David Strathearn

Lab. Pressure 760 mmHg
Lab. Temperature 22.5 °C

Instrument Reading	Lab Standard Reading	Deviation	Allowable Deviation	As Shipped
200.8ccm	200.955ccm	-0.08%	1.00%	In Tolerance
5010ccm	5006.7ccm	0.07%	1.00%	In Tolerance
16980ccm	17016.5ccm	-0.21%	1.00%	In Tolerance

Bios International Standards Used

Description	Standard Serial Number	Calibration Date	Calibration Due Date
ML_500_10	113778	11/13/2009	11/13/2010
ML_500_44	113761	4/23/2009	4/23/2010

Calibration Notes

Bios is an ISO 17025-accredited metrology laboratory. Each Bios primary gas flow standard is dynamically verified by comparing it to one of our laboratory standards, which is a Proven DryCal® Technology volumetric piston prover of much higher accuracy (± 0.25% or better) but of similar operating principles. For this purpose, a flow generator of ±0.03% stability is used. Our laboratory standards are qualified by direct measurement of their dimensions (diameter, length and time) using NIST-traceable precision gauges and instruments, such as depth micrometers and laser micrometers. NIST numbers for these gauges and instruments are available upon request. Rigorous analyses of our laboratory standards' uncertainties have been performed, in accordance with The Guide to the Expression of Uncertainty in Measurement (the GUM), assuring their traceable accuracy.

Technician Notes:

Harvey Padden, President and Chief Metrologist

APPENDIX G

"Town of Oyster Bay, Old Bethpage Solid Waste Disposal Complex
Evaluation of Volatile Organic Compounds
in Ambient Air, Soil Gas and Soil Gas Pressure Readings
2010 Annual Summary Report"

RTP Environmental Associates, Inc.
March 2011

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

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

2010 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 2011

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

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

2010 Annual Summary

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TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

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

2010 Annual Summary

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TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

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

1.0 INTRODUCTION

The Town of Oyster Bay (the Town) has contracted RTP Environmental Associates, Inc. (RTP) to conduct a supplemental gas monitoring program of volatile organic compounds (VOCs) and soil gas pressures during 2010 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) Remedial Action Plan (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 2010 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 2010 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 (Figure 1.1). 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 Fire Service Academy (NCFSA) are located along the southern border of the OBSWDC; 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 possible 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.

N

0 300 600 1,200 Feet

FIGURE 1.1

OBSWDC AND SURROUNDING AREA MAP

TOWN OF OYSTER BAY LANDFILL
BETHPAGE, NEW YORK

ORTHOIMAGERY SOURCE:
NYSGIS Clearinghouse 2007

RTP Environmental Associates, Inc.
Westbury, New York

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 with portions beginning operation in 1981. 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 (6) 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. They are designed to contain gas migration and to maintain acceptable methane levels at the thermal oxidizer (TO). 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 of May 2008, the TO, as well as the perimeter gas collection system, were not completely operational; however, the perimeter collection system remains under some negative pressure as the blowers applying negative pressures to the collection system continue to operate. A perimeter system and landfill gas collection system assessment performed by Lockwood, Kessler & Bartlett, Inc. (LKB) found that the system had been damaged. Repairs to the landfill gas perimeter system were largely completed during 2010, which is most likely the reason for the increase negative pressure observed in soil gas pressure wells during quarterly testing this year. In response to the thermal oxidizer being offline, the NYSDEC has requested samples of the perimeter system vent be collected and analyzed for the same set of target compounds analyzed in this report. Those results of the perimeter vent tests will be reported in the 2010 Zero Gas Migration Report.

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 results recorded during the 2010 quarterly efforts likely reflect repairs made to the perimeter system in 2010.

The air emissions from the thermal oxidizer were originally tested on a quarterly basis, but the schedule was amended in 1998 to test on an annual basis. Since the TO was not operating, a stack test was not performed in 2010. Repairs to the TO and perimeter system have been discussed with the Town and the repairs are expected to be implemented in the near future.

2.0 ANALYSIS OF DATA

2.1 Analysis of the 2010 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. A schematic of the sampling train, 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 were scheduled during periods of steady or falling atmospheric pressure. These periods would coincide with the greatest potential for releases of VOCs from the landfill; however, a test will occasionally be performed during steady to rising atmospheric pressure conditions to test ambient concentrations during rising pressure when landfill emissions are expected to be lower. For 2010, three (3) of the four (4) quarterly tests were conducted during periods of falling atmospheric pressure. The pressure for the first quarter event fell 0.17 inches of mercury throughout the duration of the sampling period. The pressure for the second quarter event initially fell by 0.07 inches of mercury but then rose 0.13 inches of mercury for an overall rise of 0.06 inches of mercury throughout the duration of the test. The pressure for the third quarter event remained steady but ultimately fell by 0.03 inches of mercury throughout the duration of the test, and finally, the pressure for the fourth quarter event fell steadily 0.15 inches of mercury. Sampling for each quarterly test occurred over a consecutive 24-hour period.

Table 2.1 provides the months during which the quarterly test efforts for each year of the sampling

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
2006	March	June	September	November
2007	April	July	September	November
2008	March	May	October	December
2009	March	July	September	November
2010	March	July	October	November

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

program have been conducted. Monitoring for the 2010 sampling program, which is evaluated herein, occurred in March, July, October and November 2010.

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 program because of changing State requirements, analytical capabilities and continuing data review as related to the tentatively identified compounds (TICs) being detected. It was based on the most recently modified DAR-1 Annual and Short-term Guideline Concentrations (AGCs and SGCs) dated September 10, 2007 and was used for comparison in 2010 1st and 2nd quarterly sampling efforts, and the updated AGCs and SGCs dated October 18, 2010 were used for comparison in the 3rd and 4th quarter sampling events, as well as the annual average totals.

Several changes to the TCL and analytical procedures had been made for the 1997 program and these changes apply to the 2010 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 and reporting process. The combined isomer concentration is required for direct comparison to the New York State Department of Environmental Conservation (NYSDEC) de minimus guideline value. Furthermore, a practical quantitation limit (PQL) was introduced by the analytical laboratory, Holzmacher, McLendon & Murrell, P.C. (H2M), for several compounds as a result of lowering the minimum detection limit from 20 nanograms (ng) to five ng. The PQL represents the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. The analytical laboratory used for sample analysis, H2M, introduced a TIC minimum detection limit of 25 ng, (50 ng for benzaldehyde) which also can be applied to additional TICs when less than seven (7) are detected. Otherwise, the lowest mass loading of the top seven (7) additional TICs is considered to be the additional TIC minimum detection limit of a particular sample.

The NYSDEC provides both short-term (1-hour) guideline concentrations (SGC) and long-term annual average guideline concentration (AGC) values for most of the compounds being monitored. SGC values are significantly higher than AGC 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 had been used in previous quarterly and annual reports until 2000.

TABLE 2.2

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

2010 PROGRAM TARGET COMPOUND LIST
AND NYSDEC AMBIENT AIR GUIDELINE CONCENTRATIONS

CHEMICAL NAME	CAS NUMBER	AIRS CODE	24 HOUR SGC µg/m^3	W (SGC)	AGC µg/m^3	W (AGC)	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	30,000	H	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	---		70.0	D	M															
Bromoform	00075-25-2	4	---		0.91	E	M			H	I											
Bromomethane	00074-83-9	4	3,900	D	5.0	E	M			H	I											
2-Butanone	00078-93-3	4	13,000	D	5,000	E	M															
Carbon Disulfide	00075-15-0	6	6,200	D	700	E	M			H	I											
Carbon Tetrachloride	00056-23-5	4	1,900	D	0.17	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	---		700	A	M										R					
Dibromochloromethane	00124-48-1	4	---		0.10	d	M															
1,2-Dichlorobenzene (o)	00095-50-1	4	30,000	Z	200	H	M				I											
1,3-Dichlorobenzene (m)	00541-73-1	4	---		10	H	M															
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	U		H	I											
1,2-Dichloroethane	00107-06-2	4	---		0.038	E	M	U		H	I											
1,1-Dichloroethene	00075-35-4	4	---		70	D	M			H	I											
cis-1,2-Dichloroethene	00156-59-2	4	---		63	D	M															
trans-1,2-Dichloroethene	00156-60-5	4	----		63	D	M															
1,2-Dichloropropane	00078-87-5	4	----		4.0	E	M			H												
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	I											
2/4 Ethyltoluene (total)	611-14-3/622-96-8		----		0.10	d																
Freon 13	00075-72-9	4	9,000	A	5,000	A	L										R	R				
2-Hexanone	00591-78-6	4	4,000	Z	30	E																
Methylene Chloride	00075-09-2	6	14,000	D	2.1	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	Z	1,000	E	M			H	I											
1,1,2,2-Tetrachloroethane	00079-34-5	4	---		16	T	M			H	I											
Tetrachloroethene	00127-18-4	4	1,000	H	1.0	H	M	U		H	I											
Toluene	00108-88-3	4	37,000	D	5,000	E	L			H	I											
1,1,1-Trichloroethane	00071-55-6	6	9,000	E	5,000	E	L			H	I											
1,1,2-Trichloroethane	00079-00-5	4	---		1.40	D	M			H	I											
Trichloroethene	00079-01-6	4	14,000	Z	0.50	D	M	U		H	B											
Trichlorofluoromethane	00075-69-4	6	9,000	A	5,000	A	L								R	R						
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 Asphyxiant.
(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 recently revised October 2010 and are still current as of March 2011.

Revisions of the Air Guide-1 AGC/SGC values were released by the NYSDEC on July 12, 2000. These updated values were used in the quarterly and annual reports from 2001 through 2003. During the 2003 monitoring program, the designation of decane was changed from an additional TIC to a targeted TIC on the TCL. This change was completed in December 2003 and first became effective in the 2003 fourth quarter testing effort with an amendment in June 2004. Since that revision, the AGC value for decane changed from 0.1 to 200 $\mu g/m^3$, and was again revised to 700 $\mu g/m^3$ as per the revision in September 2007. The current NYSDEC air guideline concentrations were revised in October 2010 and are presented in this report for comparison to monitored values. AGC and SGC values for several compounds have changed during this latest revision in October 2010. Most notably, the bromodichloromethane AGC value was increased from 0.02 $\mu g/m^3$ to 70.0 $\mu g/m^3$. Also, the carbon tetrachloride AGC value was increased from 0.067 $\mu g/m^3$ to 0.17 $\mu g/m^3$. Four (4) TCL compounds continue to not have assigned AGC values, and as such, an Interim AGC value was assigned to these compounds using NYSDEC DAR-1 policy guidance. The compounds benzaldehyde, chloroethyl vinyl ether, dibromochloromethane and 2/4 ethyltoluene (total) have been assigned an Interim AGC value of 0.1 $\mu g/m^3$, which represents the DAR-1 Moderate Toxicity "de minimis" limit based on NYSDEC DAR-1 policy. According to this policy, when no exposure limits derived by NYSDEC, USEPA, New York State Department of Health (NYSDOH) or the American Conference of Governmental Industrial Hygienists (ACGIH) values are available and no analogies can be made, NYSDEC will assign a conservative de minimus limit as the AGC. As previously stated, any changes in guidelines were incorporated in all quarterly reports for this year, as well as this 2010 annual summary report. The quoted values represent NYSDEC guidelines as of March 2011.

The NYSDEC strongly emphasizes that the AGC's are guideline values only, developed for screening and toxicity ranking, and are not standards or absolute limits of acceptable risk. With these limitations in mind, the AGC's are used to relate the data recorded from the OBSWDC to a scale of toxicity. This is necessary because compounds are known to vary widely in toxicity and reporting only the concentrations of chemicals without any information as to their relative toxicity would be less informative.

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 are taken at an upwind location and three (3) samples are 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 2010 Ambient Air Quality Data

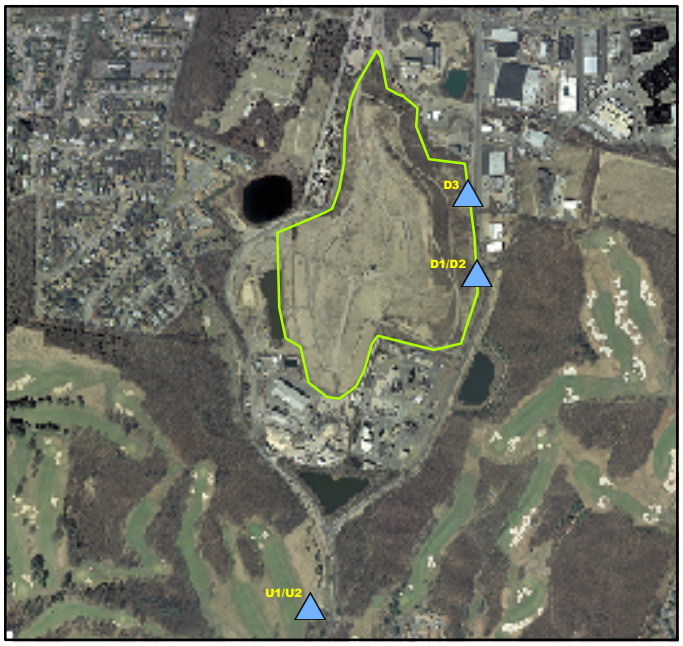
Ambient air quality levels were monitored for each 24-hour sampling period at three (3) sampling locations during the 2010 sampling events. Figure 2.1 provides the locations of the ambient air sampling sites during each quarterly test. Samplers were positioned at two (2) locations generally downwind 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. The EPA reference sampling method was modified to account for site conditions and monitoring requirements. The sampling locations specified in the Consent Decree were adjusted slightly to account for expected meteorological conditions during the 24-hour sampling period. Collocated samples were used for quality assurance and control precision checks. In this case, at the upwind location and one (1) downwind location, collocated samplers were positioned to provide duplicate samples for quality assurance/control purposes.

It is worth noting that during sampling events in 2010, significant thermal inversions occurred. The inversions occurred mostly during the overnight hours and were responsible for periods of light to calm winds that varied significantly, at times, in direction near the base of the landfill. In addition, drainage flows from areas of higher terrain to areas of lower terrain are common during inversions occurring over several consecutive hours. Some observed wind directions, particularly during the light wind speed period overnight, suggest a good potential for an influence from off-site sources on all samplers during the 24-hour testing periods. Since the horizontal distance between the two stations at times was approximately 3,500 feet and drainage flows were likely occurring, there is some potential for landfill emissions caught in drainage flows to impact the upwind station under such conditions.

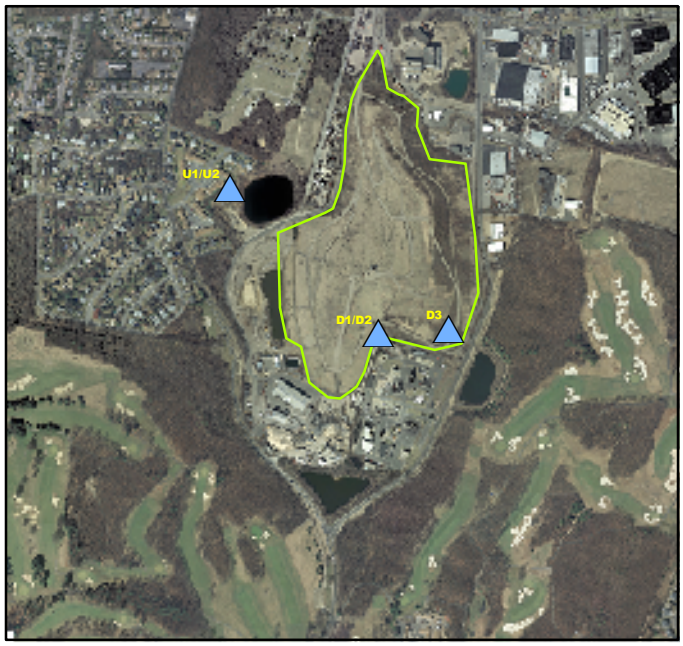
The adiabatic lapse rate (dry) would predict the temperature difference between the upwind and the atop meteorological stations to be roughly -1°F. During the first quarter test of 2010, the peak temperature difference was measured at +11.8 °F between the upwind and top of the landfill site and occurred during the early morning hours on March 18, 2010. During the second quarter test, the peak temperature difference was +6.3 °F between the upwind and top of the landfill sites and occurred twice, once at 2300 hours on July 1 and once at 0500 hours on July 2, 2010. During the third quarter test of 2010, the peak temperature difference was +3.8 °F between the upwind and top of the landfill site at midnight on October 19, 2010. Finally, during the fourth quarter test of 2010, the peak temperature difference was +7.4 °F between the upwind and top of the landfill sites at 1900 hours on November 29, 2010.

One (1) double Tenax cartridge and one (1) Tenax/Anasorb® cartridge combination were used for all

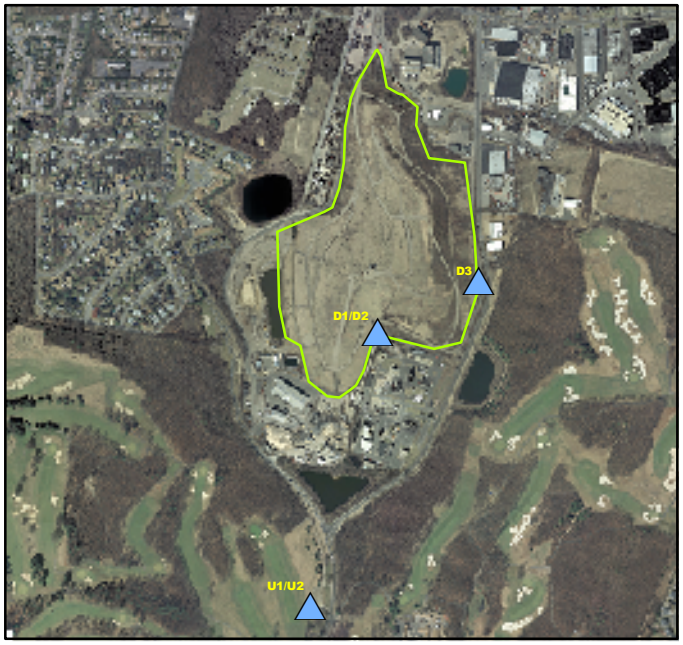
1st Quarter



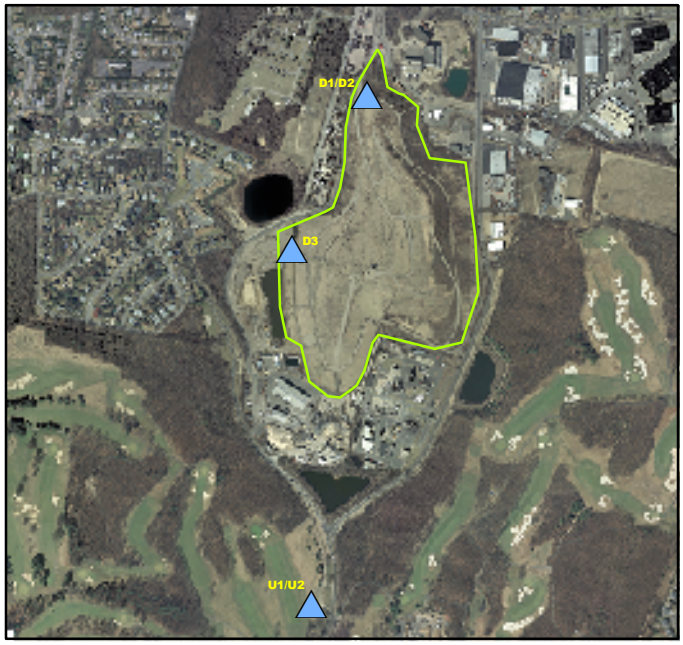
2nd Quarter



3rd Quarter



4th Quarter



Legend

Ambient Sample

Landfill Boundary

N

0 750 1,500 3,000 Feet

ORTHOIMAGERY SOURCE:
NYSGIS Clearinghouse 2007

RTP Environmental Associates, Inc.
Westbury, New York

FIGURE 2.1

AMBIENT AIR SAMPLING LOCATIONS FOR 2010 EFFORTS

TOWN OF OYSTER BAY LANDFILL
BETHPAGE, NEW YORK

samples (USEPA Reference Method 0030) for all four (4) quarterly tests of 2010. This approach was used in order to compare analytical results equally from all samples taken and to determine if compound breakthrough was occurring. Based on the results of the split samples, it does appear that some minor contaminant breakthrough may have occurred through the front (all Tenax) cartridges.

The ambient air sample results during the 2010 quarterly monitoring efforts were mostly consistent; however, some minor inconsistencies were noted. The ambient results during the fourth quarter test appeared to have some differences in collocated samplers, where compounds varied slightly. During the 2007 efforts, some of the split samples were suspect for compound breakthrough, and therefore, the sampling method was changed from U2, D2 and D3 being a double Tenax/Anasorb® tube configuration. Thus the sampling train reverted back to the normal configuration (Tenax/Tenax to Tenax/Anasorb®) in 2008.

During 2010, samplers D1, D2, U1 and U2 ran for the intended 1,440 minutes throughout three of the four sampling events. During the fourth quarter test, upwind sampler U2 ran continuously for 946 minutes where it stopped and was restarted at 0627 hours on November 30. It ran for an additional 12 minutes before failing again. At 0845 hours on November 30 the pump was discovered to be down again and the battery was changed. It was restarted, but only ran for an additional 10 minutes. The sampler was restarted at 1021 hours, but stopped after 7 minutes. It was restarted at 1241 hours and ran for the last 12 minutes of the sampling period for a total of 983 minutes (68.3% of the 24-hour sampling period). I was determined that a faulty battery connector was likely the cause of the pump failures at U2.

Table 2.3 contains data for the 2010 monitoring program at the downwind sampling locations. The downwind location presented for each quarter was chosen based on the highest total speciated target VOCs for the downwind samples per quarterly test effort. This data represents 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 annual average downwind value of eight (8) TCL constituents exceeded the level of their respective current AGCs specified by the NYSDEC. In addition, one (1) TIC constituent, C3 substituted benzene, exceeded the level of its AGC. No target or tentatively identified compounds exceeded their respective SGC values during any quarterly test based on the 24-hour sample results adjusted to 1-hour values for direct comparison with NYSDEC SGC values, respectively.

Table 2.4 presents the 2010, 24-hour monitoring data for ambient air concentrations at selected upwind sample locations. Two (2) collocated samplers were positioned upwind of the OBSWDC during all four

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
2010 Annual Summary

Quarterly I.D.	1st	2nd	3rd	4th	ANNUAL AVERAGE	CURRENT	24 HOUR
Sample Identification	D1	D3	D2	D2	MAX DOWNWIND VALUE	AGC	SGC
Lower Quantitation Limit ($\mu g/m^3$)	0.0153	0.0328	0.0299	0.0241	0.0255	---	---
Practical Quantitation Limit ($\mu g/m^3$)	0.0245	0.0525	0.0479	0.0386	0.0408	---	---
Target TIC Lower Quantitation Limit ($\mu g/m^3$)	0.0765	0.164	0.1497	0.1205	0.1276	---	---
Constituent/Units	($\mu g/std\text{-}m^3$)	($\mu g/std\text{-}m^3$)	($\mu g/std\text{-}m^3$)	($\mu g/std\text{-}m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
Acetone*	0.28	0.88	0.90	0.84	0.725	30,000	180,000
Benzaldehyde**			**< 1.03**	**< 1.17**	**0.610**	0.10	----
Benzene	**1.65**	**0.27**	**0.71**	**1.33**	**0.991**	0.13	1,300
Bromodichloromethane						70	---
Bromoform*				< 0.04	0.04	0.91	---
Bromomethane						5.0	3,900
2-Butanone*	0.30	0.25	0.30	0.70	0.390	5,000	13,000
Carbon Disulfide				< 0.03	0.026	700	6,200
Carbon Tetrachloride	**0.52**	**0.82**	**0.73**	**0.64**	**0.678**	0.17	1,900
Chlorobenzene						110	---
Chloroethane						10,000	---
Chloroethyl Vinyl Ether**						0.10	----
Chloroform	**0.13**	**0.13**	**0.15**	**0.13**	**0.135**	0.043	150
Chloromethane	0.03	< 0.10	< 0.07	< 0.05	< 0.065	90	22,000
Dibromochloromethane						0.10	---
1,2-Dichlorobenzene (o)						200	30,000
1,3-Dichlorobenzene (m)						10	---
1,4-Dichlorobenzene (p)	**0.52**	< 0.05	**< 0.13**	**< 0.13**	**0.208**	0.09	---
1,1-Dichloroethane						0.63	---
1,2-Dichloroethane		**< 0.08**	**< 0.07**	**< 0.08**	**0.060**	0.038	---
1,1-Dichloroethene						70	---
cis-1,2-Dichloroethene						63	---
trans-1,2-Dichloroethene				< 0.02	0.026	63	----
1,2-Dichloropropane				< 0.03	0.028	4.0	----
1,3-Dichloropropene, cis & trans isomers						0.25	---
Ethylbenzene	0.64	< 0.13	< 0.31	< 0.54	0.407	1,000	54,000
2/4-Ethyltoluene (total)	**1.47**	< 0.06	**< 0.21**	**< 0.42**	**0.539**	0.10	----
Freon 13**						5,000	9,000
2-Hexanone*						30	4,000
Methylene Chloride	0.58	0.30	0.69	0.62	0.546	2.1	14,000
4-Methyl-2-Pentanone*			< 0.07	< 0.21	0.089	3,000	31,000
Styrene			< 0.03	< 0.07	0.039	1,000	17,000
1,1,2,2-Tetrachloroethane						16	---
Tetrachloroethene	0.80	< 0.17	< 0.49	< 0.98	0.610	1.0	1,000
Toluene	3.36	< 0.64	< 1.90	2.66	2.142	5,000	37,000
1,1,1-Trichloroethane		0.11	0.09	0.08	0.074	5,000	9,000
1,1,2-Trichloroethane						1.4	---
Trichloroethene	0.11	< 0.08	< 0.16	**5.25**	**1.400**	0.50	14,000
Trichlorofluoromethane	0.80	1.74	2.04	1.37	1.486	5,000	9,000
Vinyl Chloride						0.11	180,000
Xylenes (Total)	2.72	< 0.48	< 1.39	< 2.35	1.735	100	4,300
Decane**	0.80	< 0.33	< 0.67	< 0.90	0.677	700	---

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

2010 Annual Summary

Quarterly I.D.	1st	2nd	3rd	4th	ANNUAL AVERAGE	CURRENT	24 HOUR
Sample Identification	D1	D3	D2	D2	MAX DOWNWIND VALUE	AGC	SGC
TIC Lower Quantitation Limit (LQL)	0.076	0.164	0.150	0.120	0.128	---	---
Constituent/Units	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
2-Methyl-pentane	0.22	< 0.38	1.44	< 2.40	< 1.110	4,200	350,000
3-Methyl-pentane			< 0.70	< 1.05	< 0.498	4,200	350,000
Branched Alkane (DEL) + cyclohexane	0.12				0.138	3,000	---
(DEL) Branched Alkane (Total)			< 1.21		< 0.393	---	---
C3 subst. Benzene				**< 0.81**	**< 0.299**	0.13	1,300
2-Methyl-butane	0.24	< 0.64	2.01	3.88	< 1.692	42,000	---
2-Methyl-hexane	0.12	< 0.38			< 0.192	---	---
Hexane	0.20	< 0.54		< 2.16	< 0.761	700	---
Isobutane	0.12	< 0.39		< 2.71	< 0.842	57,000	---
Dichlorodifluoromethane		< 1.26	< 1.33	< 1.29	< 0.990	12,000	---
Butane	0.20	< 0.54	< 1.75	< 2.71	< 1.302	57,000	---
Unknown (RT: 1.23-1.24)			< 0.61		< 0.244	---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu (Freon 113)		< 0.54	< 0.52		< 0.315	180,000	960,000
1,3-Butadiene, 2-methyl		1.44			0.447	---	---
Pentane		< 0.26	1.14	3.18	1.164	23.0	---
Octane		< 0.33			0.169	3,300	---
Heptane		< 0.41			0.189	---	---
Acetic acid, methyl ester				< 1.67	0.516	---	---
Propane		< 0.48		< 0.83	0.383	---	---
Cyclopentane, methyl			< 0.73	< 1.10	0.518	700	---

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 ($\mu g/std\text{-}m^3$).
- 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 (recently revised October 2010 and still current as of March 2011) 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 2.4

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF MINIMUM QUARTERLY 24-HOUR UPWIND AMBIENT AIR VOST SAMPLE RESULTS
2010 Annual Summary

Quarterly I.D.	1st	2nd	3rd	4th	ANNUAL AVERAGE	CURRENT	24 HOUR
Sample Identification*	U2	U1	U2	U1	MIN UPWIND VALUE	AGC	SGC
Lower Quantitation Limit (ug/m3)	0.0309	0.0151	0.0290	0.0246	0.025	---	---
Practical Quantitation Limit (ug/m3)	0.0494	0.0241	0.0464	0.0394	0.037	---	---
Target TIC Lower Quantitation Limit (ug/m3)	0.1543	0.0753	0.1449	0.1232	0.114	---	---
Constituent/Units	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
Acetone*	0.29	0.66	0.87	0.70	< 0.631	30,000	180,000
Benzaldehyde**	**< 1.05**	**0.81**	**< 1.42**	**< 1.00**	**1.070**	0.10	----
Benzene	**2.06**	**0.25**	**0.66**	**1.17**	**< 1.035**	0.13	1,300
Bromodichloromethane						70.00	---
Bromoform*		0.03	< 0.05	< 0.04	0.041	0.9	---
Bromomethane						5.0	3,900
2-Butanone*	< 0.28	0.28	0.29	0.40	< 0.312	5,000	13,000
Carbon Disulfide					<	700	6,200
Carbon Tetrachloride	**0.47**	**0.75**	**0.66**	**0.66**	**< 0.636**	0.17	1,900
Chlorobenzene						110	---
Chloroethane						10,000	---
Chloroethyl Vinyl Ether**						0.10	----
Chloroform	**0.14**	**0.16**	**0.13**	**0.13**	**< 0.139**	0.043	150
Chloromethane	< 0.06	0.12	< 0.06	< 0.06	< 0.077	90	22,000
Dibromochloromethane						0.10	---
1,2-Dichlorobenzene (o)						200	30,000
1,3-Dichlorobenzene (m)						10	---
1,4-Dichlorobenzene (p)	**< 0.35**	0.05	**< 0.12**	**< 0.10**	**< 0.156**	0.09	---
1,1-Dichloroethane						0.63	---
1,2-Dichloroethane		**0.07**	**< 0.06**	**< 0.08**	**0.060**	0.04	---
1,1-Dichloroethene						70	---
cis-1,2-Dichloroethene						63	---
trans-1,2-Dichloroethene						63	----
1,2-Dichloropropane				< 0.03	0.027	4.0	----
1,3-Dichloropropene, cis & trans isomers						0.25	---
Ethylbenzene	< 0.63	0.12	< 0.29	< 0.41	< 0.362	1,000	54,000
2/4-Ethyltoluene (total)	**< 1.28**	0.07	**< 0.18**	**< 0.28**	**< 0.453**	0.10	----
Freon 13**						5,000	9,000
2-Hexanone*		0.03			0.041	30	4,000
Methylene Chloride	0.94	0.22	0.49	0.48	0.531	2.10	14,000
4-Methyl-2-Pentanone*		0.05	< 0.06	< 0.11	0.067	3,000	31,000
Styrene			< 0.05	< 0.04	0.032	1,000	17,000
1,1,2,2-Tetrachloroethane		0.02			0.026	16	---
Tetrachloroethene	**< 1.03**	0.12	< 0.45	**< 1.79**	< 0.848	1.0	1,000
Toluene	< 2.92	0.72	< 1.70	< 2.48	< 1.953	5,000	37,000
1,1,1-Trichloroethane		0.06	0.08	0.11	< 0.071	5,000	9,000
1,1,2-Trichloroethane						1.4	---
Trichloroethene	< 0.11		< 0.10	0.46	**< 0.171**	0.5	14,000
Trichlorofluoromethane	0.83	1.69	1.48	1.45	1.361	5,000	9,000
Vinyl Chloride						0.11	180,000
Xylenes (Total)	< 2.52	0.51	< 1.29	< 1.88	< 1.550	100	4,300
Decane**	< 0.79	0.18	< 0.62	< 0.65	< 0.562	700	---

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
2010 Annual Summary

Quarterly I.D.	1st	2nd	3rd	4th	ANNUAL AVERAGE	CURRENT	24 HOUR
Sample Identification*	U2	U1	U2	U1	MIN UPWIND VALUE	AGC	SGC
TIC Lower Quantitation Limit (LQL)	0.127	0.075	0.145	0.123	0.118	---	---
Constituent/Units	(μg/m³)	(μg/m³)	(μg/m³)	(μg/m³)	(μg/m³)	(μg/m³)	(μg/m³)
2-Methyl-pentane	0.94	0.51	1.33	2.49	< 1.317	4,200	350,000
(DEL) Branched Alkane (Total)	0.44				< 0.195	---	---
C3 subst. Benzene				**< 0.65**	**< 0.250**	0.13	1,300
2-Methyl-butane	2.74	0.66	2.03	< 2.33	< 1.941	42,000	---
2-Methyl-hexane	< 0.22		< 1.03	< 1.64	0.740	---	---
Hexane	< 0.28	0.48	< 1.17	2.32	1.063	700	---
Isobutane	< 2.08		< 1.26		< 0.886	57,000	---
Dichlorodifluoromethane	< 1.16	1.30	< 1.12	< 1.29	< 1.215	12,000	---
Butane	< 3.01	0.63	< 1.55	< 2.38	< 1.892	57,000	---
Ethane, 1,1,2-trichloro-1,2,2-triflu (Freon 113)	< 0.91	0.51	< 0.51		< 0.513	180,000	960,000
1,3-Butadiene, 2-methyl		1.39			0.445	---	---
Unknown alkene (RT: 3.37)	< 0.12				0.115	---	---
Heptane				< 0.63	0.244	---	---
Propane				< 0.53	0.219	---	---
Pentane			1.04	< 1.82	0.766	---	---
Cyclopentane, methyl			< 0.65	< 0.97	0.457	---	---

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 (mg/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 (recently revised October 2010 and still current as of March 2011) 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.

(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, eight (8) TCL constituents exceeded the level of the current NYSDEC AGCs during all quarterly tests. No TICs at the upwind site exceeded the level of their respective AGC. Further, over all the quarterly tests for 2010, no target compounds or TICs exceeded their respective SGC values based on the 24-hour sample results adjusted to 1-hour values. No collectable condensate samples were retrieved during any of the four quarterly sampling events, and therefore, condensate sample results were not reported.

Trip and field blank air samples were collected to assure that there was no media contamination prior to or during the quarterly monitoring efforts. Several compounds were detected in the trip and field blanks during all quarterly sampling efforts with varying concentrations and retention times. Acetone and methylene chloride are known laboratory contaminants and are assumed to be at least a partial cause for their presence in these sample results. Both field blanks and the trip blank for the second quarter effort of 2010 showed a moderate amount of additional contamination when analyzed. Although this level of contamination was not observed during the third or fourth quarter efforts, some minor abnormal media contamination was detected. The third quarter results showed a possibility of slight trichloroethene contamination. It is unknown if the presence of these compounds were the result of laboratory interference or if the media was indeed compromised. Additionally, the compounds detected during the second quarter of 2010 may have been, in part, the result of compounds present in the RTP Westbury office and not necessarily laboratory or media contamination. Overall, the contamination issues were minor and did not appreciably affect the reported results. These compound concentrations and confirmation testing methods will be monitored for the 2011 sampling efforts in an effort to find and mitigate the cause of the contaminants.

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. If the reporting concentration was negative, it was left blank. In addition, the minimum detection limit (MDL) of the upwind sample was not subtracted from the result to maximize potential impacts. As

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)	0.0255	0.0249	---	---
Target TIC Lower Quantitation Limit (ug/m3)	0.0408	0.0366	---	---
Practical Quantitation Limit (ug/m3)	0.1276	0.1145	---	---
Constituent/Units	**($\mu g/m^3$)**	**($\mu g/m^3$)**	**($\mu g/m^3$)**	**($\mu g/m^3$)**
Acetone*	0.725	< 0.631	0.093	30,000
Benzaldehyde**	**0.610**	**1.070**		0.10
Benzene	**0.991**	**< 1.035**		0.13
Bromodichloromethane				70
Bromoform*	0.041	0.041	0.001	0.91
Bromomethane				5.0
2-Butanone*	0.390	< 0.312	0.078	5,000
Carbon Disulfide	0.026	<	0.026	700
Carbon Tetrachloride	**0.678**	**< 0.636**	0.042	0.17
Chlorobenzene				110
Chloroethane				10,000
Chloroethyl Vinyl Ether**				0.10
Chloroform	**0.135**	**< 0.139**		0.043
Chloromethane	< 0.065	< 0.077		90
Dibromochloromethane				0.10
1,2-Dichlorobenzene (o)				200
1,3-Dichlorobenzene (m)				10
1,4-Dichlorobenzene (p)	**0.208**	**< 0.156**	0.053	0.09
1,1-Dichloroethane				0.63
1,2-Dichloroethane	**0.060**	**0.060**		0.038
1,1-Dichloroethene				70
cis-1,2-Dichloroethene				63
trans-1,2-Dichloroethene	0.026		0.026	63
1,2-Dichloropropane	0.028	0.027	0.001	4.0
1,3-Dichloropropene, cis & trans isomers				0.25
Ethylbenzene	0.407	< 0.362	0.045	1,000
2/4-Ethyltoluene (total)	**0.539**	**< 0.453**	0.086	0.10
Freon 13**				5,000
2-Hexanone*		0.041		30
Methylene Chloride	0.546	0.531	0.015	2.1
4-Methyl-2-Pentanone*	0.089	0.067	0.022	3,000
Styrene	0.039	0.032	0.007	1,000
1,1,2,2-Tetrachloroethane		0.026		16
Tetrachloroethene	0.610	< 0.848		1.0
Toluene	2.142	< 1.953	0.189	5,000
1,1,1-Trichloroethane	0.074	< 0.071	0.003	5,000
1,1,2-Trichloroethane				1.4
Trichloroethene	**1.400**	**< 0.171**	**1.229**	0.50
Trichlorofluoromethane	1.486	1.361	0.124	5,000
Vinyl Chloride				0.11
Xylenes (Total)	1.735	< 1.550	0.184	100
Decane**	< 0.065	< 0.077		700

Notes:

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

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

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

  Targeted Compounds and Targeted TICs- All blank values are below the Lower Quantitation Limit, Practical Quantitation Limit (applies to Aceton Bromoform, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone), or the Targeted TIC Lower Quantitation Limit (applies to Chloroethyl vinyl ethe 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) additior 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 (recently revised October 2010 and still current as of March 2011) and/or previous ambient ai 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 averag with the reported values.

shown in Table 2.5, the results indicate that two (2) TCL constituents, benzaldehyde and trichloroethene, potentially impacted the ambient air quality at respective concentrations that exceeded the level of their currently assigned de minimus value and AGC, respectively. As previously stated, the interim AGC value of 0.1 $\mu g/m^3$ was assigned to benzaldehyde based on its moderately toxic classification and the Moderate Toxicity de minimus concentration, as per NYSDEC DAR-1 policy.

If an estimate of potential landfill impacts were to be calculated using all upwind and downwind data, the net impacts downwind of the landfill would be below values documented in Table 2.5. Again, Table 2.5 data provides a conservative, worst-case scenario. Six (6) other compounds, benzaldehyde, benzene, chloroform, 1,4-dichlorobenzene (p), 1,2-dichloroethane and 2/4-ethyltoluene (total), exceeded AGC guideline values for downwind and upwind impact values respectively; however once the respective upwind value was subtracted from the downwind value to determine net impact of the OBSWDC, the resulting values no longer exceeded their respective ambient guideline value for these compounds. All other TCL constituents identified in the annual averages have differential downwind impact values that are below their respective AGCs. The only exception is when the upwind samples are impacted by landfill sources or sources downwind of the landfill as during inversion conditions when the near surface flow is variable. As long as the duration of the variable surface flows are minimal, the above concentrations will remain valid.

According to the NYSDEC, benzene is the one compound that shows significant annual average concentrations above its AGC at several of the various sites monitored across the state, indicating a numerous sources of this compound throughout the state. The principal source of benzene is mobile sources both from direct emissions and emissions related to gasoline storage and handling. The concentrations of benzene observed may actually reflect the relative amounts of automobile traffic at the various sites, and may only partially relate to the emissions from the landfill.

It is important to note that the impact associated with the landfill as determined by the recorded concentrations is only an approximation. The upwind concentrations are taken to represent the general background in the area upwind of the landfill on the day of the sampling; however, there is diffusion (dilution) of those concentrations as the wind moves from an upwind sample point to a downwind sample point. Simply put, diffusion is a process that reduces higher atmospheric concentrations to lower concentrations. Diffusion rates can vary depending on, for example, the source release characteristics as well as ambient turbulence. Therefore, because of diffusion, the downwind sample concentrations should be lower when compared to coincident upwind values, if the landfill was not there. Thus, the concentration as

reported in the downwind sample data should be a conservative estimate of the actual impact of landfill sources on surrounding areas.

In a further analysis of the ambient data collected during all four quarters of the 2010 sampling events, background TCL constituent concentrations (total averaged upwind sample concentrations) were subtracted from the total average downwind sample concentrations recorded at both locations downwind of the landfill in order to provide an estimate of the net impacts that the landfill, and all other OBSWDC activities taken together, have on local air quality. This analysis is done only for the constituents that exceeded their respective guideline values for the year. The net impact from this analysis showed that during 2010 only trichloroethene exceeded its assigned de minimus guideline value when comparing the upwind concentrations detected and/or the lower quantitation limit (LQL) for undetectable compounds to the downwind concentrations detected. This suggests that the landfill or other OBSWDC onsite activities may have had a slight influence on the air quality in the vicinity of the landfill for this compound during 2010. However, it is believed that a source northeast of the landfill may have caused these concentrations. A review of the monitoring efforts in 2008, 2009 and 2010 note that during periods of northeasterly winds, trichloroethene concentration values dramatically increase in ambient samples, as demonstrated in the downwind samples from the fourth quarter 2010 effort.

Additionally, the average annual results were analyzed to determine impacts based on two separate downwind locations. The net concentrations for the exceeding compounds were varied. Trichloroethene exceeded its AGC guideline value, but only when comparing the average of the collocated downwind location D1/2 to the averaged upwind location. Additionally, the TIC C3 substituted benzene exceeded its AGC guideline but only for downwind location D3 when compared to the average upwind locations for 2010. No other compound exceeded its respective annual guideline value.

In terms of the relative impact of the landfill, it deserves repeating that because minimum 2010 upwind sample concentrations were subtracted from maximum 2010 downwind sample concentrations, the ambient air impact analysis presented within this report takes a conservative approach rather than simply comparing 2010 average upwind concentrations with 2010 average downwind concentrations.

The short-term guideline values for the target compounds were estimated from the 24-hour recorded values during each quarterly test. The individual 24-hour 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, a USEPA 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 2010 monitoring program are presented in Appendix A. In all cases, no measured concentrations exceeded their respective short-term guideline value.

2.3 New York State VOC Monitoring Summary

Beginning in the 2007 annual report, RTP developed a comparison of the OBSWDC VOC results to the state-wide VOC ambient air quality levels. This section summarizes VOC monitoring data collected by the NYSDEC. A comparison between State collected data and the OSBSWDC 2010 annual average results are also provided for all compounds that were detected in the VOST samples.

The NYSDEC first established the ambient air toxics monitoring program in 1985 as part of the Governor's Air Monitoring Modernization Capital Budget Program. This monitoring network measures VOCs throughout NY. The initial development of the network and analytical capabilities was part of a joint Staten Island/New Jersey Urban Air Toxics Assessment Project (SI/NJ Study) coordinated with USEPA Region II from 1987 through 1989. The network expanded in 1990 to a statewide network. As of 2003, there are 15 monitoring locations throughout the State measuring over 40 VOCs. The goal of the NYSDEC monitoring program is to monitor air quality related to toxics in urban, industrial, residential and rural areas. The latest available data from the State is for years 2002 and 2003.

There are several land use characteristics immediately surrounding the OBSWDC landfill including industrial, urban and suburban; and therefore, it is difficult to classify the results collected in the vicinity of the landfill as appropriate for any one land use type. As such, it is important to compare the results with State monitoring data representing several different site characteristics. As shown in Figure 2.2, five locations based on several site characteristics represented at the landfill and a control (rural site) have been chosen for comparison to average concentration levels. A location at the Troy Atrium in Troy, NY was chosen to represent an urban area. Lackawanna in Erie County, NY was chosen to represent an industrial site. Whiteface Base Lodge located in Adirondack Park, Essex, NY was selected as a rural site for control comparison. LaTourette Golf Course in Richmond, NY was chosen to represent a suburban neighborhood, and finally, the two sites located at Fresh Kills landfill (East and West) in Staten Island, NY were selected to represent releases from another landfill. The nearest monitoring site to the OBSWDC landfill is located at the La Tourette Golf Course in Staten Island, NY, that is approximately

N

0 37.5 75 150 Miles

FIGURE 2.2

OBSWDC AND SURROUNDING AREA MAP

TOWN OF OYSTER BAY LANDFILL
BETHPAGE, NEW YORK

BASE MAP SOURCE:
ESRI World Street Map

RTP Environmental Associates, Inc.
Westbury, New York

49 miles west southwest of the OBSWDC.

Table 2.6 provides annual average air toxic VOC concentrations for 2002 and 2003 at the urban, industrial, suburban/residential, landfill and a rural State monitoring site along with the VOC concentrations from the OBSWDC 2010 air tests, as these are the latest sample years available. Upwind and downwind sample results for the OBSWDC tests represent the average concentrations for all four (4) 2010 quarterly sampling events. LQLs were used for all compounds that did not detect concentrations over the MDL in order to provide the most conservative estimation. OBSWDC data for both upwind and downwind samplers were used to more closely compare with the NYSDEC data since the NYSDEC does not differentiate samplers as upwind or downwind. OBSWDC samples have been presented as the total annual average of combined upwind and downwind results in order to provide a more accurate value for comparison. It is important to note, however, that 2010 OBSWDC values being presented as representative of the annual average have been taken under similar meteorological conditions in four (4) seasonal quarters for a total of 20 tests per compound throughout the year. The NYSDEC VOC values have been taken once every six days regardless of meteorological conditions for the entire year amounting to roughly 60 samples. Although the amount of samples taken at OBSWDC are less, it is believed that the results are comparable.

Aside from the OBSWDC 2010 annual average data, the values presented in Table 2.6 include only compounds measured by the NYSDEC. No new data has been presented for the five (5) selected NYSDEC sites, so the OBSWDC 2010 data is compared to the existing 2002 and 2003 data for these locations. After reviewing the 2010 annual averages in comparison to the 2007 through 2009 annual averages, the results are relatively similar. Six (6) compounds, benzene, carbon tetrachloride, chloroform, 1,4-dichlorobenzene (p), 1,2-dichloroethane and trichloroethene, continued to exceed their respective guideline value. In previous years, the compound bromodichloromethane also exceeded its AGC guideline level; however, for the 2010 monitoring year, it was in compliance with its respective guideline value at the OBSWDC complex. The OBSWDC continued to report the highest average annual concentration of trichloroethene. Additionally, the compound tetrachloroethane was measured as the highest average annual concentration among the six other locations across the State. Although the concentrations of chloroethane and vinyl chloride presented in Table 2.6 recorded at the OBSWDC are technically the highest for all locations, these concentrations represent the average of the respective LQL for each quarter of 2010, and are therefore, not necessarily present at the OBSWDC. Despite the fact that the actual measured concentrations for trichloroethene and tetrachloroethane were highest for the

TABLE 2.6

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

NYSDEC AIR TOXIC CONCENTRATIONS AT VARIOUS STATE MONITORING SITES (μg/m^3)

Exceeding Compounds for 2010 Quarterly Efforts	TROY *Urban*		LACKAWANNA *Industrial*		Whiteface Mt. Base *Rural*		Fresh Kills Landfill West *Landfill*		Fresh Kills Landfill East *Landfill*		LaTourette Golf Course (Richmond) *Neighborhood*		TOB-OBSWDC *Landfill*	NYSDEC AGCs
	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2010 Avg.	
Benzene	1.469	1.781	**3.336**	1.299	0.450	0.428	1.408	1.433	1.338	1.743	1.261	1.360	0.970	0.13
Bromodichloromethane	0.067	0.020	0.107	0.080	0.027	0.020	**0.121**	0.020	0.027	0.027	0.027	0.027	*0.026*	70
Bromomethane	0.074	0.054	0.085	0.074	0.066	0.058	**0.097**	0.074	0.081	0.070	0.074	0.078	*0.026*	5.0
Carbon Tetrachloride	0.748	0.729	**1.018**	0.704	0.767	0.692	0.773	0.717	0.792	0.692	0.754	0.723	0.620	0.17
Chlorobenzene	0.064	0.037	**0.083**	0.078	0.055	0.037	0.069	0.051	0.064	0.069	0.046	0.046	*0.026*	110
Chloroethane	0.018	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000	***0.026***	10,000
Chloroform	0.166	0.176	0.161	0.166	0.098	0.102	0.181	0.171	0.181	**0.283**	0.166	0.185	0.131	0.043
Chloromethane	1.176	**1.649**	1.050	1.211	1.071	1.232	1.174	1.319	1.187	1.308	1.069	1.306	0.074	90
1,2-Dichlorobenzene (o)	**0.090**	0.010	0.017	0.016	0.013	0.009	0.015	0.012	0.012	0.013	0.011	0.011	0.049	200
1,3-Dichlorobenzene (m)	0.084	0.054	**0.102**	0.096	0.078	0.048	0.084	0.060	0.072	0.060	0.066	0.060	*0.026*	10
1,4-Dichlorobenzene (p)	**0.673**	0.517	0.180	0.168	0.204	0.066	0.252	0.204	0.330	0.282	0.264	0.234	0.182	0.09
1,2-Dichloroethane	0.069	0.057	0.085	**0.089**	0.057	0.061	0.028	0.065	0.061	0.065	0.057	0.065	0.051	0.038
1,1-Dichloroethene	0.020	0.004	0.036	**0.038**	0.012	0.008	0.020	0.008	0.008	0.012	0.008	0.012	0.033	70
1,2-Dichloropropane	0.023	0.009	0.037	**0.111**	0.014	0.018	0.023	0.014	0.009	0.018	0.009	0.023	0.028	4.0
Ethylbenzene	0.620	0.655	0.443	0.412	0.113	0.204	0.720	0.529	**0.759**	0.594	0.607	0.490	0.373	1,000
Styrene	0.247	0.187	0.226	0.183	0.123	0.089	0.238	0.175	**0.566**	0.311	0.213	0.166	0.040	1,000
1,1,2,2-Tetrachloroethane	0.096	0.089	**0.117**	**0.117**	0.034	0.069	0.041	0.089	0.021	0.096	0.021	0.089	0.027	16
Tetrachloroethene	0.237	0.237	0.264	0.298	0.108	0.102	0.447	0.474	0.535	0.556	0.420	0.522	**0.741**	1.0
Toluene	3.295	**4.798**	2.259	3.197	0.459	1.032	4.188	3.958	3.577	3.762	3.144	3.363	2.072	5,000
1,1,1-Trichloroethane	0.278	0.224	0.311	0.305	0.256	0.218	0.747	**1.538**	0.278	0.251	0.262	0.240	0.070	5,000
1,1,2-Trichloroethane	0.033	0.016	0.093	**0.104**	0.022	0.022	0.033	0.016	0.016	0.093	0.016	0.022	*0.026*	1.40
Trichloroethene	0.097	0.145	0.118	0.107	0.032	0.086	0.145	0.145	0.188	0.172	0.166	0.145	**0.710**	0.50
Trichlorofluoromethane	1.830	**2.044**	1.651	1.696	1.696	1.780	1.712	1.886	1.881	1.909	1.740	1.914	1.392	5,000
Vinyl Chloride	0.010	0.000	0.010	0.001	0.005	0.000	0.010	0.003	0.018	0.008	0.003	0.003	***0.026***	0.11
Xylenes (Total)	2.499	**2.855**	1.775	1.783	0.330	0.894	0.926	2.234	2.694	2.382	2.434	2.087	1.605	100

Notes:

- TOB-OBSWDC site is presented for comparison with the NYSDEC monitoring data. The TOB sites are not an official part of the NYSDEC Air Toxic Program.
- The NYSDEC data is only available up to 2003. As such, the two most current annual data averages were presented for comparison with the current 2010 average data from OBSWDC.
- Values in red represent the highest individual average annual compound concentration for the monitoring sites presented in this comparison.
- Values in shaded areas are equal to or exceed the level of the current (recently revised October 2010 and still current as of March 2011) and/or previous ambient air Annual Guideline Concentration (AGC) values.
- Concentrations in italics represent the inferred values based on the average quarterly LQLs for 2010. Although the concentrations of chloroethane and vinyl chloride are technically the highest for all locations, these concentrations represent the average of the respective LQL for each quarter of 2010, and are therefore not necessarily present at OBSWDC.

OBSWDC compared to the other six locations, the origin of this compound is most likely attributed to off-site industrial sources as opposed to actual landfill activities, as noted in Section 2.2 above. Lackawanna, the industrial site, detected the highest concentrations for nine (9) compounds in both 2002 and 2003, which was still the most as compared to the other sites provided in this comparison. For the majority of compounds, the OBSWDC results were generally below the average ambient air quality levels monitored at the other six (6) selected NYSDEC monitoring sites, including the rural site at Whiteface Mountain located in Adirondack Park.

The above demonstrates that the air quality at many locales throughout New York State exceeds certain State AGC guidelines. It is important to remember the NYSDEC monitoring data provided in Table 2.6 represents the most recent annual average concentrations available. As such, it is not appropriate to directly compare the OBSWDC 2010 annual average ambient air results to State AGC values from 2002 and 2003. These values are only provided as a general reference. However, the data in Table 2.6 generally shows the OBSWDC annual results are below most of the ambient VOC concentrations collected in other parts of State, representing various land uses.

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

The ambient air quality at and surrounding the OBSWDC has been monitored by RTP for the Town since 1990. Over the course of the past nineteen (19) 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 2010 and in 2008 (as well as results from previous years) confirm that benzene, carbon tetrachloride, chloroform, 1,4-dichloroethane and 2/4-ethyltoluene (previously reported as ethyl-methyl benzene) and trichloroethene concentrations consistently exceed the level of the NYSDEC ambient annual guideline values at both upwind and downwind locations. The Interim AGC value of 0.1 $\mu g/m^3$ for 2/4-ethyltoluene was assigned based on the Moderate Toxicity de minimis concentration, as per NYSDEC DAR-1 policy. Since the decane AGC guideline value was revised upward in December 2003 and again in September 2007, measured ambient concentrations have not exceeded the new AGC value. Further, the compound 1,1,2,2-tetrachloroethane typically exceeded its AGC guideline value; however, with the revision of the guideline value from 0.017 to 16 $\mu g/m^3$ in September 2007, measured concentrations have not exceeded this guideline value. Nevertheless, RTP will continue to monitor these target compounds as part of the Consent Decree.

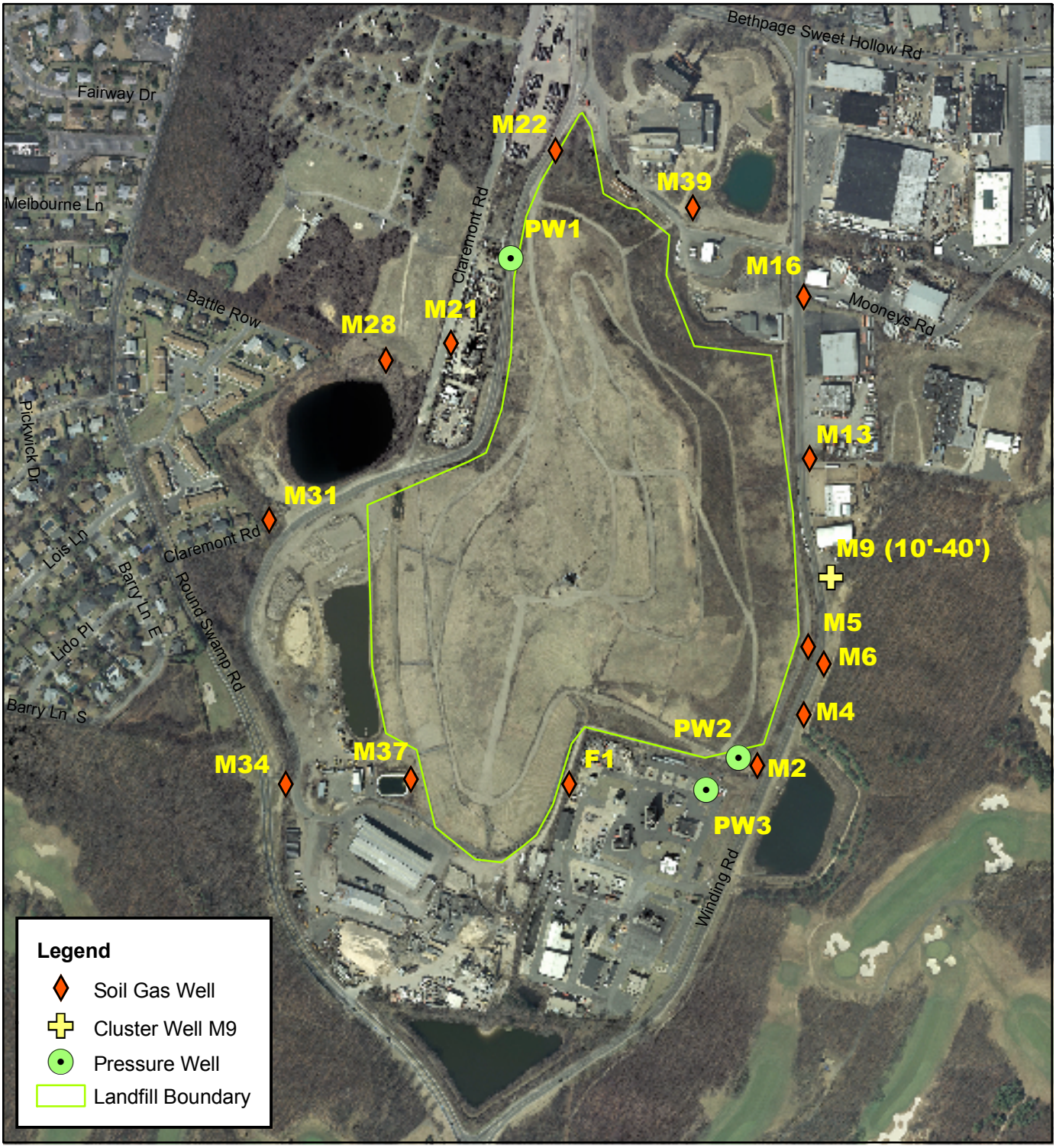
The compounds benzaldehyde, carbon tetrachloride, methylene chloride and trichloroethene exceeded their respective AGC guideline/de minimis value on an annual average basis for the 2010 quarterly monitoring efforts. In 2010 and other monitoring years, benzaldehyde was measured in excess of its assigned AGC/de minimus value at both upwind and downwind sample locations, but in 2010, detections are inconsistent and exceedances are only noted in downwind samples for the first quarter of 2010. In addition, trichloroethene was in excess of its respective AGC guideline values in both upwind and downwind samples during 2010, with exceptionally high values detected during the fourth quarter sampling event. Although this compound is normally detected during quarterly sampling, it was detected in lower concentrations for 2008 and did not demonstrate a consistent exceedance of its respective guideline value. In reviewing data from the first years of testing and comparing it to the data collected in 2010, these same compounds, with some minor variation between years, consistently have exceeded their assigned AGC guideline values.

In comparing 2009 and 2010, these results continue to suggest that there may be an off-site source to the northeast of the landfill causing the high concentrations of trichloroethene. During the 2010 quarterly efforts, the highest concentrations were noted for trichloroethene when winds came from northerly and easterly directions, particularly demonstrated in the upwind samples for the fourth quarter effort. This suggests that local, off-site industrial sources, possibly associated with a paint spray booth operation, are responsible for these concentrations and are not associated with landfill emissions.

Several compounds observed in upwind and downwind samples during the first two years of monitoring appear to have been at slightly higher concentration values when compared to 2010 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 2010 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. The comparison with similar air toxics data collected by NYSDEC at other sites in the State indicates that the levels at the OBSWDC are in most cases lower than in other industrial areas as shown in Section 2.3.

2.5 Analysis of 2010 Soil Gas VOC Concentration Data

The 2010 soil gas VOC samples provide data on the concentrations of TCL and TIC constituents in the soil gas in the vicinity of the landfill. Figure 2.3 provides the 2010 sampling locations. Soil gas



N

0 250 500 1,000 Feet

ORTHOIMAGERY SOURCE:
NYSGIS Clearinghouse 2007

RTP Environmental Associates, Inc.
Westbury, New York

FIGURE 2.3

SOIL GAS AND PRESSURE WELLS FOR 2010 EFFORTS

TOWN OF OYSTER BAY LANDFILL
BETHPAGE, NEW YORK

concentrations of the identified constituents observed during the 2010 year of testing have been presented in the quarterly reports and summary tables are reproduced in Appendix B of this report. Table 2.7 provides an annual summary of maximum soil gas VOC concentrations for each quarter. No tests have been conducted at soil gas well M21 since the third quarterly test of 2003 (August), which has been inaccessible due to a retaining wall along Claremont Road. 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 30-inch wells only. As shown in Table 2.7, a total of four (4) compounds averaged higher than their respective ambient air AGC value. No TIC compounds exceeded their respective AGC value(s).

Individually, M22 provides the maximum total VOC concentration out of all the soil gas wells analyzed during the 2010 quarterly monitoring efforts as recorded during the second quarter. M4 and M2 demonstrated the highest VOC concentrations for the other quarterly sampling efforts for 2010; M4 demonstrated the highest VOC concentrations for both the first and third quarters and M2 recorded the highest concentrations of VOCs during the fourth quarter of 2010. The number of soil gas wells containing target compound constituents that had exceeded the level of their respective AGCs varied throughout the four 2010 quarterly tests. No additional TIC compounds exceeded their respective AGC value from the selected soil gas wells. Since the soil gas values are not ambient air values, they should not be directly compared to NYSDEC AGC/SGC ambient air guidelines; although, the measured 10-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 air guidelines during 2010. Neither the NYSDEC nor Nassau County have developed vadose zone VOC concentration guidelines, and therefore, a direct comparison to applicable State regulations cannot be made; however, New York State is currently considering vadose zone limits for soil gas concentrations. When these guideline values are promulgated, future quarterly and annual reports for soil gas collection at the Old Bethpage Landfill will be modified to address any applicable guidance.

The 2010 soil gas VOST sample results for cluster well M9, including wells M9(10'), M9(20'), M9(30') and M9(40') varied in certain constituent concentrations at the different well depth for all four quarterly tests. In past years, constituent concentrations have increased with well depths which may be attributed to groundwater conditions at this location. Although this trend was not quite as pronounced during all of the 2010 efforts as in previous years, levels of the principal contaminant, tetrachloroethene, continued to demonstrate an increase with depth for all 2010 sample results, except for the second quarter, for which the measured concentrations fluctuated with the increase in depth. Additionally, the TIC dichlorotetrafluoroethane showed a consistent increase with depth during most of the 2010 quarterly

TABLE 2.7

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF MAXIMUM SOIL GAS VOC SAMPLE RESULTS FROM 2010

Quarterly I.D.	1st	2nd	3rd	4th	ANNUAL AVERAGE	CURRENT
Soil Gas Well Identification*	M4	M22	M4	M2	---	AGC
Lower Quantitation Limit (LQL)	0.476	0.505	0.458	0.473	0.484	---
Practical Quantitation Limit (PQL)	0.762	0.807	0.733	0.756	0.78	---
Targeted TIC LQL	2.38	2.52	2.29	2.36	2.39	---
Constituent/Units	(µg/std-m3)	(µg/std-m3)	(µg/std-m3)	(µg/std-m^3)	(µg/std-m^3)	(µg/m^3)
Acetone**	2.48	4.64	3.94	2.36	3.35	30,000
Benzaldehyde* **			**18.32**	**6.24**	**7.36**	0.10
Benzene						0.13
Bromodichloromethane						70.00
Bromoform**						0.91
Bromomethane						5.0
2-Butanone**	1.14	0.91	1.56	0.95	1.14	5,000
Carbon Disulfide		1.11			0.63	700
Carbon Tetrachloride		**0.61**		**0.57**	**0.53**	0.170
Chlorobenzene						110
Chloroethane						10,000
Chloroethyl Vinyl Ether***						0.10
Chloroform						0.043
Chloromethane		2.93			1.08	90
Dibromochloromethane						0.10
1,2-Dichlorobenzene (o)						200
1,3-Dichlorobenzene (m)						10
1,4-Dichlorobenzene (p)						0.09
1,1-Dichloroethane						0.63
1,2-Dichloroethane						0.038
1,1-Dichloroethene						70
cis-1,2-Dichloroethene						63
trans-1,2-Dichloroethene						63
1,2-Dichloropropane						4.0
1,3-Dichloropropene, cis & trans isomers						0.25
Ethylbenzene						1,000
2/4-Ethyltoluene (total)						0.10
Freon 13***						5,000
2-Hexanone**						30
Methylene Chloride	**14.29**	1.61	1.37	1.80	**4.77**	2.10
4-Methyl-2-Pentanone**						3,000
Styrene						1,000
1,1,2,2-Tetrachloroethane						16
Tetrachloroethene	0.67				0.53	1.0
Toluene		0.81			0.55	5,000
1,1,1-Trichloroethane						5,000
1,1,2-Trichloroethane						1.40
Trichloroethene			**2.47**		**0.98**	0.50
Trichlorofluoromethane	0.76	1.31	1.47	1.32	1.22	5,000
Vinyl Chloride						0.11
Xylenes (Total)						100
Decane***		141.27	18.32	6.24	42.05	700

TABLE 2.7
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF MAXIMUM SOIL GAS VOC SAMPLE RESULTS FROM 2010
ADDITIONAL TENTATIVELY IDENTIFIED COMPOUNDS

Quarterly	1st	2nd	3rd	4th	ANNUAL AVERAGE	CURRENT
Soil Gas Well Identification*	M4	M22	M4	M2	---	AGC
Additional TIC LQL	2.38	2.52	2.29	2.51	2.39	---

Constituent/Units	(μg/m3)	(μg/m3)	(μg/m3)	(μg/m3)	(μg/m^3)	(μg/m^3)
Undecane		1412.71			354.97	---
Dichlorodifluoromethane	3.71			3.12	2.91	12,000
1,1-difluoroethane			2.75		2.54	40,000
Cyclotrisiloxane, hexamethyl-			4.40	3.31	3.15	---
Difluorochloromethane			5.59		3.25	---

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 (μg/std-m^3).
- 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 (recently revised October 2010 and still current as of March 2011) 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.

efforts.

2.6 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 program, modifications have been made to the soil gas sampling 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 to historical sampling data. In general, soil gas VOC concentration exceedances of NYSDEC AGCs increased in number from 1992 through 1997. The NYSDEC AGCs are used only as a relative comparison. Since 1997, the number and magnitudes of the exceedances has remained similar for each test year, specifically the compounds benzene, carbon tetrachloride, chloroform, tetrachloroethene and trichloroethene have consistently exceeded the level of their respective NYSDEC ambient air annual guideline values. From 2008 through 2010, methylene chloride has also been measured in excess of its respective AGC air guideline value. Benzene was only detected during the fourth quarter effort of 2010 at wells M34 and M39 where the values detected exceeded the AGC guideline value. Chloroform, although not shown in the soil gas wells included in Table 2.7, has consistently exceeded its assigned AGC value in several soil gas wells during quarterly efforts since the AGC was revised in October 1995.

Additionally, tetrachloroethene is not shown exceeding its assigned AGC, but this compound is consistently found in several soil gas wells in excess of its AGC guideline value throughout quarterly efforts since the beginning of the program. In particular, this compound is detected in its highest amounts in the soil gas well cluster M9. In recent years, RTP has noted a steady increase in the concentrations of tetrachloroethene in the M9 cluster, particularly M9(40) and became concerned that a new plume of this chemical may be present in the ground water. However, after review of historical data since the program's start at the M9(40) location, it was determined that values detected in recent years, although slightly higher when compared to concentrations detected in late 2005 through early 2007, are significantly lower than historically detected. RTP will continue to monitor this compound for any notable trends in 2011.

Again, it is worth noting that methylene chloride exceedances may be associated in part with laboratory contamination and not necessarily reflective of OBSWDC activities. It is also critical to note that the subsurface soil gas data were only 10 minute samples, which are not directly comparable to NYSDEC annual or short-term guideline concentration values for ambient air. As stated before, the NYSDEC and

Nassau County do not currently have soil gas standards/guidelines, and therefore, a direct comparison to applicable regulations cannot be made; however, New York State is currently considering vadose zone limits. Should these guideline values be adopted, RTP shall provide analysis in future quarterly and annual reports for all effected efforts.

2.7 Analysis of 2010 Soil Gas Pressure Measurements

Soil gas pressure measurements were made during the 2010 testing program as prescribed in the Consent Decree. The locations of the pressure wells are provided in Figure 2.3. PW1 and PW2 are on the OBSWDC property while PW3 is off-site at the NCFSA. PW1 and PW3 are located outside the perimeter collection system while PW2 is located within the perimeter collection system.

Soil gas pressure readings during 2010 varied between positive, zero and negative pressure for the wells sampled. PW1 measured zero and negative readings during all quarterly efforts for 2010 for both 10 foot and 20 foot depths. PW2 measured zero readings for the all quarters, at 10 foot depths and negative readings for all quarters in 2010 at 20 foot depths. Finally, PW3 measured zero or negative readings in all four quarterly efforts for 2010 for both 10 foot and 20 foot depths. During the fourth quarter effort, the blower station was not operating during initial pressure well tests on November 30, 2010 due to a motor malfunction; therefore, the pressure wells were retested once the blower station came back online. The values presented in the fourth quarter 2010 report represent testing that occurred during that time.

It is difficult to determine whether the results for 2010 were due to changes in atmospheric pressure or the operation of the perimeter collection system. Based on a landfill gas collection and perimeter system assessment prepared by LKB, substantial damage throughout the system was previously documented. Repairs to the landfill gas perimeter system were largely completed during 2010, which is most likely the reason for the negative pressure observed during this year's readings as compared to 2009 and the second half of 2008. It is worth noting that the thermal oxidizer was not operating during 2010 and has not operated since May 2008; however, the perimeter collection system remains under negative pressure as the blowers continue to apply negative pressures to the collection system. The summaries of soil gas pressure readings for the quarterly tests are provided in Appendix C.

3.0 SUMMARY AND CONCLUSIONS

In summary, the 2010 test program involved collecting data on ambient air and soil gas volatile organic compounds and soil gas pressure readings. The program was completed according to the NYSDEC approved monitoring plan, which is in conformance with the Consent Decree. The data indicates that several compounds, most notably benzaldehyde, benzene, carbon tetrachloride, chloroform, 1,4-dichlorobenzene (p), 1,2-dichloroethane, 2/4-ethyltoluene (total), tetrachloroethene and trichloroethene 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 minimum upwind VOC concentrations (background levels) are subtracted from the peak downwind VOC concentration levels, only carbon tetrachloride and trichloroethene exceeded the level of their respective guideline values downwind of the landfill.

The upwind and downwind values that have been used in estimating air quality impacts associated with releases from the landfill are intentionally conservative. Moreover, it should be noted that quarterly monitoring, in most cases, is intended to occur during generally falling barometric pressure conditions which tend to maximize the observed impacts from any landfill source. Not all four (4) quarterly sampling events for 2010 occurred during falling atmospheric pressure; the pressure fell initially during the second quarter test of 2010 but rose for the remainder of the test for an overall rise in pressure during the 24 hour testing period. The downwind sampling locations were also positioned in order to maximize the impact from landfill and associated sources. A comparison of the data collected by the NYSDEC at other sites across the State indicated that the air quality in the area surrounding the OBSWDC remains typical of other areas of the State.

A database 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 TCL has been occasionally updated based on continuing reviews of TICs being detected by enhanced analytical procedures. These compounds can be as significant as illustrated by decane, which was not on the initial list of target compounds but was measured in excess of State annual guideline concentrations both upwind and downwind of the OBSWDC in the past. Decane was added to the TCL in 2003 and is almost always detected in the ambient samples; but since the AGC was increased in 2003 from 0.1 $\mu g/m^3$ to 200 $\mu g/m^3$ and then again in 2007 to 700 $\mu g/m^3$, it is unlikely it will exceed its currently assigned guideline

value. No additional precautions are recommended at this point since this compound was below the AGC limit in 2010 and all previous concentrations were below the State SGC limit.

In conclusion, the ambient VOC concentrations measured during the 2010 study upwind and downwind of the facility for most compounds appear to be similar to VOC constituents and VOC concentrations detected during previous years and for some compounds, have decreased significantly. Therefore, RTP will continue the current sample media configuration in future quarterly efforts for 2010. 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 test data, the OBSWDC appears to have had a limited impact on air quality for measured VOC compounds in 2010, especially with higher concentrations of trichloroethene. No VOC compound concentrations measured downwind of the landfill exceeded NYSDEC short-term air guidelines.

APPENDIX A

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

2010 ANNUAL SUMMARY REPORT

2010 QUARTERLY AMBIENT AIR VOC CONCENTRATION DATA

TABLE 4.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

FIRST QUARTER 2010

	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION[1]	U1	U2	D1	D2	D3	FB3	TB1	AGC	SGC[4]
LOWER QUANTITATION LIMIT (LQL)	0.0189	0.0309	0.0153	0.0375	0.0317	5	5		
PRACTICAL QUANTITATION LIMIT (PQL)	0.0302	0.0494	0.0245	0.0599	0.0508	8	8		
TARGETED TIC LQL	0.0943	0.1543	0.0765	0.1873	0.159	25	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(ng)	(µg/m^3)	(µg/m^3)
Acetone[2]	0.30	0.29	0.28	0.31	0.28	22		28,000	180,000
Benzaldehyde[3]		< 1.05						0.10	----
Benzene	**2.15**	**2.06**	**1.65**	**1.44**	**1.46**			0.13	1,300
Bromodichloromethane								0.02	---
Bromoform[2]								0.91	---
Bromomethane								5.00	3,900
2-Butanone[2]	0.24	< 0.28	0.30	< 0.28	0.31	23		5,000	13,000
Carbon Disulfide								700	6,200
Carbon Tetrachloride	**0.49**	**0.47**	**0.52**	**0.50**	**0.43**			0.067	1,900
Chlorobenzene								110	---
Chloroethane								10,000	---
Chloroethyl Vinyl Ether[3]								0.10	----
Chloroform	**0.15**	**0.14**	**0.13**	**0.13**	**0.12**			0.043	150
Chloromethane	0.049	< 0.062	0.028	< 0.071	< 0.063			90	22,000
Dibromochloromethane								0.10	---
1,2-Dichlorobenzene (o)								360	30,000
1,3-Dichlorobenzene (m)								360	30,000
1,4-Dichlorobenzene (p)	**0.49**	**< 0.35**	**0.52**	**< 0.43**	**0.44**			0.09	---
1,1-Dichloroethane								0.63	---
1,2-Dichloroethane								0.038	---
1,1-Dichloroethene								70	---
cis-1,2-Dichloroethene								63	---
trans-1,2-Dichloroethene								63	----
1,2-Dichloropropane								4.0	----
1,3-Dichloropropene, cis & trans isomers								0.25	---
Ethylbenzene	0.75	< 0.63	0.64	< 0.51	< 0.52			1,000	54,000
2/4-Ethyltoluene (total)	**1.70**	**< 1.28**	**1.47**	**< 1.14**	**< 1.22**			0.10	----
Freon 13[3]								1,000	68,000
2-Hexanone[2]								48	4,000
Methylene Chloride	0.79	0.94	0.58	0.63	0.62			2.10	14,000
4-Methyl-2-Pentanone[2]								3,000	31,000
Styrene								1,000	17,000
1,1,2,2-Tetrachloroethane								16	---
Tetrachloroethene	**1.36**	**< 1.03**	0.80	< 0.73	< 0.75			1.00	1,000
Toluene	4.15	< 2.92	3.36	< 2.68	< 2.71			5,000	37,000
1,1,1-Trichloroethane								1,000	68,000
1,1,2-Trichloroethane								1.40	---
Trichloroethene	0.12	< 0.11	0.11	< 0.12	< 0.13			0.50	14,000
Trichlorofluoromethane	0.94	0.83	0.80	0.87	0.92			1,000	68,000
Vinyl Chloride								0.11	180,000
Xylenes (Total)	3.32	< 2.52	2.72	< 2.04	< 2.21			100	4,300
Decane[3]	0.94	< 0.79	0.80	< 0.73	< 0.75			700	---
	17.95	15.77	14.70	12.61	12.95				

TABLE 4.1
Continued

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

FIRST QUARTER 2010

SAMPLE TYPE	**24-HR AMBIENT AIR SAMPLE**					BLANK		CURRENT AGC	24-HOUR SGC[4]
SAMPLE IDENTIFICATION (1)	U1	U2	D1	D2	D3	FB3	TB1		
ADDITIONAL TIC LQL	0.094	0.154	0.076	0.187	0.159	25	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(ng)	(µg/m^3)	(µg/m^3)
2-Methyl-pentane	0.25	0.94	0.22	1.57	0.60			4,200	350,000
Branched Alkane (DEL)	0.15	0.44		< 0.62	< 0.17			---	---
Unknown Alkene(RT: 3.37)		< 0.12						---	---
C3 subst. Benzene				**< 1.07**	**< 1.03**			0.13	1,300
2-Methyl-butane	0.32	2.74	0.24	3.11	1.72			42,000	---
Hexane	0.22	< 0.28	0.20	< 0.96	0.40			700	---
Isobutane	0.21	< 2.08	0.12	< 2.00	< 1.35			57,000	---
Dichlorodifluoromethane		< 1.16		< 1.85	< 0.78			12,000	---
Ethane, 1,1,2-trichloro-1,2,2-triflu		< 0.91		< 0.84				180,000	960,000
2-Methyl-Hexane	0.16	< 0.22	0.12	< 0.58	< 0.18			---	---
Butane	0.30	< 3.01	0.20	< 3.20	< 2.11			57,000	---
Branched Alkane (DEL) + cyclohexane			0.12	1.09	0.52			---	---

NOTES:

[1] See Figure 2.1 for ambient air sampling locations.

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

[3] 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.

[4] This 24-hour guideline concentration was calculated by multiplying the current SGC value (last revised September 2007 and still current as of September 2010) by 0.4 (EPA averaging time adjustment factor).

U1/U2: Ambient upwind samplers collocated on the 15th hole fairway of the Bethpage State Black Golf Course
D1/D2: Ambient downwind samplers collocated on the third footbridge on a landfill access road, approximately 150 feet west of soil gas well cluster M9.
D3: Ambient downwind sampler was located on the first footbridge on a landfill access road approximately 75 feet west of Winding Road.

- All values are reported in micrograms per standard cubic meter (µg/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 September 2007 and still current as of September 2010) 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.
- (µg/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 2010

	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION[1]	U1	U2	D1	D2*	D3	FB3	TB1	AGC	SGC[4]
LOWER QUANTITATION LIMIT (LQL)	0.0151	0.0314	0.0154	0.0315	0.0328	5	5		
PRACTICAL QUANTITATION LIMIT (PQL)	0.0241	0.0503	0.0247	0.0505	0.0525	8	8		
TARGETED TIC LQL	0.0753	0.1572	0.0772	0.1577	0.164	25	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(ng)	(µg/m^3)	(µg/m^3)
Acetone[2]	0.66	1.04	0.80	< 0.75	0.88	8		28,000	180,000
Benzaldehyde[3]	**0.81**	**< 0.91**						0.10	----
Benzene	**0.25**	**< 0.26**	**0.23**		**0.27**			0.13	1,300
Bromodichloromethane								0.02	---
Bromoform[2]	0.03		0.03					0.91	---
Bromomethane								5.00	3,900
2-Butanone[2]	0.28	0.32	0.28	< 0.07	0.25			5,000	13,000
Carbon Disulfide		< 0.03						700	6,200
Carbon Tetrachloride	**0.75**	**0.74**	**0.74**	**< 0.17**	**0.82**			0.067	1,900
Chlorobenzene								110	---
Chloroethane								10,000	---
Chloroethyl Vinyl Ether[3]								0.10	----
Chloroform	**0.16**	**0.17**	**0.13**	**< 0.05**	**0.13**			0.043	150
Chloromethane	0.12	< 0.08	0.10	< 0.11	< 0.10			90	22,000
Dibromochloromethane								0.10	---
1,2-Dichlorobenzene (o)								360	30,000
1,3-Dichlorobenzene (m)								360	30,000
1,4-Dichlorobenzene (p)	0.05	< 0.06	0.04		< 0.05			0.09	---
1,1-Dichloroethane								0.63	---
1,2-Dichloroethane	**0.07**	**< 0.08**	**0.07**		**< 0.08**			0.038	**---**
1,1-Dichloroethene								70	---
cis-1,2-Dichloroethene								63	---
trans-1,2-Dichloroethene								63	----
1,2-Dichloropropane								4.0	----
1,3-Dichloropropene, cis & trans isomers								0.25	---
Ethylbenzene	0.12	< 0.15	0.11		< 0.13			1,000	54,000
2/4-Ethyltoluene (total)	0.07	< 0.08	0.06		< 0.06			0.10	----
Freon 13[3]								1,000	68,000
2-Hexanone[2]	0.03		0.04					48	4,000
Methylene Chloride	0.22	0.34	0.15	< 0.20	0.30	32		2.10	14,000
4-Methyl-2-Pentanone[2]	0.05	< 0.05	0.05					3,000	31,000
Styrene								1,000	17,000
1,1,2,2-Tetrachloroethane	0.02		0.03					16	---
Tetrachloroethene	0.12	< 0.14	0.12		< 0.17			1.00	1,000
Toluene	0.72	< 0.83	0.62		< 0.64			5,000	37,000
1,1,1-Trichloroethane	0.06	0.07	0.06		0.11			1,000	68,000
1,1,2-Trichloroethane								1.40	---
Trichloroethene					< 0.08			0.50	14,000
Trichlorofluoromethane	1.69	1.57	1.51	< 1.47	1.74			1,000	68,000
Vinyl Chloride								0.11	180,000
Xylenes (Total)	0.51	< 0.58	0.46		< 0.48			100	4,300
Decane[3]	0.18	< 0.23	0.17		< 0.33			700	---
	6.98	7.74	5.82	2.81	6.61				

TABLE 4.1
Continued

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

SECOND QUARTER 2010

SAMPLE TYPE	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT AGC	24-HOUR SGC[4]
SAMPLE IDENTIFICATION (1)	U1	U2	D1	D2*	D3	FB3	TB1		
ADDITIONAL TIC LQL	0.075	0.157	0.077	0.158	0.164	25	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(ng)	(µg/m^3)	(µg/m^3)
2-Methyl-Heptane								3,300	---
2-Methyl-pentane	0.51	< 0.49	0.40		< 0.38			4,200	350,000
3-Methyl-pentane								4,200	350,000
Pentane		< 0.30			< 0.26			100	4,300
2-Methyl-butane	0.66	< 0.64	0.46	< 0.49	< 0.64			42,000	---
Hexane	0.48	< 0.55	0.40		< 0.54			700	---
Isobutane		< 0.49		< 0.36	< 0.39			57,000	---
Dichlorodifluoromethane	1.30	< 1.15	1.30	< 1.31	< 1.26			12,000	---
1, 3-Butadiene, 2-methyl-	1.39	1.45	1.36	< 1.06	1.44			---	---
Unknown (RT: 1.19-1.48)				< 0.26				---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu	0.51	< 0.55	0.46	< 0.52	< 0.54			180,000	960,000
Heptane					< 0.41			---	---
2-Methyl-Hexane		< 0.46			< 0.38			---	---
Butane	0.63	< 0.64	0.34	< 0.49	< 0.54			57,000	---
Octane					< 0.33			3,300	---
Cyclopentane, methyl		< 0.30						---	---
Nonanal		< 0.31						25,000	---
Propane					< 0.48			12,000	---

NOTES:

[1] See Figure 2.1 for ambient air sampling locations.

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

[3] 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.

[4] This 24-hour guideline concentration was calculated by multiplying the current SGC value (last revised September 2007 and still current as of September 2010) by 0.4 (EPA averaging time adjustment factor).

U1/U2: Ambient upwind samplers collocated near the western OBSWDC property boundary, approximately 150 feet west of Discharge Basin No. 1,
D1/D2: Ambient downwind samplers collocated on the southeast corner of the landfill along Haul Road.
D3: Ambient downwind sampler was located on the first footbridge on the eastern side of Haul Road approximately 75 feet west of Winding Road.

- All values are reported in micrograms per standard cubic meter (µg/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 September 2007 and still current as of September 2010) 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.
- (µg/std-m^3): micrograms per standard cubic meter
- (ng): nanograms

* D2.f was not analyzed, and therefore, the D2 values presented are strictly from the back trap.

TABLE 4.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

THIRD QUARTER 2010

	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION[1]	U1	U2	D1	D2	D3	FB3	TB1	AGC	SGC[4]
LOWER QUANTITATION LIMIT (LQL)	0.0164	0.0290	0.0151	0.0299	0.0308	5	5		
PRACTICAL QUANTITATION LIMIT (PQL)	0.0262	0.0464	0.0241	0.0479	0.0492	8	8		
TARGETED TIC LQL	0.0820	0.1449	0.0753	0.1497	0.154	25	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(ng)	(µg/m^3)	(µg/m^3)
Acetone[2]	0.69	0.87	0.54	0.90	0.83	10		30,000	180,000
Benzaldehyde[3]	**1.64**	**< 1.42**	**1.54**	**< 1.03**	**< 1.03**			0.10	----
Benzene	**0.72**	**0.66**	**0.63**	**0.71**	**0.62**			0.13	1,300
Bromodichloromethane								70.00	---
Bromoform[2]	0.02	< 0.05	0.02					0.91	---
Bromomethane								5.00	3,900
2-Butanone[2]	0.31	0.29	0.27	0.30	0.27			5,000	13,000
Carbon Disulfide	0.02							700	6,200
Carbon Tetrachloride	**0.79**	**0.66**	**0.69**	**0.73**	**0.70**			0.170	1,900
Chlorobenzene								110	---
Chloroethane								10,000	---
Chloroethyl Vinyl Ether[3]								0.10	----
Chloroform	**0.14**	**0.13**	**0.13**	**0.15**	**0.14**			0.043	150
Chloromethane	0.07	< 0.06	0.08	< 0.07	< 0.07			90	22,000
Dibromochloromethane								0.10	---
1,2-Dichlorobenzene (o)								200	30,000
1,3-Dichlorobenzene (m)								10	---
1,4-Dichlorobenzene (p)	0.14	< 0.12	0.12	< 0.13	< 0.12			0.09	---
1,1-Dichloroethane								0.63	---
1,2-Dichloroethane	**0.07**	**< 0.06**	**0.06**	**< 0.07**	**< 0.07**			0.038	**---**
1,1-Dichloroethene								70	---
cis-1,2-Dichloroethene								63	---
trans-1,2-Dichloroethene								63	----
1,2-Dichloropropane					< 0.03			4.0	----
1,3-Dichloropropene, cis & trans isomers								0.25	---
Ethylbenzene	0.32	< 0.29	0.28	< 0.31	< 0.28			1,000	54,000
2/4-Ethyltoluene (total)	**0.20**	**< 0.18**	**0.19**	**< 0.21**	**< 0.16**			0.10	----
Freon 13[3]								5,000	9,000
2-Hexanone[2]								30	4,000
Methylene Chloride	0.36	0.49	0.42	0.69	0.77	26		2.10	14,000
4-Methyl-2-Pentanone[2]	0.05	< 0.06	0.05	< 0.07	< 0.07			3,000	31,000
Styrene	0.04	< 0.05	0.04	< 0.03	< 0.03			1,000	17,000
1,1,2,2-Tetrachloroethane					< 0.04			16	---
Tetrachloroethene	0.56	< 0.45	0.54	< 0.49	< 0.45			1.00	1,000
Toluene	1.93	< 1.70	1.84	< 1.90	< 1.74			5,000	37,000
1,1,1-Trichloroethane	0.09	0.08	0.08	0.09	0.11			5,000	9,000
1,1,2-Trichloroethane								1.40	---
Trichloroethene	0.09	< 0.10	0.13	< 0.16	< 0.20			0.50	14,000
Trichlorofluoromethane	1.77	1.48	1.57	2.04	1.69	9		5,000	9,000
Vinyl Chloride								0.11	180,000
Xylenes (Total)	1.48	< 1.29	1.33	< 1.39	< 1.22			100	4,300
Decane[3]	0.59	< 0.62	0.57	< 0.67	< 0.57			700	---
	12.08	11.09	11.11	12.17	11.22				

TABLE 4.1
Continued

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

THIRD QUARTER 2010

SAMPLE TYPE	**24-HR AMBIENT AIR SAMPLE**					BLANK		CURRENT AGC	24-HOUR SGC[4]
SAMPLE IDENTIFICATION (1)	U1	U2	D1	D2	D3	FB3	TB1		
ADDITIONAL TIC LQL	0.082	0.145	0.075	0.150	0.154	25	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(ng)	(µg/m^3)	(µg/m^3)
2-Methyl-pentane	1.51	1.33	1.33	1.44	1.30			4,200	350,000
3-Methyl-pentane				< 0.70				4,200	350,000
Pentane	1.02	1.04	0.81	1.14	1.20			---	4,200
Branched Alkane (DEL)			1.23	< 1.21				---	---
2-Methyl-butane	0.72	2.03	1.48	2.01	1.97			42,000	---
Hexane	1.31	< 1.17	1.33	< 1.33	< 1.22			700	---
alpha-Pinene isomer (RT: 10.68)					< 0.66			---	---
Isobutane		< 1.26						57,000	---
Dichlorodifluoromethane	1.18	< 1.12	1.27	< 1.33	< 1.34			12,000	---
Unknown (RT: 1.23-1.24)				< 0.61	< 0.60			---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu		< 0.51		< 0.52	< 0.54			180,000	960,000
2-Methyl-Hexane	1.21	< 1.03			< 1.09			---	---
Butane	1.67	< 1.55	1.33	< 1.75	< 1.52			57,000	---
Cyclopentane, methyl		< 0.65		< 0.73				700	---

NOTES:

[1] See Figure 2.1 for ambient air sampling locations.

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

[3] 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.

[4] This 24-hour guideline concentration was calculated by multiplying the current SGC value (last revised October 2010 and still current as of December 2010) by 0.4 (EPA averaging time adjustment factor).

U1/U2: Ambient upwind samplers collocated on the 15th hole fairway of the Bethpage State Black Golf Course
D1/D2: Ambient downwind samplers collocated on the southeast corner of the landfill along Haul Road.
D3: Ambient downwind samplers collocated on the third footbridge on a landfill access road, approximately 150 feet west of soil gas well cluster M9.

- All values are reported in micrograms per standard cubic meter (µg/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 October 2010 and still current as of December 2010) 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.
- (µg/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 2010

	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION[1]	U1	U2	D1	D2	D3	FB3	TB1	AGC	SGC[4]
LOWER QUANTITATION LIMIT (LQL)	0.0246	0.0372	0.0235	0.0241	0.0238	5	5		
PRACTICAL QUANTITATION LIMIT (PQL)	0.0394	0.0595	0.0376	0.0386	0.0381	8	8		
TARGETED TIC LQL	0.1232	0.1859	0.1176	0.1205	0.119	25	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(ng)	(µg/m^3)	(µg/m^3)
Acetone[2]	0.70	1.34	0.68	0.84	0.78			30,000	180,000
Benzaldehyde[3]	**< 1.00**	**< 2.12**	**< 0.98**	**< 1.17**	**< 0.42**			0.10	----
Benzene	**1.17**	**< 1.36**	**1.25**	**1.33**	**1.14**			0.13	1,300
Bromodichloromethane								70.0	---
Bromoform[2]	< 0.04	< 0.05	< 0.04	< 0.04				0.91	---
Bromomethane								5.00	3,900
2-Butanone[2]	0.40	< 0.55	0.65	0.70	0.60			5,000	13,000
Carbon Disulfide			< 0.03	< 0.03	< 0.02			700	6,200
Carbon Tetrachloride	**0.66**	**0.63**	**0.62**	**0.64**	**0.65**			0.170	1,900
Chlorobenzene								110	---
Chloroethane								10,000	---
Chloroethyl Vinyl Ether[3]			0.03					0.10	----
Chloroform	**0.13**	**0.14**	**0.12**	**0.13**	**0.12**			0.043	150
Chloromethane	< 0.06	< 0.13	< 0.04	< 0.05	< 0.05			90.0	22,000
Dibromochloromethane								0.10	---
1,2-Dichlorobenzene (o)								200	30,000
1,3-Dichlorobenzene (m)								10.0	---
1,4-Dichlorobenzene (p)	**< 0.10**	**< 0.12**	**< 0.12**	**< 0.13**	< 0.05			0.09	---
1,1-Dichloroethane								0.63	---
1,2-Dichloroethane	**< 0.08**	**< 0.09**	**< 0.07**	**< 0.08**	**< 0.08**			0.038	**---**
1,1-Dichloroethene								70.0	---
cis-1,2-Dichloroethene								63.0	---
trans-1,2-Dichloroethene				< 0.02	< 0.02			63.0	----
1,2-Dichloropropane	< 0.03	< 0.04	< 0.03	< 0.03	< 0.03			4.00	----
1,3-Dichloropropene, cis & trans isomers								0.25	---
Ethylbenzene	< 0.41	< 0.54	< 0.48	< 0.54	< 0.42			1,000	54,000
2/4-Ethyltoluene (total)	**< 0.28**	**< 0.38**	**< 0.32**	**< 0.42**	**< 0.13**			0.10	----
Freon 13[3]								5,000	9,000
2-Hexanone[2]								30.0	4,000
Methylene Chloride	0.48	0.66	0.53	0.62	0.52	15		2.10	14,000
4-Methyl-2-Pentanone[2]	< 0.11	< 0.17	< 0.18	< 0.21	< 0.11			3,000	31,000
Styrene	< 0.04	< 0.18	< 0.03	< 0.07	< 0.03			1,000	17,000
1,1,2,2-Tetrachloroethane								16.0	---
Tetrachloroethene	**< 1.79**	**< 2.32**	< 0.93	< 0.98	**< 1.06**			1.00	1,000
Toluene	< 2.48	< 3.29	< 2.60	2.66	< 2.63			5,000	37,000
1,1,1-Trichloroethane	0.11	0.13	0.08	0.08	0.08			5,000	9,000
1,1,2-Trichloroethane								1.40	---
Trichloroethene	0.46	**< 0.61**	**5.27**	**5.25**	**1.15**			0.50	14,000
Trichlorofluoromethane	1.45	1.64	1.16	1.37	1.34			5,000	9,000
Vinyl Chloride								0.11	180,000
Xylenes (Total)	< 1.88	< 2.29	< 2.15	< 2.35	< 1.87			100	4,300
Decane[3]	< 0.65	< 0.72	< 0.88	< 0.90	< 0.70			700	---
	14.50	19.49	19.29	20.67	14.01				

TABLE 4.1
Continued

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

FOURTH QUARTER 2010

SAMPLE TYPE	**24-HR AMBIENT AIR SAMPLE**					BLANK		CURRENT AGC	24-HOUR SGC[4]
SAMPLE IDENTIFICATION (1)	U1	U2	D1	D2	D3	FB3	TB1		
ADDITIONAL TIC LQL	0.123	0.186	0.118	0.120	0.119	25	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(ng)	(µg/m^3)	(µg/m^3)
2-Methyl-pentane	2.49	2.83	4.05	< 2.40	2.31			4,200	350,000
3-Methyl-pentane			< 0.51	< 1.05				4,200	350,000
Pentane	< 1.59	3.20	2.71	3.18	< 1.73			---	4,200
C3 subst. Benzene	**< 0.65**			**< 0.81**	**< 0.49**			0.13	1,300
2-Methyl-butane	< 2.33	4.65	3.29	3.88	< 2.68			42,000	---
Hexane	2.32	< 2.47	< 2.11	< 2.16	< 1.82			700	---
Isobutane				< 2.71	< 2.27			57,000	---
Dichlorodifluoromethane	< 1.29	< 2.88	< 1.09	< 1.29	< 1.25			12,000	---
Ethane, 1,1,2-trichloro-1,2,2-triflu		< 0.61			< 0.54			180,000	960,000
Heptane	< 0.63				< 0.68			---	---
2-Methyl-Hexane	< 1.64	< 2.17	< 1.94		< 1.61			---	---
Butane	< 2.38	< 3.22	< 2.41	< 2.71	< 2.42			57,000	---
Acetic acid, methyl ester				< 1.67				3,400	---
Cyclopentane, methyl	< 0.97	< 1.39	< 1.05	< 1.10	< 0.89			700	---
Propane	< 0.53	< 3.33	< 0.65	< 0.83				12,000	---

NOTES:

[1] See Figure 2.1 for ambient air sampling locations.

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

[3] 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.

[4] This 24-hour guideline concentration was calculated by multiplying the current SGC value (last revised October 2010 and still current as of March 2011) by 0.4 (EPA averaging time adjustment factor).

U1/U2: Ambient upwind samplers collocated on the 15th hole fairway of the Bethpage State Black Golf Course
D1/D2: Ambient downwind samplers collocated on the northern edge of the landfill approximately 200' east of Haul Road.
D3: Ambient downwind sampler was located along a landfill access road on the southwestern edge of the landfill, north of the yard waste area.

- All values are reported in micrograms per standard cubic meter (µg/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 October 2010 and still current as of March 2011) 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.
- (µg/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, SOILS AND SOIL GAS PRESSURE READINGS

2010 ANNUAL SUMMARY REPORT

2010 QUARTERLY SOIL GAS VOC CONCENTRATION DATA

TABLE 4.2

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
FIRST QUARTER 2010

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	FB1	Current	Current
LOWER QUANTITATION LIMIT (LQL)	0.506	0.514	0.476	0.498	0.514	0.514	0.514	1.029	0.514	5	AGC	SGC
PRACTICAL QUANTITATION LIMIT (PQL)	0.809	0.823	0.762	0.797	0.823	0.823	0.823	1.646	0.82	8	---	---
TARGETED TIC LQL	2.53	2.57	2.38	2.49	2.57	2.57	2.57	5.14	2.57	25	---	---
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(µg/m^3)	(µg/m^3)
Acetone*			2.48					1.95			28,000	180,000
Benzaldehyde**								< 27.26			0.10	----
Benzene											0.13	1300
Bromodichloromethane											0.02	---
Bromoform*											0.91	---
Bromomethane											5.00	3900
2-Butanone*			1.14					< 1.75			5000	13,000
Carbon Disulfide											700	6200
Carbon Tetrachloride											0.067	1,900
Chlorobenzene											110	---
Chloroethane											10,000	---
Chloroethyl Vinyl Ether**											0.10	----
Chloroform	**6.27**					**0.62**			**1.03**		0.043	150
Chloromethane											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											63	---
trans-1,2-Dichloroethene									1.23		63	----
1,2-Dichloropropane											4.00	----
1,3-Dichloropropene, cis & trans isomers											0.25	---
Ethylbenzene											1,000	54,000
2/4-Ethyltoluene (total)											0.10	----
Freon 13**											1000	68,000
2-Hexanone*											48.0	4000
Methylene Chloride			**14.29**	**14.94**	**15.43**	1.65	**2.06**		1.75		2.10	14,000
4-Methyl-2-Pentanone*											3,000	31,000
Styrene											1,000	17,000
1,1,2,2-Tetrachloroethane											16	---
Tetrachloroethene		0.72	0.67	0.90		**2.06**	**2.47**	**< 13.89**	**113.17**		1.00	1,000
Toluene	3.24										5,000	37,000
1,1,1-Trichloroethane									1.34		1,000	68,000
1,1,2-Trichloroethane											1.40	---
Trichloroethene											0.50	14,000
Trichlorofluoromethane	0.81	0.82	0.76	0.90	0.82	1.13	1.03	< 1.34	3.19		1,000	68,000
Vinyl Chloride											0.11	180,000
Xylenes (Total)											100	4,300
Decane**								< 27.26			700	---
	10.31	1.54	19.33	16.73	16.26							

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 2010

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	FB1	Current	Current
ADDITIONAL TIC LQI	2.53	2.57	2.38	2.49	2.57	2.57	2.57	5.14	2.57	25	AGC	SGC
VOC COMPOUND NAME	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(ng)	(µg/m³)	(µg/m³)
Dichlorodifluoromethane	3.94	3.70	3.71	3.78	3.81	2.67	3.50	< 7.82	16.46		12,000	---
1,1-Dichloro-1-fluoroethane	7.18										---	---
Dichlorotetrafluoroethane									12.35		17,000	---
Ethane, 1,1-difluoro-+dichlorofluoromethane											---	---

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
FIRST QUARTER 2010

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	FB2	Current AGC	Current SGC
LOWER QUANTITATION LIMIT (LQL)	0.470	0.489	-	0.475	0.478	0.463	0.484	0.479	0.997	5		
PRACTICAL QUANTITATION LIMIT (PQL)	0.752	0.782	-	0.760	0.764	0.74	0.775	0.767	1.595	8		
TARGETED TIC LQL	2.35	2.44	-	2.38	2.39	2.31	2.42	2.40	4.99	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(µg/m^3)	(µg/m^3)
Acetone*				0.95	0.96				< 1.89		28,000	180,000
Benzaldehyde**											0.10	----
Benzene											0.13	1300
Bromodichloromethane											0.02	---
Bromoform*					0.67						0.91	---
Bromomethane											5.00	3900
2-Butanone*									< 1.99		5000	13,000
Carbon Disulfide	1.13										700	6200
Carbon Tetrachloride											0.067	1,900
Chlorobenzene											110	---
Chloroethane											10,000	---
Chloroethyl Vinyl Ether**											0.10	----
Chloroform	**0.75**										0.043	150
Chloromethane											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											63	---
trans-1,2-Dichloroethene											63	----
1,2-Dichloropropane											4.00	----
1,3-Dichloropropene, cis & trans isomers											0.25	---
Ethylbenzene											1,000	54,000
2/4-Ethyltoluene (total)											0.10	----
Freon 13**											1000	68,000
2-Hexanone*											48.0	4000
Methylene Chloride	1.79			**2.19**	1.15		1.55			12	2.10	14,000
4-Methyl-2-Pentanone*											3,000	31,000
Styrene											1,000	17,000
1,1,2,2-Tetrachloroethane					0.86						16	---
Tetrachloroethene	**3.48**	**2.44**							**< 7.48**		1.00	1,000
Toluene				0.57							5000	37,000
1,1,1-Trichloroethane											1,000	68,000
1,1,2-Trichloroethane											1.40	---
Trichloroethene											0.50	14,000
Trichlorofluoromethane	2.07	1.37		0.86	0.86	0.74	0.87	0.86	< 1.00		1000	68,000
Vinyl Chloride											0.11	180,000
Xylenes (Total)											100	4,300
Decane**											700	---
	9.21	3.81		4.56	4.49	0.74	2.42	0.86	12.36			

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 2010

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	FB2	Current	Current
ADDITIONAL TIC LQI	2.35	2.44	-	2.38	2.39	2.31	2.42	2.40	4.99	25	AGC	SGC
VOC COMPOUND NAME	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(ng)	(µg/m³)	(µg/m³)
Dichlorodifluoromethane		3.91		3.80	3.15	2.68		3.55			12,000	---
1,1-Dichloro-1-fluoroethane											---	---
Dichlorotetrafluoroethane											17,000	---
Ethane, 1,1-difluoro-+dichlorofluoromethane	4.89						4.46		< 6.08		---	---

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 (µg/std-m^3).
- 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 September 2007 and still current as of September 2010) 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.
- (µg/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 2010

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	FB1	Current	Current
LOWER QUANTITATION LIMIT (LQL)	0.478	0.466	0.470	0.478	0.469	0.493	0.486	0.982	0.491	5	AGC	SGC
PRACTICAL QUANTITATION LIMIT (PQL)	0.766	0.746	0.753	0.765	0.750	0.788	0.778	1.572	0.79	8	---	---
TARGETED TIC LQL	2.39	2.33	2.35	2.39	2.35	2.46	2.43	4.91	2.45	25	---	---
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(µg/m^3)	(µg/m^3)
Acetone*	1.63	2.33	2.35	2.20	2.35	1.77	3.02	4.22	4.12	11	28,000	180,000
Benzaldehyde* **								**< 26.03**			0.10	----
Benzene											0.13	1300
Bromodichloromethane											0.02	---
Bromoform*											0.91	---
Bromomethane											5.00	3900
2-Butanone*	0.57		0.66	33.46	0.94	0.59			0.88		5000	13,000
Carbon Disulfide				1.05				< 1.67			700	6200
Carbon Tetrachloride											0.067	1,900
Chlorobenzene											110	---
Chloroethane											10,000	---
Chloroethyl Vinyl Ether**											0.10	----
Chloroform	**11.48**			**0.67**		**0.69**	**0.78**	**< 1.18**	**0.79**		0.043	150
Chloromethane											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											63	---
trans-1,2-Dichloroethene									0.98		63	----
1,2-Dichloropropane											4.00	----
1,3-Dichloropropene, cis & trans isomers											0.25	---
Ethylbenzene											1,000	54,000
2/4-Ethyltoluene (total)											0.10	----
Freon 13**											1000	68,000
2-Hexanone*											48.0	4000
Methylene Chloride					1.69	1.67	1.26	**< 2.85**	1.18	23	2.10	14,000
4-Methyl-2-Pentanone*											3,000	31,000
Styrene											1,000	17,000
1,1,2,2-Tetrachloroethane											16	---
Tetrachloroethene	**5.36**	**1.03**	**1.22**	**3.92**	0.84	**8.08**	**5.84**	**< 6.78**	**59.86**		1.00	1,000
Toluene											5,000	37,000
1,1,1-Trichloroethane									1.08		1,000	68,000
1,1,2-Trichloroethane											1.40	---
Trichloroethene	**0.67**										0.50	14,000
Trichlorofluoromethane	2.11	1.12	1.41	1.34	1.59	3.74	3.31	3.14	3.53		1,000	68,000
Vinyl Chloride											0.11	180,000
Xylenes (Total)											100	4,300
Decane**								< 26.03			700	---
	21.82	4.47	5.64	42.64	7.41							

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 2010

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	FB1	Current	Current
ADDITIONAL TIC LQL	2.39	2.33	2.35	2.39	2.35	2.46	2.43	4.91	2.45	25	AGC	SGC
VOC COMPOUND NAME	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(ng)	(µg/m³)	(µg/m³)
Ethane, 1,1-dichloro-1,1,2,2-tetrafluoro									5.40		---	---
Isobutane											57,000	---
Dichlorodifluoromethane	3.35		3.01		4.03	2.46		< 6.29	8.73	44	12,000	---
1,1-Dichloro-1-fluoroethane	2.78										---	---
Pinene isomer (RT:11.35)			2.92								95	6,000
Undecane		85.74									---	---
Unknown (RT: 1.19-1.48)										98	---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu									4.02		180,000	960,000
Cyclotrisiloxane, hexamethyl-	3.16	3.36	3.67	5.16	5.72	3.84	2.63	< 6.58	3.14		---	---
Nonanal					2.81						25,000	---
Propane						6.70				160	12,000	---

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
SECOND QUARTER 2010

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	FB2	Current AGC	Current SGC
LOWER QUANTITATION LIMIT (LQL	0.472	0.503	-	0.505	0.509	0.498	0.502	0.501	0.985	5		
PRACTICAL QUANTITATION LIMIT (PQL	0.755	0.804	-	0.807	0.814	0.80	0.802	0.801	1.576	8		
TARGETED TIC LQL	2.36	2.51	-	2.52	2.54	2.49	2.51	2.50	4.93	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(µg/m^3)	(µg/m^3)
Acetone*	2.74	2.01		4.64	1.93	2.79	2.81	1.70	2.17	12	28,000	180,000
Benzaldehyde**											0.10	----
Benzene											0.13	1300
Bromodichloromethane											0.02	---
Bromoform*											0.91	---
Bromomethane											5.00	3900
2-Butanone*	0.57	0.60		0.91							5000	13,000
Carbon Disulfide				1.11		0.90					700	6200
Carbon Tetrachloride				**0.61**							0.067	1,900
Chlorobenzene											110	---
Chloroethane											10,000	---
Chloroethyl Vinyl Ether**											0.10	----
Chloroform	**2.74**	**1.71**				**1.09**	**0.60**	**3.60**	< **1.58**		0.043	150
Chloromethane				2.93							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	**1.32**										0.63	---
1,2-Dichloroethane											0.038	---
1,1-Dichloroethene											70.00	---
cis-1,2-Dichloroethene											63	---
trans-1,2-Dichloroethene											63	----
1,2-Dichloropropane											4.00	----
1,3-Dichloropropene, cis & trans isomers											0.25	---
Ethylbenzene											1,000	54,000
2/4-Ethyltoluene (total)											0.10	----
Freon 13**											1000	68,000
2-Hexanone*											48.0	4000
Methylene Chloride		1.71		**1.61**	1.42	1.39	1.60	**16.02**	< **2.56**	41	2.10	14,000
4-Methyl-2-Pentanone*											3,000	31,000
Styrene											1,000	17,000
1,1,2,2-Tetrachloroethane											16	---
Tetrachloroethene	**22.66**	**25.13**				0.90	**1.40**	**2.70**	< **57.64**		1.00	1,000
Toluene				0.81				0.50			5000	37,000
1,1,1-Trichloroethane	1.61	0.70									1,000	68,000
1,1,2-Trichloroethane											1.40	---
Trichloroethene	**1.98**										0.50	14,000
Trichlorofluoromethane	2.55	2.71		1.31	1.42	1.59		1.70	< 2.27		1000	68,000
Vinyl Chloride											0.11	180,000
Xylenes (Total)											100	4,300
Decane**	17.00			141.27							700	---
	53.16	34.57		155.20	4.78	8.66	6.42	26.23	66.21			

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 2010

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	FB2	Current	Current
ADDITIONAL TIC LQL	2.36	2.51	-	2.52	2.54	2.49	2.51	2.50	4.93	25	AGC	SGC
VOC COMPOUND NAME	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(ng)	(µg/m³)	(µg/m³)
Ethane, 1,1-dichloro-1,1,2,2-tetrafluoro											---	---
Isobutane								2.70			57,000	---
Dichlorodifluoromethane		4.12					3.41		< 5.52		12,000	---
1,1-Dichloro-1-fluoroethane		3.02									---	---
Pinene isomer (RT:11.35)											95	6,000
Undecane	415.49	6.13		1412.71	6.41				< 48.77		---	---
Unknown (RT: 1.19-1.48)								3.10			---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu											180,000	960,000
Cyclotrisiloxane, hexamethyl-		2.81			3.87	3.38	2.91	6.21	< 5.52		---	---
Nonanal											25,000	---
Propane						4.48	3.41	4.20			12,000	---

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 (µg/std-m^3).
- 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 September 2007 and still current as of September 2010) 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.
- (µg/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 2010

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	FB1	Current	Current
LOWER QUANTITATION LIMIT (LQL)	0.470	0.487	0.458	0.476	0.499	0.487	0.489	0.980	0.490	5	AGC	SGC
PRACTICAL QUANTITATION LIMIT (PQL)	0.753	0.779	0.733	0.762	0.798	0.779	0.782	1.569	0.78	8	---	---
TARGETED TIC LQL	2.35	2.43	2.29	2.38	2.50	2.43	2.44	4.90	2.45	25	---	---
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(µg/m^3)	(µg/m^3)
Acetone*	1.88	1.07	3.94	1.52	1.90	1.66	1.47	6.57	1.96	13	30,000	180,000
Benzaldehyde**	**12.23**		**18.32**	**6.67**		**5.94**		**42.16**			0.10	----
Benzene											0.13	1300
Bromodichloromethane											70	---
Bromoform*											0.91	---
Bromomethane											5.00	3900
2-Butanone*	0.56		1.56	0.67				3.82	0.78		5000	13,000
Carbon Disulfide				2.00		0.68		< 1.67			700	6200
Carbon Tetrachloride				**0.57**							0.17	1,900
Chlorobenzene											110	---
Chloroethane											10,000	---
Chloroethyl Vinyl Ether**											0.10	----
Chloroform	**1.32**			**0.76**	**0.60**	**0.97**	**0.68**	**< 1.37**	**0.78**		0.043	150
Chloromethane											90.0	22,000
Dibromochloromethane											0.10	---
1,2-Dichlorobenzene (o)											200	30,000
1,3-Dichlorobenzene (m)											10	---
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											63	---
trans-1,2-Dichloroethene									1.57		63	----
1,2-Dichloropropane											4.00	----
1,3-Dichloropropene, cis & trans isomers											0.25	---
Ethylbenzene											1,000	54,000
2/4-Ethyltoluene (total)											0.10	----
Freon 13**											5000	9,000
2-Hexanone*											30.0	4000
Methylene Chloride	**2.82**	**3.21**	1.37	1.24	1.40	1.27		**16.96**	1.96		2.10	14,000
4-Methyl-2-Pentanone*											3,000	31,000
Styrene											1,000	17,000
1,1,2,2-Tetrachloroethane											16	---
Tetrachloroethene	**3.57**			**1.05**		**11.68**	**12.71**	**< 15.20**	**93.14**		1.00	1,000
Toluene											5,000	37,000
1,1,1-Trichloroethane									1.47		5,000	9,000
1,1,2-Trichloroethane											1.40	---
Trichloroethene	**0.66**		**2.47**				**0.78**	**< 1.08**			0.50	14,000
Trichlorofluoromethane	1.60	1.75	1.47	2.00	3.19	2.92	4.20	3.33	6.27	12	5,000	9,000
Vinyl Chloride											0.11	180,000
Xylenes (Total)											100	4,300
Decane**	12.23		18.32	6.67		5.94		42.16			700	---
	36.88	6.04	47.44	23.14	7.09							

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 2010

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	FB1	Current	Current
ADDITIONAL TIC LQL	2.35	2.43	2.29	2.38	2.50	2.43	2.44	4.90	2.45	25	AGC	SGC
VOC COMPOUND NAME	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(ng)	(µg/m³)	(µg/m³)
Pentane									3.63		---	4,200
Unknown Alkene(RT: 1.47)											---	---
Ethane, 1,1-difluoro-	8.84		2.75		2.89					57	40,000	---
Ethane, 1,1-dichloro-1,1,2,2-tetrafluoro									5.59		17,000	---
Hexane								< 6.18			700	---
Dichlorodifluoromethane								< 6.86	3.82		12,000	---
1,1-Dichloro-1-fluoroethane	11.29										---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu									4.61		180,000	960,000
Cyclotrisiloxane, hexamethyl-	3.67	4.87	4.40	4.67	4.99	3.99	3.42		3.24		---	---
Ethane, 1,2-dichloro-1-fluoro						3.70					---	---
Difluorochloromethane			5.59	4.67	3.69						50,000	---

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
THIRD QUARTER 2010

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	FB2	Current AGC	Current SGC
LOWER QUANTITATION LIMIT (LQL	0.447	0.494	-	0.487	0.498	0.490	0.498	0.498	0.991	5		
PRACTICAL QUANTITATION LIMIT (PQL	0.716	0.790	-	0.779	0.796	0.78	0.796	0.796	1.586	8		
TARGETED TIC LQL	2.24	2.47	-	2.43	2.49	2.45	2.49	2.49	4.96	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(µg/m^3)	(µg/m^3)
Acetone*	2.77	1.48		1.56	1.69	1.47	4.88	1.19	4.86	12	30,000	180,000
Benzaldehyde**							**20.90**		**26.26**		0.10	----
Benzene											0.13	1300
Bromodichloromethane											70	---
Bromoform*											0.91	---
Bromomethane											5.00	3900
2-Butanone*							1.49		< 2.48		5000	13,000
Carbon Disulfide						0.88					700	6200
Carbon Tetrachloride					**0.60**						0.17	1,900
Chlorobenzene											110	---
Chloroethane											10,000	---
Chloroethyl Vinyl Ether**											0.10	----
Chloroform	**2.68**					**5.78**					0.043	150
Chloromethane							1.09				90.0	22,000
Dibromochloromethane											0.10	---
1,2-Dichlorobenzene (o)											200	30,000
1,3-Dichlorobenzene (m)											10	---
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											63	---
trans-1,2-Dichloroethene											63	----
1,2-Dichloropropane											4.00	----
1,3-Dichloropropene, cis & trans isomers											0.25	---
Ethylbenzene											1,000	54,000
2/4-Ethyltoluene (total)											0.10	----
Freon 13**											5000	9,000
2-Hexanone*											30.0	4000
Methylene Chloride					**4.08**				**< 2.18**	25	2.10	14,000
4-Methyl-2-Pentanone*											3,000	31,000
Styrene											1,000	17,000
1,1,2,2-Tetrachloroethane											16	---
Tetrachloroethene	**9.84**										1.00	1,000
Toluene											5000	37,000
1,1,1-Trichloroethane	0.81										5,000	9,000
1,1,2-Trichloroethane											1.40	---
Trichloroethene	**0.54**										0.50	14,000
Trichlorofluoromethane	1.88	0.69		1.27	2.69	1.47	1.49	2.39	< 4.36		5000	9,000
Vinyl Chloride											0.11	180,000
Xylenes (Total)											100	4,300
Decane**											700	---
	18.52	2.17		2.82	9.05	9.60	29.85	3.58	40.14			

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 2010

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	FB2	Current	Current
ADDITIONAL TIC LQL	2.24	2.47	-	2.43	2.49	2.45	2.49	2.49	4.96	25	AGC	SGC
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(µg/m^3)	(µg/m^3)
Pentane					2.89			3.58	< 5.25		---	4,200
Unknown Alkene(RT: 1.47)					3.88						---	---
Ethane, 1,1-difluoro-					3.78			3.78		3.40E+01	40,000	---
Ethane, 1,1-dichloro-1,1,2,2-tetrafluoro											17,000	---
Hexane											700	---
Dichlorodifluoromethane											12,000	---
1,1-Dichloro-1-fluoroethane								5.27			---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu											180,000	960,000
Cyclotrisiloxane, hexamethyl-	3.04	3.75		3.12	4.48	3.43	4.48	3.18			---	---
Ethane, 1,2-dichloro-1-fluoro											---	---
Difluorochloromethane					3.38	4.21					50,000	---

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 (µg/std-m^3).
- 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 October 2010 and still current as of December 2010) 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.
- (µg/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 2010

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	FB1	Current	Current
LOWER QUANTITATION LIMIT (LQL)	0.473	0.473	0.473	0.472	0.472	0.472	0.471	0.942	0.472	5	AGC	SGC
PRACTICAL QUANTITATION LIMIT (PQL)	0.756	0.756	0.756	0.755	0.755	0.755	0.753	1.507	0.76	8	---	---
TARGETED TIC LQL	2.36	2.36	2.36	2.36	2.36	2.36	2.35	4.71	2.36	25	---	---
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(µg/m^3)	(µg/m^3)
Acetone*	1.23	2.36	1.42	1.23	1.32	1.51	1.41	3.86	1.79	9	30,000	180,000
Benzaldehyde**	**4.82**	**6.24**	**5.29**						**3.97**		0.10	----
Benzene											0.13	1300
Bromodichloromethane											70.0	---
Bromoform*											0.91	---
Bromomethane											5.00	3900
2-Butanone*		0.95	1.61								5000	13,000
Carbon Disulfide	0.47			0.57							700	6200
Carbon Tetrachloride		**0.57**		**0.47**							0.17	1,900
Chlorobenzene											110	---
Chloroethane											10,000	---
Chloroethyl Vinyl Ether**											0.10	----
Chloroform	**0.66**				**0.76**	**0.57**	**0.75**	**< 1.13**	**0.85**		0.043	150
Chloromethane											90.0	22,000
Dibromochloromethane											0.10	---
1,2-Dichlorobenzene (o)											200	30,000
1,3-Dichlorobenzene (m)											10.0	---
1,4-Dichlorobenzene (p)											0.09	---
1,1-Dichloroethane											0.63	---
1,2-Dichloroethane											0.038	---
1,1-Dichloroethene											70.0	---
cis-1,2-Dichloroethene											63.0	---
trans-1,2-Dichloroethene									0.85		63.0	----
1,2-Dichloropropane											4.00	----
1,3-Dichloropropene, cis & trans isomers											0.25	---
Ethylbenzene											1,000	54,000
2/4-Ethyltoluene (total)											0.10	----
Freon 13**											5000	9,000
2-Hexanone*											30.0	4000
Methylene Chloride	1.89	1.80	1.98	1.23	1.13	1.13	1.22		2.08		2.10	14,000
4-Methyl-2-Pentanone*											3,000	31,000
Styrene											1,000	17,000
1,1,2,2-Tetrachloroethane											16.0	---
Tetrachloroethene	**2.46**			**0.76**		**6.23**	**7.91**	**< 9.60**	**50.99**		1.00	1,000
Toluene											5,000	37,000
1,1,1-Trichloroethane									0.76		5,000	9,000
1,1,2-Trichloroethane											1.40	---
Trichloroethene				**1.32**							0.50	14,000
Trichlorofluoromethane	1.51	1.32	1.32	1.13	1.32	2.08	2.26	< 2.45	2.74		5,000	9,000
Vinyl Chloride											0.11	180,000
Xylenes (Total)											100	4,300
Decane**	4.82	6.24	5.29						3.97		700	---
	17.86	19.47	16.92	6.70	4.53							

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 2010

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	FB1	Current	Current
ADDITIONAL TIC LQL	2.36	2.36	2.36	2.36	2.36	2.36	2.35	4.71	2.36	25	AGC	SGC
VOC COMPOUND NAME	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(µg/std-m³)	(ng)	(µg/m³)	(µg/m³)
Pentane											---	4,200
2-Methyl-butane											42,000	---
Ethane, 1,1-difluoro-											40,000	---
Ethane, 1,1-dichloro-1,1,2,2-tetrafluoro									2.46		17,000	---
Hexane							26.37				700	---
Santolina triene											---	---
alpha-Pinene isomer (RT: 10.68)				41.55							---	---
Isobutane											57,000	---
Dichlorodifluoromethane	3.31	3.12	4.82	3.21	3.02	3.30	3.20	< 5.74	6.04		12,000	---
1,1-Dichloro-1-fluoroethane	16.07					5.47					---	---
beta-Pinene isomer (RT:11.35)				3.97							95.0	6,000
Undecane											---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu									2.74		180,000	960,000
Butane											57,000	---
Cyclotrisiloxane, hexamethyl-	2.65	3.31	3.78	4.06	11.33	3.77	3.20		2.64		---	---
Ethane, 1,2-dichloro-1-fluoro											---	---
Cyclotetrasiloxane, octamethyl-					2.46						3,300	---
3-Cyclohepten-1-one				17.94							25,000	---
Propane											12,000	---

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
FOURTH QUARTER 2010

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	FB2	Current AGC	Current SGC
LOWER QUANTITATION LIMIT (LQL	0.469	0.470	-	0.472	0.475	0.473	0.477	0.473	0.637	5		
PRACTICAL QUANTITATION LIMIT (PQL	0.750	0.752	-	0.755	0.760	0.76	0.763	0.758	1.019	8		
TARGETED TIC LQL	2.35	2.35	-	2.36	2.38	2.37	2.39	2.37	3.18	25		
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(µg/m^3)	(µg/m^3)
Acetone*	1.31	1.13		1.79	1.33	2.37	2.29	1.70	3.44	9	30,000	180,000
Benzaldehyde**							**5.34**	**4.07**			0.10	----
Benzene							**0.57**		< **1.46**		0.13	1300
Bromodichloromethane											70.0	---
Bromoform*											0.91	---
Bromomethane											5.00	3900
2-Butanone*									< 0.96		5000	13,000
Carbon Disulfide											700	6200
Carbon Tetrachloride				**0.57**	**0.57**			**0.47**	< **0.70**		0.17	1,900
Chlorobenzene											110	---
Chloroethane											10,000	---
Chloroethyl Vinyl Ether**											0.10	----
Chloroform	**1.31**	**0.75**				**1.70**			< **0.76**		0.043	150
Chloromethane				0.66			1.05				90.0	22,000
Dibromochloromethane											0.10	---
1,2-Dichlorobenzene (o)											200	30,000
1,3-Dichlorobenzene (m)											10.0	---
1,4-Dichlorobenzene (p)											0.09	---
1,1-Dichloroethane											0.63	---
1,2-Dichloroethane											0.038	---
1,1-Dichloroethene											70.0	---
cis-1,2-Dichloroethene											63.0	---
trans-1,2-Dichloroethene											63.0	----
1,2-Dichloropropane											4.00	----
1,3-Dichloropropene, cis & trans isomers											0.25	---
Ethylbenzene											1,000	54,000
2/4-Ethyltoluene (total)											0.10	----
Freon 13**											5,000	9,000
2-Hexanone*											30.0	4000
Methylene Chloride	**2.91**				1.43		1.72		< 1.21	13	2.10	14,000
4-Methyl-2-Pentanone*											3,000	31,000
Styrene											1,000	17,000
1,1,2,2-Tetrachloroethane											16.0	---
Tetrachloroethene	**6.47**	**6.39**			0.48		**1.05**	**3.88**	< **4.01**		1.00	1,000
Toluene							0.57		< 1.34		5,000	37,000
1,1,1-Trichloroethane	0.66							0.57			5,000	9,000
1,1,2-Trichloroethane											1.40	---
Trichloroethene											0.50	14,000
Trichlorofluoromethane	1.50	1.88		1.42	1.43	1.23	1.24	1.70	1.46		5,000	9,000
Vinyl Chloride											0.11	180,000
Xylenes (Total)											100	4,300
Decane**											700	---
	14.17	10.15		4.43	5.23	5.30	13.84	12.41	15.35			

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 2010

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	FB2	Current	Current
ADDITIONAL TIC LQL	2.35	2.35	-	2.36	2.38	2.37	2.39	2.37	3.18	25	AGC	SGC
VOC COMPOUND NAME	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(µg/std-m^3)	(ng)	(µg/m^3)	(µg/m^3)
Pentane							3.53		< 8.60		---	4,200
2-Methyl-butane							5.06	3.31	< 3.38		42,000	---
Ethane, 1,1-difluoro-								9.47			40,000	---
Ethane, 1,1-dichloro-1,1,2,2-tetrafluoro											17,000	---
Hexane									< 10.51		700	---
Santolina triene									< 78.03		---	---
alpha-Pinene isomer (RT: 10.68)									< 46.82		---	---
Isobutane								6.34	< 3.89		57,000	---
Dichlorodifluoromethane	3.00	4.32				2.84					12,000	---
1,1-Dichloro-1-fluoroethane											---	---
beta-Pinene isomer (RT:11.35)									< 11.15		95.0	6,000
Undecane									< 11.15		---	---
Ethane, 1,1,2-trichloro-1,2,2-triflu											180,000	960,000
Butane							4.39	3.98	7.58		57,000	---
Cyclotrisiloxane, hexamethyl-	3.28	3.10		3.02	3.33	3.03	3.63	3.13			---	---
Ethane, 1,2-dichloro-1-fluoro								6.16			---	---
Cyclotetrasiloxane, octamethyl-											3,300	---
3-Cyclohepten-1-one											25,000	---
Propane									< 4.97		12,000	---

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 (µg/std-m^3).
- 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 October 2010 and still current as of March 2011) 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.
- (µg/std-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, SOILS AND SOIL GAS PRESSURE READINGS

2010 ANNUAL SUMMARY REPORT

2010 QUARTERLY SOIL GAS PRESSURE WELL DATA

TABLE 5.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF SOIL GAS PRESSURE TESTS

FIRST QUARTER 2010

SAMPLE ID	DATE (mm/dd/yy)	TIME (EDT)	WELL ID	WELL LOCATION	WELL DEPTH (feet)	READINGS (INCHES H2O)
P1	03/18/10	7:10 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P2	03/18/10	7:10 AM	PW1	NW corner of the landfill on Haul Road	20	0.00
P3	03/18/10	7:11 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P4	03/18/10	7:11 AM	PW1	NW corner of the landfill on Haul Road	20	0.00
P5	03/18/10	7:04 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P6	03/18/10	7:04 AM	PW2	SE corner of the landfill NW of Well M2	20	0.00
P7	03/18/10	7:05 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P8	03/18/10	7:05 AM	PW2	SE corner of the landfill NW of Well M2	20	0.00
P9	03/18/10	7:24 AM	PW3	Nassau County Fire Service Academy	10	0.01
P10	03/18/10	7:24 AM	PW3	Nassau County Fire Service Academy	20	0.02
P11	03/18/10	7:25 AM	PW3	Nassau County Fire Service Academy	10	0.01
P12	03/18/10	7:25 AM	PW3	Nassau County Fire Service Academy	20	0.02

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 2010

SAMPLE ID	DATE (mm/dd/yy)	TIME (EDT)	WELL ID	WELL LOCATION	WELL DEPTH (feet)	READINGS (INCHES H2O)
P1	07/02/10	6:40 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P2	07/02/10	6:40 AM	PW1	NW corner of the landfill on Haul Road	20	-0.02
P3	07/02/10	6:41 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P4	07/02/10	6:41 AM	PW1	NW corner of the landfill on Haul Road	20	-0.03
P5	07/02/10	6:33 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P6	07/02/10	6:33 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.11
P7	07/02/10	6:34 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P8	07/02/10	6:34 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.11
P9	07/02/10	6:55 AM	PW3	Nassau County Fire Service Academy	10	0.00
P10	07/02/10	6:55 AM	PW3	Nassau County Fire Service Academy	20	-0.22
P11	07/02/10	6:56 AM	PW3	Nassau County Fire Service Academy	10	0.00
P12	07/02/10	6:56 AM	PW3	Nassau County Fire Service Academy	20	-0.23

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 2010

SAMPLE ID	DATE (mm/dd/yy)	TIME (EDT)	WELL ID	WELL LOCATION	WELL DEPTH (feet)	READINGS (INCHES H2O)
P1	10/19/10	7:51 AM	PW1	NW corner of the landfill on Haul Road	10	-0.01
P2	10/19/10	7:51 AM	PW1	NW corner of the landfill on Haul Road	20	-0.03
P3	10/19/10	7:52 AM	PW1	NW corner of the landfill on Haul Road	10	-0.01
P4	10/19/10	7:52 AM	PW1	NW corner of the landfill on Haul Road	20	-0.02
P5	10/19/10	7:35 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P6	10/19/10	7:35 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.07
P7	10/19/10	7:36 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P8	10/19/10	7:36 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.07
P9	10/19/10	8:05 AM	PW3	Nassau County Fire Service Academy	10	0.00
P10	10/19/10	8:05 AM	PW3	Nassau County Fire Service Academy	20	-0.41
P11	10/19/10	8:06 AM	PW3	Nassau County Fire Service Academy	10	0.00
P12	10/19/10	8:06 AM	PW3	Nassau County Fire Service Academy	20	-0.42

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 2010

SAMPLE ID	DATE (mm/dd/yy)	TIME (EDT)	WELL ID	WELL LOCATION	WELL DEPTH (feet)	READINGS (INCHES H2O)
P1	11/30/10	10:37 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P2	11/30/10	10:37 AM	PW1	NW corner of the landfill on Haul Road	20	-0.06
P3	11/30/10	10:38 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P4	11/30/10	10:38 AM	PW1	NW corner of the landfill on Haul Road	20	-0.05
P5	11/30/10	10:51 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P6	11/30/10	10:51 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.07
P7	11/30/10	10:52 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P8	11/30/10	10:52 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.08
P9	11/30/10	10:44 AM	PW3	Nassau County Fire Service Academy	10	0.00
P10	11/30/10	10:44 AM	PW3	Nassau County Fire Service Academy	20	-0.35
P11	11/30/10	10:45 AM	PW3	Nassau County Fire Service Academy	10	0.00
P12	11/30/10	10:45 AM	PW3	Nassau County Fire Service Academy	20	-0.35

NOTES:

- Measurements taken using a ten inch Dwyer inclined manometer.
- Leak checks were performed on manometer before testing each well.
- The blower station was not operating during the initial pressure well tests from 0749 through 0806 hours on November 30, 2010 due to a motor malfunction. Therefore, the pressure wells were retested once the blower station came back online. The above values represent testing that occurred during that time.