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**FOUR-MONTH OPERATION MAINTENANCE AND MONITORING REPORT**  
**(June 2002 – September 2002)**  
**FORMER FLAGSHIP AIRLINES HANGAR**  
**DUTCHESS COUNTY AIRPORT**  
**WAPPINGERS FALLS, NEW YORK**  
**NYSDEC SITE NO. 3-14-101, ORDER ON CONSENT NO. W3-0837-98-12**

Shaw Environmental Project 820131

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## 1.0 INTRODUCTION

This status report details the operational status of the Air Sparge/Soil Vapor Extraction treatment system at the Former Flagship Airlines Hangar, Dutchess County Airport, Wappingers Falls, New York (**Figure 1** and **Figure 2**). This status report covers the period from May 23, 2002 through September 24, 2002. Discussion addresses the sampling event conducted on September 23 and 24, 2002 and four months of operation and maintenance.

Total run time for the air sparge (AS) and soil vapor extraction (SVE) system during the reporting period was 2,976 available hours, with 1,896 actual hours or 63.7%. The down-time experienced during the reporting period was caused by a high SVE moisture knock out (MKO) alarm in early June. A technician visit was scheduled and the MKO was drained and system was restarted. An alarm was triggered by the failure of the vent fan, in late June. The fan was replaced and the system was restarted. Down-time was also caused by the failure of the alarm auto dialer unit. The auto dialer battery failed in late July. Remote connection and subsequent system re-activation was not possible without the telemetry unit functioning. A technician responded, removed and sent the telemetry unit to the manufacturer for battery replacement. The telemetry unit battery was replaced, reprogrammed telemetry unit re-installed and the system restarted.

## 2.0 OPERATION AND MAINTENANCE

As per the Interim Remedial Measures Work Plan (IRM), Operation and Maintenance (O&M) visits were performed. O&M visits were performed on June 15, July 15, July 17 (system restart), August 28 and September 23 and 24 for sampling. The system was monitored during these O&M visits for air flow and volatile organic compounds (VOCs) utilizing a thermal anemometer and a photoionization detector (PID). System air flow rates were consistent with system startup performance and the distribution of sparge air into the treatment zone was satisfactory. Individual system components were also monitored to ensure that all process system components were operating within design parameters.

Monitoring tasks performed during each O&M visit included:

- AS and SVE equipment inspected and operating parameters monitored and adjusted.
- AS and SVE equipment monitored (drained moisture separator when necessary, check/change air filter elements and belts and greasing and oil changes on blowers).
- Former Flagship and IBM property monitoring wells gauged for water depths and dissolved oxygen content.
- SVE points monitored in the equipment compound to verify pressure vacuum response surrounding the system.
- System operational time monitored.
- Influent SVE leg, pre-manifold, post-manifold, pre-carbon, in-between carbon and post-carbon absorption PID readings. Influent and effluent analytical for air quality once per four-month period (September, January and May).

### **3.0 SIGNIFICANT OPERATIONAL NOTES**

Significant operational notes for this reporting period:

Condensate accumulation was recorded during the June O&M visit. High water level interlock alarm in the SVE MKO caused a system shutdown.

Failure and subsequent replacement of the ventilation fan in early July.

Replacement of the telemetry unit's integrated lithium battery and subsequent reprogramming of the telemetry unit in early August.

#### 4.0 SOIL VAPOR EXTRACTION SYSTEM

The SVE system was activated on August 4, 2000. The SVE system was designed and initially operated as two pulsed legs (North Leg and South Leg). All seven SVE wells are positioned horizontally in the subsurface due to shallow groundwater conditions. The North Leg wells are EW-3, EW-4 and EW-6. The South Leg wells are EW-1, EW-2, EW-5 and EW-7.

All seven SVE wells continue to operate simultaneously, twenty-four hours per day. Flow and pressure measurements continue to fall within design levels.

Air samples were collected during the September 24, 2002 site visit to track system removal efficiency, and to verify compliance as per the informal NYSDEC discharge agreement. The laboratory report is included as **Appendix A**.

The SVE system, while in operation, performed at an average flow of 302 cubic feet per minute (cfm) during the reporting period as measured at the SVE blower effluent. This decrease in average flow, from the previous reporting period (368 cfm) corresponds with higher groundwater levels. The amount of vacuum placed on the SVE is reduced during higher groundwater periods to minimize moisture accumulation in the MKO.

Based on photoionization detector (PID) calculation, no VOCs were removed during the current reporting quarter, all between the June 15<sup>th</sup> and September 24<sup>th</sup> visits. To date the system has removed approximately 21.18 pounds of VOCs. System operating data and removal calculations based on monthly PID readings are shown in **Table 1**. Based on laboratory data, the calculative collection of "compounds of concern" is determined to be approximately 4.48 pounds (**Table 3**). Vapor phase carbon absorption efficiency for the compounds of concern is shown on **Table 2**.

## 5.0 AIR SPARGE SYSTEM

The air sparging (AS) system was activated on August 7, 2000. The AS system is comprised of two pulsed legs (North Leg and South Leg). The North Leg wells are SP-4, SP-5 and SP-6. The South Leg wells are SP-1, SP-2, SP-3 and SP-7.

During the current reporting period, the sparge points ran at an average flow of approximately 5.6 cfm (previous period = 9.9 cfm), with a total average system pressure of approximately 5.57 pounds per square inch (psi) as compared to previous period of 4.6 psi. The air sparge blower was fully operational in conjunction with the SVE system during the reporting period.

Dissolved oxygen levels were measured in performance monitoring wells during the scheduled O&M visits. Based upon data collected during the quarterly monitoring period distribution of sparge air is noticeable. All historical dissolved oxygen data available since May 1999 is tabulated and shown in **Table 4**. Air distribution trends and dissolved oxygen levels in the monitoring well network will continue to be measured during future O&M visits to anticipate maintenance actions needed in order to maintain desired air flow rates to the treatment zone.

## 6.0 SYSTEM TREATMENT EFFICIENCY

Data collected from the performance monitoring well network located upgradient and downgradient of the treatment zone does show slight trends as of this reporting period. The highest dissolved contaminant levels on the former Flagship property remain in the MW-9 and MW-10 well area. Analytical results from the monitoring well network are tabulated and presented in **Table 5**. IRM significant compounds of concern are tabulated and presented in **Table 6**.

This report summarizes a joint survey from the Flagship and IBM hangar property groundwater contour map for the water level measurements from this reporting period. The groundwater contour map of the September 2002 event is shown as **Figure 3** in this report.

During the September 2002 gauging event groundwater elevations on the Flagship parcel ranged from 150.59 feet (ME-13) to 153.96 feet (MW-9). On the IBM parcel, groundwater elevations ranged from 150.39 feet (A-44S) to 151.80 feet (A-8S). Depth to groundwater measurements and elevations are presented in **Table 4**. Based on the calculated groundwater elevations on the former Flagship and IBM properties a northwest groundwater flow direction is indicated (**Figure 3**). Prior to monitoring well gauging the treatment system is shutdown to allow for the stabilization of the naturally occurring potentiometric surface.

During the September 24, 2002 sampling, laboratory detections were recorded in samples collected from MW-9 and MW-10. PCE was detected at 70 ug/l (MW-9) and 26 ug/l (MW-10). These concentrations have remained relatively constant over the past year. PCE was not detected in down-gradient monitoring well MW-6. Though MW-9 and MW-10 continue to display dissolved contamination, down-gradient wells are predominantly clean, thus demonstrating limited plume mobility away from this primary area of concern. TCE was not detected in any of the monitoring wells on either property. Naphthalene was detected at 260 ug/l (MW-9), 62 ug/l (MW-6) and 60 ug/l (MW-20). Naphthalene was not detected in any other former Flagship down-gradient property boundary wells. MW-20 was specifically screened directly above the silty aquitard beneath the impacted aquifer to monitor potential naphthalene presence. The analytical results are presented on **Table 5** and **Figure 4**. Naphthalene (**Figure 5**), chloroethane (**Figure 6**) and 1,2 dichloroethene (**Figure 7**) are visually presented in contamination isochron format. Trend data for PCE, DCA, and naphthalene are presented in **Figures 8, 9 and 10** respectfully. Groundwater analytical data is presented in **Appendix B**.

Samples collected from former IBM monitoring wells, located near the eastern corner of the hangar exhibited elevated concentrations. DCA concentration of 5 ug/l (A-42S) was recorded.

Naphthalene was detected at a concentration of 870 ug/l in A-42S. No significant trends have been observed in former IBM property wells. The up-gradient wells on the former Flagship property have demonstrated reductions in total VOC concentrations

The presence of one or more of the following compounds (naphthalene, dichloroethane and chloroethane) in former IBM property wells A-42S, A-26S and A-27S, combined with the lack of immediate up-gradient (former Flagship property) detections suggests that an ongoing source of these contaminants possibly exists on the former IBM leased property. The MW-9 and MW-10 area of concern on the former Flagship property is approximately 160 feet up-gradient from this IBM well area. With the exception of low and infrequent detections in MW-6 and MW-20 no detections have been recorded between these two areas.

A representative of the NYSDEC was on site during the September 23-24 O&M and sampling event. During this visit the NYSDEC representative stated that a modified scope of treatment would be required to accelerate the clean-up of contamination in the areas surrounding MW-9 and MW-10, and A-42S. Following this site visit a letter dated October 4, 2002 was sent Shaw Environmental restating that the area around MW-9 and MW-10 and the area around A-42s would require the system to be modified to accelerate the clean-up of the site.

## 7.0 PROPOSED ACTIVITIES

Proposed activities for the next reporting period include:

- Monthly operation and maintenance visits to monitor system operation.
- Adjust system flow and vacuum to maximize treatment system operation.
- Collect groundwater and SVE effluent air samples in January 2003.
- Develop a plan of action to address NYSDEC requirements for specific areas on the site.

## **TABLES**

FORMER FLAGSHIP HANGAR FACILITY  
AIR SPARGE/SOIL VAPOR EXTRACTION SYSTEM  
RECOVERY

Sampling Date	Run Time Since Last Visit (hrs)		SVE Operation Since Last O&M Visit (%)	SVE Blower Effluent Flow Velocity (4" diam.) (fpm)	SVE Blower Effluent Flow Rate (cfm)	SVE Blower PID Reading (ppmv)	VOC Removal Rate (lbs/hr)	VOC's Recovered Since Last O&M Visit (lbs.)	Cumulative lbs. of VOC's Recovered (lbs.)
	Available	Actual							
08/04/00	0 /	0	0.00%	2942.5	256	2.2	0.01	0.00	0.00
08/09/00	120 /	6	5.00%	3172.4	276	0.0	0.00	0.00	0.00
08/16/00	168 /	168	100.00%	3103.4	270	0.0	0.00	0.00	0.00
08/24/00	192 /	192	100.00%	3356.3	292	0.0	0.00	0.00	0.00
09/21/00	672 /	261	38.84%	3678.2	320	0.0	0.00	0.00	0.00
10/09/00	432 /	192	44.44%	3678.2	320	0.0	0.00	0.00	0.00
11/17/00	936 /	542	57.91%	4046.0	352	0.0	0.00	0.00	0.00
12/06/00	456 /	298	65.35%	4114.9	358	0.0	0.00	0.00	0.00
01/10/01	840 /	120	14.29%	4000.0	348	0.0	0.00	0.00	0.00
02/19/01	960 /	960	100.00%	3195.4	278	0.0	0.00	0.00	0.00
03/28/01	888 /	72	8.11%	0.0	0	0.0	0.00	0.00	0.00
04/19/01	528 /	270	51.14%	2580.0	224	0.0	0.00	0.00	0.00
05/16/01	648 /	600	92.59%	2919.5	254	0.0	0.00	0.00	0.00
06/20/01	840 /	792	94.29%	3185.0	277	0.0	0.00	0.00	0.00
07/30/01	960 /	960	100.00%	3287.4	286	0.0	0.00	0.00	0.00
08/17/01	432 /	432	100.00%	3310.3	288	0.0	0.00	0.00	0.00
09/11/01	600 /	600	100.00%	3379.3	294	0.0	0.00	0.00	0.00
10/31/01	1200 /	1200	100.00%	3595.0	313	0.0	0.00	0.00	0.00
11/29/01	696 /	408	59.00%	3560.0	310	2.3	0.01	4.08	4.08
12/13/01	336 /	336	100.00%	3580.0	311	2.0	0.01	3.36	7.44
01/17/02	840 /	768	91.00%	2494.0	217	0.0	0.00	0.00	7.44
02/21/02	840 /	840	100.00%	3678.2	320	0.0	0.00	0.00	7.44
03/20/02	648 /	552	85.19%	4770.1	415	0.0	0.00	0.00	7.44
04/17/02	672 /	672	100.00%	3804.6	331	0.0	0.00	0.00	7.44
05/22/02	840 /	840	100.00%	4655.2	405	5.7	0.02	13.74	21.18
06/17/02	624 /	384	61.54%	0.0	0	0.0	0.00	0.00	21.18
07/15/02	672 /	312	46.43%	3379.3	294	0.0	0.00	0.00	21.18
08/28/02	1056 /	576	54.55%	3183.9	277	0.0	0.00	0.00	21.18
09/24/02	624 /	624	100.00%	3862.1	336	0.0	0.00	0.00	21.18

**TABLE 2**  
**FORMER FLAGSHIP HANGAR FACILITY**  
**AIR SPARGE/SOIL VAPOR EXTRACTION SYSTEM**  
**TREATMENT EFFICIENCY**

Date	Compounds of Concern	SVE Influent South Leg (ppbv)	SVE Influent North Leg (ppbv)	Carbon Effluent South Leg (ppbv)	Carbon Effluent North Leg (ppbv)	Carbon Efficiency South Leg (%)	Carbon Efficiency North Leg (%)	Total System Efficiency (%)
08/04/00	Trichloroethene	ND	ND	ND	ND	100.00	100.00	100.00
	Tetrachloroethene	130	13	ND	ND	100.00	100.00	100.00
	Toluene	3.9	2.3	0.52	ND	86.67	100.00	93.34
	1,1-Dichloroethane	1.4	ND	ND	ND	100.00	100.00	100.00
	1,1,1-Trichloroethane	13	1.5	ND	ND	100.00	100.00	100.00
	Naphthalene	ND	ND	ND	ND	100.00	100.00	100.00
10/9/00 (1)	Trichloroethene	ND	ND	ND	ND	100.00	100.00	100.00
	Tetrachloroethene	100	ND	ND	ND	100.00	100.00	100.00
	Toluene	ND	ND	0.82	ND	100.00	100.00	100.00
	1,1-Dichloroethane	2.3	ND	ND	ND	100.00	100.00	100.00
	1,1,1-Trichloroethane	17	ND	ND	ND	100.00	100.00	100.00
	Naphthalene	ND	ND	ND	ND	100.00	100.00	100.00
12/06/00	Trichloroethene	ND	ND	ND	ND	100.00	100.00	100.00
	Tetrachloroethene	50	3.5	ND	ND	100.00	100.00	100.00
	Toluene	1.1	ND	ND	ND	100.00	100.00	100.00
	1,1-Dichloroethane	5.9	ND	ND	ND	100.00	100.00	100.00
	1,1,1-Trichloroethane	6.7	ND	ND	ND	100.00	100.00	100.00
	Naphthalene	ND	ND	ND	ND	100.00	100.00	100.00
05/16/01	Trichloroethene	ND	ND	ND	ND	100.00	100.00	100.00
	Tetrachloroethene	ND	ND	ND	ND	100.00	100.00	100.00
	Toluene	ND	ND	ND	ND	100.00	100.00	100.00
	1,1-Dichloroethane	ND	ND	ND	ND	100.00	100.00	100.00
	1,1,1-Trichloroethane	ND	ND	ND	ND	100.00	100.00	100.00
	Naphthalene	ND	ND	ND	ND	100.00	100.00	100.00
06/20/01	Trichloroethene	ND	ND	ND	ND	100.00	100.00	100.00
	Tetrachloroethene	40	7.0	ND	ND	100.00	100.00	100.00
	Toluene	ND	ND	0.98	ND	NA	100.00	NA
	1,1-Dichloroethane	ND	3.0	ND	ND	100.00	100.00	100.00
	1,1,1-Trichloroethane	4.2	ND	ND	ND	100.00	100.00	100.00
	Naphthalene	ND	ND	ND	ND	100.00	100.00	100.00
09/11/01	Trichloroethene	1.4	ND	ND	ND	100.00	100.00	100.00
	Tetrachloroethene	130	2.5	ND	ND	100.00	100.00	100.00
	Toluene	ND	ND	ND	ND	NA	100.00	NA
	1,1-Dichloroethane	14	ND	ND	ND	100.00	100.00	100.00
	1,1,1-Trichloroethane	88	ND	ND	ND	100.00	100.00	100.00
	Naphthalene	ND	ND	ND	ND	100.00	100.00	100.00
01/17/02	Trichloroethene	NA	NA	ND	ND	100.00	100.00	100.00
	Tetrachloroethene	NA	NA	ND	ND	100.00	100.00	100.00
	Toluene	NA	NA	1.5	ND	NA	100.00	NA
	1,1-Dichloroethane	NA	NA	ND	ND	100.00	100.00	100.00
	1,1,1-Trichloroethane	NA	NA	ND	ND	100.00	100.00	100.00
	Naphthalene	NA	NA	ND	ND	100.00	100.00	100.00
05/22/02	Trichloroethene	ND	ND	0.55	1	NA	NA	NA
	Tetrachloroethene	6.20	7.90	ND	ND	100.00	100.00	100.00
	Toluene	18.00	15.00	1.3	2.8	93.00	81.00	87.00
	1,1-Dichloroethane	ND	ND	ND	ND	100.00	100.00	100.00
	1,1,1-Trichloroethane	ND	ND	ND	ND	100.00	100.00	100.00
	Naphthalene	86.00	109.00	ND	ND	100.00	100.00	100.00
09/24/02	Trichloroethene	ND	ND	ND	ND	100.00	100.00	100.00
	Tetrachloroethene	ND	ND	ND	ND	100.00	100.00	100.00
	Toluene	ND	ND	ND	ND	100.00	100.00	100.00
	1,1-Dichloroethane	ND	ND	ND	ND	100.00	100.00	100.00
	1,1,1-Trichloroethane	ND	ND	ND	ND	100.00	100.00	100.00
	Naphthalene	ND	ND	ND	ND	100.00	100.00	100.00

Notes:

ND = Not Detected, therefore, compound believed to be absent in treatment train or below method detection limit.

NA = Not Applicable.

(1) = Quarterly vapor recovery/treatment air samples collected on 10/9/00, not during the quarterly groundwater sampling event as intended.

(2) = Quarterly vapor recovery/treatment air samples collected in May because SVE MOV not operational during March sampling event.

The May 16, 2001 sampling event was conducted after the system was re-started and in-place of the scheduled March sampling event.

**Table 3**  
**Former Flagship Airlines Hangar Facility**  
**Air Sparge/Soil Vapor Extraction System**  
**Compound of Concern Cumulative Recovery**

Sampling Date	Run Time Since Last Visit (hrs)		SVE Operation Since Last O&M Visit (%)	SVE Blower Effluent Flow Velocity (4" diam.) (fpm)	SVE Blower Effluent Flow Rate (cfm)	SVE Blower Effluent Lab Result (ppmv)	SVE Blower Effluent PID Reading (ppmv)	VOC Removal Rate (lbs/hr)	VOC's Recovered Since Last O&M Visit (lbs.)	Cumulative lbs. of VOC's Recovered (lbs.)
	Available	Actual								
08/04/2000	0 / 0		0.00%	2885	252	0.165	2.2	0.00065	0.00	0.00
10/09/2000	1584 / 627		39.58%	3759	328	0.119	0.0	0.00064	0.40	0.40
12/06/2000	1392 / 1032		74.14%	4103	358	0.067	0.0	0.00050	0.51	0.92
05/16/2001	3864 / 2320		60.04%	2805	245	0	0.0	0.00016	0.46	1.38
06/20/2001	840 / 792		94.29%	3195	279	0.0542	0.0	0.00011	0.08	1.46
09/11/2001	9672 / 1992		20.60%	3379	295	0.236	0.0	0.00086	1.20	1.20
01/17/2002	3072 / 2712		88.28%	2494	217	0.0015	0.0	0.00047	1.36	2.56
05/22/2002	3000 / 3000		100.00%	4500	405	0.0404	5.7	0.00010	0.30	2.86
09/24/2002	2976 / 1896		63.71%	3862	336	0	0.0	0.00012	0.00	2.86

**TABLE 4**  
**FORMER FLAGSHIP HANGAR FACILITY**  
**HISTORICAL GROUNDWATER DEPTHS, ELEVATIONS AND DISSOLVED OXYGEN MEASUREMENTS**

Date	DG-1			MW-1			MW-2			MW-6			MW-7A			MW-8		
	TOC Elev. 162.27'			TOC Elev. 156.03'			TOC Elev. 162.34'			TOC Elev. 158.64'			TOC Elev. 158.52'			TOC Elev. 159.37'		
	DTW	GW Elev	DO															
12/30/1996	8.65	153.62	NM	1.14	154.89	NM	5.83	156.51	NM	2.41	156.23	NM	1.98	156.54	NM	5.73	153.64	NM
04/02/1997	7.80	154.47	NM	0.79	155.24	NM	4.72	157.62	NM	2.24	156.40	NM	1.85	156.67	NM	5.18	154.19	NM
05/21/1999	9.00	153.27	12.59	2.32	153.71	14.87	7.32	155.02	15.23	3.75	154.89	13.51	3.45	155.07	13.00	6.19	153.18	12.53
02/09/2000	10.12	152.15	NM	NG	NG	NM	8.87	153.47	NM	5.33	153.31	NM	5.14	153.38	NM	7.33	152.04	NM
06/28/2000	8.45	153.82	NM	1.22	154.81	NM	5.98	156.36	NM	2.45	156.19	NM	2.15	156.37	NM	5.48	153.89	NM
08/03/2000	9.00	153.27	1.19	2.09	153.94	4.65	6.98	155.36	1.02	4.47	154.17	7.17	3.19	155.33	4.25	6.31	153.06	1.57
08/10/2000	8.78	153.49	NM	2.07	153.96	NM	6.94	155.40	NM	3.44	155.20	NM	3.17	155.35	NM	6.23	153.14	NM
08/31/2000	9.01	153.26	3.58	2.38	153.65	4.69	6.94	155.40	5.25	3.47	155.17	3.60	3.24	155.28	11.05	6.91	152.46	2.29
09/21/2000	9.16	153.11	2.48	2.45	153.58	5.59	5.90	156.44	4.28	2.39	156.25	3.62	3.49	155.03	6.98	5.95	153.42	1.76
10/16/2000	9.39	152.88	3.58	2.93	153.10	7.97	7.58	154.76	7.68	4.11	154.53	6.09	3.90	154.62	6.79	6.55	152.82	2.81
11/13/2000	9.55	152.72	1.75	2.92	153.11	8.58	6.36	155.98	4.48	2.97	155.67	5.09	4.23	154.29	6.56	6.39	152.98	2.37
12/06/2000	9.98	152.29	13.25*	3.51	152.52	0.77*	7.45	154.89	15.68*	4.35	154.29	10.61*	4.54	153.98	8.29*	6.88	152.49	17.4*
01/08/2001	9.37	152.90	1.83	3.06	152.97	3.33	9.22	153.12	5.38	4.94	153.70	5.57	4.60	153.92	6.24	6.52	152.85	2.52
02/19/2001	9.19	153.08	4.19	NM	NM	NM	10.07	152.27	11.15	6.05	152.59	13.03	5.03	153.49	8.13	6.35	153.02	2.33
03/28/2001	8.61	153.66	16.51*	1.37	154.66	17.86*	6.56	155.78	9.56*	3.02	155.62	15.73*	2.72	155.80	16.75*	5.75	153.62	15.53*
4/19-4/20/2001	NM	NM	NM	NM	NM													
05/16/2001	9.26	153.01	0.73	NG	NG	NM	8.36	153.98	2.09	4.89	153.75	4.29	3.32	155.20	5.54	6.34	153.03	1.05
6/20-6/21/2001	9.32	152.95	0.63	2.29	153.74	2.98	7.35	154.99	6.75	3.84	154.80	4.00	3.53	154.99	4.37	7.01	152.36	0.66
07/30/2001	9.93	152.34	0.77	3.21	152.82	1.22	8.81	153.53	2.82	5.30	153.34	3.56	4.53	153.99	4.17	7.33	152.04	1.08
08/16/2001	10.30	151.97	0.62	3.56	152.47	1.71	9.55	152.79	2.37	5.94	152.70	4.12	4.87	153.65	3.57	8.22	151.15	0.94
09/10/2001	10.81	151.46	0.62	3.95	152.08	1.08	7.60	154.74	3.69	4.40	154.24	9.97	4.93	153.59	4.12	9.22	150.15	1.35
10/31/2001	10.73	151.54	0.56	4.02	152.01	3.69	NM	NM	NM	4.75	153.89	4.86	5.50	153.02	3.72	NM	NM	NM
11/29/2001	11.13	151.14	0.81	4.35	151.68	6.27	10.49	151.85	5.65	7.76	150.88	7.10	6.02	152.50	3.54	8.90	150.47	1.34
12/13/2001	11.11	151.16	0.29	4.64	151.39	5.47	12.31	150.03	6.31	8.03	150.61	3.62	6.56	151.96	3.38	8.75	150.62	NM
01/17/2002	10.96	151.31	1.00	4.04	151.99	0.95	11.98	150.36	7.03	8.13	150.51	6.98	6.44	152.08	5.20	8.13	151.24	2.42
02/21/2002	11.03	151.24	0.72	4.55	151.48	0.72	10.28	152.06	4.12	6.73	151.91	3.25	6.49	152.03	2.94	8.21	151.16	0.37
03/20/2002	11.01	151.26	0.45	4.54	151.49	1.48	10.24	152.10	9.62	6.73	151.91	4.89	6.50	152.02	3.28	8.17	151.20	1.15
04/17/2002	10.40	151.87	1.38	4.07	151.96	2.40	11.24	151.10	2.28	7.15	151.49	3.27	6.18	152.34	3.96	7.78	151.59	1.61
05/22/2002	9.54	152.73	1.12	2.92	153.11	0.59	8.43	153.91	0.90	4.89	153.75	1.89	4.64	153.88	2.50	6.72	152.65	0.43
06/17/2002	9.09	153.18	1.94	2.21	153.82	0.87	7.49	154.85	2.03	3.97	154.67	1.88	3.70	154.82	0.92	6.40	152.97	2.34
07/15/2002	9.66	152.61	0.35	2.81	153.22	1.94	NM	NM	NM	4.49	154.15	4.17	3.27	155.25	3.27	6.91	152.46	0.53
08/28/2002	9.95	152.32	0.43	3.21	152.82	1.53	8.43	153.91	0.43	5.92	152.72	3.58	4.70	153.82	3.58	7.20	152.17	0.55
09/23&24/2002	10.08	152.19	0.50	3.40	152.63	2.03	8.40	153.94	4.48	5.01	153.63	3.40	4.82	153.70	2.63	7.35	152.02	0.56

**TABLE 4**  
**FORMER FLAGSHIP HANGAR FACILITY**  
**HISTORICAL GROUNDWATER DEPTHS, ELEVATIONS AND DISSOLVED OXYGEN MEASUREMENTS**

Date	MW-9			MW-10			MW-20			ME-17			ME-13			ME-14		
	TOC Elev. 158.87'			TOC Elev. 158.72'			TOC Elev. 159.24'			TOC Elev. 158.87'			TOC Elev. 159.50'			TOC Elev. 159.98'		
	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO
12/30/1996	2.72	156.15	NM	2.58	156.14	NM	NG	NG	NM	3.12	155.75	NM	6.10	153.40	NM	3.91	156.07	NM
04/02/1997	4.54	154.33	NM	2.39	156.33	NM	NG	NG	NM	3.06	155.81	NM	5.65	153.85	NM	3.86	156.12	NM
05/21/1999	3.82	155.05	13.58	3.55	155.17	11.12	NG	NG	NI	4.50	154.37	14.39	7.10	152.40	10.13	5.39	154.59	10.41
02/09/2000	5.43	153.44	NM	5.20	153.52	NM	NG	NG	NM	5.83	153.04	NM	NG	NG	NM	6.71	153.27	NM
06/28/2000	2.91	155.96	NM	2.72	156.00	NM	4.46	154.78	NM	3.29	155.58	NM	7.14	152.36	NM	3.92	156.06	NM
08/03/2000	3.75	155.12	0.2	3.55	155.17	0.25	5.15	154.09	2.55	4.08	154.79	0.65	7.65	151.85	1.80	4.79	155.19	0.61
08/10/2000	3.72	155.15	NM	3.50	155.22	NM	5.09	154.15	NM	4.06	154.81	NM	6.69	152.81	NM	4.72	155.26	NM
08/31/2000	3.69	155.18	8.29	3.52	155.2	3.68	5.65	153.59	6.51	4.17	154.7	10.93	6.97	152.53	4.37	4.95	155.03	3.3
09/21/2000	3.54	155.33	1.67	3.80	154.92	3.39	4.56	154.68	3.88	3.76	155.11	9.34	8.79	150.71	3.89	5.31	154.67	2.07
10/16/2000	3.99	154.88	7.77	4.12	154.6	2.72	4.90	154.34	7.37	4.70	154.17	10.51	NG	NG	5.76	154.22	3.18	
11/13/2000	4.53	154.34	2.02	4.58	154.14	2.11	5.44	153.8	8.38	3.32	155.55	10.55	9.93	149.57	1.56	9.93	150.05	1.56
12/06/2000	4.80	154.07	2.06*	4.67	154.05	2.39*	6.44	152.8	5.82	5.19	153.68	10.66*	8.04	151.46	6.97*	6.45	153.53	0.6*
01/08/2001	4.65	154.22	8.61	4.58	154.14	4.28	6.02	153.22	5.59	5.18	153.69	10.58	7.85	151.65	1.97	6.30	153.68	2.21
02/19/2001	4.60	154.27	9.38	4.20	154.52	8.91	5.56	153.68	6.59	6.64	152.23	8.94	6.92	152.58	1.14	5.62	154.36	1.38
03/28/2001	3.32	155.55	13.77*	3.15	155.57	9.77*	4.70	154.54	13.08*	3.67	155.20	10.95*	6.41	153.09	16.11*	4.50	155.48	11.53*
4/19-4/20/01	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
05/16/2001	3.68	153.19	0.74	3.45	155.27	0.58	5.11	154.13	0.58	4.53	154.34	1.48	NG	NG	NM	5.00	154.98	1.14
6/20-6/21/01	3.98	154.89	0.68	3.73	154.99	0.70	5.65	153.59	0.81	4.52	154.35	5.68	7.12	152.38	1.07	5.15	154.83	0.63
07/30/2001	4.91	153.96	0.36	4.60	154.12	0.31	6.13	153.11	2.16	5.93	152.94	6.65	NM	NM	5.95	154.03	0.53	
08/16/2001	5.14	153.73	0.45	5.06	153.66	0.43	6.92	152.32	0.54	7.25	151.62	4.09	8.13	151.37	0.69	6.38	153.60	0.57
09/10/2001	4.98	153.89	0.58	5.33	153.39	0.54	7.61	151.63	0.79	5.15	153.72	10.72	7.55	151.95	0.89	6.90	153.08	0.39
10/31/2001	5.40	153.47	0.87	5.84	152.88	0.69	6.82	152.42	1.92	5.63	153.24	3.14	9.56	149.94	0.56	7.23	152.75	0.72
11/29/2001	6.08	152.79	0.59	6.32	152.40	0.47	6.92	152.32	1.56	8.27	150.60	2.41	8.61	150.89	0.91	7.65	152.33	0.93
12/13/2001	6.69	152.18	0.91	6.54	152.18	0.56	7.92	151.32	4.15	7.85	151.02	5.80	11.23	148.27	0.52	7.82	152.16	0.67
01/17/2002	6.07	152.80	0.59	6.29	152.43	1.40	NM	NM	NM	7.93	150.94	2.60	9.10	150.40	1.30	7.83	152.15	1.33
02/21/2002	6.75	152.12	NM	6.63	152.09	1.36	7.68	151.56	0.72	6.96	151.91	4.07	9.18	150.32	1.22	7.82	152.16	0.65
03/20/2002	6.77	152.10	NM	6.70	152.02	NM	7.68	151.56	1.38	7.00	151.87	1.32	NM	NM	7.93	152.05	0.70	
04/17/2002	6.64	152.23	3.46	6.30	152.42	3.16	7.34	151.90	5.34	7.11	151.76	2.03	NM	NM	7.33	152.65	2.94	
05/22/2002	5.03	153.84	0.95	4.83	153.89	0.50	6.06	153.18	1.06	5.20	153.67	1.56	NM	NM	6.14	153.84	0.87	
06/17/2002	4.18	154.69	0.81	3.91	154.81	0.84	4.87	154.37	0.98	4.48	154.39	1.00	7.90	151.60	1.07	5.34	154.64	1.72
07/15/2002	5.08	153.79	0.55	4.91	153.81	0.34	5.73	153.51	4.71	5.40	153.47	0.89	NM	NM	6.19	153.79	1.00	
08/28/2002	4.65	154.22	0.35	4.40	154.32	0.32	5.72	153.52	3.43	5.00	153.87	0.86	8.49	151.01	0.51	5.83	154.15	0.30
09/23&24/2002	4.91	153.96	0.73	4.94	153.78	0.42	5.69	153.55	5.95	5.58	153.29	5.43	8.91	150.59	0.63	6.38	153.60	0.81

Notes:

Joint water level gauging on former Flagship and IBM properties began on June 28, 2000, therefore, IT Corporation did not collect prior to this date.

NG - Well Not Gauged on this date.

NI = Not installed as of this date.

All dissolved oxygen measurements are in mg/l.

NM = Not Measured.

\* = DO measurement incorrect due to malfunctioning meter.

**TABLE 4**  
**FORMER IBM HANGAR FACILITY**  
**HISTORICAL GROUNDWATER DEPTHS, ELEVATIONS AND DISSOLVED OXYGEN MEASUREMENTS**

Date	ME-15			ME-16			ME-18			ME-19			PZ-1		
	TOC Elev. 159.66'			TOC Elev. 159.09'			TOC Elev. 157.82'			TOC Elev. 161.08'			TOC Elev. 157.46'		
	DTW	GW Elev	DO	DTW	GW Elev	DO									
12/30/1996	3.58	156.08	NM	2.45	156.64	NM	2.31	155.51	NM	NG	NG	NM	NG	NG	NM
04/02/1997	3.58	156.08	NM	2.43	156.66	NM	2.27	155.55	NM	6.31	154.77	NM	NG	NG	NM
05/21/1999	5.10	154.56	9.09	4.00	155.09	9.86	3.29	154.53	14.69	7.68	153.4	13.17	NG	NG	NI
02/09/2000	NC	NG	NM	NG	NG	NM	4.89	152.93	NM	8.86	152.22	NM	NG	NG	NM
06/28/2000	4.20	155.46	NM	2.55	156.54	NM	1.95	155.87	NM	7.48	153.6	NM	3.24	154.22	NM
08/03/2000	4.29	155.37	3	3.65	155.44	0.86	3.17	154.65	3.36	7.37	153.71	2.32	3.89	153.57	0.5
08/10/2000	4.35	155.31	NM	3.59	155.50	NM	3.13	154.69	NM	7.32	153.76	NM	3.84	153.62	NM
08/31/2000	4.53	155.13	3.78	3.58	155.51	3.88	3.18	154.64	4.51	8.08	153.00	2.48	4.50	152.96	6.39
09/21/2000	5.07	154.59	1.67	3.96	155.13	1.98	3.17	154.65	2.96	7.32	153.76	3.93	3.70	153.76	1.19
10/16/2000	5.44	154.22	4.33	4.52	154.57	3.58	6.99	150.83	2.89	4.50	156.58	3.93	4.91	152.55	3.51
11/13/2000	5.51	154.15	1.71	4.81	154.28	2.19	6.00	151.82	2.19	8.87	152.21	2.96	3.40	154.06	2.84
12/06/2000	6.05	153.61	0.35	5.30	153.79	16.08*	5.43	152.39	15.24*	7.96	153.12	12.57*	4.91	152.55	3.72
01/08/2001	6.00	153.66	2.51	NM	NM	NM	5.60	152.22	2.73	8.25	152.83	0.44	NM	NM	NM
02/19/2001	9.31	150.35	1.22	NM	NM	NM	3.94	153.88	8.71	7.81	153.27	3.28	NM	NM	NM
03/28/2001	4.16	155.50	17.42*	3.26	155.83	12.62*	2.55	155.27	10.86*	7.51	153.57	14.44*	3.41	154.05	NM
4/19-4/20/01	NM	NM	NM	NM	NM	NM									
05/16/2001	NG	NG	NM	3.85	155.24	0.85	3.36	154.46	1.89	7.59	153.49	1.19	4.11	153.35	2.63
6/20-6/21/01	4.59	155.07	1.30	3.94	155.15	0.61	3.41	154.41	3.35	8.21	152.87	0.66	4.31	153.15	2.11
07/30/2001	NM	NM	NM	4.80	154.29	0.50	3.18	154.64	2.49	8.61	152.47	0.63	5.11	152.35	2.47
08/16/2001	6.03	153.63	1.71	5.25	153.84	0.64	4.40	153.42	2.28	8.84	152.24	0.76	5.60	151.86	2.21
09/10/2001	8.56	151.10	0.98	5.77	153.32	0.85	4.82	153.00	3.49	9.65	151.43	1.25	WNA	WNA	WNA
10/31/2001	6.89	152.77	0.61	6.15	152.94	1.35	4.96	152.86	2.97	NM	NM	NM	5.89	151.57	2.12
11/29/2001	9.76	149.90	0.73	6.56	152.53	0.43	5.67	152.15	1.47	9.84	151.24	0.71	4.87	152.59	1.09
12/13/2001	8.01	151.65	0.41	6.80	152.29	0.52	6.85	150.97	1.88	10.27	150.81	NM	6.49	150.97	2.82
01/17/2002	7.93	151.73	2.62	NM	NM	NM	6.47	151.35	1.26	9.55	151.53	0.76	6.11	151.35	2.13
02/21/2002	7.58	152.08	1.92	6.91	152.18	0.70	6.04	151.78	1.19	9.77	151.31	0.41	6.17	151.29	1.86
03/20/2002	NM	NM	NM	6.92	152.17	0.90	6.01	151.81	96.00	9.70	151.38	0.63	6.18	151.28	1.51
04/17/2002	NM	NM	NM	6.35	152.74	1.48	NM	NM	NM	9.22	151.86	1.61	5.72	151.74	4.96
05/22/2002	NM	NM	NM	4.64	154.45	0.85	NM	NM	NM	8.15	152.93	0.62	4.67	152.79	0.38
06/17/2002	5.02	154.64	1.09	2.58	156.51	1.06	NM	NM	NM	8.45	152.63	2.07	3.86	153.60	1.03
07/15/2002	5.50	154.16	0.97	4.60	154.49	0.28	NM	NM	NM	8.11	152.97	3.49	4.68	152.78	0.26
08/28/2002	NM	NM	NM	5.01	154.08	0.65	NM	NM	NM	8.45	152.63	1.21	5.06	152.40	0.39
09/23&24/2002	6.04	153.62	1.34	5.24	153.85	0.73	4.60	153.22	NM	8.60	152.48	1.97	5.24	152.22	0.47

**TABLE 4**  
**FORMER IBM HANGAR FACILITY**  
**HISTORICAL GROUNDWATER DEPTHS, ELEVATIONS AND DISSOLVED OXYGEN MEASUREMENTS**

Date	A-8S			A-16S			A-19S			A-20S			A-26S		
	TOC Elev. 157.86'			TOC Elev. 157.40'			TOC Elev. 159.04'			TOC Elev. 158.76'			TOC Elev. 154.94'		
	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO
06/28/2000	8.65	149.21	NM	5.06	152.34	NM	5.83	153.21	NM	6.33	152.43 X	NM	2.04	152.90	NM
08/03/2000	5.07	152.79	2.06	5.37	152.03	0.62	6.79	152.25	2.30	6.64	152.12	0.64	3.40	151.54	3.95
08/10/2000	5.00	152.86	NM	5.29	152.11	NM	6.71	152.33	NM	6.52	152.24	NM	2.61	152.33	NM
08/31/2000	5.25	152.61	3.90	5.57	151.83	1.74	6.89	152.15	3.33	6.82	151.94	4.55	2.55	152.39	8.19
09/21/2000	5.35	152.51	4.59	5.69	151.71	2.48	7.11	151.93	2.37	6.92	151.84	4.38	3.09	151.85	3.47
10/16/2000	5.67	152.19	4.49	5.95	151.45	4.81	7.48	151.56	5.36	7.32	151.44	4.66	3.41	151.53	3.78
11/13/2000	5.65	152.21	3.36	5.92	151.48	8.19	7.39	151.65	7.29	7.22	151.54	5.29	3.90	151.04	2.91
12/06/2000	6.16	151.70	11.84	6.26	151.14	6.81	7.72	151.32	5.54	7.62	151.14	8.33	3.91	151.03	2.99*
01/08/2001	5.88	151.98	1.83	6.09	151.31	7.78	7.57	151.47	4.03	NM	NM	NM	3.50	151.44	0.81
02/19/2001	5.30	152.56	2.34	5.50	151.90	4.90	6.96	152.18	6.41	NM	NM	NM	NM	NM	NM
03/28/2001	4.71	153.15	21.61*	5.01	152.39	NM	6.38	152.66	NM	6.18	152.58	NM	2.75	152.19	20.48*
4/19-4/20/01	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
05/16/2001	5.30	152.56	1.93	5.62	151.78	1.33	7.05	152.09	1.42	6.79	151.97	0.93	3.00	151.94	1.79
6/20-6/21/01	5.32	152.54	1.70	5.60	151.80	1.95	7.09	151.95	1.01	6.93	151.83	0.58	3.71	151.23	0.53
07/30/2001	6.00	151.86	1.16	6.19	151.21	1.70	7.67	151.37	0.83	7.45	151.31	0.57	3.63	151.31	0.69
08/16/2001	6.28	151.58	0.94	6.43	150.97	1.96	7.94	151.10	0.71	7.79	150.97	0.39	3.90	151.04	0.45
09/10/2001	6.65	151.21	0.83	6.75	150.65	2.00	8.26	150.78	0.77	8.01	150.75	0.84	4.30	150.64	0.59
10/31/2001	6.70	151.16	0.47	6.86	150.54	2.36	8.35	150.69	0.48	8.14	150.62	0.68	4.20	150.74	0.44
11/29/2001	6.94	150.92	0.66	7.09	150.31	4.65	8.60	150.44	2.56	8.34	150.42	1.17	NM	NM	NM
12/13/2001	7.15	150.71	NM	7.13	150.27	2.48	8.68	150.36	1.67	8.35	150.41	NM	4.64	150.30	0.55
01/17/2002	6.89	150.97	0.89	7.05	150.35	5.95	8.53	150.51	2.98	8.28	150.48	1.20	4.40	150.54	0.61
02/21/2002	6.97	150.89	75.00	7.07	150.33	5.86	8.52	150.52	2.57	8.24	150.52	1.26	4.43	150.51	1.10
03/20/2002	6.99	150.87	0.37	7.08	150.32	3.28	8.55	150.49	1.71	8.30	150.46	0.57	4.40	150.54	0.39
04/17/2002	6.54	151.32	1.42	6.71	150.69	4.21	8.22	150.82	1.59	7.94	150.82	1.58	3.93	151.01	1.19
05/22/2002	5.50	152.36	1.02	5.70	151.70	3.62	7.15	151.89	1.78	6.93	151.83	1.47	3.16	151.78	1.81
06/17/2002	5.06	152.80	0.87	5.39	152.01	0.87	6.82	152.22	0.89	6.55	152.21	1.12	3.00	151.94	0.77
07/15/2002	5.62	152.24	2.45	5.93	151.47	0.57	7.38	151.66	0.68	7.14	151.62	1.03	3.23	151.71	0.36
08/28/2002	5.89	151.97	0.46	6.18	151.22	1.96	7.65	151.39	0.55	7.42	151.34	0.22	3.80	151.14	0.28
09/23&24/2002	6.06	151.80	0.63	6.31	151.09	1.64	7.76	151.28	0.36	7.55	151.21 X	0.28	3.68	151.26	0.35

Notes:

Joint water level gauging on former Flagship and IBM properties began on June 28, 2000, therefore, IT Corporation did not collect prior to this date.

NM = Not Measured.

WNA = Well Not Accessible at time of gauging.

All dissolved oxygen measurements are in mg/l

\* = DO measurement incorrect due to malfunctioning meter.

**TABLE 4**  
**FORMER FLAGSHIP HANGAR FACILITY**  
**HISTORICAL GROUNDWATER DEPTHS, ELEVATIONS AND DISSOLVED OXYGEN MEASUREMENTS**

A-27S			A-39S			A-40S			A-41S			A-42S			A-43S			A-44S		
Date	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO		
06/28/2000	4.35	153.39	NM	6.75	152.76	NM	7.81	153.22	NM	7.05	152.70	NM	4.75	153.14	NM	2.72	152.61	NM		
08/03/2000	5.27	152.47	1.00	7.05	152.46	5.78	7.88	153.15	0.48	7.71	152.93	0.54	7.88	151.52	0.47	5.77	152.12	2.15		
08/10/2000	5.20	152.54	NM	6.96	152.55	NM	7.66	153.37	NM	7.61	153.03	NM	4.66	153.23	NM	4.30	151.03	NM		
08/31/2000	5.32	152.42	2.90	7.23	152.28	7.28	8.55	152.48	2.31	8.09	152.55	9.36	6.98	152.42	2.04	5.07	152.82	2.11		
09/21/2000	4.83	152.91	2.99	7.47	152.04	6.18	6.75	154.28	3.59	7.37	153.27	7.36	5.43	153.97	2.68	4.64	153.25	3.18		
10/16/2000	5.43	152.31	3.43	7.58	151.93	7.57	7.22	153.81	2.89	7.90	152.74	9.26	6.27	153.13	3.81	5.52	152.37	3.38		
11/13/2000	5.19	152.55	3.38	7.62	151.89	9.32	7.54	153.49	2.58	8.02	152.62	3.53	5.77	153.63	2.67	4.81	153.08	2.49		
12/06/2000	5.78	151.96	4.17*	6.02	153.49	5.26	8.37	152.66	4.08	8.43	152.21	12.17*	6.86	152.54	4.47*	5.67	152.22	12.23*		
01/08/2001	5.55	152.19	1.09	7.81	151.70	7.47	NM	NM	NM	8.10	152.54	1.79	NM	NM	NM	NM	NM	NM		
02/19/2001	5.01	152.73	8.53	7.20	152.31	3.43	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM		
03/28/2001	4.50	153.24	17.84*	6.70	152.81	NM	7.24	153.79	NM	7.60	153.04	15.18*	5.62	153.78	15.19*	4.20	153.66	16.00*	3.89	
4/19-4/20/01	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM		
05/1/2001	5.05	152.69	0.94	7.41	152.10	3.86	7.70	153.33	0.54	NG	NG	NM	6.01	153.39	0.60	4.76	153.10	0.93	4.49	
6/20-6/21/01	5.24	152.50	0.69	7.36	152.15	4.99	8.35	152.68	0.71	8.00	152.64	0.58	7.10	152.30	0.82	5.22	152.64	1.10	4.52	
07/30/2001	6.04	151.70	0.73	7.97	151.54	4.39	8.76	152.27	0.53	8.58	152.06	0.78	7.63	151.77	0.65	5.86	152.03	1.08	4.97	
08/16/2001	6.33	151.41	0.98	8.24	151.27	2.09	9.60	151.43	0.69	9.11	151.53	0.74	8.07	151.33	0.81	6.24	151.65	0.91	5.41	
09/10/2001	6.98	150.76	0.67	8.55	150.96	1.35	11.24	149.79	0.56	10.13	150.51	0.52	9.30	150.10	1.63	6.75	151.14	0.94	5.42	
10/31/2001	6.64	151.10	0.60	8.72	150.79	0.78	9.46	151.57	0.92	9.18	151.46	0.43	7.88	151.52	0.51	6.47	151.42	0.77	5.51	
11/29/2001	6.93	150.81	0.66	8.93	150.58	0.69	10.46	150.57	0.43	10.02	150.62	0.70	8.54	150.86	0.93	6.82	151.07	1.40	NM	
12/13/2001	7.28	150.46	0.16	8.96	150.55	NM	10.27	150.76	0.43	9.88	150.76	0.54	8.71	150.69	0.38	6.98	150.91	0.26	5.74	
01/17/2001	6.85	150.89	0.70	8.87	150.64	1.20	9.70	151.33	1.20	9.93	150.71	0.60	8.12	151.28	0.85	6.62	151.27	1.53	5.64	
02/21/2002	6.89	150.85	1.14	8.88	150.63	0.97	9.81	151.22	0.19	9.51	151.13	0.72	8.12	151.28	0.50	6.78	151.11	0.42	5.65	
03/20/2002	6.90	150.84	0.41	8.92	150.59	0.59	9.78	151.25	0.28	10.22	150.42	0.27	9.71	149.69	0.49	7.60	150.29	0.75	5.80	
04/17/2002	6.45	151.29	1.74	8.50	151.01	0.87	9.94	151.09	2.33	9.79	150.85	1.37	9.33	150.07	1.53	7.20	150.69	1.52	5.21	
05/22/2002	5.57	152.17	1.05	7.42	152.09	6.42	8.25	152.78	0.52	8.13	152.51	0.71	6.86	152.54	0.47	5.31	152.58	0.57	5.06	
06/17/2002	5.12	152.62	1.16	7.10	152.41	1.55	8.40	152.63	1.76	8.39	152.25	0.87	7.98	151.42	1.94	5.65	152.24	1.01	4.11	
07/15/2002	5.65	152.09	0.47	7.72	151.79	1.77	8.92	152.11	0.32	8.90	151.74	0.51	8.43	150.97	0.30	6.20	151.69	0.35	4.62	
08/28/2002	5.93	151.81	0.34	8.00	151.51	2.63	9.25	151.78	0.36	9.15	151.49	0.45	8.64	150.76	0.39	5.68	152.21	0.59	NM	
09/23&24/2002	6.06	151.68	0.39	8.07	151.44	1.84	9.43	151.60	0.21	9.62	151.02	0.43	8.78	150.62	0.41	6.67	151.22	0.51	4.94	
																		150.39	0.84	

Notes:

Joint water level gauging on former Flagship and IBM properties began on June 28, 2000, therefore, IT Corporation did not collect prior to this date.

NG = Well not gauged because dumpster was positioned over it.

NM = Not Measured.

WNA = Well Not Accessible at time of gauging.

All dissolved oxygen measurements are in mg/l.

\* = DO measurement incorrect due to malfunctioning meter.

**TABLE 4**  
**FORMER FLAGSHIP HANGAR FACILITY**  
**HISTORICAL GROUNDWATER DEPTHS, ELEVATIONS AND DISSOLVED OXYGEN MEASUREMENTS**

Date	A-27S			A-39S			A-40S			A-41S			A-42S			A-43S			A-44S		
	TOC Elev. 157.74'			TOC Elev. 159.51			TOC Elev. 161.03'			TOC Elev. 160.64'			TOC Elev. 159.40'			TOC Elev. 157.89'			TOC Elev. 155.33'		
	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO	DTW	GW Elev	DO
06/28/2000	4.35	153.39	NM	6.75	152.76	NM	7.81	153.22	NM	7.94	152.70	NM	7.05	152.35	NM	4.75	153.14	NM	2.72	152.61	NM
08/03/2000	5.27	152.47	1.00	7.05	152.46	5.78	7.88	153.15	0.48	7.71	152.93	0.54	7.88	151.52	0.47	5.77	152.12	2.15	4.32	151.01	1.88
08/10/2000	5.20	152.54	NM	6.96	152.55	NM	7.66	153.37	NM	7.61	153.03	NM	7.60	151.80	NM	4.66	153.23	NM	4.30	151.03	NM
08/31/2000	5.32	152.42	2.90	7.23	152.28	7.28	8.55	152.48	2.31	8.09	152.55	9.36	6.98	152.42	2.04	5.07	152.82	2.11	NG	NG	WNA
09/21/2000	4.83	152.91	2.99	7.47	152.04	6.18	6.75	154.28	3.59	7.37	153.27	7.36	5.43	153.97	2.68	4.64	153.25	3.18	NG	NG	WNA
10/16/2000	5.43	152.31	3.43	7.58	151.93	7.57	7.22	153.81	2.89	7.90	152.74	9.26	6.27	153.13	3.81	5.52	152.37	3.38	4.83	150.50	3.59
11/13/2000	5.19	152.55	3.38	7.62	151.89	9.32	7.54	153.49	2.58	8.02	152.62	3.53	5.77	153.63	2.67	4.81	153.08	2.49	4.83	150.5	3.05
12/06/2000	5.78	151.96	4.17*	6.02	153.49	5.26	8.37	152.66	4.08	8.43	152.21	12.17*	6.86	152.54	4.47*	5.67	152.22	12.23*	5.04	150.29	2.56
01/08/2001	5.55	152.19	1.09	7.81	151.70	7.47	NM	NM	NM	8.10	152.54	1.79	NM	NM	NM	NM	NM	NM	NM	NM	NM
02/19/2001	5.01	152.73	8.53	7.20	152.31	3.43	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
03/28/2001	4.50	153.24	17.84*	6.70	152.81	NM	7.24	153.79	NM	7.60	153.04	15.18*	5.62	153.78	15.19*	4.20	153.66	16.00*	3.89	151.44	NM
4/19-4/20/01	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
05/16/2001	5.05	152.69	0.94	7.41	152.10	3.86	7.70	153.33	0.54	NG	NG	NM	6.01	153.39	0.60	4.76	153.10	0.93	4.49	150.84	0.93
6/20-6/21/01	5.24	152.50	0.69	7.36	152.15	4.99	8.35	152.68	0.71	8.00	152.64	0.58	7.10	152.30	0.82	5.22	152.64	1.10	4.52	150.81	0.55
07/30/2001	6.04	151.70	0.73	7.97	151.54	4.39	8.76	152.27	0.53	8.58	152.06	0.78	7.63	151.77	0.65	5.86	152.03	1.08	4.97	150.36	1.01
08/16/2001	6.33	151.41	0.98	8.24	151.27	2.09	9.60	151.43	0.69	9.11	151.53	0.74	8.07	151.33	0.81	6.24	151.65	0.91	5.41	149.92	0.37
09/10/2001	6.98	150.76	0.67	8.55	150.96	1.35	11.24	149.79	0.56	10.13	150.51	0.52	9.30	150.10	1.63	6.75	151.14	0.94	5.42	149.91	0.90
10/31/2001	6.64	151.10	0.60	8.72	150.79	0.78	9.46	151.57	0.92	9.18	151.46	0.43	7.88	151.52	0.51	6.47	151.42	0.77	5.51	149.82	0.39
11/29/2001	6.93	150.81	0.66	8.93	150.58	0.69	10.46	150.57	0.43	10.02	150.62	0.70	8.54	150.86	0.93	6.82	151.07	1.40	NM	NM	NM
12/13/2001	7.28	150.46	0.16	8.96	150.55	NM	10.27	150.76	0.43	9.88	150.76	0.54	8.71	150.69	0.38	6.98	150.91	0.26	5.74	149.59	0.79
01/17/2001	6.85	150.89	0.70	8.87	150.64	1.20	9.70	151.33	1.20	9.93	150.71	0.60	8.12	151.28	0.85	6.62	151.27	1.53	5.64	149.69	NM
02/21/2002	6.89	150.85	1.14	8.88	150.63	0.97	9.81	151.22	0.19	9.51	151.13	0.72	8.12	151.28	0.50	6.78	151.11	0.42	5.65	149.68	NM
03/20/2002	6.90	150.84	0.41	8.92	150.59	0.59	9.78	151.25	0.28	10.22	150.42	0.27	9.71	149.69	0.49	7.60	150.29	0.75	5.80	149.53	1.35
04/17/2002	6.45	151.29	1.74	8.50	151.01	0.87	9.94	151.09	2.33	9.79	150.85	1.37	9.33	150.07	1.53	7.20	150.69	1.52	5.21	150.12	1.93
05/22/2002	5.57	152.17	1.05	7.42	152.09	6.42	8.25	152.78	0.52	8.13	152.51	0.71	6.86	152.54	0.47	5.31	152.58	0.57	5.06	150.27	0.96
06/17/2002	5.12	152.62	1.16	7.10	152.41	1.55	8.40	152.63	1.76	8.39	152.25	0.87	7.98	151.42	1.94	5.65	152.24	1.01	4.11	151.22	0.93
07/15/2002	5.65	152.09	0.47	7.72	151.79	1.77	8.92	152.11	0.32	8.90	151.74	0.51	8.43	150.97	0.30	6.20	151.69	0.35	4.62	150.71	0.27
08/28/2002	5.93	151.81	0.34	8.00	151.51	2.63	9.25	151.78	0.36	9.15	151.49	0.45	8.64	150.76	0.39	5.68	152.21	0.59	NM	NM	NM
09/23&24/2002	6.06	151.68	0.39	8.07	151.44	1.84	9.43	151.60	0.21	9.62	151.02	0.43	8.78	150.62	0.41	6.67	151.22	0.51	4.94	150.39	0.84
10/21/2002	5.13	152.61	1.20	6.91	152.60	7.85	8.40	152.63	0.75	8.79	151.85	0.43	7.88	151.52	0.47	5.65	152.24	0.77	4.30	151.03	0.77
11/15/2002	5.48	152.26	1.13	7.43	152.08	7.99	8.72	152.31	1.71	8.67	151.97	1.79	8.14	151.26	0.98	5.98	151.91	2.35	4.53	150.80	2.35
12/17/2002	4.28	153.46	1.38	6.15	153.36	0.72	7.40	153.63	0.91	7.51	153.13	1.16	6.74	152.66	0.93	4.62	153.27	1.08	3.87	151.46	0.91
01/17/2003	4.44	153.30	0.47	6.60	152.91	0.73	7.42	153.61	0.89	7.81	152.83	0.91	6.83	152.57	0.86	4.67	153.22	0.55	4.08	151.25	0.71

Notes:

Joint water level gauging on former Flagship and IBM properties began on June 28, 2000, therefore, IT Corporation did not collect prior to this date.

NG = Well not gauged because dumpster was positioned over it.

NM = Not Measured.

WNA = Well Not Accessible at time of gauging.

All dissolved oxygen measurements are in mg/l.

\* = DO measurement incorrect due to malfunctioning meter.

**TABLE 5**  
**ANALYTICAL RESULTS OVERTBURDEN MONITORING WELLS -SEPTEMBER 24, 2002**  
**FORMER FLAGSHIP AIRLINES HANGAR - DUTCHESS COUNTY AIRPORT**  
**ORDER ON CONSENT NOL W3-0837-00-06, NYSDEC SITE NO. 3-14-101**

Field Parameters	NYSDEC															DUP 1	DUP 2			
	Standard (1)	ME-12	ME-13	ME-14	ME-15	ME-16	ME-18	ME-19	MW-1	MW-2	MW-6	MW-7A	MW-8	MW-9	MW-10	MW-20	DG-1	Septic	(MW-7A)	(MW-10)
pH	6.5-8.5	6.70	6.44	6.30	6.17	6.48	7.48	7.25	7.43	6.67	6.72	6.73	7.33	6.18	6.37	7.11	6.62	NS	6.73	6.37
Temperature (deg Celcius)	--	16.85	17.71	22.65	22.52	21.02	20.92	17.56	22.06	20.84	20.36	21.84	18.93	20.80	20.82	17.38	17.78	NS	21.84	20.82
Conductivity (umhos/cm)	--	0.77	0.526	0.874	0.866	1.476	0.783	0.616	0.933	0.923	0.704	1.438	0.746	1.189	1.253	0.348	0.51	NS	1.438	1.253
Turbidity (NTU)	5	191.9	1975.9	220.5	18.7	303.9	56.1	24.1	77.6	118.2	6.30	104.9	23.6	238.2	88.8	277.0	12.7	NS	104.9	88.8
Dissolved Oxygen (ppm)	--	5.43	0.63	0.81	1.34	0.73	3.36	1.97	2.03	4.48	3.40	2.63	0.56	0.73	0.42	5.95	0.50	NS	2.63	0.42
<b>Volatile Organic Compound by ASP/CLP Method (ug/L)</b>																				
Vinyl Chloride	2	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	
Bromomethane	5	8JB	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	
Chloroethane	5	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	
Acetone	--	10U	10U	10U	7J	17	10U	88	69	10U	10U	10U	77							
Carbon Disulfide	--	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	15	10U	10U	10U	10U	11	
1,1-Dichloroethane	5	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	
1,2-Dichloroethene, Total	5	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	14	10U	10U	10U	10U	15	
MEK (2-Butanone)	50	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	33	10U	10U	10U	10U	10U	
Toluene	5	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	
Ethylbenzene	5	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	
m & p Xylene	5	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	
o Xylene	5	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	
Tetrachloroethene	5	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	70	26	10U	10U	10U	29	
<b>Semi-Volatile Organic Compound by ASP/CLP Method (ug/L)</b>																				
Phenol	1 (3)	10U	10U	12U	10U	10U	11U	10U	10U	10U	140	10U	10U	210	10U	10U	10U	10U	150	
2,4-Dimethylphenol	1 (3)	10U	10U	12U	10U	10U	11U	10U	10U	10U	10U	10U	10U	51U	10U	2J	10U	10U	10U	
4-Methylphenol	1 (3)	10U	10U	12U	10U	10U	11U	10U	10U	10U	140	10U	10U	610	10U	10U	10U	10U	86	
Naphthalene	10	10U	10U	12U	10U	10U	1J	10U	10U	10U	62	10U	10U	260	10U	60	10U	10U	65	
Phenanthrene	50	10U	10U	12U	10U	10U	11U	10U	10U	10U	10U	10U	10U	51U	10U	10U	10U	10U	51U	
Pyrene	50	10U	10U	12U	10U	10U	11U	10U	10U	10U	10U	10U	10U	51U	10U	10U	10U	10U	51U	
Fluoranthene	50	10U	10U	12U	10U	10U	11U	10U	10U	10U	10U	10U	10U	51U	10U	10U	10U	10U	51U	
Acenaphthalene	20	10U	10U	12U	10U	10U	11U	10U	10U	10U	10U	10U	10U	19J	10U	10U	10U	10U	51U	
Chrysene	0.002	10U	10U	12U	10U	10U	11U	10U	10U	10U	10U	10U	10U	200U	10U	10U	10U	10U	51U	
2-Methylnaphthalene	--	10U	10U	12U	10U	10U	11U	10U	10U	10U	10U	10U	10U	39J	10U	10U	10U	10U	51U	
Diethyl phthalate	50	10U	10U	12U	2J	10U	11U	10U	10U	10U	10U	10U	10U	2j	19J	1J	2J	10U	51U	
Butyl benzyl phthalate	50	10U	10U	12U	10U	10U	11U	10U	10U	10U	10U	10U	10U	51U	10U	10U	10U	10U	51U	
Di-n-butyl phthalate	50	10U	10U	12U	10U	10U	11U	10U	10U	10U	10U	10U	10U	44J	10U	10U	10U	10U	51U	
Di-n-octyl phthalate	50	10U	10U	12U	10U	10U	11U	10UJ	10U	10U	10U	10U	10U	51U	10U	10UJ	10U	10U	51U	
Bis (2-ethylhexyl) phthalate	50	4J	1J	2J	4J	4J	4J	2J	2J	6J	10U	2J	3J	17U	3J	2J	2J	10U	3.0 J	51U

**Notes:**

Only compounds detected at one or more sampling locations are listed.

**BOLD** values indicate detections above NYSDEC Standards or Guidance Values.

Laboratory data on this table includes third party validation.

(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

(3) = The collective sum of all phenol compounds should not exceed 1 ug/l.

U = Indicates compound was analyzed for but not detected.

J = Indicates estimated value which is less than the sample quantitation limit but greater than zero.

D = Identifies all compounds in analysis at a secondary dilution factor.

NS = Not Sampled.

**TABLE 5 (Continued)**  
**ANALYTICAL RESULTS OVERBURDEN MONITORING WELLS -SEPTEMBER 24, 2002**  
**FORMER IBM SHALLOW WELLS**  
**ORDER ON CONSENT NO. W3-0837-00-06, NYSDEC SITE NO. 3-14-101**

Field Parameters	NYSDEC Standard (1)	A-8S	A-26S	A-27S	A-41S	A-42S	A-43S
pH	6.5-8.5	7.22	7.50	7.38	NS	7.08	7.38
Temperature (deg Celcius)	-	16.90	17.65	18.96	NS	17.65	20.31
Conductivity (umhos/cm)	-	0.736	0.885	0.66	NS	0.007	0.932
Turbidity (NTU)	5	39.5	40.2	244.1	NS	28.7	98.9
Dissolved Oxygen (ppm)	-	0.63	0.39	1.05	0.71	0.47	0.57
<b>Volatile Organic Compound by ASP/CLP Method (ug/L)</b>							
Vinyl Chloride	2	10U	10U	10U	NS	<b>70</b>	10U
Chloroethane	5	10U	10U	10U	NS	<b>13</b>	10U
1,1-Dichloroethane	5	10U	10U	10U	NS	<b>5J</b>	2J
1,2-Dichloroethene, Total	5	10U	10U	9J	NS	<b>7J</b>	10U
Toluene	5	10U	10U	10U	NS	<b>6J</b>	10U
Ethylbenzene	5	10U	10U	10U	NS	<b>3J</b>	10U
Xylenes, Total	5	10U	10U	10U	NS	<b>23</b>	10U
<b>Semi-Volatile Organic Compound by ASP/CLP Method (ug/L)</b>							
4-Methylphenol	1	10U	10U	10U	NS	<b>210U</b>	10U
2,4-Dimethylphenol	5	10U	10U	10U	NS	<b>210U</b>	10U
Naphthalene	-	10U	10U	2J	NS	<b>870</b>	10U
4-Chloroaniline	-	10U	10U	10U	NS	<b>210U</b>	10U
bis-2-Ethylhexyl phthalate	5	1J	1J	2J	NS	<b>210U</b>	1J
2-Methylnaphthalene	-	10U	10U	10U	NS	<b>30J</b>	10U
Di-n-octyl phthalate	-	10U	10U	10U	NS	<b>210U</b>	10U

**Notes:**

Only compounds detected at one or more sampling locations are listed.

BOLD values indicate detections above NYSDEC Standards or Guidance Values.

Laboratory data on this table includes third party validation.

(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

U = Indicates compound was analyzed for but not detected.

J = Indicates estimated value which is less than the sample quantitation limit but greater than zero.

D = Identifies all compounds in analysis at a secondary dilution factor.

NS = Not Sampled.

ND = Not Detected.

**TABLE 6**  
**SUMMARY OF HISTORICAL WATER QUALITY RESULTS**  
**FORMER FLAGSHIP AIRLINES HANGAR - DUTCHESS COUNTY AIRPORT**  
**ORDER ON CONSENT NO: 3-0837-98-12, NYSDEC SITE NO: 3-14-101**

Volatile Organic	NYSDEC	ME-12					
Compounds of Concern	Standard (1)	05/20/1999	06/28/2000	09/21/2000	12/07/2000	03/29/2001	06/20/2001
1,1-Dichloroethane	5	10U	10U	10U	10U	10U	10U
1,1,1-Trichloroethane	5	10U	10U	10U	10U	10U	10U
Trichloroethene	5	10U	10U	10U	10U	10U	10U
Tetrachloroethene	5	10U	10U	10U	10U	10U	10U
Toluene	5	10U	10U	10U	10U	10U	10U
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	10U	9U	9U	10U	9U	10U

Volatile Organic	NYSDEC	ME-12					
Compounds of Concern	Standard (1)	09/10/2001	01/17/2002	05/22/2002	09/24/2002		
1,1-Dichloroethane	5	5U	NS	NS	10U		
1,1,1-Trichloroethane	5	5U	NS	NS	10U		
Trichloroethene	5	5U	NS	NS	10U		
Tetrachloroethene	5	5U	NS	NS	10U		
Toluene	5	5U	NS	NS	10U		
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	10U	NS	NS	10U		

ME-13					
05/20/1999	06/28/2000	09/21/2000	12/06/2000	03/28/2001	06/20/2001
10U	10U	10U	10U	10U	10U
10U	10U	10U	10U	10U	10U
10U	10U	10U	10U	10U	10U
10U	10U	10U	10U	10U	10U
10U	10U	10U	10U	10U	10U
<b>ME-13</b>					
09/10/2001	01/17/2002	05/22/2002	09/24/2002		
5U	NS	NS	10U		
5U	NS	NS	10U		
5U	NS	NS	10U		
5U	NS	NS	10U		
5U	NS	NS	10U		
<b>ME-13</b>					
10U	NS	NS	10U		

**Notes:**

Compounds of concern were noted in the Interim Remedial Measures Work Plan, June 7, 1999.

**BOLD** values indicate laboratory detections.

Laboratory data on this table includes third party validation.

(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

U = Indicates compound was analyzed for but not detected.

J = Indicates estimated value which is less than the sample quantitation limit but greater than zero.

D = Identifies all compounds in analysis at a secondary dilution factor.

R = Data unusable (compound may or may not be present).

NS = Not Sampled.

ND = Not Detected.

**TABLE 6**  
**SUMMARY OF HISTORICAL WATER QUALITY RESULTS**  
**FORMER FLAGSHIP AIRLINES HANGAR - DUTCHESS COUNTY AIRPORT**  
**ORDER ON CONSENT NO: 3-0837-98-12, NYSDEC SITE NO: 3-14-101**

Volatile Organic	NYSDEC	ME-14					
Compounds of Concern	Standard (1)	05/20/1999	06/28/2000	09/21/2000	12/06/2000	03/29/2001	06/20/2001
1,1-Dichloroethane	5	10U	10U	10U	10U	10U	SU
1,1,1-Trichloroethane	5	10U	10U	10U	10U	10U	SU
Trichloroethene	5	10U	10U	10U	10U	10U	SU
Tetrachloroethene	5	1J	6J	2J	10U	10U	SU
Toluene	5	10U	10U	10U	10U	10U	SU
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	10U	9U	9U	10U	9U	10U

Volatile Organic	NYSDEC	ME-14					
Compounds of Concern	Standard (1)	09/10/2001	01/17/2002	05/22/2002	09/24/2002		
1,1-Dichloroethane	5	5U	NS	NS	10U		
1,1,1-Trichloroethane	5	5U	NS	NS	10U		
Trichloroethene	5	5U	NS	NS	10U		
Tetrachloroethene	5	5U	NS	NS	10U		
Toluene	5	5U	NS	NS	10U		
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	10U	NS	NS	10U		

ME-15					
05/20/1999	06/28/2000	09/21/2000	12/06/2000	03/28/2001	06/20/2001
10U	10U	10U	10U	10U	SU
10U	10U	10U	10U	10U	SU
10U	10U	10U	10U	10U	SU
10U	10U	10U	10U	10U	SU
10U	10U	10U	10U	10U	SU
10U      0.7J      9UJ      9U      10U      10U					
ME-15					
09/10/2001	01/17/2002	05/22/2002	09/24/2002		
SU	NS	NS	10U		
SU	NS	NS	10U		
SU	NS	NS	10U		
SU	NS	NS	10U		
SU	NS	NS	10U		
10U      NS      NS      10U					

**Notes:**

Compounds of concern were noted in the Interim Remedial Measures Work Plan, June 7, 1999.

BOLD values indicate laboratory detections.

Laboratory data on this table includes third party validation.

(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

U = Indicates compound was analyzed for but not detected.

J = Indicates estimated value which is less than the sample quantitation limit but greater than zero.

D = Identifies all compounds in analysis at a secondary dilution factor.

R = Data unusable (compound may or may not be present).

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ND = Not Detected.

**TABLE 6**  
**SUMMARY OF HISTORICAL WATER QUALITY RESULTS**  
**FORMER FLAGSHIP AIRLINES HANGAR - DUTCHESS COUNTY AIRPORT**  
**ORDER ON CONSENT NO: 3-0837-98-12, NYSDEC SITE NO: 3-14-101**

Volatile Organic		NYSDEC	ME-16					
Compounds of Concern	Standard (1)	05/20/1999	06/28/2000	09/21/2000	12/06/2000	03/28/2001	06/20/2001	
1,1-Dichloroethane	5	10U	10U	10U	10U	10U	5U	
1,1,1-Trichloroethane	5	10U	10U	10U	10U	10U	5U	
Trichloroethene	5	10U	10U	10U	10U	10U	5U	
Tetrachloroethene	5	10U	10U	10U	10U	10U	5U	
Toluene	5	10U	10U	10U	10U	10U	5U	
<b>Semi-Volatile Organic</b>								
<b>Compound of Concern</b>								
Naphthalene	10	10U	10U	50U	10U	47U	10U	
Volatile Organic		NYSDEC	ME-16					
Compounds of Concern	Standard (1)	09/10/2001	01/17/2002	05/22/2002	09/24/2002			
1,1-Dichloroethane	5	5U	NS	NS	10U			
1,1,1-Trichloroethane	5	5U	NS	NS	10U			
Trichloroethene	5	5U	NS	NS	10U			
Tetrachloroethene	5	5U	NS	NS	10U			
Toluene	5	5U	NS	NS	10U			
<b>Semi-Volatile Organic</b>								
<b>Compound of Concern</b>								
Naphthalene	10	10U	NS	NS	10U			

ME-18						
05/20/1999	06/28/2000	09/21/2000	12/07/2000	03/29/2001	06/20/2001	
6J	10U	10U	10U	10U	5U	
10U	10U	10U	10U	10U	5U	
10U	10U	10U	10U	10U	5U	
10U	10U	10U	10U	10U	5U	
10U	10U	10U	10U	10U	5U	
11	5J	9U	10U	9U	10U	
ME-18						
09/10/2001	01/17/2002	05/22/2002	09/24/2002			
5U	NS	NS	10U			
5U	NS	NS	10U			
5U	NS	NS	10U			
5U	NS	NS	10U			
5U	NS	NS	10U			
10U	NS	NS	11U			

**Notes:**

Compounds of concern were noted in the Interim Remedial Measures Work Plan, June 7, 1999.

**BOLD** values indicate laboratory detections.

Laboratory data on this table includes third party validation.

(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

U = Indicates compound was analyzed for but not detected.

J = Indicates estimated value which is less than the sample quantitation limit but greater than zero.

D = Identifies all compounds in analysis at a secondary dilution factor.

R = Data unusable (compound may or may not be present).

NS = Not Sampled.

ND = Not Detected.

**TABLE 6**  
**SUMMARY OF HISTORICAL WATER QUALITY RESULTS**  
**FORMER FLAGSHIP AIRLINES HANGAR - DUTCHESS COUNTY AIRPORT**  
**ORDER ON CONSENT NO: 3-0837-98-12, NYSDEC SITE NO: 3-14-101**

Volatile Organic		NYSDEC ME-19					
Compounds of Concern	Standard (1)	05/20/1999	06/28/2000	09/21/2000	12/06/2000	03/28/2001	06/20/2001
1,1-Dichloroethane	5	11	10U	10U	10U	10U	5U
1,1,1-Trichloroethane	5	10U	10U	10U	10U	10U	5U
Trichloroethene	5	10U	10U	10U	10U	10U	5U
Tetrachloroethene	5	3J	10U	10U	10U	10U	5U
Toluene	5	10U	10U	10U	10U	10U	5U
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	30	9U	1J	10U	6J	10U
<b>Volatile Organic</b>		NYSDEC ME-19					
Compounds of Concern	Standard (1)	09/10/2001	01/17/2002	05/22/2002	09/24/2002		
1,1-Dichloroethane	5	5U	10U	10U	10U		
1,1,1-Trichloroethane	5	5U	10U	10U	10U		
Trichloroethene	5	5U	10U	10U	10U		
Tetrachloroethene	5	5U	10U	10U	10U		
Toluene	5	5U	10U	10U	10U		
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	2J	10U	10U	10U		

MW-1					
05/20/1999	06/28/2000	09/21/2000	12/06/2000	03/29/2001	06/20/2001
10U	10U	10U	10U	10U	5U
10U	10U	10U	10U	10U	5U
10U	10U	10U	10U	10U	5U
10U	10U	10U	10U	10U	5U
10U	10U	10U	10U	10U	5U
10U 9U 9U 10U 9U 10U					
MW-1					
09/10/2001	01/17/2002	05/22/2002	09/24/2002		
5U	NS	NS	10U		
5U	NS	NS	10U		
5U	NS	NS	10U		
5U	NS	NS	10U		
5U	NS	NS	10U		
10U NS NS 10U					

**Notes:**

Compounds of concern were noted in the Interim Remedial Measures Work Plan, June 7, 1999.

BOLD values indicate laboratory detections.

Laboratory data on this table includes third party validation.

(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

U = Indicates compound was analyzed for but not detected.

J = Indicates estimated value which is less than the sample quantitation limit but greater than zero.

D = Identifies all compounds in analysis at a secondary dilution factor.

R = Data unusable (compound may or may not be present).

NS = Not Sampled.

ND = Not Detected.

**TABLE 6**  
**SUMMARY OF HISTORICAL WATER QUALITY RESULTS**  
**FORMER FLAGSHIP AIRLINES HANGAR - DUTCHESS COUNTY AIRPORT**  
**ORDER ON CONSENT NO: 3-0837-98-12, NYSDEC SITE NO: 3-14-101**

Volatile Organic	NYSDEC	MW-2					
Compounds of Concern	Standard (1)	05/20/1999	06/28/2000	09/21/2000	12/07/2000	03/29/2001	06/20/2001
1,1-Dichloroethane	5	10U	10U	10U	10U	10U	5U
1,1,1-Trichloroethane	5	10U	10U	10U	10U	10U	5U
Trichloroethene	5	10U	10U	10U	10U	10U	5U
Tetrachloroethene	5	10U	10U	10U	10U	10U	5U
Toluene	5	10U	10U	10U	10U	10U	5U
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	10U	9U	9U	10U	10U	10U

Volatile Organic	NYSDEC	MW-2					
Compounds of Concern	Standard (1)	09/10/2001	01/17/2002	05/22/2002	09/24/2002		
1,1-Dichloroethane	5	5U	NS	NS	10U		
1,1,1-Trichloroethane	5	5U	NS	NS	10U		
Trichloroethene	5	5U	NS	NS	10U		
Tetrachloroethene	5	5U	NS	NS	10U		
Toluene	5	5U	NS	NS	10U		
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	10U	NS	NS	10U		

MW-6					
05/20/1999	06/28/2000	09/21/2000	12/07/2000	03/29/2001	06/20/2001
10U	10U	10U	10U	10U	5U
10U	10U	10U	10U	10U	5U
10U	10U	10U	10U	10U	5U
<b>4J</b>	<b>5J</b>	<b>18</b>	10U	10U	5U
10U	10U	10U	10U	10U	5U
<b>39</b>	<b>10</b>	<b>9U</b>	10U	10U	10U

MW-6			
09/10/2001	01/17/2002	05/22/2002	09/24/2002
5U	10U	10U	10U
5U	10U	10U	10U
5U	10U	10U	10U
5U	10	10U	10U
5U	10U	10U	10U
10U	40	10U	62

**Notes:**

Compounds of concern were noted in the Interim Remedial Measures Work Plan, June 7, 1999.

**BOLD** values indicate laboratory detections.

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(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

U = Indicates compound was analyzed for but not detected.

J = Indicates estimated value which is less than the sample quantitation limit but greater than zero.

D = Identifies all compounds in analysis at a secondary dilution factor.

R = Data unusable (compound may or may not be present).

NS = Not Sampled.

ND = Not Detected.

**TABLE 6**  
**SUMMARY OF HISTORICAL WATER QUALITY RESULTS**  
**FORMER FLAGSHIP AIRLINES HANGAR - DUTCHESS COUNTY AIRPORT**  
**ORDER ON CONSENT NO: 3-0837-98-12, NYSDEC SITE NO: 3-14-101**

Volatile Organic	NYSDEC	MW-7A					
Compounds of Concern	Standard (1)	05/20/1999	06/28/2000	09/21/2000	12/07/2000	03/29/2001	06/20/2001
1,1-Dichloroethane	5	10U	10U	10U	10U	10U	5U
1,1,1-Trichloroethane	5	10U	10U	10U	10U	10U	5U
Trichloroethene	5	10U	10U	10U	10U	10U	5U
Tetrachloroethene	5	10U	10U	10U	10U	10U	5U
Toluene	5	10U	10U	10U	10U	10U	5U
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	10U	9U	9U	10U	9U	10U

Volatile Organic	NYSDEC	MW-7A					
Compounds of Concern	Standard (1)	09/10/2001	01/17/2002	05/22/2002	09/24/2002		
1,1-Dichloroethane	5	5U	NS	NS	10U		
1,1,1-Trichloroethane	5	5U	NS	NS	10U		
Trichloroethene	5	5U	NS	NS	10U		
Tetrachloroethene	5	5U	NS	NS	10U		
Toluene	5	5U	NS	NS	10U		
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	1J	NS	NS	10U		

MW-8					
05/20/1999	06/28/2000	09/21/2000	12/07/2000	03/29/2001	06/20/2001
10U	10U	1J	2J	2J	5U
10U	10U	10U	10U	10U	5U
10U	10U	10U	10U	10U	5U
10U	3J	10U	10U	10U	5U
10U	10U	10U	10U	10U	5U
<b>MW-8</b>					
09/10/2001	01/17/2002	05/22/2002	09/24/2002		
2J	10U	10U	10U		
5U	10U	10U	10U		
5U	10U	10U	10U		
5U	10U	10U	10U		
5U	10U	10U	10U		
<b>MW-8</b>					
10U	10U	10U	10U		

**Notes:**

Compounds of concern were noted in the Interim Remedial Measures Work Plan, June 7, 1999.

**BOLD** values indicate laboratory detections.

Laboratory data on this table includes third party validation.

(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

U = Indicates compound was analyzed for but not detected.

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**TABLE 6**  
**SUMMARY OF HISTORICAL WATER QUALITY RESULTS**  
**FORMER FLAGSHIP AIRLINES HANGAR - DUTCHESS COUNTY AIRPORT**  
**ORDER ON CONSENT NO: 3-0837-98-12, NYSDEC SITE NO: 3-14-101**

Volatile Organic	NYSDEC	MW-9					
Compounds of Concern	Standard (1)	05/20/1999	06/28/2000	09/21/2000	12/07/2000	03/29/2001	06/20/2001
1,1-Dichloroethane	5	530	99	170J	160J	20J	210
1,1,1-Trichloroethane	5	150	24	45J	25J	200U	61
Trichloroethene	5	10U	2J	200U	200U	200U	25U
Tetrachloroethene	5	490	56D	680	260	210	340
Toluene	5	40U	9J	25J	200U	200U	30
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	1100D	710D	9600D	2200D	1000D	3300UR
<b>Volatile Organic</b>							
<b>Compounds of Concern</b>							
1,1-Dichloroethane	5	190	200U	7J	10U		
1,1,1-Trichloroethane	5	27	200U	10U	10U		
Trichloroethene	5	5U	200U	10U	10U		
Tetrachloroethene	5	240	280	74	70		
Toluene	5	22	200U	2J	10U		
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	1200	170	340D	260		

MW-10					
05/20/1999	06/28/2000	09/21/2000	12/07/2000	03/29/2001	06/20/2001
61	39J	8J	5J	10J	11
29	40U	40U	40U	5J	25U
13J	40U	40U	40U	40U	25U
250	40U	36J	52	44	53
10U	40U	40U	10U	40U	3J
19	88	140	410	52U	3200J
MW-10					
09/10/2001	01/17/2002	05/22/2002	09/24/2002		
27	7J	10U	10U		
1J	4J	10U	10U		
25U	10U	10U	10U		
97	74	43	26		
5	10U	10U	10U		
430	55	8JD	10U		

**Notes:**

Compounds of concern were noted in the Interim Remedial Measures Work Plan, June 7, 1999.

BOLD values indicate laboratory detections.

Laboratory data on this table includes third party validation.

(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

U = Indicates compound was analyzed for but not detected.

J = Indicates estimated value which is less than the sample quantitation limit but greater than zero.

D = Identifies all compounds in analysis at a secondary dilution factor.

R = Data unusable (compound may or may not be present).

NS = Not Sampled.

ND = Not Detected.

NI = Monitoring well not installed as of this date.

**TABLE 6**  
**SUMMARY OF HISTORICAL WATER QUALITY RESULTS**  
**FORMER FLAGSHIP AIRLINES HANGAR - DUTCHESS COUNTY AIRPORT**  
**ORDER ON CONSENT NO: 3-0837-98-12, NYSDEC SITE NO: 3-14-101**

Volatile Organic	NYSDEC	MW-20					
Compounds of Concern	Standard (1)	05/20/1999	06/28/2000	09/21/2000	12/07/2000	03/28/2001	06/20/2001
1,1-Dichloroethane	5	NI	10U	10U	10U	10U	5U
1,1,1-Trichloroethane	5	NI	10U	10U	10U	10U	5U
Trichloroethene	5	NI	10U	10U	10U	10U	5U
Tetrachloroethene	5	NI	10U	10U	10U	10U	5U
Toluene	5	NI	10U	10U	10U	10U	5U
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	NI	57	9U	10U	9U	10U
<b>Volatile Organic</b>							
<b>Compounds of Concern</b>							
1,1-Dichloroethane	5	5U	10U	10U	10U		
1,1,1-Trichloroethane	5	5U	10U	10U	10U		
Trichloroethene	5	5U	10U	10U	10U		
Tetrachloroethene	5	5U	10U	10U	10U		
Toluene	5	5U	10U	10U	10U		
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	10U	10U	10U	60		

**Notes:**

Compounds of concern were noted in the Interim Remedial Measures Work Plan, June 7, 1999.

**BOLD** values indicate laboratory detections.

Laboratory data on this table includes third party validation.

(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

U = Indicates compound was analyzed for but not detected.

J = Indicates estimated value which is less than the sample quantitation limit but greater than zero.

D = Identifies all compounds in analysis at a secondary dilution factor.

R = Data unusable (compound may or may not be present).

NS = Not Sampled.

ND = Not Detected.

DG-1					
05/20/1999	06/28/2000	09/21/2000	12/06/2000	03/28/2001	06/20/2001
10U	10U	10U	10U	10U	5U
10U	10U	10U	10U	10U	5U
10U	10U	10U	10U	10U	5U
10U	10U	10U	10U	10U	5U
10U	10U	10U	10U	10U	5U
<b>Semi-Volatile Organic</b>					
<b>Compound of Concern</b>					
10U	9U	9U	9U	9U	10U
DG-1					
09/10/2001	01/17/2002	05/22/2002	09/24/2002		
5U	NS	NS	10U		
5U	NS	NS	10U		
5U	NS	NS	10U		
5U	NS	NS	10U		
5U	NS	NS	10U		
10U	NS	NS	10U		

**TABLE 6**  
**SUMMARY OF HISTORICAL WATER QUALITY RESULTS**  
**FORMER FLAGSHIP AIRLINES HANGAR - DUTCHESS COUNTY AIRPORT**  
**ORDER ON CONSENT NO: 3-0837-98-12, NYSDEC SITE NO: 3-14-101**

Volatile Organic		NYSDEC	Septic Tank/Sanitary Sewer				
Compounds of Concern	Standard (1)	05/20/1999	06/28/2000	09/21/2000	12/06/2000	03/29/2001	06/20/2001
1,1-Dichloroethane	5	10U	NS	10UJ	10U	10U	5U
1,1,1-Trichloroethane	5	10U	NS	10UJ	10U	10U	5U
Trichloroethene	5	10U	NS	10UJ	10U	10U	5U
Tetrachloroethene	5	10U	NS	10UJ	10U	10U	5U
Toluene	5	10U	NS	10UJ	10U	10U	5U
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	10U	NS	9UR	10U	10U	10U
Volatile Organic		NYSDEC	Septic Tank/Sanitary Sewer				
Compounds of Concern	Standard (1)	09/10/2001	01/17/2002	05/22/2002	09/24/2002		
1,1-Dichloroethane	5	5U	NS	NS	10U		
1,1,1-Trichloroethane	5	5U	NS	NS	10U		
Trichloroethene	5	5U	NS	NS	10U		
Tetrachloroethene	5	5U	NS	NS	10U		
Toluene	5	5U	NS	NS	10U		
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	10U	NS	NS	10U		

A-8S					
05/20/1999	06/28/2000	09/21/2000	12/06/2000	03/28/2001	06/20/2001
NI	10U	10U	10U	10U	5U
NI	10U	10U	10U	10U	5U
NI	10U	10U	10U	10U	5U
NI	10U	10U	10U	10U	5U
NI	10U	10U	10U	10U	5U
NI	9U	9UJ	9U	9U	10U
A-8S					
09/10/2001	01/17/2002	05/22/2002	09/24/2002		
5U	NS	NS	10U		
5U	NS	NS	10U		
5U	NS	NS	10U		
5U	NS	NS	10U		
5U	NS	NS	10U		
10U	NS	NS	10U		

**Notes:**

Compounds of concern were noted in the Interim Remedial Measures Work Plan, June 7, 1999.

**BOLD** values indicate laboratory detections.

Laboratory data on this table includes third party validation.

(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

U = Indicates compound was analyzed for but not detected.

J = Indicates estimated value which is less than the sample quantitation limit but greater than zero.

D = Identifies all compounds in analysis at a secondary dilution factor.

R = Data unusable (compound may or may not be present).

NS = Not Sampled.

ND = Not Detected.

**TABLE 6**  
**SUMMARY OF HISTORICAL WATER QUALITY RESULTS**  
**FORMER FLAGSHIP AIRLINES HANGAR - DUTCHESS COUNTY AIRPORT**  
**ORDER ON CONSENT NO: 3-0837-98-12, NYSDEC SITE NO: 3-14-101**

Volatile Organic	NYSDEC	A-26S					
Compounds of Concern	Standard (1)	05/20/1999	06/28/2000	09/21/2000	12/07/2000	03/28/2001	06/20/2001
1,1-Dichloroethane	5	NI	14	16	17	14	17
1,1,1-Trichloroethane	5	NI	10U	10U	10U	5U	
Trichloroethene	5	NI	10U	10U	10U	5U	
Tetrachloroethene	5	NI	10U	10U	10U	5U	
Toluene	5	NI	10U	10U	10U	5U	
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	NI	9U	9UJ	10U	10U	10U
<b>Volatile Organic</b>							
<b>NYSDEC</b>							
<b>A-26S</b>							
Compounds of Concern	Standard (1)	09/10/2001	01/17/2002	05/22/2002	09/24/2002		
1,1-Dichloroethane	5	16	14	17	10U		
1,1,1-Trichloroethane	5	5U	10U	10U	10U		
Trichloroethene	5	5U	10U	10U	10U		
Tetrachloroethene	5	5U	10U	10U	10U		
Toluene	5	5U	10U	10U	10U		
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	10U	12U	10U	10U		

A-27S					
05/20/1999	06/28/2000	09/21/2000	12/07/2000	03/28/2001	06/20/2001
NI	<b>2J</b>	3J	4J	4J	3J
NI	10U	10U	10U	10U	5U
NI	10U	10U	10U	10U	5U
NI	10U	10U	10U	10U	5U
NI	10U	10U	10U	10U	5U
NI	<b>83D</b>	1J	18	23	40U
A-27S					
09/10/2001	01/17/2002	05/22/2002	09/24/2002		
5U	<b>2J</b>	10U	10U		
5U	10U	10U	10U		
5U	10U	10U	10U		
5U	10U	10U	10U		
5U	10U	10U	10U		
9J	<b>4J</b>	6J	10U		

**Notes:**

Compounds of concern were noted in the Interim Remedial Measures Work Plan, June 7, 1999.

**BOLD** values indicate laboratory detections.

Laboratory data on this table includes third party validation.

(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

U = Indicates compound was analyzed for but not detected.

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R = Data unusable (compound may or may not be present).

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ND = Not Detected.

**TABLE 6**  
**SUMMARY OF HISTORICAL WATER QUALITY RESULTS**  
**FORMER FLAGSHIP AIRLINES HANGAR - DUTCHESS COUNTY AIRPORT**  
**ORDER ON CONSENT NO: 3-0837-98-12, NYSDEC SITE NO: 3-14-101**

Volatile Organic	NYSDEC	A-41S					
Compounds of Concern	Standard (1)	05/20/1999	06/28/2000	09/21/2000	12/06/2000	03/28/2001	06/20/2001
1,1-Dichloroethane	5	NI	10U	10U	10U	10U	5U
1,1,1-Trichloroethane	5	NI	10U	10U	10U	10U	5U
Trichloroethene	5	NI	10U	10U	10U	10U	5U
Tetrachloroethene	5	NI	10U	10U	10U	10U	5U
Toluene	5	NI	10U	10U	10U	10U	5U
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	NI	10U	9UJ	10U	9U	10U
<b>Volatile Organic</b>							
<b>A-41S</b>							
Compounds of Concern	Standard (1)	09/10/2001	01/17/2002	05/22/2002	09/24/2002		
1,1-Dichloroethane	5	5U	NS	NS	NS		
1,1,1-Trichloroethane	5	5U	NS	NS	NS		
Trichloroethene	5	5U	NS	NS	NS		
Tetrachloroethene	5	5U	NS	NS	NS		
Toluene	5	5U	NS	NS	NS		
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	10U	NS	NS	NS		

A-42S					
05/20/1999	06/28/2000	09/21/2000	12/07/2000	03/28/2001	06/20/2001
NI	40U	11	16J	4J	2J
NI	40U	10U	40U	10U	5U
NI	40U	10U	10U	10U	5U
NI	40U	10U	40U	10U	5U
NI	8J	22	15J	2J	4J
NI	760D	1200D	1100D	550	770
A-42S					
09/10/2001	01/17/2002	05/22/2002	09/24/2002		
11	21	11	5J		
5U	10U	10U	10U		
5U	10U	10U	10U		
5U	10U	10U	10U		
8	10J	10	10U		
480	1200	1300D	870		

**Notes:**

Compounds of concern were noted in the Interim Remedial Measures Work Plan, June 7, 1999.

**BOLD** values indicate laboratory detections.

Laboratory data on this table includes third party validation.

(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

U = Indicates compound was analyzed for but not detected.

J = Indicates estimated value which is less than the sample quantitation limit but greater than zero.

D = Identifies all compounds in analysis at a secondary dilution factor.

R = Data unusable (compound may or may not be present).

NS = Not Sampled.

ND = Not Detected.

**TABLE 6**  
**SUMMARY OF HISTORICAL WATER QUALITY RESULTS**  
**FORMER FLAGSHIP AIRLINES HANGAR - DUTCHESS COUNTY AIRPORT**  
**ORDER ON CONSENT NO: 3-0837-98-12, NYSDEC SITE NO: 3-14-101**

Volatile Organic	NYSDEC	A-43S					
Compounds of Concern	Standard (1)	05/20/1999	06/28/2000	09/21/2000	12/07/2000	03/28/2001	06/20/2001
1,1-Dichloroethane	5	NI	<b>2J</b>	1J	1J	2J	5U
1,1,1-Trichloroethane	5	NI	10U	10U	10U	10U	5U
Trichloroethene	5	NI	10U	10U	10U	10U	5U
Tetrachloroethene	5	NI	10U	10U	10U	10U	5U
Toluene	5	NI	10U	10U	10U	10U	5U
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	NI	9U	9UJ	10U	10U	10U
Volatile Organic	NYSDEC	A-43S					
Compounds of Concern	Standard (1)	09/10/2001	01/17/2002	05/22/2002	09/24/2002		
1,1-Dichloroethane	5	<b>2J</b>	<b>3J</b>	<b>4J</b>	10U		
1,1,1-Trichloroethane	5	5U	10U	10U	10U		
Trichloroethene	5	5U	10U	10U	10U		
Tetrachloroethene	5	5U	10U	10U	10U		
Toluene	5	5U	10U	10U	10U		
<b>Semi-Volatile Organic</b>							
<b>Compound of Concern</b>							
Naphthalene	10	10U	10U	10UJ	10U		

Notes:

Compounds of concern were noted in the Interim Remedial Measures Work Plan, June 7, 1999.

BOLD values indicate laboratory detections.

Laboratory data on this table includes third party validation.

(1) = NYSDEC Standards has taken from Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

U = Indicates compound was analyzed for but not detected.

J = Indicates estimated value which is less than the sample quantitation limit but greater than zero.

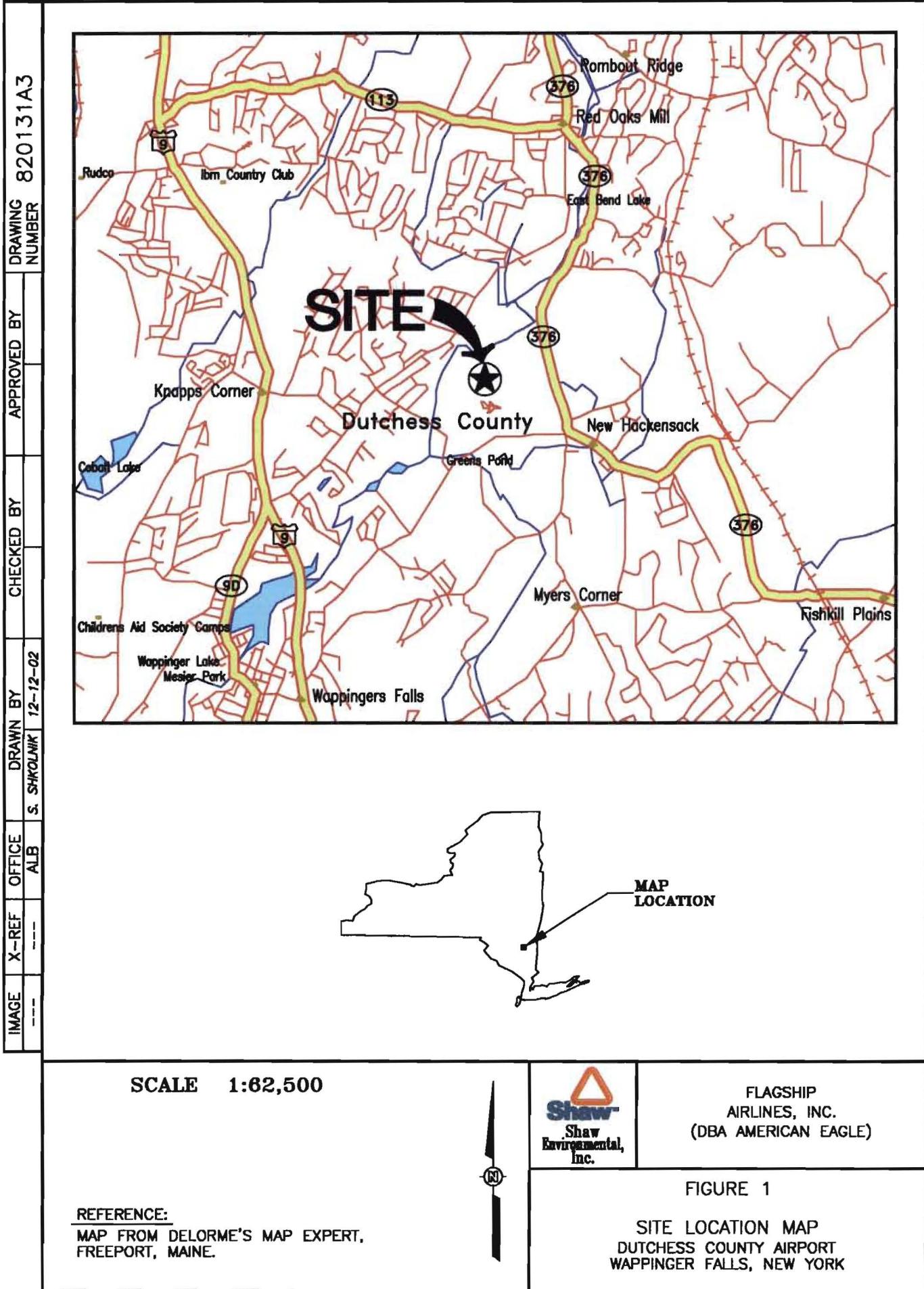
D = Identifies all compounds in analysis at a secondary dilution factor.

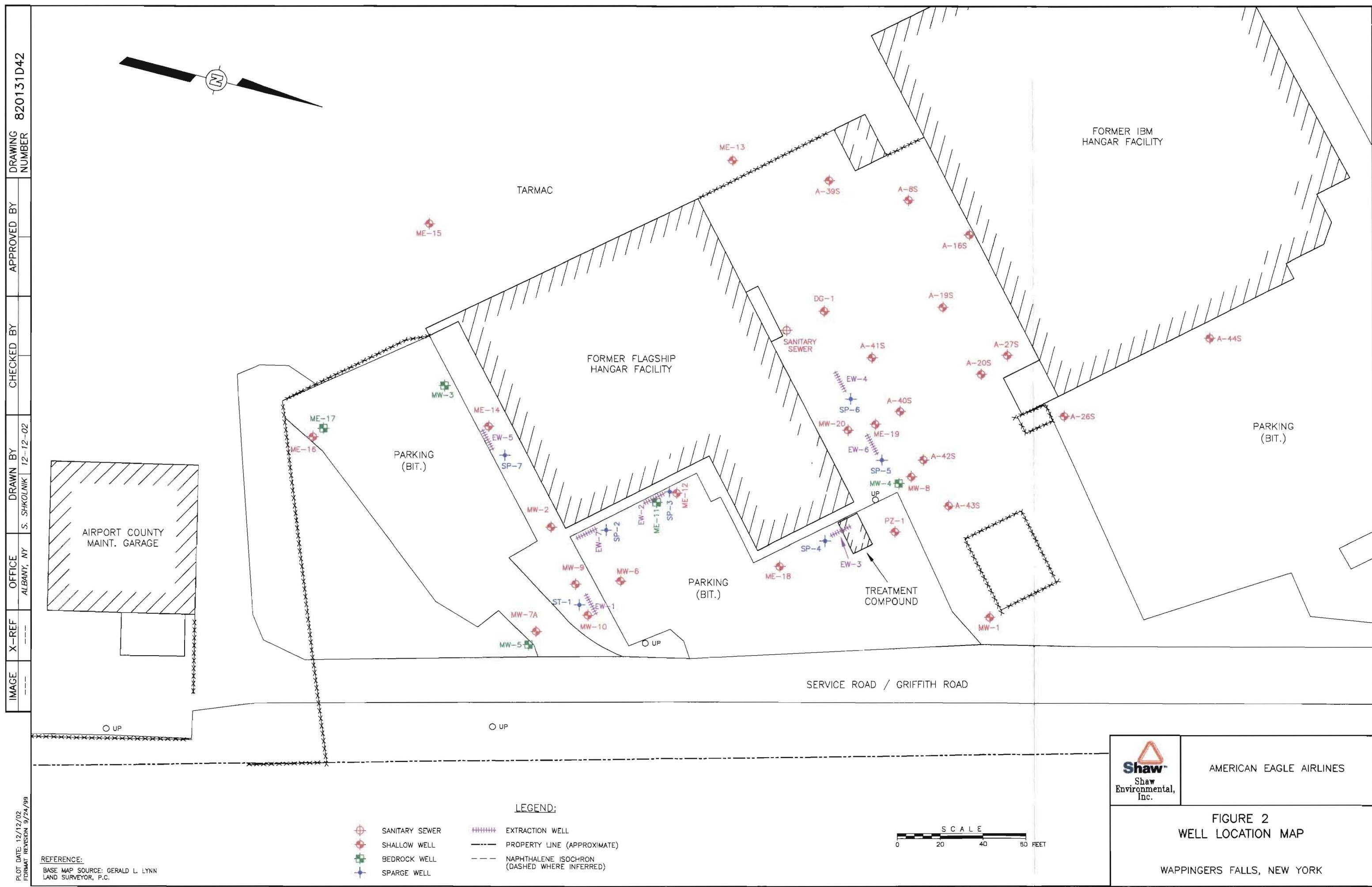
R = Data unusable (compound may or may not be present).

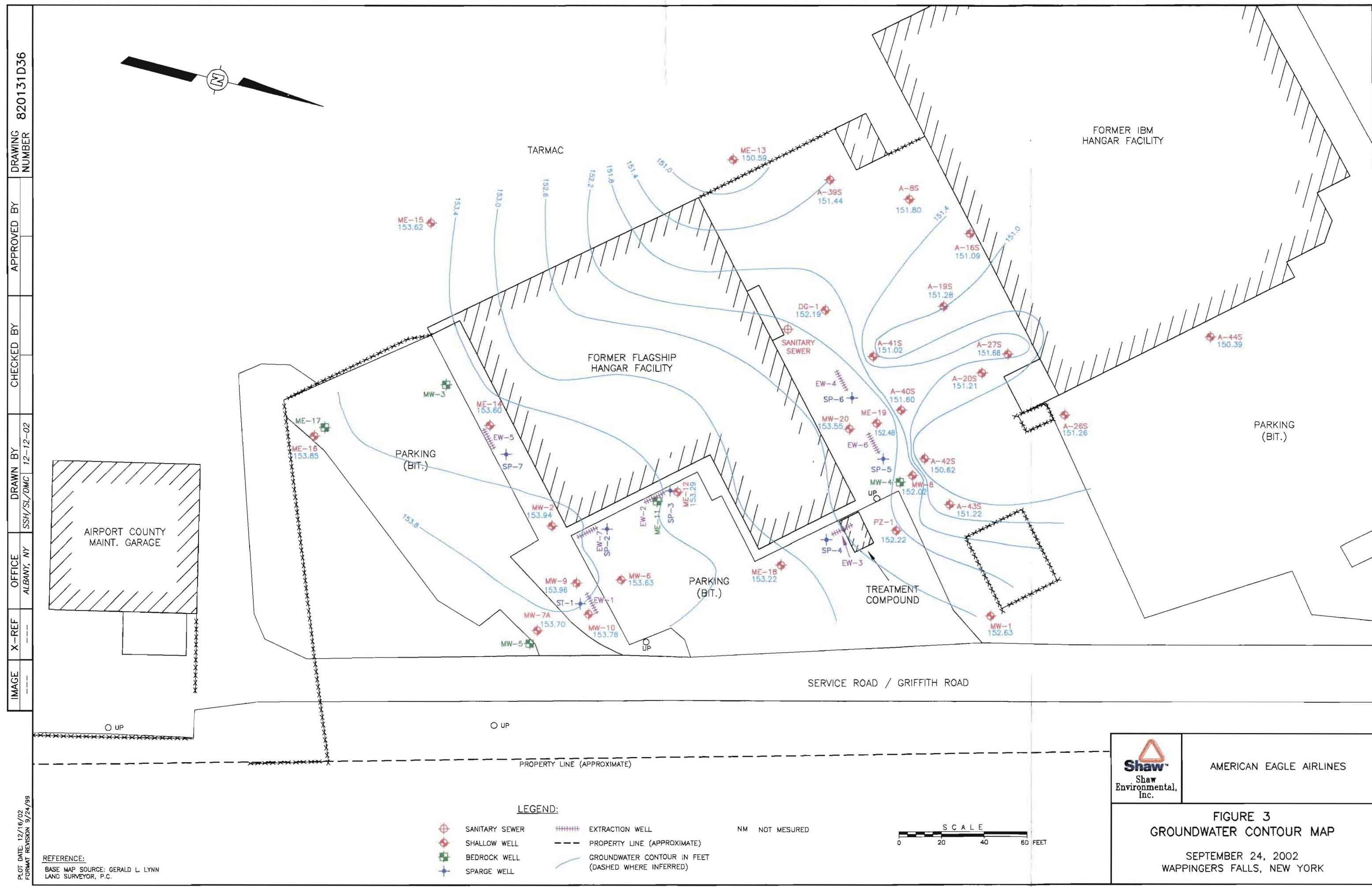
NS = Not Sampled.

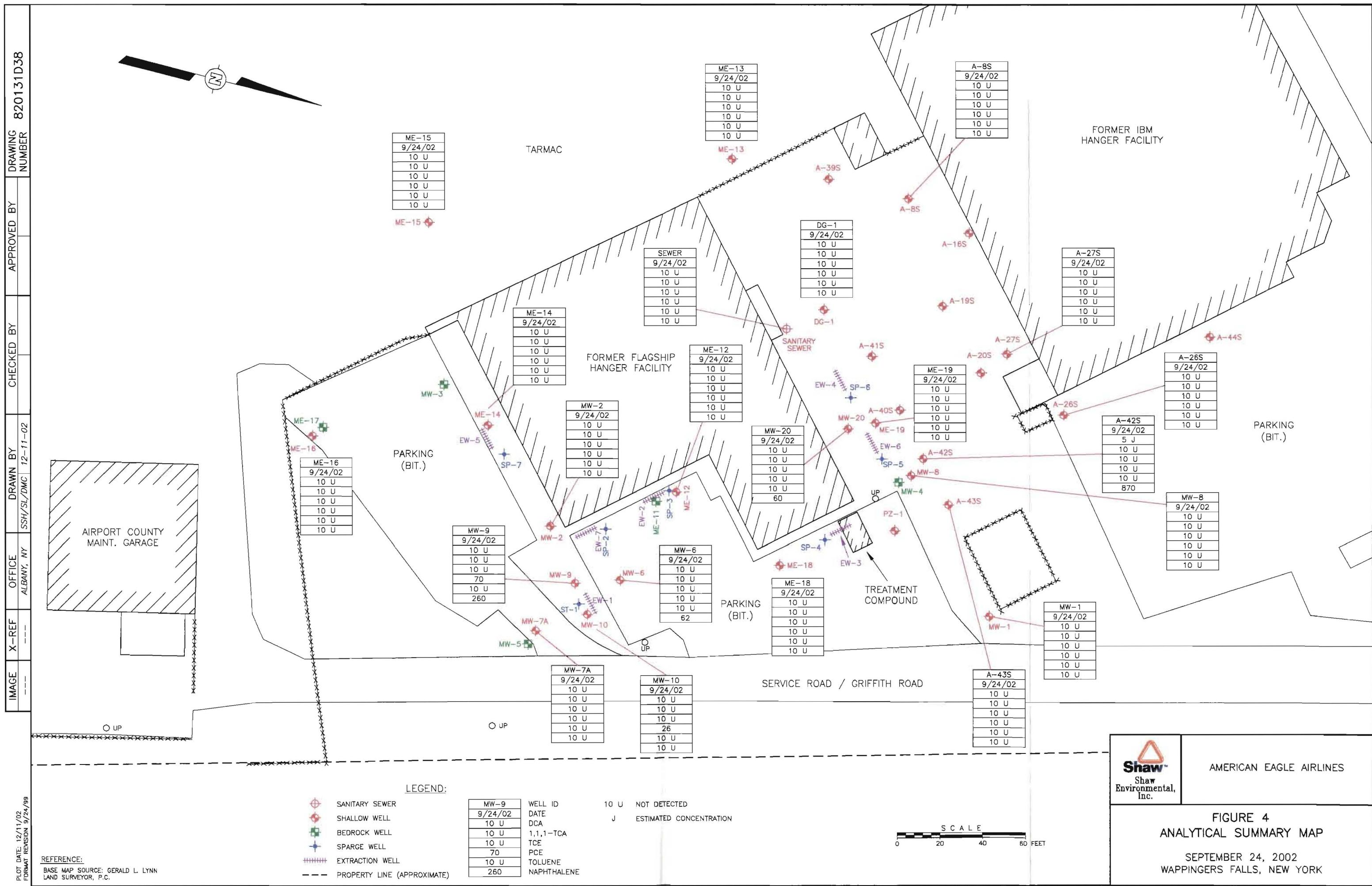
ND = Not Detected.

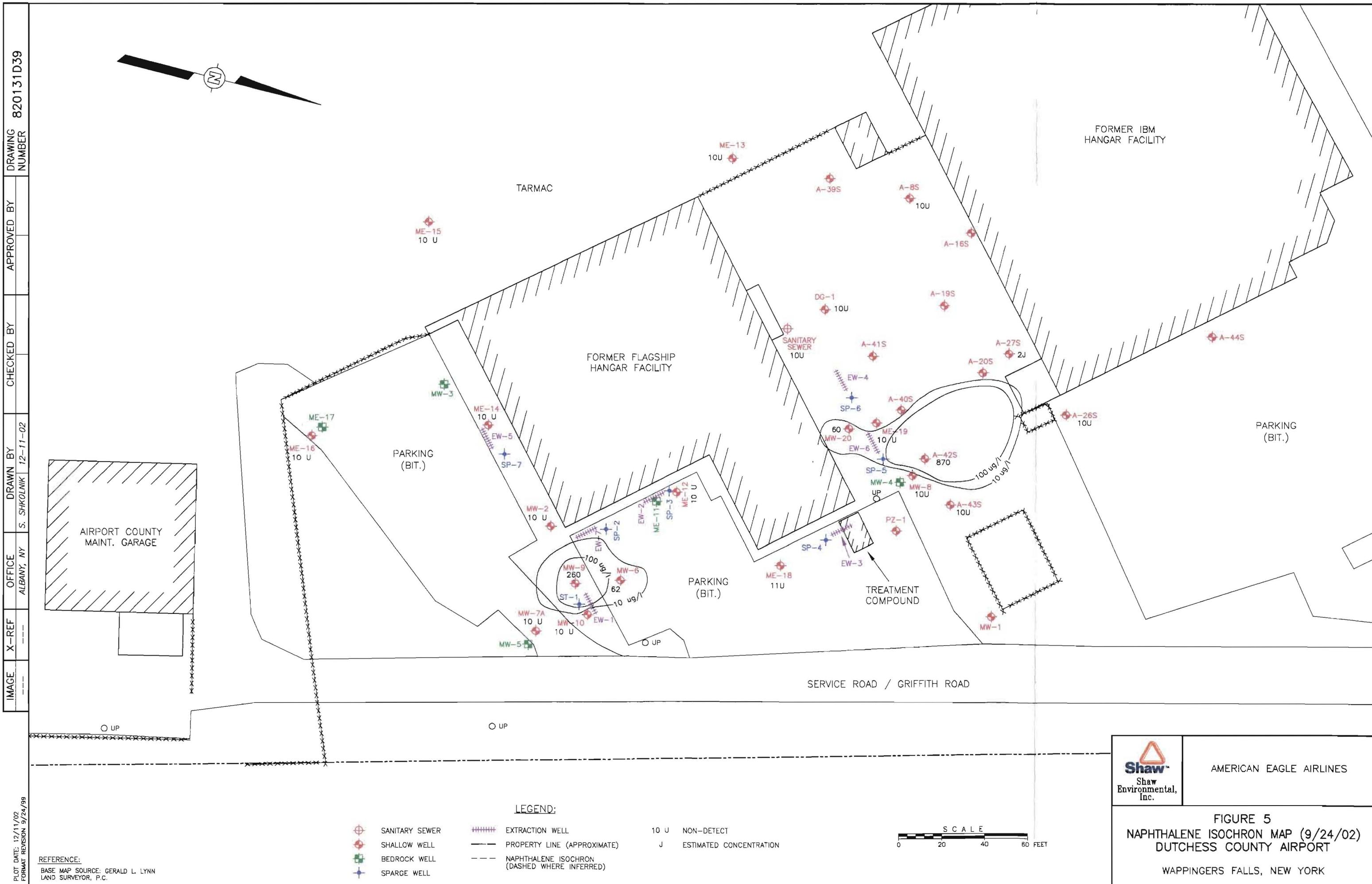
## **FIGURES**

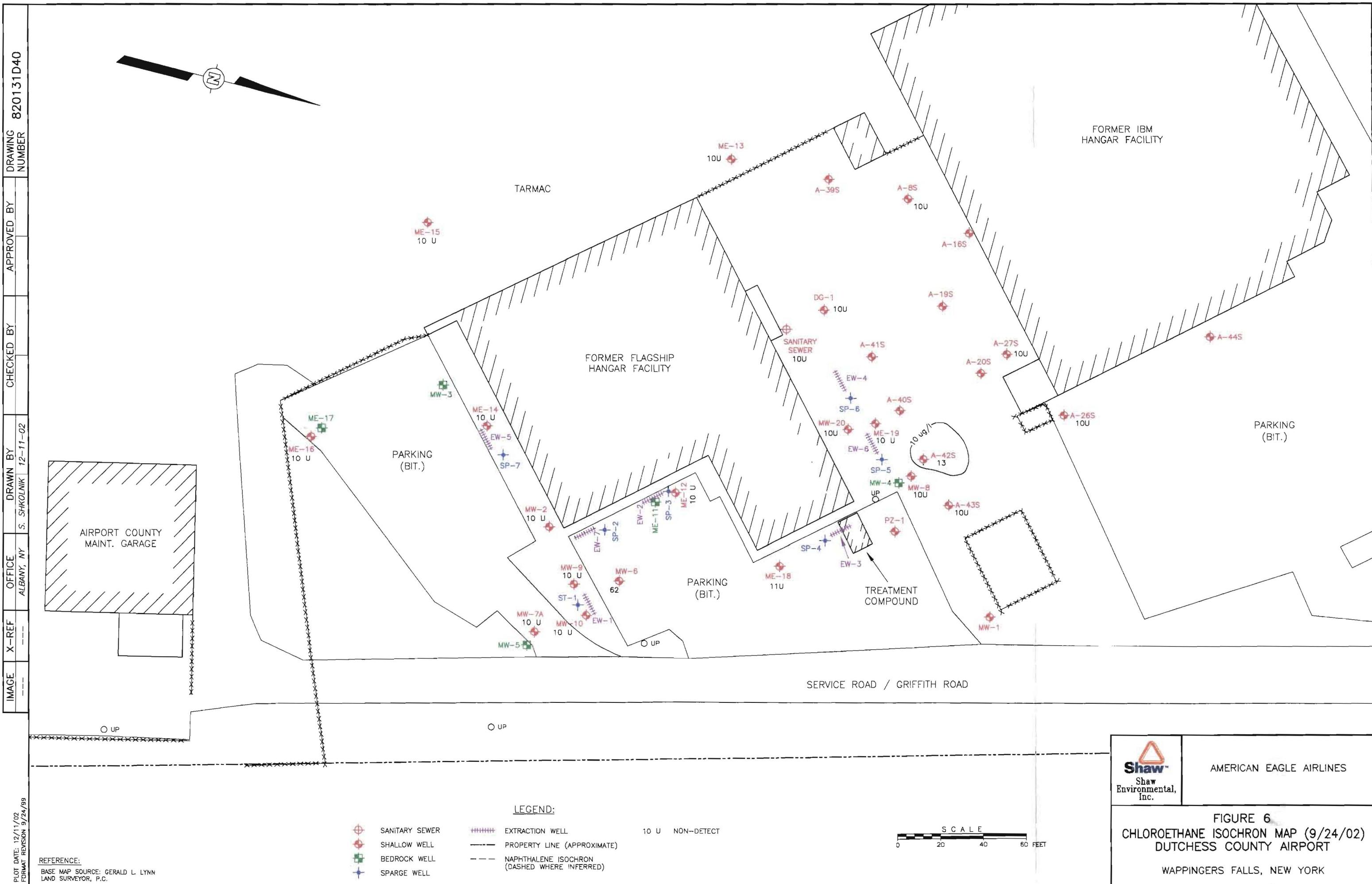


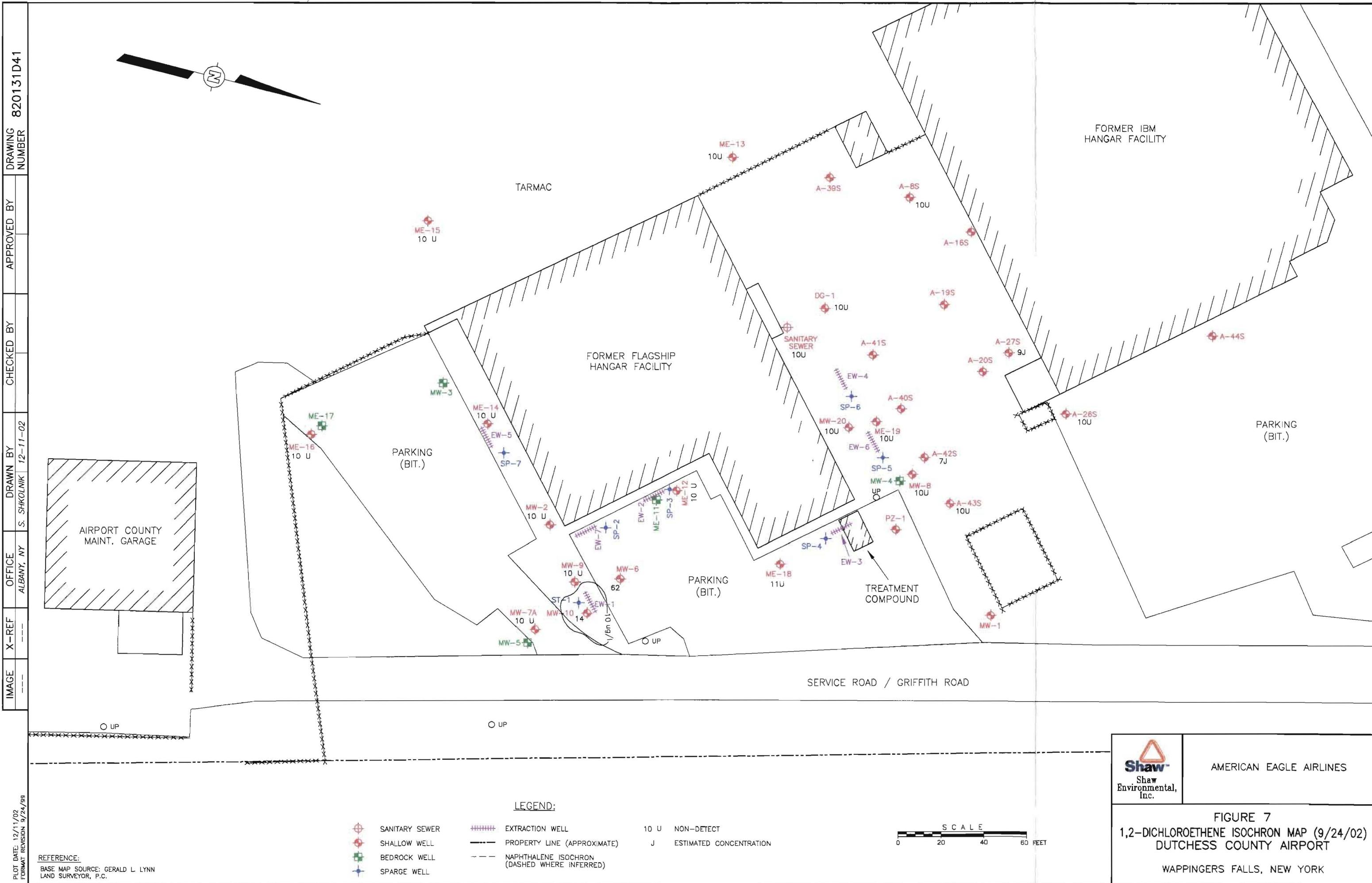




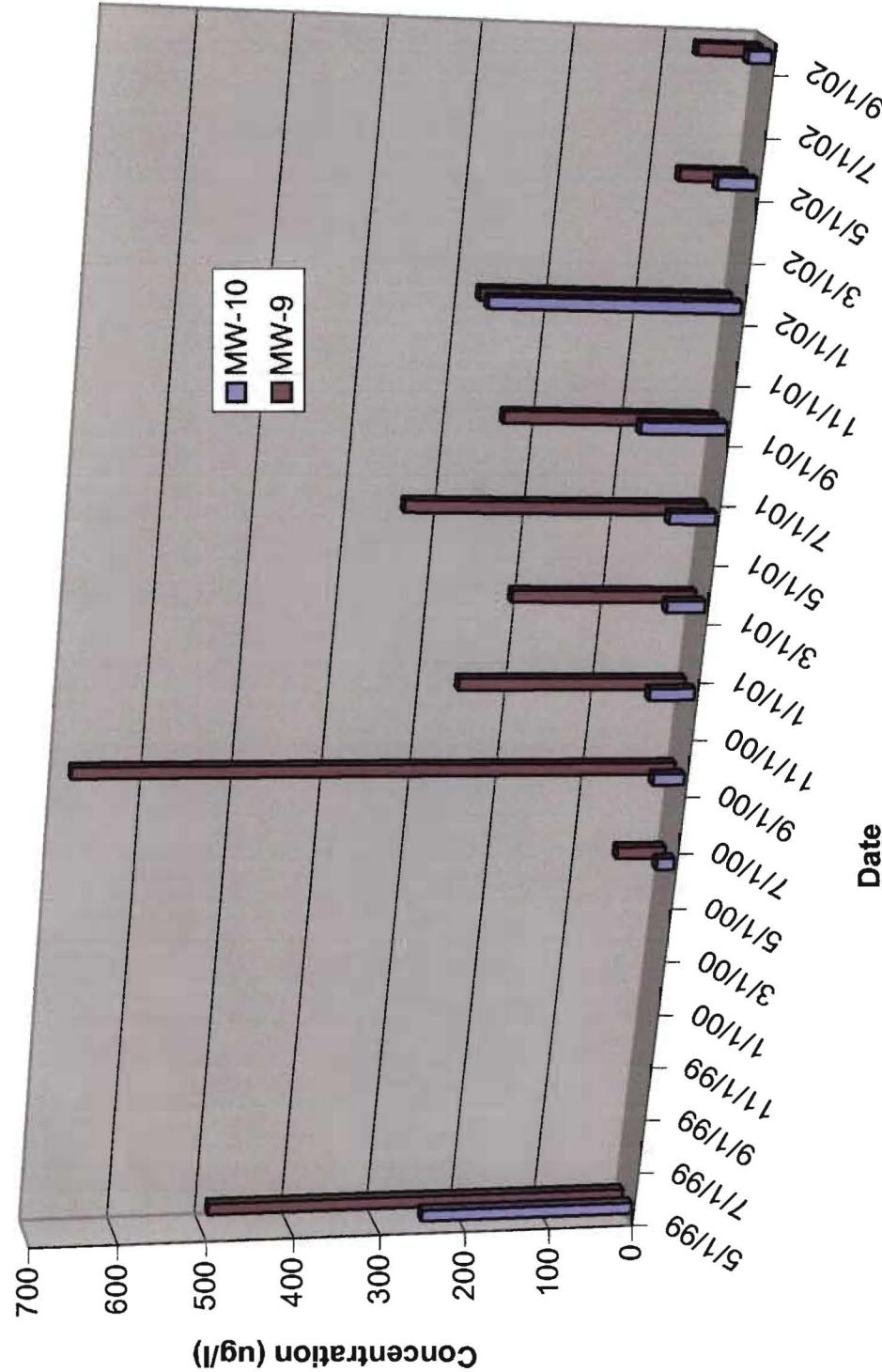




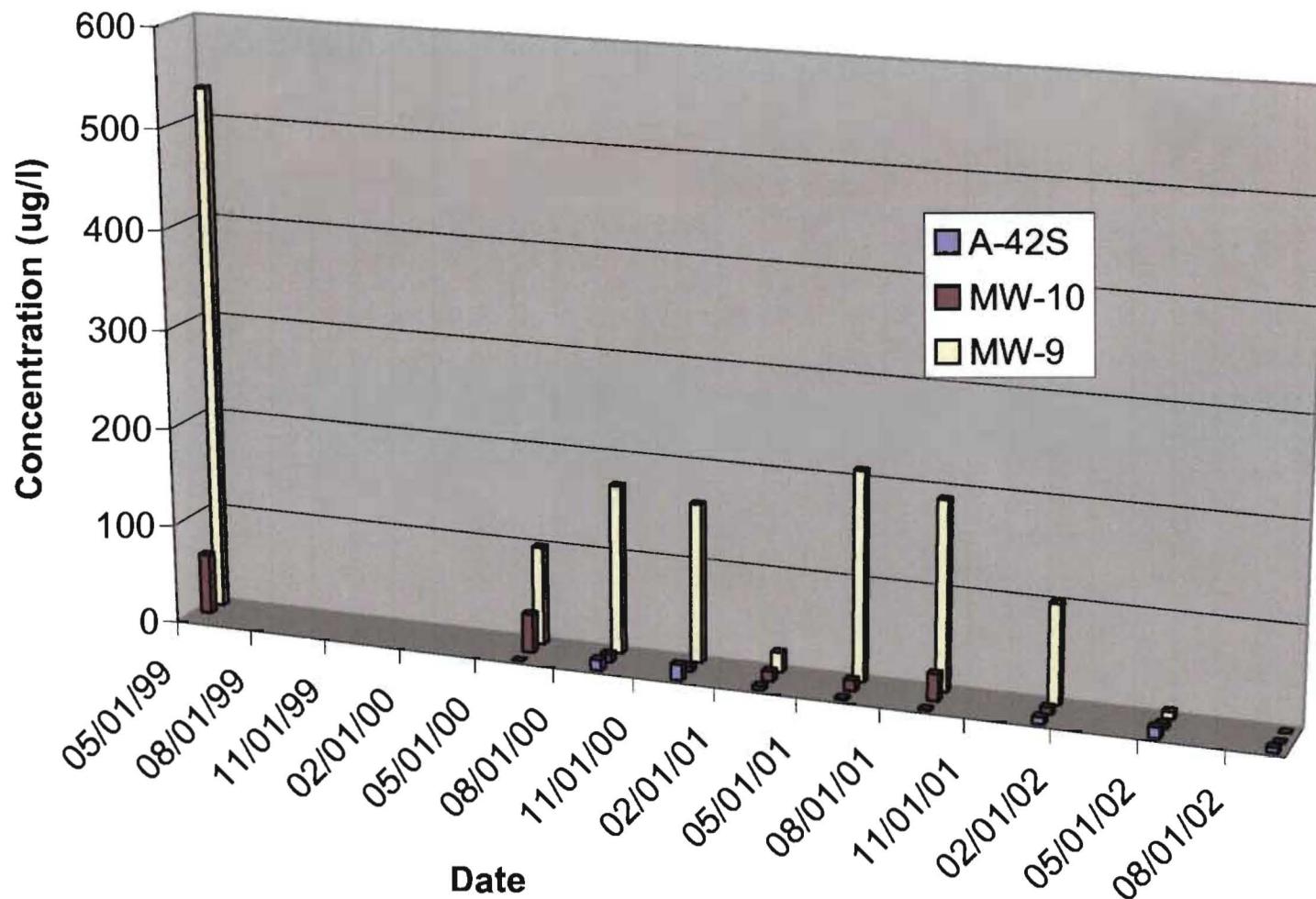




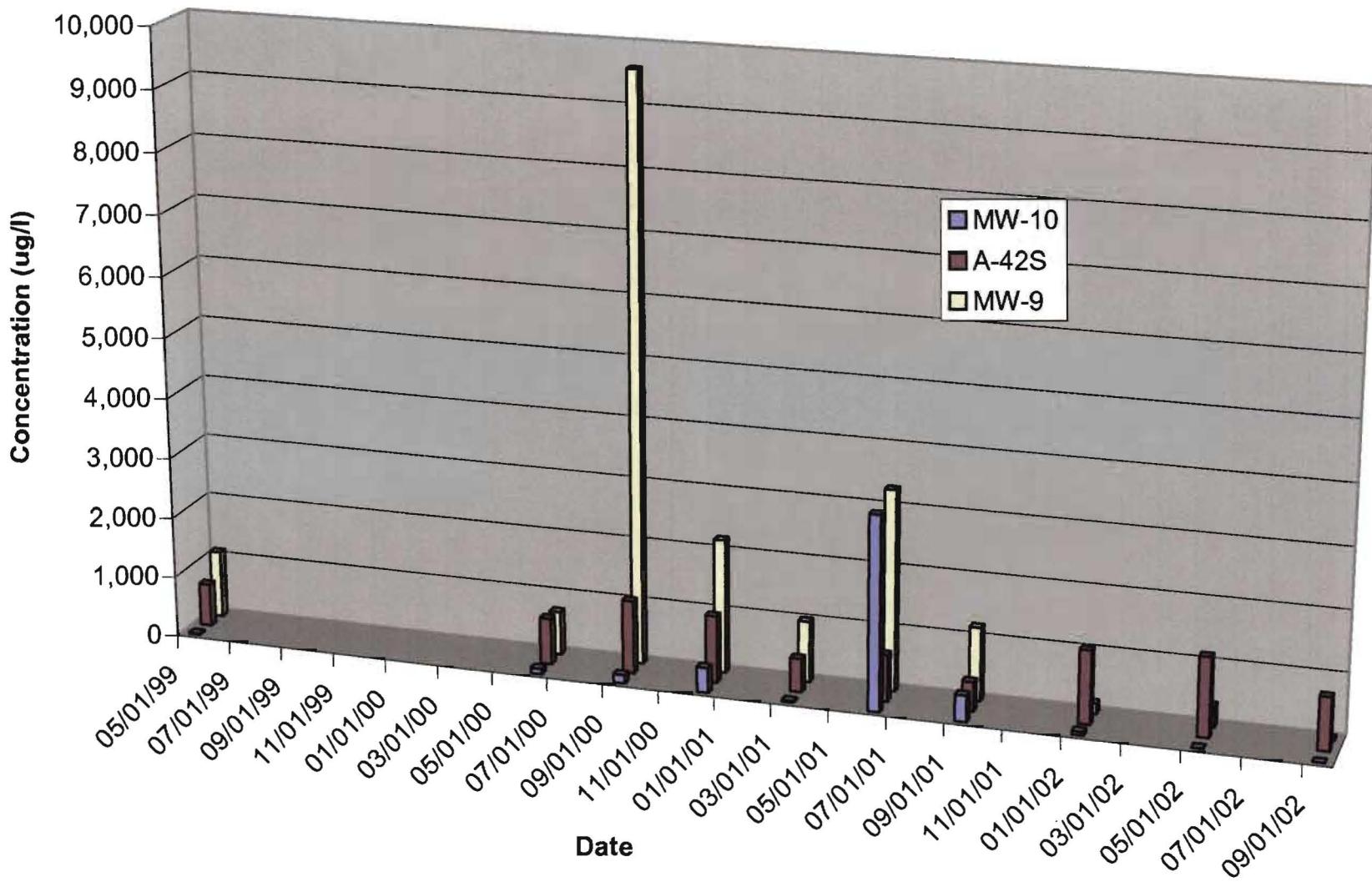
**Figure 8**  
**Dissolved Tetrachloroethene (PCE), MW-9 & MW-10**



**Figure 9**  
**Dissolved 1,1-Dichloroethane Trends, MW-9, MW-10 & A-42S**



**Figure 10**  
**Dissolved Naphthalene Trends, MW-9, MW-10 & A-42S**



**APPENDIX A**

**ANALYTICAL RESULTS – SVE SYSTEM**  
**(SEPTEMBER 24, 2002)**



39 Spruce Street ° 2nd Floor ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

REPORT DATE 10/1/02

SHAW ENV. & INFRASTRUCTURE - NY  
13 BRITISH AMERICAN BOULEVARD  
LATHAM, NY 12110  
ATTN: BRIAN NEUMANN

CONTRACT NUMBER:  
PURCHASE ORDER NUMBER:

Brian Neumann

PROJECT NUMBER:

**ANALYTICAL SUMMARY**

Flagship

8A

LIMS BAT #: LIMS-66514

JOB NUMBER: -

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: FLAGSHIP POU

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST
1	02B25239	AIR	SVE INF NORTH/SOUTH	to-14 ppbv
1	02B25239	AIR	SVE INF NORTH/SOUTH	to-14 ug/m3
2	02B25240	AIR	SVE EFF NORTH/SOUTH	to-14 ppbv
2	02B25240	AIR	SVE EFF NORTH/SOUTH	to-14 ug/m3
*3	02B25241	AIR	SVE INF SOUTH ONLY	to-14 ppbv
*3	02B25241	AIR	SVE INF SOUTH ONLY	to-14 ug/m3
4	02B25242	AIR	SVE EFF SOUTH ONLY	to-14 ppbv
4	02B25242	AIR	SVE EFF SOUTH ONLY	to-14 ug/m3

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations :

AIHA 100033	AIHA ELLAP (LEAD) 100033
MASSACHUSETTS MA0100	NEW HAMPSHIRE 2516
CONNECTICUT PH-0567	VERMONT DOH (LEAD) No. LL015036
NEW YORK ELAP 10899	RHODE ISLAND (LIC. No. 112)

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Edward Denson 10/1/02

Tod Kopyscinski  
Director of Operations

Sondra S. Kocot  
Quality Control Coordinator

SIGNATURE

DATE

Edward Denson  
Technical Director

\* See end of data tabulation for notes and comments pertaining to this sample



39 Spruce Street ° 2nd Floor ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

BRIAN NEUMANN  
SHAW ENV. & INFRASTRUCTURE - NY  
13 BRITISH AMERICAN BOULEVARD  
LATHAM, NY 12110

10/1/02  
Page 1 of 17

Purchase Order No.:

Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514

Date Received: 9/25/02

Job Number: -

Field Sample #: 1

Sample ID : 02B25239

Sampled : 9/24/02

SVE INF NORTH/SOUTH

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Benzene	PPBv	ND	09/27/02	PRM	0.5		
Bromomethane	PPBv	ND	09/27/02	PRM	0.5		
Carbon Tetrachloride	PPBv	ND	09/27/02	PRM	0.5		
Chlorobenzene	PPBv	ND	09/27/02	PRM	0.5		
Chloroethane	PPBv	ND	09/27/02	PRM	0.5		
Chloroform	PPBv	ND	09/27/02	PRM	0.5		
Chloromethane	PPBv	ND	09/27/02	PRM	0.5		
1,2-Dibromoethane	PPBv	ND	09/27/02	PRM	0.5		
1,2-Dichlorobenzene	PPBv	ND	09/27/02	PRM	0.5		
1,3-Dichlorobenzene	PPBv	ND	09/27/02	PRM	0.5		
1,4-Dichlorobenzene	PPBv	ND	09/27/02	PRM	0.5		
Dichlorodifluoromethane	PPBv	ND	09/27/02	PRM	0.5		
1,1-Dichloroethane	PPBv	ND	09/27/02	PRM	0.5		
1,2-Dichloroethane	PPBv	ND	09/27/02	PRM	0.5		
1,1-Dichloroethylene	PPBv	ND	09/27/02	PRM	0.5		
cis-1,2-Dichloroethylene	PPBv	ND	09/27/02	PRM	0.5		
1,2-Dichloropropane	PPBv	ND	09/27/02	PRM	0.5		
cis-1,3-Dichloropropene	PPBv	ND	09/27/02	PRM	0.5		
trans-1,3-Dichloropropene	PPBv	ND	09/27/02	PRM	0.5		
1,2-Dichlortetrafluoroethane (114)	PPBv	ND	09/27/02	PRM	0.5		
Ethylbenzene	PPBv	ND	09/27/02	PRM	0.5		
Hexachlorobutadiene	PPBv	ND	09/27/02	PRM	0.5		
Methylene Chloride	PPBv	ND	09/27/02	PRM	0.5		
Styrene	PPBv	ND	09/27/02	PRM	0.5		
1,1,2,2-Tetrachloroethane	PPBv	ND	09/27/02	PRM	0.5		
Tetrachloroethylene	PPBv	ND	09/27/02	PRM	0.5		
Toluene	PPBv	ND	09/27/02	PRM	0.5		
1,2,4-Trichlorobenzene	PPBv	ND	09/27/02	PRM	0.5		
1,1,1-Trichloroethane	PPBv	ND	09/27/02	PRM	0.5		
1,1,2-Trichloroethane	PPBv	ND	09/27/02	PRM	0.5		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected

NM = Not Measured

\* = See end of report for comments and notes applying to this sample



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13 BRITISH AMERICAN BOULEVARD  
LATHAM, NY 12110

10/1/02  
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Purchase Order No.:

Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514  
Job Number: -

Date Received: 9/25/02

Field Sample # : 1

Sample ID : 02B25239

Sampled : 9/24/02

SVE INF NORTH/SOUTH

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/ F
						Lo	Hi
Trichloroethylene	PPBv	ND	09/27/02	PRM	0.5		
Trichlorofluoromethane (Freon 11)	PPBv	ND	09/27/02	PRM	0.5		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	09/27/02	PRM	0.5		
1,2,4-Trimethylbenzene	PPBv	ND	09/27/02	PRM	0.5		
1,3,5-Trimethylbenzene	PPBv	ND	09/27/02	PRM	0.5		
Vinyl Chloride	PPBv	ND	09/27/02	PRM	0.5		
m/p-Xylene	PPBv	ND	09/27/02	PRM	0.5		
o-Xylene	PPBv	ND	09/27/02	PRM	0.5		

Analytical Method:

EPA TO-14A

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

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Purchase Order No.:

Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514

Date Received: 9/25/02

Job Number: -

**Field Sample # :** 2

**Sample ID :** 02B25240

Sampled : 9/24/02

SVE EFF NORTH/SOUTH

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F	SPEC Limit Hi
Benzene	PPBv	ND	09/27/02	PRM	0.5			
Bromomethane	PPBv	ND	09/27/02	PRM	0.5			
Carbon Tetrachloride	PPBv	ND	09/27/02	PRM	0.5			
Chlorobenzene	PPBv	ND	09/27/02	PRM	0.5			
Chloroethane	PPBv	ND	09/27/02	PRM	0.5			
Chloroform	PPBv	ND	09/27/02	PRM	0.5			
Chloromethane	PPBv	ND	09/27/02	PRM	0.5			
1,2-Dibromoethane	PPBv	ND	09/27/02	PRM	0.5			
1,2-Dichlorobenzene	PPBv	ND	09/27/02	PRM	0.5			
1,3-Dichlorobenzene	PPBv	ND	09/27/02	PRM	0.5			
1,4-Dichlorobenzene	PPBv	ND	09/27/02	PRM	0.5			
Dichlorodifluoromethane	PPBv	ND	09/27/02	PRM	0.5			
1,1-Dichloroethane	PPBv	ND	09/27/02	PRM	0.5			
1,2-Dichloroethane	PPBv	ND	09/27/02	PRM	0.5			
1,1-Dichloroethylene	PPBv	ND	09/27/02	PRM	0.5			
cis-1,2-Dichloroethylene	PPBv	ND	09/27/02	PRM	0.5			
1,2-Dichloropropane	PPBv	ND	09/27/02	PRM	0.5			
cis-1,3-Dichloropropene	PPBv	ND	09/27/02	PRM	0.5			
trans-1,3-Dichloropropene	PPBv	ND	09/27/02	PRM	0.5			
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	09/27/02	PRM	0.5			
Ethylbenzene	PPBv	ND	09/27/02	PRM	0.5			
Hexachlorobutadiene	PPBv	ND	09/27/02	PRM	0.5			
Methylene Chloride	PPBv	ND	09/27/02	PRM	0.5			
Styrene	PPBv	ND	09/27/02	PRM	0.5			
1,1,2,2-Tetrachloroethane	PPBv	ND	09/27/02	PRM	0.5			
Tetrachloroethylene	PPBv	ND	09/27/02	PRM	0.5			
Toluene	PPBv	ND	09/27/02	PRM	0.5			
1,2,4-Trichlorobenzene	PPBv	ND	09/27/02	PRM	0.5			
1,1,1-Trichloroethane	PPBv	ND	09/27/02	PRM	0.5			
1,1,2-Trichloroethane	PPBv	ND	09/27/02	PRM	0.5			

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Purchase Order No.:

Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514

Date Received: 9/25/02

Job Number: -

Field Sample # : 2

Sample ID : 02B25240

Sampled : 9/24/02

SVE EFF NORTH/SOUTH

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/ F
						Lo	Hi
Trichloroethylene	PPBv	ND	09/27/02	PRM	0.5		
Trichlorofluoromethane (Freon 11)	PPBv	ND	09/27/02	PRM	0.5		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	09/27/02	PRM	0.5		
1,2,4-Trimethylbenzene	PPBv	ND	09/27/02	PRM	0.5		
1,3,5-Trimethylbenzene	PPBv	ND	09/27/02	PRM	0.5		
Vinyl Chloride	PPBv	ND	09/27/02	PRM	0.5		
m/p-Xylene	PPBv	ND	09/27/02	PRM	0.5		
o-Xylene	PPBv	ND	09/27/02	PRM	0.5		

Analytical Method:

EPA TO-14A

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

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Purchase Order No.:

Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514

Date Received: 9/25/02

Job Number: -

Field Sample #: 3

Sample ID : \*02B25241

Sampled : 9/24/02

SVE INF SOUTH ONLY

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Benzene	PPBv	ND	09/27/02	PRM	7.6		
Bromomethane	PPBv	ND	09/27/02	PRM	7.6		
Carbon Tetrachloride	PPBv	ND	09/27/02	PRM	7.6		
Chlorobenzene	PPBv	ND	09/27/02	PRM	7.6		
Chloroethane	PPBv	ND	09/27/02	PRM	7.6		
Chloroform	PPBv	ND	09/27/02	PRM	7.6		
Chloromethane	PPBv	ND	09/27/02	PRM	7.6		
1,2-Dibromoethane	PPBv	ND	09/27/02	PRM	7.6		
1,2-Dichlorobenzene	PPBv	ND	09/27/02	PRM	7.6		
1,3-Dichlorobenzene	PPBv	ND	09/27/02	PRM	7.6		
1,4-Dichlorobenzene	PPBv	ND	09/27/02	PRM	7.6		
Dichlorodifluoromethane	PPBv	ND	09/27/02	PRM	7.6		
1,1-Dichloroethane	PPBv	ND	09/27/02	PRM	7.6		
1,2-Dichloroethane	PPBv	ND	09/27/02	PRM	7.6		
1,1-Dichloroethylene	PPBv	ND	09/27/02	PRM	7.6		
cis-1,2-Dichloroethylene	PPBv	ND	09/27/02	PRM	7.6		
1,2-Dichloropropane	PPBv	ND	09/27/02	PRM	7.6		
cis-1,3-Dichloropropene	PPBv	ND	09/27/02	PRM	7.6		
trans-1,3-Dichloropropene	PPBv	ND	09/27/02	PRM	7.6		
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	09/27/02	PRM	7.6		
Ethylbenzene	PPBv	ND	09/27/02	PRM	7.6		
Hexachlorobutadiene	PPBv	ND	09/27/02	PRM	7.6		
Methylene Chloride	PPBv	ND	09/27/02	PRM	7.6		
Styrene	PPBv	ND	09/27/02	PRM	7.6		
1,1,2,2-Tetrachloroethane	PPBv	ND	09/27/02	PRM	7.6		
Tetrachloroethylene	PPBv	ND	09/27/02	PRM	7.6		
Toluene	PPBv	ND	09/27/02	PRM	7.6		
1,2,4-Trichlorobenzene	PPBv	ND	09/27/02	PRM	7.6		
1,1,1-Trichloroethane	PPBv	ND	09/27/02	PRM	7.6		
1,1,2-Trichloroethane	PPBv	ND	09/27/02	PRM	7.6		

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Purchase Order No.:

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Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514

Date Received: 9/25/02

Job Number: -

Field Sample #: 3

Sample ID : \*02B25241

Sampled : 9/24/02

SVE INF SOUTH ONLY

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/ F
					Lo	Hi	
Trichloroethylene	PPBv	ND	09/27/02	PRM	7.6		
Trichlorofluoromethane (Freon 11)	PPBv	ND	09/27/02	PRM	7.6		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	09/27/02	PRM	7.6		
1,2,4-Trimethylbenzene	PPBv	ND	09/27/02	PRM	7.6		
1,3,5-Trimethylbenzene	PPBv	ND	09/27/02	PRM	7.6		
Vinyl Chloride	PPBv	ND	09/27/02	PRM	7.6		
m/p-Xylene	PPBv	ND	09/27/02	PRM	7.6		
o-Xylene	PPBv	ND	09/27/02	PRM	7.6		

Analytical Method:

EPA TO-14A

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

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Purchase Order No.:

Project Location: FLAGSHIP POU

Date Received: 9/25/02

Field Sample # : 4

Sample ID : 02B25242

Sampled : 9/24/02

SVE EFF SOUTH ONLY

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Benzene	PPBv	ND	09/27/02	PRM	0.5		
Bromomethane	PPBv	ND	09/27/02	PRM	0.5		
Carbon Tetrachloride	PPBv	ND	09/27/02	PRM	0.5		
Chlorobenzene	PPBv	ND	09/27/02	PRM	0.5		
Chloroethane	PPBv	ND	09/27/02	PRM	0.5		
Chloroform	PPBv	ND	09/27/02	PRM	0.5		
Chloromethane	PPBv	ND	09/27/02	PRM	0.5		
1,2-Dibromoethane	PPBv	ND	09/27/02	PRM	0.5		
1,2-Dichlorobenzene	PPBv	ND	09/27/02	PRM	0.5		
1,3-Dichlorobenzene	PPBv	ND	09/27/02	PRM	0.5		
1,4-Dichlorobenzene	PPBv	ND	09/27/02	PRM	0.5		
Dichlorodifluoromethane	PPBv	ND	09/27/02	PRM	0.5		
1,1-Dichloroethane	PPBv	ND	09/27/02	PRM	0.5		
1,2-Dichloroethane	PPBv	ND	09/27/02	PRM	0.5		
1,1-Dichloroethylene	PPBv	ND	09/27/02	PRM	0.5		
cis-1,2-Dichloroethylene	PPBv	ND	09/27/02	PRM	0.5		
1,2-Dichloropropane	PPBv	ND	09/27/02	PRM	0.5		
cis-1,3-Dichloropropene	PPBv	ND	09/27/02	PRM	0.5		
trans-1,3-Dichloropropene	PPBv	ND	09/27/02	PRM	0.5		
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	09/27/02	PRM	0.5		
Ethylbenzene	PPBv	ND	09/27/02	PRM	0.5		
Hexachlorobutadiene	PPBv	ND	09/27/02	PRM	0.5		
Methylene Chloride	PPBv	ND	09/27/02	PRM	0.5		
Styrene	PPBv	ND	09/27/02	PRM	0.5		
1,1,2,2-Tetrachloroethane	PPBv	ND	09/27/02	PRM	0.5		
Tetrachloroethylene	PPBv	ND	09/27/02	PRM	0.5		
Toluene	PPBv	ND	09/27/02	PRM	0.5		
1,2,4-Trichlorobenzene	PPBv	ND	09/27/02	PRM	0.5		
1,1,1-Trichloroethane	PPBv	ND	09/27/02	PRM	0.5		
1,1,2-Trichloroethane	PPBv	ND	09/27/02	PRM	0.5		

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LATHAM, NY 12110

10/1/02  
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Purchase Order No.:

Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514  
Job Number: -

Date Received: 9/25/02

Field Sample #: 4

Sample ID : 02B25242

Sampled : 9/24/02

SVE EFF SOUTH ONLY

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/ F
						Lo	Hi
Trichloroethylene	PPBv	ND	09/27/02	PRM	0.5		
Trichlorofluoromethane (Freon 11)	PPBv	ND	09/27/02	PRM	0.5		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	09/27/02	PRM	0.5		
1,2,4-Trimethylbenzene	PPBv	ND	09/27/02	PRM	0.5		
1,3,5-Trimethylbenzene	PPBv	ND	09/27/02	PRM	0.5		
Vinyl Chloride	PPBv	ND	09/27/02	PRM	0.5		
m/p-Xylene	PPBv	ND	09/27/02	PRM	0.5		
o-Xylene	PPBv	ND	09/27/02	PRM	0.5		

Analytical Method:

EPA TO-14A

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

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Purchase Order No.:

Project Location: FLAGSHIP POU

Date Received: 9/25/02

Field Sample #: 1

Sample ID : 02B25239

Sampled : 9/24/02

SVE INF NORTH/SOUTH

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Benzene	ug/cu m	ND	09/27/02	PRM	1.6		
Bromomethane	ug/cu m	ND	09/27/02	PRM	1.9		
Carbon Tetrachloride	ug/cu m	ND	09/27/02	PRM	3.1		
Chlorobenzene	ug/cu m	ND	09/27/02	PRM	2.3		
Chloroethane	ug/cu m	ND	09/27/02	PRM	1.3		
Chloroform	ug/cu m	ND	09/27/02	PRM	2.4		
Chloromethane	ug/cu m	ND	09/27/02	PRM	1.0		
1,2-Dibromoethane	ug/cu m	ND	09/27/02	PRM	3.8		
1,2-Dichlorobenzene	ug/cu m	ND	09/27/02	PRM	3.0		
1,3-Dichlorobenzene	ug/cu m	ND	09/27/02	PRM	3.0		
1,4-Dichlorobenzene	ug/cu m	ND	09/27/02	PRM	3.0		
Dichlorodifluoromethane	ug/cu m	ND	09/27/02	PRM	2.5		
1,1-Dichloroethane	ug/cu m	ND	09/27/02	PRM	2.0		
1,2-Dichloroethane	ug/cu m	ND	09/27/02	PRM	2.0		
1,1-Dichloroethylene	ug/cu m	ND	09/27/02	PRM	2.0		
cis-1,2-Dichloroethylene	ug/cu m	ND	09/27/02	PRM	2.0		
1,2-Dichloropropane	ug/cu m	ND	09/27/02	PRM	2.3		
cis-1,3-Dichloropropene	ug/cu m	ND	09/27/02	PRM	2.3		
trans-1,3-Dichloropropene	ug/cu m	ND	09/27/02	PRM	2.3		
1,2-Dichlorotetrafluoroethane (114)	ug/cu m	ND	09/27/02	PRM	3.5		
Ethylbenzene	ug/cu m	ND	09/27/02	PRM	2.2		
Hexachlorobutadiene	ug/cu m	ND	09/27/02	PRM	5.3		
Methylene Chloride	ug/cu m	ND	09/27/02	PRM	1.7		
Styrene	ug/cu m	ND	09/27/02	PRM	2.1		
1,1,2,2-Tetrachloroethane	ug/cu m	ND	09/27/02	PRM	3.4		
Tetrachloroethylene	ug/cu m	ND	09/27/02	PRM	3.4		
Toluene	ug/cu m	ND	09/27/02	PRM	1.9		
1,2,4-Trichlorobenzene	ug/cu m	ND	09/27/02	PRM	3.7		
1,1,1-Trichloroethane	ug/cu m	ND	09/27/02	PRM	2.7		
1,1,2-Trichloroethane	ug/cu m	ND	09/27/02	PRM	2.7		

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LATHAM, NY 12110

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Purchase Order No.:

Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514

Date Received: 9/25/02

Job Number: -

Field Sample #: 1

Sample ID : 02B25239

Sampled : 9/24/02

SVE INF NORTH/SOUTH

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Trichloroethylene	ug/cu m	ND	09/27/02	PRM	2.7		
Trichlorofluoromethane	ug/cu m	ND	09/27/02	PRM	2.8		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/cu m	ND	09/27/02	PRM	3.8		
1,2,4-Trimethylbenzene	ug/cu m	ND	09/27/02	PRM	2.5		
1,3,5-Trimethylbenzene	ug/cu m	ND	09/27/02	PRM	2.5		
Vinyl Chloride	ug/cu m	ND	09/27/02	PRM	1.3		
m/p-Xylene	ug/cu m	ND	09/27/02	PRM	2.2		
o-Xylene	ug/cu m	ND	09/27/02	PRM	2.2		

Analytical Method:

EPA TO-14A

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected

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\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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13 BRITISH AMERICAN BOULEVARD

LATHAM, NY 12110

10/1/02

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Purchase Order No.:

Project Location: FLAGSHIP POU

Date Received: 9/25/02

Field Sample #: 2

Sample ID : 02B25240

Sampled : 9/24/02

Sample Matrix: AIR

SVE EFF NORTH/SOUTH

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Benzene	ug/cu m	ND	09/27/02	PRM	1.6		
Bromomethane	ug/cu m	ND	09/27/02	PRM	1.9		
Carbon Tetrachloride	ug/cu m	ND	09/27/02	PRM	3.1		
Chlorobenzene	ug/cu m	ND	09/27/02	PRM	2.3		
Chloroethane	ug/cu m	ND	09/27/02	PRM	1.3		
Chloroform	ug/cu m	ND	09/27/02	PRM	2.4		
Chloromethane	ug/cu m	ND	09/27/02	PRM	1.0		
1,2-Dibromoethane	ug/cu m	ND	09/27/02	PRM	3.8		
1,2-Dichlorobenzene	ug/cu m	ND	09/27/02	PRM	3.0		
1,3-Dichlorobenzene	ug/cu m	ND	09/27/02	PRM	3.0		
1,4-Dichlorobenzene	ug/cu m	ND	09/27/02	PRM	3.0		
Dichlorodifluoromethane	ug/cu m	ND	09/27/02	PRM	2.5		
1,1-Dichloroethane	ug/cu m	ND	09/27/02	PRM	2.0		
1,2-Dichloroethane	ug/cu m	ND	09/27/02	PRM	2.0		
1,1-Dichloroethylene	ug/cu m	ND	09/27/02	PRM	2.0		
cis-1,2-Dichloroethylene	ug/cu m	ND	09/27/02	PRM	2.0		
1,2-Dichloropropane	ug/cu m	ND	09/27/02	PRM	2.3		
cis-1,3-Dichloropropene	ug/cu m	ND	09/27/02	PRM	2.3		
trans-1,3-Dichloropropene	ug/cu m	ND	09/27/02	PRM	2.3		
1,2-Dichlorotetrafluoroethane (114)	ug/cu m	ND	09/27/02	PRM	3.5		
Ethylbenzene	ug/cu m	ND	09/27/02	PRM	2.2		
Hexachlorobutadiene	ug/cu m	ND	09/27/02	PRM	5.3		
Methylene Chloride	ug/cu m	ND	09/27/02	PRM	1.7		
Styrene	ug/cu m	ND	09/27/02	PRM	2.1		
1,1,2,2-Tetrachloroethane	ug/cu m	ND	09/27/02	PRM	3.4		
Tetrachloroethylene	ug/cu m	ND	09/27/02	PRM	3.4		
Toluene	ug/cu m	ND	09/27/02	PRM	1.9		
1,2,4-Trichlorobenzene	ug/cu m	ND	09/27/02	PRM	3.7		
1,1,1-Trichloroethane	ug/cu m	ND	09/27/02	PRM	2.7		
1,1,2-Trichloroethane	ug/cu m	ND	09/27/02	PRM	2.7		

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Purchase Order No.:

Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514

Date Received: 9/25/02

Job Number: -

Field Sample # : 2

Sample ID : 02B25240

Sampled : 9/24/02

SVE EFF NORTH/SOUTH

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Trichloroethylene	ug/cu m	ND	09/27/02	PRM	2.7		
Trichlorofluoromethane	ug/cu m	ND	09/27/02	PRM	2.8		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/cu m	ND	09/27/02	PRM	3.8		
1,2,4-Trimethylbenzene	ug/cu m	ND	09/27/02	PRM	2.5		
1,3,5-Trimethylbenzene	ug/cu m	ND	09/27/02	PRM	2.5		
Vinyl Chloride	ug/cu m	ND	09/27/02	PRM	1.3		
m/p-Xylene	ug/cu m	ND	09/27/02	PRM	2.2		
o-Xylene	ug/cu m	ND	09/27/02	PRM	2.2		

Analytical Method:

EPA TO-14A

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

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NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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LATHAM, NY 12110

Purchase Order No.:

Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514

Date Received: 9/25/02

Job Number: -

Field Sample #: 3

Sample ID : 02B25241

Sampled : 9/24/02

SVE INF SOUTH ONLY

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Benzene	ug/cu m	ND	09/27/02	PRM	24.3		
Bromomethane	ug/cu m	ND	09/27/02	PRM	29.4		
Carbon Tetrachloride	ug/cu m	ND	09/27/02	PRM	47.0		
Chlorobenzene	ug/cu m	ND	09/27/02	PRM	34.9		
Chloroethane	ug/cu m	ND	09/27/02	PRM	20.0		
Chloroform	ug/cu m	ND	09/27/02	PRM	36.9		
Chloromethane	ug/cu m	ND	09/27/02	PRM	15.6		
1,2-Dibromoethane	ug/cu m	ND	09/27/02	PRM	58.3		
1,2-Dichlorobenzene	ug/cu m	ND	09/27/02	PRM	45.7		
1,3-Dichlorobenzene	ug/cu m	ND	09/27/02	PRM	45.7		
1,4-Dichlorobenzene	ug/cu m	ND	09/27/02	PRM	45.7		
Dichlorodifluoromethane	ug/cu m	ND	09/27/02	PRM	37.5		
1,1-Dichloroethane	ug/cu m	ND	09/27/02	PRM	30.6		
1,2-Dichloroethane	ug/cu m	ND	09/27/02	PRM	30.6		
1,1-Dichloroethylene	ug/cu m	ND	09/27/02	PRM	30.0		
cis-1,2-Dichloroethylene	ug/cu m	ND	09/27/02	PRM	30.0		
1,2-Dichloropropane	ug/cu m	ND	09/27/02	PRM	35.0		
cis-1,3-Dichloropropene	ug/cu m	ND	09/27/02	PRM	34.4		
trans-1,3-Dichloropropene	ug/cu m	ND	09/27/02	PRM	34.4		
1,2-Dichlorotetrafluoroethane (114)	ug/cu m	ND	09/27/02	PRM	53.1		
Ethylbenzene	ug/cu m	ND	09/27/02	PRM	32.9		
Hexachlorobutadiene	ug/cu m	ND	09/27/02	PRM	80.9		
Methylene Chloride	ug/cu m	ND	09/27/02	PRM	26.4		
Styrene	ug/cu m	ND	09/27/02	PRM	32.3		
1,1,2,2-Tetrachloroethane	ug/cu m	ND	09/27/02	PRM	52.0		
Tetrachloroethylene	ug/cu m	ND	09/27/02	PRM	51.4		
Toluene	ug/cu m	ND	09/27/02	PRM	28.5		
1,2,4-Trichlorobenzene	ug/cu m	ND	09/27/02	PRM	56.3		
1,1,1-Trichloroethane	ug/cu m	ND	09/27/02	PRM	41.4		
1,1,2-Trichloroethane	ug/cu m	ND	09/27/02	PRM	41.4		

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Purchase Order No.:

Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514

Date Received: 9/25/02

Job Number: -

Field Sample # : 3

Sample ID : 02B25241

Sampled : 9/24/02

SVE INF SOUTH ONLY

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Trichloroethylene	ug/cu m	ND	09/27/02	PRM	40.8		
Trichlorofluoromethane	ug/cu m	ND	09/27/02	PRM	42.6		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/cu m	ND	09/27/02	PRM	58.1		
1,2,4-Trimethylbenzene	ug/cu m	ND	09/27/02	PRM	37.3		
1,3,5-Trimethylbenzene	ug/cu m	ND	09/27/02	PRM	37.3		
Vinyl Chloride	ug/cu m	ND	09/27/02	PRM	19.4		
m/p-Xylene	ug/cu m	ND	09/27/02	PRM	32.9		
o-Xylene	ug/cu m	ND	09/27/02	PRM	32.9		

Analytical Method:

EPA TO-14A

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

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Purchase Order No.:

Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514

Date Received: 9/25/02

Job Number: -

Field Sample # : 4

Sample ID : 02B25242

Sampled : 9/24/02

SVE EFF SOUTH ONLY

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Benzene	ug/cu m	ND	09/27/02	PRM	1.6		
Bromomethane	ug/cu m	ND	09/27/02	PRM	1.9		
Carbon Tetrachloride	ug/cu m	ND	09/27/02	PRM	3.1		
Chlorobenzene	ug/cu m	ND	09/27/02	PRM	2.3		
Chloroethane	ug/cu m	ND	09/27/02	PRM	1.3		
Chloroform	ug/cu m	ND	09/27/02	PRM	2.4		
Chloromethane	ug/cu m	ND	09/27/02	PRM	1.0		
1,2-Dibromoethane	ug/cu m	ND	09/27/02	PRM	3.8		
1,2-Dichlorobenzene	ug/cu m	ND	09/27/02	PRM	3.0		
1,3-Dichlorobenzene	ug/cu m	ND	09/27/02	PRM	3.0		
1,4-Dichlorobenzene	ug/cu m	ND	09/27/02	PRM	3.0		
Dichlorodifluoromethane	ug/cu m	ND	09/27/02	PRM	2.5		
1,1-Dichloroethane	ug/cu m	ND	09/27/02	PRM	2.0		
1,2-Dichloroethane	ug/cu m	ND	09/27/02	PRM	2.0		
1,1-Dichloroethylene	ug/cu m	ND	09/27/02	PRM	2.0		
cis-1,2-Dichloroethylene	ug/cu m	ND	09/27/02	PRM	2.0		
1,2-Dichloropropane	ug/cu m	ND	09/27/02	PRM	2.3		
cis-1,3-Dichloropropene	ug/cu m	ND	09/27/02	PRM	2.3		
trans-1,3-Dichloropropene	ug/cu m	ND	09/27/02	PRM	2.3		
1,2-Dichlorotetrafluoroethane (114)	ug/cu m	ND	09/27/02	PRM	3.5		
Ethylbenzene	ug/cu m	ND	09/27/02	PRM	2.2		
Hexachlorobutadiene	ug/cu m	ND	09/27/02	PRM	5.3		
Methylene Chloride	ug/cu m	ND	09/27/02	PRM	1.7		
Styrene	ug/cu m	ND	09/27/02	PRM	2.1		
1,1,2,2-Tetrachloroethane	ug/cu m	ND	09/27/02	PRM	3.4		
Tetrachloroethylene	ug/cu m	ND	09/27/02	PRM	3.4		
Toluene	ug/cu m	ND	09/27/02	PRM	1.9		
1,2,4-Trichlorobenzene	ug/cu m	ND	09/27/02	PRM	3.7		
1,1,1-Trichloroethane	ug/cu m	ND	09/27/02	PRM	2.7		
1,1,2-Trichloroethane	ug/cu m	ND	09/27/02	PRM	2.7		

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Purchase Order No.:

Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514

Date Received: 9/25/02

Job Number: -

Field Sample # : 4

Sample ID : 02B25242

Sampled : 9/24/02

SVE EFF SOUTH ONLY

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F	SPEC Limit Hi
Trichloroethylene	ug/cu m	ND	09/27/02	PRM	2.7			
Trichlorofluoromethane	ug/cu m	ND	09/27/02	PRM	2.8			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/cu m	ND	09/27/02	PRM	3.8			
1,2,4-Trimethylbenzene	ug/cu m	ND	09/27/02	PRM	2.5			
1,3,5-Trimethylbenzene	ug/cu m	ND	09/27/02	PRM	2.5			
Vinyl Chloride	ug/cu m	ND	09/27/02	PRM	1.3			
m/p-Xylene	ug/cu m	ND	09/27/02	PRM	2.2			
o-Xylene	ug/cu m	ND	09/27/02	PRM	2.2			

## Analytical Method:

EPA TO-14A

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

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10/1/02

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Purchase Order No.:

Project Location: FLAGSHIP POU

LIMS-BAT #: LIMS-66514

Date Received: 9/25/02

Job Number: -

The following notes were attached to the reported analysis :

Sample ID: \* 02B25241

Analysis: to-14 ppbv

CANISTER RETURNED TO LABORATORY UNDER HIGH VACUUM. NITROGEN ADDED TO PROVIDE SUFFICIENT VOLUME FOR ANALYSIS, RESULTING IN Elevated DETECTION LIMITS.

\*\* END OF REPORT \*\*

RL = Reporting Limit

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SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample



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### QC SUMMARY REPORT

#### SAMPLE QC: Sample Results with Duplicates.

Sample Matrix Spikes and Matrix Spike Duplicates

#### BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 10/1/02 Lims Bat #: LIMS-66514 Page 1 of 3

QC Batch Number: BATCH-4778

Sample Id	Analysis	QC Analysis	Values	Units	Limits
02B25239	4-Bromofluorobenzene	Surrogate Recovery	82.8	%	70-130
02B25240	4-Bromofluorobenzene	Surrogate Recovery	83.5	%	70-130
02B25241	4-Bromofluorobenzene	Surrogate Recovery	75.8	%	70-130
02B25242	4-Bromofluorobenzene	Surrogate Recovery	86.0	%	70-130
BLANK-44845	Benzene	Blank	<0.5	PPBv	
	Carbon Tetrachloride	Blank	<0.5	PPBv	
	Chloroform	Blank	<0.5	PPBv	
	1,2-Dichloroethane	Blank	<0.5	PPBv	
	1,4-Dichlorobenzene	Blank	<0.5	PPBv	
	Ethylbenzene	Blank	<0.5	PPBv	
	Styrene	Blank	<0.5	PPBv	
	Tetrachloroethylene	Blank	<0.5	PPBv	
	Toluene	Blank	<0.5	PPBv	
	1,1,1-Trichloroethane	Blank	<0.5	PPBv	
	Trichloroethylene	Blank	0.9	PPBv	
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Blank	<0.5	PPBv	
	Trichlorofluoromethane (Freon 11)	Blank	<0.5	PPBv	
	o-Xylene	Blank	<0.5	PPBv	
	m/p-Xylene	Blank	<0.5	PPBv	
	1,2-Dichlorobenzene	Blank	<0.5	PPBv	
	1,3-Dichlorobenzene	Blank	<0.5	PPBv	
	1,1-Dichloroethane	Blank	<0.5	PPBv	
	1,1-Dichloroethylene	Blank	<0.5	PPBv	
	Vinyl Chloride	Blank	<0.5	PPBv	
	Methylene Chloride	Blank	5.7	PPBv	
	Chlorobenzene	Blank	<0.5	PPBv	
	Chloromethane	Blank	<0.5	PPBv	
	Bromomethane	Blank	<0.5	PPBv	
	Chloroethane	Blank	<0.5	PPBv	
	cis-1,3-Dichloropropene	Blank	<0.5	PPBv	
	trans-1,3-Dichloropropene	Blank	<0.5	PPBv	
	1,1,2-Trichloroethane	Blank	<0.5	PPBv	
	1,1,2,2-Tetrachloroethane	Blank	<0.5	PPBv	
	Hexachlorobutadiene	Blank	<0.5	PPBv	
	1,2,4-Trichlorobenzene	Blank	<0.5	PPBv	
	1,2,4-Trimethylbenzene	Blank	<0.5	PPBv	
	1,3,5-Trimethylbenzene	Blank	<0.5	PPBv	
	cis-1,2-Dichloroethylene	Blank	<0.5	PPBv	
	1,2-Dichloropropane	Blank	<0.5	PPBv	



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#### QC SUMMARY REPORT

##### SAMPLE QC: Sample Results with Duplicates.

Sample Matrix Spikes and Matrix Spike Duplicates

##### BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 10/1/02

Lims Bat #: LIMS-66514

Page 2 of 3

QC Batch Number: BATCH-4778

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-44845					
	Dichlorodifluoromethane	Blank	<0.5	PPBv	
	1,2-Dibromoethane	Blank	<0.5	PPBv	
	1,2-Dichlorotetrafluoroethane (114)	Blank	<0.5	PPBv	



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### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates.

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:

10/1/02

Lims Bat #: LIMS-66514

Page 3 of 3

### QUALITY CONTROL DEFINITIONS AND ABBREVIATIONS

QC BATCH NUMBER

This is the number assigned to all samples analyzed together that would be subject to comparison with a particular set of Quality Control Data.

LIMITS

Upper and Lower Control Limits for the QC ANALYSIS Reported. All values normally would fall within these statistically determined limits, unless there is an unusual circumstance that would be documented in a NOTE appearing on the last page of the QC SUMMARY REPORT. Not all QC results will have Limits defined.

Sample Amount

Amount of analyte found in a sample.

Blank

Method Blank that has been taken through all the steps of the analysis.

LFBLANK

Laboratory Fortified Blank (a control sample)

STDADD

Standard Added (a laboratory control sample)

Matrix Spk Amt Added  
MS Amt Measured

Amount of analyte spiked into a sample  
Amount of analyte found including amount that was spiked  
% Recovery of spiked amount in sample.

Duplicate Value  
Duplicate RPD

The result from the Duplicate analysis of the sample.  
The Relative Percent Difference between two Duplicate Analyses.

Surrogate Recovery

The % Recovery for non-environmental compounds (surrogates) spiked into samples to determine the performance of the analytical methods.

Sur. Recovery (ELCD)  
Sur. Recovery (PID)

Surrogate Recovery on the Electrolytic Conductivity Detector.  
Surrogate Recovery on the Photoionization Detector.

Standard Measured  
Standard Amt Added  
Standard % Recovery

Amount measured for a laboratory control sample  
Known value for a laboratory control sample  
% recovered for a laboratory control sample with a known value.

Lab Fort Blank Amt  
Lab Fort Blk. Found  
Lab Fort Blk % Rec  
Dup Lab Fort Bl Amt  
Dup Lab Fort Bl Fnd  
Dup Lab Fort Bl % Rec  
Lab Fort Blank Range

Laboratory Fortified Blank Amount Added  
Laboratory Fortified Blank Amount Found  
Laboratory Fortified Blank % Recovered  
Duplicate Laboratory Fortified Blank Amount Added  
Duplicate Laboratory Fortified Blank Amount Found  
Duplicate Laboratory Fortified Blank % Recovery  
Laboratory Fortified Blank Range (Absolute value of difference between recoveries for Lab Fortified Blank and Lab Fortified Blank Duplicate).

Lab Fort Bl. Av. Rec.

Laboratory Fortified Blank Average Recovery

Duplicate Sample Amt  
MSD Amount Added  
MSD Amt Measured  
MSD % Recovery  
MSD Range

Sample Value for Duplicate used with Matrix Spike Duplicate  
Matrix Spike Duplicate Amount Added (Spiked)  
Matrix Spike Duplicate Amount Measured  
Matrix Spike Duplicate % Recovery  
Absolute difference between Matrix Spike and Matrix Spike Duplicate Recoveries



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Lims# 66514

## CHAIN OF CUSTODY RECORD

39 SPRUCE ST. • 2ND FLOOR • EAST LONGMEADOW, MA 01028

Client Name: Sh'aw Ed & I  
Attn: Brian Newman  
Address: 13 Britzg American Blvd  
Latham N.Y. 12110  
Site Location: Flagship POU.  
Sampled By: R. Hyde

Telephone: 518-783-1956

Batch #:

Project #:

Client  
P.O. #:

Call Results: Yes  No

Email Format: .pdf format .xls format

Fax OR Email Results: Fax#: 518-783-8397

Email Address:

Total # of Containers submitted with this chain:

DATE  
SAMPLED

Field Sample I.D.	Sample Description	Lab # 02B	Start Date/Time	Stop Date/Time	Composite	Grab	MATRIX				Preservative (Use Code)	Container (Use Code)
							WASTE WATER	GROUND WATER	DKG WATER	Soil	Air	
1	SVE INF North/south	25239	9/24 0900	1100	2 hr					X		X
2	SVE EFF North/south	25240	↓	↓	↓					X		↑
3	SVE INF South only	25241	9/24 1200	1400	2 hr					X		X
4	SVE EFF South Only	25242		1400	↓					X		X

CONTAINER CODE

P: PLASTIC ( Size) V = 40 ml vial G = Glass ( size) A = 1000 ml Amber O = Other

I = ICED N = HNO<sub>3</sub> H = HCl S = NaOH T = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> O = OTHER

RELINQUISHED BY: (Signature) Date Time Received by (Signature) 1500 9/25 1000

If this section is not filled out, Con-Test will analyze at normal turnaround.  
Turnaround Requested: 24-Hour  48-Hour  Normal   
Other  Date Required

RELINQUISHED BY: (Signature) Date Time Received by (Signature)

REMARKS/COMMENTS: DETECTION LIMIT REQUESTS:

REGULATIONS? SIMS: Yes  No

\*MATRIX OTHER