2009 THIRD QUARTER REPORT

Old Bethpage
Solid Waste Disposal Complex
Groundwater Treatment Facility

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
SYOSSET, NEW YORK 11791

April 2012

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

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1.0 INTRODUCTION

This document is the Old Bethpage Landfill (Landfill) Remedial Action Plan (RAP) Report for the third calendar quarter of 2009. 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 Consent Decree 83 Civ. 5357, Appendix A (OBSWDC Remedial Action Plan), Section D (Reporting), Subsection b (Operating Period), which requires the Town to submit the following information:

- 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

This information is summarized and evaluated in the Sections 2.0 and 3.0 below. Copies of the actual data and records, as well as the monitoring subconsultants' reports, are provided in Appendices A through E. Conclusions and recommendations based on this quarter's findings are provided in Section 4.0.

2.0 STATUS OF GROUND-WATER REMEDIATION

2.1 Ground Water-Treatment Facility Operation

The ground water-treatment facility was fully operational this quarter, except for four hours on September 29th when RW-2 was off-line for maintenance. The average facility flow this quarter was 1,175 gallons per minute (GPM), which equates to 1.69 million gallons per day (MGD). Table 1 provides a summary of facility operation based on the pumpage records maintained by the Town. A copy of those records is provided in Appendix A.

2.2 Ground Water-Treatment Facility Monitoring

Samples of the facility influent and effluent were collected approximately three times per week 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. Samples of influent and effluent were also sent to an outside laboratory for VOC (influent and effluent) and inorganic/leachate parameter (effluent only) analyses on a monthly basis.

Table 1
Summary of Ground Water-Treatment Facility Operation, Third Quarter 2009

Date(s)	Q_{gpm}	Remarks
7/1 - 9/28	1,175	GTF on-line
9/29	1,065	Recovery Well RW-2 off-line 4 hours for maintenance
9/30	1,271	GTF on-line
Average Flow:	1,175	

The results of this monitoring are provided in Appendix B and the key findings are summarized below:

- Influent total VOC concentration ranged from 114 to 247 ug/L and averaged 151 ug/L
- Effluent total VOC concentration ranged from 0.2 to 36.6 ug/L, and averaged 14.0 ug/L
- Treatment efficiency ranged from 77.7 to 99.8 %, and averaged 90.8 %
- Except for period minor exceedances for trichloroethene (TCE) effluent individual VOC concentrations were less than applicable limits this quarter
- Effluent inorganic/leachate indicator parameter concentrations were also less than applicable limits except for manganese, which exceeded the 0.6-mg/L limit on three occasions this quarter. The limit for manganese is aesthetics-based. Therefore, these minor exceedances are not a concern with respect to public health or the environment

Samples from the recovery wells were collected on an approximately weekly basis and analyzed for VOCs. These results are provided in Appendix C and the key findings are summarized below:

- Total VOC concentrations in RW-1 ranged from 1.2 to 8.9 ug/L and averaged 4.1 ug/L
- Total VOC concentrations in RW-2 ranged from 0.8 to 12.3 ug/L and averaged 6.0 ug/L
- Total VOC concentrations in RW-3 ranged from 61.7 to 79 ug/L and averaged 73.0 ug/L
- Total VOC concentrations in RW-4 ranged from 187 to 510 ug/L and averaged 366 ug/L
- Total VOC concentrations in RW-5 ranged from 201 to 336 ug/L and averaged 273 ug/L

The VOC detected at highest concentration in RW-3, RW-4 and RW-5 was trichloroethene (TCE), followed by tetrachloroethene (PCE) and cis-1,2-dichloroethene (cis-1,2-DCE), and the concentrations of these three VOCs were higher than their 5-ug/L limit in all three wells. The concentrations 1,1-dichloroethene (1,1-DCE) and 1,1,1-trichloroethane (1,1,1-TCA) in RW-5, and on a few occasions in RW-4 were also higher than the limits for these VOC. 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. Total VOC concentrations were relatively constant in RW-1, RW-2 and RW-3, and exhibited fluctuating but generally increasing trends in RW-4 and RW-5 this quarter.

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 TCE and vinyl chloride, VOC concentrations were well below the stack discharge limits this quarter.

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	0.8	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	4.5	2,700
1,2-Dichloroethane	3.9	20
1,1-Dichloroethene	61.3	66.7
1,2-Dichloroethene	208	2,630***
1,2-Dichloropropane	ND	1,170
Ethylbenzene	ND	1,450
Methylene Chloride	ND	1,170
Tetrachloroethene	302	1,120
Toluene	ND	7,500
1,1,1-Trichloroethane	80.4	38,000
Trichloroethene	1,836	900
Vinyl Chloride	3.2	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.

2.3 Ground Water-Quality Monitoring

Samples were collected from 15 the 16 monitoring wells required to be monitored, and Well MW-9D, and analyzed for VOCs. Well 7B was not sampled this quarter because its casing is believed to be compromised. The monitoring subconsultant's report is provided in Appendix D. The VOC results are summarized by well and parameter group in the table below:

Well Number	Total VOCs	Total VHOs*	Total Aromatics	PCE / TCE
LF-1	ND	ND	ND	ND / ND
M-30B-R	ND	ND	ND	ND / ND
MW-5B	ND	ND	ND	ND / ND
MW-6A	1.5	ND	1.5	ND / ND
MW-6B	10.2	ND	10.2	ND / ND
MW-6C	3.6	3.4	ND	ND / 0.2
MW-6E	2.1	ND	1.3	0.2 / 0.6
MW-6F	ND	ND	ND	ND / ND
MW-8A	9.7	ND	ND	9.0 / 0.7
MW-8B	0.8	ND	ND	0.6 / 0.2
MW-9B	0.8	ND	ND	ND / 0.8
MW-9C	ND	ND	ND	ND / ND
MW-9D	56.2	13.1	40.8	1.3 / 1.0
MW-11A	2.2	0.9	ND	0.6 / 0.7
MW-11B	ND	ND	ND	ND / ND
OBS-1	6.5	1.4	4.6	0.3 / 0.2

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

Review of the above table indicates that VOCs are currently at non-detectable or very low levels (i.e., < 5 ug/L) in 12 of the 15 quarterly monitoring wells, and that total VOC concentrations in the three other quarterly monitoring wells (MW-6B, MW-8A and OBS-1) are in the 5- to 10-ug/L range. The total VOC concentration in Well MW-9D was highest (56.2 ug/L) this quarter.

Based on the laboratory reports in Appendix D, an exceedance of the Class GA standards for individual VOCs occurred this quarter for PCE in Well MW-8A. A variety of VOCs was detected in Well MW-9D, but none exceeded their respective Class GA standard. The benzene concentration in Well MW-6B this quarter was lower than the Class GA standard.

In addition to the required monitoring, the Town analyzed split-samples from 12 wells sampled during the quarterly monitoring effort for the Claremont Site for VOCs.

These results are summarized below by well and parameter group:

Well Number	Total VOCs	Total VHOs*	Total Aromatics	PCE / TCE
EW-1A	28.6	1.3	ND	26.2 / 1.1
EW-1B	1.9	ND	ND	1.7 / 0.2
EW-1C	ND	ND	ND	ND / ND
EW-2A	0.9	ND	ND	0.5 / 0.4
EW-2B	19.9	8.0	ND	1.4 / 10.5
EW-2C	ND	ND	ND	ND / ND
EW-3A	ND	ND	ND	ND / ND
EW-3B	0.8	ND	0.8	ND / ND
EW-3C	2.1	ND	ND	0.2 / 1.9
MW-10B	3.9	0.5	1.2	1.1 / 1.1
MW-10C	11.3	0.5	ND	3.0 / 7.8
MW-10D	38.0	6.7	ND	5.6 / 25.7

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 total VOC concentrations in eight of these 12 wells are also relatively low (i.e., generally < 5 ug/L) or non-detectable. Total VOC concentrations in the four other wells are in the 10- to 40-ug/L range. The highest total VOC concentrations occurred at the water table near the Claremont Site (Well EW-1A) and at depth at Well Cluster MW-10 (Well MW-10D) and are primarily due to cis-1,2-DCE, PCE and/or TCE.

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 and 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 this quarter are listed below:

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

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. As noted above, Well MW-7B was not sampled this quarter. The mercury exceedance in Well MW-9D is believed to be naturally-occurring.

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 third quarter 2009 monitoring results. Review of these figures indicates the following key findings:

1. 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).
2. 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.
3. The distribution of total VOCs in the shallow (water-table) zone of the aquifer is limited to the area immediately downgradient of the Landfill and the Claremont Site (e.g., Wells MW-6A, MW-8A, EW-1A and EW-2A).
4. 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, VOC concentrations in Wells MW-11A and MW-11B are in fact very low (2.2 ug/L and not detectable, respectively) and are not attributed to the Landfill.

3.0 RESULTS OF AMBIENT-AIR AND SOIL-GAS MONITORING

3.1 Ambient Air-Monitoring Results

The scope of this monitoring entailed 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 (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. A copy of the monitoring subconsultant's report is provided in Appendix E.

The third quarter 2009 monitoring round was performed on September 21st and 22nd. The forecast wind direction was from the south. Therefore, the upwind sample was collected on the golf course south of the Landfill, and the downwind samples were collected along the north boundary of the Landfill. Based on on-site meteorological monitoring during the test, the downwind samplers were downwind of the Landfill for only approximately one-half of the test period due to a period of calm winds and a thermal inversion. The barometer was relatively steady and ultimately rose slightly by 0.03 inches of mercury during the test.

A relatively small 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. The detections of seven target VOCs (benzene, carbon tetrachloride, chloroform, 1,4-dichlorobenzene, 2/4-ethyltoluene, trichloroethene and tetrachloroethene) exceeded their DAR-1 AGCs, but were detected at similar concentrations in the upwind and downwind samples, and any downwind increases were minor in magnitude.

Based on the results, VOC detections in ambient air this quarter are similar to background ambient air quality, and the Landfill did not have a significant influence on ambient air quality.

3.2 Soil-Gas Quality Monitoring Results

The scope of this monitoring entailed 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 comparison is made 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 E.

The third quarter 2009 monitoring round was performed on September 22nd. All wells were sampled, except Well M21, which was not accessible. A relatively small number of VOCs were detected at generally low concentrations, in certain soil-gas samples. All VOC detections were much lower than the DAR-1 SGCs. Four VOCs were detected at concentrations higher than their DAR-1 AGCs. Most of these "exceedances" were sporadic and relatively low in magnitude. PCE concentrations increased with depth, which is attributed to the influence of the shallow plume(s) from the Claremont Site and/or the FTC Site.

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 typical construction-related excavation should it be required. Accordingly, the only recommendation 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 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 third quarter 2009 monitoring round was performed on September 22nd. The results of this monitoring are included in Appendix E.

Readings of zero to slightly negative pressure were measured in all 12 gas wells at the three monitoring locations along the perimeter of the collection system (PW-1 and PW-2) and on the FTC Site (PW-3). These findings are consistent with successful operation of the perimeter gas collection system.

4.0 CONCLUSIONS AND RECOMMENDATIONS

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

1. The facility was operated on a full-time basis this quarter, with only one recovery well off-line briefly for maintenance.
2. The average total VOC concentration of the facility influent continues 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 at least one monitoring well exceeded their respective Class GA standards. Therefore, continued operation of the facility is warranted. It is recognized, however, that the majority of the VOC loading to the facility is 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, and except for low-magnitude exceedances for TCE the concentrations of individual VOCs in the influent were less than their respective limits this quarter.
4. Except for TCE and vinyl chloride, VOC levels in the air stripper stack exhaust this quarter were lower than the limits in Appendix A, Table 1 of the Consent Decree. This determination is consistent with this quarter's ambient air monitoring results, which did not detect significantly elevated levels of any Site-related VOCs in ambient air.
5. Elevated VOC concentrations continue 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. Therefore, continued operation of all five wells is warranted.
6. 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. Continue to analyze split-samples from selected Claremont Site monitoring wells for VOCs to provide current ground-water VOC data for these locations.

APPENDIX A

DAILY OPERATIONS REPORTS
July through September, 2009

TOWN OF OYSTER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

7-1-09

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DAILY OPERATIONS WORKSHEET
DAY SHIFT

TIME	SYSTEM FLOW	STRIPPER FLOW	PRESSURE FILTER FLOW	PRESSURE FILTER FLOW	PRESSURE FILTER FLOW	TOTAL FLOW	CHLORINE FLOW PPD	CHLORINE FLOW GPH	BLOWER AIR FLOW CFM	AIR STRIPPING PSI/GPM	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM	225	ON	150	182	184	1295	1139	1770	ON	ON	1420	Cembrale
8 AM	224	"	151	182	185	1298	630	983	"	"	61	
9 AM	225	"	150	182	184	1285	671	953	"	"	123	
10 AM	224	"	151	181	182	1282	1122	984	"	"	188	
11 AM	224	"	150	180	181	1279	1153	972	"	"	250	
12 PM	224	"	151	182	183	1292	1162	995	"	"	315	
1 PM	223	"	149	180	182	1290	1163	996	"	"	377	
2 PM	224	"	150	181	181	1290	1161	995	"	"	440	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

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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.

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7.2.09

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS

GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET

DAY SHIFT

	224	on	150	180	181	1240	1191	1222	open	open	1425	Combole
	225		149	180	181	1282	1190	934			65	
	224		151	181	183	1283	1148	948			133	
	225		150	180	180	1288	1151	981			192	
	228		149	182	180	1289	633	975		"	252	
	225		150	181	181	1291	632	0001			308	
	223		157	180	181	1287	1176	975			365	
	224		150	181	182	1291	1162	981			425	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

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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

7.3.09

DAILY OPERATIONS WORKSHEET
DAY SHIFT

TIME	SYSTEM FLOW	STRIPPER FLOW	PRESSURE FILTER FLOW	PRESSURE FILTER FLOW	PRESSURE FILTER FLOW	AQUIFER FLOW	GREENWICH PUMP FLOW GPM	TOWN OF OYSTER PUMP FLOW GPM	STRIPPER AIR FLOW CFM	AIR STRIPPING BLOWER RPM	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
7 AM	224	ON	150	184	182	1272	1155	968	ok	ok	1427	Comeau
8 AM	223		148	179	178	1272	1211	0002			55	
9 AM	224		149	178	178	1271	1210	968			115	
10 AM	225		151	182	181	1280	1163	950			179	
11 AM	224		150	181	180	1287	1162	975		"	250	
12 PM	225		151	179	181	1285	1160	958			310	
1 PM	224	↓	149	180	180	1285	1155	0002		↓	365	
2 PM	224	↓	150	182	181	1280	1160	957	↓			
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

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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

7-7-09
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DAILY OPERATIONS WORKSHEET
DAY SHIFT

TIME	WELL 5 FLOW	WELL 6 FLOW	WELL 7 FLOW	WELL 8 FLOW	WELL 9 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESSURE FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR STRIPPING TOWER PSIG	EFFLUENT FLOW METER	SUPERVISORY OPERATOR INITIALS
7 AM	224	ON	150	180	181	1289	1164	989	OFF	OFF	1440	Conr
8 AM	225		148	179	180	1278	1206	961			55	
9 AM	224		149	180	181	1279	1204	970			115	
10 AM	225		148	181	180	1275	1190	971			175	
11 AM	223		149	180	179	1273	1185	0001		"	243	
12 PM	225		150	181	180	1275	1205	0002			296	
1 PM	224		151	180	181	1276	1201	970			352	
2 PM	223	↓	149	179	181	1277	1205	968	↓	↓	402	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EMF TO Rep Boss

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

11-5-99

Comstock

TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	TOTAL FLOW	SYSTEM FLOW GPM	STRIPPER FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE PSIG	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
7 AM	224	on	149	180	181	1280	1203	853	on	off	1431	Comstock
8 AM	221		150	181	181	1284	1182	993			57	
9 AM	224		150	182	180	1280	1181	0001			119	
10 AM	223		149	180	181	1282	1180	850			178	
11 AM	224		149	182	180	1292	1192	965		"	242	
12 PM	228		150	181	180	1290	1169	0001			302	
1 PM	223		148	179	180	1278	1205	872			355	
2 PM	224		147	178	178	1275	1206	975			408	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

OK to Rep 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 7/6/09

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 WC	EFFLUENT FLOW MG/GLS	SUPERVISOR/ OPERATOR INITIALS
7 AM	224	0	150	182	182	1292	1134	1762	0		1.740	PMA
8 AM	223		148	181	180	1262	1175	982			.041	
9 AM	222		149	179	179	1252	1195	0002			.101	
10 AM	222		149	176	180	1275	0552	994			.169	
11 AM	223		150	181	181	1286	1158	900		..	.226	
12 PM	224		150	183	180	1286	1160	1040			.288	
1 PM	224		152	180	180	1260	1185	1182			.350	
2 PM	224		151	182	183	1292	1143	1250			.412	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to RAP Basin
- 9:05 LKQ on site
- changed enzyme barrel
" 3 PM LKQ off site

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 9/7/09

TIME	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW GPM	[illegible] FLOW GPM	STRIPPER AIR FLOW SCFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATOR INITIALS
7 AM	224	0	152	180	180	1277	1172	1096	0	0	1.961	CMD
8 AM	224		149	174	174	1260	1207	1160			.1043	
9 AM	224		151	182	182	1283	1185	1080			.117	
10 AM	224		149	180	179	1278	1163	1202			.131	
11 AM	232		149	179	178	1291	1202	1035		"	.237	
12 PM	224		148	174	172	1271	1206	0002			.363	
1 PM	224		151	181	181	1269	1145	893			.357	
2 PM	224		150	181	180	1260	1169	1167			.419	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

1AM EFFLUENT to RAP Basin
5:30AM EFFLUENT to Basin 33
9 AM R&G on site 9:30 Crew on site
10:30AM R&G off site 9:45

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 7/8/09

3180
1480
1345
65

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 Range 3-5 psi	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATOR INITIALS
7 AM	224	0	149	180	181	1293	646	6002	0	0	1.345	DMD
8 AM	224		149	181	184	1307	1150	1069			1.410	
9 AM	222		148	179	180	1265	1173	902			.061	
10 AM	222		148	177	180	1254	1203	1194			.120	
11 AM	221		148	177	179	1261	654	1165		..	.184	
12 PM	222		148	179	183	1279	1154	1071			.248	
1 PM	223	"	148	179	182	1270	1194	1784	"	"	.205	"
2 PM	222		149	177	179	1255	697	1021			.371	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent 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

7-9-09
Comp ok

TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	WELL 6 FLOW	STRIPPER FLOW GPM	PRESSURE FILTER FLOW GPM	STRIPPER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM	219	ON	149	179	184	1274	1171	902	OFF	ON	1425	Comp
8 AM	224		148	180	184	1260	1169	1762			61	
9 AM	224		149	181	182	1264	637	1021			126	
10 AM	221		148	179	180	1257	1184	868			185	
11 AM	222		149	178	181	1269	657	892		"	247	
12 PM	220		145	180	181	1263	1177	882			315	
1 PM	223		148	178	179	1258	1184	1168			379	
2 PM	221		147	178	180	1258	1204	1091			419	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EXP 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.

COMPLETE
7-10-07

TOWN OF OYSTER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

TIME	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible] FLOW	[illegible]	[illegible]	BLOWER AIR FLOW CFM	AIR STRIPPING PRESS. PSIG	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATOR INITIALS
7 AM	222	OFF	168	178	181	1275	650	1135	OFF	OFF	1431	Complete
8 AM	225		149	180	184	1298	620	1763			64	
9 AM	224		150	181	182	1293	620	0001			128	
10 AM	224		145	180	181	1255	650	1297			192	
11 AM	225		150	179	180	1294	1146	907		"	258	
12 PM	223		149	180	182	1296	1145	983			321	
1 PM	221		148	178	180	1266	656	862			385	
2 PM	220	↓	149	179	181	1267	657	864	↓	↓	435	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

LOCK TO PASSING #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

7-11-09
Cembrola

TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	WELL 6 FLOW	STRIPPER FLOW GPM	PRESSURE FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR STRIPPER PRESSURE PSI/IN. WC.	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATOR INITIALS
7 AM	224	ON	180	181	184	1303	624	1125	ON	ON	1435	Cembrola
8 AM	221		151	170	182	1270	645	1184			65	
9 AM	222		149	180	181	1299	0001	1195			134	
10 AM	221		148	181	180	1295	1155	1350			195	
11 AM	221		149	170	180	1283	1195	878		"	255	
12 PM	222		150	179	180	1288	1184	1248			309	
1 PM	221	"	149	178	180	1284	1145	0001		V	374	
2 PM	222		149	171	180	1284	1190	1348	"		445	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EXP TO ~~Pro~~ 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

7-12-09

Combal

DAILY OPERATIONS WORKSHEET
DAY SHIFT

TIME	VOC FLOW	SPARE FLOW	METAL FLOW	SPARE FLOW	METAL FLOW	SPARE FLOW	SYSTEM FLOW GPM	PRESS FILTER FLOW GPM	STRIPPER AIR FLOW CFM	AIR PRESSURE PSIG IN	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM	221	OP	148	178	180	1285	1182	863	OFF	OFF	1875	Combal
8 AM	222		148	180	180	1283	1184	1235			62	
9 AM	221		149	180	181	1288	1180	960			125	
10 AM	220		150	181	179	1286	1186	1150			191	
11 AM	221		149	180	180	1288	1182	1177		"	258	
12 PM	220		150	180	179	1282	1207	1242			310	
1 PM	221		149	181	178	1288	1180	961			372	
2 PM	221		150	180	180	1285	1196	0001			440	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EFF TO BASSIN 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
DAY SHIFT 7/13

TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	SYSTEM FLOW	STRIPPER FLOW GPM	PRESSURE FLOW GPM	BLOWER AMPERAGE GPM	AIR PRESSURE PSI/IN WC	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM	224	000	146	181	182	1302	636	6012	C	O	1501	KMD
8 AM	224	"	149	181	182	1314	1149	1237	/	/	.059	"
9 AM	222	"	148	180	180	1301	1142	1917	/	/	.119	"
10 AM	223	"	148	179	180	1296	1184	852	/	/	.177	"
11 AM	222	"	148	180	180	1307	670	1034	/	"	.243	"
12 PM	224	"	149	180	181	1310	1155	979	/	/	.305	"
1 PM	220	/	148	178	180	1294	1182	1236	/	/	.362	"
2 PM	222	/	148	178	178	1289	650	662	/	/	.436	/
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to Basin 23

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 7/14/09

1,537
1,480
057

TIME	WELL 1 FLOW	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WATER FLOW	STRIPPER FLOW GPM	PRESSURE FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR STRIPPING PRESSURE PSI or IN. H2O	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM	224	0	148	180	182	1299	1166	6823	0	0	1.480	DWD
8 AM	221		148	177	180	1286	1195	656			1.537	
9 AM	222		148	178	181	1300	633	660			.065	
10 AM	219		149	180	182	1302	1252	852			.125	
11 AM	221		149	179	180	1302	1162	1779		**	.186	
12 PM	222		148	178	180	1285	1204	0055			.249	
1 PM	224		149	180	181	1295	638	0002			.312	
2 PM	223		148	179	183	1306	1148	655			.374	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent 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

2/15/09

	223	0	149	177	180	1292	644	999	0	9	1.424	OMD
	223		148	182	184	1308	624	1111			064	
	222		148	180	180	1299	1169	1778			.120	
	220		148	177	180	1265	1201	998			.189	
	223		148	178	180	1301	632	1232		***	.057	
	221		150	181	181	1308	1148	881			.209	
	220		146	179	180	1298	632	1128		V	.220	V
	221	V	147	176	180	1284	1194	899	V	V	5528	V
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

- Effluent to Basins 33
  6:45 RTP on site
- changed enzyme barrel

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

7-16-09
Combo:

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	224	ON	149	180	181	1305	1162	865	ON	ON	1470	Combo
	224	"	150	181	180	1309	1145	1131			63	
	223	"	148	177	181	1299	1159	877			127	
	225	"	149	176	179	1285	647	917			188	
	220	"	148	177	180	1281	650	952		"	255	
	221	"	148	176	181	1284	1145	1175			322	
	221	"	147	178	176	1281	1199	1149			373	
	221	"	148	176	180	1292	1169	1164			6425	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EXT TO BASIN 33

2

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

7-17-09
Cemsola

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	221	00	148	179	180	1289	1185	1235	OFF	OFF	1475	Cemsola
	224		150	180	180	1293	1179	1255			62	
	224		180	181	180	1311	1139	1275			120	
	222		149	180	180	1288	1161	579			185	
	221		148	180	181	1295	1168	857			252	
	220		141	177	180	1311	646	865			304	
	221		148	175	180	1281	1202	0002			368	
	220		145	180	180	1279	1205	865			432	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

OFF 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

7-18-09
Cembalo

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	219	ON	149	180	180	1412	1151	896	off	off	1458	Cembalo
	222		150	180	181	1391	1201	1176			63	
	224		149	179	180	1399	1180	0001			125	
	221		150	181	180	1390	1191	938			185	
	221		149	180	181	1400	1192	967			250	
	222		150	181	180	1398	1150	1660			310	
	221		149	180	180	1399	1165	809			570	
	222		150	181	179	1416	1150	820			435	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

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

7-19-09

Cembrola

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	224	ow	148	180	181	1433	1118	871	opr	ow	1448.	Cembrola
	223		150	190	181	1452	1147	905			65.	
	221		149	180	180	1411	662	0005			128	
	220		150	179	181	1421	660	905			188.	
	221		150	180	180	1441	1140	1777		"	258	
	220		149	179	180	1440	1138	0001			312	
	221		150	180	182	1441	0008	1765			375	
	220		149	180	180	1445	1100	955			434.	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EXP 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 7/10/09

	220	0	148	176	179	1419	1205	880	0	4	1.441	RMO
	220		148	176	177	1417	669	0002			.063	
	220		148	176	177	1420	661	0002			.127	
	222		148	178	179	1447	1141	1215			.186	
	224		149	178	180	1444	1150	959			.246	
	221		148	179	180	1441	1159	1121			.307	
	221		148	178	179	1434	1142	851			.367	
	221		148	176	178	1429	1185	1994			.422	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to Basin #3
changed effluent barrel

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 7/21/09

4
1810
1451
5F

	220	9	148	176	179	1430	1194	1166	0	0	1451	OMC
	221		148	177	177	1426	1182	1166			1509	
	221		148	176	178	1422	1192	895			.093	
	220		146	176	176	1419	1205	994			.119	
	219		148	176	176	1418	1202	899			.178	
	220		146	177	178	1421	994	0002			.247	
	222	✓	149	180	180	1447	1142	1165	✓	✓	.306	✓
	222	✓	149	177	179	1439	1151	969	✓	✓	.365	✓
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent 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 7/29/09

	220	4	147	179	176	1426	662	0001	0	9	139	OMA
	223		149	179	179	1450	0001	1764			.061	
	220		149	178	180	1455	1141	879			.118	
	222		148	178	178	1450	1153	895			.175	
	220		148	177	177	1449	1153	937		...	.239	
	221		146	178	174	1445	1172	1222			.301	
	222		146	179	176	1441	1177	1757			360	
	220		148	176	176	1432	1193	990			.417	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to Basin 33
- changed enzyme barrel

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

7-23-09 Comstock

	220	ON	178	176	179	1428	668	0001	OFF	OFF	1843	Compost
	222		150	178	179	1453	1148	1082			62	
	222		178	178	179	1453	1154	1168			130	
	221		150	179	180	1451	1150	881			188	
	221		148	180	178	1454	1155	880			249	
	221		150	181	177	1447	1170	1275			312	
	220		145	180	178	1457	1150	856			372	
	221		150	180	179	1449	1148	1276			435	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

OFF TO PASIN #3

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

Ca MBoyle
7-24-09

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	223	ok	150	180	179	1405	1144	1222	ok	ok	1441	Ca MBoyle
	224		149	179	180	1455	1176	1238			61	
	219		148	176	180	1433	1196	1306			125	
	220		149	177	181	1439	1210	0001			185	
	221		150	180	178	1443	1167	1017			245	
	220		148	176	175	1432	1177	1257			305	
	221	↓	149	177	176	1434	1180	1254	↓	↓	362	
	222		149	178	178	1452	1139	1209			429	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EXP TO BASIN #33. 8 AM SW. Tue
EFF TO Rapp 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

9.25.09
Cambrook

	221	OF	148	177	178	1451	1161	8JJ	OM	OM	1440	Cambrook
	220		148	172	178	1436	0001	0002			62	
	221		147	178	180	1434	1158	1299			125	
	220		148	178	179	1435	1163	1304			179	
	221		150	178	180	1450	1166	1257			250	
	222		150	179	181	1451	1168	1201			310	
	221	V	149	180	180	1434	462	0002			371	
	221		148	179	181	1440	1159	1181	V	V	429	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

ERR 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

7-26-09
Cembrola

	221	ON	148	177	176	1452	1129	1775	OFF	OFF	1450	Cembrola
	220		150	178	176	1455	0001	895			62	
	221		150	177	178	1457	1156	1158			123	
	220		145	177	176	1453	0001	1137			181	
	221		150	180	177	1467	1150	1022			245	
	220		149	179	178	1472	1142	885			310	
	221		150	180	179	1470	1148	1143			370	
	221		149	180	180	1460	1162	1213			425	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

OFF TO Rap BASIN
3

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 1/27/09

	216	0	145	175	174	1393	660	921	0	0	1.400	NMO
	216		145	174	174	1385	660	869			.059	
	218		147	176	176	1408	0001	1240			.128	
	218		147	176	176	1415	0095	1096			.181	
	219		146	176	176	1413	1145	869			.243	
	216		147	176	176	1401	1141	1074			.303	
	218		146	176	176	1400	1150	896			.361	
	218		146	176	176	1396	1158	859			.425	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to RAP Basin
18:15 Effluent to Basin 33
changed enzyme Barrel

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 7/28/09

	216	0	145	173	176	1360	1155	1111			1.458	0 WD
	219		146	176	175	1357	1149	1191				1519
	219		147	176	176	1361	1143	1239			.48	.052
	218		145	174	173	1352	1168	1215			.113	
	218		146	176	174	1361	1143	1169			.174	
	216		145	175	174	1345	1172	1020			.234	
	216		144	173	174	1352	1180	1766			.292	
	216		145	173	173	1369	1185	1999			.351	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

effluent to Bays 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 7/29/09

	217	0	145	174	176	1373	1167	849	0	0	1386	0 MD
	218		145	175	174	1375	1165	853			.060	
	216		144	172	172	1365	1196	966			.121	
	216		145	173	173	1374	1198	1760			.179	
	216		144	172	173	1369	1181	1767			.237	
	216		144	174	174	1371	1185	1778			.296	
	216	✓	144	173	172	1361	1165	859			.357	✓
	216		144	173	172	1366	1192	983	✓	✓	.417	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent 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

7.30.09
Carmela

	218	ON	145	173	175	1387	1147	1159	OK	OK	147	Carbs
	217		146	174	176	1385	1138	1158			61	
	216		144	173	173	1309	1180	1177			123	
	216		145	173	172	1356	1178	000 1			184	
	215		146	172	173	1349	663	871			243	
	216		144	174	172	1361	1175	1162			306	
	216	V	144	173	172	1357	1183	1168	V	V	363	
	215		145	174	172	1358	1177	1167			427	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

CH TO Egg 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

7-31-09
Centdale

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	216	OP	146	172	173	1369	1158	767	OFF	OP	1488	Centdale
	217		147	176	174	1371	0001	914			65	
	214		144	173	174	1359	1175	1757			125	
	212		144	172	173	1351	1188	879			187	
	211		145	171	172	1349	1185	1180			249	
	216		145	172	173	1362	1168	807			310	
	217		146	175	174	1369	1153	1211			367	
	215		147	176	173	1371	1160	886			430	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EFF TO POP 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

8-1-09
Cembale

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	217	ow	146	174	173	1389	1142	960	ow	ow	1851	Cembale
	216		145	175	173	1393	1143	816			65	
	216		146	174	172	1395	1156	829			125	
	217		145	173	172	1396	1160	0001			187	
	215		145	174	170	1391	1162	872			250	
	216		147	173	171	1388	1155	1190			310	
	217	"	145	172	172	1392	1154	1166	"	"	372	
	215	"	144	173	173	1395	1151	048	"	"	428	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

OFF 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

8.2-07
Comparable

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	215	on	144	174	172	1391	1665	1205	on	on	1461	Comparable
	214		145	173	171	1382	1187	1297			62	
	215		144	175	170	1385	1186	1807			127	
	216		144	174	171	1390	1180	0001			189	
	215		140	173	170	1402	0001	1016			260	
	216		140	173	174	1401	1184	859			320	
	215		146	172	171	1395	1140	801			380	
	215		144	175	174	1407	1143	928			439	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Off 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 8/3/09

											KM
			1/d	daily	Days on						
	215	9	144	172	172	1354	1033	0001	9	9	1.681	
	214		144	172	170	1353	1193	0001			1740	
	214		144	172	170	1357	1155	0001			1802	
	214		144	172	171	1360	663	920			1.866	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

HMW effluent to Basin #3
change of enzyme barrel

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 8/4/09

TIME	WELL 1 FLOW	WELL 2 FLOW	WELL 3 FLOW	WELL 4 FLOW	WELL 5 FLOW	TOTAL FLOW	STRIPPER FLOW GPM	PRESSURE FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR STRIPPING AIR PRESSURE INCHES WC	EFFLUENT FLOW MGALS	SUPERVISOR/ OPERATOR INITIALS
7 AM	216	0	146	175	174	1387	1155	817	✓	✓	2.892	AMO
8 AM	215		144	173	174	1386	1153	914			.060	
9 AM	216		144	172	172	1383	1155	883			.120	
10 AM	216		145	174	172	1381	1154	1105			.180	
11 AM	216		145	174	174	1382	1156	911		"	.240	
12 PM	216		146	174	173	1385	1156	1181		✓	.300	
1 PM	216	✓	144	172	172	1379	1164	1081	✓		.360	✓
2 PM	216		144	173	172	1388	1160	1234			.420	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to Basin 33

Effluent total for 8/3 to 8/4

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 8/5/09

	214	0	144	172	171	1378	1199	1002	0	0	1.437	DMO
	213		144	172	171	1379	1191	994			.059	
	213		144	172	172	1375	1200	1225			.119	
	212		144	171	168	1372	1201	982			.179	
	213		144	172	171	1371	1205	0002			.240	
	214		144	172	172	1371	1207	0001			.302	
	212		144	172	172	1371	667	0001			.364	
	214		144	172	172	1372	665	0002			.426	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluents to Basin 33
- changed enzyme barrel

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

8-6-09
COMPL

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	214	ON	144	172	173	1390	1125	1178	OFF	OFF	1440	COMPL
	213		145	172	172	1391	1186	1185			61.	
	215		144	173	170	1384	1199	856			125	
	214		145	172	171	1386	1199	1076			186	
	215		146	172	172	1391	1185	1184			245	
	215		146	171	170	1399	1163	1220			301	
	216		147	170	171	1398	1176	1267			370	
	215	↓	146	172	171	1402	1175	1265	↓	↓	430	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

OFF 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

8.7.09

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	210	ON	144	172	170	1385	1200	1123	OK	OK	1430	Control
	213		146	174	172	1399	1144	913			62	
	213		144	172	171	1390	1183	1839			125	
	214		144	172	171	1389	1166	1028			184	
	215		146	174	172	1411	1143	911			245	
	216		149	174	173	1414	1137	900			305	
	216	↓	145	173	173	1415	0001	1060	↓	↓	370	
	213	↓	144	173	170	1396	1112	1711	↓	↓	424	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

BACK TO FEB 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

Complete 8-8-09

	216	OP	146	175	171	1283	1192	1067	OP	OP	140	Complete
	216	"	146	174	173	1287	1175	1150	"	"	63	
	217	"	145	174	173	1277	1166	897	"	"	120	
	216	"	145	176	173	1287	1188	911	"	"	185	
	217	"	146	175	172	1286	1160	995	"	"	247	
	217	"	145	176	174	1286	1155	864	"	"	305	
	215	"	145	179	173	1280	1188	914	"	"	370	
	216	"	146	175	171	1285	1190	1268	"	"	430	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

BACK 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

8-9-09
Combale

DAILY OPERATIONS WORKSHEET
DAY SHIFT

	216	00	178	176	175	1285	1161	1100	OKP	OKP	1450	Combale
	214		176	174	173	1276	1185	900			62	
	215		176	174	173	1285	1181	973			125	
	216		176	173	175	1281	1180	1153			187	
	215		174	176	176	1290	1142	1225			250	
	216		176	175	175	1291	1182	1023			310	
	217		178	176	176	1288	1167	994			370	
	215		178	178	175	1285	1160	850			431	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Off 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 8/10

1.517
1.456
61

216	0	145	176	174	1247	1187	892	0	0	1.456	0 WD
216		146	174	173	1242	1194	935			1.517	
217		149	177	176	1260	1141	669			.063	
216		146	176	173	1235	669	0010			.127	
216		149	175	174	1242	658	941			.168	
217		148	176	176	1254	0001	932			.250	
217		149	177	176	1263	1141	941			.310	
217		146	178	176	1258	1148	873			.372	
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent 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 6/10/09

216	0	148	176	176	1240	1167	846	0	9	1,392	Bmk
217		148	176	176	1247	1156	1147			.060	
216		147	174	174	1232	1201	843			.121	
216		147	176	174	1231	666	0821			.168	
216		145	176	174	1233	602	1252		...	.249	
217		148	176	176	1246	0881	1193			.310	
217		149	176	176	1254	1140	957			.371	
217		148	176	176	1252	1140	1237			.432	
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to Basin 33
changed enzyme Control

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 8/12/09

216	✓	148	176	174	1237	1185	1179	0	0	1.455	DMO
216		148	173	174	1232	1190	1296			.059	
216		148	175	174	1231	1193	568			.12	
216		146	174	173	1225	1204	0001			.181	
214		148	174	173	1230	658	0002			.249	
216		147	176	176	1244	0001	1771			.307	
216	✓	149	176	177	1252	0136	1671	✓	✓	.364	✓
217	✓	146	177	176	1248	1147	873	✓	✓	.425	✓
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

REMARKS

Effluent to Basin #3
(Shipment of enzyme to Barnwell)

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

8.13.09

Combo

DAILY OPERATIONS WORKSHEET
DAY SHIFT

216	on	146	174	173	1230	1214	0001	off	on	1445	Combo
215	"	146	175	176	1239	1172	1220	"	"	63.	
216	"	148	176	176	1212	1140	1080	"	"	126.	
215	"	147	174	173	1233	1203	0001	"	"	187	
216	"	148	173	174	1238	1208	1149	"	"	250.	
215	"	249	176	175	1257	1187	069	"	"	310	
215	"	147	[illegible]	174	1224	1200	881	"	"	360	
215	"	146	175	172	1230.	1199	1257	"	"	415	
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

BACK TO BASIN #53

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

8.14.09

Comprale

DAILY OPERATIONS WORKSHEET
DAY SHIFT

214	ON	148	173	175	1239	1184	955	OFF	OFF	1460	Comprale
216	"	146	174	175	1236	1192	988	"	"	63.	
214	"	147	175	176	1240	522	1047	"	"	125.	
216	"	148	176	175	1242	1172	870	"	"	187	
216	"	149	175	174	1238	1185	988	"	"	247	
214	"	150	174	175	1240	1187	957	"	"	302	
215	"	148	175	174	1246	1172	892	"	"	365	
214	"	147	175	173	1250	1180	1240	"	"		
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EXX 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

8-15-09

COMBAT

DAILY OPERATIONS WORKSHEET
DAY SHIFT

216	ON	148	176	173	1244	1163	1057	ON	OFF	1470	COMB
215	"	147	175	172	1240	0001	880	"	"	63	
216	"	147	173	172	1233	1200	1211	"	"	125	
216	"	145	172	172	1234	1155	944	"	"	187	
215	"	146	173	172	1232	1200	989	"	"	248	
215	"	148	172	172	1230	664	1034	"	"	380	
214	"	147	173	174	1231	0001	898	"	"	359	
216	"	146	172	170	1230	1160		"	"	420	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

REMARKS

EXH TO BASIN #3

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.

Combale

8-16-09

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

216	on	149	177	176	1244	0001	946	on	on	1466	Combale
215	"	148	176	176	1250	1142	1257	"	"	63	
216	"	149	177	174	1255	1158	1181	"	"	126	
216	"	147	175	175	1251	1150	980	"	"	189	
216	"	146	176	173	1246	1163	892	"	"	250	
215	"	148	175	172	1250	1159	801	"	"	306	
216	"	147	176	172	1249	660	1201	"	"	365	
214	"	148	176	171	1233	1181	1157	"	"	435	
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EXF 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 6/17

2/6	0	147	173	174	1232	1205	0001	9	9	1499	0 MD
2/4		145	174	172	1272	663	1110			.063	
2/3		147	176	175	1279	0000	910			.126	
2/6		148	176	176	1255	1137	927			.188	
2/6		148	172	176	1252	1140	1278			.251	
2/6		148	177	176	1249	1145	670			.312	
2/6		148	177	176	1248	1153	1086	U	U	.373	
2/4		148	176	176	1250	1142	1110			.434	
	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to Basin #3
- changed enzyme drums

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

8/18/09

215	8	148	175	174	1279	1196	1164	0	0	4469	DMD
215		149	173	174	1233	1181	1823			.055	
215		145	176	176	1244	1159	1095			.116	
215		147	176	173	1229	1198	858			.178	
215		149	172	172	1228	1203	960			.239	
213		147	173	172	1227	665	853			.305	
214		146	175	173	1229	660	853			.367	
213		146	176	174	1235	1183	1637			.428	
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent 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

8/19

215	0	148	177	176	1253	1141	871	9	9	1463	DMO
216	1	148	176	175	1249	0000	1068			.097	
216	1	148	176	173	1245	1161	875			.117	
214	1	148	176	176	1241	1165	650			.180	
214	1	148	176	174	1241	1165	666			.239	
214	1	146	176	174	1236	1181	1782			.297	
215	1	146	172	173	1235	1169	913			.357	
212	1	149	175	173	1234	1198	1074			.417	
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

- Effluent to Basin 33
- changed out oxy mix barrel

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

8-20-09
Cembrook

DAILY OPERATIONS WORKSHEET
DAY SHIFT

214	OP	148	176	174	1243	1167	855	OFF	OFF	1451	Cembrook
216	"	147	176	175	1238	1180	1251	"	"	65.	
214	"	146	176	176	1234	1181	1280	"	"	12.	
215	"	146	175	175	1240	1144	1263	"	"	190	
216	"	148	176	175	1205	600?	867	"	"	250	
215	"	147	177	175	1204	1185	1269	"	"	310	
216	"	148	176	175	1213	1166	1244	"	"	373.	
217	"	145	178	177	1218	1137	1205	"	"	438.	
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Eff to Basin #3

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

8.21.09
Comprale

DAILY OPERATIONS WORKSHEET
DAY SHIFT

216	ON	148	176	175	1225	1149	1244	OFF	OFF	1455	COMPLE
216		145	177	176	1225	1201	1182			65	
215		150	178	175	1231	0001	1182			127	
218		147	176	176	1219	1170	870			187	
214		147	175	173	1211	1194	1117			245	
216		148	176	174	1202	1180	905			302	
215		148	177	176	1231	1142	1272			363	
214		146	176	175	1215	1187	1187			420	
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

CPK to BASIN #33.

NOTES

1- THE SYSTEM FLOW, STRIPPER FLOW AND PRESSURE FILTER FLOW MUST BE EQUAL WITHIN 6%.
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

8-22-09
Combo

216	90	148	178	176	1202	1153	1243	on	on	1450	Combo
215		149	178	175	1210	1203	1257			58	
216		147	177	174	1218	1191	864			124	
214		146	176	173	1215	1182	1146			181	
215		147	177	174	1218	1195	902			24	
216		148	176	176	1225	1166	1117			308	
215		145	175	177	1223	1170	852			376	
214		141	176	174	1230	1158	996			432	
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Cl2 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

8.23.09
Comparable

216	on	140	176	175	1226	1154	1240	off	off	1645	Comparable
215		147	175	176	1219	0001	1445			63	
216		146	176	176	1221	1161	1109			126	
217		147	177	175	1222	1168	1257			184	
214		142	177	177	1226	1155	1785			242	
215		148	174	176	1227	1156	1352			305	
215		146	175	175	1218	1161	1297			366	
216		148	176	176	1217	1158	855			428	
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

CAT 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 8/24/09

214	0	147	175	173	1210	668	260	0	0	1466	UMD
216		148	176	176	1214	0000	865			.060	
216		148	176	175	1822	0001	867			.122	
216		148	176	176	1235	1142	1234			.181	
216		148	177	176	1235	1140	664			241	
216		148	177	176	1231	1153	941			.302	
216		148	175	176	1230	1157	987			.364	
213		147	176	174	1226	1169	1239			.426	
	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to Basin 33
- changed arroyo the battery

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 8/25/09

	2(2	0	145	174	173	1228	1192	1148	0	0	1.457	DMD
	214		147	173	174	1225	1192	925			.062	
	214		146	175	173	1225	1205	0002			.124	
	214		144	174	172	1225	1202	914			.163	
	214		146	174	172	1226	665	888			.250	
	213		146	176	176	1239	0001	1279			.311	
	216		148	176	175	1249	1139	965			.373	
	215		147	173	173	1236	000	1060			.432	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to Basin #3

RTP on site

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 6/26/09

216	8	148	176	174	1244	1140	938	9	9	1.969	DMO
25	1	.148	175	175	1248	1161	920			.060	
216		148	174	174	1239	1169	869			.121	
214		146	176	172	1236	1172	1046			.181	
213		146	174	173	1234	1164	862			.240	
214		147	175	174	1232	1182	1178			.298	
214		140	174	172	1232	1195	916			.359	
214		146	172	172	1250	1200	1021			.422	
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

- Effluent to Basin 33
- changed enzyme barrel

RTP on site

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 8/12/09

	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	214	0	147	174	172	1227	667	0002	0	0	1,464	DMO
8 AM	214		146	173	172	1226	662	926			.060	
9 AM	216		148	176	175	1236	0001	871			.121	
10 AM	215		147	176	176	1248	1138	1249			.181	
11 AM	213		146	172	172	1217	666	0043			.243	
12 PM	216		148	177	176	1242	1141	1004			.303	
1 PM	216		147	176	176	1241	1152	875			.361	
2 PM	214		148	175	174	1238	1153	1274			.425	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

- Effluent to Basin 33
- new yoke barrel change

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.

~~1434~~

742-4900 x 6441

~~735-6744~~ ~~735-6580~~

TOWN OF OYSTER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT 8/28/09

	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	216	0	148	178	177	1257	1192	914	9	0	1.483	DMD
8 AM	216	0	148	176	177	1239	1200	687			.061	
9 AM	217		148	179	178	1245	1135	0001			.180	
10 AM	219		151	180	180	1255	1144	1071			.188	
11 AM	217		151	180	180	1254	1154	891			.249	
12 PM	218		151	181	180	1260	1142	1127			.306	
1 PM	216	"	150	179	177	1248	1180	1764	"		.368	
2 PM	218	"	148	178	177	1241	1196	1223	"	0	.425	"
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

- Effluent to Basin #2
- AM, Effluent ~~flow~~ flow to both Basin #3 & #4 Basin
* 12:00 PM All Effluent to Rip Basin only (change of entry time here)

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

8-29-09 Cambria

TIME	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
	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	219	ON	150	180	179	1257	1155	1245	OK	OK	1765.	Cambria
8 AM	218		151	182	180	1250	0001	944			65.	
9 AM	216		147	179	178	1248	1186	878			123	
10 AM	217		149	178	178	1249	1181	1234			185.	
11 AM	218		147	178	177	1242	60	0001			245	
12 PM	219		146	177	178	1244	1201	970			308	
1 PM	216	"	147	173	177	1254	0001	835			369	
2 PM	215		146	177	178	1255	1191	1201	"	"	425.	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

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

8-30-09

	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	216	ON	149	177	178	1232	1172	884	OFF	OFF	1960.	CMB
8 AM	217		150	180	180	1242	1146	1232			63	
9 AM	215		149	178	181	1240	1150	1250			128	
10 AM	216		148	177	179	1240	1147	0001			185	
11 AM	217		148	178	179	1238	1186	801			243	
12 PM	216		150	179	180	1237	1179	952			301	
1 PM	216		149	180	178	1231	1178	1007			363	
2 PM	216		149	180	177	1239	1181	1150			431	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

OFF 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 8/31/09

	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	216	0	149	176	176	1246	1204	920	9	9	1446	DMD
8 AM	217		150	177	176	1249	660	0001			.062	
9 AM	219		150	180	180	1264	1139	1395			.129	
10 AM	219		150	180	178	1261	1147	1141			.186	
11 AM	217		150	180	179	1257	1156	848			.247	
12 PM	217		149	177	178	1251	1168	1249			.307	
1 PM	216		150	177	177	1251	1183	1769			.364	
2 PM	216		149	177	176	1245	1193	1252			.421	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to Basin 33
Effluent to RAP Basin 8/30/09 MMM
changed enzyme barrel

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 9/1/09

(dead line is used before Rel of publication at Nassau)

	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	216	0	149	177	176	1249	659	8001	9	0	1.460	DMD
8 AM	216		150	180	180	1264	1136	11776			.058	
9 AM	218		151	180	180	1260	1143	1261			.117	
10 AM	218		148	178	179	1256	1157	1162			.177	
11 AM	217		148	180	179	1253	1167	919			.239	
12 PM	216		149	176	176	1252	1179	1770			.295	
1 PM	216	"	148	176	176	1247	1192	904	"	"	.353	"
2 PM	216	"	149	175	176	1245	1208	0001	"	"	.415	"
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to Rec Basin
7 AM / no condensation or puddles in Arma room
Kenny Mc Rachel changed

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 9/2/09

	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	216	0	148	178	178	1254	0000	1098	0	0	8455	DMD
8 AM	216		150	180	178	1265	1138	1198			.056	
9 AM	217		150	178	179	1263	1146	955			.116	
10 AM	216		150	179	179	1258	1154	.578			.179	
11 AM	217		148	176	176	1251	0556	0001			.235	
12 PM	219		148	176	176	1254	1178	1771			.293	
1 PM	216		149	178	176	1252	1193	1223			.350	
2 PM	216		148	177	176	1248	698	0001			.414	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to 2 MG Gauge
- changed out gray meter barrel

1 1/2/10
NC

.976 968-(7)

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.

Take Rdg (5/6) 364 ~ 9459

9450 Off

9/1 Sat 5:30 - 7:30

9/2 Sun

9/1 Sat DMD

TOWN OF OYSTER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

CeMBrale

DAILY OPERATIONS WORKSHEET
DAY SHIFT

9.3.09

	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	217	ON	151	179	178	1265	1153	944	ON	ON	1445	CeMBrale
8 AM	216		150	179	179	1261	1163	1052			62.	
9 AM	216		148	176	176	1247	1065	0001			127.	
10 AM	216		149	175	177	1251	1201	894			185	
11 AM	217		148	176	176	1200	1195	801			250	
12 PM	216		149	175	177	1258	1199	1028			310.	
1 PM	215		148	176	177	1253	1206	0003			365	
2 PM	216		147	176	176	1250	1201	951			431.	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EXF 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

9-4-09 Comarle

	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	218	ON	178	179	175	1273	1164	867	ON	ON	1749	Comarle
8 AM	216		179	176	176	1257	1197	1091			61.	
9 AM	216		178	177	175	1255	620	002			125	
10 AM	217		179	176	175	1257	699	801			189	
11 AM	216		179	175	175	1252	996	1251			245	
12 PM	215		179	180	179	1268	1146	1237			308.	
1 PM	216		178	176	175	1253	1204	002			367	
2 PM	215		179	175	179	1250	1198	1201			435.	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EFF TO Rec 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

9.5.09 CemBrake

	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	216	op	149	176	175	1253	681	0001	OFF	OFF	1445	CemBrake
8 AM	215	"	150	175	179	1260	0001	867	"	"	62	
9 AM	217	"	148	176	178	1260	1152	1052	"	"	127	
10 AM	215	"	150	176	178	1268	1180	1251	"	"	187	
11 AM	215	"	149	177	177	1262	1235	1431	"	"	249	
12 PM	217	"	148	174	178	1266	1201	1299	"	"	310	
1 PM	215	"	145	175	179	1260	1159	1351	"	"	369	
2 PM	216	"	145	176	175	1258	1143	832	"	"	428	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

OFF TO Rg 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

9.6.09 Cem Bode

TIME	WELLFIELD OPERATION GALLONS PER MINUTE						AIR STRIPPER OPERATING PARAMETERS					
	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	216	OP	148	177	176	1256	1180	1118	OFF	ON	1445	Cem Bode
8 AM	216		149	178	177	1251	1184	1791			60	
9 AM	218		150	177	177	1257	1199	1251			107	
10 AM	216		149	178	177	1253	660	0001			187.	
11 AM	215		150	177	178	1265	1184	932			250.	
12 PM	216		151	180	177	1266	1137	1770			310	
1 PM	217		150	181	175	1260	1160	1351			372	
2 PM	214		149	180	178	1262	1105	1282			437	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EXT TO REP BASIN 3

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 9/8/07

	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	220	0	152	181	183	1146	1025	802	0	0	2.895	DWD
8 AM	218		152	181	182	1145	1032	1253			.060	
9 AM	220		152	182	181	1141	1031	954			.125	
10 AM	217		152	183	182	1140	1026	983			.190	
11 AM	220		152	183	182	1144	1033	1362			.252	
12 PM	220		152	183	182	1146	1044	1172			.319	
1 PM	217		151	180	180	1126	995	1766			.384	
2 PM	219		152	180	182	1147	1026	921			.448	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluents to RAP Basin
changed enzyme barrel
5:30 PM Effluents to Basin 3

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 9/9/09

.061

	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 %	AIR PRESSURE INCHES W.C.	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM	220		152	181	182	1154	1035	1044	9	9	1.523	LMD
8 AM	218		153	184	183	1146	1041	1027				
9 AM	219		152	181	181	1149	1014	680			.183	
10 AM	219		149	182	180	1149	1050	947			.183	
11 AM	218		152	181	182	1148	1041	1275			.249	
12 PM	218		145	182	182	1149	1040	1184			.314	
1 PM	213		145	172	174	1110	665	0081			.353	
2 PM	212		146	173	173	1192	0008	945			.410	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

- Effluent to Basin 33
- Effluent to RDP Basin out of order
- From 12:38 to 12:40, problems with all pumps off, in MS tank

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

9. 10-09
Comstock

	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	SUPERVISORY OPERATOR INITIALS
7 AM	212	OFF	146	172	173	1231	1148	1215	OFF	OFF	1432	Combs
8 AM	211		145	172	171	1226	1169	1232			65	
9 AM	212		147	171	173	1230	1162	975			130	
10 AM	210		145	172	174	1227	1160	001			185	
11 AM	211		144	170	172	1230	1171	1251			251	
12 PM	208		145	172	171	1228	1187	1224			308	
1 PM	212		146	172	171	1235	~~1150~~ 1150	1127			360	
2 PM	211		147	171	170	1225	1142	915			425	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

OFF TO Recp 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

9.11.09

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 SCFM	AIR PRESSURE INCHES H2O	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATOR INITIALS
7 AM	210	ON	144	172	173	1217	1178	1764	ON	ON	1435.	Campbell
8 AM	211		145	173	174	1230	1161	903			64.	
9 AM	210		144	169	170	1212	1202	1221			128.	
10 AM	210		144	172	171	1232	1150	862			185	
11 AM	211		144	173	172	1235	1141	1351			251.	
12 PM	212		145	173	173	1236	609	1204			307	
1 PM	211	↓	147	174	172	1240	000	852	↓	↓	370	
2 PM	209		144	171	169	1213	1190	881			431	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

OFF TO Rapp 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

9-12-9

	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 PSI/IN H2O	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATOR INITIALS
7 AM	209	ov	144	171	170	1232	1155	932	OKA	OKA	1440.	Comple
8 AM	208		144	170	169	1230	1170	1150			63	
9 AM	210		145	172	170	1229	1180	1153			127.	
10 AM	208		147	170	170	1222	1189	857			187	
11 AM	210		146	171	168	1225	1201	1155			249	
12 PM	208		144	170	168	1226	0001	1246			310.	
1 PM	209		145	171	170	1238	1152	967			362	
2 PM	210		146	170	169	1240	1160	857			428.	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EFF TO RAPIDS.

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

9-13-09
ComBank.

	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	209	on	144	169	170	1224	1139	991	on	on	1435	Combank
8 AM	210		145	170	168	1262	1195	1206			63.	
9 AM	211		144	171	171	1262	0001	1177			125.	
10 AM	208		145	170	171	1295	1138	903			186	
11 AM	209		146	170	169	1280	1157	1357			249	
12 PM	210		145	171	170	1296	1130	1215			307	
1 PM	209		142	170	169	1256	667	0001			367	
2 PM	210		143	169	170	1262	1150	1780			425.	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

OFF 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 9/14

	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	TOTAL FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES H2O	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM	208	0029	142	168	168	1703	0001	666			1.907	DMZ
8 AM	206	0	144	166	165	1263	668	0001			.057	
9 AM	208		143	168	164	1289	0002	886			.114	
10 AM	207		142	166	165	1275	0002	951			.172	
11 AM	205		140	165	165	1273	1192	910			.226	
12 PM	206		141	167	166	1272	665	0002			.288	
1 PM	205		142	168	166	1291	1177	1775			.343	
2 PM	209		142	167	166	1266	1192	1248			.401	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to Basin >>
12:30 County Fair on site 1:45 county fair leaves site

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 9/15/09

	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 FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES H2O	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM	204	0	140	164	162	1233	1189	1233	9	9	1.351	OMD
8 AM	204		140	164	164	1235	1152	907			.061	
9 AM	204		140	164	164	1225	1165	1670			.121	
10 AM	204		140	164	163	1230	1154	1033			.179	
11 AM	204		140	165	164	1235	1145	851			.236	
12 PM	204		142	164	164	1231	1137	1116			.297	
1 PM	204		140	164	164	1217	0000	662			.354	
2 PM	203		138	163	162	1200	666	0001			.409	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EFFLUENT TO BASIN 33
CHANGE OF ENZYME BOTTLE
EFFLUENT TO RAP BASIN AS OF 12 NOON

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 9/16/09

	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	FLOW PS FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES WC	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATOR INITIALS
7 AM	204	0	139	164	164	1232	1150	1181	0		1.386	DMD
8 AM	205		139	164	164	1234	0004	999			.056	
9 AM	204		139	164	163	1225	0000	1117			.116	
10 AM	204		139	163	161	1213	662	0014			.172	
11 AM	204		137	162	161	1207	734	0001			.229	
12 PM	204		138	162	162	1216	1196	965			.279	
1 PM	204		138	164	162	1228	1184	1197			336	
2 PM	204		137	164	163	1233	1173	1164			1395	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to RAP Basin
2:15 shut pot on Hyde 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.

9/09 9-7

TOWN OF OYSTER BAY
DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT

9-17-09
Con Boll

	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 PRESSURE PSI/IN H2O	EFFLUENT FLOW U.GALS	SUPERVISORY OPERATOR INITIALS
7 AM	204	OF	137	163	162	1232	655	1015	ON	ON	1370	Con Boll
8 AM	203		138	162	163	1230	662	0001			65	
9 AM	202		140	163	162	1234	1191	971			135	
10 AM	204		139	164	161	1246	1171	1255			185	
11 AM	205		139	165	160	1249	1175	1340			246	
12 PM	202		137	162	160	1228	1198	895			302	
1 PM	204		137	161	161	1228	1199	0001			360	
2 PM	205		138	160	162	1230	1198	1351			421	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Ok to Rep Brine -

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

7.18.09
Cem Bruk

	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 PRESSURE INCHES H2O	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATOR INITIALS
7 AM	207	off	138	164	162	1225	1175	768	off	off	1380	Cem
8 AM	203		140	160	161	1218	660	307			61.	
9 AM	204		141	163	164	1272	1144	1187			126.	
10 AM	203		140	160	164	1232	1164	1018			180	
11 AM	203		139	161	162	1230	1171	001			241	
12 PM	202		140	160	161	1242	1147	915			308.	
1 PM	204		137	164	161	1226	1178	1275			360	
2 PM	205		138	165	163	1227	1176	1251			425.	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Ckt To Keep Bats in.

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

9-19-09

Cembrook

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	PRESSURE FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES H2O	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM	204	OFF	137	163	160	1224	668	0001	OFF	OFF	1370	Cembrook
8 AM	201		136	162	160	1225	667	1751			62	
9 AM	202		137	163	161	1230	1120	861			125	
10 AM	203		138	161	155	1227	1125	1349			185	
11 AM	205		140	164	164	1247	1150	1185			245	
12 PM	204		138	163	163	1230	1131	1251			305	
1 PM	203		137	160	163	1231	1141	1751			359	
2 PM	203	↓	137	160	161	1230	1143	0001	↓	↓	421	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

OFF TO Regg BLDG.

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

9.20.09

cambell

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	PRESSURE FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES H2O	EFFLUENT FLOW M.GALS	SUPERVISOR/ OPERATOR INITIALS
7 AM	204	off	138	163	164	1207	0001	1090	max	max	1376	Campbell
8 AM	203		137	162	162	1231	1189	956			60	
9 AM	202		138	164	161	1228	1151	1080			120	
10 AM	204		137	163	164	1227	1160	1357			17J	
11 AM	203		138	169	166	1238	1193	1231			23J	
12 PM	204		137	163	161	1235	1180	1182			27J	
1 PM	203		139	162	160	1230	1152	1079			34J	
2 PM	203		137	161	162	1231	1150	1257			402	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EXP TO MP 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 9/21/09

	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	SUPERVISORY OPERATOR INITIALS
7 AM	204	0	137	163	163	1232	1174	993	0	993	1.356	D MD
8 AM	204		136	164	162	1237	1170	1795			.060	
9 AM	204		139	164	162	1244	1158	943			.120	
10 AM	204		138	164	162	1245	1150	1209			.177	
11 AM	203		138	165	164	1254	1139	864			.235	
12 PM	204		139	163	160	1234	662	0001			.290	
1 PM	204		136	162	162	1229	0001	1211			.349	
2 PM	204		139	162	161	1219	665	0002			.403	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to RTP Basin
8:15 am effluent to Basin 33
11:00 am Backgate opened for Lazar
2 PM RTP on site

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 9/22/09

	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	FORCE MN FLOW GPM	BLOWER AIR FLOW %	AIR PRESSURE INCHES W.C.	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATOR INITIALS
7 AM	203	0	137	165	163	1251	1146	853	9	9	1374	AMO
8 AM	204		137	165	164	1251	946	851			055	
9 AM	204		138	164	163	1232	0000	878			113	
10 AM	204		136	163	160	1220	6660	0002			176	
11 AM	203		139	162	160	1215	1109	0001			222	
12 PM	204		136	163	160	1222	1195	911			276	
1 PM	204		139	164	166	1269	1151	668			334	
2 PM	0		0	0	0	0234	0002	1713			393	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent Flow to Basin 33
- 7:15 RTP on 3rd
- changed enzyme barrel
- back flush valve tested 1:50 - 2:10 PM

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.

9/22

1-7 9/22

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT 9/23/09

	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 FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES H2O	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATOR INITIALS
7 AM	209	0	144	171	169	1239	0001	1256	0	0	1377	DMD
8 AM	210		142	172	169	1240	0001	1211			.057	
9 AM	208		147	168	166	1222	0461	0420			.115	
10 AM	208		140	166	165	1221	0661	0001			.171	
11 AM	208		143	165	168	1245	0000	862			.234	
12 PM	208		142	169	168	1244	0000	1080			.292	
1 PM	207		140	168	166	1221	1192	902			.345	
2 PM	208	0	141	168	167	1209	1200	0001			.405	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent Flow to Basin 3

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

Centrode.
9.24.08

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 FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES W/C	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATOR INITIALS
7 AM	208	OP	139	165	166	1229	1187	1074	ORA	ORA	1401	Comrade
8 AM	208		141	160	169	1248	1137	928			58	
9 AM	208		142	169	166	1245	1140	913			118	
10 AM	208		141	168	167	1238	1161	1240			171	
11 AM	206		140	169	167	1239	1153	1180			234	
12 PM	207		141	168	167	1233	1172	1011			290	
1 PM	208	↓	140	169	166	1226	622	850	↓	↓	345	
2 PM	206		141	169	167	1230	1160	960			410	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Ext to Rep 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

Cambria

9.25.09

	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 FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE PSI/IN.H2O	EFFLUENT FLOW M.GALS	STRIPPER/WELL OPERATOR DETAILS
7 AM	206	OFF	140	168	164	1233	661	0002	ON	ON	1410.	Cambria
8 AM	207		141	170	163	1240	1180	1265			58.	
9 AM	206		140	168	163	1236	1188	1076			117.	
10 AM	205		141	167	166	1253	1157	1229			181	
11 AM	206		141	168	163	1235	664	0001			237.	
12 PM	206		140	166	164	1231	1201	0001			300	
1 PM	208		141	167	166	1250	1140	848			355	
2 PM	209		140	166	168	1255	1139	1166			410	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EXP to BAS. N # 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

9.26.09

Cambelle

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	SUPERVISORY OPERATION INITIALS
7 AM	210	OF	164	170	168	1292	1140	1205	OFF	OFF	1415	Cambelle
8 AM	211		145	165	168	1234	1150	884			63	
9 AM	210		143	169	167	1284	1136	1114			125	
10 AM	211		140	170	166	1245	1140	1006			186	
11 AM	209		143	168	167	1241	1141	985			245	
12 PM	208		144	168	166	1232	1143	1041			305	
1 PM	209	↓	143	161	169	1246	1151	1157	↓	↓	369	
2 PM	208	↓	142	166	167U	1238	1153	1210			435	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EFF TO ~~[illegible]~~ 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

9.27.09

Cambell

	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	208	00	142	168	168	1185	1201	676	OK	OK	1418	Cambell
8 AM	210		143	168	169	1201	1150	967			63	
9 AM	209		142	168	169	1210	1165	852			125	
10 AM	210		143	167	168	1203	1148	1003			187	
11 AM	208		143	168	169	1205	1151	1132			250	
12 PM	209		142	169	168	1199	1133	1117			310	
1 PM	210		143	169	169	1195	1157	1251			365	
2 PM	208		141	168	168	1208	1191	1311			432	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

EXP TO ~~BISTS~~ RGP BACKW

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 9/28/09

	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 PRESSURE INCHES H2O	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATION DETAILS
7 AM	208	0	142	170	169	1220	1175	964	0	0	1,716	OWH
8 AM	209		143	169	168	1213	0001	899			1476	
9 AM	209		142	168	168	1213	0001	871			.056	
10 AM	207		141	167	165	1190	1200	0001			.110	
11 AM	208		145	168	165	1191	664	0001			.170	
12 PM	207		142	168	167	1191	661	0002			.231	
1 PM	207		141	168	168	1207	1162	1079			.290	
2 PM	205		141	167	167	1196	0002	853			.349	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to RAP Bays
- AM changed over to the backup

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.

10/7 4:32 -C/A

TOWN OF OYSTER BAY

DEPARTMENT OF PUBLIC WORKS
GROUNDWATER TREATMENT FACILITY

DAILY OPERATIONS WORKSHEET
DAY SHIFT 9/29/09

	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 STRIPPING PRESS. INCHES H2O	EFFLUENT FLOW M.GALS	SUPERVISORY OPERATOR INITIALS
7 AM	208	0	141	169	168	1233	1185	867	0	0	1349	RMD
8 AM	208		142	165	168	1205	1175	1746			.052	0
9 AM	0		0	269	256	735	661	0001			.104	
10 AM	0		0	005	000	0000	000	0001			.124	
11 AM												
12 PM												
1 PM	203		141	164	164	1319	1168	1750			.187	0
2 PM	208		144	166	166	1320	1160	1859			.246	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Entered to RAF Basin
8:05 shut down well #2 for maintenance
8:50 well #3 shut down for maintenance
9:10 All wells shut down

11:05 ALL WELLS BACK IN OPERATION

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 9/30/09

	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 FILTER FLOW GPM	BLOWER AIR FLOW CFM	AIR PRESSURE INCHES H2O	EFFLUENT FLOW M.GAL'S	OPERATOR INITIALS
7 AM	205	0	142	165	164	1281	1193	864	0	0	1,227	DWL
8 AM	204		141	165	163	1269	1146	865			.051	
9 AM	205		141	165	164	1289	1139	1037			.109	
10 AM	204		140	164	161	1260	662	0021			.165	
11 AM	204		140	163	161	1267	0003	1052			.225	
12 PM	204		140	165	162	1252	1158	988			.283	
1 PM	203		139	162	161	1256	1190	1164			.330	
2 PM	204		139	164	161	1253	1199	937			.389	
3 PM												
AVERAGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

REMARKS

Effluent to RAP Bag'd
- changed enzyme barrel

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
July through September, 2009

Town of Oyster Bay

Old Bethpage Landfill Remedial Action Plan

Organic Self-Monitoring Results - Third Quarter 2009

Influent and Effleunt Results, in micrograms per Liter

DATE	Total VOC 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	
7/1/2009	**147**	0.1	ND	25.5	ND	98.2	13.5	4	0.1	5.6	18.1
7/6/2009	**150**	0.1	ND	20.9	ND	106	15.6	3.1	ND	4.4	20.0
7/8/2009	**146**	0.1	ND	20.5	ND	105	11.7	3.2	ND	4.9	1.1
7/10/2009	**145**	0.2	ND	27.3	ND	97.2	12.3	3.0	ND	5.1	19.4
7/13/2009	**164**	ND	0.9	25.6	ND	110	18.9	3.8	0.2	4.9	36.6
7/15/2009	**154**	ND	0.7	25.1	ND	104	14.7	3.4	0.1	5.3	1.8
7/17/2009	**164**	0.6	0.7	26.3	0.1	114	13.2	3.2	0.1	5.6	24.7
7/20/2009	**158**	ND	1.9	22.1	ND	113	13.4	3.4	ND	4.2	NA
8/10/2009	**228**	ND	ND	20.8	0.7	171	17.5	8.8	1.1	7.6	NA
8/12/2009	**247**	ND	ND	23.1	0.7	186	18.4	9.2	0.2	8.9	21.1
8/14/2009	**243**	ND	ND	21.3	ND	189	17.2	7.5	0.2	8.1	21.4
8/17/2009	**132**	ND	ND	12.8	0.4	101	10.0	3.0	0.5	4.1	11.6
8/19/2009	**136**	ND	ND	13.1	0.5	104	10.8	3.0	0.3	4.1	10.3
8/21/2009	**114**	ND	ND	11.5	0.4	88.4	8.2	2.3	ND	2.9	7.6
8/24/2009	**122**	ND	ND	12.5	0.4	91.4	10.3	3.1	0.4	4.1	11.2
8/26/2009	**137**	ND	ND	13.5	0.4	105	10.7	3.2	ND	4.0	25.6
8/28/2009	**122**	ND	ND	13.1	0.5	90.5	10.1	2.8	0.5	4.2	0.2
8/31/2009	**118**	ND	ND	11.3	0.3	94.4	6.9	1.9	ND	3.3	9.5
9/2/2009	**123**	ND	ND	14.1	0.4	91.2	10.1	3.0	ND	4.1	10.1
9/4/2009	**136**	ND	ND	12.5	0.5	106	9.9	2.9	0.6	4.0	3.1
9/9/2009	**135**	ND	ND	14.5	0.4	101	11.4	3.2	0.3	4.4	NA
9/11/2009	**129**	ND	ND	16.7	0.5	90.7	12.9	2.5	0.7	4.5	NA
9/16/2009	**133**	ND	0.1	15.4	0.0	100	11.4	1.9	0.1	3.7	NA
Averages:	**151**	0.2	0.1	18.2	0.2	111.2	12.6	3.7	0.2	4.9	14.1

Notes:

Bolded values are higher than Consent Decree limit of 50 ug/L total VOCs for ground water.

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

NA = Not Available.

ND = Not Detected.

Town of Oyster Bay

Old Bethpage Landfill Remedial Action Plan

Inorganic Self-Monitoring Results, July-September 2009

Effleunt Results, in milligrams per Liter

Parameter	Limit	Avg. Conc.	7/8/2009	7/15/2009	7/22/2009	7/29/2009	8/5/2009	8/12/2009	8/19/2009	8/26/2009	9/2/2009	9/9/2009	9/16/2009	9/23/2009	9/30/2009
pH	6.5 - 8.5	7.2	7.1	7.1	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.1	7.0	**9.0**	7.0
Iron	0.6	0.01	0.00	0.02	0.02	0.00	0.00	0.01	0.02	0.02	0.00	0.05	0.00	0.00	0.00
Manganese	0.6	0.5	0.2	0.3	0.2	0.3	0.2	0.2	**0.7**	0.2	0.5	0.4	**1.8**	**1.3**	0.1
Iron and Manganese	1.0	0.5	0.2	0.3	0.2	0.3	0.2	0.2	0.7	0.2	0.5	0.5	**1.8**	**1.3**	0.1
Dissolved Oxygen	No Std.	14.0	12.4	12.8	16.6	12.4	18.8	11.2	12.0	12.9	18.4	11.5	18.5	11.7	12.3
Ammonia	No Std.	5.6	6.1	5.7	5.0	5.5	6.0	5.7	5.5	5.8	5.3	5.6	5.8	5.5	5.7
Chloride	500	131	140	145	133	140	131	108	135	126	114	144	114	136	139

Notes: Limits are ground water discharge limits in NYSDEC TOGS 1.1.1.
Bold results exceed limits.

Town of Oyster Bay

Old Bethpage Landfill Remedial Action Plan

Organic Self-Monitoring Results - Third Quarter 2009

Recovery Well RW-4 Results, in micrograms per Liter

Date	Total VOCs	Benzene	Bromodichloro-methane	Bromoform	Carbon Tetrachloride	Chloro-benzene	Chlorodibromo-methane	Chloroethane	Chloroform	Dichloro-benzenes	1,1-DCA	1,2-DCA
	100*	1	50(GV)	50(GV)	5	5	50(GV)	5	7	3**	5	0.6
7/3/2009	**314**	<0.1	<0.3	<0.2	<0.1	<0.1	<0.6	<0.2	3.2	<0.8	0.8	0.3
7/9/2009	**187**	0.1	<0.3	0.2	<0.1	0.1	<0.6	<0.2	<0.1	1.6	<0.2	<0.3
8/7/2009	**510**	<0.1	<0.3	<0.2	<0.1	<0.1	<0.6	<0.2	4.3	<0.8	1.2	0.5
8/14/2009	**339**	<0.1	<0.3	<0.2	<0.1	<0.1	<0.6	<0.2	<0.1	<0.8	<0.2	<0.3
8/21/2009	**390**	<0.1	<0.3	<0.2	<0.1	0.4	<0.6	<0.2	<0.1	11.4	<0.2	<0.3
9/25/2009	**459**	<0.1	<0.3	<0.2	<0.1	<0.1	<0.6	<0.2	1.9	<0.8	0.5	0.3
Averages:	366	0.0	ND	0.0	ND	0.1	ND	ND	1.6	2.2	0.4	0.2

Date	1,1-DCE	1,2-DCE (Total)	1,2 dichloro-propane	Ethyl-benzene	Methylene Chloride	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride	Xylenes (Total)
	5	5**	1	5	5	5	5	5	5	2	5**
7/3/2009	6.4	**29.4**	<0.1	<0.1	<0.2	**24.0**	<0.1	**6.6**	**243**	0.5	<1.8
7/9/2009	0.7	**13.4**	<0.1	<0.1	<0.2	**18.2**	0.1	1.4	**146**	1.8	3.2
8/7/2009	**11.8**	**31.6**	<0.1	<0.1	<0.2	**127**	<0.1	**11.3**	**322**	<0.2	<1.8
8/14/2009	2.6	**35.3**	<0.1	<0.1	0.3	**24.3**	<0.1	<0.1	**276**	<0.2	<1.8
8/21/2009	2.9	**37.7**	<0.1	<0.1	<0.2	**37.2**	0.3	2.5	**288**	0.8	9
9/25/2009	2.8	**44.0**	<0.1	<0.1	<0.2	**38.7**	<0.1	4.4	**366**	<0.2	<1.8
Averages:	4.5	31.9	ND	ND	0.1	44.9	0.1	4.4	273	0.5	2.0

Notes:

Bolded results are higher than the New York State Department of Conservation Class GA standard or guidance value (GV) shown at top of column.

* Consent Decree limit.

** Standard per isomer.

APPENDIX C

RECOVERY WELL MONITORING RESULTS
July through September, 2009

Town of Oyster Bay

Old Bethpage Landfill Remedial Action Plan

Organic Self-Monitoring Results - Third Quarter 2009

Recovery Well RW-1 Results, in micrograms per Liter

Date	Total VOCs	Benzene	Bromodichloro-methane	Bromoform	Carbon Tetrachloride	Chloro-benzene	Chlorodibromo-methane	Chloroethane	Chloroform	Dichloro-benzenes	1,1-DCA	1,2-DCA
	100*	1	50(GV)	50(GV)	5	5	50(GV)	5	7	3**	5	0.6
7/3/2009	2.7	0.1	<0.3	<0.2	<0.1	0.6	<0.6	<0.2	<0.1	1.2	<0.2	<0.3
7/9/2009	2.6	0.1	<0.3	<0.2	<0.1	0.4	<0.6	<0.2	<0.1	1.0	0.2	<0.3
8/7/2009	3.0	0.2	<0.3	<0.2	<0.1	0.5	<0.6	<0.2	<0.1	1.2	<0.2	<0.3
8/14/2009	6.4	0.2	<0.3	<0.2	<0.1	0.8	<0.6	<0.2	<0.1	1.8	<0.2	<0.3
8/21/2009	8.9	0.2	<0.3	<0.2	<0.1	<0.5	<0.6	<0.2	<0.1	3.5	<0.2	<0.3
9/25/2009	1.2	<0.1	<0.3	<0.2	<0.1	0.2	<0.6	<0.2	<0.1	0.7	<0.2	<0.3
Averages:	4.1	0.1	ND	ND	ND	0.4	ND	ND	ND	1.6	0.03	ND

Date	1,1-DCE	1,2-DCE (Total)	1,2 dichloro-propane	Ethyl-benzene	Methylene Chloride	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride	Xylenes (Total)
	5	5**	1	5	5	5	5	5	5	2	5**
7/3/2009	<0.3	0.5	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.2	0.3	<1.8
7/9/2009	<0.3	0.5	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	0.2	0.2	<1.8
8/7/2009	<0.3	<0.5	<0.1	<0.1	<0.2	0.2	<0.1	<0.1	0.3	<0.2	<1.8
8/14/2009	<0.3	0.6	<0.1	<0.1	0.2	0.2	<0.1	<0.1	0.3	<0.2	2.1
8/21/2009	<0.3	<0.5	<0.1	<0.1	<0.2	0.1	0.1	<0.1	<0.2	0.2	4.1
9/25/2009	<0.3	<0.5	<0.1	ND	<0.2	<0.1	<0.1	<0.1	<0.2	<0.2	<1.8
Averages:	ND	0.2	ND	0.0	0.03	0.1	0.02	ND	0.1	0.1	1.0

Notes:

Bolded results are higher than the New York State Department of Conservation Class GA standard or guidance value (GV) shown at top of column.

* Consent Decree limit.

** Standard per isomer.

Town of Oyster Bay

Old Bethpage Landfill Remedial Action Plan

Organic Self-Monitoring Results - Third Quarter 2009

Recovery Well RW-2 Results, in micrograms per Liter

Date	Total VOCs	Benzene	Bromodichloro-methane	Bromoform	Carbon Tetrachloride	Chloro-benzene	Chlorodibromo-methane	Chloroethane	Chloroform	Dichloro-benzenes	1,1-DCA	1,2-DCA
	100*	1	50(GV)	50(GV)	5	5	50(GV)	5	7	3**	5	0.6
7/3/2009	12.3	0.4	0.3	0.2	<0.1	0.8	<0.6	<0.2	0.6	3.9	0.3	0.3
7/9/2009	1.5	0.1	<0.3	<0.2	<0.1	0.3	<0.6	<0.2	<0.1	<0.8	0.2	<0.3
8/7/2009	3.6	0.2	<0.3	<0.2	<0.1	0.4	<0.6	<0.2	<0.1	0.8	<0.2	<0.3
8/14/2009	7.0	0.2	<0.3	<0.2	<0.1	0.4	<0.6	<0.2	<0.1	1.4	<0.2	<0.3
8/21/2009	10.5	0.2	<0.3	<0.2	<0.1	0.6	<0.6	<0.2	<0.1	2.8	<0.2	<0.3
9/25/2009	0.8	0.1	<0.3	<0.2	<0.1	0.2	<0.6	<0.2	<0.1	0.5	<0.2	<0.3
Averages:	6.0	0.2	0.1	0.0	ND	0.5	ND	ND	0.1	1.9	0.1	0.1

Date	1,1-DCE	1,2-DCE (Total)	1,2 dichloro-propane	Ethyl-benzene	Methylene Chloride	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride	Xylenes (Total)
	5	5**	1	5	5	5	5	5	5	2	5**
7/3/2009	<0.3	0.7	0.4	0.2	0.6	0.4	0.2	<0.1	0.2	0.2	2.6
7/9/2009	<0.3	<0.5	<0.1	<0.1	<0.2	0.2	<0.1	<0.1	0.4	0.3	<1.8
8/7/2009	<0.3	0.7	<0.1	<0.1	<0.2	0.3	<0.1	<0.1	1	0.2	<1.8
8/14/2009	<0.3	0.5	<0.1	<0.1	<0.2	0.2	<0.1	<0.1	0.5	0.3	3.5
8/21/2009	<0.3	0.5	<0.1	<0.1	<0.2	0.3	0.1	<0.1	0.3	<0.2	5.7
9/25/2009	<0.3	<0.5	<0.1	<0.1	<0.2	<0.2	<0.1	<0.1	<0.2	<0.2	<1.8
Averages:	ND	0.4	0.1	0.03	0.1	0.2	0.5	ND	0.4	0.2	2.0

Notes:

Bolded results are higher than the New York State Department of Conservation Class GA standard or guidance value (GV) shown at top of column.

* Consent Decree limit.

** Standard per isomer.

Town of Oyster Bay

Old Bethpage Landfill Remedial Action Plan

Organic Self-Monitoring Results - Third Quarter 2009

Recovery Well RW-3 Results, in micrograms per Liter

Date	Total VOCs	Benzene	Bromodichloro-methane	Bromoform	Carbon Tetrachloride	Chloro-benzene	Chlorodibromo-methane	Chloroethane	Chloroform	Dichloro-benzenes	1,1-DCA	1,2-DCA
	100*	1	50(GV)	50(GV)	5	5	50(GV)	5	7	3**	5	0.6
7/3/2009	77.0	6.1	<0.3	<0.2	<0.1	0.6	<0.6	<0.2	1.2	1	0.5	<0.3
7/9/2009	64.5	0.2	<0.3	<0.2	<0.1	0.5	<0.6	<0.2	0.8	<0.8	0.4	<0.3
8/7/2009	83.3	<0.1	<0.3	<0.2	<0.1	1	<0.6	<0.2	0.6	1.7	1.1	<0.3
8/14/2009	78.3	0.5	<0.3	<0.2	<0.1	0.8	<0.6	<0.2	<0.1	1.7	<0.2	0.4
8/21/2009	140	1.3	2.9	0.3	<0.1	6.0	4.4	<0.2	2.1	31.3	0.4	3.1
9/25/2009	70.1	0.2	<0.3	<0.2	<0.1	0.6	<0.6	<0.2	0.7	0.7	0.3	<0.3
Averages:	85.5	1.4	0.5	0.1	ND	1.6	0.7	ND	0.9	6.1	0.5	0.6

Date	1,1-DCE	1,2-DCE (Total)	1,2 dichloro-propane	Ethyl-benzene	Methylene Chloride	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride	Xylenes (Total)
	5	5**	1	5	5	5	5	5	5	2	5**
7/3/2009	0.9	**10.1**	<0.1	<0.1	<0.2	**12.5**	<0.1	1.5	**42.6**	<0.2	<1.8
7/9/2009	1.1	**12.8**	<0.1	<0.1	<0.2	**18.3**	<0.1	1.7	**28.7**	<0.2	<1.8
8/7/2009	2.3	**18.3**	<0.1	<0.1	<0.2	**25.3**	<0.1	3.4	**29.6**	<0.2	<1.8
8/14/2009	0.8	**9.7**	<0.1	<0.1	<0.2	**14.8**	<0.1	2.6	**47.0**	<0.2	<1.8
8/21/2009	1.0	**11.1**	5.2	<0.1	1.5	**19.4**	1.3	1.1	**47.4**	<0.2	<1.8
9/25/2009	0.5	**9.2**	<0.1	<0.1	<0.2	**16.5**	<0.1	1.4	**40.0**	<0.2	<1.8
Averages:	1.1	11.9	0.9	ND	0.3	17.8	0.2	2.0	39.2	ND	ND

Notes:

Bolded results are higher than the New York State Department of Conservation Class GA standard or guidance value (GV) shown at top of column.

* Consent Decree limit.

** Standard per isomer.

Town of Oyster Bay

Old Bethpage Landfill Remedial Action Plan

Organic Self-Monitoring Results - Third Quarter 2009

Recovery Well RW-4 Results, in micrograms per Liter

Date	Total VOCs	Benzene	Bromodichloro-methane	Bromoform	Carbon Tetrachloride	Chloro-benzene	Chlorodibromo-methane	Chloroethane	Chloroform	Dichloro-benzenes	1,1-DCA	1,2-DCA
	100*	1	50(GV)	50(GV)	5	5	50(GV)	5	7	3**	5	0.6
7/3/2009	**314**	<0.1	<0.3	<0.2	<0.1	<0.1	<0.6	<0.2	3.2	<0.8	0.8	0.3
7/9/2009	**187**	0.1	<0.3	0.2	<0.1	0.1	<0.6	<0.2	<0.1	1.6	<0.2	<0.3
8/7/2009	**510**	<0.1	<0.3	<0.2	<0.1	<0.1	<0.6	<0.2	4.3	<0.8	1.2	0.5
8/14/2009	**339**	<0.1	<0.3	<0.2	<0.1	<0.1	<0.6	<0.2	<0.1	<0.8	<0.2	<0.3
8/21/2009	**390**	<0.1	<0.3	<0.2	<0.1	0.4	<0.6	<0.2	<0.1	11.4	<0.2	<0.3
9/25/2009	**459**	<0.1	<0.3	<0.2	<0.1	<0.1	<0.6	<0.2	1.9	<0.8	0.5	0.3
Averages:	366	0.0	ND	0.0	ND	0.1	ND	ND	1.6	2.2	0.4	0.2

Date	1,1-DCE	1,2-DCE (Total)	1,2 dichloro-propane	Ethyl-benzene	Methylene Chloride	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride	Xylenes (Total)
	5	5**	1	5	5	5	5	5	5	2	5**
7/3/2009	6.4	**29.4**	<0.1	<0.1	<0.2	**24.0**	<0.1	**6.6**	**243**	0.5	<1.8
7/9/2009	0.7	**13.4**	<0.1	<0.1	<0.2	**18.2**	0.1	1.4	**146**	1.8	3.2
8/7/2009	**11.8**	**31.6**	<0.1	<0.1	<0.2	**127**	<0.1	**11.3**	**322**	<0.2	<1.8
8/14/2009	2.6	**35.3**	<0.1	<0.1	0.3	**24.3**	<0.1	<0.1	**276**	<0.2	<1.8
8/21/2009	2.9	**37.7**	<0.1	<0.1	<0.2	**37.2**	0.3	2.5	**288**	0.8	9
9/25/2009	2.8	**44.0**	<0.1	<0.1	<0.2	**38.7**	<0.1	4.4	**366**	<0.2	<1.8
Averages:	4.5	31.9	ND	ND	0.1	44.9	0.1	4.4	273	0.5	2.0

Notes:

Bolded results are higher than the New York State Department of Conservation Class GA standard or guidance value (GV) shown at top of column.

* Consent Decree limit.

** Standard per isomer.

Town of Oyster Bay

Old Bethpage Landfill Remedial Action Plan

Organic Self-Monitoring Results - Third Quarter 2009

Recovery Well RW-5 Results, in micrograms per Liter

Date	Total VOCs	Benzene	Bromodichloro-methane	Bromoform	Carbon Tetrachloride	Chloro-benzene	Chlorodibromo-methane	Chloroethane	Chloroform	Dichloro-benzenes	1,1-DCA	1,2-DCA
	100*	1	50(GV)	50(GV)	5	5	50(GV)	5	7	3**	5	0.6
7/3/2009	**201**	**8.9**	<0.3	<0.2	<0.1	<0.1	<0.6	<0.2	1.3	<0.8	1.7	<0.3
7/9/2009	**242**	0.1	<0.3	0.2	<0.1	0.1	<0.6	<0.2	0.7	1.4	1.2	**1.0**
8/7/2009	**300**	<0.1	<0.3	<0.2	<0.1	<0.1	<0.6	<0.2	1.6	<0.8	3	<0.3
8/14/2009	**289**	<0.1	<0.3	<0.2	<0.1	<0.1	<0.6	<0.2	1.5	<0.8	3.3	**2.3**
8/21/2009	**267**	0.4	<0.3	0.2	<0.1	0.7	<0.6	<0.2	1.3	5.6	1.0	**0.7**
9/25/2009	**336**	<0.1	<0.3	<0.2	<0.1	<0.1	<0.6	<0.2	<0.1	<0.8	1.7	**1.0**
Averages:	273	2	ND	0.07	ND	0.1	ND	ND	1.1	1.2	2.0	0.8

Date	1,1-DCE	1,2-DCE (Total)	1,2 dichloro-propane	Ethyl-benzene	Methylene Chloride	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride	Xylenes (Total)
	5	5**	1	5	5	5	5	5	5	2	5**
7/3/2009	**25.2**	**17.3**	<0.1	<0.1	<0.2	**24.3**	<0.1	**17.1**	**105**	0.5	<1.8
7/9/2009	**27.0**	**16.2**	<0.1	<0.1	<0.2	**59.1**	0.1	**21.8**	**112**	1.4	<1.8
8/7/2009	**26.7**	**22.8**	<0.1	<0.1	<0.2	**82.4**	<0.1	**22.3**	**141**	<0.2	<1.8
8/14/2009	**23.7**	**13.8**	<0.1	<0.1	0.6	**69.5**	<0.1	**21.6**	**153**	<0.2	<1.8
8/21/2009	**15.9**	**14.7**	<0.1	<0.1	0.4	**43.2**	0.5	**14.5**	**160**	0.3	7.6
9/25/2009	**17.4**	**16.2**	<0.1	<0.1	<0.2	**37.9**	<0.1	**19.7**	**242**	<0.2	<1.8
Averages:	22.7	16.8	ND	ND	0.2	52.7	0.1	19.5	152	0.4	1.3

Notes:

Bolded results are higher than the New York State Department of Conservation Class GA standard or guidance value (GV) shown at top of column.

* Consent Decree limit.

** Standard per isomer.

APPENDIX D

"Quarterly Monitoring Report
Third Quarter 2009 Results
Old Bethpage Landfill
Old Bethpage, New York"

Gannett Fleming, December 2009

TOWN OF OYSTER BAY

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QUARTERLY MONITORING REPORT

THIRD QUARTER 2009 RESULTS
OLD BETHPAGE LANDFILL
OLD BETHPAGE, NEW YORK

December 2009

Gannett Fleming

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APPENDICES

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 August 25, 2009. 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, limiting 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 0.10 feet; RW-02 decreased 1.02 feet; RW-03 decreased 0.18 feet; RW-04 decreased 0.15 feet; and the water level elevation did not change in RW-05 from the second quarter 2009 reporting period.

Water-level elevations in the monitoring wells decreased an average of 0.56 feet from the first quarter reporting period. The greatest change in water-level elevations occurred at monitoring well MW-07B, decreasing by 4.75 feet.

The average system pumpage for the third quarter was approximately 1,215 gallons per minute (gpm). The system flow was sufficient to control the VOC plume. The third quarter pumpage data and recovery well downtime are summarized in Table 2.

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-08A, MW-08B, MW-09B, MW-09C, MW-09D, MW-11A, MW-11B and OBS-1 between August 26 to 28, 2009 in accordance with the *Protocols for Sampling Groundwater under the Old Bethpage Solid Waste Disposal Complex Remedial Action Plan* prepared by Geraghty & Miller. MW-07B was not sampled during the third quarter sampling round. Quality assurance/quality control (QA/QC) samples were analyzed, including two field blanks, one field duplicate, and two 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, or disposable bailer 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, and turbidity were collected following the purge of each of 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 VOC plume maps shown on Figures 4, 5, and 6. The third quarter analytical data are summarized below and compared to the second quarter sampling results.

The depth to bottom of monitoring well MW-07B was measured at greater than 200 feet below the top of the casing. MW-07B was not sampled due to pump malfunction caused by sand infiltration in the well.

3.1 Volatile Organic Compound (VOC) Plume

The extent and distribution of VOCs detected during the third quarter is consistent with previous sampling rounds. Total VOC concentrations detected during the third quarter sampling round ranged from less than the laboratory detection limit to 56.2 micrograms per liter (µg/L), with the highest concentration found in the sample from MW-09D. The sample from MW-06B had the next highest total VOC concentration followed in decreasing order by MW-08A, OBS-1, MW-11A, MW-06E, MW-06A, MW-08B and MW-09B. VOC concentrations were at less than the laboratory-detection limit at wells M-30B-R, LF-1, MW-05B, MW-06C, MW-06F, MW-09C, and MW-11B.

3.1.1 Volatile Halogenated Organics (VHO) Group

Thirteen VHO compounds were detected during the third quarter 2009 sampling round: chloroethane, chloroform, dichlorodifluoromethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane, trans-1,2dichloroethene, cis-1,2-dichloroethene, methylene chloride, tetrachloroethene, 1,1,1-trichloroethane, trichloroethylene, and vinyl chloride. Trichloroethylene was found at the greatest frequency, in 8 of 16 samples. Distribution of VHOs during GF's third quarter sampling rounds is consistent with previous sampling rounds. The following table presents concentrations of total VHOs found during GF's second quarter and third quarter sampling rounds.

Well	2nd Quarter 2009 (µg/L)	3rd Quarter 2009 (µg/L)
MW-06B	1.0	Non-Detect
MW-06C	0.2	3.6
MW-06E	0.8	0.8
MW-08A	13.6	9.7
MW-08B	0.8	0.8
MW-09B	Non-Detect	0.8
MW-11A	Non-Detect	2.2
OBS-1	3.1	1.9

VHO concentrations remained unchanged at less than the laboratory-detection limit at monitoring wells M-30B-R, LF-1, MW-05B, MW-06A, MW-06F, MW-09C, and MW-11B.

VHO concentrations in MW-09D decreased from 18.0 µg/L to 15.4 µg/L from the 2008 third quarter sampling round to the 2009 third quarter sampling round. MW-07B was not sampled in the third quarter 2009 sampling round.

Figure 4 illustrates the approximate extent and distribution of total VHOs in groundwater during the third quarter 2009 sampling event.

3.1.2 Aromatic Hydrocarbons

Compared to previous monitoring rounds, the extent and distribution of aromatic hydrocarbons during the third quarter 2009 round is consistent. The following aromatic hydrocarbons were detected: benzene, n-butylbenzene, tert-butylbenzene, chlorobenzene, dichlorobenzene-o,m&p, ethylbenzene, isopropylbenzene, toluene and xylenes (o,m&p). The following table shows concentrations of total aromatic hydrocarbons found during GF's second and third quarter sampling rounds.

Well	2nd Quarter 2009 (µg/L)	3rd Quarter 2009 (µg/L)
LF-1	2.6	Non-Detect
MW-06A	1.1	1.5
MW-06B	9.5	10.2
MW-06C	2.6	Non-Detect
MW-06E	1.3	1.3
MW-08A	2.0	Non-Detect
OBS-1	3.5	4.6

VHO concentrations remained unchanged at less than the laboratory-detection limit at wells M-30B-R, MW-05B, MW-06F, MW-08B, MW-09B, MW-09C, MW-11A, and MW-11B. Aromatic hydrocarbon total concentrations in MW-09D increased from 7.4 µg/L to 40.8 µg/L from the 2008 third quarter sampling round to the 2009 third quarter sampling round. MW-07B was not sampled in the third quarter 2009 sampling round.

Figure 5 illustrates the approximate extent and distribution of aromatic hydrocarbons during the third quarter 2009 sampling event.

3.1.3 Tetrachloroethene

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

Well	2nd Quarter 2009 (µg/L)	3rd Quarter 2009 (µg/L)
MW-06E	0.2	0.2
MW-08A	13.6	9.0
MW-08B	0.8	0.6
MW-11A	2.2	0.6
OBS-1	3.1	0.3

Tetrachloroethene concentrations remained unchanged at less than the laboratory-detection limit at wells LF-1, M-30B-R, MW-05B, MW-06A, MW-06B, MW-06C, MW-06F, MW-09B, MW-09C, and MW-11B. MW-07B was not sampled in the third quarter 2009 sampling round

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

3.2 Inorganic Analyte Plume

The third quarter 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-11B, MW-11A, MW-06A, MW-08A, MW-09B, MW-08B, MW-09C, M-30B-R, MW-05B, MW-06E, OBS-1, MW-09D, MW-06F, LF-1, MW-06C, and MW-06B.

3.3 Quality Assurance/Quality Control

One duplicate, two field blank and two trip blank samples were analyzed for QA/QC purposes. The duplicate sample collected from well MW-08B. There was good agreement between the

sample and duplicate data. The trip blank sample collected on August 28, 2009 reported several aromatic hydrocarbon compounds including benzene, dichlorobenzene (o,m&p), cis-1,2-dichloroethene, ethylbenzene, toluene, and o-xylene. These concentrations were detected below guidance values and these compounds were not detected in any of the samples collected on August 28, with the exception of well OBS-1. The compounds and concentrations reported from OBS-1 are consistent with previous sampling rounds. VOCs were not detected in the August 26, 2009 trip blank sample.

The analytical results for the field blank sample collected on August 26 reported several compounds including benzene, chlorobenzene, chloroform, dichlorobenzene (o,m&p), cis-1,2-dichloroethene, ethylbenzene, toluene, o-xylene, isopropylbenzene, n-butylbenzene, and tert-butylbenzene. These concentrations were detected below guidance values. The samples associated with this field blank do not show elevated levels of these compounds and therefore the data collected for the associated samples is valid.

4.0 FINDINGS

1. The average estimated system flow of 1,215 gallons per minute was sufficient to control the VOC plume.

2. There was localized water table mounding beneath Recharge Basin #1 resulting from the treatment facility discharge.

3. The extent and distribution of VHOs, aromatic hydrocarbons, tetrachloroethene and leachate parameters detected during the third quarter 2009 sampling round are consistent with previous sampling rounds.

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

5. Groundwater samples were not collected from well MW-07B due to the groundwater pump becoming inundated with sand. MW-07B is damaged.

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.

3. Reinstall monitoring well MW-07B for plume delineation purposes.

4. Reinstall monitoring well OBS-2 for the purpose of evaluating groundwater elevation trends.

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

WATER LEVEL MEASUREMENTS - THIRD QUARTER 2009

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	DELTA WATER ELEV. (feet)	WATER ELEVATION (feet)
EW-02A	6/29/2009	157.14	91.11		66.03
EW-02A	8/25/2009	157.14	91.43	-0.32	65.71
EW-02B	6/29/2009	157.61	91.28		66.33
EW-02B	8/25/2009	157.61	91.65	-0.37	65.96
EW-02C	6/29/2009	157.54	91.18		66.36
EW-02C	8/25/2009	157.54	91.59	-0.41	65.95
EW-03A	6/29/2009	157.28	94.90		62.38
EW-03A	8/25/2009	157.28	95.10	-0.20	62.18
EW-03B	6/29/2009	157.32	95.01		62.31
EW-03B	8/25/2009	157.32	95.28	-0.27	62.04
EW-03C	6/29/2009	157.16	94.91		62.25
EW-03C	8/25/2009	157.16	95.20	-0.29	61.96
LF-1	6/29/2009	111.40	44.29		67.11
LF-1	8/25/2009	111.40	44.58	-0.29	66.82
LF-2	6/29/2009	118.70	51.65		67.05
LF-2	8/25/2009	118.70	51.94	-0.29	66.76
LF-3	6/29/2009	126.50	NM	N/A	N/A
LF-3	8/25/2009	126.50	NM	N/A	N/A
LF-4	6/29/2009	149.93	NM	N/A	N/A
LF-4	8/25/2009	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 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

WATER LEVEL MEASUREMENTS - THIRD QUARTER 2009

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	DELTA WATER ELEV. (feet)	WATER ELEVATION (feet)
M-29A-R	6/29/2009	157.50	89.62		67.88
M-29A-R	8/25/2009	157.50	90.00	-0.38	67.50
M-29B	6/29/2009	157.41	84.94		72.47
M-29B	8/25/2009	157.41	81.31	3.63	76.10
MW-30A	6/29/2009	151.20	NM	N/A	N/A
MW-30A	8/25/2009	151.20	NM	N/A	N/A
M-30B-R	6/29/2009	154.51	81.07		73.44
M-30B-R	8/25/2009	154.51	85.37	-4.30	69.14
MW-05A	6/29/2009	137.13	71.44		65.69
MW-05A	8/25/2009	137.13	71.71	-0.27	65.42
MW-05B	6/29/2009	138.43	72.70		65.73
MW-05B	8/25/2009	138.43	72.94	-0.24	65.49
MW-06A	6/29/2009	160.24	94.80		65.44
MW-06A	8/25/2009	160.24	95.02	-0.22	65.22
MW-06B	6/29/2009	160.39	95.12		65.27
MW-06B	8/25/2009	160.39	95.27	-0.15	65.12
MW-06C	6/29/2009	159.99	94.57		65.42
MW-06C	8/25/2009	159.99	94.71	-0.14	65.28
MW-06D	6/29/2009	160.39	94.92		65.47
MW-06D	8/25/2009	160.39	94.17	0.75	66.22

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N/A - Not Applicable

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

WATER LEVEL MEASUREMENTS - THIRD QUARTER 2009

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	DELTA WATER ELEV. (feet)	WATER ELEVATION (feet)
MW-06E	6/29/2009	160.88	95.70		65.18
MW-06E	8/25/2009	160.88	95.93	-0.23	64.95
MW-06F	6/29/2009	159.88	94.75		65.13
MW-06F	8/25/2009	159.88	95.28	-0.53	64.60
MW-07A	6/29/2009	148.44	86.40		62.04
MW-07A	8/25/2009	148.44	86.51	-0.11	61.93
MW-07B	6/29/2009	147.94	81.25		66.69
MW-07B	8/25/2009	147.94	86.00	-4.75	61.94
MW-08A	6/29/2009	134.94	68.75		66.19
MW-08A	8/25/2009	134.94	68.97	-0.22	65.97
MW-08B	6/29/2009	134.24	68.38		65.86
MW-08B	8/25/2009	134.24	68.29	0.09	65.95
MW-08C	6/29/2009	135.72	69.08		66.64
MW-08C	8/25/2009	135.72	69.67	-0.59	66.05
MW-09A	6/29/2009	153.35	90.13		63.22
MW-09A	8/25/2009	153.35	90.00	0.13	63.35
MW-09B	6/29/2009	153.28	91.26		62.02
MW-09B	8/25/2009	153.28	91.43	-0.17	61.85
MW-09C	6/29/2009	153.53	90.24		63.29
MW-09C	6/29/2009	153.53	92.58	-2.34	60.95

MP - Measuring Point (Typically Top of Casing)
MSL - Mean Sea Level
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TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

WATER LEVEL MEASUREMENTS - THIRD QUARTER 2009

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	DELTA WATER ELEV. (feet)	WATER ELEVATION (feet)
MW-09D	6/29/2009	152.95	91.07		61.88
MW-09D	8/25/2009	152.95	91.53	-0.46	61.42
MW-10A	6/29/2009	161.28	95.75		65.53
MW-10A	8/25/2009	161.28	95.99	-0.24	65.29
MW-10B	6/29/2009	161.12	95.99		65.13
MW-10B	8/25/2009	161.12	96.29	-0.30	64.83
MW-10C	6/29/2009	160.27	94.10		66.17
MW-10C	8/25/2009	160.27	95.49	-1.39	64.78
MW-10D	6/29/2009	161.17	95.85		65.32
MW-10D	8/25/2009	161.17	96.60	-0.75	64.57
MW-11A	6/29/2009	80.19	21.85		58.34
MW-11A	8/25/2009	80.19	22.57	-0.72	57.62
MW-11B	6/29/2009	79.91	21.70		58.21
MW-11B	8/25/2009	79.91	22.65	-0.95	57.26
N-9980	6/29/2009	80.46	20.48		59.98
N-9980	8/25/2009	80.46	23.47	-2.99	56.99
OBS-1	6/29/2009	110.61	48.48		62.13
OBS-1	8/25/2009	110.61	49.12	-0.64	61.49
OBS-2	6/29/2009	105.26	NM	N/A	N/A
OBS-2	8/25/2009	105.26	NM	N/A	N/A

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N/A - Not Applicable

TABLE 1
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL

WATER LEVEL MEASUREMENTS - THIRD QUARTER 2009

SITE	DATE	MP ELEVATION (feet)	DEPTH TO WATER (feet)	DELTA WATER ELEV. (feet)	WATER ELEVATION (feet)
RW-01	6/29/2009	110.94	55.30		55.64
RW-01	8/25/2009	110.94	55.40	-0.10	55.54
RW-02	6/29/2009	145.31	94.50		50.81
RW-02	8/25/2009	145.31	95.52	-1.02	49.79
RW-03	6/29/2009	120.92	67.72		53.20
RW-03	8/25/2009	120.92	67.90	-0.18	53.02
RW-04	6/29/2009	144.82	87.27		57.55
RW-04	8/25/2009	144.82	87.42	-0.15	57.40
RW-05	6/29/2009	149.74	93.70		56.04
RW-05	8/25/2009	149.74	93.70	0.00	56.04
TW-1	6/29/2009	121.12	NM	N/A	N/A
TW-1	8/25/2009	121.12	51.52	N/A	69.60
TW-2	6/29/2009	117.52	50.00		67.52
TW-2	8/25/2009	117.52	50.47	-0.47	67.05
TW-3-R	6/29/2009	133.93	66.94		66.99
TW-3-R	8/25/2009	133.93	67.39	-0.45	66.54

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
JULY THROUGH SEPTEMBER 2009

PERIOD: From 7/1/2009 to 9/30/2009 - Inclusive

Date	System Flow (gpm)	Remarks
7/1/09 - 9/28/09	1,281	GTF on-line.
9/29	1,065	Recovery Well RW-2 off-line 4 hours for maintenance.
9/30	1,271	GTF on-line.
Average:	1,215	

TABLE 3
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - THIRD QUARTER 2009
VOLATILE HALOGENATED ORGANIC COMPOUNDS

CONSTITUENT	M-30B-R 8/28/2009	MW-05B 8/26/2009	MW-06A 8/27/2009	MW-06B 8/27/2009	MW-06C 8/28/2009
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	0.3
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.3
Dichlorodifluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.2
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.5
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	0.6
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.4
cis-1,2-Dichloroethene	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
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.6
Tetrachloroethene	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
Trichloroethylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	ND	ND	ND	ND	3.6

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
Results appearing bold indicate concentrations greater than the action level

TABLE 3
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - THIRD QUARTER 2009
VOLATILE HALOGENATED ORGANIC COMPOUNDS

CONSTITUENT	MW-06E 8/27/2009	MW-06F 8/27/2009	MW-08A 8/26/2009	MW-08B 8/26/2009	MW-08B DUP 8/26/2009
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	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
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2	0.2 U	**9.0**	0.6	0.5
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethylene	0.6	0.2 U	0.7	0.2	0.2 U
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	0.8	ND	9.7	0.8	0.5

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
Results appearing bold indicate concentrations greater than the action level

TABLE 3
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - THIRD QUARTER 2009
VOLATILE HALOGENATED ORGANIC COMPOUNDS

CONSTITUENT	MW-07B Not Sampled	MW-09B 8/26/2009	MW-09C 8/26/2009	MW-09D 8/26/2009	MW-11A 8/28/2009	MW-11B 8/26/2009
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	2.0	0.2 U	0.2 U
Chloroform		0.1 U	0.1 U	0.5	0.1	0.1 U
Dichlorodifluoromethane		0.1 U	0.1 U	1.5	0.1 U	0.1 U
1,1-Dichloroethane		0.2 U	0.2 U	3.1	0.2 U	0.2 U
1,1-Dichloroethene		0.3 U	0.3 U	0.3	0.3 U	0.3 U
1,2-Dichloroethane		0.3 U	0.3 U	0.5	0.3 U	0.3 U
trans-1,2-Dichloroethene		0.3 U	0.3 U	0.3	0.3 U	0.3 U
cis-1,2-Dichloroethene		0.2 U	0.2 U	2.9	0.8	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	0.7	0.2 U	0.2 U
Tetrachloroethene		0.2 U	0.2 U	1.3	0.6	0.2 U
1,1,1-Trichloroethane		0.1 U	0.1 U	0.2	0.1 U	0.1 U
Trichloroethylene		0.8	0.2 U	1.0	0.7	0.2 U
Vinyl chloride		0.2 U	0.2 U	1.1	0.2 U	0.2 U
Sum of Constituents		0.8	ND	15.4	2.2	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
Results appearing bold indicate concentrations greater than the action level

TABLE 3
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - THIRD QUARTER 2009
VOLATILE HALOGENATED ORGANIC COMPOUNDS

CONSTITUENT	LF-1 8/28/2009	OBS-1 8/28/2009	Field Blank 8/26/2009	Field Blank 8/28/2009	Trip Blank 8/28/2009	Trip Blank 8/28/2009
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 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	1.1	0.2	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	0.3	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	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride	0.2 U	0.3	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	ND	1.9	0.4	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
Results appearing bold indicate concentrations greater than the action level

TABLE 4
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - THIRD QUARTER 2009
AROMATIC HYDROCARBONS

CONSTITUENT	LF-1 8/28/2009	M-30B-R 8/28/2009	MW-05B 8/26/2009	MW-06A 8/27/2009	MW-06B 8/27/2009
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	0.6
n-Butylbenzene	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
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	2.9
Dichlorobenzene, o&p	0.3 U	0.3 U	0.3 U	0.7 U	3.8
Dichlorobenzene, o,m&p	0.4 U	0.4 U	0.4 U	1.5	5.1
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	1.0
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1
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	1.5	10.2

Notes:
ND - Not Detected
U - Analyzed for but not detected
J - Estimated Value
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 - THIRD QUARTER 2009
AROMATIC HYDROCARBONS

CONSTITUENT	MW-06C 8/28/2009	MW-06E 8/27/2009	MW-06F 8/27/2009	MW-07B Not Sampled	MW-08A 8/26/2009
Benzene	0.1 U	0.1 U	0.1 U		0.1 U
n-Butylbenzene	0.1 U	0.1	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	0.9	0.3 U		0.3 U
Dichlorobenzene, o,m&p	0.4 U	1.2	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	1.3	ND		ND

Notes:
ND - Not Detected
U - Analyzed for but not detected
J - Estimated Value
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 - THIRD QUARTER 2009
AROMATIC HYDROCARBONS

CONSTITUENT	MW-08B 8/26/2009	MW-08B DUP 8/26/09	MW-09B 8/26/2009	MW-09C 8/26/2009	MW-09D 8/26/2009
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	**2.5**
n-Butylbenzene	0.1 U	0.2	0.1 U	0.1 U	0.9
tert-Butylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.9
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	2.3
Dichlorobenzene, o&p	0.3 U	0.3 U	0.3 U	0.3 U	**15.4**
Dichlorobenzene, o,m&p	0.4 U	0.4 U	0.4 U	0.4 U	**15.4**
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.7
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	2.3
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.6
m/p-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.5
o-Xylene	1.6 U	1.6 U	1.6 U	1.6 U	**14.7**
Sum of Constituents	ND	0.2	ND	ND	40.8

Notes:
ND - Not Detected
U - Analyzed for but not detected
J - Estimated Value
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 - THIRD QUARTER 2009
AROMATIC HYDROCARBONS

CONSTITUENT	OBS-1 8/28/2009	MW-11A 8/28/2009	MW-11B 8/26/2009	Field Blank 8/26/2009	Field Blank 8/28/2009
Benzene	0.3	0.1 U	0.1 U	0.1	0.1 U
n-Butylbenzene	0.1 U	0.1 U	0.1 U	0.3	0.1 U
tert-Butylbenzene	0.3	0.1 U	0.1 U	0.2	0.1 U
Chlorobenzene	1.0	0.1 U	0.1 U	0.5	0.1 U
Dichlorobenzene, o&p	2.8	0.3 U	0.3 U	1.5	0.3 U
Dichlorobenzene, o,m&p	3.0	0.4 U	0.4 U	3.8	0.4 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.2	0.1 U
Isopropylbenzene	0.1 U	0.1 U	0.1 U	0.1	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.3	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	4.6	ND	ND	5.5	ND

Notes:
ND - Not Detected
U - Analyzed for but not detected
J - Estimated Value
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 - THIRD QUARTER 2009
AROMATIC HYDROCARBONS

CONSTITUENT	Trip Blank 8/26/2009	Trip Blank 8/28/2009
Benzene	0.1 U	0.2
n-Butylbenzene	0.1 U	0.1 U
tert-Butylbenzene	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U
Dichlorobenzene, o&p	0.3 U	1.1
Dichlorobenzene, o,m&p	0.4 U	1.1
Ethylbenzene	0.1 U	0.1
Isopropylbenzene	0.1 U	0.1 U
Toluene	0.1 U	0.8
m/p-Xylene	0.2 U	0.2 U
o-Xylene	1.6 U	2.7
Sum of Constituents	ND	4.9

Notes:
ND - Not Detected
U - Analyzed for but not detected
J - Estimated Value
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 - THIRD QUARTER 2009
TETRACHLOROETHENE

CONSTITUENT	SAMPLE ID / DATE	LF-1 8/28/2009	M-30B-R 8/28/2009	MW-05B 8/26/2009	MW-06A 8/27/2009	MW-06B 8/27/2009	MW-06C 8/28/2009	MW-06E 8/27/2009	MW-06F 8/27/09
Tetrachloroethene		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2	0.2 U

CONSTITUENT	SAMPLE ID / DATE	MW-07B Not Sampled	MW-08A 8/26/09	MW-08B 8/26/09	MW-08B DUP 8/26/09	MW-09B 8/26/09	MW-09C 8/26/09	MW-09D 8/26/09	OBS-1 8/28/09
Tetrachloroethene			**9.0**	0.6	0.5	0.2 U	0.2 U	1.3	0.3

CONSTITUENT	SAMPLE ID / DATE	MW-11A 8/28/09	MW-11B 8/26/09	FIELD BLANK 8/26/09	FIELD BLANK 8/28/09	TRIP BLANK 8/26/09	TRIP BLANK 8/28/09
Tetrachloroethene		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
J - Estimated Value
U - Analyzed for but not detected
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 - THIRD QUARTER 2009
VOLATILE HALOGENATED ORGANIC COMPOUNDS

CONSTITUENT	RW-01 8/21/2009	RW-02 8/21/2009	RW-03 8/21/2009	RW-04 8/21/2009	RW-05 8/21/2009
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	0.4
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	0.4	0.8	0.6
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	0.2 U	1.3
1,1-Dichloroethene	0.3 U	0.3 U	0.9	**2.5**	**14.9**
1,2-Dichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.9
trans-1,2-Dichloroethene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.7	0.5	**8.0**	**33.3**	**12.4**
1,2-Dichloropropane	0.1 U	0.1	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	0.3	**15.7**	**27.1**	**31.8**
1,1,1-Trichloroethane	0.1 U	0.1 U	0.8	**3.3**	**15.3**
Trichloroethylene	0.2 U	0.3	**47.4**	**288**	**160**
Vinyl chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sum of Constituents	0.7	1.2	73.4	355.0	237.6

Notes:
All units are micrograms per liter (µg/L) or parts per billion (ppb)
ND - Not Detected
J - Estimated Value
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 - THIRD QUARTER 2009
AROMATIC HYDROCARBONS

CONSTITUENT	RW-01 8/21/2009	RW-02 8/21/2009	RW-03 8/21/2009	RW-04 8/21/2009	RW-05 8/21/2009
Benzene	0.2	0.2	0.3	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	0.6	1	0.1 U	0.1 U
Dichlorobenzene, o&p	1.1	1.3	1.6	0.3 U	0.3 U
Dichlorobenzene, o,m&p	0.7	2.8	4	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	2.1	4.9	6.9	ND	ND

Notes:
All units are micrograms per liter (µg/L) or parts per billion (ppb)
ND - Not Detected
J - Estimated Value
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 - THIRD QUARTER 2009
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

CONSTITUENT	UNITS	LF-1 9/9/2009	M-30B-R 8/28/2009	MW-05B 8/26/2009	MW-06A 8/27/2009	MW-06B 8/27/2009
Alkalinity, Total (As $CaCO_3$)	(mg/l)	170	4.7	51.5	5.15	551
Aluminum	(mg/l)	NA	0.2 U	0.2 U	1.63	0.2 U
Barium	(mg/l)	NA	0.2 U	0.2 U	0.2 U	0.2 U
Bicarbonate	(mg/l)	170	4.7	51.5	5.1	551
Calcium	(mg/l)	NA	12.5	16	0.7	9.24
Carbonate	(mg/l)	1 U	1 U	2 U	1 U	1 U
Chloride	(mg/l)	230	92	82.7	7.38	229
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	(mg/l)	10 U	10 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	(mg/l)	110	50	80	11	54
Iron	(mg/l)	NA	0.08	0.02 U	4.52	3.87
Lead	(mg/l)	NA	5 U	5 U	5 U	5 U
Magnesium	(mg/l)	NA	5.11	7.81	0.96	6.95
Manganese	(mg/l)	NA	0.02 U	4.81	0.04	0.03
Mercury	(mg/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)	0.1 U	2.05	4.07	0.51	0.1 U
Nitrite as N	(mg/l)	0.1 U	0.1 U	0.33	0.1 U	0.1 U
Nitrogen, Ammonia (As N)	(mg/l)	14.2	0.1 U	0.1 U	0.1 U	63
Nitrogen, Kjeldahl, Total	(mg/l)	27.5	0.1 U	0.24	0.1 U	96.5
Phenolics, Total Recoverable	(mg/l)	5 U	5 U	5 U	5 U	5 U
Potassium	(mg/l)	NA	3.65	9.02	1.43	80.9
Sodium	(mg/l)	NA	44.8	49.5	8.5	226
Sulfate	(mg/l)	23.8	18.9	22.5	5.01	11.3
Total Dissolved Solids	(mg/l)	482	217	243	66	750
Zinc	(mg/l)	NA	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
NA - Not Analyzed
U - Analyzed for but not detected
mg/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 - THIRD QUARTER 2009
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

CONSTITUENT	UNITS	MW-06C 8/28/2009	MW-06E 8/27/2009	MW-06F 8/27/2009	MW-07B Not Sampled	MW-08A 8/26/2009
Alkalinity, Total (As $CaCO_3$)	(mg/l)	415	50.8	1 U		1.85
Aluminum	(mg/l)	0.2 U	0.2 U	0.26		1.32
Barium	(mg/l)	0.2 U	0.2 U	0.22		0.2 U
Bicarbonate	(mg/l)	415	50.8	1 U		1.8
Calcium	(mg/l)	25.8	22.5	38		3
Carbonate	(mg/l)	1 U	1 U	1 U		1 U
Chloride	(mg/l)	249	165	226		15.5
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	(mg/l)	10 U	10 U	10 U		10 U
Hardness (As $CaCO_3$)	(mg/l)	105	95	156		19
Iron	(mg/l)	4.61	1.84	0.19		2.78
Lead	(mg/l)	5 U	5 U	5 U		14.3
Magnesium	(mg/l)	10.3	9.07	14.7		2.03
Manganese	(mg/l)	0.06	0.41	0.1		0.03
Mercury	(mg/l)	0.2 U	0.2 U	0.32		0.2 U
Nickel	(mg/l)	0.04 U	0.04 U	0.04 U		0.04 U
Nitrate as N	(mg/l)	0.1 U	0.1 U	2.73		2.31
Nitrite as N	(mg/l)	0.1 U	0.1 U	0.1		0.1 U
Nitrogen, Ammonia (As N)	(mg/l)	25.3	6.51	0.41		0.1 U
Nitrogen, Kjeldahl, Total	(mg/l)	42.7	11.3	0.34		0.47
Phenolics, Total Recoverable	(mg/l)	5 U	5 U	5 U		5 U
Potassium	(mg/l)	52.8	19.6	5.68		3.34
Sodium	(mg/l)	261	77.1	73.2		5.88
Sulfate	(mg/l)	42.8	30.1	5 U		5 U
Total Dissolved Solids	(mg/l)	803	386	614		62
Zinc	(mg/l)	0.02 U	0.05	0.04		0.02 U

Notes:
NA - Not Analyzed
U - Analyzed for but not detected
mg/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 - THIRD QUARTER 2009
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

CONSTITUENT	UNITS	MW-08B 8/26/2009	MW-8B DUP 8/26/2009	MW-09B 8/26/2009	MW-09C 8/26/2009	MW-09D 8/26/2009
Alkalinity, Total (As $CaCO_3$)	(mg/l)	3.8	2.9	9.6	48.1	1 U
Aluminum	(mg/l)	0.2 U	0.2 U	0.2 U	0.2 U	0.56
Barium	(mg/l)	0.2 U	0.2 U	0.2 U	0.2 U	0.27
Bicarbonate	(mg/l)	3.8	2.9	9.6	48.1	1 U
Calcium	(mg/l)	13.3	12.5	11.4	3.11	18.5
Carbonate	(mg/l)	1 U	1 U	1 U	1 U	1 U
Chloride	(mg/l)	74	77.1	48.6	88.4	275
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	(mg/l)	10 U	10 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	(mg/l)	51	49	47	28	106
Iron	(mg/l)	0.03	0.02 U	0.02 U	0.14	1.04
Lead	(mg/l)	8.12	6.37	5 U	5 U	11.3
Magnesium	(mg/l)	3.97	3.77	4.41	5.12	13.7
Manganese	(mg/l)	0.56	0.55	0.12	0.07	0.18
Mercury	(mg/l)	0.2 U	0.2 U	0.2 U	0.2 U	1.9
Nickel	(mg/l)	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Nitrate as N	(mg/l)	2.18	2.19	4.5	0.22	0.1 U
Nitrite as N	(mg/l)	0.1 U	0.1 U	0.1 U	0.1	0.1 U
Nitrogen, Ammonia (As N)	(mg/l)	0.1 U	0.1 U	0.1 U	5.31	1.4
Nitrogen, Kjeldahl, Total	(mg/l)	0.74	2.09	0.1 U	9.9	3.4
Phenolics, Total Recoverable	(mg/l)	5 U	5 U	5 U	5 U	5 U
Potassium	(mg/l)	10.8	10.4	5.28	16.7	4.5
Sodium	(mg/l)	29.6	28.8	26.6	49	101
Sulfate	(mg/l)	21.4	21.1	21.1	16.3	5 U
Total Dissolved Solids	(mg/l)	208	224	169	184	569
Zinc	(mg/l)	0.04	0.04	0.02 U	0.02 U	0.07

Notes:
NA - Not Analyzed
U - Analyzed for but not detected
mg/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 - THIRD QUARTER 2009
TOTAL (UNFILTERED) METALS AND LEACHATE INDICATORS

CONSTITUENT	UNITS	MW-11A 8/28/2009	MW-11B 8/28/2009	OBS-1 8/28/2009	Field Blank 8/26/2009
Alkalinity, Total (As $CaCO_3$)	(mg/l)	1 U	1 U	75.3	1 U
Aluminum	(mg/l)	0.2 U	0.2 U	0.2 U	0.2 U
Barium	(mg/l)	0.2 U	0.2 U	0.2 U	0.2 U
Bicarbonate	(mg/l)	1 U	1 U	75.3	1 U
Calcium	(mg/l)	3.52	2.14	20.4	0.2 U
Carbonate	(mg/l)	1 U	1 U	1 U	1 U
Chloride	(mg/l)	9.98	11.4	142	2 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	(mg/l)	10 U	10 U	10 U	10 U
Hardness (As $CaCO_3$)	(mg/l)	15	9	115	5 U
Iron	(mg/l)	0.02	0.07	0.09	0.02 U
Lead	(mg/l)	5 U	5 U	5 U	5 U
Magnesium	(mg/l)	1.84	1.03	14.8	0.2 U
Manganese	(mg/l)	0.02 U	0.02 U	1.58	0.02 U
Mercury	(mg/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)	3.82	1.03	0.1 U	0.1 U
Nitrite as N	(mg/l)	0.1 U	0.1 U	0.1 U	0.1 U
Nitrogen, Ammonia (As N)	(mg/l)	0.1 U	0.1 U	4.48	0.1 U
Nitrogen, Kjeldahl, Total	(mg/l)	0.1 U	0.1 U	9.81	0.1 U
Phenolics, Total Recoverable	(mg/l)	5 U	5 U	5 U	5 U
Potassium	(mg/l)	1.2	1.02	10	0.23
Sodium	(mg/l)	4.63	5.2	81.5	0.2 U
Sulfate	(mg/l)	5 U	5 U	59.9	5 U
Total Dissolved Solids	(mg/l)	51	31	357	10 U
Zinc	(mg/l)	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
NA - Not Analyzed
U - Analyzed for but not detected
mg/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 - THIRD QUARTER 2009
DISSOLVED (FILTERED) METALS

CONSTITUENT	UNITS	LF-1 8/28/2009	M-30B-R 8/28/2009	MW-05B 8/26/2009	MW-06A 8/27/2009	MW-06B 8/27/2009
Aluminum	(mg/l)	NA	0.2 U	0.2 U	0.2 U	0.2 U
Barium	(mg/l)	NA	0.2 U	0.2 U	0.2 U	0.2 U
Calcium	(mg/l)	NA	12.4	15.8	0.47	9.06
Chromium	(mg/l)	NA	0.01 U	0.01	0.01 U	0.01 U
Chromium, Hexavalent (Diss.)	(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
Iron	(mg/l)	NA	0.02 U	0.02 U	0.02 U	0.07
Lead	(µg/l)	NA	5 U	5 U	5 U	5 U
Magnesium	(mg/l)	NA	5.19	7.65	0.65	6.84
Manganese	(mg/l)	NA	0.02 U	4.67	0.02 U	0.03
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
Potassium	(mg/l)	NA	3.59	9.4	1.19	78.6
Sodium	(mg/l)	NA	45.3	48.5	8.22	218
Zinc	(mg/l)	NA	0.02 U	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

TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - THIRD QUARTER 2009
DISSOLVED (FILTERED) METALS

CONSTITUENT	UNITS	MW-06C 8/28/2009	MW-06E 8/27/2009	MW-06F 8/27/2009	MW-07B Not Sampled	MW-08A 8/26/2009
Aluminum	(mg/l)	0.2 U	0.2 U	0.25		0.2 U
Barium	(mg/l)	0.2 U	0.2 U	0.22		0.2 U
Calcium	(mg/l)	25.6	21.5	37.1		3.17
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)	0.17	1.66	0.19		0.04
Lead	(µg/l)	5 U	5 U	5 U		5 U
Magnesium	(mg/l)	10.3	8.7	14.6		2.09
Manganese	(mg/l)	0.06	0.39	0.1		0.03
Mercury	(µg/l)	0.2 U	0.2 U	0.28		0.2 U
Nickel	(mg/l)	0.04 U	0.04 U	0.04 U		0.04 U
Potassium	(mg/l)	52.1	18.1	5.46		3.94
Sodium	(mg/l)	258	71.8	71.7		6.66
Zinc	(mg/l)	0.02 U	0.06	0.03		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 - THIRD QUARTER 2009
DISSOLVED (FILTERED) METALS

CONSTITUENT	UNITS	MW-08B 8/26/2009	MW-08B DUP 8/26/2009	MW-09B 8/26/2009	MW-09C 8/26/2009	MW-09D 8/26/2009
Aluminum	(mg/l)	0.2 U	0.2 U	0.2 U	0.2 U	0.66
Barium	(mg/l)	0.2 U	0.2 U	0.2 U	0.2 U	0.27
Calcium	(mg/l)	13.5	13.7	12.7	3.32	18.9
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)	0.03	0.04	0.02 U	0.09	1.06
Lead	(µg/l)	5 U	5 U	5 U	5 U	5 U
Magnesium	(mg/l)	4.09	4.04	4.87	5.37	13.8
Manganese	(mg/l)	0.57	0.56	0.12	0.08	0.18
Mercury	(µg/l)	0.2 U	0.2 U	0.2 U	0.2 U	1.7
Nickel	(mg/l)	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	(mg/l)	11.9	11.6	5.99	18.6	4.81
Sodium	(mg/l)	32.1	32.1	30.1	52.8	104
Zinc	(mg/l)	0.05	0.05	0.02 U	0.02 U	0.08

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

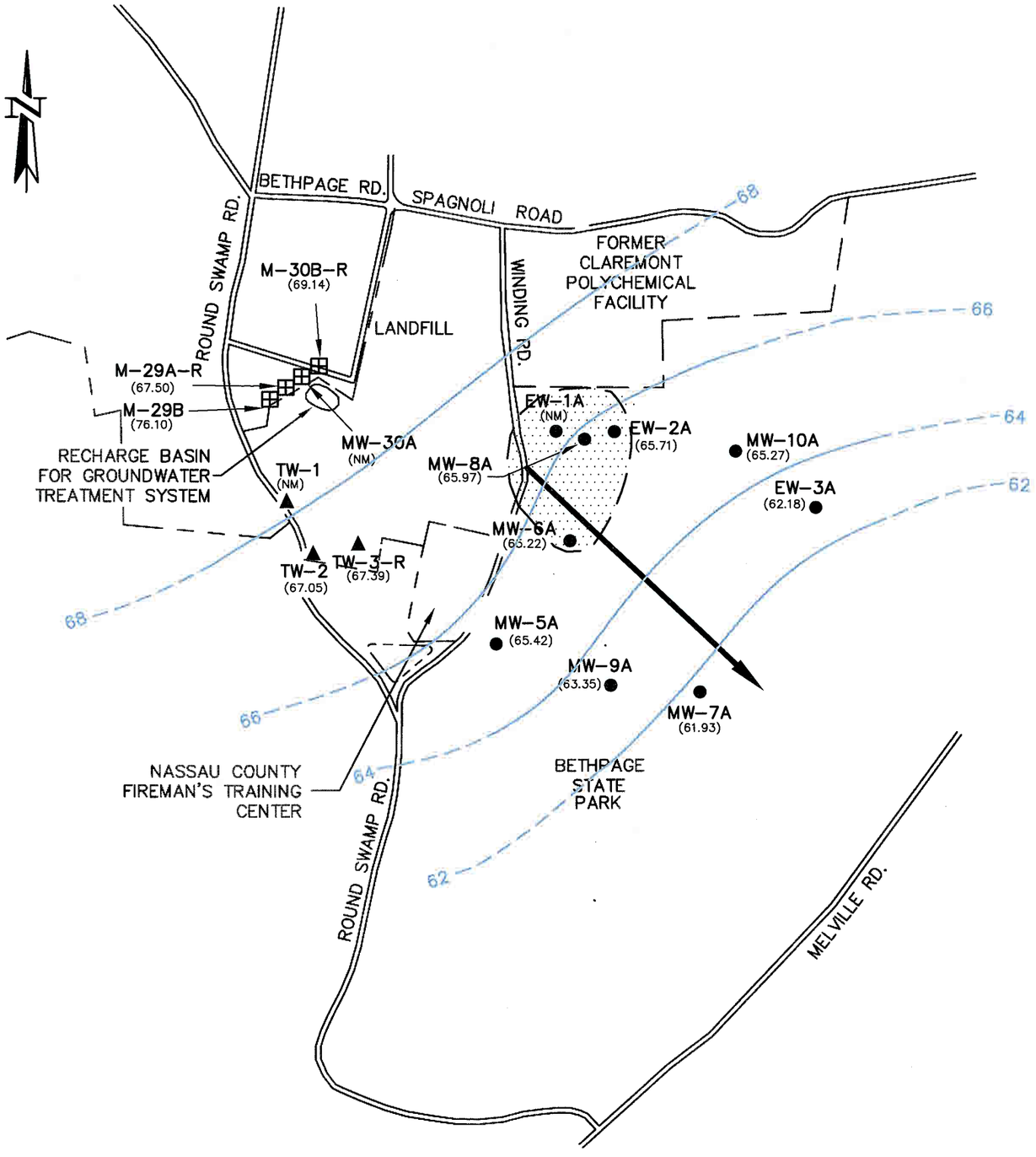
TABLE 8
TOWN OF OYSTER BAY
OLD BETHPAGE LANDFILL
GROUNDWATER ANALYTICAL RESULTS - THIRD QUARTER 2009
DISSOLVED (FILTERED) METALS

CONSTITUENT	UNITS	MW-11A 8/28/2009	MW-11B 8/28/2009	OBS-1 8/28/2009	Field Blank 8/26/2009
Aluminum	(mg/l)	0.2 U	0.2 U	0.2 U	0.2 U
Barium	(mg/l)	0.2 U	0.2 U	0.2 U	0.2 U
Calcium	(mg/l)	3.5	2.09	20.2	0.2 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	0.04	0.09	0.02 U
Lead	(µg/l)	5 U	5 U	5 U	5 U
Magnesium	(mg/l)	1.83	1.01	14.7	0.2 U
Manganese	(mg/l)	0.02 U	0.02 U	1.56	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
Potassium	(mg/l)	1.16	0.96	9.9	0.2 U
Sodium	(mg/l)	4.51	4.99	80.1	0.2 U
Zinc	(mg/l)	0.02 U	0.02 U	0.02	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 (67.11) ●	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
TW-2 ▲	*Phase II Extension Well*
M-29A ⊞	*Upgradient Well*
— — —	*Property Boundary*
➡	*Groundwater Flow Direction*
56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
	Approximate Extent Of The VOC Plume In Water Table Wells – Third Quarter 2009
(NM)	*Not Measured*

Note:
Water level measurements from M-29A-R, M-29B and M-30B-R are not included in the water level contours.

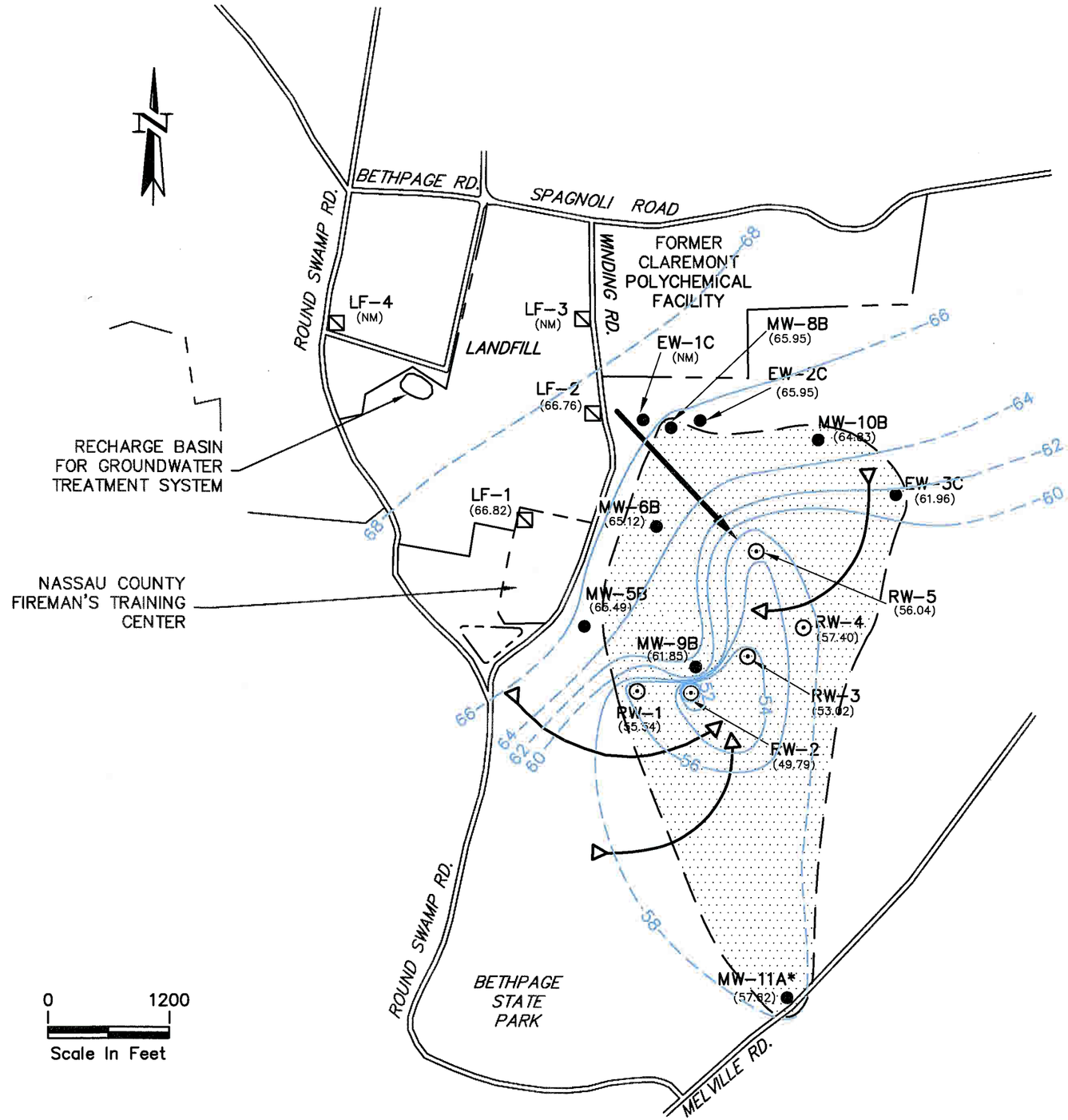
0 1200

Scale In Feet

WATER TABLE FLOW MAP AUGUST 25, 2009

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

SN49725A
12022009



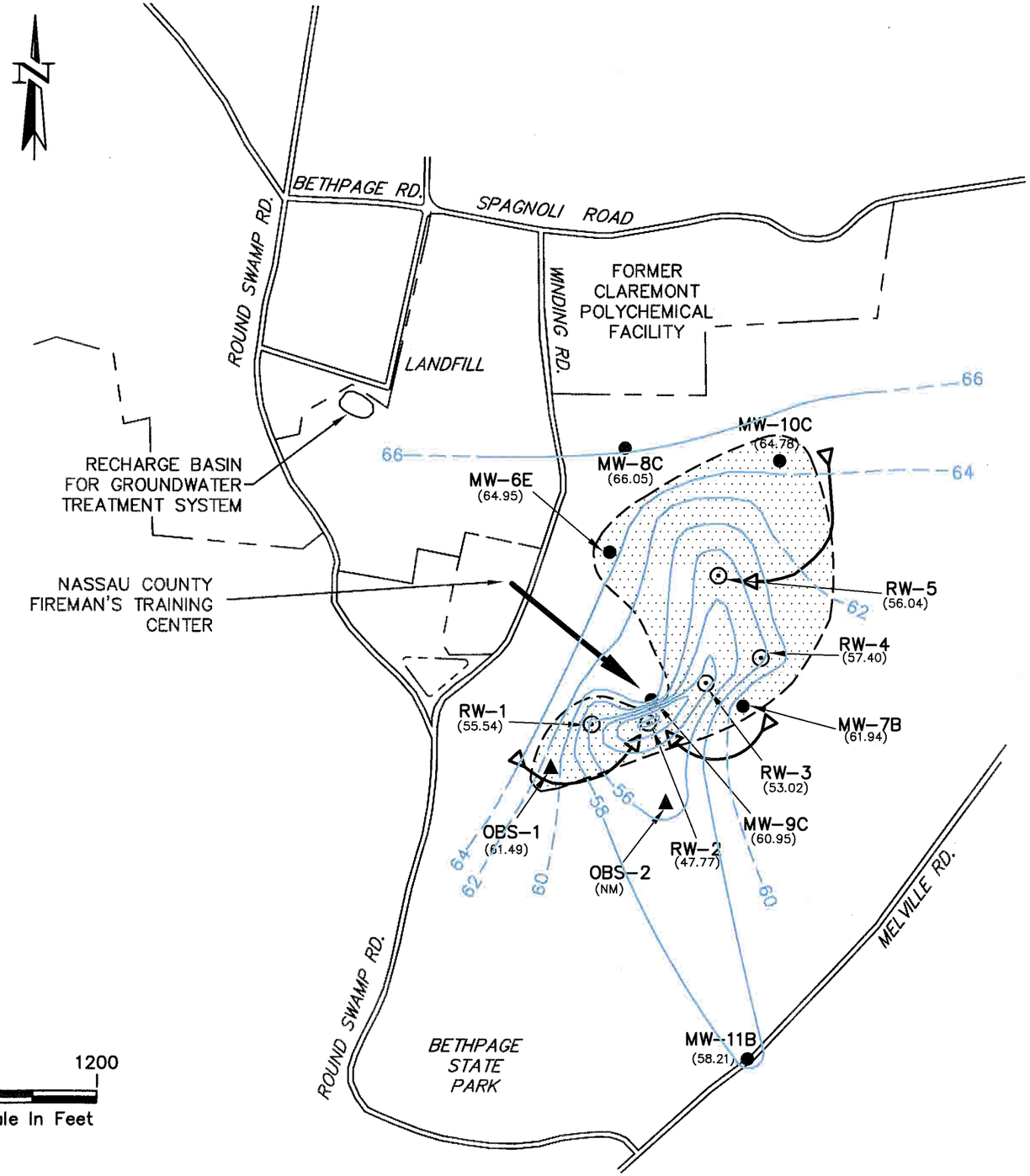
LEGEND

MW–5B (67.08) ●	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
RW–5 ⊙	*Recovery Well*
LF–2 ⧄	*Phase III Well*
▷——▷	*Limiting Flow Lines Depicting Estimated Effective Capture Zones*
——▶	*Groundwater Flow Direction*
56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
— — — —	*Property Boundary*
⬭	*Approximate Extent Of The VOC Plume In Shallow Potentiometric Zone Third Quarter 2009.*
(NM)	*Not Measured*
*	*Well MW–11A is screened just below the Shallow Potentiometric Zone.*

SHALLOW POTENTIOMETRIC FLOW MAP
AUGUST 25, 2009

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

SN49725B
12022009



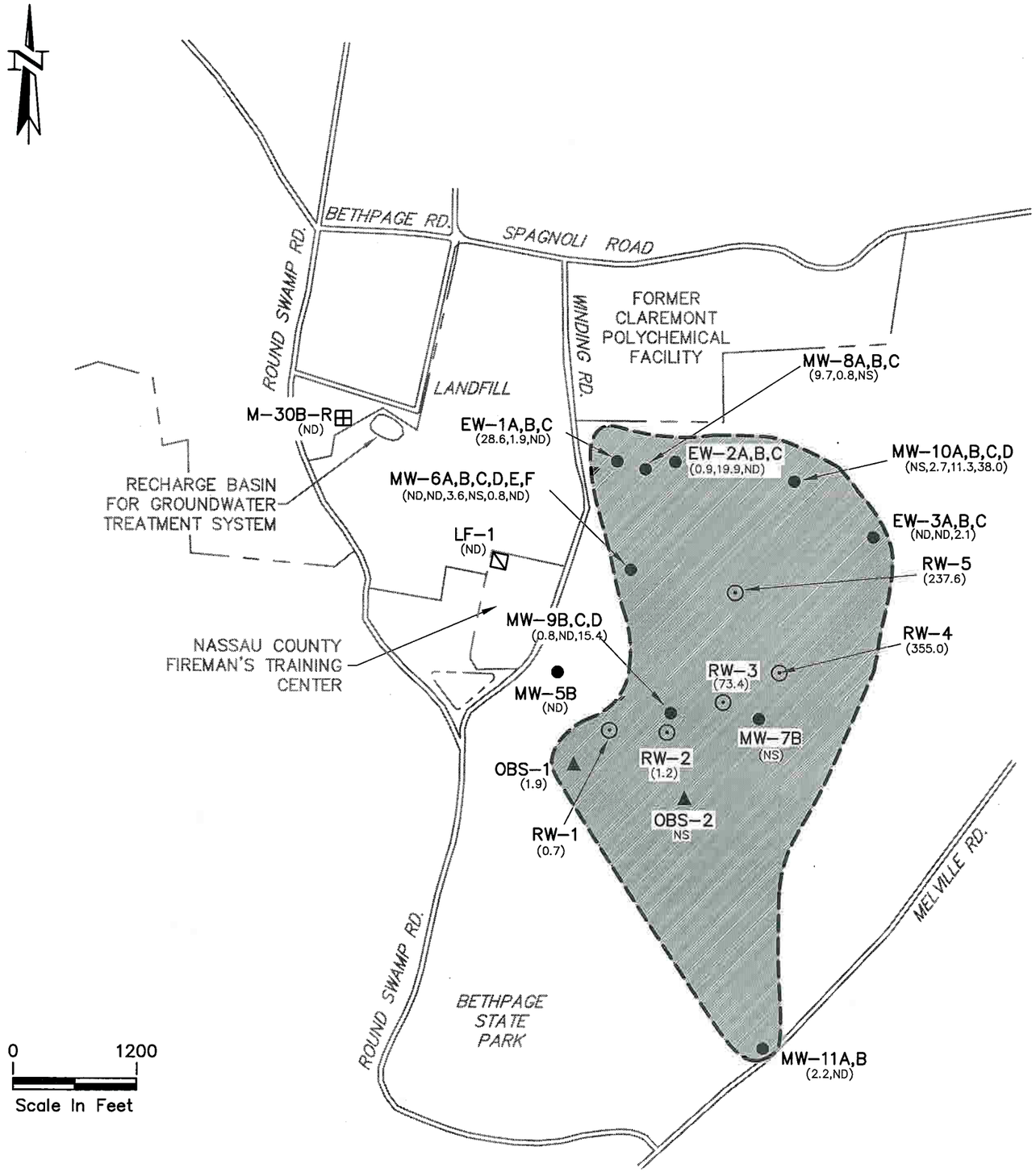
LEGEND

MW–8C (66.96) ●	*Monitoring Well Location And Designation Water Level Elevation In Feet Above Mean Sea Level*
RW–4 ⊙	*Recovery Well*
OBS–2 ▲	*Phase II Extension Well*
— – – —	*Property Boundary*
→	*Limiting Flow Lines Depicting Estimated Effective Capture Zone*
➡	*Groundwater Flow Direction*
56	*Line Of Equal Elevation Of The Water Table In Feet Above Mean Sea Level (Dashed Where Inferred)*
⬭	*Approximate Extent Of The VOC Plume In The Deep Potentiometric Zone – Third Quarter 2009*
(NM)	*Not Measured*

DEEP POTENTIOMETRIC FLOW MAP AUGUST 25, 2009

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

SN49725C
12022009



Sn49725D
12022009

LEGEND

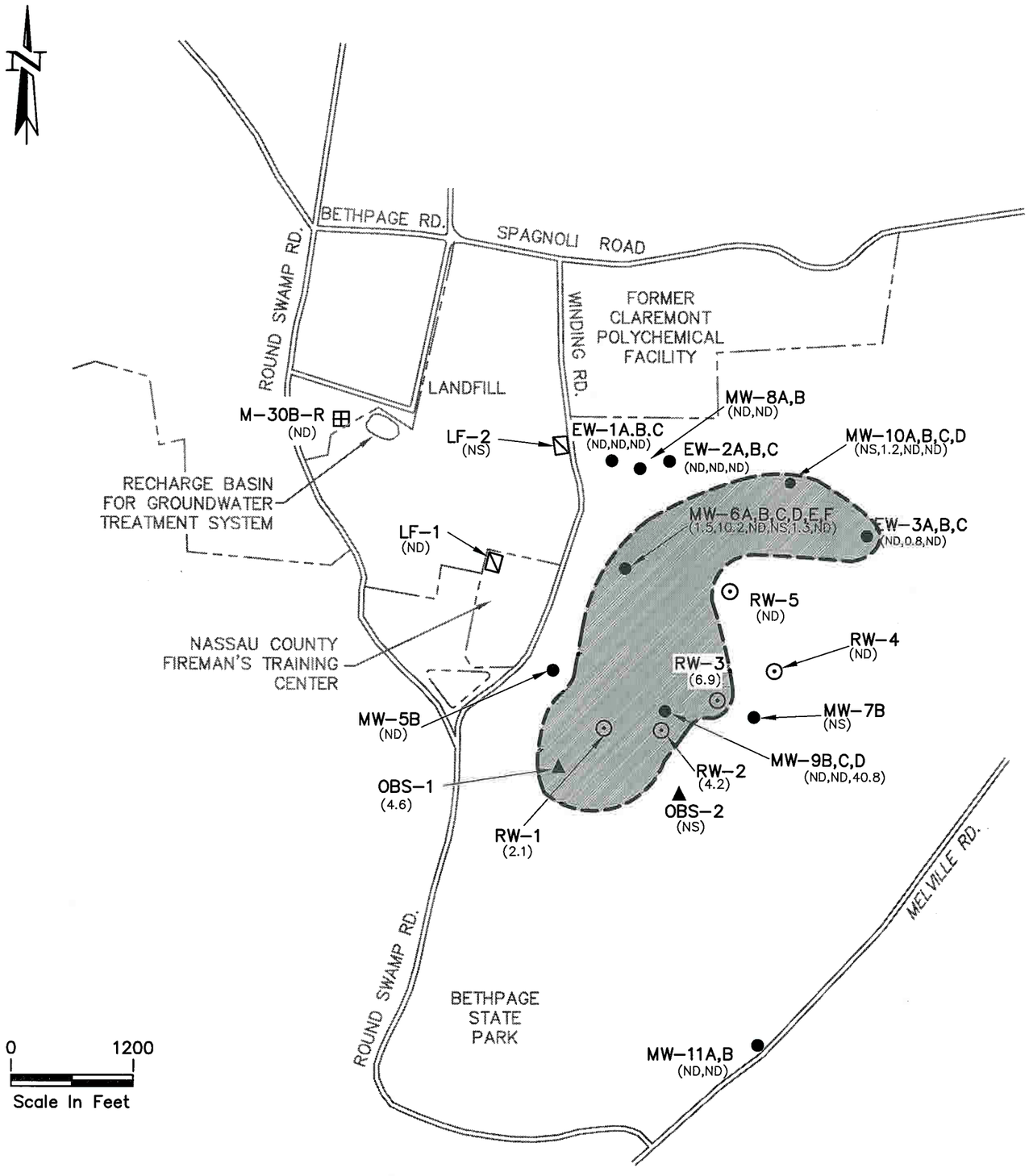
MW-5B (<0.5) ●	*Monitoring Well Location And Total Volatile Halogenated Organics Concentration, ppb*
RW-5 ⊙	*Recovery Well*
OBS-2 ▲	*Phase II Extension Well*
LF-1 ⧄	*Phase III Well*
M-30B-R ⊞	*Upgradient Well*
— — —	*Property Boundary*
⬭	*Approximate Extent Of The Volatile Halogenated Organic Plume*
(NS)	*Not Sampled*
(ND)	*Not Detected*

NOTE

Plume Contour Is Based On Total Volatile Halogenated Organics Concentrations In The Monitoring And Recovery Wells. Estimated values not shown.

APPROXIMATE EXTENT AND DISTRIBUTION OF TOTAL VOLATILE HALOGENATED ORGANICS THIRD QUARTER 2009

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY



SN49725E
12022009

LEGEND

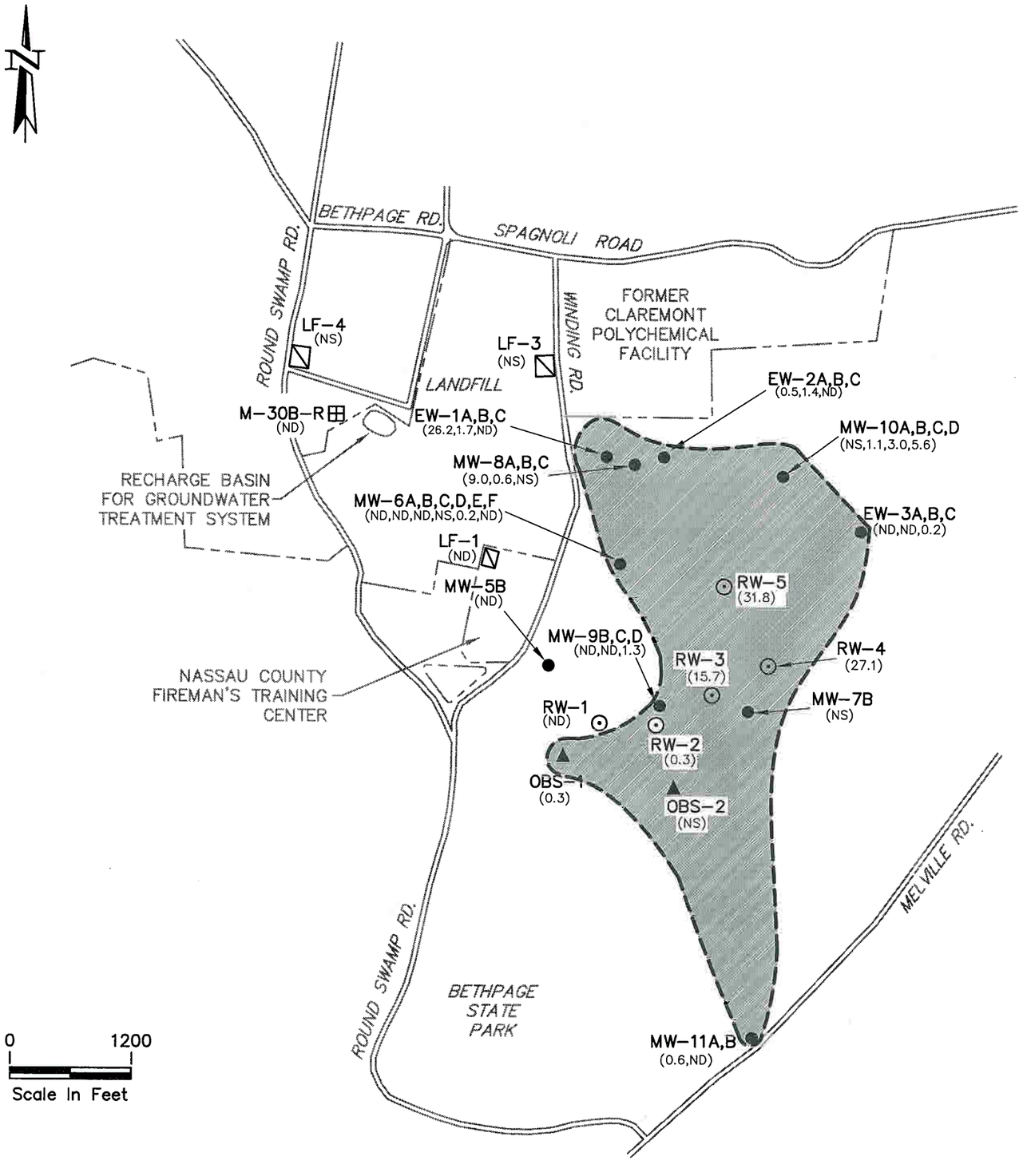
MW-5B (0.4) ●	*Monitoring Well Location And Total Aromatic Hydrocarbon Concentration, ppb*
RW-4 ⊙	*Recovery Well*
OBS-1 ▲	*Phase II Extension Well*
LF-1 ⊠	*Phase III Well*
M-30B-R ⊞	*Upgradient Well*
———	*Property Boundary*
	Approximate Extent Of The Aromatic Hydrocarbon Plume
(NS)	*Not Sampled*
(ND)	*Not Detected*

NOTE

Plume Contour Is Based On Total Aromatic Hydrocarbon Concentrations In The Monitoring And Recovery Wells. Estimated Values Not Shown.

APPROXIMATE EXTENT AND DISTRIBUTION OF TOTAL AROMATIC HYDROCARBONS THIRD QUARTER 2009

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY



SN49725F
12022009

LEGEND

MW-5B (<0.5) ●	*Monitoring Well Location And Tetrachloroethene Concentration, ppb*
RW-4 ⊙	*Recovery Well*
OBS-1 ▲	*Phase II Extension Well*
LF-3 ⊠	*Phase III Well*
M-30B-R ⊞	*Upgradient Well*
———	*Property Boundary*
	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. Estimated Values Not Shown.

APPROXIMATE EXTENT AND DISTRIBUTION OF TETRACHLOROETHENE THIRD QUARTER 2009

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY

APPENDIX A

LABORATORY DATA REPORTS

TOWN OF OYSTER BAY

Department of Public Works
Groundwater Treatment Facility
ORGANICS ANALYSIS REPORT

Well LF-1 (August 28, 2009)

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

Well M-30B-R (August 28, 2009)

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

Well MW-11A (August 28, 2009)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	2.2
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***	<0.4
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.8
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	0.6
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.7
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	<0.1
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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Well MW-11B (August 26, 2009)

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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Well MW-5B (August 26, 2009)

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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Well MW-6A (August 27, 2009)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	1.5
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***	0.7
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	<0.2
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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Well MW-6B (August 27, 2009)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	10.2
Benzene	1***	0.6
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	2.9
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	3.8
Dichlorobenzene, o,m&p	9***	5.1
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<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	1.0
n-Butylbenzene	5	0.5
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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Well MW-6C (August 28, 2009)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	ND
Benzene	1***	<0.1
Bromodichloromethane	50	
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	<0.1
Chlorodibromomethane	50	<0.6
Chloroethane	5	0.3
Chloroform	7***	0.3
Dichlorobenzene, o&p	6***	<0.3
Dichlorobenzene, o,m&p	9***	<0.4
1,1 Dichloroethane	5	0.5
1,2 Dichloroethane	0.6***	0.6
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	0.5
trans-1,2 Dichloroethene	5	0.4
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	0.6
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	<0.1
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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Well MW-6E (August 27, 2009)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	2.1
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***	0.9
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	<0.2
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	0.6
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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Well MW-6F (August 27, 2009)

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

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Well MW-8A (August 26, 2009)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	9.7
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***	<0.4
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***	**9.0**
Toluene	5	<0.1
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	0.7
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	<0.1
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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Well MW-8B (August 26, 2009)

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

Department of Public Works
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Well MW-9B (August 26, 2009)

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***	<0.2
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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Well MW-9C (August 26, 2009)

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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Well MW-9D (August 26, 2009)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	**100**	56.2
Benzene	**1*** **	**2.5**
Bromodichloromethane	**50**	<0.3
Bromoform	**50**	<0.2
Carbon Tetrachloride	**5**	<0.1
Chlorobenzene	**5**	2.3
Chlorodibromomethane	**50**	<0.6
Chloroethane	**5**	2.0
Chloroform	**7*** **	0.5
Dichlorobenzene, o&p	**6*** **	**15.4**
Dichlorobenzene, o,m&p	**9*** **	**15.4**
1,1 Dichloroethane	**5**	3.1
1,2 Dichloroethane	**0.6*** **	0.5
1,1 Dichloroethene	**5*** **	0.3
cis-1,2 Dichloroethene	**5**	2.9
trans-1,2 Dichloroethene	**5**	0.3
1,2 Dichloropropane	**1*** **	<0.1
Ethylbenzene	**5**	0.7
Methylene Chloride	**5**	0.7
Tetrachloroethene	**5*** **	1.3
Toluene	**5**	0.6
1,1,1 Trichloroethane	**5**	0.2
Trichloroethylene	**5**	1.0
Vinyl Chloride	**2**	1.1
Xylene, o	**5**	**14.7**
Xylene, m&p	**10*** **	0.5
Xylene, o,m&p	**15*** **	**15.2**
Dichlorodifluoromethane	**5**	1.5
Isopropylbenzene	**5**	2.3
n-Butylbenzene	**5**	0.9
tert-Butylbenzene	**5**	0.9

***** 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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Well OBS-1 (August 28, 2009)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	6.5
Benzene	1***	0.3
Bromodichloromethane	50	<0.3
Bromoform	50	<0.2
Carbon Tetrachloride	5	<0.1
Chlorobenzene	5	1.0
Chlorodibromomethane	50	<0.6
Chloroethane	5	<0.2
Chloroform	7***	<0.1
Dichlorobenzene, o&p	6***	2.8
Dichlorobenzene, o,m&p	9***	3.0
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	1.1
trans-1,2 Dichloroethene	5	<0.3
1,2 Dichloropropane	1***	<0.1
Ethylbenzene	5	<0.1
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	0.3
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	<0.1
Isopropylbenzene	5	<0.1
n-Butylbenzene	5	<0.1
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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Duplicate (August 26, 2009)

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***	<0.4
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***	0.5
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	0.2
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 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 #1 (August 26, 2009)

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 #2 (August 28, 2009)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	4.9
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***	1.1
Dichlorobenzene, o,m&p	9***	1.1
1,1 Dichloroethane	5	<0.2
1,2 Dichloroethane	0.6***	<0.3
1,1 Dichloroethene	5***	<0.3
cis-1,2 Dichloroethene	5	<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	0.8
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	2.7
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	2.7
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 (August 26, 2009)

Chemical Constituent	Concentration	
	Allowed * (ug/L)	Measured ** (ug/L)
Total VOCs	100	5.9
Benzene	1***	0.1
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***	0.2
Dichlorobenzene, o&p	6***	1.5
Dichlorobenzene, o,m&p	9***	3.8
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	0.2
Methylene Chloride	5	<0.2
Tetrachloroethene	5***	<0.2
Toluene	5	0.3
1,1,1 Trichloroethane	5	<0.1
Trichloroethylene	5	<0.2
Vinyl Chloride	2	<0.2
Xylene, o	5	8.3
Xylene, m&p	10***	<0.2
Xylene, o,m&p	15***	<1.8
Dichlorodifluoromethane	5	<0.1
Isopropylbenzene	5	0.1
n-Butylbenzene	5	0.3
tert-Butylbenzene	5	0.2

* 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 (August 28, 2009)

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.

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-001A

Client Sample ID. DUPLICATE

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/26/2009 8:00:00 AM
Received : 8/26/2009 2:50:00 PM
Collected By : G&F

Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/01/2009 7:01 PM
Barium	< 0.20		1	mg/L	E200.7	09/01/2009 7:01 PM
Calcium	12.5		1	mg/L	E200.7	09/01/2009 7:01 PM
Chromium	< 0.01		1	mg/L	E200.7	09/01/2009 7:01 PM
Copper	< 0.02		1	mg/L	E200.7	09/01/2009 7:01 PM
Iron	< 0.02		1	mg/L	E200.7	09/01/2009 7:01 PM
Lead	6.37		1	ug/L	E200.7	09/01/2009 7:01 PM
Magnesium	3.77		1	mg/L	E200.7	09/01/2009 7:01 PM
Manganese	0.55		1	mg/L	E200.7	09/01/2009 7:01 PM
Nickel	< 0.04		1	mg/L	E200.7	09/01/2009 7:01 PM
Potassium	10.4		1	mg/L	E200.7	09/01/2009 7:01 PM
Sodium	28.8		1	mg/L	E200.7	09/01/2009 7:01 PM
Zinc	0.04		1	mg/L	E200.7	09/01/2009 7:01 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:20 PM
Alkalinity, Total (As CaCO3)	2.90		1	mg/L	SM2320B	08/28/2009 12:35 PM
Chloride	77.1		5	mg/L	E300.0	09/04/2009 9:18 PM
Sulfate	21.1		1	mg/L	E300.0	09/04/2009 9:05 PM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/27/2009 5:12 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:30 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:02 AM
Hardness (As CaCO3)	49.0		1	mg/L	SM2340C	09/08/2009 3:36 PM
Bicarbonate	2.9		1	mg/L	M4500-CO2D	09/04/2009 11:30 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	09/14/2009 3:01 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/27/2009 7:05 AM
Nitrate as N	2.19		5	mg/L	E353.2	09/09/2009 12:16 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/08/2009 10:49 AM
Total Dissolved Solids	224		1	mg/L	SM2540C	08/27/2009 4:39 PM
Nitrogen, Kjeldahl, Total	2.09		10	mg/L	E351.2	09/10/2009 2:13 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-001B

Client Sample ID. DUPLICATE

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/26/2009 8:00:00 AM
Received : 8/26/2009 2:50:00 PM
Collected By : G&F

DISSOLVED

Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/02/2009 10:27 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 10:27 PM
Calcium	13.7		1	mg/L	E200.7	09/02/2009 10:27 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 10:27 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 10:27 PM
Iron	0.04		1	mg/L	E200.7	09/02/2009 10:27 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 10:27 PM
Magnesium	4.04		1	mg/L	E200.7	09/02/2009 10:27 PM
Manganese	0.56		1	mg/L	E200.7	09/02/2009 10:27 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 10:27 PM
Potassium	11.6		1	mg/L	E200.7	09/02/2009 10:27 PM
Sodium	32.1		1	mg/L	E200.7	09/02/2009 10:27 PM
Zinc	0.05		1	mg/L	E200.7	09/02/2009 10:27 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 11:12 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:14 AM

Qualifiers:
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D.F. = Dilution Factor
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# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-002A

Client Sample ID. FIELD BLANK

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/26/2009 12:00:00 PM
Received : 8/26/2009 2:50:00 PM
Collected By : G&F

Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/01/2009 7:06 PM
Barium	< 0.20		1	mg/L	E200.7	09/01/2009 7:06 PM
Calcium	< 0.20		1	mg/L	E200.7	09/01/2009 7:06 PM
Chromium	< 0.01		1	mg/L	E200.7	09/01/2009 7:06 PM
Copper	< 0.02		1	mg/L	E200.7	09/01/2009 7:06 PM
Iron	< 0.02		1	mg/L	E200.7	09/01/2009 7:06 PM
Lead	< 5.00		1	ug/L	E200.7	09/01/2009 7:06 PM
Magnesium	< 0.20		1	mg/L	E200.7	09/01/2009 7:06 PM
Manganese	< 0.02		1	mg/L	E200.7	09/01/2009 7:06 PM
Nickel	< 0.04		1	mg/L	E200.7	09/01/2009 7:06 PM
Potassium	0.23		1	mg/L	E200.7	09/01/2009 7:06 PM
Sodium	< 0.20		1	mg/L	E200.7	09/01/2009 7:06 PM
Zinc	< 0.02		1	mg/L	E200.7	09/01/2009 7:06 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:28 PM
Alkalinity, Total (As CaCO3)	< 1.00		1	mg/L	SM2320B	08/28/2009 12:39 PM
Chloride	< 2.00		1	mg/L	E300.0	09/04/2009 9:32 PM
Sulfate	< 5.00		1	mg/L	E300.0	09/04/2009 9:32 PM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/27/2009 5:13 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:31 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:05 AM
Hardness (As CaCO3)	< 5.00		1	mg/L	SM2340C	09/08/2009 3:39 PM
Bicarbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:31 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	09/14/2009 3:02 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/27/2009 7:09 AM
Nitrate as N	< 0.10		1	mg/L	E353.2	09/09/2009 12:17 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/08/2009 10:50 AM
Total Dissolved Solids	< 10		1	mg/L	SM2540C	08/27/2009 4:42 PM
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	E351.2	09/10/2009 2:14 PM

Qualifiers:
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Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-002B

Client Sample ID. FIELD BLANK

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/26/2009 12:00:00 PM
Received : 8/26/2009 2:50:00 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	09/02/2009 10:50 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 10:50 PM
Calcium	< 0.20		1	mg/L	E200.7	09/02/2009 10:50 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 10:50 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 10:50 PM
Iron	< 0.02		1	mg/L	E200.7	09/02/2009 10:50 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 10:50 PM
Magnesium	< 0.20		1	mg/L	E200.7	09/02/2009 10:50 PM
Manganese	< 0.02		1	mg/L	E200.7	09/02/2009 10:50 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 10:50 PM
Potassium	< 0.20		1	mg/L	E200.7	09/02/2009 10:50 PM
Sodium	< 0.20		1	mg/L	E200.7	09/02/2009 10:50 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 10:50 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 11:24 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:15 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-003A

Client Sample ID. MW - 5B

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/26/2009 10:07:00 AM
Received : 8/26/2009 2:50:00 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	09/01/2009 7:12 PM
Barium	< 0.20		1	mg/L	E200.7	09/01/2009 7:12 PM
Calcium	16.0		1	mg/L	E200.7	09/01/2009 7:12 PM
Chromium	< 0.01		1	mg/L	E200.7	09/01/2009 7:12 PM
Copper	< 0.02		1	mg/L	E200.7	09/01/2009 7:12 PM
Iron	< 0.02		1	mg/L	E200.7	09/01/2009 7:12 PM
Lead	< 5.00		1	ug/L	E200.7	09/01/2009 7:12 PM
Magnesium	7.81		1	mg/L	E200.7	09/01/2009 7:12 PM
Manganese	4.81		1	mg/L	E200.7	09/01/2009 7:12 PM
Nickel	< 0.04		1	mg/L	E200.7	09/01/2009 7:12 PM
Potassium	9.02		1	mg/L	E200.7	09/01/2009 7:12 PM
Sodium	49.5		1	mg/L	E200.7	09/01/2009 7:12 PM
Zinc	< 0.02		1	mg/L	E200.7	09/01/2009 7:12 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:30 PM
Alkalinity, Total (As CaCO3)	51.5		2	mg/L	SM2320B	08/28/2009 12:44 PM
Chloride	82.7		5	mg/L	E300.0	09/04/2009 9:59 PM
Sulfate	22.5		1	mg/L	E300.0	09/04/2009 9:45 PM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/27/2009 5:14 PM
Carbonate	< 2.0		2	mg/L	M4500-CO2D	09/04/2009 11:47 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:06 AM
Hardness (As CaCO3)	80.0		2	mg/L	SM2340C	09/08/2009 3:42 PM
Bicarbonate	51.5		2	mg/L	M4500-CO2D	09/04/2009 11:47 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	09/14/2009 3:03 PM
Nitrite as N	0.33		1	mg/L	E353.2	08/27/2009 7:10 AM
Nitrate as N	4.07		10	mg/L	E353.2	09/09/2009 12:18 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/08/2009 10:51 AM
Total Dissolved Solids	243		1	mg/L	SM2540C	08/27/2009 4:45 PM
Nitrogen, Kjeldahl, Total	0.24		1	mg/L	E351.2	09/10/2009 2:15 PM

Qualifiers:
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D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-003B

Client Sample ID. MW - 5B

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/26/2009 10:07:00 AM
Received : 8/26/2009 2:50:00 PM
Collected By : G&F

DISSOLVED

Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/02/2009 10:56 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 10:56 PM
Calcium	15.8		1	mg/L	E200.7	09/02/2009 10:56 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 10:56 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 10:56 PM
Iron	< 0.02		1	mg/L	E200.7	09/02/2009 10:56 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 10:56 PM
Magnesium	7.65		1	mg/L	E200.7	09/02/2009 10:56 PM
Manganese	4.67		1	mg/L	E200.7	09/02/2009 10:56 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 10:56 PM
Potassium	9.40		1	mg/L	E200.7	09/02/2009 10:56 PM
Sodium	48.5		1	mg/L	E200.7	09/02/2009 10:56 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 10:56 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 11:26 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:16 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-004A

Client Sample ID. MW - 8A

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/26/2009 9:15:00 AM
Received : 8/26/2009 2:50:00 PM
Collected By : G&F

Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	1.32		1	mg/L	E200.7	09/01/2009 7:35 PM
Barium	< 0.20		1	mg/L	E200.7	09/01/2009 7:35 PM
Calcium	3.00		1	mg/L	E200.7	09/01/2009 7:35 PM
Chromium	< 0.01		1	mg/L	E200.7	09/01/2009 7:35 PM
Copper	< 0.02		1	mg/L	E200.7	09/01/2009 7:35 PM
Iron	2.78		1	mg/L	E200.7	09/01/2009 7:35 PM
Lead	14.3		1	ug/L	E200.7	09/01/2009 7:35 PM
Magnesium	2.03		1	mg/L	E200.7	09/01/2009 7:35 PM
Manganese	0.03		1	mg/L	E200.7	09/01/2009 7:35 PM
Nickel	< 0.04		1	mg/L	E200.7	09/01/2009 7:35 PM
Potassium	3.34		1	mg/L	E200.7	09/01/2009 7:35 PM
Sodium	5.88		1	mg/L	E200.7	09/01/2009 7:35 PM
Zinc	< 0.02		1	mg/L	E200.7	09/01/2009 7:35 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:32 PM
Alkalinity, Total (As CaCO3)	1.85		1	mg/L	SM2320B	08/28/2009 12:52 PM
Chloride	15.5		1	mg/L	E300.0	09/04/2009 10:12 PM
Sulfate	< 5.00		1	mg/L	E300.0	09/04/2009 10:12 PM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/27/2009 5:15 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:32 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:07 AM
Hardness (As CaCO3)	19.0		1	mg/L	SM2340C	09/08/2009 3:45 PM
Bicarbonate	1.8		1	mg/L	M4500-CO2D	09/04/2009 11:32 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	09/14/2009 3:04 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/27/2009 7:11 AM
Nitrate as N	2.31		5	mg/L	E353.2	09/09/2009 12:19 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/08/2009 10:52 AM
Total Dissolved Solids	62		1	mg/L	SM2540C	08/27/2009 4:48 PM
Nitrogen, Kjeldahl, Total	0.47		1	mg/L	E351.2	09/10/2009 2:15 PM

Qualifiers:
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D.F. = Dilution Factor
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# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-004B

Client Sample ID. MW - 8A

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/26/2009 9:15:00 AM
Received : 8/26/2009 2:50:00 PM
Collected By : G&F

DISSOLVED

Copy : Mike Wagner

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/02/2009 11:02 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 11:02 PM
Calcium	3.17		1	mg/L	E200.7	09/02/2009 11:02 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 11:02 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 11:02 PM
Iron	0.04		1	mg/L	E200.7	09/02/2009 11:02 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 11:02 PM
Magnesium	2.09		1	mg/L	E200.7	09/02/2009 11:02 PM
Manganese	0.03		1	mg/L	E200.7	09/02/2009 11:02 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 11:02 PM
Potassium	3.94		1	mg/L	E200.7	09/02/2009 11:02 PM
Sodium	6.66		1	mg/L	E200.7	09/02/2009 11:02 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 11:02 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 11:27 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:17 AM

Qualifiers:
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D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-005A

Client Sample ID. MW - 8B

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/26/2009 9:10:00 AM
Received : 8/26/2009 2:50:00 PM
Collected By : G&F

Copy : Mike Wagner

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/01/2009 7:41 PM
Barium	< 0.20		1	mg/L	E200.7	09/01/2009 7:41 PM
Calcium	13.3		1	mg/L	E200.7	09/01/2009 7:41 PM
Chromium	< 0.01		1	mg/L	E200.7	09/01/2009 7:41 PM
Copper	< 0.02		1	mg/L	E200.7	09/01/2009 7:41 PM
Iron	0.03		1	mg/L	E200.7	09/01/2009 7:41 PM
Lead	8.12		1	ug/L	E200.7	09/01/2009 7:41 PM
Magnesium	3.97		1	mg/L	E200.7	09/01/2009 7:41 PM
Manganese	0.56		1	mg/L	E200.7	09/01/2009 7:41 PM
Nickel	< 0.04		1	mg/L	E200.7	09/01/2009 7:41 PM
Potassium	10.8		1	mg/L	E200.7	09/01/2009 7:41 PM
Sodium	29.6		1	mg/L	E200.7	09/01/2009 7:41 PM
Zinc	0.04		1	mg/L	E200.7	09/01/2009 7:41 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:34 PM
Alkalinity, Total (As CaCO3)	3.80		1	mg/L	SM2320B	08/28/2009 12:57 PM
Chloride	74.0		10	mg/L	E300.0	09/04/2009 11:06 PM
Sulfate	21.4		1	mg/L	E300.0	09/04/2009 10:53 PM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/27/2009 5:16 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:33 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:08 AM
Hardness (As CaCO3)	51.0		1	mg/L	SM2340C	09/08/2009 3:48 PM
Bicarbonate	3.8		1	mg/L	M4500-CO2D	09/04/2009 11:33 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	09/14/2009 3:06 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/27/2009 7:12 AM
Nitrate as N	2.18		5	mg/L	E353.2	09/09/2009 12:21 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/08/2009 10:53 AM
Total Dissolved Solids	208		1	mg/L	SM2540C	08/27/2009 4:51 PM
Nitrogen, Kjeldahl, Total	0.74		1	mg/L	E351.2	09/10/2009 2:16 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-005B

Client Sample ID. MW - 8B

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/26/2009 9:10:00 AM
Received : 8/26/2009 2:50:00 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	09/02/2009 11:08 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 11:08 PM
Calcium	13.5		1	mg/L	E200.7	09/02/2009 11:08 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 11:08 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 11:08 PM
Iron	0.03		1	mg/L	E200.7	09/02/2009 11:08 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 11:08 PM
Magnesium	4.09		1	mg/L	E200.7	09/02/2009 11:08 PM
Manganese	0.57		1	mg/L	E200.7	09/02/2009 11:08 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 11:08 PM
Potassium	11.9		1	mg/L	E200.7	09/02/2009 11:08 PM
Sodium	32.1		1	mg/L	E200.7	09/02/2009 11:08 PM
Zinc	0.05		1	mg/L	E200.7	09/02/2009 11:08 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 11:29 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:18 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-006A

Client Sample ID. MW - 9B

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/26/2009 12:33:00 PM
Received : 8/26/2009 2:50:00 PM
Collected By : G&F

Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/01/2009 7:47 PM
Barium	< 0.20		1	mg/L	E200.7	09/01/2009 7:47 PM
Calcium	11.4		1	mg/L	E200.7	09/01/2009 7:47 PM
Chromium	< 0.01		1	mg/L	E200.7	09/01/2009 7:47 PM
Copper	< 0.02		1	mg/L	E200.7	09/01/2009 7:47 PM
Iron	< 0.02		1	mg/L	E200.7	09/01/2009 7:47 PM
Lead	< 5.00		1	ug/L	E200.7	09/01/2009 7:47 PM
Magnesium	4.41		1	mg/L	E200.7	09/01/2009 7:47 PM
Manganese	0.12		1	mg/L	E200.7	09/01/2009 7:47 PM
Nickel	< 0.04		1	mg/L	E200.7	09/01/2009 7:47 PM
Potassium	5.28		1	mg/L	E200.7	09/01/2009 7:47 PM
Sodium	26.6		1	mg/L	E200.7	09/01/2009 7:47 PM
Zinc	< 0.02		1	mg/L	E200.7	09/01/2009 7:47 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:36 PM
Alkalinity, Total (As CaCO3)	9.60		1	mg/L	SM2320B	08/28/2009 1:01 PM
Chloride	48.6		5	mg/L	E300.0	09/04/2009 11:33 PM
Sulfate	21.1		1	mg/L	E300.0	09/04/2009 11:20 PM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/27/2009 5:19 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:34 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:09 AM
Hardness (As CaCO3)	47.0		1	mg/L	SM2340C	09/08/2009 3:51 PM
Bicarbonate	9.6		1	mg/L	M4500-CO2D	09/04/2009 11:34 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	09/14/2009 3:07 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/27/2009 7:14 AM
Nitrate as N	4.50		10	mg/L	E353.2	09/09/2009 12:22 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/08/2009 10:54 AM
Total Dissolved Solids	169		1	mg/L	SM2540C	08/27/2009 4:54 PM
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	E351.2	09/10/2009 2:17 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-006B

Client Sample ID. MW - 9B

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/26/2009 12:33:00 PM
Received : 8/26/2009 2:50:00 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	09/02/2009 11:31 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 11:31 PM
Calcium	12.7		1	mg/L	E200.7	09/02/2009 11:31 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 11:31 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 11:31 PM
Iron	< 0.02		1	mg/L	E200.7	09/02/2009 11:31 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 11:31 PM
Magnesium	4.87		1	mg/L	E200.7	09/02/2009 11:31 PM
Manganese	0.12		1	mg/L	E200.7	09/02/2009 11:31 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 11:31 PM
Potassium	5.99		1	mg/L	E200.7	09/02/2009 11:31 PM
Sodium	30.1		1	mg/L	E200.7	09/02/2009 11:31 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 11:31 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 11:31 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:19 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-007A

Client Sample ID. MW - 9C

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/26/2009 1:17:00 PM
Received : 8/26/2009 2:50:00 PM
Collected By : G&F

Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/01/2009 7:53 PM
Barium	< 0.20		1	mg/L	E200.7	09/01/2009 7:53 PM
Calcium	3.11		1	mg/L	E200.7	09/01/2009 7:53 PM
Chromium	< 0.01		1	mg/L	E200.7	09/01/2009 7:53 PM
Copper	< 0.02		1	mg/L	E200.7	09/01/2009 7:53 PM
Iron	0.14		1	mg/L	E200.7	09/01/2009 7:53 PM
Lead	< 5.00		1	ug/L	E200.7	09/01/2009 7:53 PM
Magnesium	5.12		1	mg/L	E200.7	09/01/2009 7:53 PM
Manganese	0.07		1	mg/L	E200.7	09/01/2009 7:53 PM
Nickel	< 0.04		1	mg/L	E200.7	09/01/2009 7:53 PM
Potassium	16.7		1	mg/L	E200.7	09/01/2009 7:53 PM
Sodium	49.0		1	mg/L	E200.7	09/01/2009 7:53 PM
Zinc	< 0.02		1	mg/L	E200.7	09/01/2009 7:53 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:38 PM
Alkalinity, Total (As CaCO3)	48.1		2	mg/L	SM2320B	08/28/2009 1:08 PM
Chloride	88.4		5	mg/L	E300.0	09/05/2009 12:00 AM
Sulfate	16.3		1	mg/L	E300.0	09/04/2009 11:47 PM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/27/2009 5:20 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:35 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:10 AM
Hardness (As CaCO3)	28.0		1	mg/L	SM2340C	09/08/2009 3:54 PM
Bicarbonate	48.1		1	mg/L	M4500-CO2D	09/04/2009 11:35 AM
Nitrogen, Ammonia (As N)	5.31		10	mg/L	SM4500-NH3 H	09/14/2009 3:08 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/27/2009 7:17 AM
Nitrate as N	0.22		1	mg/L	E353.2	09/09/2009 12:23 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/08/2009 10:55 AM
Total Dissolved Solids	184		1	mg/L	SM2540C	08/27/2009 4:57 PM
Nitrogen, Kjeldahl, Total	9.90		5	mg/L	E351.2	09/10/2009 2:20 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-007B

Client Sample ID. MW - 9C

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/26/2009 1:17:00 PM
Received : 8/26/2009 2:50:00 PM
Collected By : G&F

DISSOLVED

Copy : Mike Wagner

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/02/2009 11:37 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 11:37 PM
Calcium	3.32		1	mg/L	E200.7	09/02/2009 11:37 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 11:37 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 11:37 PM
Iron	0.09		1	mg/L	E200.7	09/02/2009 11:37 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 11:37 PM
Magnesium	5.37		1	mg/L	E200.7	09/02/2009 11:37 PM
Manganese	0.08		1	mg/L	E200.7	09/02/2009 11:37 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 11:37 PM
Potassium	18.6		1	mg/L	E200.7	09/02/2009 11:37 PM
Sodium	52.8		1	mg/L	E200.7	09/02/2009 11:37 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 11:37 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 11:33 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:20 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-008A

Client Sample ID. MW - 9D

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/26/2009 11:52:00 AM
Received : 8/26/2009 2:50:00 PM
Collected By : G&F

Copy : Mike Wagner

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	0.56		1	mg/L	E200.7	09/01/2009 7:58 PM
Barium	0.27		1	mg/L	E200.7	09/01/2009 7:58 PM
Calcium	18.5		1	mg/L	E200.7	09/01/2009 7:58 PM
Chromium	< 0.01		1	mg/L	E200.7	09/01/2009 7:58 PM
Copper	< 0.02		1	mg/L	E200.7	09/01/2009 7:58 PM
Iron	1.04		1	mg/L	E200.7	09/01/2009 7:58 PM
Lead	11.3		1	ug/L	E200.7	09/01/2009 7:58 PM
Magnesium	13.7		1	mg/L	E200.7	09/01/2009 7:58 PM
Manganese	0.18		1	mg/L	E200.7	09/01/2009 7:58 PM
Nickel	< 0.04		1	mg/L	E200.7	09/01/2009 7:58 PM
Potassium	4.50		1	mg/L	E200.7	09/01/2009 7:58 PM
Sodium	101		1	mg/L	E200.7	09/01/2009 7:58 PM
Zinc	0.07		1	mg/L	E200.7	09/01/2009 7:58 PM
Mercury	1.9		1	ug/L	E245.1	09/04/2009 12:39 PM
Alkalinity, Total (As CaCO3)	< 1.00		1	mg/L	SM2320B	08/28/2009 1:32 PM
Fluoride	< 0.10		1	mg/L	E300.0	09/05/2009 12:14 AM
Chloride	275		10	mg/L	E300.0	09/08/2009 8:36 PM
Sulfate	< 5.00		1	mg/L	E300.0	09/05/2009 12:14 AM
Bromide	2.19		1	mg/L	E300.0	09/05/2009 12:14 AM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/27/2009 5:21 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:36 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:11 AM
Hardness (As CaCO3)	106		2	mg/L	SM2340C	09/08/2009 3:57 PM
Bicarbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:36 AM
Nitrogen, Ammonia (As N)	1.40		1	mg/L	SM4500-NH3 H	09/14/2009 3:09 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/27/2009 7:18 AM
Nitrate as N	< 0.10		1	mg/L	E353.2	09/09/2009 12:24 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/08/2009 10:56 AM
Total Dissolved Solids	569		1	mg/L	SM2540C	08/27/2009 5:00 PM
Nitrogen, Kjeldahl, Total	3.40		1	mg/L	E351.2	09/10/2009 2:21 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909493-008B

Client Sample ID. MW - 9D

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/26/2009 11:52:00 AM
Received : 8/26/2009 2:50:00 PM
Collected By : G&F

DISSOLVED

Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	0.66		1	mg/L	E200.7	09/02/2009 11:43 PM
Barium	0.27		1	mg/L	E200.7	09/02/2009 11:43 PM
Calcium	18.9		1	mg/L	E200.7	09/02/2009 11:43 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 11:43 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 11:43 PM
Iron	1.06		1	mg/L	E200.7	09/02/2009 11:43 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 11:43 PM
Magnesium	13.8		1	mg/L	E200.7	09/02/2009 11:43 PM
Manganese	0.18		1	mg/L	E200.7	09/02/2009 11:43 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 11:43 PM
Potassium	4.81		1	mg/L	E200.7	09/02/2009 11:43 PM
Sodium	104		1	mg/L	E200.7	09/02/2009 11:43 PM
Zinc	0.08		1	mg/L	E200.7	09/02/2009 11:43 PM
Mercury	1.7		1	ug/L	E245.1	09/04/2009 11:34 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/27/2009 6:21 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909514-001A

Client Sample ID. MW - 6A

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/27/2009 10:23:00 AM
Received : 8/27/2009 12:30:00 PM
Collected By : G&F

Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	1.63		1	mg/L	E200.7	09/02/2009 7:56 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 7:56 PM
Calcium	0.70		1	mg/L	E200.7	09/02/2009 7:56 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 7:56 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 7:56 PM
Iron	4.52		1	mg/L	E200.7	09/02/2009 7:56 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 7:56 PM
Magnesium	0.96		1	mg/L	E200.7	09/02/2009 7:56 PM
Manganese	0.04		1	mg/L	E200.7	09/02/2009 7:56 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 7:56 PM
Potassium	1.43		1	mg/L	E200.7	09/02/2009 7:56 PM
Sodium	8.50		1	mg/L	E200.7	09/02/2009 7:56 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 7:56 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:41 PM
Alkalinity, Total (As CaCO3)	5.15		1	mg/L	SM2320B	08/28/2009 1:36 PM
Chloride	7.38		1	mg/L	E300.0	09/05/2009 12:54 AM
Sulfate	5.01		1	mg/L	E300.0	09/05/2009 12:54 AM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/31/2009 6:14 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:37 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 5:32 AM
Hardness (As CaCO3)	11.0		1	mg/L	SM2340C	09/08/2009 4:00 PM
Bicarbonate	5.1		1	mg/L	M4500-CO2D	09/04/2009 11:37 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	09/14/2009 3:10 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/28/2009 6:38 AM
Nitrate as N	0.51		1	mg/L	E353.2	09/09/2009 12:28 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/13/2009 10:16 AM
Total Dissolved Solids	66		2	mg/L	SM2540C	08/31/2009 3:09 PM
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	E351.2	09/10/2009 2:22 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909514-001B

Client Sample ID. MW - 6A

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/27/2009 10:23:00 AM
Received : 8/27/2009 12:30:00 PM
Collected By : G&F

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Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/02/2009 11:49 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 11:49 PM
Calcium	0.47		1	mg/L	E200.7	09/02/2009 11:49 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 11:49 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 11:49 PM
Iron	< 0.02		1	mg/L	E200.7	09/02/2009 11:49 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 11:49 PM
Magnesium	0.65		1	mg/L	E200.7	09/02/2009 11:49 PM
Manganese	< 0.02		1	mg/L	E200.7	09/02/2009 11:49 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 11:49 PM
Potassium	1.19		1	mg/L	E200.7	09/02/2009 11:49 PM
Sodium	8.22		1	mg/L	E200.7	09/02/2009 11:49 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 11:49 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 11:37 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 5:39 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909514-002A

Client Sample ID. MW - 6B

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/27/2009 10:42:00 AM
Received : 8/27/2009 12:30:00 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	09/02/2009 8:02 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 8:02 PM
Calcium	9.24		1	mg/L	E200.7	09/02/2009 8:02 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 8:02 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 8:02 PM
Iron	3.87		1	mg/L	E200.7	09/02/2009 8:02 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 8:02 PM
Magnesium	6.95		1	mg/L	E200.7	09/02/2009 8:02 PM
Manganese	0.03		1	mg/L	E200.7	09/02/2009 8:02 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 8:02 PM
Potassium	80.9		1	mg/L	E200.7	09/02/2009 8:02 PM
Sodium	226		1	mg/L	E200.7	09/02/2009 8:02 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 8:02 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:48 PM
Alkalinity, Total (As CaCO3)	551		20	mg/L	SM2320B	08/28/2009 1:41 PM
Chloride	229		5	mg/L	E300.0	09/05/2009 1:48 AM
Sulfate	11.3		1	mg/L	E300.0	09/05/2009 1:35 AM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/31/2009 6:15 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:38 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 5:33 AM
Hardness (As CaCO3)	54.0		2	mg/L	SM2340C	09/08/2009 4:03 PM
Bicarbonate	551		1	mg/L	M4500-CO2D	09/04/2009 11:38 AM
Nitrogen, Ammonia (As N)	63.0		50	mg/L	SM4500-NH3 H	09/14/2009 3:12 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/28/2009 6:40 AM
Nitrate as N	< 0.10		1	mg/L	E353.2	09/09/2009 12:31 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/13/2009 10:17 AM
Total Dissolved Solids	750		1	mg/L	SM2540C	08/31/2009 3:12 PM
Nitrogen, Kjeldahl, Total	96.5		100	mg/L	E351.2	09/10/2009 2:44 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909514-002B

Client Sample ID. MW - 6B

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/27/2009 10:42:00 AM
Received : 8/27/2009 12:30:00 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	09/02/2009 11:54 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 11:54 PM
Calcium	9.06		1	mg/L	E200.7	09/02/2009 11:54 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 11:54 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 11:54 PM
Iron	0.07		1	mg/L	E200.7	09/02/2009 11:54 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 11:54 PM
Magnesium	6.84		1	mg/L	E200.7	09/02/2009 11:54 PM
Manganese	0.03		1	mg/L	E200.7	09/02/2009 11:54 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 11:54 PM
Potassium	78.6		1	mg/L	E200.7	09/02/2009 11:54 PM
Sodium	218		1	mg/L	E200.7	09/02/2009 11:54 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 11:54 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 11:38 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 5:40 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909514-003A

Client Sample ID. MW - 6E

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/27/2009 10:11:00 AM
Received : 8/27/2009 12:30:00 PM
Collected By : G&F

Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/02/2009 8:08 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 8:08 PM
Calcium	22.5		1	mg/L	E200.7	09/02/2009 8:08 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 8:08 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 8:08 PM
Iron	1.84		1	mg/L	E200.7	09/02/2009 8:08 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 8:08 PM
Magnesium	9.07		1	mg/L	E200.7	09/02/2009 8:08 PM
Manganese	0.41		1	mg/L	E200.7	09/02/2009 8:08 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 8:08 PM
Potassium	19.6		1	mg/L	E200.7	09/02/2009 8:08 PM
Sodium	77.1		1	mg/L	E200.7	09/02/2009 8:08 PM
Zinc	0.05		1	mg/L	E200.7	09/02/2009 8:08 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:50 PM
Alkalinity, Total (As CaCO3)	50.8		2	mg/L	SM2320B	08/28/2009 1:49 PM
Chloride	165		10	mg/L	E300.0	09/05/2009 2:15 AM
Sulfate	30.1		1	mg/L	E300.0	09/05/2009 2:02 AM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/31/2009 6:16 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:39 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 5:34 AM
Hardness (As CaCO3)	95.0		5	mg/L	SM2340C	09/08/2009 4:06 PM
Bicarbonate	50.8		1	mg/L	M4500-CO2D	09/04/2009 11:39 AM
Nitrogen, Ammonia (As N)	6.51		10	mg/L	SM4500-NH3 H	09/14/2009 3:18 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/28/2009 6:41 AM
Nitrate as N	< 0.10		1	mg/L	E353.2	09/09/2009 12:33 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/13/2009 10:18 AM
Total Dissolved Solids	386		1	mg/L	SM2540C	08/31/2009 3:15 PM
Nitrogen, Kjeldahl, Total	11.3		10	mg/L	E351.2	09/10/2009 2:24 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909514-003B

Client Sample ID. MW - 6E

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/27/2009 10:11:00 AM
Received : 8/27/2009 12:30:00 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	09/03/2009 12:00 AM
Barium	< 0.20		1	mg/L	E200.7	09/03/2009 12:00 AM
Calcium	21.5		1	mg/L	E200.7	09/03/2009 12:00 AM
Chromium	< 0.01		1	mg/L	E200.7	09/03/2009 12:00 AM
Copper	< 0.02		1	mg/L	E200.7	09/03/2009 12:00 AM
Iron	1.66		1	mg/L	E200.7	09/03/2009 12:00 AM
Lead	< 5.00		1	ug/L	E200.7	09/03/2009 12:00 AM
Magnesium	8.70		1	mg/L	E200.7	09/03/2009 12:00 AM
Manganese	0.39		1	mg/L	E200.7	09/03/2009 12:00 AM
Nickel	< 0.04		1	mg/L	E200.7	09/03/2009 12:00 AM
Potassium	18.1		1	mg/L	E200.7	09/03/2009 12:00 AM
Sodium	71.8		1	mg/L	E200.7	09/03/2009 12:00 AM
Zinc	0.06		1	mg/L	E200.7	09/03/2009 12:00 AM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 11:40 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 5:41 AM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909514-004A

Client Sample ID. MW - 6F

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/27/2009 10:53:00 AM
Received : 8/27/2009 12:30:00 PM
Collected By : G&F

Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	0.26		1	mg/L	E200.7	09/02/2009 8:14 PM
Barium	0.22		1	mg/L	E200.7	09/02/2009 8:14 PM
Calcium	38.0		1	mg/L	E200.7	09/02/2009 8:14 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 8:14 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 8:14 PM
Iron	0.19		1	mg/L	E200.7	09/02/2009 8:14 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 8:14 PM
Magnesium	14.7		1	mg/L	E200.7	09/02/2009 8:14 PM
Manganese	0.10		1	mg/L	E200.7	09/02/2009 8:14 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 8:14 PM
Potassium	5.68		1	mg/L	E200.7	09/02/2009 8:14 PM
Sodium	73.2		1	mg/L	E200.7	09/02/2009 8:14 PM
Zinc	0.04		1	mg/L	E200.7	09/02/2009 8:14 PM
Mercury	0.32		1	ug/L	E245.1	09/04/2009 12:52 PM
Alkalinity, Total (As CaCO3)	< 1.00		1	mg/L	SM2320B	08/28/2009 1:56 PM
Chloride	226		5	mg/L	E300.0	09/05/2009 2:42 AM
Sulfate	< 5.00		1	mg/L	E300.0	09/05/2009 2:29 AM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/31/2009 6:17 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:40 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 5:35 AM
Hardness (As CaCO3)	156		1	mg/L	SM2340C	09/08/2009 4:09 PM
Bicarbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:40 AM
Nitrogen, Ammonia (As N)	0.41		1	mg/L	SM4500-NH3 H	09/14/2009 3:19 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/28/2009 6:42 AM
Nitrate as N	2.73		5	mg/L	E353.2	09/09/2009 12:34 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/13/2009 10:19 AM
Total Dissolved Solids	614		1	mg/L	SM2540C	08/31/2009 3:18 PM
Nitrogen, Kjeldahl, Total	0.34		1	mg/L	E351.2	09/10/2009 2:25 PM

Qualifiers:
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# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909514-004B

Client Sample ID. MW - 6F

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/27/2009 10:53:00 AM
Received : 8/27/2009 12:30:00 PM
Collected By : G&F

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	0.25		1	mg/L	E200.7	09/03/2009 12:06 AM
Barium	0.22		1	mg/L	E200.7	09/03/2009 12:06 AM
Calcium	37.1		1	mg/L	E200.7	09/03/2009 12:06 AM
Chromium	< 0.01		1	mg/L	E200.7	09/03/2009 12:06 AM
Copper	< 0.02		1	mg/L	E200.7	09/03/2009 12:06 AM
Iron	0.19		1	mg/L	E200.7	09/03/2009 12:06 AM
Lead	< 5.00		1	ug/L	E200.7	09/03/2009 12:06 AM
Magnesium	14.6		1	mg/L	E200.7	09/03/2009 12:06 AM
Manganese	0.10		1	mg/L	E200.7	09/03/2009 12:06 AM
Nickel	< 0.04		1	mg/L	E200.7	09/03/2009 12:06 AM
Potassium	5.46		1	mg/L	E200.7	09/03/2009 12:06 AM
Sodium	71.7		1	mg/L	E200.7	09/03/2009 12:06 AM
Zinc	0.03		1	mg/L	E200.7	09/03/2009 12:06 AM
Mercury	0.28		1	ug/L	E245.1	09/04/2009 11:46 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 5:42 AM

Qualifiers:
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D.F. = Dilution Factor
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# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909561-002A

Client Sample ID. MW30 B-R

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/28/2009 7:40:00 AM
Received : 8/28/2009 1:58:00 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	09/02/2009 8:20 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 8:20 PM
Calcium	12.5		1	mg/L	E200.7	09/02/2009 8:20 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 8:20 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 8:20 PM
Iron	0.08		1	mg/L	E200.7	09/02/2009 8:20 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 8:20 PM
Magnesium	5.11		1	mg/L	E200.7	09/02/2009 8:20 PM
Manganese	< 0.02		1	mg/L	E200.7	09/02/2009 8:20 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 8:20 PM
Potassium	3.65		1	mg/L	E200.7	09/02/2009 8:20 PM
Sodium	44.8		1	mg/L	E200.7	09/02/2009 8:20 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 8:20 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:55 PM
Alkalinity, Total (As CaCO3)	4.70		1	mg/L	SM2320B	09/01/2009 1:43 PM
Chloride	92.0		5	mg/L	E300.0	09/11/2009 4:57 PM
Sulfate	18.9		1	mg/L	E300.0	09/11/2009 4:43 PM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/31/2009 6:19 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:41 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 3:47 PM
Hardness (As CaCO3)	50.0		1	mg/L	SM2340C	09/08/2009 4:24 PM
Bicarbonate	4.7		1	mg/L	M4500-CO2D	09/04/2009 11:41 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	09/14/2009 3:20 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/29/2009 7:04 AM
Nitrate as N	2.05		5	mg/L	E353.2	09/10/2009 12:19 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/13/2009 10:20 AM
Total Dissolved Solids	217		1	mg/L	SM2540C	08/31/2009 3:24 PM
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	E351.2	09/10/2009 2:27 PM

Qualifiers:
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D.F. = Dilution Factor
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# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909561-002B

Client Sample ID. MW30 B-R

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/28/2009 7:40:00 AM
Received : 8/28/2009 1:58:00 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	09/03/2009 12:12 AM
Barium	< 0.20		1	mg/L	E200.7	09/03/2009 12:12 AM
Calcium	12.4		1	mg/L	E200.7	09/03/2009 12:12 AM
Chromium	< 0.01		1	mg/L	E200.7	09/03/2009 12:12 AM
Copper	< 0.02		1	mg/L	E200.7	09/03/2009 12:12 AM
Iron	< 0.02		1	mg/L	E200.7	09/03/2009 12:12 AM
Lead	< 5.00		1	ug/L	E200.7	09/03/2009 12:12 AM
Magnesium	5.19		1	mg/L	E200.7	09/03/2009 12:12 AM
Manganese	< 0.02		1	mg/L	E200.7	09/03/2009 12:12 AM
Nickel	< 0.04		1	mg/L	E200.7	09/03/2009 12:12 AM
Potassium	3.59		1	mg/L	E200.7	09/03/2009 12:12 AM
Sodium	45.3		1	mg/L	E200.7	09/03/2009 12:12 AM
Zinc	< 0.02		1	mg/L	E200.7	09/03/2009 12:12 AM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 11:54 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 3:55 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909561-003A

Client Sample ID. MW-6C

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/28/2009 9:25:00 AM
Received : 8/28/2009 1:58:00 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	09/02/2009 8:25 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 8:25 PM
Calcium	25.8		1	mg/L	E200.7	09/02/2009 8:25 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 8:25 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 8:25 PM
Iron	4.61		1	mg/L	E200.7	09/02/2009 8:25 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 8:25 PM
Magnesium	10.3		1	mg/L	E200.7	09/02/2009 8:25 PM
Manganese	0.06		1	mg/L	E200.7	09/02/2009 8:25 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 8:25 PM
Potassium	52.8		1	mg/L	E200.7	09/02/2009 8:25 PM
Sodium	261		1	mg/L	E200.7	09/02/2009 8:25 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 8:25 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:56 PM
Alkalinity, Total (As CaCO3)	415		20	mg/L	SM2320B	09/01/2009 2:00 PM
Chloride	249		5	mg/L	E300.0	09/08/2009 9:17 PM
Sulfate	42.8		1	mg/L	E300.0	09/08/2009 9:03 PM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/31/2009 6:22 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:42 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 3:50 PM
Hardness (As CaCO3)	105		5	mg/L	SM2340C	09/08/2009 4:27 PM
Bicarbonate	415		1	mg/L	M4500-CO2D	09/04/2009 11:42 AM
Nitrogen, Ammonia (As N)	25.3		10	mg/L	SM4500-NH3 H	09/14/2009 3:28 PM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/29/2009 7:05 AM
Nitrate as N	< 0.10		1	mg/L	E353.2	09/10/2009 12:20 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/13/2009 10:21 AM
Total Dissolved Solids	803		1	mg/L	SM2540C	08/31/2009 3:27 PM
Nitrogen, Kjeldahl, Total	42.7		100	mg/L	E351.2	09/10/2009 2:27 PM

Qualifiers:
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# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909561-003B

Client Sample ID. MW-6C

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/28/2009 9:25:00 AM
Received : 8/28/2009 1:58:00 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	09/03/2009 12:18 AM
Barium	< 0.20		1	mg/L	E200.7	09/03/2009 12:18 AM
Calcium	25.6		1	mg/L	E200.7	09/03/2009 12:18 AM
Chromium	< 0.01		1	mg/L	E200.7	09/03/2009 12:18 AM
Copper	< 0.02		1	mg/L	E200.7	09/03/2009 12:18 AM
Iron	0.17		1	mg/L	E200.7	09/03/2009 12:18 AM
Lead	< 5.00		1	ug/L	E200.7	09/03/2009 12:18 AM
Magnesium	10.3		1	mg/L	E200.7	09/03/2009 12:18 AM
Manganese	0.06		1	mg/L	E200.7	09/03/2009 12:18 AM
Nickel	< 0.04		1	mg/L	E200.7	09/03/2009 12:18 AM
Potassium	52.1		1	mg/L	E200.7	09/03/2009 12:18 AM
Sodium	258		1	mg/L	E200.7	09/03/2009 12:18 AM
Zinc	< 0.02		1	mg/L	E200.7	09/03/2009 12:18 AM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 11:58 AM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 3:56 PM

Qualifiers:
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D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909561-004A

Client Sample ID. MW-11A

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/28/2009 8:47:00 AM
Received : 8/28/2009 1:58:00 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	09/02/2009 8:31 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 8:31 PM
Calcium	3.52		1	mg/L	E200.7	09/02/2009 8:31 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 8:31 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 8:31 PM
Iron	0.02		1	mg/L	E200.7	09/02/2009 8:31 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 8:31 PM
Magnesium	1.84		1	mg/L	E200.7	09/02/2009 8:31 PM
Manganese	< 0.02		1	mg/L	E200.7	09/02/2009 8:31 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 8:31 PM
Potassium	1.20		1	mg/L	E200.7	09/02/2009 8:31 PM
Sodium	4.63		1	mg/L	E200.7	09/02/2009 8:31 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 8:31 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:58 PM
Alkalinity, Total (As CaCO3)	< 1.00		1	mg/L	SM2320B	09/01/2009 2:08 PM
Chloride	9.98		1	mg/L	E300.0	09/08/2009 9:30 PM
Sulfate	< 5.00		1	mg/L	E300.0	09/08/2009 9:30 PM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/31/2009 6:23 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:43 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 3:51 PM
Hardness (As CaCO3)	15.0		1	mg/L	SM2340C	09/08/2009 4:30 PM
Bicarbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:43 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	09/16/2009 10:21 AM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/29/2009 7:06 AM
Nitrate as N	3.82		5	mg/L	E353.2	09/10/2009 12:21 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/13/2009 10:22 AM
Total Dissolved Solids	51		1	mg/L	SM2540C	08/31/2009 3:30 PM
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	E351.2	09/10/2009 2:30 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909561-004B

Client Sample ID. MW-11A

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/28/2009 8:47:00 AM
Received : 8/28/2009 1:58:00 PM
Collected By : G&F

DISSOLVED

Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/03/2009 12:24 AM
Barium	< 0.20		1	mg/L	E200.7	09/03/2009 12:24 AM
Calcium	3.50		1	mg/L	E200.7	09/03/2009 12:24 AM
Chromium	< 0.01		1	mg/L	E200.7	09/03/2009 12:24 AM
Copper	< 0.02		1	mg/L	E200.7	09/03/2009 12:24 AM
Iron	< 0.02		1	mg/L	E200.7	09/03/2009 12:24 AM
Lead	< 5.00		1	ug/L	E200.7	09/03/2009 12:24 AM
Magnesium	1.83		1	mg/L	E200.7	09/03/2009 12:24 AM
Manganese	< 0.02		1	mg/L	E200.7	09/03/2009 12:24 AM
Nickel	< 0.04		1	mg/L	E200.7	09/03/2009 12:24 AM
Potassium	1.16		1	mg/L	E200.7	09/03/2009 12:24 AM
Sodium	4.51		1	mg/L	E200.7	09/03/2009 12:24 AM
Zinc	< 0.02		1	mg/L	E200.7	09/03/2009 12:24 AM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:00 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 3:57 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909561-005A

Client Sample ID. MW-11B

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/28/2009 8:48:00 AM
Received : 8/28/2009 1:58:00 PM
Collected By : G&F

Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/02/2009 8:37 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 8:37 PM
Calcium	2.14		1	mg/L	E200.7	09/02/2009 8:37 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 8:37 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 8:37 PM
Iron	0.07		1	mg/L	E200.7	09/02/2009 8:37 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 8:37 PM
Magnesium	1.03		1	mg/L	E200.7	09/02/2009 8:37 PM
Manganese	< 0.02		1	mg/L	E200.7	09/02/2009 8:37 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 8:37 PM
Potassium	1.02		1	mg/L	E200.7	09/02/2009 8:37 PM
Sodium	5.20		1	mg/L	E200.7	09/02/2009 8:37 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 8:37 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 1:00 PM
Alkalinity, Total (As CaCO3)	< 1.00		1	mg/L	SM2320B	09/01/2009 2:12 PM
Chloride	11.4		1	mg/L	E300.0	09/08/2009 10:11 PM
Sulfate	< 5.00		1	mg/L	E300.0	09/08/2009 10:11 PM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/31/2009 6:24 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:44 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 3:52 PM
Hardness (As CaCO3)	9.00		1	mg/L	SM2340C	09/08/2009 4:33 PM
Bicarbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:44 AM
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	SM4500-NH3 H	09/16/2009 10:22 AM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/29/2009 7:08 AM
Nitrate as N	1.03		1	mg/L	E353.2	09/10/2009 12:22 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/13/2009 10:23 AM
Total Dissolved Solids	31		1	mg/L	SM2540C	08/31/2009 3:33 PM
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	E351.2	09/10/2009 2:31 PM

Qualifiers:
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# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909561-005B

Client Sample ID. MW-11B

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

Sample Information...
Type : Groundwater

Origin:

Collected : 8/28/2009 8:48:00 AM
Received : 8/28/2009 1:58:00 PM
Collected By : G&F

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Copy : Mike Wagner

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Aluminum	< 0.20		1	mg/L	E200.7	09/03/2009 12:47 AM
Barium	< 0.20		1	mg/L	E200.7	09/03/2009 12:47 AM
Calcium	2.09		1	mg/L	E200.7	09/03/2009 12:47 AM
Chromium	< 0.01		1	mg/L	E200.7	09/03/2009 12:47 AM
Copper	< 0.02		1	mg/L	E200.7	09/03/2009 12:47 AM
Iron	0.04		1	mg/L	E200.7	09/03/2009 12:47 AM
Lead	< 5.00		1	ug/L	E200.7	09/03/2009 12:47 AM
Magnesium	1.01		1	mg/L	E200.7	09/03/2009 12:47 AM
Manganese	< 0.02		1	mg/L	E200.7	09/03/2009 12:47 AM
Nickel	< 0.04		1	mg/L	E200.7	09/03/2009 12:47 AM
Potassium	0.96		1	mg/L	E200.7	09/03/2009 12:47 AM
Sodium	4.99		1	mg/L	E200.7	09/03/2009 12:47 AM
Zinc	< 0.02		1	mg/L	E200.7	09/03/2009 12:47 AM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:07 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 3:58 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909561-006A

Client Sample ID. OBS-1

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/28/2009 10:45:00 AM
Received : 8/28/2009 1:58:00 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	09/02/2009 9:00 PM
Barium	< 0.20		1	mg/L	E200.7	09/02/2009 9:00 PM
Calcium	20.4		1	mg/L	E200.7	09/02/2009 9:00 PM
Chromium	< 0.01		1	mg/L	E200.7	09/02/2009 9:00 PM
Copper	< 0.02		1	mg/L	E200.7	09/02/2009 9:00 PM
Iron	0.09		1	mg/L	E200.7	09/02/2009 9:00 PM
Lead	< 5.00		1	ug/L	E200.7	09/02/2009 9:00 PM
Magnesium	14.8		1	mg/L	E200.7	09/02/2009 9:00 PM
Manganese	1.58		1	mg/L	E200.7	09/02/2009 9:00 PM
Nickel	< 0.04		1	mg/L	E200.7	09/02/2009 9:00 PM
Potassium	10.0		1	mg/L	E200.7	09/02/2009 9:00 PM
Sodium	81.5		1	mg/L	E200.7	09/02/2009 9:00 PM
Zinc	< 0.02		1	mg/L	E200.7	09/02/2009 9:00 PM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 1:03 PM
Alkalinity, Total (As CaCO3)	75.3		2	mg/L	SM2320B	09/01/2009 2:17 PM
Chloride	142		5	mg/L	E300.0	09/08/2009 10:24 PM
Sulfate	59.9		5	mg/L	E300.0	09/08/2009 10:24 PM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	08/31/2009 6:25 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/04/2009 11:45 AM
Chromium, Hexavalent	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 3:53 PM
Hardness (As CaCO3)	115		5	mg/L	SM2340C	09/08/2009 4:36 PM
Bicarbonate	75.3		1	mg/L	M4500-CO2D	09/04/2009 11:45 AM
Nitrogen, Ammonia (As N)	4.48		5	mg/L	SM4500-NH3 H	09/16/2009 10:23 AM
Nitrite as N	< 0.10		1	mg/L	E353.2	08/29/2009 7:09 AM
Nitrate as N	< 0.10		1	mg/L	E353.2	09/10/2009 12:24 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/13/2009 10:24 AM
Total Dissolved Solids	357		1	mg/L	SM2540C	08/31/2009 3:42 PM
Nitrogen, Kjeldahl, Total	9.81		5	mg/L	E351.2	09/10/2009 2:32 PM

Qualifiers:
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Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909561-006B

Client Sample ID. OBS-1

Sample Information...
Type : Groundwater

Origin:

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

Collected : 8/28/2009 10:45:00 AM
Received : 8/28/2009 1:58:00 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	09/03/2009 12:53 AM
Barium	< 0.20		1	mg/L	E200.7	09/03/2009 12:53 AM
Calcium	20.2		1	mg/L	E200.7	09/03/2009 12:53 AM
Chromium	< 0.01		1	mg/L	E200.7	09/03/2009 12:53 AM
Copper	< 0.02		1	mg/L	E200.7	09/03/2009 12:53 AM
Iron	0.09		1	mg/L	E200.7	09/03/2009 12:53 AM
Lead	< 5.00		1	ug/L	E200.7	09/03/2009 12:53 AM
Magnesium	14.7		1	mg/L	E200.7	09/03/2009 12:53 AM
Manganese	1.56		1	mg/L	E200.7	09/03/2009 12:53 AM
Nickel	< 0.04		1	mg/L	E200.7	09/03/2009 12:53 AM
Potassium	9.90		1	mg/L	E200.7	09/03/2009 12:53 AM
Sodium	80.1		1	mg/L	E200.7	09/03/2009 12:53 AM
Zinc	0.02		1	mg/L	E200.7	09/03/2009 12:53 AM
Mercury	< 0.20		1	ug/L	E245.1	09/04/2009 12:09 PM
Chromium, Hexavalent (Diss.)	< 0.02		1	mg/L	M3500-Cr D	08/28/2009 3:59 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/16/2009

H2M LABS, INC.

575 Broad Hollow Road, Melville NY 11747
(631) 694-3040 . FAX: (631) 420-8436 NYSDOH ID # 10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 0909886-001A

Client Sample ID. LF-1

Sample Information...
Type : Leachate

Origin:

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

Collected 9/9/2009 2:30:00 PM
Received 9/9/2009 2:45:00 PM
Collected By : JF99

Copy : Mike Nahmias

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Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Alkalinity, Total (As CaCO3)	170		5	mg/L	SM2320B	09/10/2009 4:03 PM
Chloride	230		5	mg/L	E300.0	09/11/2009 5:24 PM
Sulfate	23.8		1	mg/L	E300.0	09/11/2009 5:10 PM
Cyanide	< 10.0		1	µg/L	SM4500-CN E	09/14/2009 12:49 PM
Carbonate	< 1.0		1	mg/L	M4500-CO2D	09/15/2009 12:45 PM
Hardness (As CaCO3)	110		5	mg/L	SM2340C	09/15/2009 11:18 AM
Bicarbonate	170		1	mg/L	M4500-CO2D	09/15/2009 12:45 PM
Nitrogen, Ammonia (As N)	14.2		5	mg/L	SM4500-NH3 H	09/16/2009 10:20 AM
Nitrite as N	< 0.10		1	mg/L	E353.2	09/10/2009 7:39 AM
Nitrate as N	< 0.10		1	mg/L	E353.2	09/17/2009 12:58 PM
Phenolics, Total Recoverable	< 5.0		1	µg/L	E420.1	09/13/2009 10:25 AM
Total Dissolved Solids	482		1	mg/L	SM2540C	09/14/2009 10:54 AM
Nitrogen, Kjeldahl, Total	27.5		10	mg/L	E351.2	09/10/2009 2:45 PM

Qualifiers:
E - Value above quantitation range
D - Results for Dilution
D.F. = Dilution Factor
H = Sample received/analyzed outside of analytical holding time
# = ELAP / NELAP does not offer certification for this analyte

Joann M. Slavin

Laboratory Manager

Date Reported : 9/18/2009

APPENDIX B

THIRD QUARTER 2009 GROUNDWATER SAMPLING LOGS

GANNETT FLEMING ENGINEERS, P.C.

480 Forest Avenue

Locust Valley, New York 11560

CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	LF-1/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well LF-1		
SAMPLE I.D. NO.	LF-1	SAMPLED BY	MN/MB
DATE SAMPLED	8/28/09	TIME	1130
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	44.58 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	6.0 INCHES		
TOTAL WELL DEPTH	102 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	256		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	1167	pH	7.59	DO (mg/l)	-
TEMPERATURE (°C)	19.8	TURBIDITY (NTU)	2.81	ORP (mV)	–97
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 8/28/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.58	7.59	7.59
CONDUCTIVITY (µS/cm)	1139	1164	1167
TEMPERATURE (°C)	20.6	20.0	19.8
DO (mg/l)	-	-	-
TURBIDITY (NTU)	7.55	2.71	2.81
ORP (mV)	-	-	–97

GANNETT FLEMING ENGINEERS, P.C.

480 Forest Avenue

Locust Valley, New York 11560

CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
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	MN/MB
DATE SAMPLED	8/28/09	TIME	0740
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	85.37 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	2.0 INCHES		
TOTAL WELL DEPTH	123 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	19		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	402	pH	6.00	DO (mg/l)	-
TEMPERATURE (°C)	15	TURBIDITY (NTU)	12.20	ORP (mV)	186
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 8/28/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	6.76	6.13	6.00
CONDUCTIVITY (µS/cm)	395	417	402
TEMPERATURE (°C)	16.7	14.9	15.0
DO (mg/l)	-	-	-
TURBIDITY (NTU)	103	14.81	12.20
ORP (mV)	-	-	186

GANNETT FLEMING ENGINEERS, P.C.

480 Forest Avenue

Locust Valley, New York 11560

CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	MW-05B/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-05B		
SAMPLE I.D. NO.	MW-05B	SAMPLED BY	MN/MB
DATE SAMPLED	8/26/09	TIME	1007
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	72.94 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	117 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump				
PURGING RATE	10 GAL/ MIN	PURGING TIME	9 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	86		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	522	pH	7.15	DO (mg/l)	-
TEMPERATURE (°C)	15.9	TURBIDITY (NTU)	1.40	ORP (mV)	275
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 8/26/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	6.37	6.82	7.15
CONDUCTIVITY (µS/cm)	473	508	522
TEMPERATURE (°C)	18.4	16.7	15.9
DO (mg/l)	-	-	-
TURBIDITY (NTU)	10.61	6.93	1.40
ORP (mV)	-	-	275

GANNETT FLEMING ENGINEERS, P.C.

480 Forest Avenue

Locust Valley, New York 11560

CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	MW-06A/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-06A		
SAMPLE I.D. NO.	MW-06A	SAMPLED BY	MN/MB
DATE SAMPLED	8/27/09	TIME	1023
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	95.02 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	107 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	1000 mL Disposible Bailer				
PURGING RATE	- GAL/ MIN	PURGING TIME	- MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	25		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	Sulfur Odor				
CONDUCTIVITY (µS/cm)	88	pH	6.00	DO (mg/l)	-
TEMPERATURE (°C)	16.7	TURBIDITY (NTU)	91	ORP (mV)	160
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 8/27/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.67	7.17	6.00
CONDUCTIVITY (µS/cm)	80	77	88
TEMPERATURE (°C)	17.0	16.8	16.7
DO (mg/l)	-	-	-
TURBIDITY (NTU)	53	75	91
ORP (mV)	-	-	160

GANNETT FLEMING ENGINEERS, P.C.

480 Forest Avenue

Locust Valley, New York 11560

CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	MW-06B/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-06B		
SAMPLE I.D. NO.	MW-06B	SAMPLED BY	MN/MB
DATE SAMPLED	8/27/09	TIME	1042
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	95.27 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	8 GAL/ MIN	PURGING TIME	10 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	79		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	Sulfur Odor				
CONDUCTIVITY (µS/cm)	2000	pH	7.96	DO (mg/l)	-
TEMPERATURE (°C)	18.9	TURBIDITY (NTU)	2.96	ORP (mV)	–82
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 8/27/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.67	7.94	7.96
CONDUCTIVITY (µS/cm)	2000	2000	2000
TEMPERATURE (°C)	18.2	18.6	18.9
DO (mg/l)	-	-	-
TURBIDITY (NTU)	6.40	1.38	2.96
ORP (mV)	-	-	–82

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	MW-06C/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-06C		
SAMPLE I.D. NO.	MW-06C	SAMPLED BY	MN/MB
DATE SAMPLED	8/28/09	TIME	0925
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	94.71 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	161 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	131		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	Sulfur Odor				
CONDUCTIVITY (µS/cm)	1902	pH	7.91	DO (mg/l)	-
TEMPERATURE (°C)	19.6	TURBIDITY (NTU)	2.12	ORP (mV)	–805
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 8/28/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.34	7.90	7.91
CONDUCTIVITY (µS/cm)	1680	1892	1902
TEMPERATURE (°C)	20.4	19.4	19.6
DO (mg/l)	-	-	-
TURBIDITY (NTU)	5.30	4.39	2.12
ORP (mV)	-	-	–805

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	MW-06E/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-06E		
SAMPLE I.D. NO.	MW-06E	SAMPLED BY	MN/MW
DATE SAMPLED	8/27/09	TIME	1011
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	95.93 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	305		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	Sulfur Odor				
CONDUCTIVITY (µS/cm)	808	pH	8.47	DO (mg/l)	-
TEMPERATURE (°C)	18.0	TURBIDITY (NTU)	4.82	ORP (mV)	138
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 8/27/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.54	6.61	8.47
CONDUCTIVITY (µS/cm)	1002	810	808
TEMPERATURE (°C)	19.0	18.1	18.0
DO (mg/l)	-	-	-
TURBIDITY (NTU)	4.01	1.41	4.82
ORP (mV)	-	-	138

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	MW-06F/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-06F		
SAMPLE I.D. NO.	MW-06F	SAMPLED BY	MN/MB
DATE SAMPLED	8/27/09	TIME	1053
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	95.28 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	91 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	500		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	Sulfur Odor				
CONDUCTIVITY (µS/cm)	880	pH	5.31	DO (mg/l)	-
TEMPERATURE (°C)	17.3	TURBIDITY (NTU)	1.91	ORP (mV)	192
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 8/27/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	5.46	4.82	5.31
CONDUCTIVITY (µS/cm)	803	862	880
TEMPERATURE (°C)	19.1	17.7	17.3
DO (mg/l)	-	-	-
TURBIDITY (NTU)	2.53	2.82	1.91
ORP (mV)	-	-	192

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725.001		
WELL NO./ OWNER	MW-07B/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-07B		
SAMPLE I.D. NO.	MW-07B	SAMPLED BY	MN/HP
DATE SAMPLED	8/28/09	TIME	Not Sampled
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	86.00 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	236 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump				
PURGING RATE	NA GAL/ MIN	PURGING TIME	NA MIN		
NO. CASING VOLUMES REMOVED	NA	GALLONS	NA		
WELL DRAWDOWN/ RECOVERY	Poor, groundwater became inundated with sand				
SAMPLE APPEARANCE	No sample collected				
ODORS OBSERVED	NA				
CONDUCTIVITY (µS/cm)	-	pH	-	DO (mg/l)	-
TEMPERATURE (°C)	-	TURBIDITY (NTU)	-	ORP (mV)	-
SAMPLES ANALYZED FOR	Not Sampled				
LABORATORY/ DATE SHIPPED	Not Sampled				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	-	-	-
CONDUCTIVITY (µS/cm)	-	-	-
TEMPERATURE (°C)	-	-	-
DO (mg/l)	-	-	-
TURBIDITY (NTU)	-	-	-
ORP (mV)	-	-	-

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	MW-08A/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-08A		
SAMPLE I.D. NO.	MW-08A	SAMPLED BY	MN/MB
DATE SAMPLED	8/26/09	TIME	00915
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	68.97 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	81 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	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)	123	pH	4.20	DO (mg/l)	-
TEMPERATURE (°C)	14.8	TURBIDITY (NTU)	105	ORP (mV)	284.00
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 8/26/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	9.29	5.88	4.20
CONDUCTIVITY (µS/cm)	105	105	123
TEMPERATURE (°C)	17.0	15.5	14.8
DO (mg/l)	-	-	-
TURBIDITY (NTU)	11.96	108	105
ORP (mV)	-	-	284

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	MW-08B/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-08B		
SAMPLE I.D. NO.	MW-08B	SAMPLED BY	MN/MB
DATE SAMPLED	8/26/09	TIME	0910
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	68.29 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	161 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump				
PURGING RATE	6 GAL/ MIN	PURGING TIME	31 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	181		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	391	pH	4.82	DO (mg/l)	-
TEMPERATURE (°C)	16.9	TURBIDITY (NTU)	2.05	ORP (mV)	272
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 8/26/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	6.93	4.69	4.82
CONDUCTIVITY (µS/cm)	422	395	391
TEMPERATURE (°C)	16.3	15.07	16.9
DO (mg/l)	-	-	-
TURBIDITY (NTU)	1.92	2.03	2.05
ORP (mV)	-	-	272

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	MW-09B/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-09B		
SAMPLE I.D. NO.	MW-09B	SAMPLED BY	MN/MB
DATE SAMPLED	8/26/09	TIME	1233
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	91.43 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	6 GAL/ MIN	PURGING TIME	26 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	153		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	324	pH	6.11	DO (mg/l)	-
TEMPERATURE (°C)	15.8	TURBIDITY (NTU)	7.24	ORP (mV)	281
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 8/26/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	5.60	6.00	6.11
CONDUCTIVITY (µS/cm)	300	335	324
TEMPERATURE (°C)	17.8	15.8	15.8
DO (mg/l)	-	-	-
TURBIDITY (NTU)	8.45	6.79	7.24
ORP (mV)	-	-	281

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	MW-09C/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-09C		
SAMPLE I.D. NO.	MW-09C	SAMPLED BY	MN/MB
DATE SAMPLED	8/26/09	TIME	1317
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	92.58 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	227 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump				
PURGING RATE	7 GAL/ MIN	PURGING TIME	38 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	265		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	533	pH	7.26	DO (mg/l)	-
TEMPERATURE (°C)	17.2	TURBIDITY (NTU)	4.88	ORP (mV)	188
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 8/26/2009				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	6.66	7.19	7.26
CONDUCTIVITY (µS/cm)	454	511	533
TEMPERATURE (°C)	18.5	16.7	17.2
DO (mg/l)	-	-	-
TURBIDITY (NTU)	5.39	10.13	4.88
ORP (mV)	-	-	188

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	MW-09D/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-09D		
SAMPLE I.D. NO.	MW-09D	SAMPLED BY	MN/MB
DATE SAMPLED	8/26/09	TIME	1152
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	91.53 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	316 FT.	BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGING METHOD	2" Submersible Pump				
PURGING RATE	10 GAL/ MIN	PURGING TIME	42 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	425		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	878	pH	4.32	DO (mg/l)	-
TEMPERATURE (°C)	18.5	TURBIDITY (NTU)	3.54	ORP (mV)	285
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 8/26/2009				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.:

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	4.95	4.52	4.32
CONDUCTIVITY (µS/cm)	815	863	878
TEMPERATURE (°C)	22.1	18.5	18.5
DO (mg/l)	-	-	-
TURBIDITY (NTU)	0.00	5.45	3.54
ORP (mV)	-	-	285

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	MW-11A/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-11A		
SAMPLE I.D. NO.	MW-11A	SAMPLED BY	MN/MB
DATE SAMPLED	8/28/09	TIME	0847
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	22.57 FT.	BELOW MEASURING POINT	TOC
WELL DIAMETER	4.0 INCHES		
TOTAL WELL DEPTH	141 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	233		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	94	pH	4.53	DO (mg/l)	-
TEMPERATURE (°C)	12.2	TURBIDITY (NTU)	12.09	ORP (mV)	338
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab – 8/28/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	4.72	4.44	4.53
CONDUCTIVITY (µS/cm)	82	90	94
TEMPERATURE (°C)	14.3	12.3	12.2
DO (mg/l)	-	-	-
TURBIDITY (NTU)	12.68	7.05	2.09
ORP (mV)	-	-	338

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	MW-11B/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well MW-11B		
SAMPLE I.D. NO.	MW-11B	SAMPLED BY	MN/MB
DATE SAMPLED	8/28/09	TIME	0848
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	22.65 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	428		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	74	pH	4.43	DO (mg/l)	-
TEMPERATURE (°C)	11.7	TURBIDITY (NTU)	0.12	ORP (mV)	331
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 8/28/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	4.50	4.40	4.43
CONDUCTIVITY (µS/cm)	68	70	74
TEMPERATURE (°C)	12.4	11.6	11.7
DO (mg/l)	-	-	-
TURBIDITY (NTU)	2.22	1.45	0.12
ORP (mV)	-	-	331

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CLIENT/ PROJECT NO.	Town of Oyster Bay / 49725		
WELL NO./ OWNER	OBS-1/ Town of Oyster Bay		
SAMPLING POINT	Monitoring Well OBS-1		
SAMPLE I.D. NO.	OBS-1/DUP	SAMPLED BY	MN/MB
DATE SAMPLED	8/28/09	TIME	1045
WELL USE	Groundwater Monitoring		
STATIC WATER ELEV.	49.12 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	29 MIN		
NO. CASING VOLUMES REMOVED	3	GALLONS	290		
WELL DRAWDOWN/ RECOVERY	Good				
SAMPLE APPEARANCE	Clear				
ODORS OBSERVED	None				
CONDUCTIVITY (µS/cm)	805	pH	6.70	DO (mg/l)	-
TEMPERATURE (°C)	15.8	TURBIDITY (NTU)	1.99	ORP (mV)	176
SAMPLES ANALYZED FOR	See Chain of Custody				
LABORATORY/ DATE SHIPPED	H2M Labs, Inc. and TOB DPW Lab - 8/28/09				

COMMENTS, LOCATION SKETCH, WELL-HEAD SKETCH, ETC.

	1st VOLUME	2nd VOLUME	3rd VOLUME
PH	7.27	6.85	6.70
CONDUCTIVITY (µS/cm)	780	796	805
TEMPERATURE (°C)	16.8	16.5	15.8
DO (mg/l)	-	-	-
TURBIDITY (NTU)	6.43	4.73	1.99
ORP (mV)	-	-	176

APPENDIX C

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.

Procedure: (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

"Town of Oyster Bay, Old Bethpage Solid Waste Disposal Complex
Ambient Air Quality Survey and Soil Gas Quality Survey
2009 Third Quarter Report"

RTP Environmental Associates, Inc.
December 2009

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX
AMBIENT AIR QUALITY SURVEY
AND
SOIL GAS QUALITY SURVEY

2009 Third 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

December 2009

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX
AMBIENT AIR QUALITY SURVEY AND SOIL GAS QUALITY SURVEY

2009 Third Quarter Report

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OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX
AMBIENT AIR QUALITY SURVEY AND SOIL GAS QUALITY SURVEY

2009 Third 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 are scheduled for 2009.

This report contains the results obtained during the third quarter sampling event of the 2009 monitoring program. The sampling occurred on September 21 and 22, 2009 when the forecasted meteorology was expected to be within protocol requirements. Section 2.0 of this report contain 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 Remedial Action Plan (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.

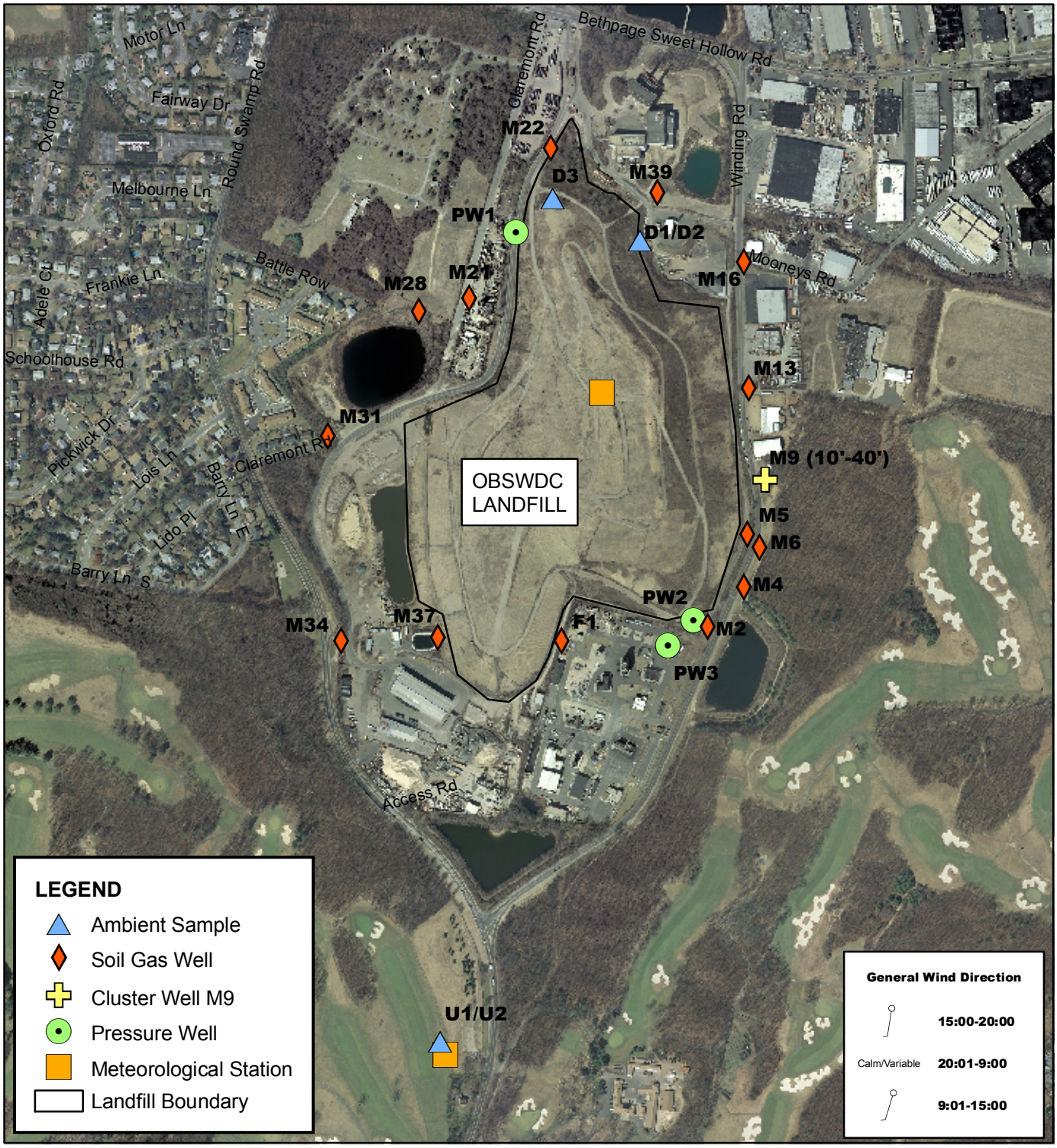
The primary objective of the sampling program is to examine the ambient air concentrations of trace volatile organic compounds (VOCs) in the vicinity of the Old Bethpage Landfill. During the 2009 third quarter sampling event, five ambient air Volatile Organic Sampling Train (VOST) samples were collected 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 the construction of a concrete wall, making the well location no longer accessible. 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 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:
September 21 - 22, 2009

N

0 410 820 1,640 Feet

RTP Environmental Associates, Inc.
Westbury, New York

FIGURE 2.1

THIRD QUARTER 2009
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 downwind of the landfill and was set to operate at 0.25 Lpm. All samplers were set to sample at a volumetric 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 2009 monitoring program includes the quarterly collection of these soil gas samples. All 30-inch wells listed in the Consent Decree were sampled during this 2009 third 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 wall 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 as 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 2009 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^{o}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 VOCs that can be evaluated using the modified VOST methodology are presented in Table 2.1 along with their corresponding New York State Department of Environmental Conservation (NYSDEC) ambient short-term and annual (SGC and AGC) air guideline concentrations. The target compound list (TCL) for the 2009 monitoring program is consistent with the VOC constituents being evaluated in the thermal oxidizer testing portion of the Consent Decree. Decane was added as a targeted tentatively identified compound (TIC) during the 2003 monitoring program. In September 2007, the NYSDEC air guideline concentrations were revised. There are still no SGCs for 1,1,2,2-tetrachloroethane or decane.

Four (4) TCL compounds currently do 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 most up-to-date AGC/SGC guidelines are 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

THIRD QUARTER 2009

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	28,000	T	L				I											
Benzaldehyde	00100-52-7	4	----		0.10	d																
Benzene	00071-43-2	4	1,300	D	0.13	E	H	U		H	A											
Bromodichloromethane	00075-27-4	4	---		0.02	D	H	U														
Bromoform	00075-25-2	4	---		0.91	E	M	U		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			H												
Carbon Disulfide	00075-15-0	6	6,200	D	700	E	M			H	I											
Carbon Tetrachloride	00056-23-5	4	1,900	D	0.067	E	H	U		H	B											
Chlorobenzene	00108-90-7	4	---		110	T	M			H	I											
Chloroethane	00075-00-3	4	---		10,000	E	L			H	I											
Chloroethyl Vinyl Ether	00110-75-8		----		0.10	d																
Chloroform	00067-66-3	4	150	D	0.043	E	M	U		H	I											
Chloromethane	00074-87-3	4	22,000	D	90	E	M			H	I											
Decane	00124-18-5	4	---		700	A	M										R					
Dibromochloromethane	00124-48-1	4	---		0.10	d	M															
1,2-Dichlorobenzene (o)	00095-50-1	4	30,000	Z	360	T	M				I											
1,3-Dichlorobenzene (m)	00541-73-1	4	30,000	A	360	A	M										R	R				
1,4-Dichlorobenzene (p)	00106-46-7	4	---		0.09	D	M	U		H	I											
1,1-Dichloroethane	00075-34-3	4	---		0.63	D	L	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	68,000	A	1,000	A	L										R	R				
2-Hexanone	00591-78-6	4	4,000	Z	48	T																
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	68,000	D	1,000	D	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												
Trichlorofluoromethane	00075-69-4	6	68,000	A	1,000	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

THIRD QUARTER 2009

NOTES:

*** AGC/SGC Values updated September 2007 and still current as of December 2009.**

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.

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, during the last few years and for 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 USEPA 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^{o}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.

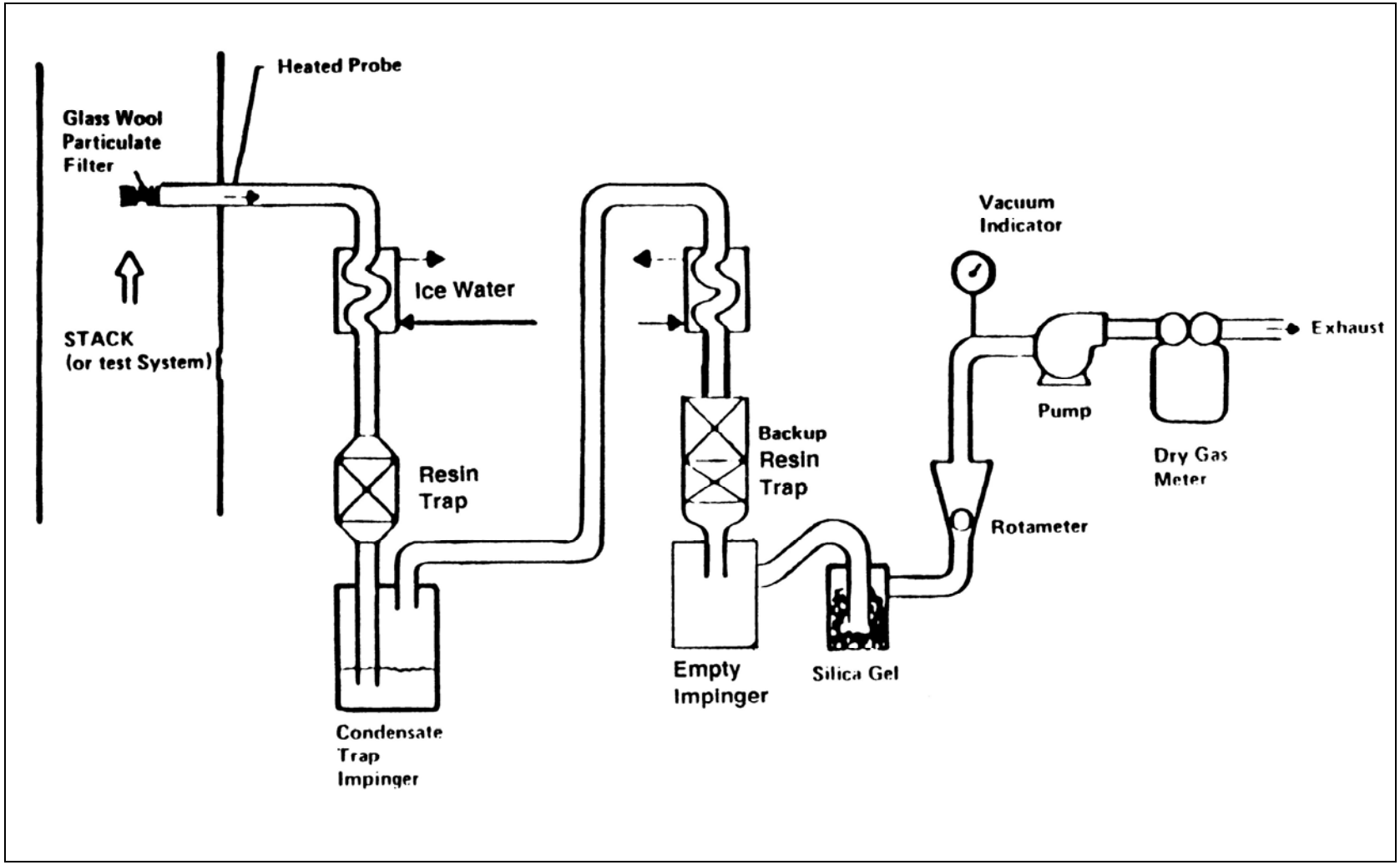
During the 2009 third quarter field event, a pre-conditioned Tenax cartridge and Tenax/Anasorb® cartridge in series were used for the ambient air samplers and were set to run at a flow rate of 0.25 Lpm.

FIGURE 2.2

TOWN OF OYSTER BAY
SOLID WASTE DISPOSAL FACILITY

SCHEMATIC OF EPA REFERENCED VOLATILE ORGANIC SAMPLING TRAIN (VOST)

THIRD QUARTER 2009



Source: http://www.epa.gov/epaoswer/hazwaste/test/pdfs/0030.pdf

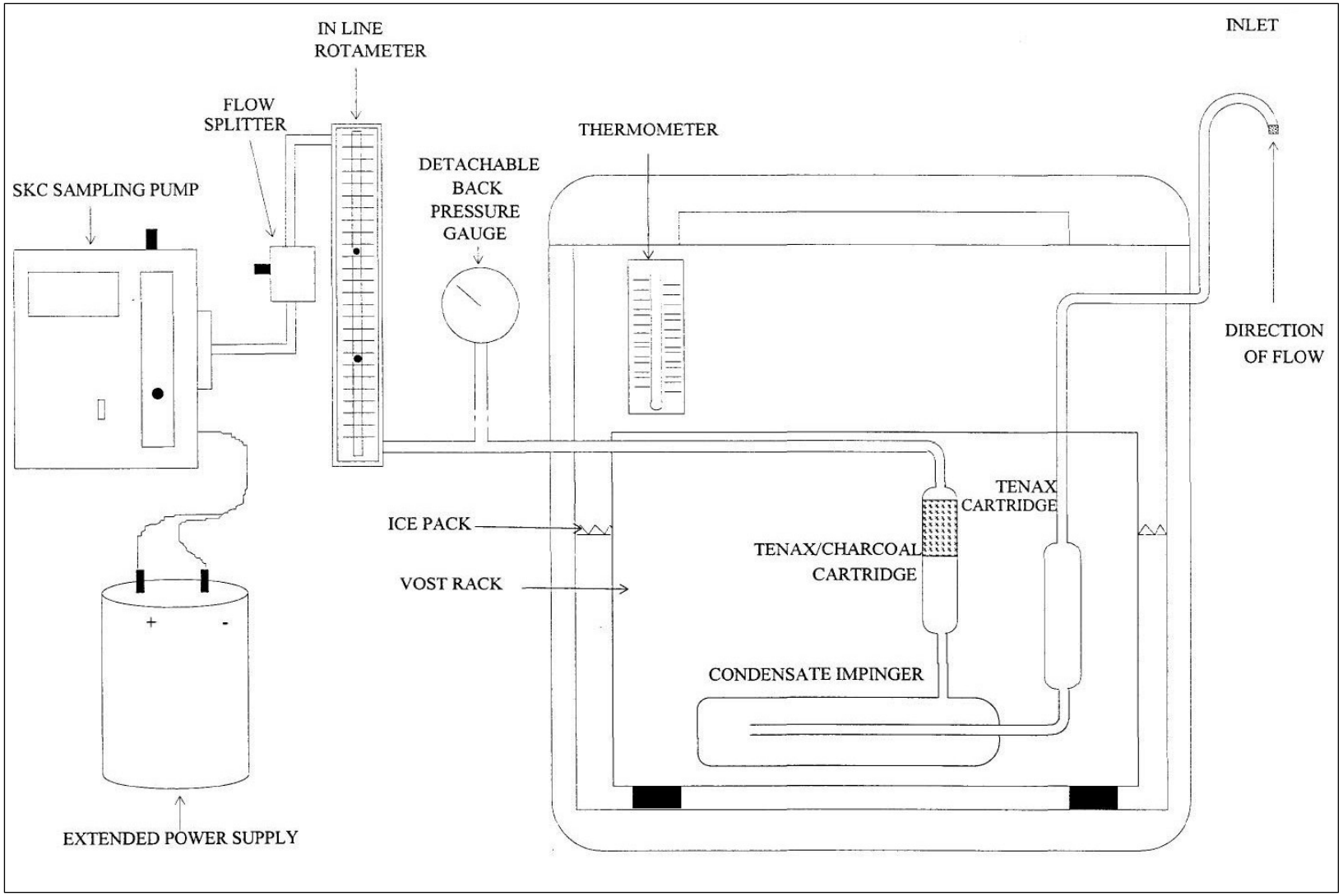
RTP Environmental Associates, Inc.

FIGURE 2.3

TOWN OF OYSTER BAY
SOLID WASTE DISPOSAL FACILITY

MODIFIED PORTABLE VOST SAMPLER

THIRD QUARTER 2009



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. In December 2003, RTP had elected to use a double Tenax/Anasorb® configuration to determine if compound breakthrough was occurring. Since this alteration and culminating in 2007, inconsistencies were noted in compound concentrations between collocated samples using the different sampling methods. Subsequently, RTP returned to the original Tenax and Tenax/Anasorb® design.

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 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 nanogram lower quantitation limit due to the poor responses generally given by these constituents during laboratory analysis. Additional tentatively identified compounds (TICs); chlorotrifluoromethane (Freon 13), chloroethyl vinyl ether and decane were analyzed at levels equivalent to or greater than 25 nanograms, except for benzaldehyde, which has a minimum detection limit of 50 nanograms for all of the soil gas wells samples and 250 nanograms for all ambient samples. The upper quantitation limit (calibration limit) for a splitless analysis was nominally set at 1,000 nanograms 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

TABLE 2.2

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

GENERAL RELATIONSHIP BETWEEN PHOTOIONIZATION DETECTOR (PID) READINGS AND SAMPLE VOLUME

THIRD QUARTER 2009

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.

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. Further, 10 liter sample volumes have been selected for the 10, 20, 30 and 40-foot deep subsurface wells at the M9 sampling location for 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 eight (8) 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 6, 2009. 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 2009 third 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 third quarter sampling event, PID measurements were taken at all of the 17 soil gas wells sampled and at the three (3) ambient air sampling locations.

2.3 Meteorological Data

Meteorological data was set up to be 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, consist 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 set to be 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 September 21 to 22, 2009 third quarter sampling event were forecasted by the National Weather Service to include southerly winds becoming westerly at light speeds with falling barometric pressure. The actual wind conditions recorded onsite during the 24-hour test were variable. Recorded onsite conditions included winds ranging mostly from the southerly direction early during the test (1600 to 2000 hours), but then winds became light and variable. Recorded directions during the overnight

hours were southeasterly to northeasterly. The wind speed then picked back up at about 9AM and changed to a southerly and south southwesterly direction for the duration of the testing period. Wind speeds were light during the sampling period, with a majority of calm winds (speeds < 1.5 mph) recorded overnight at the upwind station and three calm hours at the atop station. The wind speeds were higher during daytime hours and decreased during the evening hours, and recorded wind speeds at the main station were higher than the upwind station. The barometric pressure was mostly steady during the testing period but ultimately ended up 0.03 inches of Hg below the starting pressure based on the upwind station.

The test period was likely influenced by the light to calm wind periods starting around 8:00 PM (2000 hours) on September 21st and continuing until around 9:00 AM (0900 hours) on September 22nd. Winds during this period at the top of the landfill were recorded at low speeds from varied easterly directions. Winds at the upwind site were consistently below 1 mph and the directions recorded varied greatly from hour to hour. Upwind wind speeds diminished from 4.2 mph down to 0.8 mph by 8:00 PM (2000 hours) and back to 4.8 mph by 1000 hours. The horizontal distance between the two stations was approximately 3,500 feet. Under such conditions, there is potential very good probability that landfill emissions were caught in drainage flows and impacted the upwind station.

Based on the wind direction observations recorded during the sampling period, the downwind samplers D1/D2 and D3 were under the influence of landfill sources for a only 12 hours of the 24-hour test period. Some observed wind directions, particularly at the beginning of the test and during the light wind speed period overnight, suggest a good potential for an influence on the downwind samples from offsite sources may have been present in the downwind samplers during periods of easterly and northerly winds. Also, it may have been possibly that the upwind samplers were influenced by the landfill during the periods of varying calm winds overnight, as well as sources to the north and east of the landfill. The above conditions are typical of a strong temperature inversion, which began at roughly 10:00 PM (2200 hours) on September 21st and lasted until 9:00 AM (0900 hours) the following morning. 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 ambient air and soil gas 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 2009 third quarter ambient air sampling event was conducted on September 21 through September 22, 2009. 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 the southerly to westerly direction 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 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 on the 15th hole fairway of the Bethpage State Black Golf Course approximately 200 feet west of Round Swamp Road. Samplers for location D1/2 were collocated approximately 75 feet southwest of the southwestern corner of the RAP building. Sampler D3 was located on a landfill haul road approximately 400 feet east of Claremont Road. Sampler locations for sites U1, U2, D1, D2 and D3 are shown in Figure 2.1.

TABLE 3.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF AMBIENT AIR AND SUBSURFACE SOIL GAS SAMPLING

THIRD QUARTER 2009

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	OBL09-3:U1	9/21/09-9/22/09	1,037	40	0.25	360	225
U2	OBL09-3:U2	9/21/09-9/22/09	1,440	40	0.25	360	270
D1	OBL09-3:D1	9/21/09-9/22/09	1,440	40	0.25	360	347
D2	OBL09-3:D2	9/21/09-9/22/09	1,224	40	0.25	360	266
D3	OBL09-3:D3	9/21/09-9/22/09	1,440	40	0.25	360	361

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	OBL09-3:F1	9/22/2009	10	30	1.0	10	10.19
M2	OBL09-3:M2	9/22/2009	10	30	1.0	10	10.03
M4	OBL09-3:M4	9/22/2009	10	30	1.0	10	10.04
M5	OBL09-3:M5	9/22/2009	10	30	1.0	10	10.34
M6	OBL09-3:M6	9/22/2009	10	30	1.0	10	10.04
M9 (10')	OBL09-3:M9(10)	9/22/2009	10	120	1.0	10	10.07
M9 (20')	OBL09-3:M9(20)	9/22/2009	10	240	1.0	10	10.79
M9 (30')	OBL09-3:M9(30)	9/22/2009	10	360	1.0	10	10.83
M9 (40')	OBL09-3:M9(40)	9/22/2009	10	480	1.0	10	10.11
M13	OBL09-3:M13	9/22/2009	10	30	1.0	10	10.93
M16	OBL09-3:M16	9/22/2009	10	30	1.0	10	10.16
M21	OBL09-3:M21	**WELL NOT SAMPLED DUE TO INACCESSIBILITY CAUSED BY CONCRETE WALL**					
M22	OBL09-3:M22	9/22/2009	10	30	1.0	10	10.16
M28	OBL09-3:M28	9/22/2009	10	30	1.0	10	10.16
M31	OBL09-3:M31	9/22/2009	10	30	1.0	10	10.20
M34	OBL09-3:M34	9/22/2009	10	30	1.0	10	10.24
M37	OBL09-3:M37	9/22/2009	10	30	1.0	10	10.08
M39	OBL09-3:M39	9/22/2009	10	30	1.0	10	10.08

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 approximately 75 feet southwest of the southwestern corner of the RAP building.

D3: Ambient downwind sampler was located on a landfill haul road approximately 400 feet east of Claremont Road.

[2] Corrected to standard conditions; 25° C and 29.92 in. Hg.

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 has replaced each of the multi-port flow splitters used in earlier programs with two (2) connected single port flow splitters to allow for more stable sampling at lower flow rates. A Supelco low flow rotameter was also installed in-line, downstream of the sorbent cartridges, prior to the flow controller and SKC pump inlet. The constant flow controller was 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 constant-flow controller port was adjusted to register the desired 0.25 Lpm flow rate on the in-line rotameter. The remaining constant-flow controller port was adjusted to maintain the total flow to the SKC sampling pump within the pump operating range. This would allow 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.

It is worth noting that flows for this third quarter sampling effort dropped below the desired flow rate, particularly sampler D2, and fluctuated similar, but not as severely as during the second quarter tests although samplers U1 and D2 were plagued with flow fault issues. It is hypothesized that dirt, moisture and/or small foreign objects, such as pebbles, could have been sucked into the flow splitter and obstructed the ambient air flow. RTP has outfitted the samplers with particulate filters in order to filter air going into the splitter so that particulates such as large dirt particles and small foreign objects cannot obstruct the flow of ambient air into the samples during future quarterly efforts. Back pressures across the media were slightly elevated during this sampling period; however, the filters may not necessarily be the cause. RTP has since had several sampling pumps repaired/recalibrated and will continue to monitor the samplers for any potential flow issues.

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, 1.5 ppm and 1.4 ppm at the initiation of sampling at U1/2, D1/2 and D3, respectively; therefore, flow rates were initially set at 0.25 Lpm for all ambient samplers. These flow rates would achieve the desired range in sample volumes necessary for analytical sensitivity requirements over the 24-hour period. The sampling volumes recorded during the third quarter 2009 were mostly within the acceptable range with the exception of upwind sample U1, which fell below the 75% collection scope due to pump faults and low flow volumes. Likewise, the

decrease in the flows recorded during the sampling period caused U2 and D2 samplers to be significantly below the desired volume captured.

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. During these periodic checks, smoke from activities at the Nassau County Fire Service Academy were noted roughly around 10:40 AM (1040 hours) at the upwind station and at around 10:45 AM (1045 hours) at the collocated downwind sampler location (D1/2). Samplers U2, D1 and D3 ran continuously for the total 24-hour sampling period, but samplers U1 and D2 were unable to run for the full sampling period due to equipment failures at both locations. 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^{o}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 were measured using a PID before and after the soil gas test at all of the 17 soil gas wells sampled during the third quarter testing period. Results of the PID readings are reported in the chronology 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 third quarter sampling period due to the construction of a wall along Claremont Road back in 2003 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. Due to some sampling inconsistencies and insect intrusion during the previous quarterly tests, soil gas wells M13, M34 and M37 were reset for this third quarter test of 2009.

RTP has developed a general 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. After extracting the stagnant well gas, a well concentration reading was taken with the PID just prior to sampling (ambient VOC concentrations are also typically measured using the PID at this time). 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.

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The sampling pumps during soil gas sample collection were nominally set at a rate of 1.0 Lpm and run for 10 minutes at each well site. 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. As stated earlier, initial and final VOC measurements were recorded from all of the 17 wells, both in the ambient air and inside the well. Ambient VOCs and well VOCs were measured at 0.0 ppm at some locations, although some locations measured small levels of VOCs. These readings could also be caused by moisture in the wells which was possible since rain had occurred within days prior to the test.

A few atypical conditions were present during this third quarter sampling effort. Additionally, smoke was noted near soil gas well M5 related to FSA activities at roughly 9:00 AM (0900 hours) and at the upwind sampling location around 10:40 AM (1040 hours). Also, a sticky, gel-like substance was discovered on the end of the probe after being pulled up from sampling soil gas wells M16 and M39. In addition, soil gas well M13 needed to be pulled up and reset. The well was repaired and capped by Town staff with electrical tape. RTP also noted the tape was odorous. A site specific description of the events which occurred at these respective wells is provided in the chronology (Appendix B).

During the second quarter test of 2009, RTP noted that the PID may have been experiencing slight drift rather than recording actual detected concentrations. It was suspected that there may have been a loose connection. During this third quarter test, the PID may have indeed been drifting slightly; however, the abnormally high readings recorded, particularly at soil gas wells M16, M22, M28, M31, M34, M37 and M39, do not appear to be the result of drift. In previous tests, the PID monitor appeared to be reacting to the level of humidity present in the soil gas well, and this may again be the case during the third quarter since high VOC levels were not reported in the laboratory data from these sites. RTP will continue to monitor these PID readings in the future for suspected inaccuracies. Despite this minor inconsistency, the rest of the results seem fairly typical when compared to previous efforts in 2008 and 2009. As previously stated, the results are reported in Appendix B.

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 gas chromatograph-mass spectrographic (GC/MS) analytical services to 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/Charcoal (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.

New 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 third quarter sampling effort. This decision was based on recommendations from an USEPA 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 QA/QC purposes. In addition, RTP recommended a separate front and back cartridge analysis of ambient samples U2, D2 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 2009 third quarter sampling event at the Old Bethpage Landfill, the ambient air concentrations at selected sites were monitored for 24 consecutive hours on September 21 and 22, 2009. The sites have been

identified and the monitoring and analytical methods were discussed in preceding sections of this report. Laboratory analytical results provided as mass 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 December 2009).

A total of seven (7) TCL constituents exceeded the level of their assigned AGC values as shown in Table 4.1. Compounds include: benzene, carbon tetrachloride, chloroform, 1,4-dichlorobenzene (p) and 2/4-ethyltoluene, tetrachloroethene and trichloroethene. Benzene, carbon tetrachloride, chloroform and 2/4-ethyltoluene exceeded their respective AGC guideline values in all five (5) ambient samples. 1,4-dichlorobenzene (p) and trichloroethene exceeded their assigned respective AGC standards at all ambient samples except U1. Tetrachloroethene exceeded its assigned AGC standard at samples D1 and D2. The Interim AGC value of 0.1 µg/m^3 for 2/4-ethyltoluene were assigned based on the Moderate Toxicity de minimis concentration, as per NYSDEC DAR-1 policy. One (1) TIC, C3 substituted benzene, was detected in excess of its respective AGC guideline value at upwind sample U2. 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.

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. 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

TABLE 4.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

THIRD QUARTER 2009

	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)	0.0222	0.0370	0.0144	0.0376	0.0277	5	5		
PRACTICAL QUANTITATION LIMIT (PQL)	0.0356	0.0593	0.0231	0.0602	0.0443	8	8		
TARGETED TIC LQL	0.1111	0.1852	0.0720	0.1880	0.139	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]	0.28	0.30	0.35	0.45	0.33			28,000	180,000
Benzaldehyde[3]								0.10	----
Benzene	**0.38**	**< 0.57**	**0.43**	**< 0.58**	**< 0.46**			0.13	1,300
Bromodichloromethane								0.02	---
Bromoform[2]								0.91	---
Bromomethane								5.00	3,900
2-Butanone[2]	0.20	< 0.23	0.58	0.57	0.37			5,000	13,000
Carbon Disulfide								700	6,200
Carbon Tetrachloride	**0.71**	**0.49**	**0.58**	**0.53**	**0.39**			0.067	1,900
Chlorobenzene								110	---
Chloroethane								10,000	---
Chloroethyl Vinyl Ether[3]								0.10	----
Chloroform	**0.12**	**0.15**	**0.11**	**0.14**	**0.10**			0.043	150
Chloromethane	0.05	< 0.06	0.03	< 0.06	< 0.04			90	22,000
Dibromochloromethane								0.10	---
1,2-Dichlorobenzene (o)								360	30,000
1,3-Dichlorobenzene (m)								360	30,000
1,4-Dichlorobenzene (p)	0.07	**< 0.11**	**0.12**	**< 0.15**	**0.15**			0.09	---
1,1-Dichloroethane			0.02					0.63	---
1,2-Dichloroethane								0.038	---
1,1-Dichloroethene			0.06	< 0.11	< 0.06			70	---
cis-1,2-Dichloroethene			0.21	0.34	0.20			63	---
trans-1,2-Dichloroethene								63	----
1,2-Dichloropropane								4.0	----
1,3-Dichloropropene, cis & trans isomers								0.25	---
Ethylbenzene	0.20	< 0.36	0.29	< 0.38	< 0.35			1,000	54,000
2/4-Ethyltoluene (total)	**0.62**	**< 0.98**	**0.84**	**< 1.00**	**< 0.96**			0.10	----
Freon 13[3]								1,000	68,000
2-Hexanone[2]								48	4,000
Methylene Chloride	0.19	0.46	0.22	0.45	0.32	43		2.10	14,000
4-Methyl-2-Pentanone[2]			0.07	< 0.09	< 0.09			3,000	31,000
Styrene								1,000	17,000
1,1,2,2-Tetrachloroethane								16	---
Tetrachloroethene	0.24	< 0.54	**1.10**	**< 1.33**	< 0.84			1.00	1,000
Toluene	1.07	< 1.98	1.47	< 2.09	< 1.81			5,000	37,000
1,1,1-Trichloroethane			0.20	< 0.17	< 0.11			1,000	68,000
1,1,2-Trichloroethane								1.40	---
Trichloroethene	0.15	**< 0.76**	**4.32**	**4.97**	**< 3.89**			0.50	14,000
Trichlorofluoromethane	0.93	0.90	0.84	0.98	0.80			1,000	68,000
Vinyl Chloride								0.11	180,000
Xylenes (Total)	0.93	< 1.61	1.30	< 1.67	< 1.51			100	4,300
Decane[3]	0.17	< 0.37	0.24	< 0.36	< 0.37			700	---

TABLE 4.1
Continued

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

AMBIENT AIR VOST SAMPLE RESULTS

THIRD QUARTER 2009

SAMPLE TYPE	24-HR AMBIENT AIR SAMPLE					BLANK		CURRENT	24-HOUR
SAMPLE IDENTIFICATION (1)	U1	U2	D1	D2	D3	FB3	TB1	AGC	SGC[4]
ADDITIONAL TIC LQL	0.111	0.185	0.072	0.188	0.139	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	3.19	2.36	2.78	2.63			4,200	350,000
Branched Alkane (DEL)	1.29	3.89		2.29	< 0.68			---	---
C3 subst. Benzene				**< 0.77**	**< 0.73**			0.13	1,300
2-Methyl-butane	1.20	2.30	1.99	< 1.56	< 1.04			42,000	---
Hexane	1.33	< 3.57	2.45	< 3.40	< 3.67			700	---
alpha-Pinene isomer (RT: 11.85-12.08)			1.44	< 1.48	< 0.96			270	---
Isobutane		< 0.94		< 0.73				57,000	---
Dichlorodifluoromethane	1.11	< 1.43		< 0.92	< 0.82	31.0		12,000	---
1,1-Dichloro-1-fluoroethane					< 0.82			---	---
Unknown (RT: 3.31-15.49)	1.38	1.89	1.59	1.50	< 0.68			---	---
2-Methyl-Hexane	0.84	< 2.35	1.44	< 2.09	< 2.26			---	---
Butane			0.98	< 0.96	< 0.68			57,000	---
Ethane, 1-chloro-1, 1-difluoro-					< 0.87			---	---

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 December 2009) 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 approximately 200 feet west of Round Swamp Road.

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

D3: Ambient downwind sampler was located on a landfill haul road approximately 400 feet east of Claremont 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 December 2009) 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

monitoring events. The concentration of dichlorodifluoromethane detected in the ambient field blank is relatively small., although it signals a very minor degree of contamination may have been present. It is unknown if the contamination was present on the media prior to sampling commenced, was caused by handling during the test, or was the result of laboratory contamination. 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. It is difficult to quantify the difference between the concentrations detected on the blank samples that may be caused by laboratory contamination and the concentrations that may be associated with OBSWDC 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 were placed on the front trap to avoid influencing the sample minimum detection limit (MDL).

From the ambient data collected during the 2009 third 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 showed that only two (2) of the compounds sampled, 2/4 ethyltoluene and trichloroethene, exceeded their current AGC values after subtracting the upwind concentrations from the downwind concentrations. For compounds that were detected in some ambient samples but not all, the net VOC impact analysis included the LQL to calculate the average value rather than using “non-detection” or zero (0).

In 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), the net concentrations of 2/4 ethyltoluene and trichloroethene continued to demonstrate an exceedance when comparing the concentrations of downwind sample D3 and D1/2 individually to the average concentrations of upwind samples U1/2. Once again, it is worth noting that many of the concentrations detected in the upwind samples, particularly U2, are the same, if not slightly higher, than the concentrations detected in the collocated downwind samples D1/2 and the downwind sample D3. Therefore, the bulk of these concentrations are not necessarily attributed to the landfill, but considered to be the impact from background sources since winds during the evening would have caused sources north and east of the landfill to affect the upwind site significantly.

The results indicated few inconsistencies between concentrations of certain compounds when comparing the results between collocated samples (comparing U1 to U2 and comparing D1 to D2). Due to flow faults, the

run time between U1 and U2 and D1 and D2 was different, and therefore, could be attributed to the differences in compound concentration detected in the collocated samples, particularly with the upwind samples. The presence and concentration of various TICs were slightly varied from D1 to D2, as well as from U1 to U2. In addition to the run time inconsistency, this could most likely be attributed to the split sample in U2 and D2 reporting up to 12 separate TICs rather than the un-split U1 and D1 reporting a maximum of roughly 6 TICs. U1 also recorded lower levels than U2 because of a flow fault that caused more than 6 hours of lost data during the evening hours. D2 was also off due to a flow fault for 3 hours during the same period. Most notably, samples D2 and D3 detected the TIC C3 substituted benzene in excess of its assigned AGC standard, but the compound was not detected in sample D1. 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 third quarter test were lower than the 2009 first and second quarter test. The difference between concentrations detected in the previous sampling effort versus the current test results may be due to a combination of the variation in run time and the period of light winds overnight. Even though the perimeter system and thermal oxidizer were not completely operational, there were no major differences in concentrations reported in the third quarter test that would appear to be the result of perimeter gas wells effects.

4.2 Soil Gas Concentrations

Soil gas concentrations were monitored on September 22, 2009 at all soil gas well sites identified in the Consent Decree except for well M21, which was not tested due to the continued inaccessibility to 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 is currently no State or Federal guidelines for permissible soil gas concentrations of VOCs; however, New York State is presently 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, four (4) target VOCs (chloroform, methylene chloride, tetrachloroethane and trichloroethene) were measured in excess of the level of their respective ambient air AGC value at one or

TABLE 4.2

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
THIRD QUARTER 2009

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	FB1	Current	Current
LOWER QUANTITATION LIMIT (LQL)	0.491	0.499	0.498	0.484	0.498	0.497	0.463	0.923	0.495	5	AGC	SGC
PRACTICAL QUANTITATION LIMIT (PQL)	0.785	0.798	0.797	0.774	0.797	0.794	0.741	1.477	0.79	8	---	---
TARGETED TIC LQL	2.45	2.49	2.49	2.42	2.49	2.48	2.32	4.62	2.47	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*	1.57		1.69	1.16	1.29	0.99	2.97	2.59	1.38		28,000	180,000
Benzaldehyde**											0.10	----
Benzene											0.13	1300
Bromodichloromethane											0.02	---
Bromoform*											0.91	---
Bromomethane											5.00	3900
2-Butanone*							1.67	< 1.48			5000	13,000
Carbon Disulfide											700	6200
Carbon Tetrachloride											0.067	1,900
Chlorobenzene											110	---
Chloroethane											10,000	---
Chloroethyl Vinyl Ether**											0.10	----
Chloroform				**0.68**		**0.99**	**0.83**	**< 1.11**	**0.59**		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	1.37	1.50	1.49	1.26	0.80	0.99	1.11	**5.08**	1.29	44	2.10	14,000
4-Methyl-2-Pentanone*											3,000	31,000
Styrene											1,000	17,000
1,1,2,2-Tetrachloroethane											16	---
Tetrachloroethene	**4.81**	0.70	**1.20**	**5.61**	**1.39**	**11.92**	**12.05**	**< 18.93**	**69.24**		1.00	1,000
Toluene											5,000	37,000
1,1,1-Trichloroethane							0.65		0.89		1,000	68,000
1,1,2-Trichloroethane											1.40	---
Trichloroethene	**0.59**	**1.30**					**0.65**	**< 2.31**	**2.27**		0.50	14,000
Trichlorofluoromethane	1.57	1.30	1.29	1.45	1.39	3.38	3.34	2.77	3.36		1,000	68,000
Vinyl Chloride											0.11	180,000
Xylenes (Total)											100	4,300
Decane**											700	---

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 2009

SOIL GAS WELL ID	F1	M2	M4	M5	M6	M9(10)	M9(20)	M9(30)	M9(40)	FB1	Current	Current
ADDITIONAL TIC LQL	2.45	2.49	2.49	2.42	2.49	2.48	2.32	4.62	2.47	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)
2-Methyl-butane											42,000	---
Ethane, 1,1-difluoro-											40,000	---
Unknown siloxane (RT: 13.96-13.98)	3.14										---	---
alpha-Pinene isomer (RT: 11.85-12.08)											270	---
Isobutane											57,000	---
Dichlorodifluoromethane	2.65					3.77	5.00	< 10.43	10.88		12,000	---
1,1-Dichloro-1-fluoroethane											---	---
beta-Pinene isomer (RT:12.91-13.02)											95	6,000
Undecane											---	---
Unknown (RT: 3.31-15.49)											---	---
Dichlorotetrafluoroethane								< 6.65	13.85		17,000	---
Ethane, 1,1,2-trichloro-1,2,2-triflu									5.34		180,000	960,000
Butane											57,000	---
Dimethyl sulfide											---	---
Limonene Isomer											3,400	---
Octenal, dimethyl-isomer	7.56										3,000	---

TABLE 4.2
(Continued)

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SOIL GAS VOST SAMPLE RESULTS
THIRD QUARTER 2009

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	FB2	Current AGC	Current SGC
LOWER QUANTITATION LIMIT (LQL	0.457	0.492	-	0.492	0.492	0.490	0.488	0.496	0.992	5		
PRACTICAL QUANTITATION LIMIT (PQL	0.732	0.787	-	0.787	0.787	0.78	0.781	0.794	1.587	8		
TARGETED TIC LQL	2.29	2.46	-	2.46	2.46	2.45	2.44	2.48	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*		0.89		0.89	1.08	1.27	1.07	47.62	< 1.69		28,000	180,000
Benzaldehyde**											0.10	----
Benzene											0.13	1300
Bromodichloromethane											0.02	---
Bromoform*											0.91	---
Bromomethane											5.00	3900
2-Butanone*								2.38			5000	13,000
Carbon Disulfide											700	6200
Carbon Tetrachloride											0.067	1,900
Chlorobenzene											110	---
Chloroethane											10,000	---
Chloroethyl Vinyl Ether**											0.10	----
Chloroform	**2.56**	**4.43**			**0.59**			**9.33**	< **2.28**		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	1.01	0.98		0.98	2.07	0.98	0.88	1.19	**4.66**	46	2.10	14,000
4-Methyl-2-Pentanone*											3,000	31,000
Styrene											1,000	17,000
1,1,2,2-Tetrachloroethane											16	---
Tetrachloroethene	**10.06**	**15.75**		0.89	0.59	0.69	**1.07**	**1.79**	< **30.26**		1.00	1,000
Toluene											5000	37,000
1,1,1-Trichloroethane	0.82	0.69									1,000	68,000
1,1,2-Trichloroethane											1.40	---
Trichloroethene	**0.73**										0.50	14,000
Trichlorofluoromethane	1.56	2.66		1.08	1.08	1.27	1.46	1.39	1.98		1000	68,000
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
THIRD QUARTER 2009

SOIL GAS WELL ID	M13	M16	M21	M22	M28	M31	M34	M37	M39	FB2	Current	Current
ADDITIONAL TIC LQL	2.29	2.46	-	2.46	2.46	2.45	2.44	2.48	4.96	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)
2-Methyl-butane								2.88			42,000	---
Ethane, 1,1-difluoro-						15.69		11.90			40,000	---
Unknown siloxane (RT: 13.96-13.98)								4.17	< 5.06		---	---
alpha-Pinene isomer (RT: 11.85-12.08)	72.64										270	---
Isobutane								10.91			57,000	---
Dichlorodifluoromethane									< 5.56		12,000	---
1,1-Dichloro-1-fluoroethane								3.37			---	---
beta-Pinene isomer (RT:12.91-13.02)	93.32										95	6,000
Undecane	10.98										---	---
Unknown (RT: 3.31-15.49)	164.68	3.54									---	---
Dichlorotetrafluoroethane											17,000	---
Ethane, 1,1,2-trichloro-1,2,2-triflu											180,000	960,000
Butane								6.55			57,000	---
Dimethyl sulfide								3.87			---	---
Limonene Isomer	14.64										3,400	---
Octenal, dimethyl-isomer											3,000	---

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 December 2009) 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

more soil gas well locations. Chloroform was measured in excess of its respective ambient air AGC value at all soil gas wells except F1, M2, M4, M6, M22, M31 and M34. Methylene chloride was measured in excess of its current AGC standard at soil gas wells M9(30), and M39. Tetrachloroethane was measured in excess of its respective ambient air AGC value at all soil gas wells except M2, M22, M28 and M31; and finally, trichloroethene exceeded its respective ambient air AGC standard at F1, M2, M9(20), M9(30), M9(40) and M13. 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 SGC guideline values. The detections of methylene chloride and acetone are likely, for the most part, 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 most 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. Tetrachloroethane, trichloroethene and the TIC dichlorodifluoromethane, consistently increased in concentration with an increase in well depth. When comparing the results of various compounds at M9(40) from this third quarterly test of 2009 with the first quarter test, concentrations are relatively similar with some compounds increasing and some decreasing. It appears that tetrachloroethane has been increasing from the values detected in 2008 over the past several efforts; however, when comparing historical data, it appears that the concentrations are less than previously noted. RTP will continue to monitor this trend for any increases in future quarterly efforts.

Some LQLs exceeded the value of respective AGC levels; 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 (0.992 µg/std-m^3) or PQL (1.587 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.

The soil gas wells TCL that exceeded the level of their respective ambient air AGCs during the 2009 third quarter were similar to those of previous quarterly tests. RTP continued to note a decrease in the variety of TICs were noted from the soil gas results. Many of the soil gas samples did not even detect TICs. RTP will continue to monitor the TIC variety detected between soil gas well locations for any abnormalities.

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 in soil gas samples can truthfully be documented. As stated, soil gas concentrations from most wells sampled were slightly less as compared to the first and second quarter test in 2009.

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 0.0-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. All pressure wells were tested on September 22, 2009 from 7:38 AM (0738 hours) to 8:27 AM (0827 hours). Zero pressure levels were recorded for all pressure wells at 10-foot depths. Negative pressure readings were recorded for all 20-foot depths during this third quarter test of 2009. These results are consistent with the operation of the perimeter system.

6.0 SUMMARY AND CONCLUSIONS

The 2009 third quarter ambient air, soil gas and soil gas pressure monitoring event was performed by RTP on September 21 and 22, 2009. The ambient air quality for VOCs 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 seven (7) constituents on the program TCL exceeded the level of their respective ambient air AGCs or assigned Interim AGC values at the upwind and downwind locations. These compounds included: benzene, carbon tetrachloride, chloroform, 1,4-dichlorobenzene (p), 2/4-ethyltoluene (total), tetrachloroethene and trichloroethene. Only one (1) TIC, C3 substituted benzene, exceeded the level of its

TABLE 5.1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF SOIL GAS PRESSURE TESTS

THIRD QUARTER 2009

SAMPLE ID	DATE (mm/dd/yy)	TIME (EDT)	WELL ID	WELL LOCATION	WELL DEPTH (feet)	READINGS (INCHES H2O)
P1	09/22/09	7:45 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P2	09/22/09	7:45 AM	PW1	NW corner of the landfill on Haul Road	20	-0.02
P3	09/22/09	7:46 AM	PW1	NW corner of the landfill on Haul Road	10	0.00
P4	09/22/09	7:46 AM	PW1	NW corner of the landfill on Haul Road	20	-0.03
P5	09/22/09	7:38 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P6	09/22/09	7:38 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.07
P7	09/22/09	7:40 AM	PW2	SE corner of the landfill NW of Well M2	10	0.00
P8	09/22/09	7:40 AM	PW2	SE corner of the landfill NW of Well M2	20	-0.07
P9	09/22/09	8:26 AM	PW3	Nassau County Fire Service Academy	10	0.00
P10	09/22/09	8:26 AM	PW3	Nassau County Fire Service Academy	20	-0.06
P11	09/22/09	8:27 AM	PW3	Nassau County Fire Service Academy	10	0.00
P12	09/22/09	8:27 AM	PW3	Nassau County Fire Service Academy	20	-0.06

NOTES:

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

respective ambient air AGCs.

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. No measured values exceeded their respective SGC values. Looking at the net impact values (averaged downwind concentrations minus averaged upwind concentrations) for the third quarter test, it appears the landfill had very little or no impact on the constituents that exceeded AGC values. In general, VOC concentrations in the ambient air for the third quarter test were slightly lower when compared to the second quarter test of 2009.

On-site meteorological data from atop of the landfill and upwind of the landfill were recorded for use in this analysis. The meteorological station upwind of the landfill collected some data that was inconsistent with other on-site data due to a drainage wind flow pattern and a period of light to calm winds. The data collected from atop the landfill was considered representative of the overall site. The sampling period was characterized by a strong temperature inversion that occurred between 2100 on September 21st and lasted until 0900 hours the following morning.

Based on the observed concentrations for the third quarter 2009, off-site sources are likely the primary sources of most of the compound concentrations detected at both the upwind and downwind locations. Again, the exceedances of 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 2009 third quarter have decreased slightly when compared to the second quarter test of 2009.

Additionally, TIC detections for this quarter also seem to have varied less from well to well than in the past several efforts conducted in 2008. No target or tentatively identified compound in the soil gas exceeded the level of their respective ambient air SGC guideline values. RTP will continue to monitor the results from the quarterly efforts of 2009 to see if any trends are noted. Generally, soil gas concentrations from all wells sampled were slightly less as compared to the first and second quarter test of 2009.

During this third quarter test, there were several occurrences that could have contributed additional pollutants to the samples. Activity at the Nassau County Fire Service Academy was noted during testing at soil gas wells and at the upwind sampler location. Abnormally high PID concentrations were also detected at several soil gas wells during this third quarter test. Although only minor observances of abnormally high target compound and TIC concentrations were noted, particularly unknown compounds and beta-Pinene isomer concentrations in M13, other recorded concentrations were fairly typical compared to past sampling efforts. This suggests the PID readings were likely caused by high humidity levels in many of the wells tested.

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 this compound. Methylene chloride (and acetone) is a known laboratory contaminant 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 tested on September 22, 2009 from 7:38 AM (0738 hours) to 8:27 AM (0827 hours). Zero pressure levels were recorded for all pressure wells at 10-foot depths. Negative pressure readings were recorded for all 20-foot depths during this third quarter test of 2009. These results are consistent with the operation of the perimeter system.

A summary of the 2009 third quarter ambient, soil gas and pressure well quarterly monitoring results will be provided in the annual report at the conclusion of the 2009 monitoring program.

APPENDIX A

METEOROLOGICAL MONITORING DATA

Table A-1

TOWN OF OYSTER BAY
OLD BETHPAGE SOLID WASTE DISPOSAL COMPLEX

SUMMARY OF ATOP METEOROLOGICAL DATA

THIRD QUARTER 2009
(September 21 and 22, 2009)

DST (HH:MM)	MWS (MPH)	MWD (Degrees)	SDWD (Degrees)	TEMP (Deg F)	RH (%)	PRESS (in. Hg)	PRECIP (in.)
16:00	8.2	189.1	18.0	70.1	67.9	30.00	0.0
17:00	7.9	186.3	17.0	69.2	70.8	30.00	0.0
18:00	6.9	182.2	14.5	67.8	74.6	29.97	0.0
19:00	3.6	175.0	15.3	66.5	79.1	30.00	0.0
20:00	3.2	159.3	12.6	64.9	84.6	30.03	0.0
21:00	2.9	135.6	8.4	64.2	87.9	30.00	0.0
22:00	2.7	135.1	12.8	63.9	89.1	30.03	0.0
23:00	2.2	100.2	27.1	63.2	89.9	30.03	0.0
0:00	2.2	89.0	16.4	62.9	90.6	30.03	0.0
1:00	2.0	112.3	22.1	63.6	89.7	30.00	0.0
2:00	2.5	59.1	26.3	62.6	91.2	30.00	0.0
3:00	2.1	47.1	16.4	63.0	92.0	30.00	0.0
4:00	1.4	55.1	36.4	64.2	91.2	30.00	0.0
5:00	1.1	142.7	70.3	64.9	90.1	30.00	0.0
6:00	1.2	92.7	84.0	64.2	91.1	30.03	0.0
7:00	1.7	62.4	41.1	64.3	91.3	30.03	0.0
8:00	2.2	53.5	13.9	64.8	91.0	30.03	0.0
9:00	3.0	161.7	39.7	68.1	86.8	30.03	0.0
10:00	5.2	206.2	15.3	69.7	81.8	30.03	0.0
11:00	5.7	204.9	18.6	71.1	78.4	30.03	0.0
12:00	6.6	188.1	21.1	72.0	72.2	30.03	0.0
13:00	6.5	183.3	21.9	72.5	70.9	30.03	0.0
14:00	6.3	194.5	19.0	72.8	67.3	30.00	0.0
15:00	6.0	186.9	18.9	72.3	65.9	30.00	0.0

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

THIRD QUARTER 2009
(September 21 and 22, 2009)

DST (HH:MM)	MWS (MPH)	MWD (Degrees)	SDWD (Degrees)	TEMP (Deg F)	RH (%)	PRESS (in. Hg)	PRECIP (in.)
16:00	5.9	193.4	33.0	71.5	62.6	30.22	0.0
17:00	5.2	187.9	38.1	70.8	65.5	30.22	0.0
18:00	4.2	183.5	40.0	69.0	70.6	30.22	0.0
19:00	2.2	160.5	45.0	66.7	77.1	30.22	0.0
20:00	0.8	233.6	101.8	62.5	88.7	30.23	0.0
21:00	0.6	88.5	82.2	60.1	94.9	30.23	0.0
22:00	0.5	*MD*	53.7	58.9	96.8	30.24	0.0
23:00	0.5	117.1	59.7	58.1	97.4	30.24	0.0
0:00	0.7	22.8	34.3	59.2	97.8	30.23	0.0
1:00	0.6	309.0	81.0	59.6	97.7	30.23	0.0
2:00	0.9	52.7	81.4	59.4	97.6	30.22	0.0
3:00	0.8	348.4	24.7	59.4	97.8	30.22	0.0
4:00	0.7	348.8	12.0	60.8	97.6	30.22	0.0
5:00	0.8	43.7	88.0	61.3	97.4	30.22	0.0
6:00	1.0	185.9	66.4	61.2	97.4	30.23	0.0
7:00	0.8	26.0	71.6	61.9	97.4	30.23	0.0
8:00	0.7	327.6	68.8	62.4	97.3	30.23	0.0
9:00	2.2	209.3	30.8	67.3	90.2	30.23	0.0
10:00	4.8	197.3	21.2	69.8	79.4	30.24	0.0
11:00	4.9	198.8	23.3	71.3	75.2	30.24	0.0
12:00	4.2	190.5	38.2	73.1	68.4	30.23	0.0
13:00	4.2	186.0	35.0	73.8	66.2	30.22	0.0
14:00	4.6	191.4	29.0	73.8	62.4	30.21	0.0
15:00	4.0	189.2	30.6	73.1	62.1	30.19	0.0

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.
MD: Missing Data

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 2009 third quarter test effort. The following discussion provides a chronology of events during this quarterly test event.

The samplers for location U1/2 were collocated on the 15th hole Fairway of the Bethpage State Black Golf Course approximately 150 feet west of Round Swamp Road. Both units were assembled at the RTP Westbury office, transported to the monitoring sites and U1/2 were started at 3:07 PM (1507 hours) and 3:03 PM (1503 hours), respectively, on September 21, 2009. Upwind samplers U2 ran until 1503 hours and on September 22, 2009 for a total of 1,440 minutes (100% of the 24-hour sampling period), respectively. Upwind sampler U1 ran for 537 minutes before failing at around 0009 hours on September 22nd. It was restarted at 0110 hours and ran for an additional 3 minutes before failing again. The pump was replaced with Pump R6 at 0648 hours and the sampler was restarted and ran continuously for the remainder of the sampling period (496 minutes). Sampler U1 ran for a total of 1037 minutes (72% of the sampling period). Six (6) site inspections were performed for sampler U1 and sampler U2 over the sampling period where several adjustments were made to the flow meters to maintain the optimum flow rate for the collection of samples. 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 approximately 75 feet southwest of the southwestern corner of the RAP building. Samplers D1/2 were assembled as above and were started at 2:55 PM (1455 hours) and 2:56 PM (1456 hours), respectively, on September 21, 2009. Downwind sampler D1 ran until 1455 hours on September 22, 2009 for a total of 1440 minutes (100% of the sampling period). Downwind sampler D2 ran for 743 minutes before an equipment failure caused it to shut down at 0323 hours. The sampler was restarted and ran for an additional 10 minutes before shutting down again. The pump was then replaced at 0704 hours with Pump R7and ran continuously until the conclusion of the sampling period for a total of 1221 minutes (85% of the sampling period). Seven (7) 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. Both samples 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 on a landfill haul road approximately 400 feet east of Claremont Road. This sampler was assembled as noted above and started at 3:06 PM (1506 hours) on September 21, 2009. The

sampler ran for 1,440 minutes (100% of the 24-hour sampling period). Six (6) 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 TOBOBL09-3:FB3.f&b was collected inside the RTP Westbury 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 third quarter 2009 test were collected and forwarded to the laboratory according to the protocol. Soil gas sampling was initiated at 9:05 AM (0905 hours) on September 22, 2009 and the last sample was collected at 12:00 noon (1200 hours) on that same day. The sampling procedures required 10 liter samples to be collected since no very high initial well readings were detected. Soil gas field blank TOBOBL09-3:FB1.f&b was collected at soil gas cluster well M9 and TOBOBL09-3: 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. Sampling was performed on September 22, 2009 from 0738 hours until 0827 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 a well. Sampling followed the 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 of sampling for all locations; therefore, flow rates were initially set at 0.25 Lpm for all ambient samplers.

Total well VOC concentrations were measured using a PID before and after the soil gas test at all of the 17 soil gas wells sampled during the third quarter testing period. Ambient VOCs and well VOCs were measured at 0.0 ppm at most locations, although some locations measured small levels of VOCs. Soil gas well M4 measured 0.6 ppm in both the initial and final VOC well readings. Soil gas well M5 measured 0.9 ppm in both the initial and final VOC well readings. M6 measured 0.3 ppm in the initial VOC well reading and 0.2 ppm in the final VOC well reading. Soil gas well M16 measured 23.7 ppm in the initial well VOC reading, but did not register a VOC reading at the conclusion of the soil gas test at this location. Soil gas well M22 measured 13.9 ppm in the initial and 7.0 ppm in the final VOC well reading. Soil gas well M28 measured 16.5 ppm in the initial well VOC reading and 9.3 ppm for the final well VOC reading at this location. M31 measured 8.6 ppm in the initial well VOC reading and 8.5 in the final well VOC reading. M34 measured 0.0 ppm in the initial VOC reading and 5.7 ppm in the final VOC well reading. M37 measured 589.0 ppm in the initial VOC well and 420.0 ppm in the final VOC well reading. M37 also detected a 5.0 ppm ambient VOC reading at the start of the sampling at this location and 2.0 ppm at the conclusion of the sampling in the ambient air at this location. Finally, M39 measured 30.0 ppm in the initial well VOC reading and 28.7 ppm for the final VOC well reading. VOCs were not detected at any other soil gas wells.

APPENDIX C

ANALYTICAL RESULTS

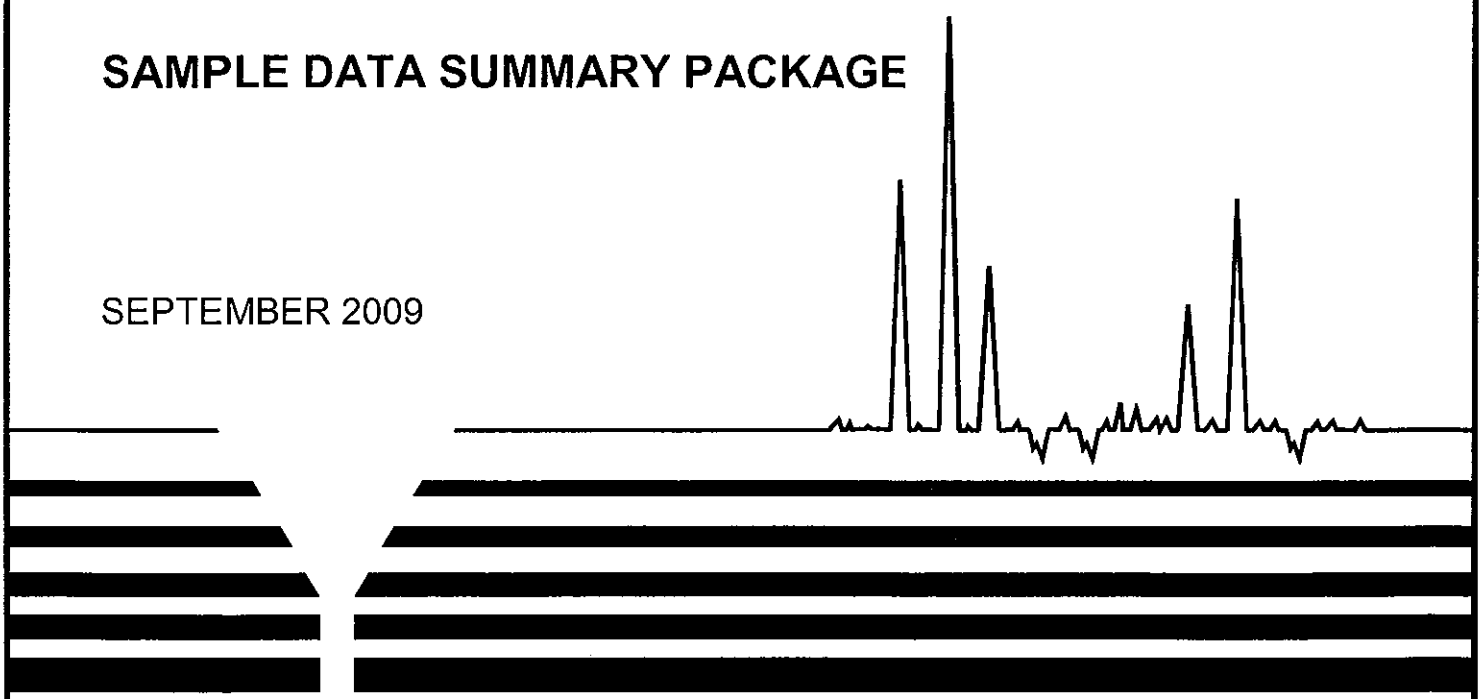
Analytical Data Package For

RTP ENVIRONMENTAL ASSOCIATES, INC.
3rd QUARTER AMBIENT AIR
SDG NO: TOY125

Air Samples
Received: 9/22/09

SAMPLE DATA SUMMARY PACKAGE

SEPTEMBER 2009



H2M LABS, INC.
Environmental Testing Laboratories
575 Broad Hollow Road, Melville, N.Y. 11747

H2M LABS, INC.

SAMPLE DATA SUMMARY PACKAGE

TABLE OF CONTENTS

RTP ENVIRONMENTAL ASSOCIATES, INC
3rd QUARTER AMBIENT AIR
AIR SAMPLES
PROJECT NO.: TOBOBL09-3
SAMPLES RECEIVED: 9/22/09
SDG NO.: TOY125

H2M LABS, INC.

1. NYS DEC SUMMARY FORMS

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: TOY125

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	MSVOA
D1.F+B	0910546-001	X
D2.B	0910546-002	X
D2.F	0910546-003	X
D3.B	0910546-004	X
D3.F	0910546-005	X
F1.F+B	0910546-006	X
FB1.F+B	0910546-007	X
FB2.F+B	0910546-008	X
FB3.F+B	0910546-009	X
M2.F+B	0910546-010	X
M4.F+B	0910546-011	X
M5.F+B	0910546-012	X
M6.F+B	0910546-013	X
M9(10).F+B	0910546-014	X
M9(20).F+B	0910546-015	X
M9(30).B	0910546-016	X
M9(30).F	0910546-017	X
M9(40).F+B	0910546-018	X
M13.F+B	0910546-019	X
M16.F+B	0910546-020	X
M22.F+B	0910546-021	X
M28.F+B	0910546-022	X
M31.F+B	0910546-023	X
M34.F+B	0910546-024	X
M37.F+B	0910546-025	X
M39.B	0910546-026	X
M39.F	0910546-027	X
U1.F+B	0910546-028	X
U2.B	0910546-029	X
U2.F	0910546-030	X

CLP (Non-CLP (Please indicate year of protocol) NYS DEC ASP B 10/95
NYS 10.23.09

TOY125 S3

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

SDG: TOY125

Laboratory Samp ID	Client Sample ID	Matrix	Analytical Protocol	Date Collected	DateRecd at Lab	Date Extracted	Date Analyzed	Extraction Method	DF	Level	Aux Cleanup
0910546-001A	D1.F+B	Air	5041	22-Sep-09	22-Sep-09		07-Oct-09		1	LOW	
0910546-002A	D2.B	Air	5041	22-Sep-09	22-Sep-09		01-Oct-09		1	LOW	
0910546-003A	D2.F	Air	5041	22-Sep-09	22-Sep-09		01-Oct-09		1	LOW	
0910546-004A	D3.B	Air	5041	22-Sep-09	22-Sep-09		02-Oct-09		1	LOW	
0910546-005A	D3.F	Air	5041	22-Sep-09	22-Sep-09		02-Oct-09		1	LOW	
0910546-006A	F1.F+B	Air	5041	22-Sep-09	22-Sep-09		05-Oct-09		1	LOW	
0910546-007A	FB1.F+B	Air	5041	22-Sep-09	22-Sep-09		01-Oct-09		1	LOW	
0910546-008A	FB2.F+B	Air	5041	22-Sep-09	22-Sep-09		01-Oct-09		1	LOW	
0910546-009A	FB3.F+B	Air	5041	22-Sep-09	22-Sep-09		01-Oct-09		1	LOW	
0910546-010A	M2.F+B	Air	5041	22-Sep-09	22-Sep-09		05-Oct-09		1	LOW	
0910546-011A	M4.F+B	Air	5041	22-Sep-09	22-Sep-09		05-Oct-09		1	LOW	
0910546-012A	M5.F+B	Air	5041	22-Sep-09	22-Sep-09		05-Oct-09		1	LOW	
0910546-013A	M6.F+B	Air	5041	22-Sep-09	22-Sep-09		05-Oct-09		1	LOW	
0910546-014A	M9(10).F+B	Air	5041	22-Sep-09	22-Sep-09		05-Oct-09		1	LOW	
0910546-015A	M9(20).F+B	Air	5041	22-Sep-09	22-Sep-09		07-Oct-09		1	LOW	
0910546-016A	M9(30).B	Air	5041	22-Sep-09	22-Sep-09		02-Oct-09		1	LOW	
0910546-017A	M9(30).F	Air	5041	22-Sep-09	22-Sep-09		02-Oct-09		1	LOW	
0910546-018A	M9(40).F+B	Air	5041	22-Sep-09	22-Sep-09		07-Oct-09		1	LOW	
0910546-019A	M13.F+B	Air	5041	22-Sep-09	22-Sep-09		05-Oct-09		1	LOW	
0910546-020A	M16.F+B	Air	5041	22-Sep-09	22-Sep-09		05-Oct-09		1	LOW	
0910546-021A	M22.F+B	Air	5041	22-Sep-09	22-Sep-09		05-Oct-09		1	LOW	
0910546-022A	M28.F+B	Air	5041	22-Sep-09	22-Sep-09		06-Oct-09		1	LOW	
0910546-023A	M31.F+B	Air	5041	22-Sep-09	22-Sep-09		06-Oct-09		1	LOW	
0910546-024A	M34.F+B	Air	5041	22-Sep-09	22-Sep-09		06-Oct-09		1	LOW	
0910546-025A	M37.F+B	Air	5041	22-Sep-09	22-Sep-09		07-Oct-09		1	LOW	
0910546-026A	M39.B	Air	5041	22-Sep-09	22-Sep-09		02-Oct-09		1	LOW	
0910546-027A	M39.F	Air	5041	22-Sep-09	22-Sep-09		02-Oct-09		1	LOW	
0910546-028A	U1.F+B	Air	5041	22-Sep-09	22-Sep-09		07-Oct-09		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
0910546-029A	U2.B	Air	5041	22-Sep-09	22-Sep-09		02-Oct-09		1	LOW	
0910546-030A	U2.F	Air	5041	22-Sep-09	22-Sep-09		02-Oct-09		1	LOW	

2. CHAIN OF CUSTODY DOCUMENTATION

TOY125

CHAIN OF CUSTODY RECORD

Page 1 of 4

RTP Environmental Associates, Inc.
400 Post Avenue, Suite 105
Westbury, NY 11590
Ph: (516) 333-4526
Fax: (516) 333-4571

Project name:	TOBOBL09-3
Project ID:	TOBOBL09-3
Project Location:	TOB Landfill
Laboratory:	H2M
Samplers: (Signature)	

Test ID	Sample ID	Matrix (A, L, S)	Date	Time	Sample Method	Sample Duration	Number of Containers	Analysis Requested	
TOBOBL09-3	U1.f	A	9/22/09	15:00	VOST	24-hr	1	0910546	-028
	U1.5						1		↓
	U2.f						1		-030
	U2.5						1		-029
	D1.f						1		-001
	D1.5						1		↓
	D2.f						1		-003
	D2.5						1		-002
	D3.f						1		-005
	D3.5					↓	1		-004
	F1.f					10 min	1		-006
	F1.5						1		↓
	M2.f						1		-010
	M2.5						1		↓
	M4.f						1		-011
	M4.5						1		↓

Relinquished by: (Signature)	Date/Time: 9/22 16:03	Received By: (Signature)	Date/Time: 9.22.9. 16:05
Relinquished by: (Signature)	Date/Time: 9.22.9 16:05	Received By: (Signature)	Date/Time: 9/22/09 16:05

Remarks:
Attn: Jennifer Arceri
TOY125 S7

Delivery Method: Drop-off

Custody Seals Intact: Yes / No

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TOY 125

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:	TOBOBL09-3
Project ID:	TOBOBL09-3
Project Location:	TOB Landfill
Laboratory:	H2M
Samplers: (Signature)	

Test ID	Sample ID	Matrix (A, L, S)	Date	Time	Sample Method	Sample Duration	Number of Containers	Analysis Requested
TOBOBL09-3	M5.f	A	9/22/09	15:00	VOST	40-min	1	0910546-012
	M5.b						1	↓
	M6.f						1	-013
	M6.b						1	↓
	M9(10).f						1	-014
	M9(10).b						1	↓
	M9(20).f						1	-015
	M9(20).b						1	↓
	M9(30).f						1	-017
	M9(30).b						1	-016
	M9(40).f						1	-018
	M9(40).b						1	↓
	M13.f						1	-019
	M13.b						1	↓
	M16.f						1	-020
	M16.b						1	↓

Relinquished by: (Signature)	Date/Time: 9/22/09 16:03	Received By: (Signature)	Date/Time: 9.22.9 16:05
Relinquished by: (Signature)	Date/Time: 9.22.9 16:07	Received By: (Signature)	Date/Time: 9/22/09 16:05

Remarks:

TOY125 S8

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Delivery Method: Drop-off

Custody Seals Intact: Yes (No)

TOY125

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: TOBOBL09-3	
Project ID: TOBOBL09-3	
Project Location: TOB Landfill	
Laboratory: H2M	
Samplers: (Signature)	

Test ID	Sample ID	Matrix (A, L, S)	Date	Time	Sample Method	Sample Duration	Number of Containers	Analysis Requested
TOBOBL09-3	M22.f	A	9/22/09	15:00	VOST	10 min	1	8260 -021
	M22.b						1	↓
	M28.f						1	-022
	M28.b						1	↓
	M01.f						1	-023
	M31.b						1	↓
	M34.f						1	-024
	M34.b						1	↓
	M37.F						1	-025
	M37.b						1	↓
	M39.f						1	-027
	M39.b					↓	1	-026
	FB1.f					"	1	-007
	FB1.b					"	1	↓
	FB2.f					"	1	-008
	FB2.b	↓	↓	↓	↓	"	1	↓

Relinquished by: (Signature)	Date/Time: 9/22 16:05	Received By: (Signature)	Date/Time: 9.22.9 16:05
Relinquished by: (Signature)	Date/Time: 9.22.9 16:05	Received By: (Signature)	Date/Time: 9/22/09 16:05

Remarks:

TOY125 S9

Delivery Method: Drop-off

Custody Seals Intact: Yes (No)

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TOY125

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:	TOBOBL09-3
Project ID:	TOBOBL09-3
Project Location:	TOB Landfill
Laboratory:	H2M
Samplers: (Signature)	

Test ID	Sample ID	Matrix (A, L, S)	Date	Time	Sample Method	Sample Duration	Number of Containers	Analysis Requested		
TOBOBL09-3	FB3.F	A	9/22/09	15:00	VOST	-	1	09105466		-009
	FB3.L					-	1			↓
	TB1.F					-	1			-031
	TB1.L					-	1			↓
							1			
							1			
							1			
							1			
							1			
							1			
							1			
							1			
							1			
							1			
							1			
							1			
							1			

Relinquished by: (Signature)	Date/Time: 9/22/16:03	Received By: (Signature)	Date/Time: 9.22.9 16:05
Relinquished by: (Signature)	Date/Time: 9.22.9 16:05	Received By: (Signature)	Date/Time: 9/22/09 16:05

Remarks:

TOY125 S10

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Delivery Method: Drop-off

Custody Seals Intact: Yes (No)

TOY 125

H2M LABS, INC.

Sample Receipt Checklist

Client Name TOY

Date and Time Received: 9/22/2009 4:05:00 PM

Work Order Number 0910546

Received by dmc

Checklist completed by _____ 9/23/09 (Signature / Date)

Reviewed by JSA (Initials) 9/28/09 (Date)

Matrix: Carrier name Hand Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Applicable ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Applicable ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Applicable ☑
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 ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked by _____

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

TOY125 S11

H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

CLIENT: TOY DELIVERABLES: B5-70D TURN AROUND TIME: 21 DAYS

SDG #: TOY125 CASE #: _____ MATRIX: AIR pH CHECK Y or (N)

REMARKS: _____

RECEIVED BY: DMC SIGNATURE: _____ DATE: 9/23/09 TIME: 16:00

SAMPLES RECEIVED 9/22/09 16:05

CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
D1.F+B	DA10546-0014	9/22/09	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				
(20) ↓	-015A				
(30).B	-016A				
↓.F	-017A				
↓ (40).F+B	-018A				
M13.F+B	-019A				
M16.F+B	-020A				

DMC 9/23/09

VOLATILE

P 0199

TOY125 S12

H2M LABS, INC.

CLIENT: TOY

SDG #: TOY 125

INTERNAL CHAIN OF CUSTODY

DATE	TIME	SAMPLE RELINQUISHED BY	SAMPLE RECEIVED BY	BOTTLE TYPE	PURPOSE OF CHANGE OF CUSTODY	INIT
9/23/09	17:00	SIGN	SIGN	VOST	ANALYSIS	
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
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VOLATILE

P 0200

TOY125 S13

H2M LABS, INC.

PAGE 2 of 2

INTERNAL CHAIN OF CUSTODY

CLIENT: TOY DELIVERABLES: 35-70D TURN AROUND TIME: 21 DAYS

SDG #: TOY125 CASE #: _____ MATRIX: AIR pH CHECK Y or N

REMARKS: _____

RECEIVED BY: DMC SIGNATURE: [signature] DATE: 9/23/09 TIME: 16:00

SAMPLES RECEIVED 9/24/09 16:05

	CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
1	M22.F+B	0910516-021A	9/22/09	VOST	1	TOY-AIR
2	M28.F+B	-022A				
3	M31.F+B	-023A				
4	M34.F+B	-024A				
5	M37.F+B (DMC 9/23)	-025A				
6	M39.B	-026A				
7	↓.F	-027A				
8	U1.F+B	-028A				
9	U2.B	-029A				
10	↓.F	-030A				
11	TB1.F+B	-031A				
12						
13						
14						
15						
16						DMC
17						9/23/09
18						
19						
20						

VOLATILE

TOY125 S14

P 0202

H2M LABS, INC.

CLIENT: TOY

SDG #: TOY125

INTERNAL CHAIN OF CUSTODY

DATE	TIME	SAMPLE RELINQUISHED BY	SAMPLE RECEIVED BY	BOTTLE TYPE	PURPOSE OF CHANGE OF CUSTODY	INIT
9/25/04	17:00	SIGN	SIGN	VOST	ANALYSIS	
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
		SIGN	SIGN			
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		SIGN	SIGN			

VOLATILE

P 0203

TOY125 S15

H2M LABS, INC.

3. SDG NARRATIVES

H2M LABS, INC.

SDG NARRATIVE FOR VOST ANALYSIS
PROJECT: 2009 AMBIENT AIR AND SOIL GAS
SAMPLES RECEIVED: 922/09
SDG #: TOY125

For Samples:

D1.F+B	FB3.F+B	M9(30).F	M34.F+B
D2.B	M2.F+B	M9(40).F+B	M37.F+B
D2.F	M4.F+B	M13.F+B	M39.B
D3.B	M5.F+B	M16.F+B	M39.F
D3.F	M6.F+B	M22.F+B	U1.F+B
F1.F+B	M9(10).F+B	M28.F+B	U2.B
FB1.F+B	M9(20).F+B	M31.F+B	U2.F
FB2.F+B	M9(30).B		

The second 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 surrogate recovery for 4-bromofluorobenzene in sample M13.F+B exceeded the Q. C. limit.

Acetone and methylene chloride were present in the method blanks. Positives for these analytes in the associated samples were flagged with the qualifier "B".

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 and acetone 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 50 ng based on the low responses for these analytes.

For the samples comprising the front tubes of the downwind or upwind samples, benzaldehyde is reported with elevated PQLs of 250 ng. due to interference by trimethylbenzene.

The QC criteria of method 5041 for SPCC compounds and CCC compounds were met for the initial and continuous calibrations (CCV). No response was obtained in the CCVs for chlorotrifluoromethane due to a bad standard mix. Any positives for that analyte are regarded estimated.

H2M LABS, INC.

SDG NARRATIVE FOR VOST ANALYSIS
PROJECT: 2009 AMBIENT AIR AND SOIL GAS
SAMPLES RECEIVED: 922/09
SDG #: TOY125

SAMPLE ANALYSIS

TIC compounds, identified as siloxanes or silanes, that are suspected to be column bleed introduced by the analytical system, were flagged with the qualifier "X".

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: October 21, 2009

****
* *
* *
****

Ursula Middel
Technical Manager

4. SAMPLE REPORTS

4.1 VOLATILES

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
D1 F&B

MATRIX : AIR

Sample ID. : 0911546-001A
Lab File ID : W2290.D
Date/Time Analyzed: 7 Oct 20 9 13:37
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		10	
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		21	
Trichlorofluoromethane		290	
Acetone		120	B
Carbon Disulfide		5	U
Methylene Chloride		78	B
2-Butanone		200	
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		74	
1,1-Dichloroethane		6	
Chloroform		38	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		70	
Carbon Tetrachloride		200	
Trichloroethene		1,500	E
Benzene		150	
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		26	
2-Hexanone		8	U
Toluene		510	
Tetrachloroethene		380	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		99	
Xylene (total)		450	
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		290	
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		42	
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		250	U
Decane		84	

TOY125 S20

1F

EPA SAMPLE NO.

D1.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-001A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2290.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/07/09

GC Column: R-502.2 ID: .53 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 7 JRR 10/19/09

CONCENTRATION UNITS:

(µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000106-97-8	Butane	1.92	340	JN
2. 000078-78-4	Butane, 2-methyl-	2.69	690	JN
3.	unknown	3.33	550	J
4. 000107-83-5	Pentane, 2-methyl-	3.86	820	JN
5. 000110-54-3	Hexane	4.31	850	JN
6. 000591-76-4	Hexane, 2-methyl-	5.41	500	JN
7.	_alpha_-Pinene isomer	12.03	500	J

TOY125 S21

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No. D2.B

MATRIX : AIR

Sample ID. : 0910546-002A
Lab File ID : W2253.D
Date/Time Analyzed: 1 Oct 20 9 23:03
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		10	
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		23	
Trichlorofluoromethane		230	
Acetone		77	B
Carbon Disulfide		5	U
Methylene Chloride		93	B
2-Butanone		11	
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		32	
1,1-Dichloroethane		5	U
Chloroform		9	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		31	
Trichloroethene		21	
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		5	U
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S22

1F

EPA SAMPLE NO.

D2.B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-002A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2253.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/01/09

GC Column: R-502.2 ID: .53 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 7 2 BM 10/19/09 CONCENTRATION UNITS: (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.36	220	JN
2. 000075-28-5	Isobutane	1.61	170	JN
3. 000106-97-8	Butane	1.89	230	JN
4. 000078-78-4	Butane, 2-methyl-	2.67	390	JN
5.	unknown	3.31	230	J
6. 000107-83-5	Pentane, 2-methyl-	3.83	140	JN
7.	branched alkane	5.82	220	J

TOY125 S23

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No. D2.F

MATRIX : AIR

Sample ID. : 0910546-003A
Lab File ID : W2254.D
Date/Time Analyzed: 1 Oct 20 9 23:40
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		30	
Acetone		42	B
Carbon Disulfide		5	U
Methylene Chloride		28	B
2-Butanone		140	
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		59	
1,1-Dichloroethane		5	U
Chloroform		27	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		41	
Carbon Tetrachloride		110	
Trichloroethene		1,300	E
Benzene		150	
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		16	
2-Hexanone		8	U
Toluene		550	
Tetrachloroethene		350	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		96	
Xylene (total)		440	
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		260	
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		34	
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		250	U
Decane		70	

TOY125 S24

1F

EPA SAMPLE NO.

D2.F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-003A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2254.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/01/09

GC Column: R-502.2 ID: .53 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: +3 BRL 10/19/09

CONCENTRATION UNITS:

(µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	3.32	170	J
2. 000107-83-5	Pentane, 2-methyl-	3.85	600	JN
3.	branched alkane	4.07	390	J
4. 000110-54-3	Hexane	4.31	880	JN
5. 000591-76-4	Hexane, 2-methyl-	5.41	530	JN
6.	_alpha_-Pinene isomer	12.04	370	J
7.	c3-subs_benzene	13.36	180	J

TOY125 S25

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No. D3.B

MATRIX : AIR

Sample ID. : 0910546-004A
Lab File ID : W2255.D
Date/Time Analyzed: 2 Oct 20 9 0:15
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		9	
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		16	
Trichlorofluoromethane		260	
Acetone		60	B
Carbon Disulfide		5	U
Methylene Chloride		84	B
2-Butanone		14	
trans-1,2-Dichloroethene		5	
cis-1,2-Dichloroethene		29	
1,1-Dichloroethane		5	U
Chloroform		10	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		31	
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		5	U
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		10	
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S26

1F

EPA SAMPLE NO.

D3.B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-004A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2255.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/02/09

GC Column: R-502.2 ID: .53 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: +3 ppm 10/14/09 CONCENTRATION UNITS: (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.39	270	JN
2. 000075-68-3	Ethane, 1-chloro-1,1-difluoro-	1.65	290	JN
3. 000106-97-8	Butane	1.91	220	JN
4. 000078-78-4	Butane, 2-methyl-	2.69	350	JN
5. 001717-00-6	1,1-Dichloro-1-fluoroethane	3.30	270	JN
6. 000107-83-5	Pentane, 2-methyl-	3.85	130	JN
7.	branched alkane	5.82	220	J

TOY125 S27

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No. D3.F

MATRIX : AIR

Sample ID. : 0910546-005A
Lab File ID : W2256.D
Date/Time Analyzed: 2 Oct 20 9 0:52
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		30	
Acetone		59	B
Carbon Disulfide		5	U
Methylene Chloride		32	B
2-Butanone		120	
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		42	
1,1-Dichloroethane		5	U
Chloroform		27	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		35	
Carbon Tetrachloride		110	
Trichloroethene		1,400	E
Benzene		160	
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		23	
2-Hexanone		8	U
Toluene		650	
Tetrachloroethene		300	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		120	
Xylene (total)		540	
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		340	
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		43	
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		250	U
Decane		110	

TOY125 S28

1F

EPA SAMPLE NO.

D3.F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-005A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2256.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/02/09

GC Column: R-502.2 ID: .53 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 7 BM 10/19/09 CONCENTRATION UNITS: (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	unknown	3.32	220	J
2. 000107-83-5	Pentane, 2-methyl-	3.84	820	JN
3. 000096-14-0	Pentane, 3-methyl-	4.06	520	JN
4. 000110-54-3	Hexane	4.30	1300	JN
5. 000591-76-4	Hexane, 2-methyl-	5.41	790	JN
6.	_alpha_-Pinene isomer	12.04	320	J
7.	c3-subs_benzene	13.37	240	J

TOY125 S29

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
F1 F&B

MATRIX : AIR

Sample ID. : 0911546-006A
Lab File ID : W2271.D
Date/Time Analyzed: 5 Oct 20 9 19:01
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		16	
Acetone		16	B
Carbon Disulfide		5	U
Methylene Chloride		14	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		6	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		6	
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		49	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S30

1F

EPA SAMPLE NO.

F1.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-006A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2271.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/05/09

GC Column: R-502.2 ID: .53 (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	1.40	27	JN
2.		unknown siloxane	13.98	32	JX
3.		Octenal,dimethyl- isomer	15.13	77	J

BPK 10/9/09

TOY125 S31

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
FB1 F&B

MATRIX : AIR

Sample ID. : 0911546-007A
Lab File ID : W2250.D
Date/Time Analyzed: 1 Oct 20 9 21:13
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		5	U
Acetone		8	U
Carbon Disulfide		5	U
Methylene Chloride		44	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		5	U
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S32

1F

EPA SAMPLE NO.

FB1.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-007A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2250.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/01/09

GC Column: R-502.2 ID: .53 (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

TOY125 S33

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
FB2 F&B

MATRIX : AIR

Sample ID. : 0911546-008A
Lab File ID : W2251.D
Date/Time Analyzed: 1 Oct 20 9 21:49
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		5	U
Acetone		8	U
Carbon Disulfide		5	U
Methylene Chloride		46	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		5	U
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S34

1F

EPA SAMPLE NO.

FB2.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-008A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2251.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/01/09

GC Column: R-502.2 ID: .53 (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

TOY125 S35

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
FB3 F&B

MATRIX : AIR

Sample ID. : 0911546-009A
Lab File ID : W2252.D
Date/Time Analyzed: 1 Oct 20 9 22:25
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		5	U
Acetone		8	U
Carbon Disulfide		5	U
Methylene Chloride		43	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		5	U
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S36

1F

EPA SAMPLE NO.

FB3.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-009A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2252.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/01/09

GC Column: R-502.2 ID: .53 (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.	000075-45-6	Methane, chlorodifluoro-	1.33	31	JN

TOY125 S37

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M2 F&B

MATRIX : AIR

Sample ID. : 0911546-010A
Lab File ID : W2272.D
Date/Time Analyzed: 5 Oct 20 9 19:36
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		13	
Acetone		8	U
Carbon Disulfide		5	U
Methylene Chloride		15	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	
Trichloroethene		13	
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		7	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S38

1F

EPA SAMPLE NO.

M2.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-010A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2272.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/05/09

GC Column: R-502.2 ID: .53 (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

TOY125 S39

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M4 F&B

MATRIX : AIR

Sample ID. : 0911546-011A
Lab File ID : W2273.D
Date/Time Analyzed: 5 Oct 20 9 20:11
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		13	
Acetone		17	B
Carbon Disulfide		5	U
Methylene Chloride		15	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		12	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S40

1F

EPA SAMPLE NO.

M4.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-011A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2273.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/05/09

GC Column: R-502.2 ID: .53 (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

TOY125 S41

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M5 F&B

MATRIX : AIR

Sample ID. : 0911546-012A
Lab File ID : W2274.D
Date/Time Analyzed: 5 Oct 20 9 20:47
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		15	
Acetone		12	B
Carbon Disulfide		5	U
Methylene Chloride		13	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		7	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		58	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S42

1F

EPA SAMPLE NO.

M5.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-012A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2274.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/05/09

GC Column: R-502.2 ID: .53 (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

TOY125 S43

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M6 F&B

MATRIX : AIR

Sample ID. : 0911546-013A
Lab File ID : W2275.D
Date/Time Analyzed: 5 Oct 20 9 21:22
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		14	
Acetone		13	B
Carbon Disulfide		5	U
Methylene Chloride		8	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		14	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S44

1F

EPA SAMPLE NO.

M6.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-013A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2275.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/05/09

GC Column: R-502.2 ID: .53 (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

TOY125 S45

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M9(10) F&B

MATRIX : AIR

Sample ID. : 0911546-014A
Lab File ID : W2276.D
Date/Time Analyzed: 5 Oct 20 9 21:57
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		34	
Acetone		10	B
Carbon Disulfide		5	U
Methylene Chloride		10	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		10	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		120	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S46

1F

EPA SAMPLE NO.

M9(10).F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-014A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2276.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/05/09

GC Column: R-502.2 ID: .53 (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

TOY125 S47

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M9(20) F&B

MATRIX : AIR

Sample ID. : 0911546-015A
Lab File ID : W2292.D
Date/Time Analyzed: 7 Oct 20 9 14:52
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		36	
Acetone		32	B
Carbon Disulfide		5	U
Methylene Chloride		12	B
2-Butanone		18	
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		9	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		7	
Carbon Tetrachloride		5	U
Trichloroethene		7	
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		130	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S48

1F

EPA SAMPLE NO.

M9(20).F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-015A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2292.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/07/09

GC Column: R-502.2 ID: .53 (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	1.38	54	JN

TOY125 S49

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No. M9(30).B

MATRIX : AIR

Sample ID. : 0910546-016A
Lab File ID : W2263.D
Date/Time Analyzed: 2 Oct 20 9 17:38
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		7	
Acetone		15	B
Carbon Disulfide		5	U
Methylene Chloride		18	B
2-Butanone		8	
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		5	U
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S50

1F

EPA SAMPLE NO.

M9(30).B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-016A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2263.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/02/09

GC Column: R-502.2 ID: .53 (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	1.38	88	JN
2. 000076-14-2	Dichlorotetrafluoroethane	1.59	47	JN

TOY125 S51

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No. M9(30).F

MATRIX : AIR

Sample ID. : 0910546-017A
Lab File ID : W2264.D
Date/Time Analyzed: 2 Oct 20 9 18:14
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		23	
Acetone		13	B
Carbon Disulfide		5	U
Methylene Chloride		37	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		7	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	
Carbon Tetrachloride		5	U
Trichloroethene		20	
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		200	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S52

1F

EPA SAMPLE NO.

M9(30).F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-017A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2264.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/02/09

GC Column: R-502.2 ID: .53 (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

TOY125 S53

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M9(40) F&B

MATRIX : AIR

Sample ID. : 0911546-018A
Lab File ID : W2293.D
Date/Time Analyzed: 7 Oct 20 9 15:28
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		34	
Acetone		14	B
Carbon Disulfide		5	U
Methylene Chloride		5	U
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		6	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		9	
Carbon Tetrachloride		5	U
Trichloroethene		23	
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		700	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S54

1F

EPA SAMPLE NO.

M9(40).F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-018A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2293.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/07/09

GC Column: R-502.2 ID: .53 (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	1.37	110	JN
2. 000076-14-2	Dichlorotetrafluoroethane	1.59	140	JN
3. 000076-13-1	Ethane, 1,1,2-trichloro-1,2,2-trifl	3.44	54	JN

TOY125 S55

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M13 F&B

MATRIX : AIR

Sample ID. : 0911546-019A
Lab File ID : W2277.D
Date/Time Analyzed: 5 Oct 20 9 22:33
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		17	
Acetone		8	U
Carbon Disulfide		5	U
Methylene Chloride		11	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		28	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		9	
Carbon Tetrachloride		5	U
Trichloroethene		8	
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		110	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S56

1F

EPA SAMPLE NO.

M13.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-019A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2277.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/05/09

GC Column: R-502.2 ID: .53 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 7 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	alpha_-Pinene isomer (11.85)	11.85	74	J
2.	alpha_-Pinene isomer (12.08)	12.08	720	J
3.	_beta_-Pinene isomer (12.91)	12.91	220	J
4.	_beta_-Pinene isomer (13.02)	13.02	800	J
5.	Limonene isomer	13.66	160	J
6. 001120-21-4	Undecane	13.99	120	JN
7.	unknown	15.49	1800	J

TOY125 S57

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M16 F&B

MATRIX : AIR

Sample ID. : 0911546-020A
Lab File ID : W2278.D
Date/Time Analyzed: 5 Oct 20 9 23:08
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		27	
Acetone		9	B
Carbon Disulfide		5	U
Methylene Chloride		10	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		45	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		7	
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		160	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S58

1F

EPA SAMPLE NO.

M16.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-020A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2278.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/05/09

GC Column: R-502.2 ID: .53 (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.	unknown	13.95	36	J

TOY125 S59

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M22 F&B

MATRIX : AIR

Sample ID. : 0911546-021A
Lab File ID : W2279.D
Date/Time Analyzed: 5 Oct 20 9 23:44
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		11	
Acetone		9	B
Carbon Disulfide		5	U
Methylene Chloride		10	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		9	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S60

1F

EPA SAMPLE NO.

M22.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-021A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2279.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/05/09

GC Column: R-502.2 ID: .53 (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

TOY125 S61

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M28 F&B

MATRIX : AIR

Sample ID. : 0911546-022A
Lab File ID : W2280.D
Date/Time Analyzed: 6 Oct 20 9 0:20
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		11	
Acetone		11	B
Carbon Disulfide		5	U
Methylene Chloride		21	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		6	
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		6	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S62

1F

EPA SAMPLE NO.

M28.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-022A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2280.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/06/09

GC Column: R-502.2 ID: .53 (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

TOY125 S63

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M31 F&B

MATRIX : AIR

Sample ID. : 0911546-023A
Lab File ID : W2281.D
Date/Time Analyzed: 6 Oct 20 9 0:56
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		13	
Acetone		13	B
Carbon Disulfide		5	U
Methylene Chloride		10	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		7	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S64

1F

EPA SAMPLE NO.

M31.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-023A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2281.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/06/09

GC Column: R-502.2 ID: .53 (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

TOY125 S65

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M34 F&B

MATRIX : AIR

Sample ID. : 0911546-024A
Lab File ID : W2282.D
Date/Time Analyzed: 6 Oct 20 9 1:31
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		15	
Acetone		11	B
Carbon Disulfide		5	U
Methylene Chloride		9	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		11	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

1F

EPA SAMPLE NO.

M34.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-024A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2282.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/06/09

GC Column: R-502.2 ID: .53 (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

TOY125 S67

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M37 F&B

MATRIX : AIR

Sample ID. : 0911546-025A
Lab File ID : W2294.D
Date/Time Analyzed: 7 Oct 20 9 16:03
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		14	
Acetone		480	B
Carbon Disulfide		5	U
Methylene Chloride		12	
2-Butanone		24	
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		94	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		18	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S68

1F

EPA SAMPLE NO.

M37.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-025A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2294.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/07/09

GC Column: R-502.2 ID: .53 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 7 PJC 10/19/09

CONCENTRATION UNITS:

(µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-37-6	Ethane, 1,1-difluoro-	1.35	120	JN
2. 000075-28-5	Isobutane	1.63	110	JN
3. 000106-97-8	Butane	1.91	66	JN
4. 000078-78-4	Butane, 2-methyl-	2.67	29	JN
5. 001717-00-6	1,1-Dichloro-1-fluoroethane	3.29	34	JN
6. 000075-18-3	Dimethyl sulfide	3.72	39	JN
7.	unknown siloxane	13.96	42	JX

Chs 10/21/09

TOY125 S69

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
M39.B

MATRIX : AIR

Sample ID. : 0911546-026A
Lab File ID : W2265.D
Date/Time Analyzed: 2 Oct 20 9 18:50
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		6	
Acetone		8	U
Carbon Disulfide		5	U
Methylene Chloride		19	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		5	U
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S70

1F

EPA SAMPLE NO.

M39.B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-026A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2265.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/02/09

GC Column: R-502.2 ID: .53 (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	1.39	31	JN

TOY125 S71

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No. M39.F

MATRIX : AIR

Sample ID. : 0910546-027A
Lab File ID : W2266.D
Date/Time Analyzed: 2 Oct 20 9 19:28
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		14	
Acetone		9	B
Carbon Disulfide		5	U
Methylene Chloride		28	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		18	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		300	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S72

1F

EPA SAMPLE NO.

M39.F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-027A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2266.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/02/09

GC Column: R-502.2 ID: .53 (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.	unknown siloxane	13.97	26	J

TOY125 S73

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
U1 F&B

MATRIX : AIR

Sample ID. : 0911546-028A
Lab File ID : W2291.D
Date/Time Analyzed: 7 Oct 20 9 14:13
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result : ng	
Chloromethane	11	
Vinyl Chloride	5	U
Bromomethane	5	U
Chloroethane	5	U
1,1-Dichloroethene	5	U
Trichlorofluoromethane	210	
Acetone	63	B
Carbon Disulfide	5	U
Methylene Chloride	43	B
2-Butanone	45	
trans-1,2-Dichloroethene	5	U
cis-1,2-Dichloroethene	5	U
1,1-Dichloroethane	5	U
Chloroform	27	
1,2-Dichloroethane	5	U
1,1,1-Trichloroethane	5	U
Carbon Tetrachloride	160	
Trichloroethene	33	
Benzene	86	
1,2-Dichloropropane	5	U
Bromodichloromethane	5	U
cis-1,3-Dichloropropene	5	U
trans-1,3-Dichloropropene	5	U
1,1,2-Trichloroethane	5	U
4-Methyl-2-Pentanone	8	U
2-Hexanone	8	U
Toluene	240	
Tetrachloroethene	53	
Dibromochloromethane	5	U
Chlorobenzene	5	U
Ethylbenzene	45	
Xylene (total)	210	
Styrene	5	U
Bromoform	8	U
1,1,2,2-Tetrachloroethane	5	U
2/4-Ethyltoluene (total)	140	
1,3-Dichlorobenzene	5	U
1,4-Dichlorobenzene	16	
1,2-Dichlorobenzene	5	U
Chlorotrifluoromethane	25	U
Chloroethylvinylether	25	U
Benzaldehyde	250	U
Decane	38	

TOY125 S74

1F

EPA SAMPLE NO.

U1.F+B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-028A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2291.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/07/09

GC Column: R-502.2 ID: .53 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 7 2 BDL 10/19/09 CONCENTRATION UNITS: (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane	1.42	250	JN
2. 000078-78-4	Butane, 2-methyl-	2.71	270	JN
3.	unknown	3.35	310	J
4. 000107-83-5	Pentane, 2-methyl-	3.87	340	JN
5. 000110-54-3	Hexane	4.31	300	JN
6. 000591-76-4	Hexane, 2-methyl-	5.40	190	JN
7.	branched alkane	5.81	290	J

TOY125 S75

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No. U2.B

MATRIX : AIR

Sample ID. : 0910546-029A
Lab File ID : W2258.D
Date/Time Analyzed: 2 Oct 20 9 2:04
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		10	
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		210	
Acetone		52	B
Carbon Disulfide		5	U
Methylene Chloride		93	B
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		7	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		22	
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		5	U
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S76

1F

EPA SAMPLE NO.

U2.B

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-029A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2258.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/02/09

GC Column: R-502.2 ID: .53 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 7 2 BM 10/14/09 (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000075-71-8	Dichlorodifluoromethane ✓	1.40	360	JN
2. 000075-28-5	Isobutane ✓	1.66	230	JN
3.	branched alkane (1.92) ✓	1.92	270	J
4. 000078-78-4	Butane, 2-methyl- ✓	2.69	420	JN
5.	unknown	3.32	170	J
6. 000107-83-5	Pentane, 2-methyl- ✓	3.83	110	JN
7.	branched alkane (5.8) ✓	5.80	210	J

TOY125 S77

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No. U2.F

MATRIX : AIR

Sample ID. : 0910546-030A
Lab File ID : W2257.D
Date/Time Analyzed: 2 Oct 20 9 1:28
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		32	
Acetone		28	B
Carbon Disulfide		5	U
Methylene Chloride		31	B
2-Butanone		55	
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		34	
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		110	
Trichloroethene		200	
Benzene		150	
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		530	
Tetrachloroethene		140	
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		92	
Xylene (total)		430	
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		260	
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		26	
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		250	U
Decane		75	

TOY125 S78

1F

EPA SAMPLE NO.

U2.F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: 0910546-030A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2257.D

Level: (low/med) LOW Date Received: 09/22/09

% Moisture: not dec. Date Analyzed: 10/02/09

GC Column: R-502.2 ID: .53 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 7 BPL 10/19/09 CONCENTRATION UNITS: (µg/L or µg/Kg) ng

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000078-78-4	Butane, 2-methyl-	2.68	200	JN
2.	unknown	3.33	340	J
3. 000107-83-5	Pentane, 2-methyl-	3.85	750	JN
4. 000096-14-0	Pentane, 3-methyl-	4.07	480	JN
5. 000110-54-3	Hexane	4.30	940	JN
6. 000591-76-4	Hexane, 2-methyl-	5.41	610	JN
7.	branched alkane	5.82	570	J

TOY125 S79

H2M LABS, INC.

5. SURROGATE SPIKE ANALYSIS RESULTS

5.1 VOLATILES

TOY125 S80

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Level: (low/med) LOW

	EPA SAMPLE NO.	1 DCA #	2 BFB #	3 TOL #	OTHER	TOT OUT
01	VBLK100109	75	82	96		0
02	FB1.F+B	80	99	102		0
03	FB2.F+B	82	99	103		0
04	FB3.F+B	83	99	103		0
05	D2.B	81	83	98		0
06	D2.F	79	92	98		0
07	D3.B	78	81	97		0
08	D3.F	80	91	99		0
09	U2.F	77	91	96		0
10	U2.B	82	90	98		0
11	VBLK100209	83	91	97		0
12	M9(30).B	85	89	97		0
13	M9(30).F	89	89	97		0
14	M39.B	89	89	97		0
15	M39.F	91	91	98		0
16	VBLK100509	105	105	101		0
17	F1.F+B	98	97	100		0
18	M2.F+B	97	98	99		0
19	M4.F+B	99	98	95		0
20	M5.F+B	99	99	97		0
21	M6.F+B	97	99	97		0
22	M9(10).F+B	100	102	95		0
23	M13.F+B	97	194 *	96		1
24	M16.F+B	97	100	96		0
25	M22.F+B	100	102	98		0
26	M28.F+B	101	102	96		0
27	M31.F+B	100	98	96		0
28	M34.F+B	100	103	99		0
29	VBLK100709	100	86	94		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: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Level: (low/med) LOW

	EPA SAMPLE NO.	1 DCA #	2 BFB #	3 TOL #	OTHER	TOT OUT
31	D1.F+B	102	95	93		0
32	U1.F+B	97	86	93		0
33	M9(20).F+B	98	85	93		0
34	M9(40).F+B	98	86	93		0
35	M37.F+B	98	86	94		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

EPA SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

VBLK100109

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Lab File ID: 09\W2249.D Lab Sample ID: VBLK100109

Date Analyzed: 10/01/09 Time Analyzed: 20:25

GC Column: R-502.2 ID: .53 (mm) Heated Purge: (Y/N) Y

Instrument ID: HP5996

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	0910546-007A	09\W2250.D	21:13
02	FB2.F+B	0910546-008A	09\W2251.D	21:49
03	FB3.F+B	0910546-009A	09\W2252.D	22:25
04	D2.B	0910546-002A	09\W2253.D	23:03
05	D2.F	0910546-003A	09\W2254.D	23:40
06	D3.B	0910546-004A	09\W2255.D	0:15
07	D3.F	0910546-005A	09\W2256.D	0:52
08	U2.F	0910546-030A	09\W2257.D	1:28
09	U2.B	0910546-029A	09\W2258.D	2:04

COMMENTS: _____

_____

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No. VBLK100109

MATRIX : AIR

Sample ID. : VBLK100109
Lab File ID : W2249.D
Date/Time Analyzed: 1 Oct 20 9 20:25
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		5	U
Acetone		25	
Carbon Disulfide		5	U
Methylene Chloride		19	
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		5	U
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S85

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK100109

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: VBLK100109

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2249.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/01/09

GC Column: R-502.2 ID: .53 (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

TOY125 S86

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK100209

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Lab File ID: 09\W2262.D Lab Sample ID: VBLK100209

Date Analyzed: 10/02/09 Time Analyzed: 16:55

GC Column: R-502.2 ID: .53 (mm) Heated Purge: (Y/N) Y

Instrument ID: HP5996

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	M9(30).B	0910546-016A	09\W2263.D	17:38
02	M9(30).F	0910546-017A	09\W2264.D	18:14
03	M39.B	0910546-026A	09\W2265.D	18:50
04	M39.F	0910546-027A	09\W2266.D	19:28

COMMENTS: _____

_____

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
VBLK100209

MATRIX : AIR

Sample ID. : VBLK100209
Lab File ID : W2262.D
Date/Time Analyzed: 2 Oct 20 9 16:55
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		5	U
Acetone		27	
Carbon Disulfide		5	U
Methylene Chloride		16	
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		5	U
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

1F

EPA SAMPLE NO.

VBLK100209

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: VBLK100209

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2262.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/02/09

GC Column: R-502.2 ID: .53 (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

TOY125 S89

4A

EPA SAMPLE NO.

VBLK100509

VOLATILE METHOD BLANK SUMMARY

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Lab File ID: 09\W2270.D Lab Sample ID: VBLK100509

Date Analyzed: 10/05/09 Time Analyzed: 18:21

GC Column: R-502.2 ID: .53 (mm) Heated Purge: (Y/N) Y

Instrument ID: HP5996

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	0910546-006A	09\W2271.D	19:01
02	M2.F+B	0910546-010A	09\W2272.D	19:36
03	M4.F+B	0910546-011A	09\W2273.D	20:11
04	M5.F+B	0910546-012A	09\W2274.D	20:47
05	M6.F+B	0910546-013A	09\W2275.D	21:22
06	M9(10).F+B	0910546-014A	09\W2276.D	21:57
07	M13.F+B	0910546-019A	09\W2277.D	22:33
08	M16.F+B	0910546-020A	09\W2278.D	23:08
09	M22.F+B	0910546-021A	09\W2279.D	23:44
10	M28.F+B	0910546-022A	09\W2280.D	0:20
11	M31.F+B	0910546-023A	09\W2281.D	0:56
12	M34.F+B	0910546-024A	09\W2282.D	1:31

COMMENTS: _____

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
VBLK100509

MATRIX : AIR

Sample ID. : VBLK100509
Lab File ID : W2270.D
Date/Time Analyzed: 5 Oct 20 9 18:21
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		5	U
Acetone		26	
Carbon Disulfide		5	U
Methylene Chloride		11	
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		5	U
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S91

1F

EPA SAMPLE NO.

VBLK100509

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: VBLK100509

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2270.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/05/09

GC Column: R-502.2 ID: .53 (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

TOY125 S92

4A

EPA SAMPLE NO.

VBLK100709

VOLATILE METHOD BLANK SUMMARY

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Lab File ID: 09\W2289.D Lab Sample ID: VBLK100709

Date Analyzed: 10/07/09 Time Analyzed: 12:58

GC Column: R-502.2 ID: .53 (mm) Heated Purge: (Y/N) Y

Instrument ID: HP5996

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	D1.F+B	0910546-001A	09\W2290.D	13:37
02	U1.F+B	0910546-028A	09\W2291.D	14:13
03	M9(20).F+B	0910546-015A	09\W2292.D	14:52
04	M9(40).F+B	0910546-018A	09\W2293.D	15:28
05	M37.F+B	0910546-025A	09\W2294.D	16:03

COMMENTS: _____

_____

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

VOST

H2M LABS INC.

Sample No.
VBLK100709

MATRIX : AIR

Sample ID. : VBLK100709
Lab File ID : W2289.D
Date/Time Analyzed: 7 Oct 20 9 00:58
Instument ID:

Split Factor : 1 : 1
Quant Range : 5 to 1000

COMPOUND NAME:	Result :	ng	
Chloromethane		5	U
Vinyl Chloride		5	U
Bromomethane		5	U
Chloroethane		5	U
1,1-Dichloroethene		5	U
Trichlorofluoromethane		5	U
Acetone		23	
Carbon Disulfide		5	U
Methylene Chloride		10	
2-Butanone		8	U
trans-1,2-Dichloroethene		5	U
cis-1,2-Dichloroethene		5	U
1,1-Dichloroethane		5	U
Chloroform		5	U
1,2-Dichloroethane		5	U
1,1,1-Trichloroethane		5	U
Carbon Tetrachloride		5	U
Trichloroethene		5	U
Benzene		5	U
1,2-Dichloropropane		5	U
Bromodichloromethane		5	U
cis-1,3-Dichloropropene		5	U
trans-1,3-Dichloropropene		5	U
1,1,2-Trichloroethane		5	U
4-Methyl-2-Pentanone		8	U
2-Hexanone		8	U
Toluene		5	U
Tetrachloroethene		5	U
Dibromochloromethane		5	U
Chlorobenzene		5	U
Ethylbenzene		5	U
Xylene (total)		5	U
Styrene		5	U
Bromoform		8	U
1,1,2,2-Tetrachloroethane		5	U
2/4-Ethyltoluene (total)		5	U
1,3-Dichlorobenzene		5	U
1,4-Dichlorobenzene		5	U
1,2-Dichlorobenzene		5	U
Chlorotrifluoromethane		25	U
Chloroethylvinylether		25	U
Benzaldehyde		50	U
Decane		25	U

TOY125 S94

1F

EPA SAMPLE NO.

VBLK100709

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Matrix: (soil/water) AIR Lab Sample ID: VBLK100709

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\W2289.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/07/09

GC Column: R-502.2 ID: .53 (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

TOY125 S95

H2M LABS, INC.

7. INTERNAL STANDARD AREA DATA

7.1 VOLATILES

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Lab File ID (Standard): 09\W2247.D Date Analyzed: 10/01/09

EPA Sample No.(VSTD050##): VSTD250NG Time Analyzed: 18:49

Instrument ID: HP5996 Heated Purge: (Y/N) Y

GC Column: R-502.2 ID: .53 (mm)

		IS1 BCM AREA #	RT #	IS2 DFB AREA #	RT #	IS3 CBZ AREA #	RT #
	12 HOUR STD	306063	5.51	1655534	6.57	1238866	10.75
	UPPER LIMIT	612126	6.01	3311068	7.07	2477732	11.25
	LOWER LIMIT	153032	5.01	827767	6.07	619433	10.25
	EPA SAMPLE						
01	VBLK100109	296310	5.47	1624897	6.55	1195678	10.74
02	FB1.F+B	286232	5.56	1553848	6.60	1258709	10.77
03	FB2.F+B	267150	5.50	1469384	6.57	1200015	10.75
04	FB3.F+B	259045	5.50	1423538	6.57	1163725	10.77
05	D2.B	247434	5.50	1361001	6.57	1040851	10.78
06	D2.F	232772	5.50	1319036	6.57	998976	10.75
07	D3.B	261025	5.51	1382935	6.56	1010068	10.75
08	D3.F	220466	5.50	1305093	6.56	1005395	10.74
09	U2.F	243119	5.51	1405706	6.57	1058311	10.76
10	U2.B	255986	5.48	1357249	6.54	1034482	10.75

IS1 BCM = Bromochloromethane
IS2 DFB = 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: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Lab File ID (Standard): 09\W2261.D Date Analyzed: 10/02/09

EPA Sample No.(VSTD050##): VSTD250NG Time Analyzed: 15:37

Instrument ID: HP5996 Heated Purge: (Y/N) Y

GC Column: R-502.2 ID: .53 (mm)

		IS1 BCM AREA #	RT #	IS2 DFB AREA #	RT #	IS3 CBZ AREA #	RT #
	12 HOUR STD	212798	5.59	1216699	6.64	866057	10.8
	UPPER LIMIT	425596	6.09	2433398	7.14	1732114	11.3
	LOWER LIMIT	106399	5.09	608350	6.14	433029	10.3
	EPA SAMPLE						
01	VBLK100209	225544	5.49	1276823	6.56	975237	10.75
02	M9(30).B	212553	5.52	1157893	6.58	856023	10.76
03	M9(30).F	197845	5.52	1092934	6.57	801663	10.76
04	M39.B	186099	5.53	1053693	6.59	781673	10.77
05	M39.F	186870	5.51	1028528	6.58	761964	10.78

IS1 BCM = Bromochloromethane
IS2 DFB = 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: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Lab File ID (Standard): 09\W2269.D Date Analyzed: 10/05/09

EPA Sample No.(VSTD050##): VSTD250NG Time Analyzed: 17:37

Instrument ID: HP5996 Heated Purge: (Y/N) Y

GC Column: R-502.2 ID: .53 (mm)

		IS1 BCM AREA #	RT #	IS2 DFB AREA #	RT #	IS3 CBZ AREA #	RT #
	12 HOUR STD	123119	5.49	740018	6.54	610412	10.72
	UPPER LIMIT	246238	5.99	1480036	7.04	1220824	11.22
	LOWER LIMIT	61560	4.99	370009	6.04	305206	10.22
	EPA SAMPLE						
01	VBLK100509	133475	5.49	756283	6.56	634500	10.76
02	F1.F+B	117899	5.51	666745	6.57	544433	10.78
03	M2.F+B	127878	5.49	687404	6.56	556217	10.76
04	M4.F+B	126228	5.53	684157	6.59	531973	10.78
05	M5.F+B	114336	5.52	625093	6.59	484043	10.79
06	M6.F+B	116233	5.53	628519	6.59	483286	10.79
07	M9(10).F+B	116922	5.49	616381	6.57	476857	10.77
08	M13.F+B	111114	5.54	611700	6.59	468301	10.77
09	M16.F+B	108361	5.50	621724	6.57	467892	10.76
10	M22.F+B	112352	5.53	595832	6.60	456579	10.81
11	M28.F+B	111532	5.53	589707	6.60	450988	10.80
12	M31.F+B	108035	5.52	587624	6.58	436648	10.78
13	M34.F+B	105482	5.52	562747	6.59	428855	10.82

IS1 BCM = Bromochloromethane
IS2 DFB = 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: 10478 Case No.: TOY SAS No.: _____ SDG No.: TOY125

Lab File ID (Standard): 09\W2288.D Date Analyzed: 10/07/09

EPA Sample No.(VSTD050##): VSTD250NG Time Analyzed: 12:15

Instrument ID: HP5996 Heated Purge: (Y/N) Y

GC Column: R-502.2 ID: .53 (mm)

		IS1 BCM AREA #	RT #	IS2 DFB AREA #	RT #	IS3 CBZ AREA #	RT #
	12 HOUR STD	181407	5.46	975458	6.51	724537	10.69
	UPPER LIMIT	362814	5.96	1950916	7.01	1449074	11.19
	LOWER LIMIT	90704	4.96	487729	6.01	362269	10.19
	EPA SAMPLE						
01	VBLK100709	218010	5.48	1169724	6.54	858917	10.73
02	D1.F+B	234287	5.51	1237960	6.57	938288	10.74
03	U1.F+B	233636	5.50	1277564	6.56	933094	10.75
04	M9(20).F+B	251088	5.49	1313895	6.54	973861	10.72
05	M9(40).F+B	251688	5.47	1314402	6.53	961430	10.71
06	M37.F+B	248331	5.50	1320129	6.57	991091	10.75

IS1 BCM = Bromochloromethane
IS2 DFB = 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.

APPENDIX D

FIELD DATA FORMS

AMBIENT AIR SAMPLING DATA SHEET

Project:	TOBOBL09-3	Date:	9/21/09
Project Site:	TOBOBSWDC	Operators:	KJS, BA, JKB, JLV, VV
General Weather Conditions:			

Sample ID:	TOBOBL09-3: U1	Sample Location:	
Pump ID:		Nominal Flow Rate:	0.25 LPM
Sampler ID:	{R- 8 }	Nominal Sample Volume:	360 liters

Initial Ambient VOC Conc. (ppm): 0
Leak Check: OK
Sampling Start Time: 15:07
Initial Rotameter Reading (Bottom of the S.S. Ball): 58
Initial Pressure Drop Across Traps: 8
Initial Max/Min Temperature Inside Cooler: 62

Rotameter Reading	Total Elapse Time	Local Time
58	0	15:07
55	53	16:00
60	54	16:01
58	343	20:55
	537	00:47
60	538	1:10
~~53~~	~~938~~	~~6:40~~

Rotameter Reading	Total Elapse Time	Local Time
60	~~548~~	6:40
60	0	6:48
~~48~~	~~[illegible]~~	~~[illegible]~~
~~60~~	~~[illegible]~~	~~[illegible]~~
48	233	10:40
60	234	10:40

RG Pump

Final Leak Check: OK
Sample Stop Time: 15:07
Final Rotameter Reading: 55
Total Elapse Time: 1446
Final Ambient VOC Conc. (ppm): 0.0
Final Pressure Drop Across Traps: 28
Final Max/Min Temperature Inside Cooler: 68/57

Comments: .f = 7a
.b= 7b

Lo batt @ 00:47

Changed battery

FTR also @ 10:40

AMBIENT AIR SAMPLING DATA SHEET

Project: TOBOBL09-3
Project Site: TOBOBSWDC
General Weather Conditions:

Date: 9/21/09
Operators: KJS, BA, JKB, JLV, VV

Sample ID: TOBOBL09-3: 42
Pump ID:
Sampler ID: {R- 9 }

Sample Location:
Nominal Flow Rate: 0.25 LPM
Nominal Sample Volume: 360 liters

Initial Ambient VOC Conc. (ppm): 0.0
Leak Check: NOK
Sampling Start Time: 1503
Initial Rotameter Reading (Bottom of the S.S. Ball): 58
Initial Pressure Drop Across Traps: 7 1/2
Initial Max/Min Temperature Inside Cooler: 66

Rotameter Reading	Total Elapse Time	Local Time
58	0	1503
53	59	16:01
59	58	16:02
44	347	20:55
53	348	20:56
48	583	00:47
58	584	00:48

Rotameter Reading	Total Elapse Time	Local Time
53	938	640
60	938	640
44	1042	1042
60	1043	1043
45	1080	1042
60	1080	1042
0	1432	1454

~~1487~~
~~1187~~

Final Leak Check: AOK
Sample Stop Time: 1503
Final Rotameter Reading: 55
Total Elapse Time: 1440
Final Ambient VOC Conc. (ppm): 0.0
Final Pressure Drop Across Traps: 5 7
Final Max/Min Temperature Inside Cooler: 68/45

Comments: .f = 24
.b= 25

* No filter *

* FTC smoke odor @ 1040

Twisted sample line caused drop in pressure!

AMBIENT AIR SAMPLING DATA SHEET

Project:	TOBOBL09-3	Date:	9/21/09
Project Site:	TOBOBSWDC	Operators:	KJS, BA, JKB, JLV, VV
General Weather Conditions:			

Sample ID:	TOBOBL09-3: D1	Sample Location:	
Pump ID:		Nominal Flow Rate:	0.25 LPM
Sampler ID:	{R- }	Nominal Sample Volume:	360 liters

Initial Ambient VOC Conc. (ppm): 1.5
Leak Check: OK
Sampling Start Time: 14:55
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
60	4	14:59
60	54	15:52
59	364	21:06
58	604	05:58
35	927	626
58	928	626
42	1187	1042

Rotameter Reading	Total Elapse Time	Local Time
60	1189	1043
60	1435	1453

Final Leak Check: O/C
Sample Stop Time: 14:57
Final Rotameter Reading: 60
Total Elapse Time: 1440
Final Ambient VOC Conc. (ppm): 0.5
Final Pressure Drop Across Traps: 16
Final Max/Min Temperature Inside Cooler: 74/42

Comments: .f = 5a
.b= 5b

* FR smoke obs @ 10:55

AMBIENT AIR SAMPLING DATA SHEET

Project:	TOBOBL09-3	Date:	9/21/09
Project Site:	TOBOBSWDC	Operators:	KJS, BA, JKB, JLV, VV
General Weather Conditions:			

Sample ID:	TOBOBL09-3: D 2	Sample Location:	
Pump ID:		Nominal Flow Rate:	0.25 LPM
Sampler ID:	{R- }	Nominal Sample Volume:	360 liters

Initial Ambient VOC Conc. (ppm): 1.5
Leak Check: OK
Sampling Start Time: 14:56
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
60	3	14:59
59	56	15:52
50	362	21:06
63	363	21:07
60	600	1:00
0	743	6:29
60	743	6:30

Rotameter Reading	Total Elapse Time	Local Time
0	750	6:59
60	~~753~~	~~6:57~~ 7:03
60	0	7:04
49	218	10:42
60	219	10:43
51	462	14:54

R7 pump

Final Leak Check: O/C
Sample Stop Time: 14:58
Final Rotameter Reading: 51
Total Elapse Time: 471 + 753
Final Ambient VOC Conc. (ppm): 0.5
Final Pressure Drop Across Traps: 20
Final Max/Min Temperature Inside Cooler: ~~PD~~ 76/46

Comments: .f = 8a
.b= 8b

AMBIENT AIR SAMPLING DATA SHEET

Project: TOBOBL09-3
Project Site: TOBOBSWDC
General Weather Conditions:

Date: 9/21/09
Operators: KJS, BA, JKB, JLV, VV

Sample ID: TOBOBL09-3: D3
Pump ID:
Sampler ID: (R- 5)

Sample Location:
Nominal Flow Rate: 0.25 LPM
Nominal Sample Volume: 360 liters

Initial Ambient VOC Conc. (ppm): 1.4
Leak Check: OK
Sampling Start Time: 13:06
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
60	2	15:08
60	46	15:55
62	356	21:05
62	594	1:03
60	925	6:33
55	1174	10:40
56	1440	15:08

Rotameter Reading	Total Elapse Time	Local Time

Final Leak Check: OK
Sample Stop Time: 1508
Final Rotameter Reading: 56
Total Elapse Time: 1440
Final Ambient VOC Conc. (ppm): 0
Final Pressure Drop Across Traps: 8
Final Max/Min Temperature Inside Cooler: ~~70/50~~ 66/50

Comments: .f = 26a
.b= 26b

AMBIENT AIR SAMPLING DATA SHEET

Project: TOBOBL09-3 Date: 9/21/09
Project Site: TOBOBSWDC Operators: KJS, BA, JKB, JLV, VV
General Weather Conditions:

Sample ID: TOBOBL09-3: FB 13 Sample Location:
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:
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:
Final Rotameter Reading:
Total Elapse Time:
Final Ambient VOC Conc. (ppm):
Final Pressure Drop Across Traps:
Final Max/Min Temperature Inside Cooler:

Comments: .f = 14A
.b= 14B

RTP Office - post Lysol Spray

RTP ENVIRONMENTAL ASSOCIATES, INC.

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions PAR. SQ 2.

SAMPLE ID TOBOBL09-3: 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 0.0 INITIAL WELL VOC READING 0.0

INITIAL INLET LINE VOC READING - SAMPLE START TIME 905

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 121

FINAL AMBIENT VOC READING 0.0 FINAL WELL VOC READING 0.0

SAMPLE STOP TIME 915 DURATION 10

FINAL ROTAMETER READING 123 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK AOK

Comments: FRONT TRAP ID: 224 PTC inactive burning -

BACK TRAP ID: 226

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Clear - SC @ 24 Fahr

SAMPLE ID TOBOBL09-3: 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 92

INITIAL AMBIENT VOC READING 0.0 INITIAL WELL VOC READING 0.0

INITIAL INLET LINE VOC READING 0.0 SAMPLE START TIME 927

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 120

FINAL AMBIENT VOC READING 0.0 FINAL WELL VOC READING 0.0

SAMPLE STOP TIME 937 DURATION 10

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 TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators (KJS) BA, JKB, JB, VV

General Weather Conditions Cldy Fog/LS-SW

SAMPLE ID TOBOBL09-3: SAMPLER ID (R4)

PUMP ID R4 SAMPLE LOCATION M4

WELL ID M4 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 0.0 INITIAL WELL VOC READING 0.6

INITIAL INLET LINE VOC READING — SAMPLE START TIME 945

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 120

FINAL AMBIENT VOC READING 0.0 FINAL WELL VOC READING 0.6

SAMPLE STOP TIME 955 DURATION 10

FINAL ROTAMETER READING 120 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK AOK

Comments: FRONT TRAP ID: 25A

BACK TRAP ID: 25B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Cldy SW 5

SAMPLE ID TOBOBL09-3: SAMPLER ID (R - 4)

PUMP ID R4 SAMPLE LOCATION M5

WELL ID M5 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 0.0 INITIAL WELL VOC READING 0.9

INITIAL INLET LINE VOC READING - SAMPLE START TIME 1024

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 124

FINAL AMBIENT VOC READING 0.0 FINAL WELL VOC READING 0.9

SAMPLE STOP TIME 1034 DURATION 10

FINAL ROTAMETER READING 127 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK Ok

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 TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Cldy SW@5

SAMPLE ID TOBOBL09-3: 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 ADK PID ID

INITIAL AMBIENT VOC READING 0.0 INITIAL WELL VOC READING 0.3

INITIAL INLET LINE VOC READING - SAMPLE START TIME 1006

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 120

FINAL AMBIENT VOC READING 0.0 FINAL WELL VOC READING 0.2

SAMPLE STOP TIME 1016 DURATION 10

FINAL ROTAMETER READING 120 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK ADK

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 TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Cldy SW-5

SAMPLE ID TOBOBL09-3: SAMPLER ID (RF)

PUMP ID RF SAMPLE LOCATION M9

WELL ID M9 WELL DEPTH 30" or (10', 20', 30', or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK ADK PID ID

INITIAL AMBIENT VOC READING 0.0 INITIAL WELL VOC READING 0.0

INITIAL INLET LINE VOC READING — SAMPLE START TIME 1110

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 121

FINAL AMBIENT VOC READING 0.0 FINAL WELL VOC READING 0.0

SAMPLE STOP TIME 1120 DURATION 10

FINAL ROTAMETER READING 120 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK ADK

Comments: FRONT TRAP ID: 4A

BACK TRAP ID: 4B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators (KJS), BA, JKB, JB, VV

General Weather Conditions Cldy SW@5

SAMPLE ID TOBOBL09-3: SAMPLER ID (R-4)

PUMP ID R4 SAMPLE LOCATION M9

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 ADK PID ID

INITIAL AMBIENT VOC READING 0.0 INITIAL WELL VOC READING 0.0

INITIAL INLET LINE VOC READING - SAMPLE START TIME 1127

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 119

FINAL AMBIENT VOC READING 0.0 FINAL WELL VOC READING 0.0

SAMPLE STOP TIME 1237 DURATION 10

FINAL ROTAMETER READING 119 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK ADK

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 TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KS, BA, JKB, JB, VV

General Weather Conditions Cldy SW@5

SAMPLE ID TOBOBL09-3: SAMPLER ID (R - 4

PUMP ID R4 SAMPLE LOCATION M-9

WELL ID M9 WELL DEPTH 30" or 10', 20', 30' or 40'

NOMINAL FLOW RATE 1 LPM NOMINAL SAMPLE VOLUME 10 Liters

INITIAL LEAK CHECK ADK PID ID

INITIAL AMBIENT VOC READING 0.0 INITIAL WELL VOC READING 0.0

INITIAL INLET LINE VOC READING - SAMPLE START TIME 1141

INITIAL ROTAMETER READING 119 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 119

FINAL AMBIENT VOC READING 0.0 FINAL WELL VOC READING 0.0

SAMPLE STOP TIME 1151 DURATION 10

FINAL ROTAMETER READING 120 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK ADK

Comments: FRONT TRAP ID: 12A

BACK TRAP ID: 12B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators (KJS), BA, JKB, JB, VV

General Weather Conditions Cldy/ SW@5

SAMPLE ID TOBOBL09-3: SAMPLER ID (R-4)

PUMP ID R4 SAMPLE LOCATION M9

WELL ID M9 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 0.0 INITIAL WELL VOC READING 0.0

INITIAL INLET LINE VOC READING - SAMPLE START TIME 1155

INITIAL ROTAMETER READING 120 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 121

FINAL AMBIENT VOC READING 0.0 FINAL WELL VOC READING 0.0

SAMPLE STOP TIME 1205 DURATION 10

FINAL ROTAMETER READING 121 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK AOK

Comments: FRONT TRAP ID: 16A

BACK TRAP ID: 16B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions

SAMPLE ID TOBOBL09-3: SAMPLER ID (R -

PUMP ID SAMPLE LOCATION

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: 23A

BACK TRAP ID: 23B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL09-3 Location TOBOBSWDC Date 9/22/01

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Partly Cloudy & mild, temp ≈ 75°F, winds S 5-10 mph

SAMPLE ID TOBOBL09-3: M13 SAMPLER ID (R - 3)

PUMP ID 3 SAMPLE LOCATION M13

WELL ID M13 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 110 - 010070

INITIAL AMBIENT VOC READING 0 INITIAL WELL VOC READING ~~23.7~~ 0

INITIAL INLET LINE VOC READING — SAMPLE START TIME 12:00

INITIAL ROTAMETER READING 127 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 127

FINAL AMBIENT VOC READING _____ FINAL WELL VOC READING _____

SAMPLE STOP TIME 12:10 DURATION 10 min

FINAL ROTAMETER READING 128 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK OK

Comments: FRONT TRAP ID: ~~13A~~ 27A

BACK TRAP ID: ~~13B~~ 27B

* bell reamed and cupper of electrical tape w/ odor.
* well needs to be pulled up and reset.

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Partly cloudy: mild, temp = 78°F, winds 5-10 mph

SAMPLE ID TOBOBL09-3: 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 110-010070

INITIAL AMBIENT VOC READING 0 INITIAL WELL VOC READING 23.7

INITIAL INLET LINE VOC READING — SAMPLE START TIME 11:34

INITIAL ROTAMETER READING 128 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 128

FINAL AMBIENT VOC READING 0.0 FINAL WELL VOC READING 0.0

SAMPLE STOP TIME 11:44 DURATION 10 min

FINAL ROTAMETER READING 128 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK ok

Comments: FRONT TRAP ID: 13A

BACK TRAP ID: 13B

* Sticky, gel type substance on end of probe after pulled up from sampling.

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Cloudy ; mild, temp ≈ 70°F, winds S 5 mph

SAMPLE ID TOBOBL09-3: M22 SAMPLER ID (R-3)

PUMP ID 5 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 OK PID ID 110-010070

INITIAL AMBIENT VOC READING 0 INITIAL WELL VOC READING 13.9

INITIAL INLET LINE VOC READING — SAMPLE START TIME 10:52

INITIAL ROTAMETER READING 127 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 128

FINAL AMBIENT VOC READING 0 FINAL WELL VOC READING 7.0

SAMPLE STOP TIME 11:02 DURATION 10 min

FINAL ROTAMETER READING 128 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK OK

Comments: FRONT TRAP ID: 174

BACK TRAP ID: 175

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Cloudy; mild, temp ≈ 70°F, wind, S 5 mph

SAMPLE ID TOBOBL09-3: 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 OK PID ID 110-010070

INITIAL AMBIENT VOC READING 0.0 INITIAL WELL VOC READING 16.5

INITIAL INLET LINE VOC READING — SAMPLE START TIME 10:23

INITIAL ROTAMETER READING 128 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 128

FINAL AMBIENT VOC READING 0.0 FINAL WELL VOC READING 9.3

SAMPLE STOP TIME 10:33 DURATION 10 min

FINAL ROTAMETER READING 128 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK OK

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 TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Mostly cloudy; mild, temp ≈ 70°F, winds S 5mph

SAMPLE ID TOBOBL09-3: M31 SAMPLER ID (R -)

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 110-010070

INITIAL AMBIENT VOC READING 0.0 INITIAL WELL VOC READING 8.6

INITIAL INLET LINE VOC READING — SAMPLE START TIME 9:55

INITIAL ROTAMETER READING 129 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 128

FINAL AMBIENT VOC READING 0.0 FINAL WELL VOC READING 8.5

SAMPLE STOP TIME 10:05 DURATION 10 min

FINAL ROTAMETER READING 128 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK OK

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 TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Mostly cloudy & mild, temp ≈ 70°F, winds S 5 mph

SAMPLE ID TOBOBL09-3: M34 SAMPLER ID (R -)

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 Ok PID ID 110 - 010070

INITIAL AMBIENT VOC READING 0 INITIAL WELL VOC READING 0

INITIAL INLET LINE VOC READING — SAMPLE START TIME 9:36

INITIAL ROTAMETER READING 129 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 129

FINAL AMBIENT VOC READING 0 FINAL WELL VOC READING 5.7

SAMPLE STOP TIME 9:46 DURATION 10 min

FINAL ROTAMETER READING 129 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK ok

Comments: FRONT TRAP ID: 20a

BACK TRAP ID: 20b

baby spider hatch

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Mostly cloudy ; mild, temp ≈ 70°F, winds 0-5 mph

SAMPLE ID TOBOBL09-3: M37 SAMPLER ID (R -)

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 110 -- 010070

INITIAL AMBIENT VOC READING 5.0 INITIAL WELL VOC READING 587

INITIAL INLET LINE VOC READING - SAMPLE START TIME 9:09

INITIAL ROTAMETER READING 127 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 127

FINAL AMBIENT VOC READING 2.0 FINAL WELL VOC READING 420

SAMPLE STOP TIME 9:19 DURATION 10 min

FINAL ROTAMETER READING 127 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK OK

Comments: FRONT TRAP ID: 1623-36-21A

BACK TRAP ID: " " 21B

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions

SAMPLE ID TOBOBL09-3: M39 SAMPLER ID (R - 3)

PUMP ID 3 SAMPLE LOCATION ~~M3~~ M39

WELL ID ~~M3~~ 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 110-010070

INITIAL AMBIENT VOC READING 0 INITIAL WELL VOC READING 30

INITIAL INLET LINE VOC READING SAMPLE START TIME 11:13

INITIAL ROTAMETER READING 127 BOTTOM OF THE S.S. BALL

5 MIN ROTAMETER READING 127

FINAL AMBIENT VOC READING 0 FINAL WELL VOC READING 28.7

SAMPLE STOP TIME 11:23 DURATION 10

FINAL ROTAMETER READING 127 BOTTOM OF THE S.S BALL

FINAL LEAK CHECK OK

Comments: FRONT TRAP ID: 6a

BACK TRAP ID: 6b

* Sticky, gel type substance at end of probe after pulled up from sampling

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

SOIL GAS WELL SAMPLING DATA SHEET

Project ID TOBOBL09-3 Location TOBOBSWDC Date 9/22/09

Invesitgators KJS, BA, JKB, JB, VV

General Weather Conditions Mostly clear, mild, temp ~75°F, winds 5 mph

SAMPLE ID TOBOBL09-3: FB2 SAMPLER ID (R -)

PUMP ID SAMPLE LOCATION M39

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 12:18

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: 19a

BACK TRAP ID: 19b

M-9 = BLUE = 10' GREEN = 20' RED = 30' YELLOW 40'

PRESSURE WELL READING DATA SHEET

Project ID: TOBOBL09-3

Project Site: TOBOBSWDC

Date: 9/22/09

General Weather Condition: Fair

Equipment ID: Dwyer 10" inclined manometer

Operators: (KJS), JLV, BA, JKB, VV

Well ID	Pressure Well Location	Color Code	Time	Reading
PW1		blue	0	745
	NW corner of landfill	green	-0.02	745
		blue	0	746
		green	-0.03	746
Well ID	Pressure Well Location	Color Code	Time	Reading
PW2		blue	738	0.0
	SE corner of landfill	green	738	-0.01
		blue	740	-0.0
		green	740	-0.07
Well ID	Pressure Well Location	Color Code	Time	Reading
PW3		blue	826	0
	FTC	green	826	-0.06
		blue	827	0
		green	827	-0.07
Well ID	Pressure Well Location	Color Code	Time	Reading

Comments:

BLUE (Short) = 10' GREEN (Long) = 20'

APPENDIX E

EQUIPMENT CALIBRATIONS

ROTAMETER ONE : R1

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL09-3**	Date:	**8/7/2009**
Pump I.D.:	**625226**	Time (EDT):	**13:53**
Rotameter R- ?:	**1**	Barometric Pressure (in. Hg):	**30.01**
PRE- or POST- ?	PRE	Temperature (deg. F):	**70.7**
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 FOR LOW FLOW WITH SPLITTER BOTTOM OF SS BALL						
	Actual Liters Per Minute, ALPM						
1	**0.137**	**0.193**	**0.260**	**0.332**	**0.400**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
	Average (ALPM)						
	0.1370	0.1930	0.2600	0.3320	0.4000	#DIV/0!	#DIV/0!
	Average Standard Liters Per Minute, Avg. (SLPM)						
	0.1352	0.1905	0.2566	0.3276	0.3947	#DIV/0!	#DIV/0!

REMARKS:

Ta °C=	22
P_v a=	0.78
std Press in. Hg	**29.92**
Tstd °C =	**25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL09-3**	Date:	**9/24/2009**
Pump I.D.:	**625226**	Time (EDT):	**15:18**
Rotameter R- ?:	**1**	Barometric Pressure (in. Hg):	**29.93**
PRE- or POST- ?	POST	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**	**30**		
	Sampling Medium						
	T-T/C WITH FLOW SPLITTER BOTTOM OF SS BALL						
	Actual Liters Per Minute, ALPM						
1	**0.139**	**0.193**	**0.262**	**0.332**	**0.092**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
	Average (ALPM)						
	0.1390	0.1930	0.2620	0.3320	0.0920	#DIV/0!	#DIV/0!
	Average Standard Liters Per Minute, Avg. (SLPM)						
	0.1354	0.1880	0.2552	0.3234	0.0896	#DIV/0!	#DIV/0!

REMARKS:

Ta °C=	24
P_v a=	0.88
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:	0.148	-1.312	-0.546	-1.282	-77.299	#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:	**OBL09-3**	Date:	**8/7/2009**
Pump I.D.:	**625232**	Time (EDT):	**14:14**
Rotameter R- ?:	**2**	Barometric Pressure (in. Hg):	**30.01**
PRE- or POST- ?	PRE	Temperature (deg. F):	**71.0**
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	**0.135**	**0.191**	**0.262**	**0.329**	**0.403**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1350	0.1910	0.2620	0.3290	0.4030	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1332	0.1885	0.2586	0.3247	0.3977	#DIV/0!	#DIV/0!

REMARKS:
Ta ^{o}C= 22
P_v a= 0.78
std Press in. Hg **29.92**
Tstd ^{o}C = **25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL09-3**	Date:	**9/24/2009**
Pump I.D.:	**625232**	Time (EDT):	**16:04**
Rotameter R- ?:	**2**	Barometric Pressure (in. Hg):	**29.93**
PRE- or POST- ?	POST	Temperature (deg. F):	**75.6**
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	**0.133**	**0.194**	**0.267**	**0.326**			
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1330	0.1940	0.2670	0.3260	#DIV/0!	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1296	0.1890	0.2601	0.3176	#DIV/0!	#DIV/0!	#DIV/0!

REMARKS:
Ta ^{o}C= 24
P_v a= 0.88
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:	40	50	60	70	80	0	0	
ACCURACY:	-2.703	0.265	0.58	-2.187	#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 THREE : R3

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL09-3**	Date:	**8/10/2009**
Pump I.D.:	**522574**	Time (EDT):	**9:50**
Rotameter R- ?:	**3**	Barometric Pressure (in. Hg):	**29.89**
PRE- or POST- ?	PRE	Temperature (deg. F):	**74.0**
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 AMBIENT AIR BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1			**0.781**	**0.871**	**0.957**	**1.036**	**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!	0.7810	0.8710	0.9570	1.0360	1.1230
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	0.7637	0.8517	0.9358	1.0130	1.0981

REMARKS:
Ta ^{o}C= 23
P_v a= 0.83
std Press in. Hg **29.92**
Tstd ^{o}C = **25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL09-3**	Date:	**9/24/2009**
Pump I.D.:	**522574**	Time (EDT):	**16:25**
Rotameter R- ?:	**3**	Barometric Pressure (in. Hg):	**29.93**
PRE- or POST- ?	POST	Temperature (deg. F):	**75.6**
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				**0.878**	**0.968**	**1.044**	**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!	0.8780	0.9680	1.0440	1.1230
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.8553	0.9430	1.0171	1.0940

REMARKS:
Ta ^{o}C= 24
P_v a= 0.88
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	100	110	120	130	140	
ACCURACY:	#DIV/0!	#DIV/0!	#DIV/0!	0.423	0.769	0.405	-0.373	
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:	**OBL09-3**	Date:	**8/10/2009**
Pump I.D.:	**545761**	Time (EDT):	**10:22**
Rotameter R- ?:	**4**	Barometric Pressure (in. Hg):	**29.89**
PRE- or POST- ?	PRE	Temperature (deg. F):	**74.0**
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 AMBIENT AIR BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1			**0.833**	**0.927**	**1.007**	**1.094**	**1.170**
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!	0.8330	0.9270	1.0070	1.0940	1.1700
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	0.8145	0.9064	0.9847	1.0697	1.1440

REMARKS: Ta °C= 23
P_v a= 0.83
std Press in. Hg **29.92**
Tstd °C = **25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL09-3**	Date:	**9/24/2009**
Pump I.D.:	**545761**	Time (EDT):	**16:50**
Rotameter R- ?:	**4**	Barometric Pressure (in. Hg):	**29.93**
PRE- or POST- ?	POST	Temperature (deg. F):	**75.8**
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				**0.925**	**1.016**	**1.098**	**1.175**
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!	0.9250	1.0160	1.0980	1.1750
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.9011	0.9898	1.0697	1.1447

REMARKS: Ta °C= 24
P_v a= 0.88
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	100	110	120	130	140	
ACCURACY:	#DIV/0!	#DIV/0!	#DIV/0!	-0.585	0.518	0	0.061	
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:	**OBL09-3**	Date:	**8/7/2009**
Pump I.D.:	**625239**	Time (EDT):	**15:40**
Rotameter R- ?:	**5**	Barometric Pressure (in. Hg):	**30.01**
PRE- or POST- ?	PRE	Temperature (deg. F):	**71.0**
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	**0.127**	**0.184**	**0.251**	**0.316**	**0.386**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1270	0.1840	0.2510	0.3160	0.3860	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1253	0.1816	0.2477	0.3119	0.3809	#DIV/0!	#DIV/0!

REMARKS:
Ta °C= 22
P_v a= 0.78
std Press in. Hg **29.92**
Tstd °C = **25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL09-3**	Date:	**9/24/2009**
Pump I.D.:	**625239**	Time (EDT):	**17:02**
Rotameter R- ?:	**5**	Barometric Pressure (in. Hg):	**29.93**
PRE- or POST- ?	POST	Temperature (deg. F):	**75.8**
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	**0.128**	**0.187**	**0.259**	**0.325**			
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)							
	0.1280	0.1870	0.2590	0.3250	#DIV/0!	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1247	0.1822	0.2523	0.3166	#DIV/0!	#DIV/0!	#DIV/0!

REMARKS:
Ta °C= 24
P_v a= 0.88
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:	-0.479	0.33	1.857	1.507	#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:	**OBL09-3**	Date:	**8/10/2009**
Pump I.D.:	**545774**	Time (EDT):	**11:01**
Rotameter R- ?:	**6**	Barometric Pressure (in. Hg):	**29.89**
PRE- or POST- ?	PRE	Temperature (deg. F):	**74.0**
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			**0.808**	**0.895**	**0.981**	**1.070**	**1.150**
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!	0.8080	0.8950	0.9810	1.0700	1.1500
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	0.7901	0.8751	0.9592	1.0463	1.1245

REMARKS:
Ta ^{o}C= 23
P_v a= 0.83
std Press in. Hg **29.92**
Tstd ^{o}C = **25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL09-3**	Date:	**9/25/2009**
Pump I.D.:	**545774**	Time (EDT):	**11:03**
Rotameter R- ?:	**6**	Barometric Pressure (in. Hg):	**30.16**
PRE- or POST- ?	POST	Temperature (deg. F):	**72.8**
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				**0.910**	**0.996**	**1.081**	**1.146**
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!	0.9100	0.9960	1.0810	1.1460
Average Standard Liters Per Minute, Avg. (SLPM)							
	#DIV/0!	#DIV/0!	#DIV/0!	0.8981	0.9830	1.0668	1.1310

REMARKS:
Ta ^{o}C= 23
P_v a= 0.83
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	100	110	120	130	140	
ACCURACY:	#DIV/0!	#DIV/0!	#DIV/0!	2.628	2.481	1.959	0.578	
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:	**OBL09-3**	Date:	**8/10/2009**
Pump I.D.:	**538819**	Time (EDT):	**11:20**
Rotameter R- ?:	**7**	Barometric Pressure (in. Hg):	**29.89**
PRE- or POST- ?	PRE	Temperature (deg. F):	**74.2**
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	**0.152**	**0.226**	**0.321**	**0.409**	**0.485**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1520	0.2260	0.3210	0.4090	0.4850	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1486	0.2210	0.3139	0.3999	0.4742	#DIV/0!	#DIV/0!

REMARKS:
Ta ^{o}C= 23
P_v a= 0.83
std Press in. Hg **29.92**
Tstd ^{o}C = **25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL09-3**	Date:	**9/25/2009**
Pump I.D.:	**538819**	Time (EDT):	**11:25**
Rotameter R- ?:	**7**	Barometric Pressure (in. Hg):	**30.16**
PRE- or POST- ?	POST	Temperature (deg. F):	**75.9**
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	**0.156**	**0.233**	**0.326**	**0.408**			
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)							
	0.1560	0.2330	0.3260	0.4080	#DIV/0!	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1532	0.2288	0.3201	0.4006	#DIV/0!	#DIV/0!	#DIV/0!

REMARKS:
Ta ^{o}C= 24
P_v a= 0.88
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:	3.096	3.529	1.975	0.175	#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:	**OBL09-3**	Date:	**8/7/2009**
Pump I.D.:	**625276**	Time (EDT):	**16:05**
Rotameter R- ?:	**8**	Barometric Pressure (in. Hg):	**30.01**
PRE- or POST- ?	PRE	Temperature (deg. F):	**71.0**
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**	**0.200**	**0.272**	**0.341**	**0.407**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1430	0.2000	0.2720	0.3410	0.4070	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1411	0.1974	0.2684	0.3365	0.4017	#DIV/0!	#DIV/0!

REMARKS:
Ta ^{o}C= 22
P_v a= 0.78
std Press in. Hg **29.92**
Tstd ^{o}C = **25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL09-3**	Date:	**9/25/2009**
Pump I.D.:	**625276**	Time (EDT):	**11:51**
Rotameter R- ?:	**8**	Barometric Pressure (in. Hg):	**30.16**
PRE- or POST- ?	POST	Temperature (deg. F):	**75.6**
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	**0.141**	**0.200**	**0.274**	**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)							
	0.1410	0.2000	0.2740	0.3380	#DIV/0!	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1384	0.1964	0.2690	0.3319	#DIV/0!	#DIV/0!	#DIV/0!

REMARKS:
Ta ^{o}C= 24
P_v a= 0.88
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:	40	50	60	70	80	0		
ACCURACY:	-1.914	-0.507	0.224	-1.367	#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:	**OBL09-3**	Date:	**8/7/2009**
Pump I.D.:	**625277**	Time (EDT):	**16:42**
Rotameter R- ?:	**9**	Barometric Pressure (in. Hg):	**30.01**
PRE- or POST- ?	PRE	Temperature (deg. F):	**71.0**
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	**0.143**	**0.195**	**0.267**	**0.333**	**0.397**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1430	0.1950	0.2670	0.3330	0.3970	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1411	0.1924	0.2635	0.3286	0.3918	#DIV/0!	#DIV/0!

REMARKS:
Ta °C= 22
P_v a= 0.78
std Press in. Hg **29.92**
Tstd °C = **25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL09-3**	Date:	**9/25/2009**
Pump I.D.:	**625277**	Time (EDT):	**13:17**
Rotameter R- ?:	**9**	Barometric Pressure (in. Hg):	**30.17**
PRE- or POST- ?	POST	Temperature (deg. F):	**75.0**
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	**0.117**	**0.191**	**0.262**	**0.329**			
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)							
	0.1173	0.1910	0.2620	0.3290	#DIV/0!	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1152	0.1876	0.2573	0.3232	#DIV/0!	#DIV/0!	#DIV/0!

REMARKS:
Ta °C= 24
P_v a= 0.88
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		
ACCURACY:	-18.356	-2.495	-2.353	-1.643	#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:	**OBL09-3**	Date:	**8/10/2009**
Pump I.D.:	**545767**	Time (EDT):	**11:48**
Rotameter R- ?:	**10**	Barometric Pressure (in. Hg):	**29.89**
PRE- or POST- ?	PRE	Temperature (deg. F):	**74.2**
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 LOW FLOW WITH SPLITTER BOTTOM OF SS BALL							
Actual Liters Per Minute, ALPM							
1	**0.150**	**0.184**	**0.227**	**0.279**	**0.326**		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Average (ALPM)							
	0.1500	0.1840	0.2270	0.2790	0.3260	#DIV/0!	#DIV/0!
Average Standard Liters Per Minute, Avg. (SLPM)							
	0.1467	0.1799	0.2220	0.2728	0.3188	#DIV/0!	#DIV/0!

REMARKS	Ta oC=	23
	Pv a=	0.83
	std Press in. Hg	**29.92**
	Tstd oC =	**25**

PERSONAL PUMP CALIBRATION SHEET

Project:	**OBL09-3**	Date:	
Pump I.D.:	**545767**	Time (EDT):	
Rotameter R- ?:	**10**	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	**35**	**40**	**45**	**50**		
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 oC=	-18
	Pv a=	#N/A
	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.	35988	**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	2/6/2009		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 Stratheran

Lab. Pressure 745 mmHg
Lab. Temperature 22.3 °C

Instrument Reading	Lab Standard Reading	Deviation	Allowable Deviation	As Received
200.7ccm	200.93ccm	-0.11%	1.00%	In Tolerance
5003ccm	5009.35ccm	-0.13%	1.00%	In Tolerance
16970ccm	17042.5ccm	-0.43%	1.00%	In Tolerance

Bios International Standards Used

Description	Standard Serial Number	Calibration Date	Calibration Due Date
ML_500_10	113784	5/1/2008	5/1/2009
ML_500_44	110104	5/15/2008	5/15/2009

Bios

Driving a Higher Standard in Flow Measurement℠

As Shipped Calibration Data

Certificate No. 35988
Technician David Stratheran

Lab. Pressure 761 mmHg
Lab. Temperature 22.4 °C

Instrument Reading	Lab Standard Reading	Deviation	Allowable Deviation	As Shipped
200.4ccm	200.505ccm	-0.05%	1.00%	In Tolerance
4992ccm	5002.2ccm	-0.2%	1.00%	In Tolerance
16950ccm	17000ccm	-0.29%	1.00%	In Tolerance

Bios International Standards Used

Description	Standard Serial Number	Calibration Date	Calibration Due Date
ML_500_10	113778	5/1/2008	5/1/2009
ML_500_44	113761	5/1/2008	5/1/2009

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.

Harvey Padden, President and Chief Metrologist