PUREX SITE at MITCHEL FIELD
GROUNDWATER REMEDIATION

DEPARTMENT OF PUBLIC WORKS

Nassau County

Long Island, New York

ANNUAL OPERATIONS AND ENVIRONMENTAL MONITORING SUMMARY

2005

Purex Site at Mitchel Field Groundwater Remediation
Annual Operations and Environmental Monitoring Summary For Year 2005

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1.0 2005 Treatment Plant Operations

1.1 2005 Treatment Systems Configuration

Nassau County took over operation of the Mitchel Field Purex Groundwater Remediation Facility (MFPGRF) from Purex Corporation on January 1, 2003. Purex Corporation had operated the facility for nearly thirteen (13) years at the time of the transfer to the County. Operating Year (OY) 2005 was the third year of the site's operation by Nassau County.

The MFPGRF was constructed to extract contaminated groundwater from two separate areas (a highly contaminated source area which is surrounded by a slurry wall and a more diffuse down gradient plume area), treat the water to meet the State's required standards, and discharge the treated water to a County recharge basin. For OY 2005 (January 1, 2005 to December 31, 2005) there were two (2) plume area recovery wells and one (1) source area recovery well active for the MFPGRF, both the source area and plume area recovery well systems were operated in OY 2005.

Recovered water from both source area and plume area well locations was pumped via force mains to the MFPGRF located at the intersection of Oak Street and Commercial Avenue in East Garden City, New York. Once within the treatment facility, recovered water under went air stripping treatment, with a typical air to water ratio of 50 to 1. After air stripping, treated water was pumped from the facility's effluent wet well to a County recharge basin.

1.2 Significant OY 2005 Operations Events

The failure of an effluent pipe in the vault of recovery well W-4D resulted in a shutdown of this well for the last seven months of OY2005.

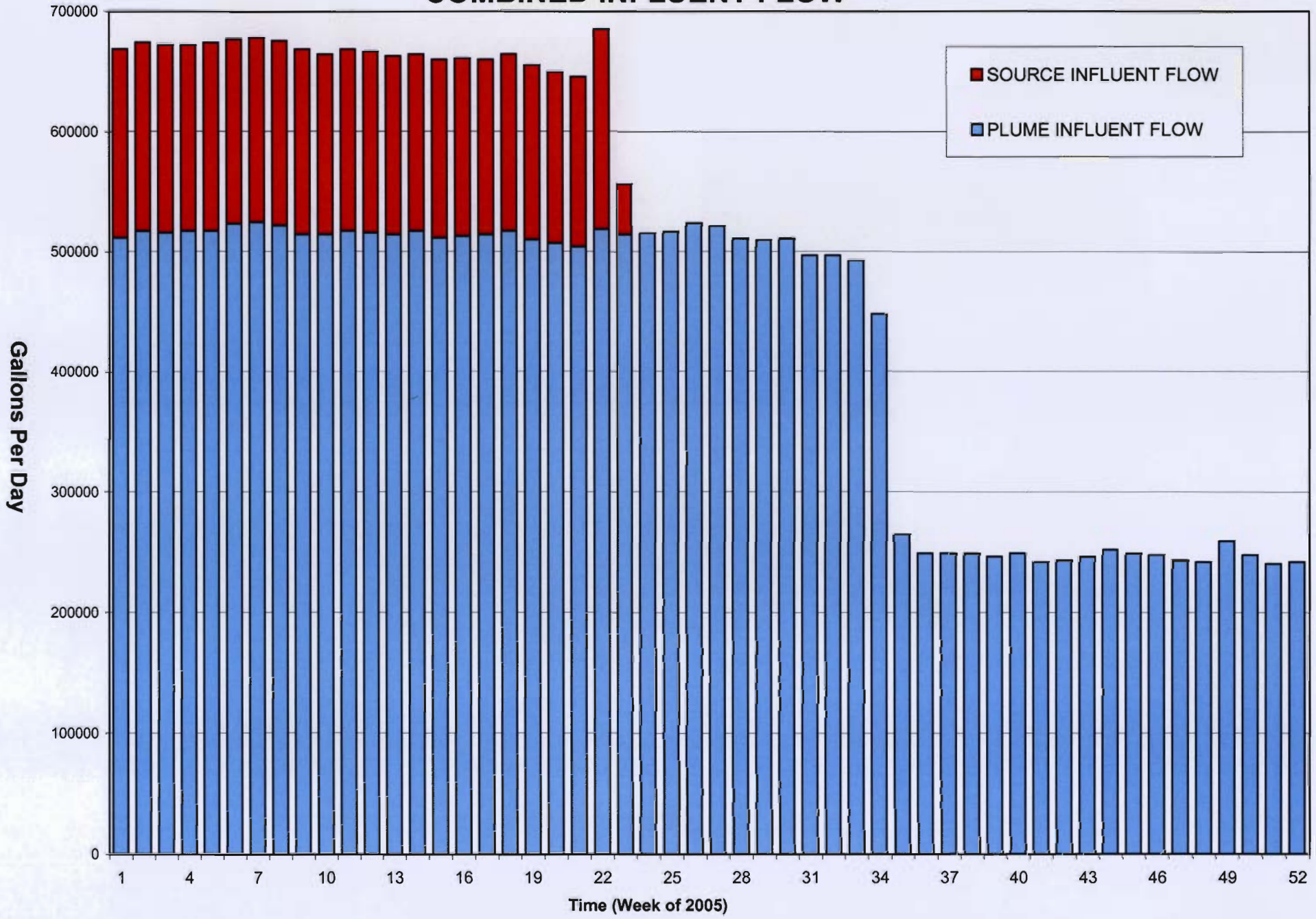
2.0 Treatment Plant Operations Monitoring Results

2.1 Total Flow and On-Line Performance

The MFPGRF pumped and treated a total of 169,536,480 gallons of contaminated groundwater in OY 2005. A total of 22,314,840 gallons was recovered from the source area system and a total of 147,221,640 gallons from the plume area system. Figure 1 shows daily flow rates for each week of OY 2005. Detailed monthly summaries of flow are presented below:

FIGURE 1

PUREX SITE - 2005
COMBINED INFLUENT FLOW



2005

MONTH	SOURCE (Gallons)	PLUME (Gallons)	TOTAL (Gallons)
JANUARY	4,815,360	15,935,040	20,750,400
FEBRUARY	4,284,000	14,486,400	18,770,400
MARCH	4,402,020	15,243,240	19,645,260
APRIL	4,386,240	15,331,680	19,717,920
MAY	4,384,980	15,015,540	19,400,520
JUNE	42,240	15,071,040	15,113,280
JULY	0	15,292,530	15,292,530
AUGUST	0	11,064,090	11,064,090
SEPTEMBER	0	7,356,960	7,356,960
OCTOBER	0	7,558,560	7,558,560
NOVEMBER	0	7,306,560	7,306,560
DECEMBER	0	7,560,000	7,560,000
TOTAL	22,314,840	147,221,640	169,536,480

The MFPGRF has treated 763,725,624 gallons of groundwater during the County's 3 years of operation of the remediation facility. A cumulative summary for each operating year is provided below:

YEAR	SOURCE FLOW	PLUME FLOW	ANNUAL TOTAL	CUMULATIVE TOTAL
2003	150,013,020	167,837,280	317,850,300	317,850,300
2004	74,133,324	202,205,520	276,338,844	594,189,144
2005	22,314,840	147,221,640	169,536,480	763,725,624

The MFPGTF operated a total of 8591 hours out of a possible 8760 hours for the 12 months covered in this report's operating year. This resulted in an overall on-line performance of 98 % during OY 2005. The majority of the system's downtime in OY 2005, was caused by power outages in March (31 hrs.), July (16.5 hrs.) and August (70.5 hrs.). Effluent pump problems in May (35.5 hrs.) also caused system downtime. Detailed monthly summaries of on-line performance are presented in Appendix A.

2.2 Influent Water Quality Results

2.2.1 Source Influent Water Quality Results

Source influent water quality samples were collected on a weekly basis. The samples were analyzed for volatile organic compounds (VOC's). Detailed monthly data summaries are presented in Appendix B.

So what previous year from pumping W-3? (not back in operation until 11/08/06) - response to Q#5 says 6 recov. wells in source area)

In OY 2005 influent TVOC levels for the source area groundwater ranged from 307.7 parts per billion (ppb) to 910.4 ppb (Figure 2). W-4D was operated alone for the first 5 months of OY 2005. This well was removed from service on June 2, 2005 due to a pipe leak in the well vault. Tetrachloroethene, Trichloroethene and Cis-1,2-Dichloroethene were the three (3) compounds that accounted for 86 % of the source area influent TVOC in OY 2005 (Figure 3).

2.2.2 Plume Influent Quality Results

Plume influent water quality samples were collected on a weekly basis. The samples were analyzed for VOC's. Detailed monthly summaries of the off-site influent quality results are presented in Appendix B.

The plume influent TVOCs ranged from 18.6 ppb to 247.8 ppb in OY 2005 (Figure 4). The plume influent TVOC concentrations ranged from 100 ppb to 200 ppb for 36 weeks of OY 2005. As observed with the source influent, 90% of the plume influent contamination was comprised of three (3) compounds, Tetrachloroethene, Trichloroethene and Cis-1,2-Dichloroethene (Figure 5).

2.3 Recovery Well Data

Both the source area and plume area recovery well systems were operated in OY 2005. Table 1 shows the operation of recovery wells on a weekly basis. No weekly water quality samples have been collected at the well head since the start of the remediation in 1990 due to confined space entry requirements. app C P 7 says influent will be sampled monitor wells as surrogate?

2.4 Effluent Water Quality Results

Effluent water quality samples were collected on a weekly basis. The samples were analyzed for VOCs and pH. Detailed monthly summaries of the effluent quality results are presented in Appendix C.

In OY 2005 there were Twenty-four (24) weeks where one or more effluent discharge limitation was exceeded. Tetrachloroethene and Cis-1,2-Dichloroethene were the principal compounds that exceeded their individual discharge limitations.

2.5 Air Emissions Monitoring Results

Two (2) compounds: Tetrachloroethene and Vinyl Chloride were identified as significant potential air contaminant sources resulting from the operation of the MFPGRF. No direct air emissions sampling is required at the MFPGRF; instead, air emissions rates are calculated based on a specific day's influent contaminant concentration and its associated fluid flow rate. The calculation assumes that 100% of the measured compound is removed by the air strippers and discharged to the atmosphere.

FIGURE 2

PUREX SITE - 2005

SOURCE INFLUENT TOTAL VOLATILE ORGANIC COMPOUNDS

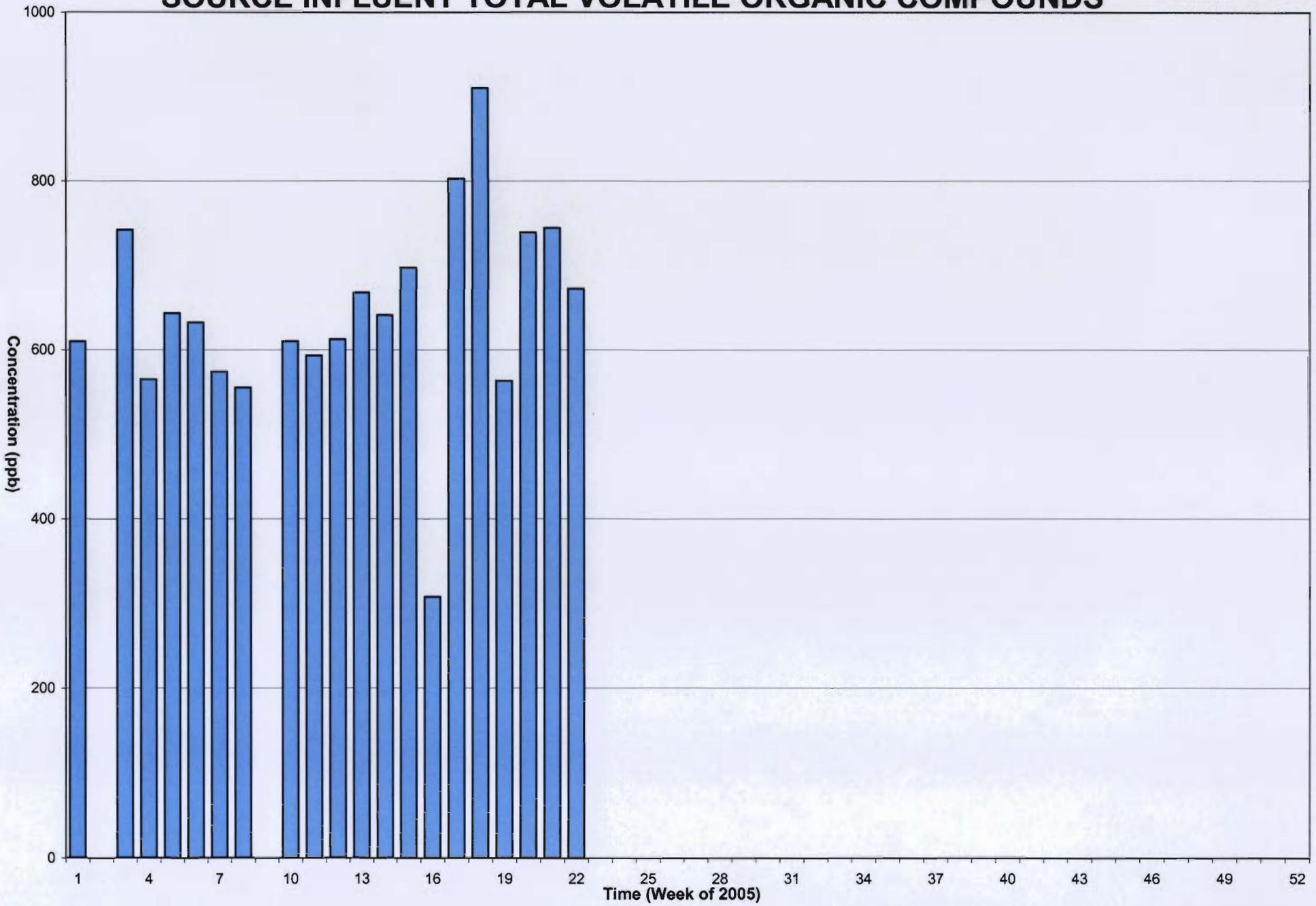


FIGURE 3

PUREX SITE - 2005 - SOURCE INFLUENT - VOC CONCENTRATION

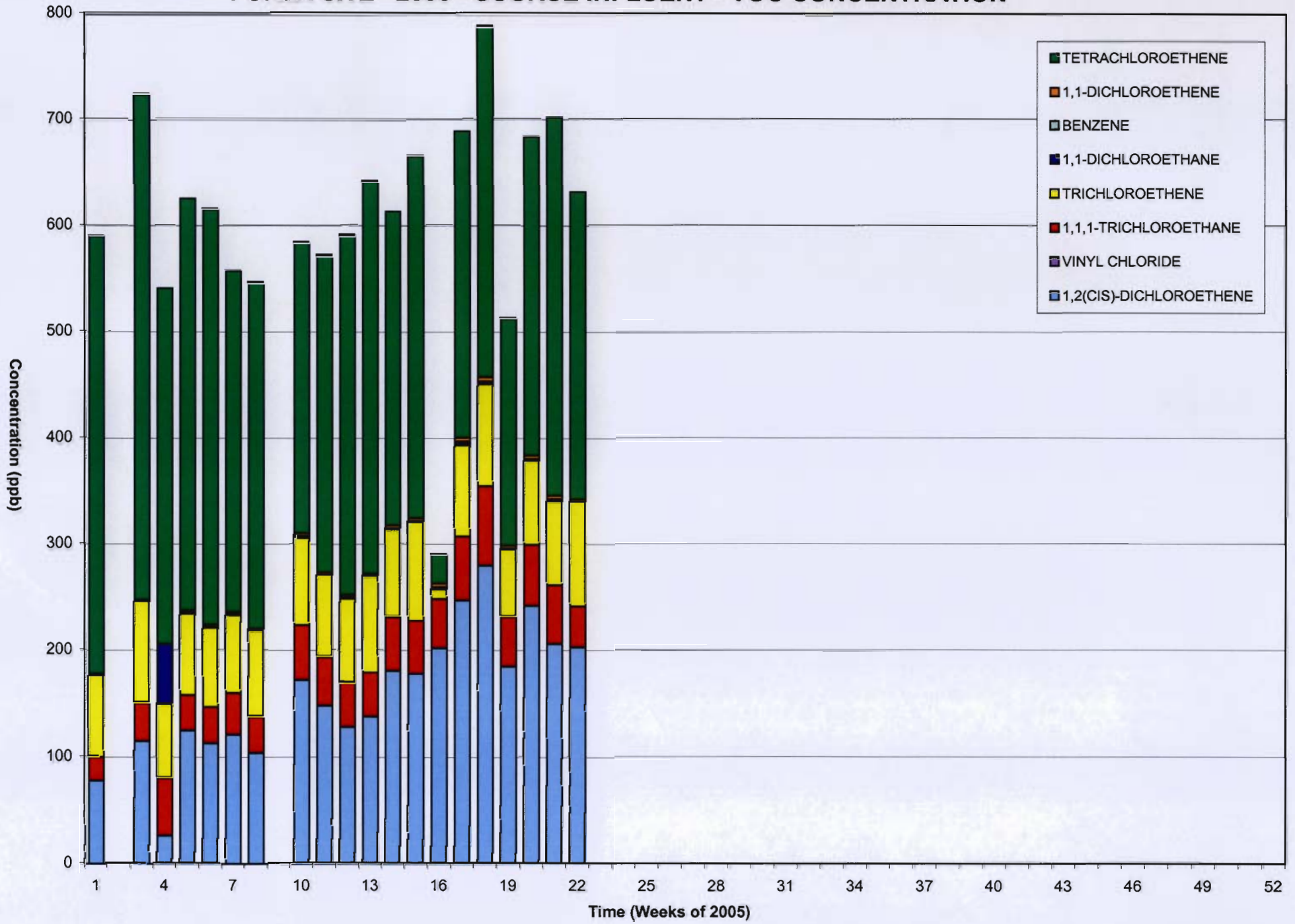


FIGURE 4

PUREX SITE - 2005
PLUME INFLUENT TOTAL VOLATILE ORGANIC COMPOUNDS

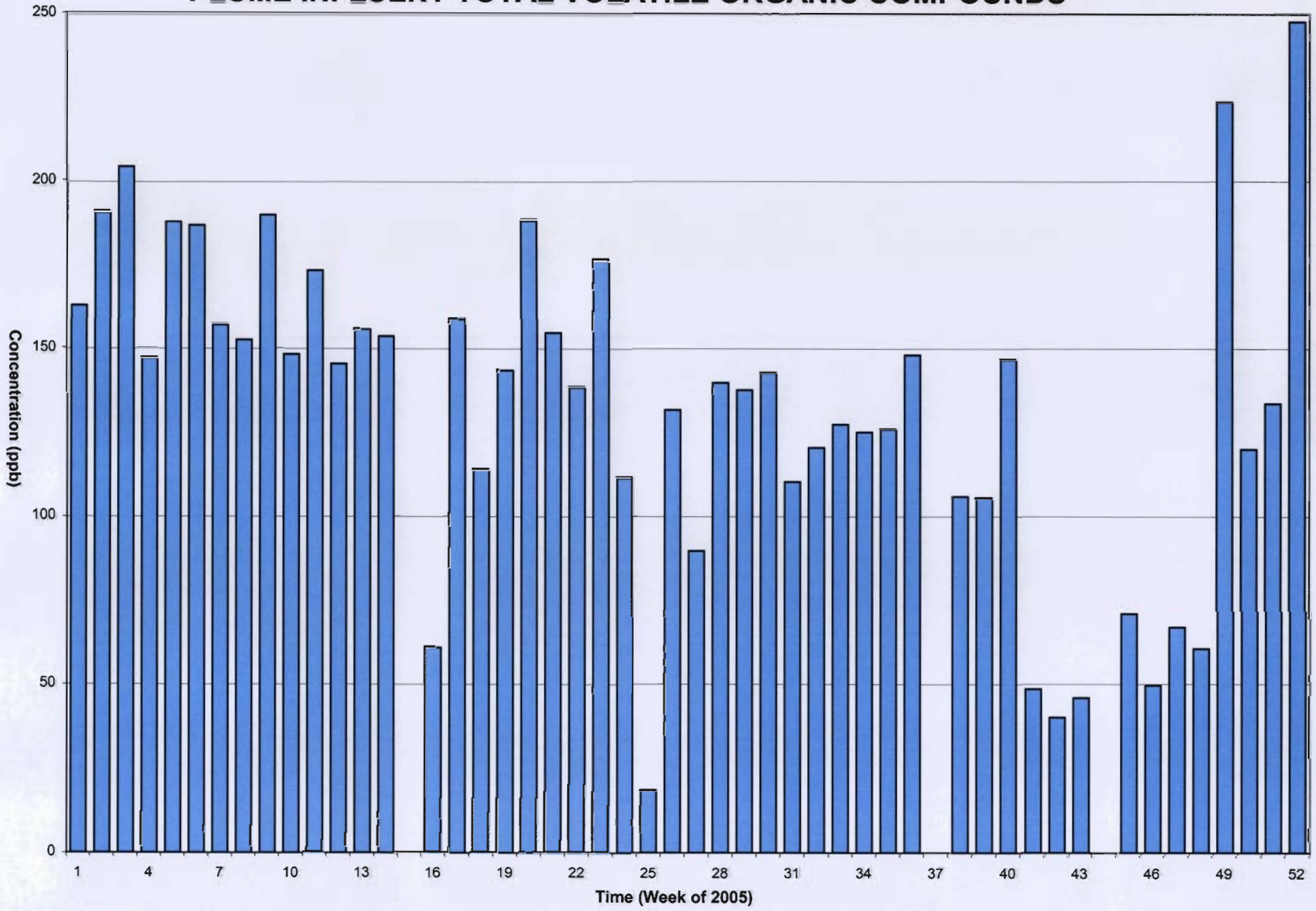


FIGURE 5

PUREX SITE - 2005 - PLUME INFLUENT - VOC CONCENTRATION

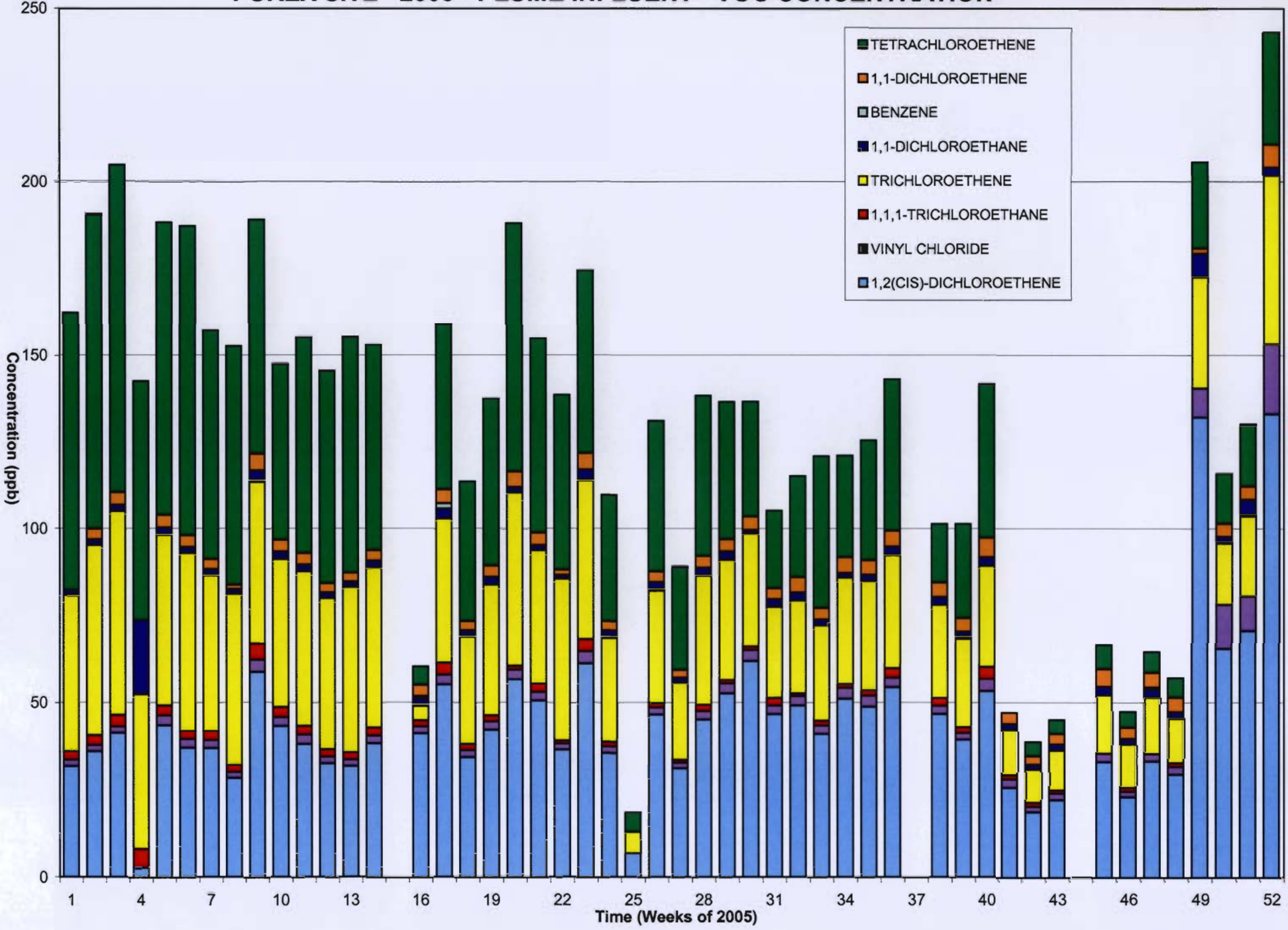


Table 1

2005 Recovery Well Operation

WEEK STARTING TUESDAY:	SOURCE WELLS	PLUME WELLS	COMMENTS
01/03/05	W-4D	W-183, W-184	
01/10/05	W-4D	W-183, W-184	
01/17/05	W-4D	W-183, W-184	
01/24/05	W-4D	W-183, W-184	
01/31/05	W-4D	W-183, W-184	
02/07/05	W-4D	W-183, W-184	
02/14/05	W-4D	W-183, W-184	
02/21/05	W-4D	W-183, W-184	
02/28/05	W-4D	W-183, W-184	
03/07/05	W-4D	W-183, W-184	
03/14/05	W-4D	W-183, W-184	
03/21/05	W-4D	W-183, W-184	
03/28/05	W-4D	W-183, W-184	
04/04/05	W-4D	W-183, W-184	
04/11/05	W-4D	W-183, W-184	
04/18/05	W-4D	W-183, W-184	
04/25/05	W-4D	W-183, W-184	
05/02/05	W-4D	W-183, W-184	
05/09/05	W-4D	W-183, W-184	
05/16/05	W-4D	W-183, W-184	
05/23/05	W-4D	W-183, W-184	
05/30/05	W-4D	W-183, W-184	W-4D offline - 6/2
06/06/05		W-183, W-184	
06/13/05		W-183, W-184	
06/20/05		W-183, W-184	
06/27/05		W-183, W-184	
07/04/05		W-183, W-184	
07/11/05		W-183, W-184	
07/18/05		W-183, W-184	
07/25/05		W-183, W-184	
08/01/05		W-183, W-184	
08/08/05		W-183, W-184	
08/15/05		W-183, W-184	
08/22/05		W-183, W-184	Plume flow reduced from 340 gpm to 175 gpm
08/29/05		W-183, W-184	
09/05/05		W-183, W-184	
09/12/05		W-183, W-184	
09/19/05		W-183, W-184	
09/26/05		W-183, W-184	
10/03/05		W-183, W-184	
10/10/05		W-183, W-184	
10/17/05		W-183, W-184	
10/24/05		W-183, W-184	
10/31/05		W-183, W-184	
11/07/05		W-183, W-184	
11/14/05		W-183, W-184	
11/21/05		W-183, W-184	
11/28/05		W-183, W-184	
12/05/05		W-183, W-184	
12/12/05		W-183, W-184	
12/19/05		W-183, W-184	
12/26/05		W-183, W-184	

During OY 2005 the highest calculated emission rates for Tetrachloroethene and Vinyl Chloride were 1.028 lbs/d and 0.041 lbs/d, respectively. The highest emission rate for Tetrachloroethene represents 18 % of the compound's maximum allowable rate of 5.76 lbs/d. The highest emission rate for Vinyl Chloride represents 2.6 % of the compound's maximum allowable rate of 1.56 lbs/d. The weekly air emissions data for these parameters are presented graphically in Figures 6 and 7.

3.0 2005 Environmental Monitoring Program

3.1 2005 Environmental Monitoring Dates, Wells and Parameters

In compliance with the Mitchel Field-Purex Groundwater Remediation Project's (MFPGRP) Remediation Monitoring Plan (RMP), the County conducted two (2) sampling events in Monitoring Year (MY) 2005 (January 1, 2005 to December 31, 2005). The two (2) sampling events were conducted in April and October. Each sampling event analyzed network groundwater monitoring wells for volatile organic compounds (VOC's). The monitoring network now consists of 27 wells with the addition of three (3) annual wells (Figure 8). All but the three annual monitoring wells are equipped with dedicated sampling devices (Grundfos Redi-flo 2 submersible pump) (Appendix D).

3.1.1 2005 Environmental Monitoring Special Notes

Monitoring well W-372 was not sampled during the April 2005 sampling round because the well box was destroyed during winter snow removal and required replacement and cleaning.

4.0 Environmental Monitoring Results

4.1 Semi-Annual Sampling Results

4.1.1 Volatile Organic Sampling Results

Groundwater samples were collected from twenty-four (24) groundwater monitoring wells and from up to five recovery wells (depending on the operational configuration) for each of the two (2) Semi-Annual sampling events. Three (3) groundwater monitoring wells are sampled annually in October. The results of the Semi-Annual sampling analyses are presented in Tables 2 and 3. These tables list only those compounds that have been detected historically at the Purex site. If a specific compound listed in the List of Analytes/Groundwater Clean-up Criteria (Table 1 & 2 in Appendix D) does not appear in the tables it has never been detected in groundwater at the site.

Figure 8 presents an aerial site map with the known extent of groundwater contamination in the upper portion of the Magothy formation, based on the October 2005 monitoring well sampling results. Of the twenty-four (24) semi-annual monitoring wells sampled, seven (7) wells had TVOCs less than 10 ppb for both MY 2005 sampling events, eleven (11) wells had at least one sampling event where its TVOC was greater than 10 ppb but less than 100 ppb and seven (7) wells had at least one sampling event where its TVOC was greater than 100 ppb.

FIGURE 6

PUREX SITE - 2005 - TETRACHLOROETHENE
COMBINED AIR DISCHARGE

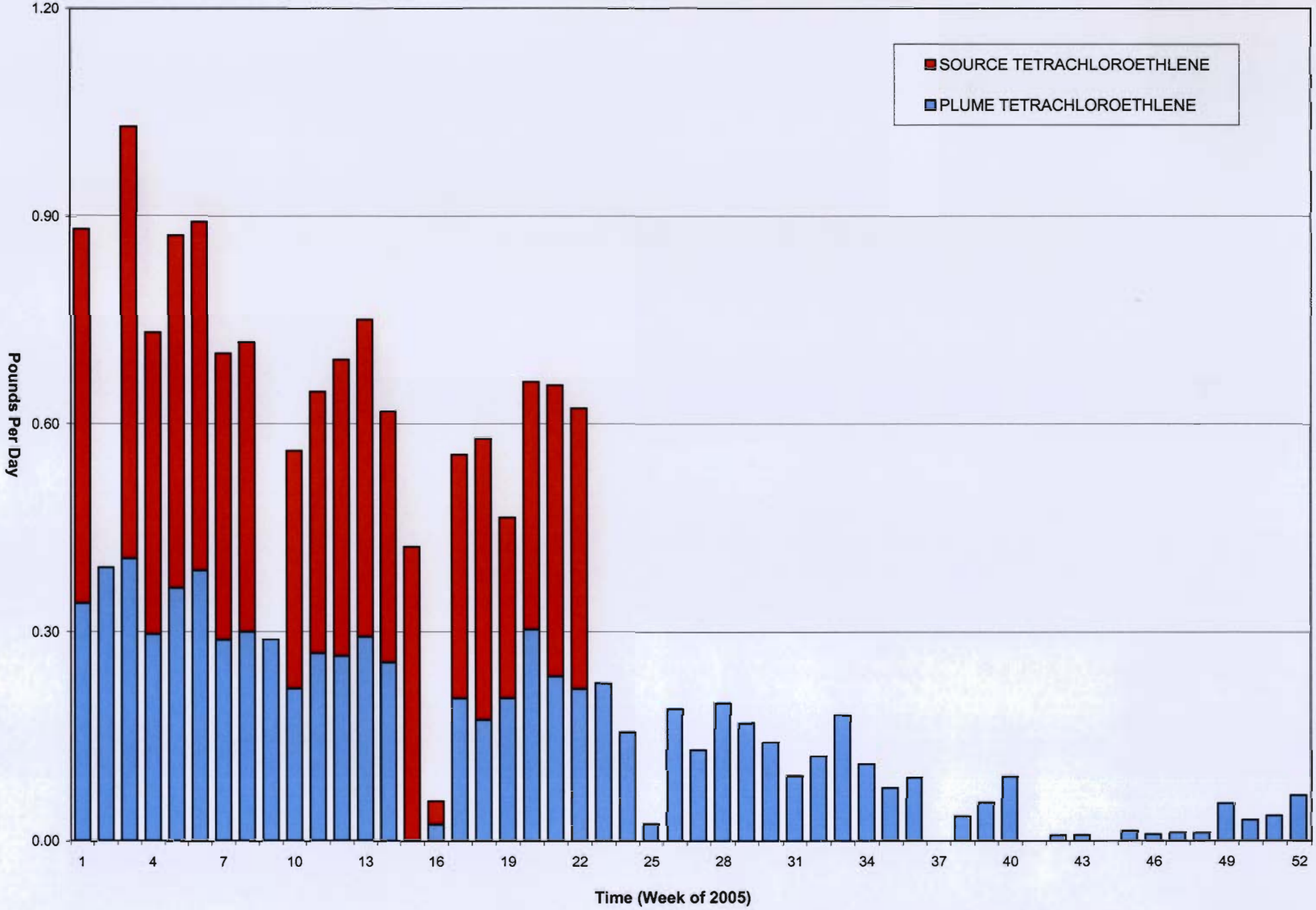


FIGURE 7

PUREX SITE - 2005 - COMBINED
AIR DISCHARGE - VINYL CHLORIDE

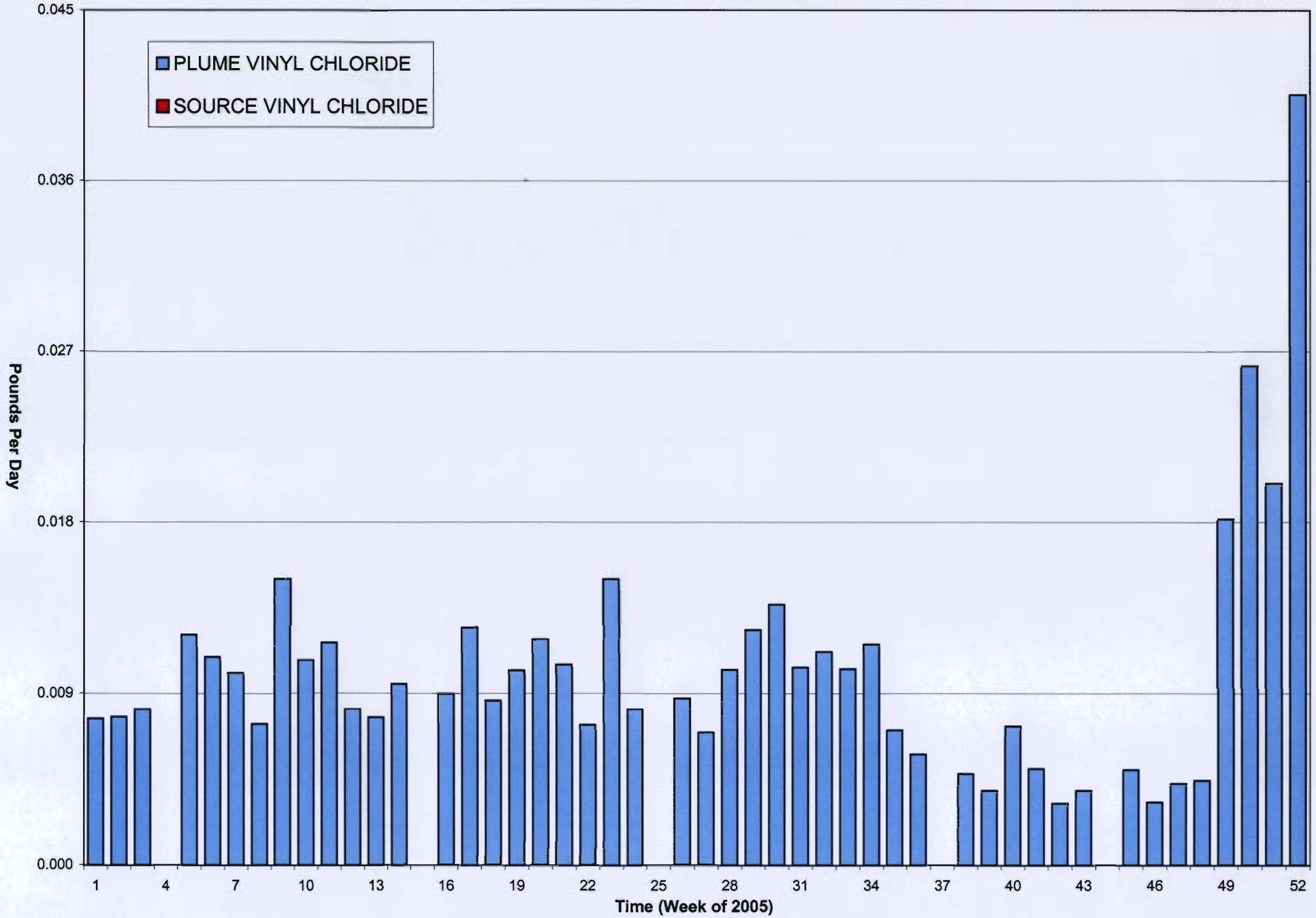
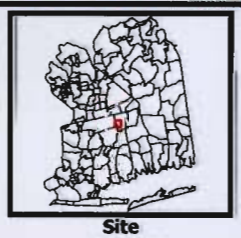


Figure 8

Legend

- Upper Magothy Monitoring Wells With TVOC(ppb) Reading for 10/05 (52)
- Plume Recovery Wells
- Source Area Recovery Wells
- Containment Area
- Influent Pipe
- Heating-Coolline Wells
- Purex TVOC(ppb) Contour Oct.,2005
  - >25ppb
  - >100ppb
  - >400ppb
  - NO DATA (inferred extent of Plume)



Site Location

PUREX SITE & VICINITY
PUREX TVOC (ppb)
October, 2005
Mitchel Field, NY

Prepared By: - NCDPW - Water/Wastewater Engineering Unit

N
W E
S

1 Inch equals 500 Feet

Nassau County

Geographic Information System

Date: 5/04/2007

Table 2
PUREX SITE
SEMI-ANNUAL GROUNDWATER SAMPLING RESULTS FOR 2005

VOLATILE ORGANICS COMPOUNDS (ppb)

	WELL W-234		WELL W-402		WELL W-405		WELL W-435		WELL W-461		WELL W-302		WELL W-305	
	DATE SAMPLED		DATE SAMPLED		DATE SAMPLED		DATE SAMPLED		DATE SAMPLED		DATE SAMPLED		DATE SAMPLED	
	5/4/05	11/28/05	4/25/05	10/19/05	4/25/05	10/24/05	5/4/05	11/28/05	4/25/05	10/19/05	4/25/05	10/19/05	4/25/05	10/24/05
Dichlorodifluoromethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Vinyl Chloride	BDL	26.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Methylene Chloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1-Dichloroethene	BDL	7.5	2.0	2.4	BDL	BDL	BDL	BDL	1.2	1.4	4.8	7.1	BDL	BDL
t-1,2 Dichloroethene	BDL	31.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1-Dichloroethane	1.1	23.8	1.8	2.2	BDL	0.7	BDL	BDL	0.6	BDL	1.1	BDL	BDL	BDL
c-1,2-Dichloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.7	BDL	BDL	1.6	BDL	BDL	BDL
Chloroform	BDL	0.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,1-Trichloroethane	3.2	47.5	BDL	BDL	BDL	BDL	BDL	BDL	1.7	1.1	1.6	2.9	BDL	BDL
Carbon Tetrachloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-Dichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Trichloroethylene	7.7	78.5	4.3	3.3	BDL	1.4	3.3	5.9	28.4	22.9	17.1	17	1.0	1.2
1,1,2-Trichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Toluene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Tetrachloroethylene	57.8	276.0	6.9	3.7	1.2	2.4	3.9	3.7	11.7	6.7	65.1	25.3	2.9	5.3
Chlorobenzene	BDL	3.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,1,2-Tetrachloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ethyl Benzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
m,p-Xylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
o-Xylene	BDL	0.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.3
Isopropylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
n-Propylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5
1,3,5-Trimethylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.9
1,2,4-Trimethylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	4.8
sec-Butyl Benzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
tert-Butyl Benzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
p-Isopropyltoluene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,4-Dichlorobenzene	BDL	2.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-Dichlorobenzene	BDL	29.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Hexachlorobutadiene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Naphthalene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,3-Trichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,3-Trichloropropane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Methyl t-Butylether (MTBE)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TVOC	69.8	527.2	15.0	11.6	1.2	4.5	7.2	10.3	43.6	32.1	91.3	52.3	0.0	0.0

Table 2
PUREX SITE
SEMI-ANNUAL GROUNDWATER SAMPLING RESULTS FOR 2005

VOLATILE ORGANICS COMPOUNDS (ppb)

	WELL W-311R DATE SAMPLED		WELL W-361 DATE SAMPLED		WELL W-363 DATE SAMPLED		WELL W-366 DATE SAMPLED		WELL W-367 DATE SAMPLED		WELL W-368 DATE SAMPLED		WELL W-369 DATE SAMPLED	
	4/26/05	10/20/05	4/25/05	10/19/05		10/24/05	4/28/05	10/24/05	4/26/05	10/24/05	4/26/05	10/24/05	4/25/05	10/19/05
Dichlorodifluoromethane	2.6	10.7	1.0	BDL		BDL	BDL	BDL	7.8	2.0	21.5	18.2	BDL	BDL
Vinyl Chloride	17.5	10.9	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	33.4	16.7
Methylene Chloride	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1-Dichloroethene	2.1	2.1	1.2	BDL	Well Added to Annual Sample Schedule	BDL	BDL	BDL	7.8	4.2	8.8	11.9	6.0	4.8
1,2-T-Dichloroethene	0.9	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.4	1.2
1,1-Dichloroethane	4.1	2.7	2.7	BDL		BDL	BDL	BDL	0.8	BDL	1.2	1.6	8.1	4.9
c-1,2-Dichloroethylene	105	68.0	27.4	2.8		BDL	BDL	BDL	3.8	1.5	8.9	14.2	261	201
Chloroform	BDL	0.8	BDL	BDL		BDL	BDL	BDL	5.4	1.8	7.3	8.7	BDL	BDL
1,1,1-Trichloroethane	BDL	BDL	4.0	0.7		BDL	BDL	BDL	3.2	1.0	3.2	2.9	2.3	2.3
Carbon Tetrachloride	BDL	BDL	5.1	BDL		BDL	BDL	BDL	2.9	BDL	BDL	BDL	BDL	BDL
1,2-Dichloroethane	2.6	1.5	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzene	1.9	0.7	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.6	BDL
Trichloroethylene	86	61.5	13.4	2.3		BDL	19.0	18.7	10.7	3.7	19.7	20.7	32.8	15.4
1,1,2-Trichloroethane	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Toluene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Tetrachloroethylene	32.2	17.8	59.4	10.8		BDL	1.5	0.7	4.8	1.3	8.8	6.1	29.3	10.3
Chlorobenzene	1.1	0.8	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.8	0.6
1,1,1,2-Tetrachloroethane	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ethyl Benzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
m,p-Xylene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
o-Xylene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Isopropylbenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
n-Propylbenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3,5-Trimethylbenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,4-Trimethylbenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.8	BDL
sec-Butyl Benzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
tert-Butyl Benzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
p-Isopropyltoluene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,4-Dichlorobenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3-Dichlorobenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-Dichlorobenzene	2.3	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	8.2	5.3
Hexachlorobutadiene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Naphthalene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,3-Trichlorobenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,3-Trichloropropane	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Methyl t-Butylether (MTBE)	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TVOC	258.3	177.5	114.2	16.6	0.0	0.0	20.5	19.4	47.2	15.5	79.4	84.3	386.7	262.5

Table 2
PUREX SITE
SEMI-ANNUAL GROUNDWATER SAMPLING RESULTS FOR 2005

VOLATILE ORGANICS COMPOUNDS (ppb)

	WELL W-370 DATE SAMPLED		WELL W-371 DATE SAMPLED		WELL W-372 DATE SAMPLED		WELL W-373 DATE SAMPLED		WELL W-375 DATE SAMPLED		WELL W-377 DATE SAMPLED		WELL W-378 DATE SAMPLED	
	4/25/05	10/19/05	4/26/05	10/21/05		10/31/05	4/26/05	10/21/05	4/26/05	10/21/05	4/26/05	10/21/05	4/26/05	10/21/05
Dichlorodifluoromethane	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Vinyl Chloride	BDL	BDL	40.6	38.7		BDL	BDL	BDL	BDL	BDL	BDL	BDL	11.5	BDL
Methylene Chloride	BDL	BDL	BDL	BDL		BDL	BDL	BDL	0.5	BDL	BDL	BDL	BDL	BDL
1,1-Dichloroethene	BDL	1.1	3.1	3.3	Curb Box Destroyed No Sample	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3.1	BDL
1,2-T-Dichloroethene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1-Dichloroethane	1.1	2.5	5.6	6.1		BDL	BDL	BDL	BDL	BDL	BDL	BDL	3.7	BDL
c-1,2-Dichloroethylene	15.8	34.6	47.1	33.7		BDL	BDL	1.5	BDL	BDL	BDL	BDL	18.8	1.4
Chloroform	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,1-Trichloroethane	1.1	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Carbon Tetrachloride	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-Dichloroethane	BDL	BDL	1.2	0.8		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzene	BDL	BDL	1.1	0.8		BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.5	BDL
Trichloroethylene	4.8	3.8	17.6	14.0		BDL	BDL	1.0	BDL	BDL	BDL	BDL	23.1	2.0
1,1,2-Trichloroethane	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Toluene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Tetrachloroethylene	18.8	7.5	17.1	8.5		BDL	BDL	BDL	BDL	BDL	1.3	0.7	24.4	0.6
Chlorobenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,1,2-Tetrachloroethane	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ethyl Benzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
m,p-Xylene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
o-Xylene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Isopropylbenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
n-Propylbenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3,5-Trimethylbenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,4-Trimethylbenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
sec-Butyl Benzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
tert-Butyl Benzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
p-Isopropyltoluene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,4-Dichlorobenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3-Dichlorobenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-Dichlorobenzene	1.7	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Hexachlorobutadiene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Naphthalene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,3-Trichlorobenzene	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,3-Trichloropropane	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Methyl t-Butylether (MTBE)	BDL	BDL	3.1	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TVOC	43.3	49.5	136.5	105.9	0.0	0.0	0.0	2.5	0.5	0.0	1.3	0.7	86.1	4.0

Table 2
PUREX SITE
SEMI-ANNUAL RECOVERY WELL SAMPLING RESULTS FOR 2005

VOLATILE ORGANICS COMPOUNDS (ppb)

	WELL W-380 DATE SAMPLED		WELL W-381 DATE SAMPLED		WELL W-382 DATE SAMPLED		WELL W-383 DATE SAMPLED		WELL X-156 DATE SAMPLED		WELL X-157 DATE SAMPLED	
	5/4/05	11/21/05	5/4/05	11/21/05	5/4/05	11/21/05	4/28/05	10/19/05		10/20/05		10/20/05
Dichlorodifluoromethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
Vinyl Chloride	8.0	7.9	BDL	BDL	BDL	BDL	29.0	30.8		BDL		2.7
Methylene Chloride	BDL	0.6	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
1,1-Dichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	2.1	3.1	Well Scheduled for October Annual Sample Only	16.1	Well Scheduled for October Annual Sample Only	421
1,2-T-Dichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
1,1-Dichloroethane	1.5	1.8	BDL	BDL	BDL	BDL	3.7	3.9		2.2		2.8
c-1,2-Dichloroethylene	8.0	9.9	BDL	BDL	BDL	BDL	29.6	30.9		BDL		BDL
Chloroform	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		1.5
1,1,1-Trichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		16.1		61.6
Carbon Tetrachloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
1,2-Dichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	1.0	0.9		BDL		2.6
Benzene	0.5	0.9	BDL	0.7	BDL	1.5	0.8	0.5		BDL		BDL
Trichloroethylene	2.3	2.3	BDL	BDL	BDL	BDL	11.4	9.9		1.0		7.9
1,1,2-Trichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
Toluene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
Tetrachloroethylene	1.8	1.1	BDL	BDL	BDL	BDL	10.8	6.8		5.4		BDL
Chlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	0.5	BDL		BDL		BDL
1,1,1,2-Tetrachloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
Ethyl Benzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
m,p-Xylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
o-Xylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
Isopropylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
n-Propylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
1,3,5-Trimethylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
1,2,4-Trimethylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
sec-Butyl Benzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
tert-Butyl Benzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
p-Isopropyltoluene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
1,4-Dichlorobenzene	3.4	3.4	BDL	1.8	BDL	2.8	1.2	BDL		BDL		BDL
1,3-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
1,2-Dichlorobenzene	44.1	45.7	BDL	19.1	BDL	24.8	20.1	BDL		BDL		BDL
Hexachlorobutadiene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
Naphthalene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
1,2,3-Trichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
1,2,3-Trichloropropane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL		BDL
Methyl t-Butylether (MTBE)	55.8	53.8	35.7	20.2	BDL	BDL	BDL	BDL		BDL		BDL
TVOC	125.4	127.4	35.7	41.8	0.0	29.1	110.2	86.8	0.0	40.8	0.0	500.1

Table 3

PUREX SITE

2005 RECOVERY WELL SAMPLING RESULTS

VOLATILE ORGANICS COMPOUNDS (ppb)

	WELL W-3 DATE SAMPLED		WELL W-4D DATE SAMPLED		WELL W-183 DATE SAMPLED		WELL W-184 DATE SAMPLED		WELL W-187 DATE SAMPLED		WELL W-383D DATE SAMPLED	
			4/21/05		4/21/05		4/21/05	10/20/05		11/29/05		
Dichlorodifluoromethane			BDL		BDL		BDL	BDL		BDL		
Vinyl Chloride			BDL		2.4		2.2	2.2		55.1		
Methylene Chloride			BDL		BDL		BDL	BDL		BDL		
1,1-Dichloroethene	Well Off No Sample	Well Off No Sample	3.0	Well Off No Sample	4.5	Well Off No Sample	1.3	2.4	Well Off No Sample	5.1	Well Off No Sample	Well Off No Sample
1,2-T-Dichloroethene			0.9		BDL		BDL	BDL		1.7		
1,1-Dichloroethane			2.6		2.5		1.5	1.4		7.8		
c-1,2-Dichloroethylene			196.0		57.1		22.3	18.9		90.5		
Chloroform			4.9		BDL		BDL	1.2		BDL		
1,1,1-Trichloroethane			44.7		3.8		BDL	BDL		BDL		
Carbon Tetrachloride			26.4		2.1		BDL	BDL		BDL		
1,2-Dichloroethane			3.5		BDL		BDL	BDL		2.1		
Benzene			0.7		BDL		0.5	BDL		2.0		
Trichloroethylene			73.2		60.0		13.7	9.3		20.4		
1,1,2-Trichloroethane			BDL		BDL		BDL	BDL		BDL		
Toluene			BDL		BDL		BDL	BDL		0.6		
Tetrachloroethylene			240.0		86.2		7.9	3.5		15.6		
Chlorobenzene			2.9		1.0		BDL	BDL		1.7		
1,1,1,2-Tetrachloroethane			BDL		BDL		BDL	BDL		BDL		
Ethyl Benzene			0.9		BDL		BDL	BDL		BDL		
m,p-Xylene			1.3		BDL		BDL	BDL		BDL		
o-Xylene			1.5		BDL		BDL	BDL		0.3		
Isopropylbenzene			0.4		BDL		BDL	BDL		BDL		
n-Propylbenzene			1.2		BDL		BDL	BDL		BDL		
1,3,5-Trimethylbenzene			1.2		BDL		BDL	BDL		0.5		
1,2,4-Trimethylbenzene			3.4		BDL		BDL	BDL		1.7		
sec-Butyl Benzene			BDL		BDL		BDL	BDL		BDL		
tert-Butyl Benzene			BDL		BDL		BDL	BDL		BDL		
p-Isopropyltoluene			BDL		BDL		BDL	BDL		BDL		
1,4-Dichlorobenzene			BDL		BDL		BDL	BDL		5.0		
1,3-Dichlorobenzene			BDL		BDL		BDL	BDL		BDL		
1,2-Dichlorobenzene			21.9		8.9		BDL	BDL		54.0		
Hexachlorobutadiene			BDL		BDL		BDL	BDL		BDL		
Naphthalene			BDL		BDL		BDL	BDL		BDL		
1,2,3-Trichlorobenzene			BDL		BDL		BDL	BDL		BDL		
1,2,3-Trichloropropane			BDL		BDL		BDL	BDL		BDL		
Methyl t-Butylether (MTBE)			BDL		BDL		BDL	BDL		15.1		
TVOC			630.6		228.5		49.4	38.9		279.2		

The figure prepared from the October 2005 monitoring well sampling results shows a long and relatively narrow plume, approximately 2000 ft. long and 400 ft. wide. The plume of contamination emanates from beneath the former Purex site. Downgradient TVOC concentrations within the plume range from 29 ppb to 279 ppb in the vicinity of plume recovery well W-187. The leading edge of the Purex plume terminates at the three southernmost plume recovery wells (W-184, W-187 and W-383D) located in the United Parcel Service parking lot. The lead edge of the plume appears to be under hydraulic control allowing for efficient recovery of contaminated groundwater from the former Purex site.

Further review of TVOC concentrations in the Upper Magothy formation indicates that up to three additional sources of groundwater contamination not attributable to the Purex site may be present in the study area. The first is observed upgradient and northeast of the former Purex site. County network monitoring wells N-9703 (X-156) and N9713 (X-157) located on Quentin Roosevelt Boulevard exhibit TVOC concentrations of 41 ppb and 500 ppb respectively. These wells may be impacted by activities at the former Roosevelt Field site. The second source of volatile organic contamination was found in the vicinity of monitoring well W-361. This monitoring well located on the east side of Oak Street had a TVOC concentration of 17 ppb. The contamination may be attributable to Win Holt Industries which is a NYSDEC spill site (Site Code V00243), and is located on the corner of Oak Street and Brook Street. A voluntary clean-up has been conducted by the owner at this site. Low levels of volatile organic compounds are also observed to the south beyond the known extent of the Purex plume in the vicinity of monitoring wells MW-311R, MW-367 and 368. These wells had TVOC concentrations ranging from 16 to 178 pp. This contamination is believed to be associated with the operation of a closed loop cooling system in the vicinity of 50 Charles Lindbergh Blvd. NYSDEC records indicate that two heating and cooling wells, N-10086 and N-10087 operate in the parking lot of the Reckson Building (50 Charles Lindbergh Blvd). These wells are approximately 900 feet southwest of Purex monitoring well W-311R. Any volatile organic compounds that might be introduced during recharge could fall under the combined hydraulic influence of plume recovery wells W-184, W-187 and W-383D. During the October 2005 sampling round groundwater collected from monitoring well W-311R was found to contain up to 11 volatile organic compounds including 11 ppb of Dichlorodifluoromethane. This compound is not common to the Purex plume and is a form of Freon that can be linked to cooling system operation. Dichlorodifluoromethane was also detected in groundwater samples collected from monitoring wells W-367 and W-368 at concentrations of 2 ppb and 18 ppb respectively.

Review of the monitoring well data collected during MY 2005 indicates that the location of the operating recovery wells is correct, provides hydraulic control and allows for efficient recovery of contaminated groundwater from the MFGRP's plume.

In MY 2005, the MFGRP was in its fifteenth (15^{th}) year of the remediation. To better illustrate the progress made in obtaining the site's clean-up objectives, historical plots of the sampling results from specific wells that still exhibit measurable levels of contamination in MY 2005 are presented in Figures 9 through 15. A summary of these plots is as follows:

Historical High TVOC's

Monitoring Well	Concentration	Date	MY 2005 Concentration
302	23,000 ppb	5/22/90	91.3 ppb
311R	34,600 ppb	7/20/89	258.3 ppb
371	22,756 ppb	1/5/95	136.5 ppb
380	32,780 ppb	10/26/95	127.4 ppb
381	7870 ppb	10/25/95	41.8 ppb
383	23,814 ppb	10/26/95	110.2 ppb
234	11,411 ppb	7/29/93	527.2 ppb

Review of the data presented indicates that the bulk of the remediation, from a contaminant mass standpoint, has been completed at the MFGRP site. The current aerial extent and the remaining levels of contamination at the MRGRP site reflects a low concentration asymptotic condition which is characteristic of long term pump and treat remediations.

4.2 Semi-Annual Hydraulic Monitoring

4.2.1 Hydraulic Effects

Hydraulic conditions are monitored on a semi-annual basis to ensure that all operating recovery wells are effectively treating plume contamination. All available monitoring wells were measured by County hydrogeologists on November 18, 2005. The results of this survey are presented in table 4.

The depth to water measurements collected during the survey were converted to water elevations. These elevations were then plotted to produce a potentiometric surface map for the Upper Magothy formation. The contoured elevation data is presented in figure 16.

Review of figure 16 indicates that regional contour elevations range from 54.95 ft. above mean sea level in the vicinity of County well N-9712 (X-156) to 44.74 ft. above mean sea level near monitoring well, W-311R. Local groundwater flow in the upper portion of the Magothy formation is from the north-northwest to the south-southeast. All contours have been modified by groundwater recovery operations. A large depression is formed just south of the UPS building insuring hydraulic control of the "lead edge" of volatile organic contamination.

Figure 9

W-302

VOC CONCENTRATIONS

1988 to 2005

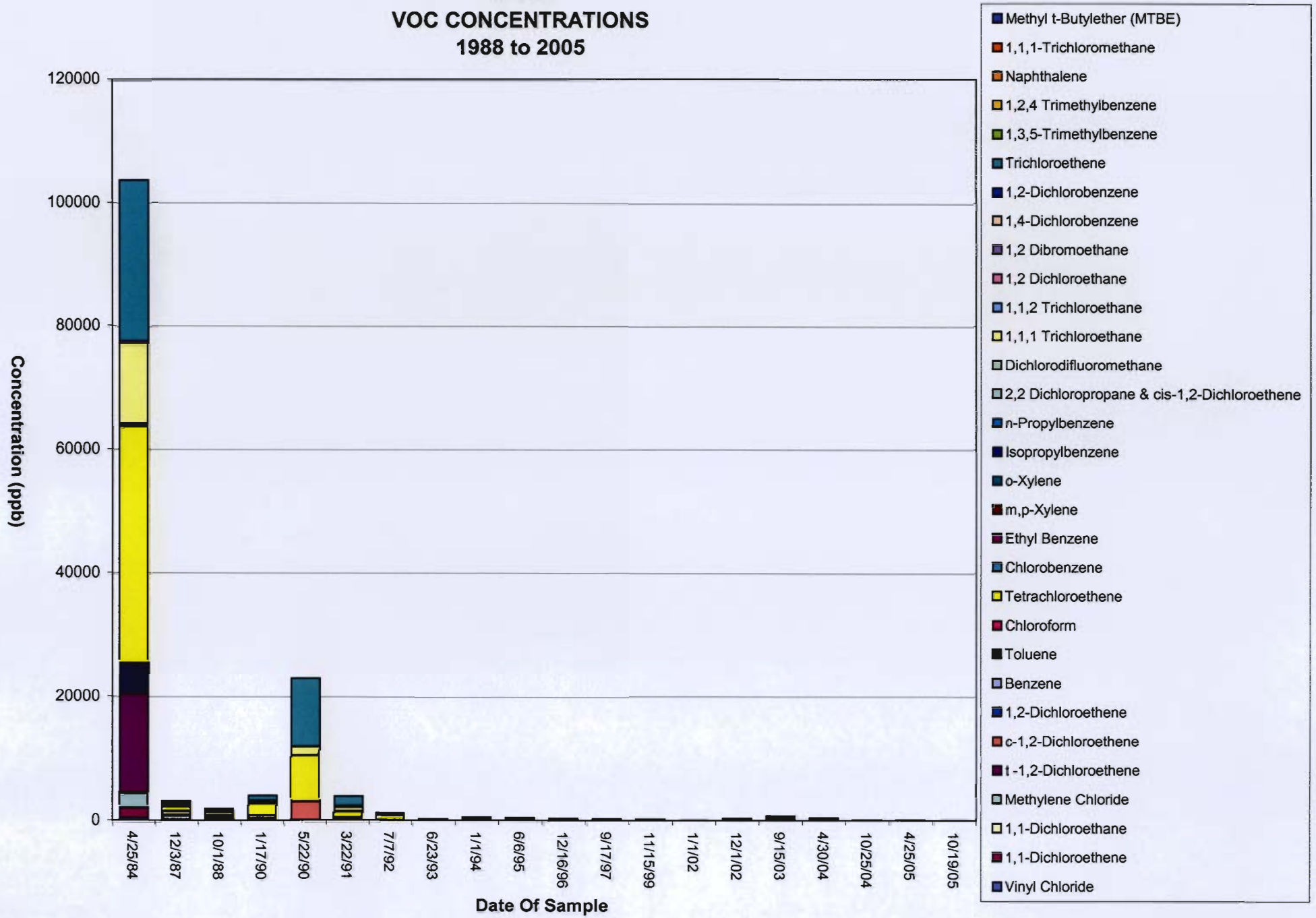


Figure 10

W-311R

VOC CONCENTRATIONS

1988 to 2005

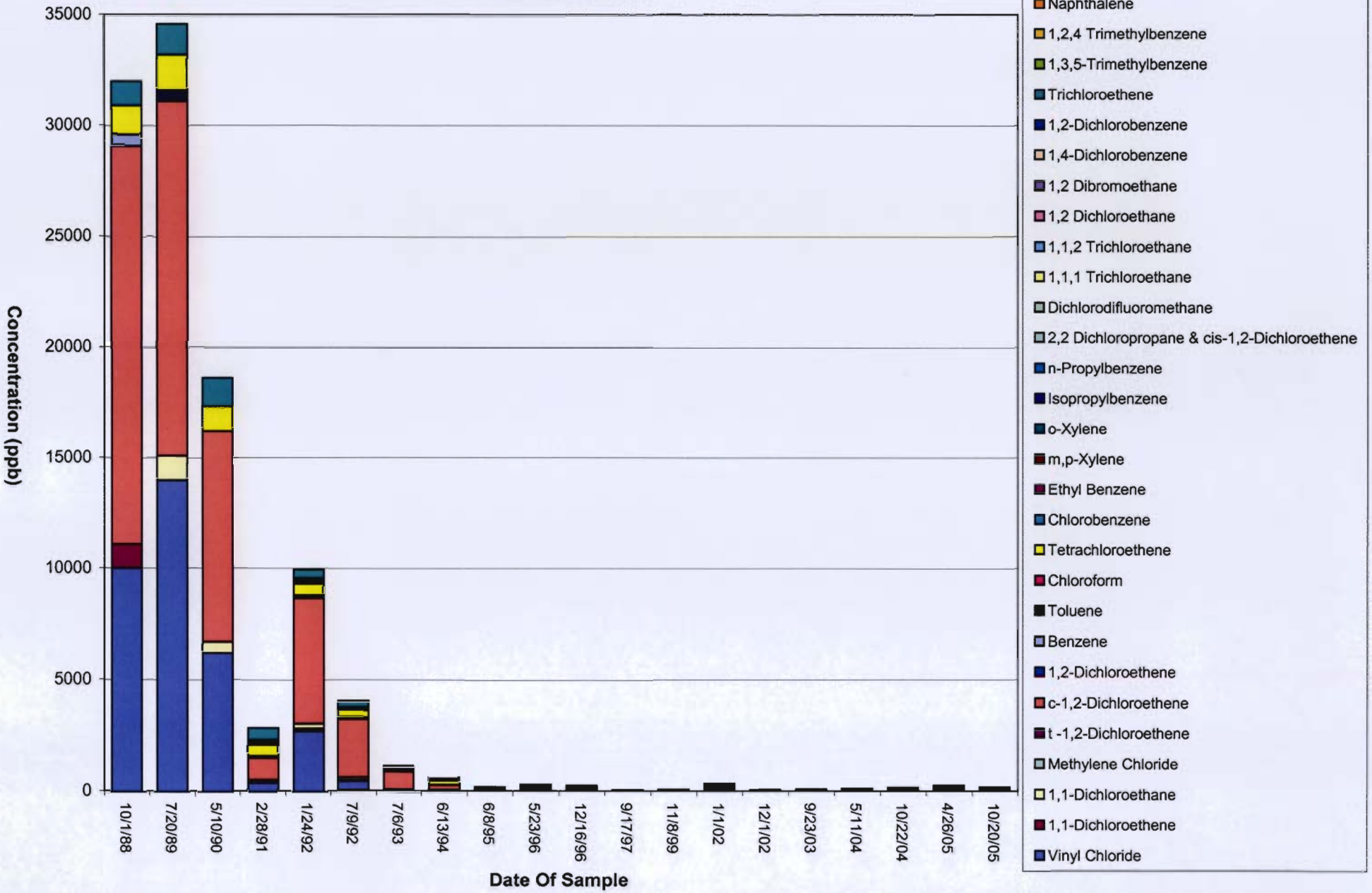


Figure 11

W-371

VOC CONCENTRATIONS

1995 to 2005

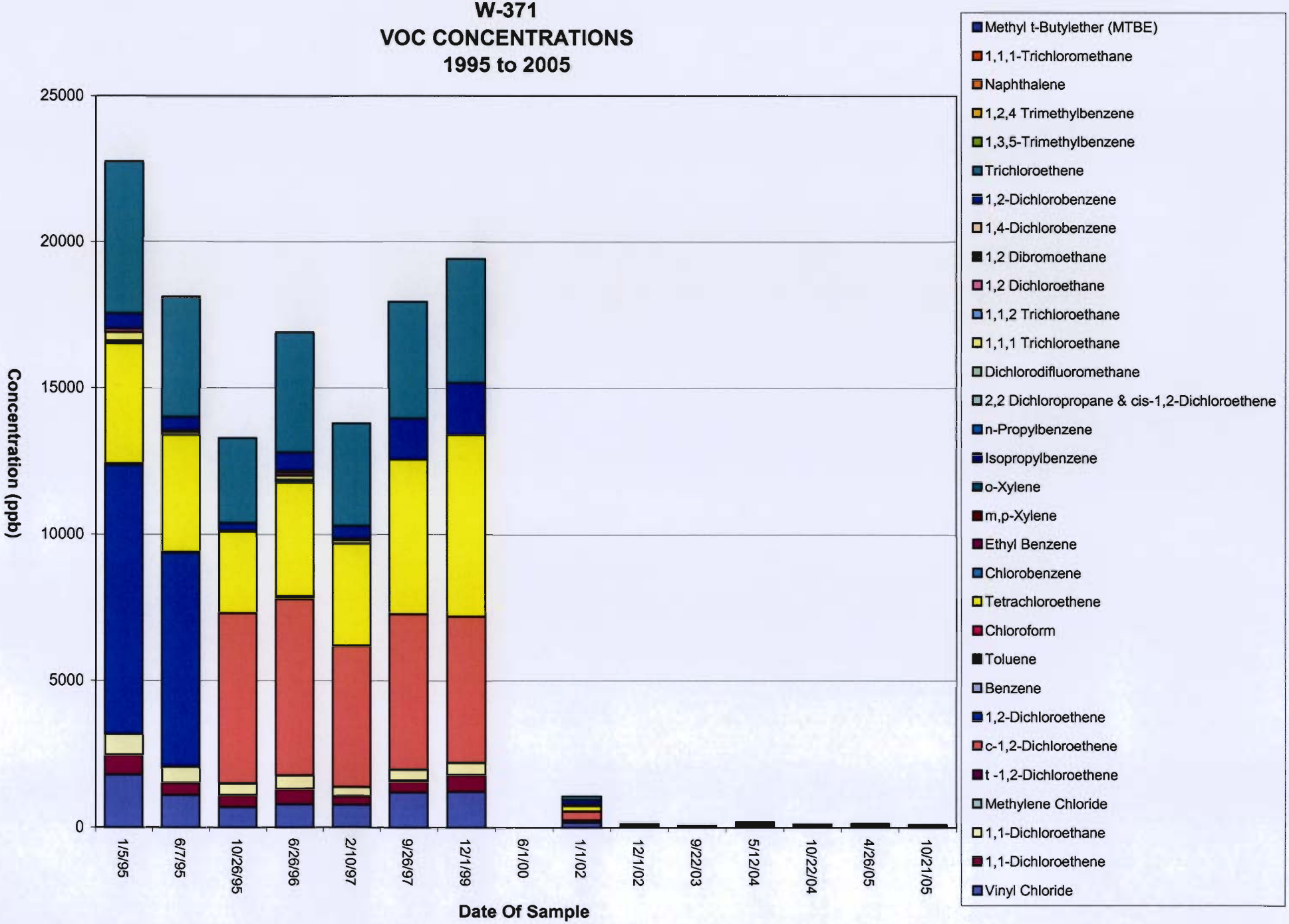


Figure 12

W-380

VOC CONCENTRATIONS

1995 to 2005

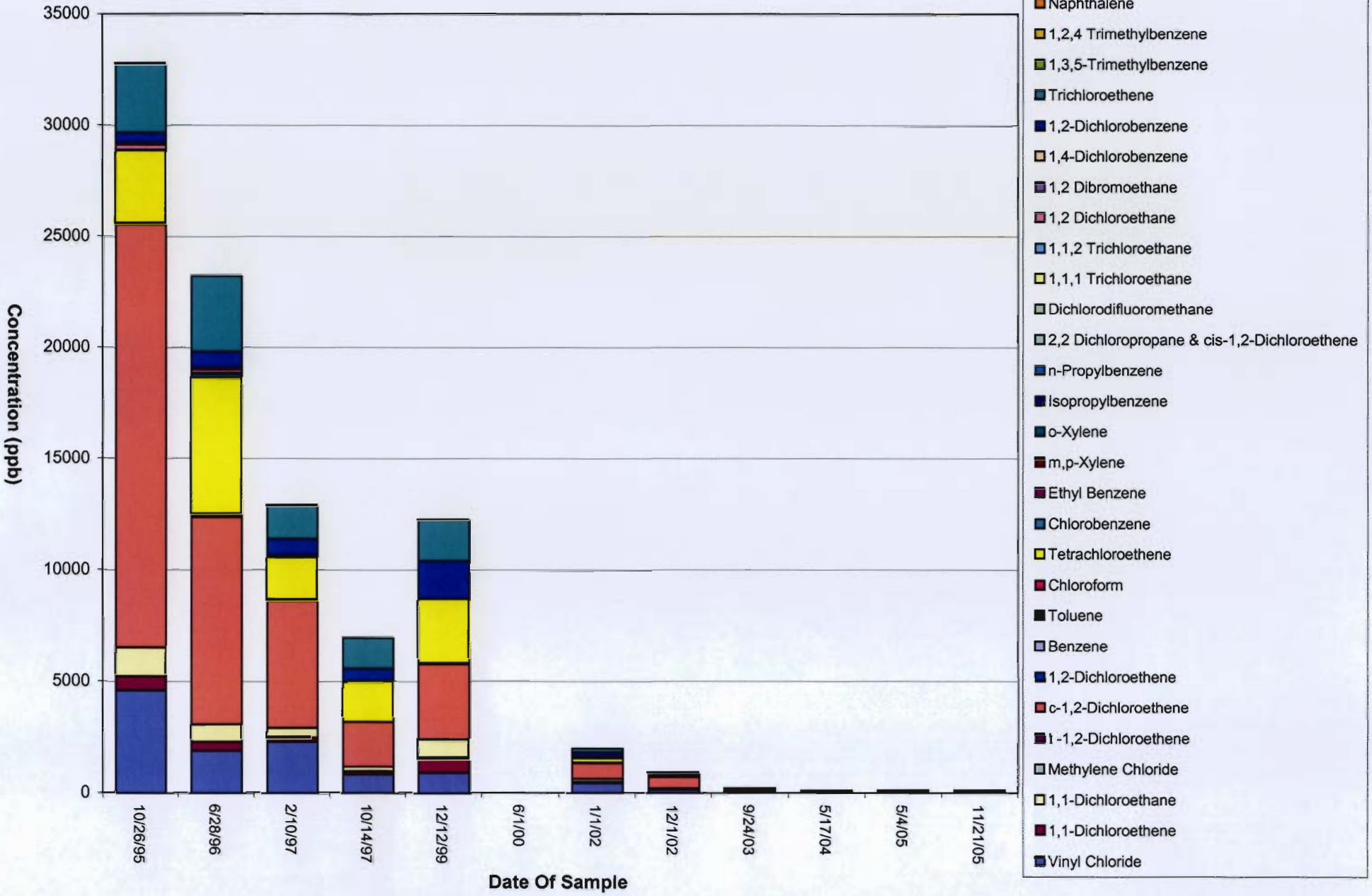


Figure 13

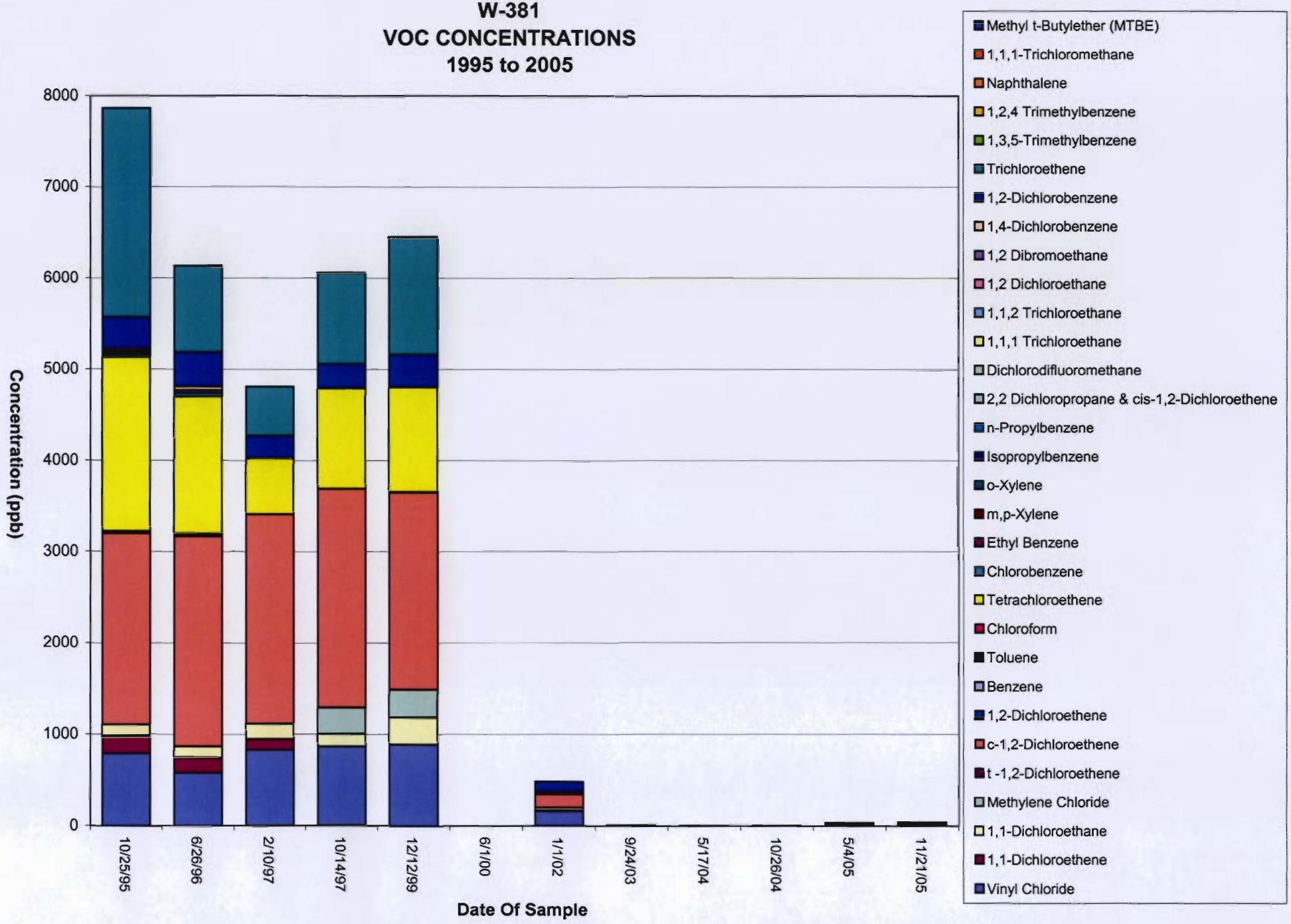

W-381
VOC CONCENTRATIONS
1995 to 2005
Concentration (ppb)
8000
7000
6000
5000
4000
3000
2000
1000
0
10/25/95
6/26/96
2/10/97
10/14/97
12/12/99
6/1/00
1/1/02
9/24/03
5/17/04
10/26/04
5/4/05
11/21/05
Date Of Sample
Methyl t-Butylether (MTBE)
1,1,1-Trichloromethane
Naphthalene
1,2,4 Trimethylbenzene
1,3,5-Trimethylbenzene
Trichloroethene
1,2-Dichlorobenzene
1,4-Dichlorobenzene
1,2 Dibromoethane
1,2 Dichloroethane
1,1,2 Trichloroethane
1,1,1 Trichloroethane
Dichlorodifluoromethane
2,2 Dichloropropane & cis-1,2-Dichloroethene
n-Propylbenzene
Isopropylbenzene
o-Xylene
m,p-Xylene
Ethyl Benzene
Chlorobenzene
Tetrachloroethene
Chloroform
Toluene
Benzene
1,2-Dichloroethene
c-1,2-Dichloroethene
t -1,2-Dichloroethene
Methylene Chloride
1,1-Dichloroethane
1,1-Dichloroethene
Vinyl Chloride

Figure 14

W-383

VOC CONCENTRATIONS

1995 to 2004

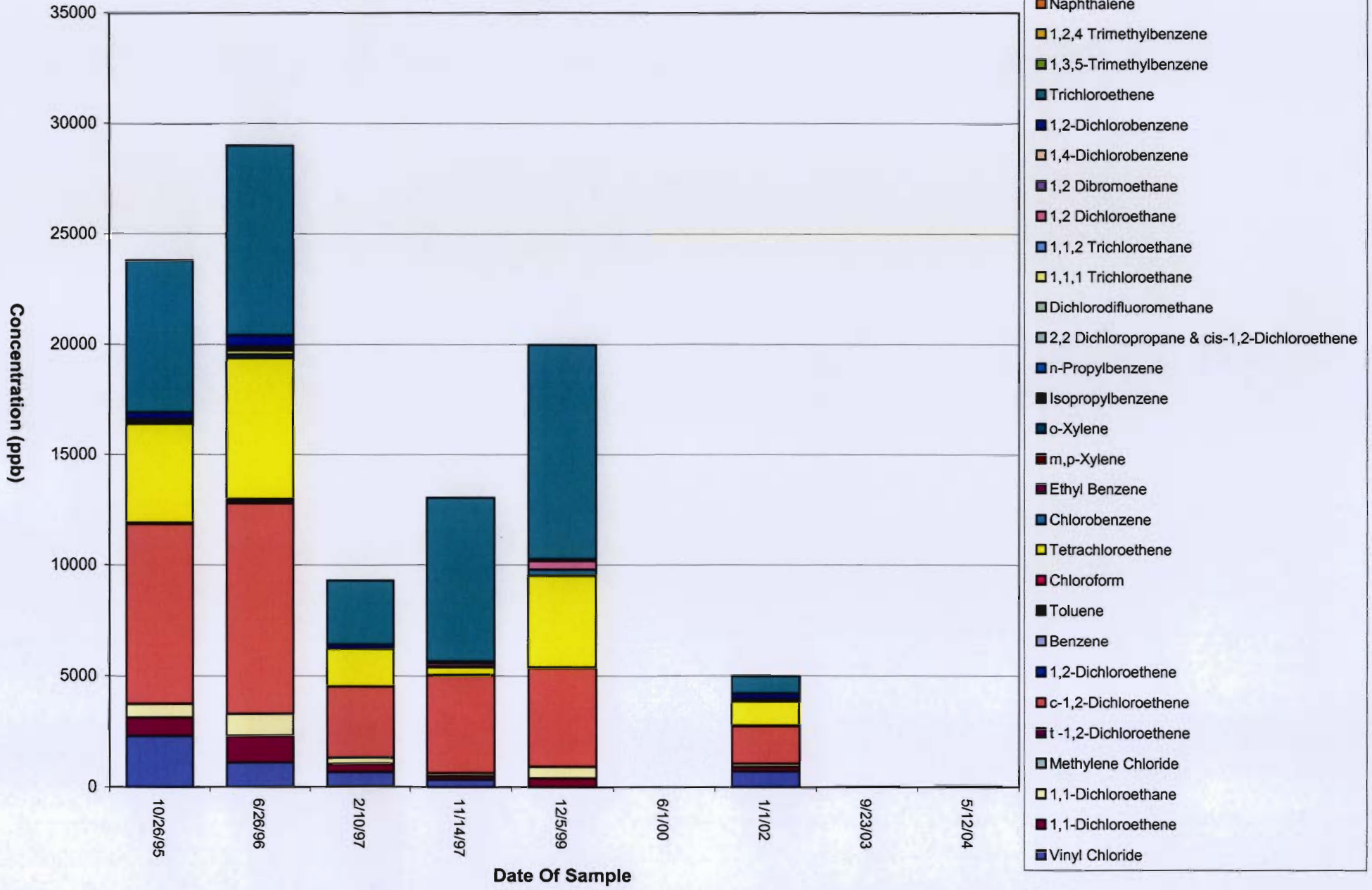


Figure 15

W-234

VOC CONCENTRATIONS

1988 to 2005

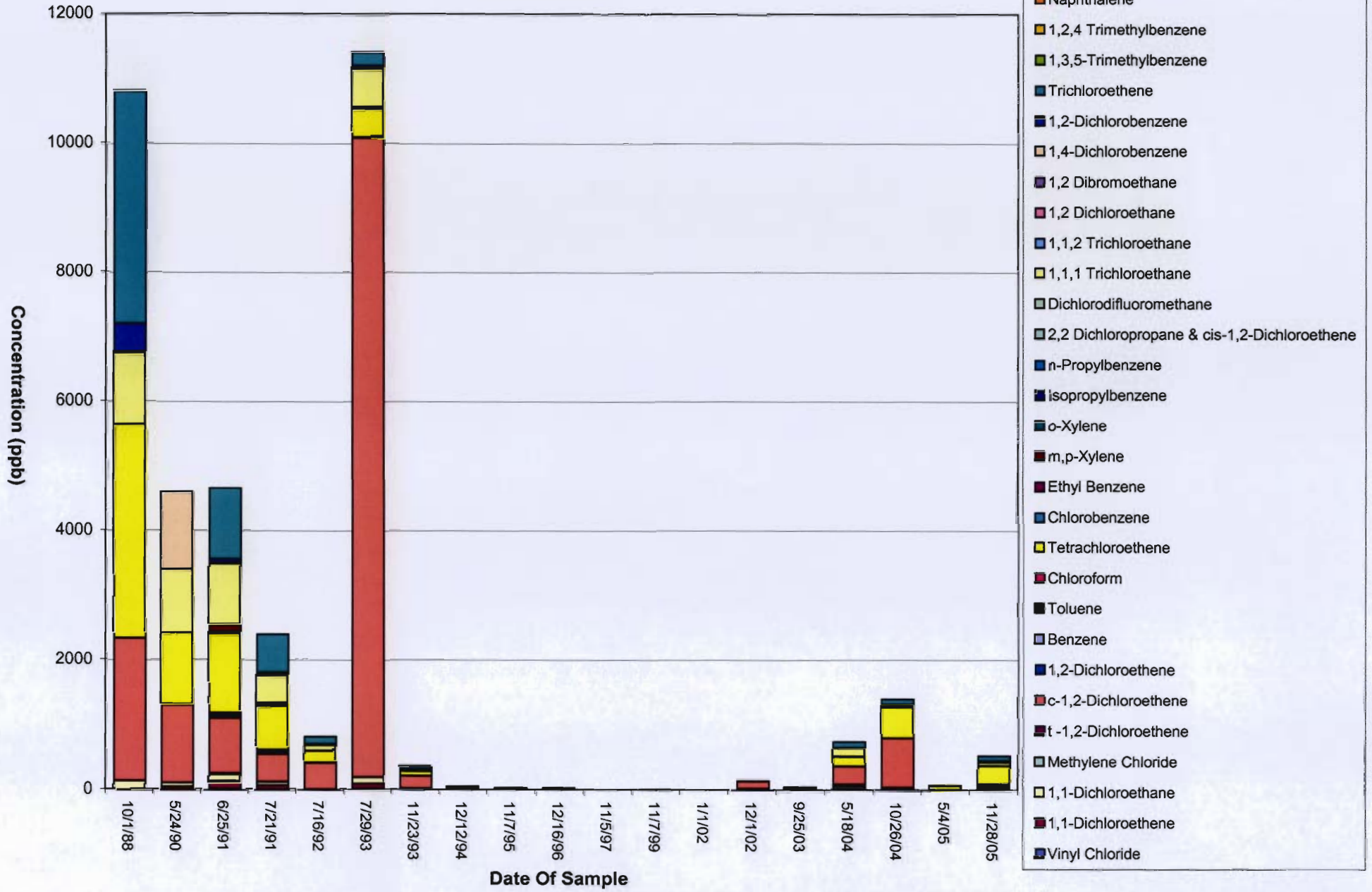


Table 4

PUREX GROUNDWATER REMEDIATION

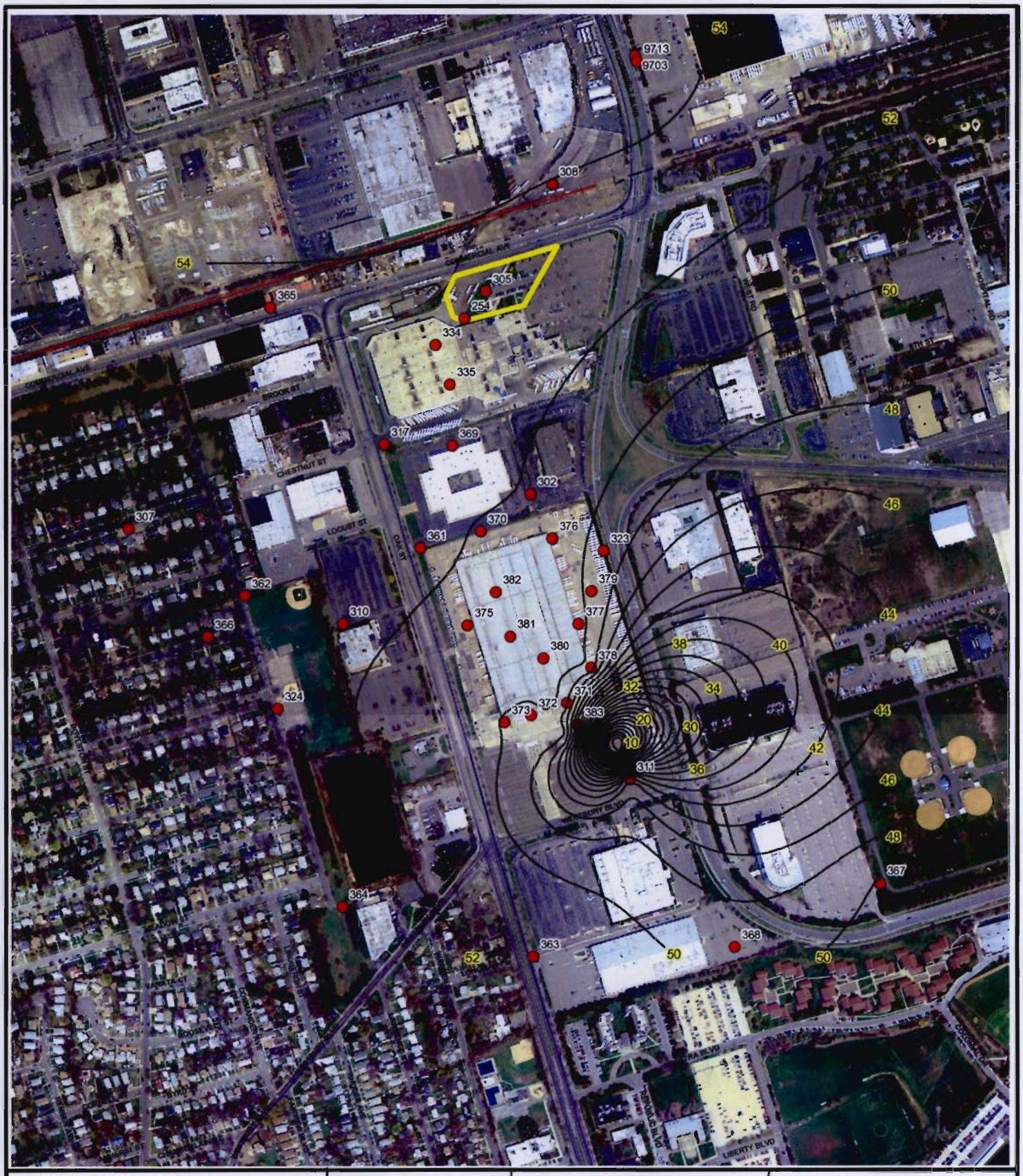
WATER LEVEL MEASUREMENTS

November 18, 2005 **M. Flaherty & J. Kardos**

WELL	TIME	MEASURING POINT ELEV.	DEPTH TO WATER	WATER TABLE ELEVATION	COMMENTS
GLACIAL WELL					
W-234	1338	79.69	25.99	53.70	
UPPER MAGOTHY WELLS					
W-302	1302	81.74	29.88	51.86	
W-305	1343	79.73	26.17	53.56	
W-311R	1046	81.70	36.96	44.74	
W-361	1256	76.53	23.98	52.55	
W-363	1040		29.63		
W-366	1245	71.08	19.34	51.74	
W-367	1405	81.71	31.53	50.18	
W-368	1353	78.63	29.61	49.02	
W-369	1310	76.01	23.41	52.60	
W-370	1259	77.43	25.58	51.85	
W-371	1114	76.66	27.76	48.90	
W-372	1110	76.44	27.12	49.32	
W-373	1142	76.26	26.42	49.84	
W-375	1130	76.78	25.50	51.28	
W-377	1120	77.79	27.07	50.72	
W-378	1116	77.81	28.37	49.44	
W-380	1138	77.14	27.38	49.76	
W-381	1133	76.92	25.98	50.94	
W-382	1125	77.16	25.81	51.35	
W-383	1055	75.76	28.03	47.73	
LOWER MAGOTHY WELLS					
W-402	1304	81.67	30.30	51.37	
W-405	1345	80.72	28.39	52.33	
W-435	1325	77.96	27.47	50.49	
W-461	1254	76.02	24.82	51.20	
UPGRADIENT WELLS					
X-156	1417	87.12	32.17	54.95	
X-157	1415	87.15	32.84	54.31	
RECOVERY WELLS					FLOW RATE
W-3		77.90	NR		
W-4D		79.20	NR		
W-183			NR		
W-184	1052	80.90	84.05	-3.15	355.00
W-187		76.00	NR		
W-383D		76.00	NR		

LEGEND NR = NO READING

Figure 16



Legend

Contour Map Nov.05

Monitoring Wells

Site Location

PUREX
POTENTIONMENTRIC SURFACE
NOVEMBER 18,2005

Prepared By: - NCDPW - Water\Wastewater Engineering Unit

N W E S

1 Inch equals 600 Feet

Nassau County

Geographic Information System

Date: 5/04/2007

APPENDIX A

PLANT EFFICIENCY REPORTS

2005

PLANT EFFICIENCY

JANUARY 2005

DATE	HOURS OF OPERATION	EFFICIENCY OF OPERATION	REASON FOR OUTAGE
1	24	100.0%	
2	24	100.0%	
3	24	100.0%	
4	24	100.0%	
5	24	100.0%	
6	24	100.0%	
7	24	100.0%	
8	24	100.0%	
9	24	100.0%	
10	24	100.0%	
11	24	100.0%	
12	24	100.0%	
13	24	100.0%	
14	24	100.0%	
15	24	100.0%	
16	24	100.0%	
17	24	100.0%	
18	24	100.0%	
19	24	100.0%	
20	24	100.0%	
21	24	100.0%	
22	24	100.0%	
23	24	100.0%	
24	24	100.0%	
25	24	100.0%	
26	24	100.0%	
27	24	100.0%	
28	24	100.0%	
29	24	100.0%	
30	24	100.0%	
31	24	100.0%	

TOTAL HOURS IN THE MONTH	TOTAL HOURS OF OPERATION	EFFICIENCY OF MONTHLY OPERATION
744	**744**	**100.0%**

PLANT EFFICIENCY

FEBRUARY 2005

DATE	HOURS OF OPERATION	EFFICIENCY OF OPERATION	REASON FOR OUTAGE
1	24	100.0%	
2	24	100.0%	
3	24	100.0%	
4	24	100.0%	
5	24	100.0%	
6	24	100.0%	
7	24	100.0%	
8	24	100.0%	
9	24	100.0%	
10	24	100.0%	
11	24	100.0%	
12	24	100.0%	
13	24	100.0%	
14	24	100.0%	
15	24	100.0%	
16	24	100.0%	
17	24	100.0%	
18	24	100.0%	
19	24	100.0%	
20	24	100.0%	
21	24	100.0%	
22	24	100.0%	
23	24	100.0%	
24	24	100.0%	
25	24	100.0%	
26	24	100.0%	
27	24	100.0%	
28	24	100.0%	

TOTAL HOURS IN THE MONTH	TOTAL HOURS OF OPERATION	EFFICIENCY OF MONTHLY OPERATION
672	**672**	**100.0%**

PLANT EFFICIENCY

MARCH 2005

DATE	HOURS OF OPERATION	EFFICIENCY OF OPERATION	REASON FOR OUTAGE
1	24	100.0%	
2	24	100.0%	
3	24	100.0%	
4	24	100.0%	
5	24	100.0%	
6	24	100.0%	
7	24	100.0%	
8	24	100.0%	
9	24	100.0%	
10	24	100.0%	
11	24	100.0%	
12	24	100.0%	
13	24	100.0%	
14	24	100.0%	
15	24	100.0%	
16	24	100.0%	
17	24	100.0%	
18	23	95.8%	Probable power outage
19	0	0.0%	Probable power outage
20	18	75.0%	Probable power outage
21	24	100.0%	
22	24	100.0%	
23	24	100.0%	
24	24	100.0%	
25	24	100.0%	
26	24	100.0%	
27	24	100.0%	
28	24	100.0%	
29	24	100.0%	
30	24	100.0%	
31	24	100.0%	

TOTAL HOURS IN THE MONTH	TOTAL HOURS OF OPERATION	EFFICIENCY OF MONTHLY OPERATION
744	**713**	**95.8%**

PLANT EFFICIENCY

APRIL 2005

DATE	HOURS OF OPERATION	EFFICIENCY OF OPERATION	REASON FOR OUTAGE
1	24	100.0%	
2	24	100.0%	
3	24	100.0%	
4	24	100.0%	
5	24	100.0%	
6	24	100.0%	
7	24	100.0%	
8	24	100.0%	
9	24	100.0%	
10	24	100.0%	
11	24	100.0%	
12	24	100.0%	
13	24	100.0%	
14	24	100.0%	
15	24	100.0%	
16	24	100.0%	
17	24	100.0%	
18	24	100.0%	
19	24	100.0%	
20	24	100.0%	
21	24	100.0%	
22	24	100.0%	
23	24	100.0%	
24	24	100.0%	
25	24	100.0%	
26	24	100.0%	
27	24	100.0%	
28	24	100.0%	
29	24	100.0%	
30	24	100.0%	

TOTAL HOURS IN THE MONTH	TOTAL HOURS OF OPERATION	EFFICIENCY OF MONTHLY OPERATION
720	**720**	**100.0%**

PLANT EFFICIENCY

MAY 2005

DATE	HOURS OF OPERATION	EFFICIENCY OF OPERATION	REASON FOR OUTAGE
1	24	100.0%	
2	24	100.0%	
3	24	100.0%	
4	24	100.0%	
5	24	100.0%	
6	24	100.0%	
7	24	100.0%	
8	24	100.0%	
9	24	100.0%	
10	24	100.0%	
11	24	100.0%	
12	24	100.0%	
13	24	100.0%	
14	24	100.0%	
15	24	100.0%	
16	24	100.0%	
17	24	100.0%	
18	24	100.0%	
19	24	100.0%	
20	24	100.0%	
21	22.5	93.8%	Effluent pump problems
22	0	0.0%	Effluent pump problems
23	14	58.3%	Effluent pump problems - put plant in by-pass
24	24	100.0%	
25	24	100.0%	
26	24	100.0%	
27	24	100.0%	
28	24	100.0%	
29	24	100.0%	
30	24	100.0%	
31	24	100.0%	

TOTAL HOURS IN THE MONTH	TOTAL HOURS OF OPERATION	EFFICIENCY OF MONTHLY OPERATION
744	**708.5**	**95.2%**

PLANT EFFICIENCY

JUNE 2005

DATE	HOURS OF OPERATION	EFFICIENCY OF OPERATION	REASON FOR OUTAGE
1	8	33.3%	Replacing Stripper Tower flow meters.
2	24	100.0%	
3	24	100.0%	
4	24	100.0%	
5	24	100.0%	
6	24	100.0%	
7	24	100.0%	
8	24	100.0%	
9	24	100.0%	
10	24	100.0%	
11	24	100.0%	
12	24	100.0%	
13	24	100.0%	
14	24	100.0%	
15	24	100.0%	
16	24	100.0%	
17	24	100.0%	
18	24	100.0%	
19	24	100.0%	
20	24	100.0%	
21	24	100.0%	
22	24	100.0%	
23	24	100.0%	
24	24	100.0%	
25	24	100.0%	
26	24	100.0%	
27	24	100.0%	
28	24	100.0%	
29	24	100.0%	
30	24	100.0%	

TOTAL HOURS IN THE MONTH	TOTAL HOURS OF OPERATION	EFFICIENCY OF MONTHLY OPERATION
720	**704**	**97.8%**

PLANT EFFICIENCY

JULY 2005

DATE	HOURS OF OPERATION	EFFICIENCY OF OPERATION	REASON FOR OUTAGE
1	24	100.0%	
2	24	100.0%	
3	24	100.0%	
4	24	100.0%	
5	24	100.0%	
6	24	100.0%	
7	24	100.0%	
8	24	100.0%	
9	24	100.0%	
10	24	100.0%	
11	24	100.0%	
12	24	100.0%	
13	24	100.0%	
14	24	100.0%	
15	24	100.0%	
16	24	100.0%	
17	24	100.0%	
18	24	100.0%	
19	24	100.0%	
20	24	100.0%	
21	24	100.0%	
22	24	100.0%	
23	24	100.0%	
24	24	100.0%	
25	24	100.0%	
26	24	100.0%	
27	24	100.0%	
28	15.5	64.6%	Power outage
29	16	66.7%	Power outage
30	24	100.0%	
31	24	100.0%	

TOTAL HOURS IN THE MONTH	TOTAL HOURS OF OPERATION	EFFICIENCY OF MONTHLY OPERATION
744	**727.5**	**97.8%**

PLANT EFFICIENCY

AUGUST 2005

DATE	HOURS OF OPERATION	EFFICIENCY OF OPERATION	REASON FOR OUTAGE
1	24	100.0%	
2	24	100.0%	
3	24	100.0%	
4	24	100.0%	
5	24	100.0%	
6	24	100.0%	
7	24	100.0%	
8	24	100.0%	
9	24	100.0%	
10	24	100.0%	
11	24	100.0%	
12	24	100.0%	
13	24	100.0%	
14	22	91.7%	T-storms - Power outage
15	14	58.3%	Power outage
16	24	100.0%	
17	24	100.0%	
18	24	100.0%	
19	17	70.8%	Power outages
20	0	0.0%	Power outage
21	0	0.0%	Power outage
22	20.5	85.4%	Power outage
23	24	100.0%	
24	24	100.0%	
25	24	100.0%	
26	24	100.0%	
27	24	100.0%	
28	24	100.0%	
29	24	100.0%	
30	24	100.0%	
31	24	100.0%	

TOTAL HOURS IN THE MONTH	TOTAL HOURS OF OPERATION	EFFICIENCY OF MONTHLY OPERATION
744	**673.5**	**90.5%**

PLANT EFFICIENCY

SEPTEMBER 2005

DATE	HOURS OF OPERATION	EFFICIENCY OF OPERATION	REASON FOR OUTAGE
1	24	100.0%	
2	24	100.0%	
3	24	100.0%	
4	24	100.0%	
5	24	100.0%	
6	24	100.0%	
7	24	100.0%	
8	24	100.0%	
9	24	100.0%	
10	24	100.0%	
11	24	100.0%	
12	24	100.0%	
13	24	100.0%	
14	24	100.0%	
15	24	100.0%	
16	24	100.0%	
17	24	100.0%	
18	24	100.0%	
19	24	100.0%	
20	24	100.0%	
21	24	100.0%	
22	24	100.0%	
23	24	100.0%	
24	24	100.0%	
25	24	100.0%	
26	24	100.0%	
27	24	100.0%	
28	24	100.0%	
29	24	100.0%	
30	24	100.0%	

TOTAL HOURS IN THE MONTH	TOTAL HOURS OF OPERATION	EFFICIENCY OF MONTHLY OPERATION
720	**720**	**100.0%**

PLANT EFFICIENCY

OCTOBER 2005

DATE	HOURS OF OPERATION	EFFICIENCY OF OPERATION	REASON FOR OUTAGE
1	24	100.0%	
2	24	100.0%	
3	24	100.0%	
4	24	100.0%	
5	24	100.0%	
6	24	100.0%	
7	24	100.0%	
8	24	100.0%	
9	24	100.0%	
10	24	100.0%	
11	24	100.0%	
12	24	100.0%	
13	24	100.0%	
14	24	100.0%	
15	24	100.0%	
16	24	100.0%	
17	24	100.0%	
18	24	100.0%	
19	24	100.0%	
20	24	100.0%	
21	24	100.0%	
22	24	100.0%	
23	24	100.0%	
24	24	100.0%	
25	24	100.0%	
26	24	100.0%	
27	24	100.0%	
28	24	100.0%	
29	24	100.0%	
30	24	100.0%	
31	24	100.0%	

TOTAL HOURS IN THE MONTH	TOTAL HOURS OF OPERATION	EFFICIENCY OF MONTHLY OPERATION
744	**744**	**100.0%**

PLANT EFFICIENCY

NOVEMBER 2005

DATE	HOURS OF OPERATION	EFFICIENCY OF OPERATION	REASON FOR OUTAGE
1	24	100.0%	
2	24	100.0%	
3	24	100.0%	
4	24	100.0%	
5	24	100.0%	
6	24	100.0%	
7	24	100.0%	
8	24	100.0%	
9	24	100.0%	
10	24	100.0%	
11	24	100.0%	
12	24	100.0%	
13	24	100.0%	
14	24	100.0%	
15	24	100.0%	
16	24	100.0%	
17	24	100.0%	
18	24	100.0%	
19	24	100.0%	
20	24	100.0%	
21	24	100.0%	
22	24	100.0%	
23	24	100.0%	
24	24	100.0%	
25	24	100.0%	
26	24	100.0%	
27	24	100.0%	
28	24	100.0%	
29	24	100.0%	
30	24	100.0%	

TOTAL HOURS IN THE MONTH	TOTAL HOURS OF OPERATION	EFFICIENCY OF MONTHLY OPERATION
720	**720**	**100.0%**

PLANT EFFICIENCY

DECEMBER 2005

DATE	HOURS OF OPERATION	EFFICIENCY OF OPERATION	REASON FOR OUTAGE
1	24	100.0%	
2	24	100.0%	
3	24	100.0%	
4	24	100.0%	
5	24	100.0%	
6	24	100.0%	
7	24	100.0%	
8	24	100.0%	
9	24	100.0%	
10	24	100.0%	
11	24	100.0%	
12	24	100.0%	
13	24	100.0%	
14	24	100.0%	
15	24	100.0%	
16	24	100.0%	
17	24	100.0%	
18	24	100.0%	
19	24	100.0%	
20	24	100.0%	
21	24	100.0%	
22	24	100.0%	
23	24	100.0%	
24	24	100.0%	
25	24	100.0%	
26	24	100.0%	
27	24	100.0%	
28	24	100.0%	
29	24	100.0%	
30	24	100.0%	
31	24	100.0%	

TOTAL HOURS IN THE MONTH	TOTAL HOURS OF OPERATION	EFFICIENCY OF MONTHLY OPERATION
744	744	100.0%

YEARLY TOTALS

TOTAL HOURS IN THE YEAR	8760
TOTAL HOURS OF OPERATION	8591
EFFICIENCY OF OPERATION FOR 2004	98%

APPENDIX B

MONTHLY INFLUENT MONITORING REPORTS

2005

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY INFLUENT MONITORING REPORT

JANUARY 2005

INFLUENT PARAMETER	Week 1 01/03/05		Week 2 01/11/05		Week 3 01/17/05		Week 4 01/24/05		Week 5 01/31/05	
	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102
FLOW, DAILY AVG (GPD)	510720	156480	512460	154800	515280	156480	515520	154903	514697	154903
FLOW, DAILY MAX (GPD)	511200	156960	516960	156960	515520	156960	516960	155520	516960	156960
VINYL CHLORIDE	1.8	BDL	1.8	BDL	1.9	BDL	BDL	BDL	2.8	BDL
1,1-DICHLOROETHANE	1.4	1.2	1.6	1.2	1.8	1.5	21.4	57.3	2.0	1.5
t-1,2 DICHLOROETHENE	0.9	1.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
c-1,2 DICHLOROETHENE	31.7	77.7	35.9	89.3	41.2	115.0	2.6	26.3	43.4	125.0
1,1,1-TRICHLOROETHANE	2.6	22.3	2.8	25.4	3.3	35.5	5.3	53.8	2.8	33.1
TRICHLOROETHENE	44.7	75.7	54.7	82.6	58.6	95.4	44.3	68.7	49.2	76.5
BENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	79.9	412.0	91.0	428.0	94.2	476.0	68.8	335.0	84.2	388.0
TOLUENE	BDL	1.1	BDL	1.2	BDL	1.5	BDL	1.4	BDL	1.3
4-CHLOROTOLUENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
p-ISOPROPYLTOLUENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	BDL	1.3	BDL	1.2	BDL	2.2	BDL	BDL	BDL	1.7
o-XYLENE	BDL	0.9	BDL	BDL	BDL	1.1	BDL	1.2	BDL	1.0
1,1-DICHLOROETHENE	BDL	1.0	3.1	1.0	3.6	BDL	BDL	BDL	3.7	1.6
CARBON TETRACHLORIDE	BDL	5.4	BDL	5.7	BDL	BDL	BDL	BDL	BDL	BDL
BROMOFORM	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CHLOROFORM	BDL	2.1	BDL	2.3	BDL	3.0	1.4	5.5	BDL	3.2
CHLOROMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CHLOROBENZENE	BDL	1.5	BDL	1.6	BDL	2.2	BDL	2.0	BDL	2.0
ETHYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
METHYL CHLORIDE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TRICHLOROFLUOROMETHANE	2.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROBENZENE	BDL	6.0	BDL	6.7	BDL	8.7	3.4	14.5	BDL	8.5
1,2-DICHLOROPROPANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3-DICHLOROBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,4-DICHLOROBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,3 TRICHLOROBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,4 TRICHLOROBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,4 TRIMETHYLBENZENE	BDL	1.4	BDL	BDL	BDL	1.9	BDL	2.4	BDL	1.5
1,3,5 TRIMETHYLBENZENE	BDL	2.1	BDL	2.0	BDL	1.3	BDL	3.3	BDL	2.0
n-BUTYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
sec-BUTYLBENZENE	BDL	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
ISOPROPYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5	BDL	BDL
n-PROPYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.7	BDL	BDL
HEXACHLOROBUTADIENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
t-1,3 DICHLOROPROPENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
c-1,3 DICHLOROPROPENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
BROMOMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
BROMOBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
METHYL TERT-BUTYL ETHER (MTBE)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs	165.8	614.3	190.9	648.2	204.6	745.3	147.2	572.6	188.1	646.9

SAMPLE RESULT UNITS ARE µ g/l

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY INFLUENT MONITORING REPORT FEBRUARY 2005

INFLUENT PARAMETER	Week 1 02/07/05		Week 2 02/14/05		Week 3 02/21/05		Week 4 02/28/05	
	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102
FLOW, DAILY AVG (GPD)	519840	154080	518606	152846	513051	153669	517989	151406
FLOW, DAILY MAX (GPD)	522720	154080	524160	154080	515520	154080	521280	154080
VINYL CHLORIDE	2.5	BDL	2.3	BDL	1.7	BDL	3.5	BDL
1,1-DICHLOROETHANE	1.7	1.3	1.8	1.4	1.4	1.1	3.1	BDL
t-1,2 DICHLOROETHENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
c-1,2 DICHLOROETHENE	36.9	113.0	36.8	121.0	28.4	104.0	58.7	BDL
1,1,1-TRICHLOROETHANE	2.5	33.8	2.8	38.9	2.1	33.6	4.6	BDL
TRICHLOROETHENE	51.0	74.2	44.6	73.2	48.9	80.0	46.7	BDL
BENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	89.0	391.0	66.0	321.0	68.9	326.0	67.5	BDL
TOLUENE	BDL	1.1	BDL	1.1	BDL	1.4	BDL	BDL
4-CHLOROTOLUENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
p-ISOPROPYLTOLUENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	BDL	1.4	BDL	BDL	BDL	BDL	BDL	BDL
o-XYLENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	3.4	1.7	2.9	1.6	1.2	1.4	49.0	BDL
CARBON TETRACHLORIDE	BDL	4.7	BDL	BDL	BDL	4.5	BDL	BDL
BROMOFORM	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CHLOROFORM	BDL	3.1	BDL	3.5	BDL	3.2	1.2	BDL
CHLOROMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CHLOROBENZENE	BDL	1.8	BDL	BDL	BDL	BDL	BDL	BDL
ETHYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
METHYL CHLORIDE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TRICHLOROFLUOROMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROBENZENE	BDL	5.8	BDL	12.9	BDL	BDL	BDL	BDL
1,2-DICHLOROPROPANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3-DICHLOROBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,4-DICHLOROBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,3 TRICHLOROBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,4 TRICHLOROBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,4 TRIMETHYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3,5 TRIMETHYLBENZENE	BDL	1.6	BDL	BDL	BDL	BDL	BDL	BDL
n-BUTYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
sec-BUTYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
ISOPROPYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
n-PROPYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
HEXACHLOROBUTADIENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
t-1,3 DICHLOROPROPENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
c-1,3 DICHLOROPROPENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
BROMOMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
BROMOBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
METHYL TERT-BUTYL ETHER (MTBE)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs	187.0	634.5	157.2	574.6	152.6	555.2	234.3	0.0

SAMPLE RESULT UNITS ARE µ g/l

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY INFLUENT MONITORING REPORT MARCH 2005

INFLUENT PARAMETER	Week 1 03/07/05		Week 2 03/14/05		Week 3 03/21/05		Week 4 03/28/05	
	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102
FLOW, DAILY AVG (GPD)	510994	147909	514491	149760	418954	121980	512640	146263
FLOW, DAILY MAX (GPD)	514080	149760	516960	151200	515520	151200	514080	148320
VINYL CHLORIDE	2.5	BDL	2.7	BDL	1.9	BDL	1.8	BDL
1,1-DICHLOROETHANE	2.1	1.9	1.9	BDL	1.6	1.5	1.5	1.5
t-1,2 DICHLOROETHENE	BDL	BDL	BDL	BDL	BDL	1.7	BDL	0.5
c-1,2 DICHLOROETHENE	43.2	172.0	37.9	148.0	32.4	128.0	31.7	138.0
1,1,1-TRICHLOROETHANE	2.9	51.4	2.6	45.6	2.1	41.2	2.1	41.2
TRICHLOROETHENE	42.6	82.3	44.5	76.8	43.5	79.4	47.5	89.8
BENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	50.9	274.0	62.3	299.0	61.5	339.0	68.2	370.0
TOLUENE	BDL	1.6	BDL	BDL	BDL	BDL	BDL	1.7
4-CHLOROTOLUENE	BDL	BDL	1.3	BDL	BDL	BDL	BDL	BDL
p-ISOPROPYLTOLUENE	BDL	BDL	3.0	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.9
o-XYLENE	BDL	0.8	BDL	BDL	BDL	BDL	BDL	0.7
1,1-DICHLOROETHENE	3.4	2.3	3.3	2.4	2.6	2.1	2.6	1.2
CARBON TETRACHLORIDE	BDL	0.9	BDL	BDL	BDL	BDL	BDL	1.1
BROMOFORM	BDL	BDL	1.0	BDL	BDL	BDL	BDL	BDL
CHLOROFORM	0.8	5.0	BDL	4.4	BDL	3.9	0.5	4.2
CHLOROMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CHLOROBENZENE	BDL	BDL	BDL	1.9	BDL	1.8	BDL	2.3
ETHYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
METHYL CHLORIDE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TRICHLOROFLUOROMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	1.3	BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROBENZENE	BDL	17.8	10.1	15.2	BDL	13.7	BDL	14.6
1,2-DICHLOROPROPANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3-DICHLOROBENZENE	BDL	BDL	3.0	BDL	BDL	BDL	BDL	BDL
1,4-DICHLOROBENZENE	BDL	BDL	3.0	BDL	BDL	BDL	BDL	BDL
1,2,3 TRICHLOROBENZENE	BDL	BDL	19.2	BDL	BDL	BDL	BDL	BDL
1,2,4 TRICHLOROBENZENE	BDL	BDL	14.4	BDL	BDL	BDL	BDL	BDL
1,2,4 TRIMETHYLBENZENE	BDL	1.4	1.7	BDL	BDL	BDL	BDL	0.9
1,3,5 TRIMETHYLBENZENE	BDL	1.2	1.4	BDL	BDL	2.0	BDL	BDL
n-BUTYLBENZENE	BDL	BDL	4.1	BDL	BDL	BDL	BDL	BDL
sec-BUTYLBENZENE	BDL	BDL	2.6	BDL	BDL	BDL	BDL	BDL
ISOPROPYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
n-PROPYLBENZENE	BDL	0.7	1.2	BDL	BDL	BDL	BDL	BDL
HEXACHLOROBUTADIENE	BDL	BDL	18.9	BDL	BDL	BDL	BDL	BDL
t-1,3 DICHLOROPROPENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
c-1,3 DICHLOROPROPENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
BROMOMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
BROMOBENZENE	BDL	BDL	1.3	BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	BDL	BDL	12.7	BDL	BDL	BDL	BDL	BDL
METHYL TERT-BUTYL ETHER (MTBE)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs	148.4	613.3	255.4	593.3	145.6	614.3	155.9	668.6

SAMPLE RESULT UNITS ARE µg/l

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY INFLUENT MONITORING REPORT APRIL 2005

INFLUENT PARAMETER	Week 1 04/04/05		Week 2 04/11/05		Week 3 04/18/05		Week 4 04/25/05	
	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102
FLOW, DAILY AVG (GPD)	511817	146263	510583	147086	511406	147086	510171	145029
FLOW, DAILY MAX (GPD)	516960	146880	511200	148320	512640	148320	514080	145440
VINYL CHLORIDE	2.2	BDL		BDL	2.1	BDL	2.9	BDL
1,1-DICHLOROETHANE	1.9	1.8		1.7	2.0	2.5	2.8	2.6
t-1,2 DICHLOROETHENE	BDL	0.5		BDL	BDL	BDL	BDL	BDL
c-1,2 DICHLOROETHENE	38.1	181.0		178.0	41.0	202.0	55.0	247.0
1,1,1-TRICHLOROETHANE	2.4	50.2		49.6	1.7	46.3	3.6	60.2
TRICHLOROETHENE	46.1	81.6		92.2	4.3	8.0	41.5	86.4
BENZENE	BDL	BDL		BDL	0.6	0.7	1.5	0.7
TETRACHLOROETHENE	59.3	296.0		341.0	5.4	27.4	BDL	289.0
TOLUENE	BDL	1.4		1.4	BDL	BDL	47.7	2.3
4-CHLOROTOLUENE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
p-ISOPROPYLTOLUENE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	BDL	0.8		0.9	BDL	BDL	BDL	BDL
o-XYLENE	BDL	BDL		0.7	BDL	BDL	BDL	0.9
1,1-DICHLOROETHENE	3.0	2.7		2.7	3.2	3.1	4.0	3.4
CARBON TETRACHLORIDE	BDL	1.3		1.3	BDL	10.7	BDL	78.9
BROMOFORM	BDL	BDL		BDL	BDL	BDL	BDL	BDL
CHLOROFORM	0.7	5.1		5.0	0.7	5.4	BDL	6.4
CHLOROMETHANE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
CHLOROBENZENE	BDL	2.1		2.3	BDL	BDL	BDL	3.0
ETHYLBENZENE	BDL	BDL		BDL	BDL	BDL	BDL	0.5
METHYL CHLORIDE	BDL	BDL		BDL	BDL	BDL	BDL	0.5
TRICHLOROFLUOROMETHANE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	BDL	BDL		BDL	BDL	BDL	BDL	1.1
1,1,2,2-TETRACHLOROETHANE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROBENZENE	BDL	16.9		19.8	BDL	1.6	BDL	18.2
1,2-DICHLOROPROPANE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
1,3-DICHLOROBENZENE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
1,4-DICHLOROBENZENE	BDL	BDL		1.2	BDL	BDL	BDL	1.7
1,2,3 TRICHLOROBENZENE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
1,2,4 TRICHLOROBENZENE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
1,2,4 TRIMETHYLBENZENE	BDL	0.6		1.2	BDL	BDL	BDL	1.4
1,3,5 TRIMETHYLBENZENE	BDL	0.5		1.0	BDL	BDL	BDL	2.3
n-BUTYLBENZENE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
sec-BUTYLBENZENE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
ISOPROPYLBENZENE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
n-PROPYLBENZENE	BDL	0.5		0.6	BDL	BDL	BDL	BDL
HEXACHLOROBUTADIENE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
t-1,3 DICHLOROPROPENE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
c-1,3 DICHLOROPROPENE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
BROMOMETHANE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
BROMOBENZENE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
METHYL TERT-BUTYL ETHER (MTBE)	BDL	BDL		BDL	BDL	BDL	BDL	BDL
CHLOROETHANE	BDL	BDL		BDL	BDL	BDL	BDL	BDL
TOTAL VOCs	153.7	643.0		700.6	61.0	307.7	159.0	806.5

SAMPLE RESULT UNITS ARE µ g/l

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY INFLUENT MONITORING REPORT

MAY 2005

INFLUENT PARAMETER	Week 1 05/02/05		Week 2 05/09/05		Week 3 05/16/05		Week 4 05/23/05		Week 5 05/31/05	
	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102
FLOW, DAILY AVG (GPD)	513051	145440	507909	144617	505646	142354	396711	111729	514980	163080
FLOW, DAILY MAX (GPD)	516960	146880	509760	145440	506880	142560	504000	141120	518400	167040
VINYL CHLORIDE	2.0	BDL	2.4	BDL	2.8	BDL	2.5	BDL	1.7	BDL
1,1-DICHLOROETHANE	1.6	2.6	2.2	1.8	1.5	2.1	1.4	2.4	1.1	BDL
t-1,2 DICHLOROETHENE	BDL	0.5	BDL	BDL	BDL	1.0	BDL	BDL	BDL	1.1
c-1,2 DICHLOROETHENE	34.2	280.0	42.1	185.0	56.5	242.0	50.4	206.0	36.4	203.0
1,1,1-TRICHLOROETHANE	2.0	74.7	1.7	46.7	1.1	57.3	2.5	55.3	0.9	38.4
TRICHLOROETHENE	30.7	96.2	37.5	62.4	49.9	79.1	38.3	78.8	46.4	98.1
BENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	40.2	331.0	48.2	214.0	71.7	300.0	56.1	356.0	50.4	290.0
TOLUENE	BDL	1.8	BDL	1.0	BDL	1.3	BDL	3.0	BDL	2.8
4-CHLOROTOLUENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
p-ISOPROPYLTOLUENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
o-XYLENE	BDL	0.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.8
1,1-DICHLOROETHENE	2.8	4.0	3.4	2.6	4.5	3.3	3.6	3.3	1.6	2.6
CARBON TETRACHLORIDE	BDL	89.3	BDL	30.9	BDL	28.8	BDL	13.3	BDL	8.3
BROMOFORM	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CHLOROFORM	0.6	7.3	0.7	4.7	0.5	6.2	BDL	3.0	BDL	5.0
CHLOROMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CHLOROBENZENE	BDL	2.6	0.4	1.6	BDL	BDL	BDL	2.1	BDL	2.5
ETHYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
METHYL CHLORIDE	BDL	0.6	BDL	0.5	BDL	0.5	BDL	BDL	BDL	BDL
TRICHLOROFLUOROMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROBENZENE	BDL	18.3	5.0	12.7	BDL	17.7	BDL	21.3	BDL	20.1
1,2-DICHLOROPROPANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3-DICHLOROBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,4-DICHLOROBENZENE	BDL	0.9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,3 TRICHLOROBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,4 TRICHLOROBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,4 TRIMETHYLBENZENE	BDL	1.0	BDL	0.6	BDL	BDL	BDL	2.0	BDL	0.6
1,3,5 TRIMETHYLBENZENE	BDL	1.9	BDL	1.5	BDL	0.8	BDL	3.6	BDL	1.8
n-BUTYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
sec-BUTYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
ISOPROPYLBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
n-PROPYLBENZENE	BDL	BDL	BDL	BDL	BDL	0.5	BDL	0.6	BDL	BDL
HEXACHLOROBUTADIENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
t-1,3 DICHLOROPROPENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
c-1,3 DICHLOROPROPENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
BROMOMETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
BROMOBENZENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NAPHTHALENE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
METHYL TERT-BUTYL ETHER (MTBE)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CHLOROETHANE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs	114.1	913.3	143.6	566.0	188.5	740.6	154.8	750.7	138.5	675.1

SAMPLE RESULT UNITS ARE μ g/l

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY INFLUENT MONITORING REPORT JUNE 2005

INFLUENT PARAMETER	Week 1 06/06/05		Week 2 06/13/05		Week 3 06/20/05		Week 4 06/27/05	
	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102
FLOW, DAILY AVG (GPD)	456000	7040	512640		510789		515726	
FLOW, DAILY MAX (GPD)	514080	42240	515520		516960		524160	
VINYL CHLORIDE	3.5		1.9		BDL		2.0	
1,1-DICHLOROETHANE	3.1		2.0		BDL		2.4	
t-1,2 DICHLOROETHENE	BDL		BDL		BDL		BDL	
c-1,2 DICHLOROETHENE	61.1		35.4		6.8		46.5	
1,1,1-TRICHLOROETHANE	3.4		1.3		BDL		1.4	
TRICHLOROETHENE	45.9		29.9		6.1		32.2	
BENZENE	BDL		BDL		BDL		BDL	
TETRACHLOROETHENE	52.8		36.4		5.7		43.3	
TOLUENE	BDL		BDL		BDL		BDL	
4-CHLOROTOLUENE	BDL		BDL		BDL		BDL	
p-ISOPROPYLTOLUENE	BDL		BDL		BDL		BDL	
m,p-XYLENE	BDL		BDL		BDL		BDL	
o-XYLENE	BDL		BDL		BDL		BDL	
1,1-DICHLOROETHENE	4.7		2.8		BDL		3.2	
CARBON TETRACHLORIDE	BDL		BDL		BDL		BDL	
BROMOFORM	BDL		BDL		BDL		BDL	
CHLOROFORM	1.0		0.7		BDL		0.8	
CHLOROMETHANE	BDL		BDL		BDL		BDL	
DIBROMOCHLOROMETHANE	BDL		BDL		BDL		BDL	
CHLOROBENZENE	BDL		BDL		BDL		BDL	
ETHYLBENZENE	BDL		BDL		BDL		BDL	
METHYL CHLORIDE	1.2		1.2		BDL		BDL	
TRICHLOROFLUOROMETHANE	BDL		BDL		BDL		BDL	
1,1,2-TRICHLOROETHANE	BDL		BDL		BDL		BDL	
1,1,2,2-TETRACHLOROETHANE	BDL		BDL		BDL		BDL	
1,2-DICHLOROETHANE	BDL		BDL		BDL		BDL	
1,2-DICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,2-DICHLOROPROPANE	BDL		BDL		BDL		BDL	
1,3-DICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,4-DICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,2,3 TRICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,2,4 TRICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,2,4 TRIMETHYLBENZENE	BDL		BDL		BDL		BDL	
1,3,5 TRIMETHYLBENZENE	BDL		BDL		BDL		BDL	
n-BUTYLBENZENE	BDL		BDL		BDL		BDL	
sec-BUTYLBENZENE	BDL		BDL		BDL		BDL	
ISOPROPYLBENZENE	BDL		BDL		BDL		BDL	
n-PROPYLBENZENE	BDL		BDL		BDL		BDL	
HEXACHLOROBUTADIENE	BDL		BDL		BDL		BDL	
t-1,3 DICHLOROPROPENE	BDL		BDL		BDL		BDL	
c-1,3 DICHLOROPROPENE	BDL		BDL		BDL		BDL	
BROMOMETHANE	BDL		BDL		BDL		BDL	
BROMOBENZENE	BDL		BDL		BDL		BDL	
NAPHTHALENE	BDL		BDL		BDL		BDL	
METHYL TERT-BUTYL ETHER (MTBE)	BDL		BDL		BDL		BDL	
CHLOROETHANE	BDL		BDL		BDL		BDL	
TOTAL VOCs	176.7		111.6		18.6		131.8	

SAMPLE RESULT UNITS ARE µ g/l

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY INFLUENT MONITORING REPORT JULY 2005

INFLUENT PARAMETER	Week 1 07/05/05		Week 2 07/11/05		Week 3 07/18/05		Week 4 07/25/05	
	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102
FLOW, DAILY AVG (GPD)	512640		503520		507291		507497	
FLOW, DAILY MAX (GPD)	521280		511200		509760		511200	
VINYL CHLORIDE	1.6		2.4		2.9		3.2	
1,1-DICHLOROETHANE	1.5		2.3		2.4		1.0	
t-1,2 DICHLOROETHENE	BDL		0.6		BDL		BDL	
c-1,2 DICHLOROETHENE	31.1		45.1		52.5		61.8	
1,1,1-TRICHLOROETHANE	0.8		1.8		1.0		1.0	
TRICHLOROETHENE	22.1		37.1		34.6		32.5	
BENZENE	BDL		BDL		BDL		BDL	
TETRACHLOROETHENE	29.9		46.2		39.6		33.1	
TOLUENE	BDL		BDL		0.3		BDL	
4-CHLOROTOLUENE	BDL		BDL		BDL		BDL	
p-ISOPROPYLTOLUENE	BDL		BDL		BDL		BDL	
m,p-XYLENE	BDL		BDL		BDL		BDL	
o-XYLENE	BDL		BDL		BDL		BDL	
1,1-DICHLOROETHENE	2.2		3.4		3.5		4.0	
CARBON TETRACHLORIDE	BDL		BDL		BDL		BDL	
BROMOFORM	BDL		BDL		BDL		BDL	
CHLOROFORM	0.5		1.1		0.9		1.1	
CHLOROMETHANE	BDL		BDL		BDL		BDL	
DIBROMOCHLOROMETHANE	BDL		BDL		BDL		BDL	
CHLOROBENZENE	BDL		BDL		BDL		BDL	
ETHYLBENZENE	BDL		BDL		BDL		BDL	
METHYL CHLORIDE	BDL		BDL		BDL		BDL	
TRICHLOROFLUOROMETHANE	BDL		BDL		BDL		BDL	
1,1,2-TRICHLOROETHANE	BDL		BDL		BDL		BDL	
1,1,2,2-TETRACHLOROETHANE	BDL		BDL		BDL		BDL	
1,2-DICHLOROETHANE	BDL		BDL		BDL		BDL	
1,2-DICHLOROBENZENE	BDL		BDL		BDL		5.2	
1,2-DICHLOROPROPANE	BDL		BDL		BDL		BDL	
1,3-DICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,4-DICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,2,3 TRICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,2,4 TRICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,2,4 TRIMETHYLBENZENE	BDL		BDL		BDL		BDL	
1,3,5 TRIMETHYLBENZENE	BDL		BDL		BDL		BDL	
n-BUTYLBENZENE	BDL		BDL		BDL		BDL	
sec-BUTYLBENZENE	BDL		BDL		BDL		BDL	
ISOPROPYLBENZENE	BDL		BDL		BDL		BDL	
n-PROPYLBENZENE	BDL		BDL		BDL		BDL	
HEXACHLOROBUTADIENE	BDL		BDL		BDL		BDL	
t-1,3 DICHLOROPROPENE	BDL		BDL		BDL		BDL	
c-1,3 DICHLOROPROPENE	BDL		BDL		BDL		BDL	
BROMOMETHANE	BDL		BDL		BDL		BDL	
BROMOBENZENE	BDL		BDL		BDL		BDL	
NAPHTHALENE	BDL		BDL		BDL		BDL	
METHYL TERT-BUTYL ETHER (MTBE)	BDL		BDL		BDL		BDL	
CHLOROETHANE	BDL		BDL		BDL		BDL	
TOTAL VOCs	89.7		140.0		137.7		142.9	

SAMPLE RESULT UNITS ARE µg/l

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY INFLUENT MONITORING REPORT

AUGUST 2005

INFLUENT PARAMETER	Week 1 08/01/05		Week 2 08/08/05		Week 3 08/15/05		Week 4 08/22/05		Week 5 08/29/05	
	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102
FLOW, DAILY AVG (GPD)	445950		493303		460303		231184		254263	
FLOW, DAILY MAX (GPD)	496800		496800		492480		447840		264960	
VINYL CHLORIDE	2.5		2.7		2.5		3.1		3.2	
1,1-DICHLOROETHANE	2.2		2.3		1.8		1.4		1.9	
t-1,2 DICHLOROETHENE	BDL		BDL		BDL		0.6		BDL	
c-1,2 DICHLOROETHENE	46.6		49.1		40.9		51.0		48.7	
1,1,1-TRICHLOROETHANE	2.1		0.7		1.3		1.2		1.6	
TRICHLOROETHENE	26.2		26.7		27.3		30.5		31.3	
BENZENE	BDL		BDL		BDL		BDL		BDL	
TETRACHLOROETHENE	22.5		29.2		43.8		BDL		34.5	
TOLUENE	BDL		BDL		1.3		BDL		BDL	
4-CHLOROTOLUENE	BDL		BDL		BDL		BDL		BDL	
p-ISOPROPYLTOLUENE	BDL		BDL		BDL		BDL		BDL	
m,p-XYLENE	BDL		BDL		BDL		BDL		BDL	
o-XYLENE	BDL		BDL		BDL		BDL		BDL	
1,1-DICHLOROETHENE	3.1		4.4		3.3		4.5		4.2	
CARBON TETRACHLORIDE	BDL		BDL		BDL		BDL		BDL	
BROMOFORM	BDL		BDL		BDL		BDL		BDL	
CHLOROFORM	0.9		0.9		0.5		1.0		0.7	
CHLOROMETHANE	BDL		BDL		5.2		BDL		BDL	
DIBROMOCHLOROMETHANE	BDL		BDL		BDL		BDL		BDL	
CHLOROBENZENE	BDL		BDL		0.6		BDL		BDL	
ETHYLBENZENE	BDL		BDL		BDL		BDL		BDL	
METHYL CHLORIDE	BDL		BDL		BDL		BDL		BDL	
TRICHLOROFLUOROMETHANE	BDL		BDL		BDL		BDL		BDL	
1,1,2-TRICHLOROETHANE	BDL		BDL		BDL		BDL		BDL	
1,1,2,2-TETRACHLOROETHANE	BDL		BDL		BDL		BDL		BDL	
1,2-DICHLOROETHANE	BDL		BDL		BDL		BDL		BDL	
1,2-DICHLOROBENZENE	4.3		4.5		4.2		2.5		BDL	
1,2-DICHLOROPROPANE	BDL		BDL		BDL		BDL		BDL	
1,3-DICHLOROBENZENE	BDL		BDL		BDL		BDL		BDL	
1,4-DICHLOROBENZENE	BDL		BDL		BDL		BDL		BDL	
1,2,3 TRICHLOROBENZENE	BDL		BDL		BDL		BDL		BDL	
1,2,4 TRICHLOROBENZENE	BDL		BDL		BDL		BDL		BDL	
1,2,4 TRIMETHYLBENZENE	BDL		BDL		BDL		BDL		BDL	
1,3,5 TRIMETHYLBENZENE	BDL		BDL		BDL		BDL		BDL	
n-BUTYLBENZENE	BDL		BDL		BDL		BDL		BDL	
sec-BUTYLBENZENE	BDL		BDL		BDL		BDL		BDL	
ISOPROPYLBENZENE	BDL		BDL		BDL		BDL		BDL	
n-PROPYLBENZENE	BDL		BDL		BDL		BDL		BDL	
HEXACHLOROBUTADIENE	BDL		BDL		BDL		BDL		BDL	
t-1,3 DICHLOROPROPENE	BDL		BDL		BDL		BDL		BDL	
c-1,3 DICHLOROPROPENE	BDL		BDL		BDL		BDL		BDL	
BROMOMETHANE	BDL		BDL		BDL		BDL		BDL	
BROMOBENZENE	BDL		BDL		BDL		BDL		BDL	
NAPHTHALENE	BDL		BDL		BDL		BDL		BDL	
METHYL TERT-BUTYL ETHER (MTBE)	BDL		BDL		BDL		BDL		BDL	
CHLOROETHANE	BDL		BDL		BDL		BDL		BDL	
TOTAL VOCs	110.4		120.5		132.7		95.8		126.1	

SAMPLE RESULT UNITS ARE µ g/l

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY INFLUENT MONITORING REPORT SEPTEMBER 2005

INFLUENT PARAMETER	Week 1 09/05/05		Week 2 09/12/05		Week 3 09/19/05		Week 4 09/26/05	
	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102
FLOW, DAILY AVG (GPD)	244594		245211		247063		243566	
FLOW, DAILY MAX (GPD)	249120		249120		249120		246240	
VINYL CHLORIDE	2.8				2.3		1.9	
1,1-DICHLOROETHANE	2.4				2.2		1.9	
t-1,2 DICHLOROETHENE	BDL				BDL		BDL	
c-1,2 DICHLOROETHENE	54.3				46.7		39.3	
1,1,1-TRICHLOROETHANE	2.7				2.3		1.7	
TRICHLOROETHENE	32.6				26.7		25.4	
BENZENE	BDL				BDL		BDL	
TETRACHLOROETHENE	43.7				16.9		27.1	
TOLUENE	BDL				BDL		BDL	
4-CHLOROTOLUENE	BDL				BDL		BDL	
p-ISOPROPYLTOLUENE	BDL				BDL		BDL	
m,p-XYLENE	BDL				BDL		BDL	
o-XYLENE	BDL				BDL		BDL	
1,1-DICHLOROETHENE	4.5				4.2		4.0	
CARBON TETRACHLORIDE	BDL				BDL		BDL	
BROMOFORM	BDL				BDL		BDL	
CHLOROFORM	1.1				1.1		1.0	
CHLOROMETHANE	BDL				BDL		BDL	
DIBROMOCHLOROMETHANE	BDL				BDL		BDL	
CHLOROBENZENE	BDL				BDL		BDL	
ETHYLBENZENE	BDL				BDL		BDL	
METHYL CHLORIDE	0.5				BDL		BDL	
TRICHLOROFLUOROMETHANE	BDL				BDL		BDL	
1,1,2-TRICHLOROETHANE	BDL				BDL		BDL	
1,1,2,2-TETRACHLOROETHANE	BDL				BDL		BDL	
1,2-DICHLOROETHANE	BDL				BDL		BDL	
1,2-DICHLOROBENZENE	4.1				3.5		3.2	
1,2-DICHLOROPROPANE	BDL				BDL		BDL	
1,3-DICHLOROBENZENE	BDL				BDL		BDL	
1,4-DICHLOROBENZENE	BDL				BDL		BDL	
1,2,3 TRICHLOROBENZENE	BDL				BDL		BDL	
1,2,4 TRICHLOROBENZENE	BDL				BDL		BDL	
1,2,4 TRIMETHYLBENZENE	BDL				BDL		BDL	
1,3,5 TRIMETHYLBENZENE	BDL				BDL		BDL	
n-BUTYLBENZENE	BDL				BDL		BDL	
sec-BUTYLBENZENE	BDL				BDL		BDL	
ISOPROPYLBENZENE	BDL				BDL		BDL	
n-PROPYLBENZENE	BDL				BDL		BDL	
HEXACHLOROBUTADIENE	BDL				BDL		BDL	
t-1,3 DICHLOROPROPENE	BDL				BDL		BDL	
c-1,3 DICHLOROPROPENE	BDL				BDL		BDL	
BROMOMETHANE	BDL				BDL		BDL	
BROMOBENZENE	BDL				BDL		BDL	
NAPHTHALENE	BDL				BDL		BDL	
METHYL TERT-BUTYL ETHER (MTBE)	BDL				BDL		BDL	
CHLOROETHANE	BDL				BDL		BDL	
TOTAL VOCs	148.7		0.0		105.9		105.5	

SAMPLE RESULT UNITS ARE µg/l

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY INFLUENT MONITORING REPORT

OCTOBER 2005

INFLUENT PARAMETER	Week 1 10/03/05		Week 2 10/10/05		Week 3 10/19/05		Week 4 10/24/05		Week 5 10/31/05	
	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102
FLOW, DAILY AVG (GPD)	246034		240686		240480		245376		250149	
FLOW, DAILY MAX (GPD)	249120		241920		243360		246240		252000	
VINYL CHLORIDE	3.5		2.5		1.6		1.9			
1,1-DICHLOROETHANE	2.4		1.7		1.4		1.7			
t-1,2 DICHLOROETHENE	BDL		BDL		BDL		BDL			
c-1,2 DICHLOROETHENE	53.2		25.6		18.7		22.1			
1,1,1-TRICHLOROETHANE	3.5		1.2		1.1		0.9			
TRICHLOROETHENE	29.1		12.9		9.5		11.4			
BENZENE	BDL		BDL		BDL		BDL			
TETRACHLOROETHENE	44.4		BDL		4.0		4.1			
TOLUENE	BDL		BDL		BDL		BDL			
4-CHLOROTOLUENE	BDL		BDL		BDL		BDL			
p-ISOPROPYLTOLUENE	BDL		BDL		BDL		BDL			
m,p-XYLENE	BDL		BDL		BDL		BDL			
o-XYLENE	BDL		BDL		BDL		BDL			
1,1-DICHLOROETHENE	5.6		3.2		2.4		3.0			
CARBON TETRACHLORIDE	BDL		BDL		BDL		BDL			
BROMOFORM	BDL		BDL		BDL		BDL			
CHLOROFORM	1.4		1.5		1.4		0.9			
CHLOROMETHANE	BDL		BDL		BDL		BDL			
DIBROMOCHLOROMETHANE	BDL		BDL		BDL		BDL			
CHLOROBENZENE	BDL		BDL		BDL		BDL			
ETHYLBENZENE	BDL		BDL		BDL		BDL			
METHYL CHLORIDE	BDL		BDL		BDL		BDL			
TRICHLOROFLUOROMETHANE	BDL		BDL		BDL		BDL			
1,1,2-TRICHLOROETHANE	BDL		BDL		BDL		BDL			
1,1,2,2-TETRACHLOROETHANE	BDL		BDL		BDL		BDL			
1,2-DICHLOROETHANE	BDL		BDL		BDL		BDL			
1,2-DICHLOROBENZENE	3.7		BDL		BDL		BDL			
1,2-DICHLOROPROPANE	BDL		BDL		BDL		BDL			
1,3-DICHLOROBENZENE	BDL		BDL		BDL		BDL			
1,4-DICHLOROBENZENE	BDL		BDL		BDL		BDL			
1,2,3 TRICHLOROBENZENE	BDL		BDL		BDL		BDL			
1,2,4 TRICHLOROBENZENE	BDL		BDL		BDL		BDL			
1,2,4 TRIMETHYLBENZENE	BDL		BDL		BDL		BDL			
1,3,5 TRIMETHYLBENZENE	BDL		BDL		BDL		BDL			
n-BUTYLBENZENE	BDL		BDL		BDL		BDL			
sec-BUTYLBENZENE	BDL		BDL		BDL		BDL			
ISOPROPYLBENZENE	BDL		BDL		BDL		BDL			
n-PROPYLBENZENE	BDL		BDL		BDL		BDL			
HEXACHLOROBUTADIENE	BDL		BDL		BDL		BDL			
t-1,3 DICHLOROPROPENE	BDL		BDL		BDL		BDL			
c-1,3 DICHLOROPROPENE	BDL		BDL		BDL		BDL			
BROMOMETHANE	BDL		BDL		BDL		BDL			
BROMOBENZENE	BDL		BDL		BDL		BDL			
NAPHTHALENE	BDL		BDL		BDL		BDL			
METHYL TERT-BUTYL ETHER (MTBE)	BDL		BDL		BDL		BDL			
CHLOROETHANE	BDL		BDL		BDL		BDL			
TOTAL VOCs	146.8		48.6		40.1		46.0		0.0	0.0

SAMPLE RESULT UNITS ARE µ g/l

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY INFLUENT MONITORING REPORT NOVEMBER 2005

INFLUENT PARAMETER	Week 1 11/09/05		Week 2 11/14/05		Week 3 11/21/05		Week 4 11/28/05	
	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102
FLOW, DAILY AVG (GPD)	247840		239616		242949		241920	
FLOW, DAILY MAX (GPD)	249120		247680		243360		241920	
VINYL CHLORIDE	2.4		1.6		2.1		2.2	
1,1-DICHLOROETHANE	2.4		1.6		2.3		1.9	
t-1,2 DICHLOROETHENE	1.2		BDL		BDL		0.9	
c-1,2 DICHLOROETHENE	33.0		23.0		33.2		29.5	
1,1,1-TRICHLOROETHANE	BDL		1.0		BDL		1.0	
TRICHLOROETHENE	16.7		12.4		16.1		12.7	
BENZENE	BDL		BDL		0.6		BDL	
TETRACHLOROETHENE	6.9		4.5		5.9		5.7	
TOLUENE	BDL		BDL		BDL		BDL	
4-CHLOROTOLUENE	BDL		BDL		BDL		BDL	
p-ISOPROPYLTOLUENE	BDL		BDL		BDL		BDL	
m,p-XYLENE	BDL		BDL		BDL		BDL	
o-XYLENE	BDL		BDL		BDL		BDL	
1,1-DICHLOROETHENE	5.1		3.3		4.3		4.1	
CARBON TETRACHLORIDE	BDL		BDL		BDL		BDL	
BROMOFORM	BDL		BDL		BDL		BDL	
CHLOROFORM	2.3		1.8		1.8		1.9	
CHLOROMETHANE	BDL		BDL		BDL		BDL	
DIBROMOCHLOROMETHANE	BDL		BDL		BDL		BDL	
CHLOROBENZENE	BDL		BDL		BDL		BDL	
ETHYLBENZENE	BDL		BDL		BDL		BDL	
METHYL CHLORIDE	BDL		BDL		BDL		BDL	
TRICHLOROFLUOROMETHANE	BDL		BDL		BDL		BDL	
1,1,2-TRICHLOROETHANE	BDL		BDL		BDL		BDL	
1,1,2,2-TETRACHLOROETHANE	BDL		BDL		BDL		BDL	
1,2-DICHLOROETHANE	0.9		0.5		0.6		0.7	
1,2-DICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,2-DICHLOROPROPANE	BDL		BDL		BDL		BDL	
1,3-DICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,4-DICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,2,3 TRICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,2,4 TRICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,2,4 TRIMETHYLBENZENE	BDL		BDL		BDL		BDL	
1,3,5 TRIMETHYLBENZENE	BDL		BDL		BDL		BDL	
n-BUTYLBENZENE	BDL		BDL		BDL		BDL	
sec-BUTYLBENZENE	BDL		BDL		BDL		BDL	
ISOPROPYLBENZENE	BDL		BDL		BDL		BDL	
n-PROPYLBENZENE	BDL		BDL		BDL		BDL	
HEXACHLOROBUTADIENE	BDL		BDL		BDL		BDL	
t-1,3 DICHLOROPROPENE	BDL		BDL		BDL		BDL	
c-1,3 DICHLOROPROPENE	BDL		BDL		BDL		BDL	
BROMOMETHANE	BDL		BDL		BDL		BDL	
BROMOBENZENE	BDL		BDL		BDL		BDL	
NAPHTHALENE	BDL		BDL		BDL		BDL	
METHYL TERT-BUTYL ETHER (MTBE)	BDL		BDL		BDL		2.7	
CHLOROETHANE	BDL		BDL		BDL		BDL	
TOTAL VOCs	70.9		49.7		66.9		63.3	

SAMPLE RESULT UNITS ARE µg/l

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY INFLUENT MONITORING REPORT DECEMBER 2005

INFLUENT PARAMETER	Week 1 12/05/05		Week 2 12/12/05		Week 3 12/19/05		Week 4 12/27/05	
	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102	PLUME SP-101	SOURCE SP-102
FLOW, DAILY AVG (GPD)	252823		242949		240274		240480	
FLOW, DAILY MAX (GPD)	259200		247680		240480		241920	
VINYL CHLORIDE	8.4		12.7		10.0		20.1	
1,1-DICHLOROETHANE	6.9		1.9		4.8		9.3	
t-1,2 DICHLOROETHENE	BDL		BDL		BDL		BDL	
c-1,2 DICHLOROETHENE	132.0		65.4		70.5		133.0	
1,1,1-TRICHLOROETHANE	BDL		BDL		BDL		BDL	
TRICHLOROETHENE	31.9		17.7		23.1		48.6	
BENZENE	1.1		BDL		BDL		BDL	
TETRACHLOROETHENE	24.9		14.5		17.9		32.4	
TOLUENE	BDL		BDL		BDL		BDL	
4-CHLOROTOLUENE	BDL		BDL		BDL		BDL	
p-ISOPROPYLTOLUENE	BDL		BDL		BDL		BDL	
m,p-XYLENE	BDL		BDL		BDL		BDL	
o-XYLENE	BDL		BDL		BDL		BDL	
1,1-DICHLOROETHENE	1.5		3.7		3.8		6.7	
CARBON TETRACHLORIDE	BDL		BDL		BDL		BDL	
BROMOFORM	BDL		BDL		BDL		BDL	
CHLOROFORM	BDL		BDL		BDL		BDL	
CHLOROMETHANE	BDL		BDL		BDL		BDL	
DIBROMOCHLOROMETHANE	BDL		BDL		BDL		BDL	
CHLOROBENZENE	BDL		BDL		BDL		BDL	
ETHYLBENZENE	BDL		BDL		BDL		BDL	
METHYL CHLORIDE	BDL		BDL		BDL		BDL	
TRICHLOROFLUOROMETHANE	BDL		BDL		BDL		BDL	
1,1,2-TRICHLOROETHANE	BDL		BDL		BDL		BDL	
1,1,2,2-TETRACHLOROETHANE	BDL		BDL		BDL		BDL	
1,2-DICHLOROETHANE	2.3		1.2		1.3		2.4	
1,2-DICHLOROBENZENE	13.1		3.0		2.3		4.6	
1,2-DICHLOROPROPANE	BDL		BDL		BDL		BDL	
1,3-DICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,4-DICHLOROBENZENE	2.8		BDL		BDL		BDL	
1,2,3 TRICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,2,4 TRICHLOROBENZENE	BDL		BDL		BDL		BDL	
1,2,4 TRIMETHYLBENZENE	BDL		BDL		BDL		BDL	
1,3,5 TRIMETHYLBENZENE	BDL		BDL		BDL		BDL	
n-BUTYLBENZENE	BDL		BDL		BDL		BDL	
sec-BUTYLBENZENE	BDL		BDL		BDL		BDL	
ISOPROPYLBENZENE	BDL		BDL		BDL		BDL	
n-PROPYLBENZENE	BDL		BDL		BDL		BDL	
HEXACHLOROBUTADIENE	BDL		BDL		BDL		BDL	
t-1,3 DICHLOROPROPENE	BDL		BDL		BDL		BDL	
c-1,3 DICHLOROPROPENE	BDL		BDL		BDL		BDL	
BROMOMETHANE	BDL		BDL		BDL		BDL	
BROMOBENZENE	BDL		BDL		BDL		BDL	
NAPHTHALENE	BDL		BDL		BDL		BDL	
METHYL TERT-BUTYL ETHER (MTBE)	2.3		BDL		BDL		BDL	
CHLOROETHANE	BDL		BDL		BDL		BDL	
TOTAL VOCs	227.2		120.1		133.7		257.1	

SAMPLE RESULT UNITS ARE µg/l

APPENDIX C

MONTHLY EFFLUENT MONITORING REPORTS

2005

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY EFFLUENT MONITORING REPORT

JANUARY 2005
OUTFALL 001G

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 01/03/05	WEEK 2 01/11/05	WEEK 3 01/17/05	WEEK 4 01/24/05	WEEK 5 01/31/05
FLOW, DAILY MAX	MONITOR	GPD	NA	668160	673920	672480	672480	673920
pH	6.5-8.5	su		6.99	7.13	7.02	7.15	7.08
DICHLOROBROMOMETHANE	50	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
CARBON TETRACHLORIDE	5	µ g/l	1.3	BDL	BDL	BDL	BDL	BDL
BROMOFORM	50	µ g/l	0.7	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	50	µ g/l	0.7	BDL	BDL	BDL	BDL	BDL
CHLOROFORM	0.2	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
TOLUENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
BENZENE	0.7	µ g/l	0.7	BDL	BDL	BDL	BDL	BDL
CHLOROBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
ETHYLBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
METHYL CHLORIDE	5	µ g/l	1.0	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	0.5	µ g/l	1.2	10.1	BDL	BDL	1.0	9.1
TRICHLOROFLUOROMETHANE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	0.9	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	5	µ g/l	1.4	BDL	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	0.5	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
1,1,2,2 TETRACHLOROETHANE	0.3	µ g/l	1.0	BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	1	µ g/l	0.8	BDL	BDL	BDL	BDL	BDL
1,2 DICHLOROBENZENE	4.7	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
1,2 DICHLOROPROPANE	5	µ g/l	1.0	BDL	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
1,3 DICHLOROBENZENE	5	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
1,4 DICHLOROBENZENE	4.7	µ g/l	1.0	BDL	BDL	BDL	BDL	BDL
TRANS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
CIS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	5	µ g/l	2.4	BDL	BDL	BDL	BDL	BDL
BROMOMETHANE	5	µ g/l	2.4	BDL	BDL	BDL	BDL	BDL
VINYL CHLORIDE	5	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	µ g/l	0.6	1.9	BDL	BDL	BDL	1.9
1,2(CIS)-DICHLOROETHENE	5	µ g/l	0.7	2.5	BDL	BDL	1.7	3.8
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	µ g/l		BDL	BDL	BDL	BDL	BDL
o-XYLENE	5	µ g/l	1.3	BDL	BDL	BDL	BDL	BDL
CHLOROETHANE	5	µ g/l	1.6	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs	100	µ g/l		14.5	0.0	0.0	2.7	14.8

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY EFFLUENT MONITORING REPORT

FEBRUARY 2005
OUTFALL 001G

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 02/07/05	WEEK 2 02/14/05	WEEK 3 02/21/05	WEEK 4 02/28/05
FLOW, DAILY MAX	MONITOR	GPD	NA	676800	678240	675360	668160
pH	6.5-8.5	su		7.02	7.07	7.16	7.14
DICHLOROBROMOMETHANE	50	µ g/l	0.9	BDL	BDL	BDL	BDL
CARBON TETRACHLORIDE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
BROMOFORM	50	µ g/l	0.7	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	50	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROFORM	0.2	µ g/l	1.1	BDL	BDL	BDL	BDL
TOLUENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
BENZENE	0.7	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
ETHYLBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
METHYL CHLORIDE	5	µ g/l	1.0	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	0.5	µ g/l	1.2	7.4	6.7	BDL	BDL
TRICHLOROFLUOROMETHANE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	0.9	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	5	µ g/l	1.4	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	0.5	µ g/l	0.9	BDL	BDL	BDL	BDL
1,1,2,2 TETRACHLOROETHANE	0.3	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	1	µ g/l	0.8	BDL	BDL	BDL	BDL
1,2 DICHLOROBENZENE	4.7	µ g/l	0.9	BDL	BDL	BDL	BDL
1,2 DICHLOROPROPANE	5	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	µ g/l	1.1	BDL	3.9	BDL	BDL
1,3 DICHLOROBENZENE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
1,4 DICHLOROBENZENE	4.7	µ g/l	1.0	BDL	BDL	BDL	BDL
TRANS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
CIS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
m,p-XYLENE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
BROMOMETHANE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
VINYL CHLORIDE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	µ g/l	0.6	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHENE	5	µ g/l	0.7	3.2	BDL	BDL	BDL
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	µ g/l		BDL	BDL	BDL	BDL
o-XYLENE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
CHLOROETHANE	5	µ g/l	1.6	BDL	BDL	BDL	BDL
TOTAL VOCs	100	µ g/l		10.6	10.6	0.0	0.0

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY EFFLUENT MONITORING REPORT

MARCH 2005
OUTFALL 001G

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 03/07/05	WEEK 2 03/14/05	WEEK 3 03/21/05	WEEK 4 03/28/05
FLOW, DAILY MAX	MONITOR	GPD	NA	663840	668160	666720	662500
pH	6.5-8.5	su		7.06	7.04	6.91	7.03
DICHLOROBROMOMETHANE	50	µ g/l	0.9	BDL	BDL	BDL	BDL
CARBON TETRACHLORIDE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
BROMOFORM	50	µ g/l	0.7	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	50	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROFORM	0.2	µ g/l	1.1	BDL	BDL	BDL	BDL
TOLUENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
BENZENE	0.7	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
ETHYLBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
METHYL CHLORIDE	5	µ g/l	1.0	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	0.5	µ g/l	1.2	BDL	BDL	2.1	BDL
TRICHLOROFLUOROMETHANE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	0.9	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	5	µ g/l	1.4	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	0.5	µ g/l	0.9	BDL	BDL	BDL	BDL
1,1,2,2 TETRACHLOROETHANE	0.3	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	1	µ g/l	0.8	BDL	BDL	BDL	BDL
1,2 DICHLOROBENZENE	4.7	µ g/l	0.9	BDL	BDL	BDL	BDL
1,2 DICHLOROPROPANE	5	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	µ g/l	1.1	BDL	BDL	BDL	BDL
1,3 DICHLOROBENZENE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
1,4 DICHLOROBENZENE	4.7	µ g/l	1.0	BDL	BDL	BDL	BDL
TRANS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
CIS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
m,p-XYLENE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
BROMOMETHANE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
VINYL CHLORIDE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	µ g/l	0.6	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHENE	5	µ g/l	0.7	BDL	BDL	2.5	BDL
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	µ g/l		BDL	BDL	BDL	BDL
o-XYLENE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
CHLOROETHANE	5	µ g/l	1.6	BDL	BDL	BDL	BDL
TOTAL VOCs	100	µ g/l	0.0	0.0	0.0	4.6	0.0

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY EFFLUENT MONITORING REPORT

APRIL 2005
OUTFALL 001G

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 04/04/05	WEEK 2 04/11/05	WEEK 3 04/18/05	WEEK 4 04/25/05
FLOW, DAILY MAX	MONITOR	GPD	NA	663840	659520	660960	659520
pH	6.5-8.5	su		7.09	7.14	7.14	7.07
DICHLOROBROMOMETHANE	50	µ g/l	0.9	BDL	BDL	BDL	BDL
CARBON TETRACHLORIDE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
BROMOFORM	50	µ g/l	0.7	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	50	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROFORM	0.2	µ g/l	1.1	BDL	BDL	BDL	BDL
TOLUENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
BENZENE	0.7	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
ETHYLBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
METHYL CHLORIDE	5	µ g/l	1.0	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	0.5	µ g/l	1.2	BDL	BDL	BDL	BDL
TRICHLOROFLUOROMETHANE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	0.9	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	5	µ g/l	1.4	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	0.5	µ g/l	0.9	BDL	BDL	BDL	BDL
1,1,2,2 TETRACHLOROETHANE	0.3	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	1	µ g/l	0.8	BDL	BDL	BDL	BDL
1,2 DICHLOROBENZENE	4.7	µ g/l	0.9	BDL	BDL	BDL	BDL
1,2 DICHLOROPROPANE	5	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	µ g/l	1.1	BDL	BDL	BDL	BDL
1,3 DICHLOROBENZENE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
1,4 DICHLOROBENZENE	4.7	µ g/l	1.0	BDL	BDL	BDL	BDL
TRANS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
CIS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
m,p-XYLENE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
BROMOMETHANE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
VINYL CHLORIDE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	µ g/l	0.6	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHENE	5	µ g/l	0.7	BDL	BDL	BDL	BDL
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	µ g/l		BDL	BDL	BDL	BDL
o-XYLENE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
CHLOROETHANE	5	µ g/l	1.6	BDL	BDL	BDL	BDL
TOTAL VOCs	100	µ g/l		0.0	0.0	0.0	0.0

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY EFFLUENT MONITORING REPORT

MAY 2005
OUTFALL 001G

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 05/02/05	WEEK 2 05/09/05	WEEK 3 05/16/05	WEEK 4 05/23/05	WEEK 5 05/31/05
FLOW, DAILY MAX	MONITOR	GPD	NA	663840	655200	649440	645120	685440
pH	6.5-8.5	su		6.97	7.07	6.14	7.07	6 8
DICHLOROBROMOMETHANE	50	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
CARBON TETRACHLORIDE	5	µ g/l	1.3	BDL	BDL	BDL	BDL	BDL
BROMOFORM	50	µ g/l	0.7	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	50	µ g/l	0.7	BDL	BDL	BDL	BDL	BDL
CHLOROFORM	0.2	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
TOLUENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
BENZENE	0.7	µ g/l	0.7	BDL	BDL	BDL	BDL	BDL
CHLOROBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
ETHYLBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
METHYL CHLORIDE	5	µ g/l	1.0	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	0.5	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
TRICHLOROFLUOROMETHANE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	0.9	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	5	µ g/l	1.4	BDL	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	0.5	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
1,1,2,2 TETRACHLOROETHANE	0.3	µ g/l	1.0	BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	1	µ g/l	0.8	BDL	BDL	BDL	BDL	BDL
1,2 DICHLOROBENZENE	4.7	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
1,2 DICHLOROPROPANE	5	µ g/l	1.0	BDL	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
1,3 DICHLOROBENZENE	5	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
1,4 DICHLOROBENZENE	4.7	µ g/l	1.0	BDL	BDL	BDL	BDL	BDL
TRANS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
CIS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	5	µ g/l	2.4	BDL	BDL	BDL	BDL	BDL
BROMOMETHANE	5	µ g/l	2.4	BDL	BDL	BDL	BDL	BDL
VINYL CHLORIDE	5	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	µ g/l	0.6	BDL	BDL	BDL	BDL	1.7
1,2(CIS)-DICHLOROETHENE	5	µ g/l	0.7	BDL	0.9	BDL	BDL	5.9
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	µ g/l		BDL	BDL	BDL	BDL	BDL
o-XYLENE	5	µ g/l	1.3	BDL	BDL	BDL	BDL	BDL
CHLOROETHANE	5	µ g/l	1.6	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs	100	µ g/l		0.0	0.9	0.0	0.0	7.6

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY EFFLUENT MONITORING REPORT

JUNE 2005
OUTFALL 001G

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 06/06/05	WEEK 2 06/13/05	WEEK 3 06/20/05	WEEK 4 06/27/05
FLOW, DAILY MAX	MONITOR	GPD	NA	556320	515520	516960	524160
pH	6.5-8.5	su		6.27	6.64	6.21	6.12
DICHLOROBROMOMETHANE	50	µ g/l	0.9	BDL	BDL	BDL	BDL
CARBON TETRACHLORIDE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
BROMOFORM	50	µ g/l	0.7	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	50	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROFORM	0.2	µ g/l	1.1	BDL	BDL	BDL	BDL
TOLUENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
BENZENE	0.7	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
ETHYLBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
METHYLENE CHLORIDE	5	µ g/l	1.0	1.1	BDL	BDL	BDL
TETRACHLOROETHENE	0.5	µ g/l	1.2	1.1	0.6	BDL	1.0
TRICHLOROFLUOROMETHANE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5	µ g/l	1.1	BDL	BDL	BDL	0.8
1,1-DICHLOROETHENE	0.9	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	5	µ g/l	1.4	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	0.5	µ g/l	0.9	BDL	BDL	BDL	BDL
1,1,2,2 TETRACHLOROETHANE	0.3	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	1	µ g/l	0.8	BDL	BDL	BDL	BDL
1,2 DICHLOROBENZENE	4.7	µ g/l	0.9	BDL	BDL	BDL	BDL
1,2 DICHLOROPROPANE	5	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	µ g/l	1.1	BDL	BDL	BDL	BDL
1,3 DICHLOROBENZENE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
1,4 DICHLOROBENZENE	4.7	µ g/l	1.0	BDL	BDL	BDL	BDL
TRANS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
CIS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
m,p-XYLENE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
BROMOMETHANE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
VINYL CHLORIDE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	µ g/l	0.6	2.6	3.5	BDL	4.6
1,2(CIS)-DICHLOROETHENE	5	µ g/l	0.7	10.4	9.8	1.9	14.9
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	µ g/l		BDL	BDL	BDL	BDL
o-XYLENE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
CHLOROETHANE	5	µ g/l	1.6	BDL	BDL	BDL	BDL
TOTAL VOCs	100	µ g/l		15.2	13.9	1.9	21.3

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY EFFLUENT MONITORING REPORT

JULY 2005
OUTFALL 001G

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 07/05/05	WEEK 2 07/11/05	WEEK 3 07/18/05	WEEK 4 07/25/05
FLOW, DAILY MAX	MONITOR	GPD	NA	521280	511200	509760	511200
pH	6.5-8.5	su		6.97	6.41	6.13	6.25
DICHLOROBROMOMETHANE	50	µ g/l	0.9	BDL	BDL	BDL	BDL
CARBON TETRACHLORIDE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
BROMOFORM	50	µ g/l	0.7	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	50	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROFORM	0.2	µ g/l	1.1	BDL	BDL	BDL	BDL
TOLUENE	5	µ g/l	1.2	BDL	BDL	0.4	BDL
BENZENE	0.7	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
ETHYLBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
METHYLENE CHLORIDE	5	µ g/l	1.0	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	0.5	µ g/l	1.2	2.8	2.1	3.0	3.5
TRICHLOROFLUOROMETHANE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5	µ g/l	1.1	BDL	BDL	BDL	1.0
1,1-DICHLOROETHENE	0.9	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	5	µ g/l	1.4	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	0.5	µ g/l	0.9	BDL	BDL	BDL	BDL
1,1,2,2 TETRACHLOROETHANE	0.3	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	1	µ g/l	0.8	BDL	BDL	BDL	BDL
1,2 DICHLOROBENZENE	4.7	µ g/l	0.9	BDL	BDL	BDL	BDL
1,2 DICHLOROPROPANE	5	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	µ g/l	1.1	BDL	BDL	BDL	BDL
1,3 DICHLOROBENZENE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
1,4 DICHLOROBENZENE	4.7	µ g/l	1.0	BDL	BDL	BDL	BDL
TRANS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
CIS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
m,p-XYLENE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
BROMOMETHANE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
VINYL CHLORIDE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	µ g/l	0.6	5.6	4.4	4.7	7.6
1,2(CIS)-DICHLOROETHENE	5	µ g/l	0.7	16.7	10.2	12.7	24.4
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	µ g/l		BDL	BDL	BDL	BDL
o-XYLENE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
CHLOROETHANE	5	µ g/l	1.6	BDL	BDL	BDL	BDL
TOTAL VOCs	100	µ g/l		25.1	16.7	20.8	36.5

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY EFFLUENT MONITORING REPORT

AUGUST 2005
OUTFALL 001G

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 08/01/05	WEEK 2 08/08/05	WEEK 3 08/15/05	WEEK 4 08/22/05	WEEK 5 08/29/05
FLOW, DAILY MAX	MONITOR	GPD	NA	496800	496800	492480	447840	264960
pH	6.5-8.5	su		6.45	6.35	6.32	6.36	6.83
DICHLOROBROMOMETHANE	50	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
CARBON TETRACHLORIDE	5	µ g/l	1.3	BDL	BDL	BDL	BDL	BDL
BROMOFORM	50	µ g/l	0.7	BDL	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	50	µ g/l	0.7	BDL	BDL	BDL	BDL	BDL
CHLOROFORM	0.2	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
TOLUENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
BENZENE	0.7	µ g/l	0.7	BDL	BDL	BDL	BDL	BDL
CHLOROBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
ETHYLBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
METHYLENE CHLORIDE	5	µ g/l	1.0	BDL	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	0.5	µ g/l	1.2	1.5	2.0	3.9	3.8	4.7
TRICHLOROFLUOROMETHANE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5	µ g/l	1.1	BDL	BDL	0.6	BDL	BDL
1,1-DICHLOROETHENE	0.9	µ g/l	1.2	BDL	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	5	µ g/l	1.4	BDL	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	0.5	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
1,1,2,2 TETRACHLOROETHANE	0.3	µ g/l	1.0	BDL	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	1	µ g/l	0.8	BDL	BDL	BDL	BDL	BDL
1,2 DICHLOROBENZENE	4.7	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
1,2 DICHLOROPROPANE	5	µ g/l	1.0	BDL	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
1,3 DICHLOROBENZENE	5	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
1,4 DICHLOROBENZENE	4.7	µ g/l	1.0	BDL	BDL	BDL	BDL	BDL
TRANS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
CIS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL	BDL
m,p-XYLENE	5	µ g/l	2.4	BDL	BDL	BDL	BDL	BDL
BROMOMETHANE	5	µ g/l	2.4	BDL	BDL	BDL	BDL	BDL
VINYL CHLORIDE	5	µ g/l	1.1	BDL	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	µ g/l	0.6	5.3	6.3	7.2	6.7	7.9
1,2(CIS)-DICHLOROETHENE	5	µ g/l	0.7	16.0	17.7	17.3	17.3	17.6
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	µ g/l		BDL	BDL	BDL	BDL	BDL
o-XYLENE	5	µ g/l	1.3	BDL	BDL	BDL	BDL	BDL
CHLOROETHANE	5	µ g/l	1.6	BDL	BDL	BDL	BDL	BDL
TOTAL VOCs	100	µ g/l		22.8	26.0	29.0	27.8	30.2

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY EFFLUENT MONITORING REPORT

SEPTEMBER 2005
OUTFALL 001G

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 09/05/05	WEEK 2 09/12/05	WEEK 3 09/19/05	WEEK 4 09/26/05
FLOW, DAILY MAX	MONITOR	GPD	NA	249120	249120	249120	246240
pH	6.5-8.5	su		6.37	6.33	6.54	6.7
DICHLOROBROMOMETHANE	50	µ g/l	0.9	BDL	BDL	BDL	BDL
CARBON TETRACHLORIDE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
BROMOFORM	50	µ g/l	0.7	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	50	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROFORM	0.2	µ g/l	1.1	BDL	BDL	0.7	BDL
TOLUENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
BENZENE	0.7	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
ETHYLBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
METHYLENE CHLORIDE	5	µ g/l	1.0	1.6	BDL	BDL	BDL
TETRACHLOROETHENE	0.5	µ g/l	1.2	5.1	2.6	4.4	4.6
TRICHLOROFLUOROMETHANE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5	µ g/l	1.1	0.7	BDL	1.2	0.6
1,1-DICHLOROETHENE	0.9	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	5	µ g/l	1.4	BDL	BDL	1.1	BDL
1,1,2-TRICHLOROETHANE	0.5	µ g/l	0.9	BDL	BDL	BDL	BDL
1,1,2,2 TETRACHLOROETHANE	0.3	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	1	µ g/l	0.8	BDL	BDL	BDL	BDL
1,2 DICHLOROBENZENE	4.7	µ g/l	0.9	BDL	BDL	BDL	BDL
1,2 DICHLOROPROPANE	5	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	µ g/l	1.1	BDL	BDL	BDL	BDL
1,3 DICHLOROBENZENE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
1,4 DICHLOROBENZENE	4.7	µ g/l	1.0	BDL	BDL	BDL	BDL
TRANS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
CIS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
m,p-XYLENE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
BROMOMETHANE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
VINYL CHLORIDE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	µ g/l	0.6	6.7	7.2	9.9	6.3
1,2(CIS)-DICHLOROETHENE	5	µ g/l	0.7	16.5	16.7	23.8	13.5
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	µ g/l		BDL	BDL	BDL	BDL
o-XYLENE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
CHLOROETHANE	5	µ g/l	1.6	BDL	BDL	BDL	BDL
TOTAL VOCs	100	µ g/l		30.6	26.5	41.1	25.0

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY EFFLUENT MONITORING REPORT

OCTOBER 2005
OUTFALL 001G

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 10/03/05	WEEK 2 10/10/05	WEEK 3 10/19/05	WEEK 4 10/24/05	WEEK 5 10/31/05
FLOW, DAILY MAX	MONITOR	GPD	NA	249120	241920	243360	246240	252000
pH	6.5-8.5	su		6.67	7.23	6.69	6.78	
DICHLOROBROMOMETHANE	50	µ g/l	0.9	BDL	BDL	BDL	BDL	
CARBON TETRACHLORIDE	5	µ g/l	1.3	BDL	BDL	BDL	BDL	
BROMOFORM	50	µ g/l	0.7	BDL	BDL	BDL	BDL	
DIBROMOCHLOROMETHANE	50	µ g/l	0.7	BDL	BDL	BDL	BDL	
CHLOROFORM	0.2	µ g/l	1.1	0.5	BDL	BDL	BDL	
TOLUENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	
BENZENE	0.7	µ g/l	0.7	BDL	BDL	BDL	BDL	
CHLOROBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	
ETHYLBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	
METHYLENE CHLORIDE	5	µ g/l	1.0	BDL	BDL	BDL	BDL	
TETRACHLOROETHENE	0.5	µ g/l	1.2	7.7	BDL	BDL	BDL	
TRICHLOROFLUOROMETHANE	5	µ g/l	1.2	BDL	BDL	BDL	BDL	
1,1-DICHLOROETHANE	5	µ g/l	1.1	0.8	BDL	BDL	BDL	
1,1-DICHLOROETHENE	0.9	µ g/l	1.2	BDL	BDL	BDL	BDL	
1,1,1-TRICHLOROETHANE	5	µ g/l	1.4	BDL	BDL	BDL	BDL	
1,1,2-TRICHLOROETHANE	0.5	µ g/l	0.9	BDL	BDL	BDL	BDL	
1,1,2,2 TETRACHLOROETHANE	0.3	µ g/l	1.0	BDL	BDL	BDL	BDL	
1,2-DICHLOROETHANE	1	µ g/l	0.8	BDL	BDL	BDL	BDL	
1,2 DICHLOROBENZENE	4.7	µ g/l	0.9	BDL	BDL	BDL	BDL	
1,2 DICHLOROPROPANE	5	µ g/l	1.0	BDL	BDL	BDL	BDL	
1,2(TRANS)-DICHLOROETHENE	2	µ g/l	1.1	BDL	BDL	BDL	BDL	
1,3 DICHLOROBENZENE	5	µ g/l	1.1	BDL	BDL	BDL	BDL	
1,4 DICHLOROBENZENE	4.7	µ g/l	1.0	BDL	BDL	BDL	BDL	
TRANS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL	
CIS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL	
m,p-XYLENE	5	µ g/l	2.4	BDL	BDL	BDL	BDL	
BROMOMETHANE	5	µ g/l	2.4	BDL	BDL	BDL	BDL	
VINYL CHLORIDE	5	µ g/l	1.1	BDL	BDL	BDL	BDL	
TRICHLOROETHENE	10	µ g/l	0.6	7.6	BDL	BDL	BDL	
1,2(CIS)-DICHLOROETHENE	5	µ g/l	0.7	18.6	BDL	BDL	BDL	
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	µ g/l		BDL	BDL	BDL	BDL	
o-XYLENE	5	µ g/l	1.3	BDL	BDL	BDL	BDL	
CHLOROETHANE	5	µ g/l	1.6	BDL	BDL	BDL	BDL	
TOTAL VOCs	100	µ g/l		35.2	0.0	0.0	0.0	0.0

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY EFFLUENT MONITORING REPORT

NOVEMBER 2005
OUTFALL 001G

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 11/09/05	WEEK 2 11/14/05	WEEK 3 11/21/05	WEEK 4 11/28/05
FLOW, DAILY MAX	MONITOR	GPD	NA	249120	247680	243360	241920
pH	6.5-8.5	su		7.04	7.01	7.33	7.36
DICHLOROBROMOMETHANE	50	µ g/l	0.9	BDL	BDL	BDL	BDL
CARBON TETRACHLORIDE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
BROMOFORM	50	µ g/l	0.7	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	50	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROFORM	0.2	µ g/l	1.1	BDL	BDL	BDL	BDL
TOLUENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
BENZENE	0.7	µ g/l	0.7	BDL	BDL	0.9	BDL
CHLOROBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
ETHYLBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
METHYLENE CHLORIDE	5	µ g/l	1.0	BDL	BDL	0.5	BDL
TETRACHLOROETHENE	0.5	µ g/l	1.2	BDL	BDL	BDL	BDL
TRICHLOROFLUOROMETHANE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	0.9	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	5	µ g/l	1.4	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	0.5	µ g/l	0.9	BDL	BDL	BDL	BDL
1,1,2,2 TETRACHLOROETHANE	0.3	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	1	µ g/l	0.8	BDL	BDL	BDL	BDL
1,2 DICHLOROBENZENE	4.7	µ g/l	0.9	BDL	BDL	BDL	BDL
1,2 DICHLOROPROPANE	5	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	µ g/l	1.1	BDL	BDL	BDL	BDL
1,3 DICHLOROBENZENE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
1,4 DICHLOROBENZENE	4.7	µ g/l	1.0	BDL	BDL	BDL	BDL
TRANS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
CIS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
m,p-XYLENE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
BROMOMETHANE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
VINYL CHLORIDE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	µ g/l	0.6	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHENE	5	µ g/l	0.7	BDL	BDL	BDL	BDL
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	µ g/l		BDL	BDL	BDL	BDL
o-XYLENE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
CHLOROETHANE	5	µ g/l	1.6	BDL	BDL	BDL	BDL
TOTAL VOCs	100	µ g/l		0.0	0.0	1.4	0.0

NASSAU COUNTY MITCHEL FIELD REMEDIAL ACTION
MONTHLY EFFLUENT MONITORING REPORT

DECEMBER 2005
OUTFALL 001G

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS	UNITS	COMP'T MDL	WEEK 1 12/05/05	WEEK 2 12/12/05	WEEK 3 12/19/05	WEEK 4 12/27/05
FLOW, DAILY MAX	MONITOR	GPD	NA	259200	247680	240480	241920
pH	6.5-8.5	su		6.88	7.18	7.33	7.35
DICHLOROBROMOMETHANE	50	µ g/l	0.9	BDL	BDL	BDL	BDL
CARBON TETRACHLORIDE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
BROMOFORM	50	µ g/l	0.7	BDL	BDL	BDL	BDL
DIBROMOCHLOROMETHANE	50	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROFORM	0.2	µ g/l	1.1	BDL	BDL	BDL	BDL
TOLUENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
BENZENE	0.7	µ g/l	0.7	BDL	BDL	BDL	BDL
CHLOROBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
ETHYLBENZENE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
METHYLENE CHLORIDE	5	µ g/l	1.0	BDL	BDL	BDL	BDL
TETRACHLOROETHENE	0.5	µ g/l	1.2	BDL	BDL	BDL	BDL
TRICHLOROFLUOROMETHANE	5	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1-DICHLOROETHANE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
1,1-DICHLOROETHENE	0.9	µ g/l	1.2	BDL	BDL	BDL	BDL
1,1,1-TRICHLOROETHANE	5	µ g/l	1.4	BDL	BDL	BDL	BDL
1,1,2-TRICHLOROETHANE	0.5	µ g/l	0.9	BDL	BDL	BDL	BDL
1,1,2,2 TETRACHLOROETHANE	0.3	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2-DICHLOROETHANE	1	µ g/l	0.8	1.0	0.5	BDL	BDL
1,2 DICHLOROBENZENE	4.7	µ g/l	0.9	1.5	BDL	BDL	BDL
1,2 DICHLOROPROPANE	5	µ g/l	1.0	BDL	BDL	BDL	BDL
1,2(TRANS)-DICHLOROETHENE	2	µ g/l	1.1	BDL	BDL	BDL	BDL
1,3 DICHLOROBENZENE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
1,4 DICHLOROBENZENE	4.7	µ g/l	1.0	BDL	BDL	BDL	BDL
TRANS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
CIS 1,3 DICHLOROPROPENE	2	µ g/l	0.9	BDL	BDL	BDL	BDL
m,p-XYLENE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
BROMOMETHANE	5	µ g/l	2.4	BDL	BDL	BDL	BDL
VINYL CHLORIDE	5	µ g/l	1.1	BDL	BDL	BDL	BDL
TRICHLOROETHENE	10	µ g/l	0.6	BDL	BDL	BDL	BDL
1,2(CIS)-DICHLOROETHENE	5	µ g/l	0.7	2.4	0.7	1.9	2.5
1,1,2 TRICHLORO 1,2,2 TRIFLUOROETHANE	5	µ g/l		BDL	BDL	BDL	BDL
o-XYLENE	5	µ g/l	1.3	BDL	BDL	BDL	BDL
CHLOROETHANE	5	µ g/l	1.6	BDL	BDL	BDL	BDL
TOTAL VOCs	100	µ g/l		4.9	1.2	1.9	2.5

APPENDIX D

GOUNDWATER MONITORING REQUIREMENTS

2005

Appendix D

GROUNDWATER MONITORING REQUIREMENTS

1.0 Semi-Annual Groundwater Monitoring Well Sampling and Testing Procedures

1.1 Sampling Equipment:

- Grundfos Redi-flo Variable Performance Pump installed in well.
- BMI/MP1 - 115V Converter with a motor lead extension cable.
- Generator or power source that provides 115 volts
- Solinst water level meter
- Discharge hose stored in the port opening of the well cap
- Discharge hose stand
- Stop watch and a bucket with a known volume.
- Disposable latex or vinyl sampling gloves.
- Cooler with ice packs.
- Sample containers with labels.
- Field book and pen.

1.2 Sampling Procedures:

- Open the well cover, unscrew and remove the discharge hose from the port opening. Confirm the well number on the metal tag or label.
- Take the depth to water reading through the port opening. Measure from the top edge of the well cover. Use well records to obtain the total depth of the well and calculate the fluid volume in the casing.
- Start the generator and allow it to idle until it runs smoothly. Connect the converter to power source.
- Connect the converter to the well cover receptacle using the motor lead extension cable. Connect the discharge hose to the well cover and position it in the desired direction of flow using the discharge hose stand.
- Select RF2M with the mode selection knob on the converter. The frequency display should read 0.0 (zero). Set the VFD speed dial to the midpoint (12 o'clock position) or approximately 220 Hz.
- Start the pump by moving the start/stop switch to the start position.

- Adjust the flow rate by turning the speed dial until the desired performance is attained. (48 Hz for minimum pumping to 400 Hz for maximum pumping)
- Use a stopwatch and a bucket of known volume to measure the rate of discharge in gallons per minute.
- Calculate the minimum pumping time by multiplying the fluid volume in the casing by three to obtain the volume to be purged and dividing by the flow rate. While purging continues measure the flow rate several times to insure the discharge rate is stable. All pertinent information must be recorded in the field book.
- Once the required volume is purged, label the sample containers. Decrease the flow rate to an appropriate sampling flow. Put on disposal latex or vinyl sampling gloves and fill the containers as per laboratory requirements. Place the samples in a cooler with ice packs.
- To stop the pump move the start/stop switch on the converter box to stop. Unplug all connections and then stop the generator. Return the discharge hose to the port, recap the connections and lock the well cover in place.

1.3 Semi-Annual Analytical Tests and Methodologies

All laboratory analyses to monitor the groundwater conditions for the Purex remediation project were conducted at the Nassau County Department of Public Works, Special Projects Laboratory located at Cedar Creek Waste Water Treatment Facility in Wantagh, New York (NCDPW-Lab). The NCDPW-Lab is a New York State Department of Health, Environmental Laboratory Approval Program (ELAP) certified laboratory for all of the analytical tests performed for the monitoring program.
The collected groundwater samples are analyzed for VOCs (EPA 524). A detailed list of parameters can be found in Table 1.

1.4 Semi-Annual Hydraulic Control Monitoring

In addition to the recovery of volatile organic contamination within the Purex plume, an equally important factor is the hydraulic containment of the site's plume. In order to monitor the hydraulic containment of the Purex plume, the measurement of water levels is necessary to establish the groundwater flow direction(s) and gradient(s). From this information, the remediation's recovery well system can be monitored to confirm the effectiveness of the hydraulic containment under various conditions and to adjust and modify the recovery well system pumping to maintain hydraulic plume containment until remediation termination criteria are met.

Water levels were measured with an electronic water level meter. All water level measurements are referenced to msl, as an elevation in feet (ft). The water level elevations are plotted on a site base map, according to depth. Contour lines, indicating areas of equal elevation are then drawn, from which groundwater flow direction(s) and gradient(s) can be established.

APPENDIX D

Table 1

Volatile Organic Compound Analysis

(EPA Method 524)

List Of Analytes

1,1,1,2-Tetrachloroethane	Carbon Tetrachloride
1,1,1-Trichloroethane	Chloroacetonitrile
1,1,2,2-Tetrachloroethane	Chlorobenzene
1,1,2-Trichloroethane	Chloroethane
1,1-Dichloro-2-Propanone	Chloroform
1,1-Dichloroethane	Chloromethane
1,1-Dichloroethene	Dibromochloromethane
1,1-Dichloropropene	Dibromomethane
1,2,3-Trichlorobenzene	Dichlorodifluoromethane
1,2,3-Trichloropropane	Ethyl Benzene
1,2,4-Trichlorobenzene	Ethyl Ether
1,2,4-Trimethylbenzene	Ethyl Methacrylate
1,2-Dibromo-3-Chloropropane	Hexachlorobutadiene
1,2-Dibromoethane	Hexachloroethane
1,2-Dichlorobenzene	Isopropylbenzene
1,2-Dichloroethane	m,p-Xylene
1,2-Dichloropropane	Methacrylonitrile
1,3,5-Trimethylbenzene	Methyl Acrylate
1,3-Dichlorobenzene	Methyl Methacrylate
1,3-Dichloropropane	Methyl tertiary-Butyl-Ether (MTBE)
1,4-Dichlorobenzene	Methylene Chloride
2 - Nitropropane	Naphthalene
2,2-Dichloropropane	n-Butylbenzene
2-Butanone	Nitrobenzene
2-Chlorotoluene	n-Propylbenzene
2-Hexanone	o-Xylene
4-Chlorotoluene	Pentachloroethane
4-Methyl-2-Pentanone	p-Isopropyltoluene
Acetone	Propionitrile
Acrylonitrile	sec-Butylbenzene
Allyl Chloride	Styrene
Benzene	tert-Butylbenzene
Bromobenzene	Tetrachloroethene
Bromochloromethane	Tetrahydrofuran
Bromodichloromethane	Toluene
Bromoform	trans-1,2-Dichloroethene
Bromomethane	trans-1,3-Dichloropropene
Butyl Chloride	Trans-1,4-Dichloro-2-Butene
cis-1,2-Dichloroethene	Trichloroethene
cis-1,3-Dichloropropene	Trichlorofluoromethane
Carbon Disulfide	Vinyl Chloride

Analyses conducted by NCDPW Environmental Laboratory

☐ Standard Method 524 VOCs

☐ Revision 4 Update VOCs

APPENDIX E

REMEDIATION CRITERIA

2005

Appendix E

REMEDIATION CRITERIA

Shutdown at any one or more of the extraction or purge wells shall occur when the "Remediation Criteria" are met. The Remediation Criteria are met when either condition described below is met:

1. The Water Condition set forth in Table 2 is met for three consecutive months, in accordance with the following methodology:
   (a) Samples taken from the extraction or purge well and related monitoring wells will be analyzed and the data will be statistically evaluated to determine the concentrations for individual compounds and Total Volatile Organic Compounds. If there is no statistically significant difference between the data and the Water Condition at the 95 percent confidence limit (using "t" statistics) then the extraction or purge well may be shut down. In the event that the analysis of the extraction or purge well data meets the Water Condition and the related monitoring wells do not, the extraction or purge well may be shut down and the Remedial System adjusted as appropriate. The need for the installation of additional extraction or purge wells will be assessed on the basis of whether additional wells are necessary to affect the areas which are contaminated with chemicals attributable to the Property.
2. The "Zero Slope Condition" is met as follows: when the slope of the curve of the concentrations of the chemicals listed in Table 2 and Total Volatile Organic Compounds, as calculated is deemed zero. The determination of said concentration shall be made on a well-by-well basis at all pertinent extraction, purge, and monitoring wells within the containment area or within the offsite area. The determination of whether there is a zero slope shall be made as follows:
   (a) Samples shall be taken at the locations and frequencies stated in the Monitoring Plan.

(b) The data collected over the preceding twelve (12) month period will be examined and the concentration values for the individual compounds and the Total Volatile Organic Compounds and the associated confidence limits will be computed and plotted.

(c) If the curve suggested by these data points is linear, then a straight line using least squares regression model shall be fitted to the data and the slope of the fitted line shall be considered as the estimated slope for purposes of this paragraph.

(d) If the data points suggest a non-linear form, then an exponential curve using a least squares regression model shall be fitted to the data. The estimated slope for purposes of this paragraph shall be the first derivative of the curve at a value of time halfway between the dates of the last two sample points.

(e) The estimated slope shall be deemed to be zero if:

1) that slope is less than or equal to zero and greater than or equal to negative 30 ppb/year; and

2) the rate of change of that slope is equal to zero or indicates a continuously decreasing concentration.

(f) If the mean concentration in a well is less than or equal to 200 ppb, and the procedure defined above results in a positive slope, then the 95 percent confidence interval shall be calculated for the slope of the regression line; if a zero slope is within this confidence interval, then the estimated slope shall be deemed to be zero.

(g) The concentration at a well shall be deemed to meet the Zero Slope Condition if the estimated slope is deemed to be zero.

Data showing contamination that can statistically be demonstrated as not attributable to the original Purex Property may be excluded from the data evaluation used to determine whether the Remediation Criteria has been met. This exclusion shall be made upon confirmation of a non-Property source.

Table 2

Water Condition

Parameter	Concentration
Benzene	5
Toluene	50
Xylene	50
Trichloroethene	50
Tetrachloroethene	50
1,1-Dichloroethene	5
cis-1,2-Dichloroethene	50
trans-1,2-Dichloroethene	50
trans-1,3-Dichloropropene	2
cis-1,3-Dichloropropene	2
Methylene Chloride	50
Chloroform	100*
1,1,2-Trichloroethane	50
1,2-Dichloroethane	5
1,1,2,2-Tetrachloroethane	50
1,1,1-Trichloroethane	50
1,1,2-Trichloro-1,2,2-trifluoroethane	50
Bromodichloromethane	100*
Dibromochloromethane	100*
Bromoform	100*
1,1-Dichloroethane	50
Carbon Tetrachloride	50
1,4-Dichlorobenzene	50
Vinyl Chloride	5
Chlorobenzene	50
Ethyl Benzene	50
Total Compounds	100

NOTES:

(1) Concentrations in ug/1 (micrograms/liter), parts per billion.

(2) Sum of these four compounds shall not exceed 100 ug/1. (*)

(3) Total compounds are defined as the sum of all the compounds listed above.

(4) As set forth in Appendix C, Section 6, the methodologies to be used are EPA methods 624 and 625. Any analyte not found in concentrations at or above the method's detection limit shall be deemed to meet the Water Condition.