

September 7, 1999

John LaBarge, P.E., Director
New York State
Department of Transportation
Consultant Management Bureau
State Office Building Campus
Building 4, Room G-01
1220 Washington Avenue
Albany, NY 12232

Re: Quarterly Monitoring Report
Barlow Road Air Sparging System
PIN 9803.62.301
Harza No. 8334

Attn: Gregory E. Menard, P.E.

Ladies and Gentlemen:

This letter constitutes Harza Engineering Company's (Harza's) report on the fifth quarter (April through June 1999) of operation of the Barlow Road air sparging system. The results of quarterly environmental monitoring performed in early July 1999 are also presented. Operation of the remediation system began on April 1, 1998. Since that date, system operation and maintenance activities have been performed in accordance with the March 1998 *Air Sparging System Operations and Maintenance Manual*. Start-up monitoring and quarterly monitoring of the system has been performed in accordance with the project *Environmental Monitoring Plan* dated March 6, 1998.

1.0 OPERATION AND MAINTENANCE

Automated daily air sparging was performed throughout April, May, and June 1999. The blower and air distribution valve timers were set for Monday through Friday sparging of the deep water table aquifer from 7:00 AM to 1:00 PM and sparging of the shallow water table aquifer from 1:00 PM to 7:00 PM. On Saturdays and Sundays, deep aquifer sparging was set for 10:00 AM to 2:00 PM and shallow aquifer sparging was performed from 2:00 PM to 6:00 PM. The system was shut down from June 28 through July 7, 1999, for routine quarterly maintenance and monitoring. No major disruptions to normal system operation occurred during the second quarter of 1999. No equipment repairs were necessary during this quarter.

Air delivery to the deep sparge points was at approximately 3 cfm with pressure in the 10 to 12 psi range. Air delivery to the shallow sparge system was at 10 to 15 cfm and 10 to 25 psi to each sparge point. Sparging of the shallow points was on an individual basis with weekly rotation between the three shallow points fed by each air distribution manhole.

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2.0 ENVIRONMENTAL MONITORING

Environmental monitoring of groundwater, soil vapor, and the soil vent system discharge was performed in accordance with the *Environmental Monitoring Plan*. Figure 1 is a site plan showing the system layout and locations of the monitored points.

2.1 Shallow Water Table Aquifer

The results of January 1998 pre-sparging baseline, July 1998, October 1998, January 1999, April 1999, and July 1999 groundwater sample analyses for samples collected from the shallow water table aquifer are presented in Table 1. These data are presented graphically in Figure 2. Attachment 1 contains the laboratory reports for the July 1999 sampling event. Laboratory data for the previous sampling events were presented in previous reports.

After the first six months of sparging the shallow water table aquifer (April through October 1998), trichloroethene (TCE) concentrations in the shallow aquifer groundwater fell drastically at all sampled points. No TCE was detected in the shallow water table aquifer at the monitored points above the 500 ppb hazardous waste level after six months of sparging.

As indicated on Table 1, TCE concentrations measured in July 1999 remain above the site cleanup goal of 50 to 100 ppb at SS-8 (223 ppb), SV-14 (398 ppb) and FHX-12 (326 ppb). The cleanup goal was met at all other monitored points. However, the TCE versus time plot (Figure 2) shows an overall flattening of the curve over the last three quarters. This indicates that remediation of the shallow aquifer has met asymptotic conditions where the technology applied has had its greatest impact and continued sparging will result in little further change in TCE concentrations.

According to the *Environmental Monitoring Plan*: "When quarterly monitoring has indicated that shallow groundwater TCE concentrations remain consistently (for two consecutive quarters) below the 50 to 100 ppb IRM cleanup level (or have obtained an asymptotic condition) throughout the IRM area, air sparging shall cease and post IRM monitoring shall be implemented." After 15 months of sparging, TCE levels consistently within or below the 50 to 100 ppb cleanup goal range have not been attained at all of the shallow water table aquifer monitoring points however TCE concentrations have reached asymptotic conditions.

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Gasoline related compounds were detected in the shallow water table aquifer during the July 1999 sampling event. Gasoline related compounds have generally not been detected in the shallow water table aquifer since the initiation of sparging. Toluene, ethylbenzene and xylene (without benzene and MTBE) were detected in SV-14. The presence of gasoline related impacts to groundwater in the upgradient portion of the site was established in studies performed before the initiation of site sparging. A second area of gasoline related impacts to shallow groundwater is indicated by the July 1999 results in the southern portion of the site. BTEX and MTBE were detected along with gasoline degradation products and naphthalene at SS-4 in the southeastern portion of the IRM area. MTBE alone was detected in SS-5, SS-8, SS-10, and FHX-12 indicating the edge of the plume in this area. No gasoline related compounds were detected in the deep portion of the water table aquifer.

In-situ hydraulic conductivity tests were performed before initiation of sparging and quarterly thereafter at SS-10 and SS-8 to assess potential plugging of the formation due to precipitation of inorganic materials induced by sparging. Results of site hydraulic conductivity tests are summarized in Table 2. July 1999 hydraulic conductivity measured at SS-8 and SS-10 are consistent with pre-sparging conditions.

July 1999 measurement of field water quality parameters in the shallow water table aquifer continue to indicate increases in average temperature, conductivity, and dissolved oxygen over background conditions. Groundwater elevations remained within the range normally associated with seasonal fluctuations.

2.2 Deep Water Table Aquifer

The results of analyses performed on groundwater samples collected from the deep water table aquifer monitoring points are summarized in Table 3. Figure 3 presents a graph of deep water table aquifer TCE concentrations versus time. Laboratory reports for the baseline, first, second, third and fourth quarter deep aquifer sampling events were presented in previous reports. The laboratory report for the July 1999 groundwater sampling is presented in Attachment 1.

TCE levels in the deep portion of the water table aquifer have fallen into the project cleanup goal range of 50 to 100 ppb for the last two quarters. Cis-1,2-DCE was the only other VOC detected in the deep portion of the water table aquifer.

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As is the case with the shallow portion of the aquifer, field water quality parameters measured in the deep water table aquifer continue to indicate increases in average temperature, conductivity, and dissolved oxygen over background conditions. Groundwater elevations remain within the range normally associated with seasonal fluctuations.

In-situ hydraulic conductivity tests were not performed on DS-2 and DS-5 in July of 1999. Sufficient drawdown to perform a test could not be attained by hand bailing indicating sustained high hydraulic conductivity in the lower portion of the water table aquifer.

2.3 Soil Vapor

The results of monitoring at the locations of soil vapor probes VP-1 through VP-6 are summarized in Table 4. The average pre-sparging soil vapor TCE concentration was $467.7 \mu\text{g}/\text{m}^3$. Laboratory analysis of soil vapor TCE concentrations is not scheduled to take place again until the post-IRM monitoring program is initiated.

The average of soil vapor photoionization detector (PID) reading in July 1999 was 4.2 ppm, below the baseline average of 9.6 ppm. Soil vapor percent oxygen readings were not taken in July 1999 due to instrument malfunction. Soil vapor pressure averaged 0.01 psi in the IRM area (with the system running).

2.4 Air Discharge

Results of air monitoring of the shallow and deep vent stack discharges and of upwind and downwind PID measurements are summarized in Table 5. According to the minor source NYSDEC Air Facility Registration, the maximum permissible annual discharge of individual hazardous air pollutants (HAPS) is 5 tons/year and the maximum permissible annual discharge of total VOC is 12.5 tons/year. Results of the July 1999 stack sampling indicate that the maximum total VOC and individual HAPS potential to emit levels were well below the permissible levels.

3.0 RECOMMENDATIONS

Results of the July 1999 monitoring indicate that shallow water table TCE concentrations have attained asymptotic conditions. Results of the July 1999 monitoring of the deep portion of the water table aquifer indicate that TCE concentrations have fallen into the

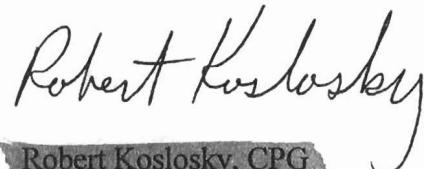
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project cleanup range. Cessation of sparging in the shallow and deep portions of the water table aquifer is recommended along with the implementation of a post-IRM groundwater monitoring program.

Post-IRM monitoring of the aquifer should be implemented in accordance with the project *Environmental Monitoring Plan*. Post-remediation monitoring should begin with a repeat of the baseline sampling as performed in January of 1998 followed by one year of quarterly groundwater sampling of selected monitoring points to assess potential post-sparging rebound of contaminant concentrations and the effects of seasonal groundwater elevation fluctuation. Reactivation of the sparge system (or portions thereof) and re-implementation of the monitoring program may be necessary if post-IRM monitoring indicates excessive rebound of TCE concentrations.

Harza thanks the NYSDOT for the opportunity to provide services on the Barlow Road project. If you have any questions or comments, please call me at (315) 797-5800.

Sincerely,



Robert Koslosky, CPG
Hydrogeologist

RAK:sek
Attachments
cc: Joel Robinson, NYSDOT Region 9
 Paul Romano, P.E., Harza
 Tom Suozzo, NYSDEC Region 7

FIGURE 2
[TCE] vrs TIME - Shallow Aquifer

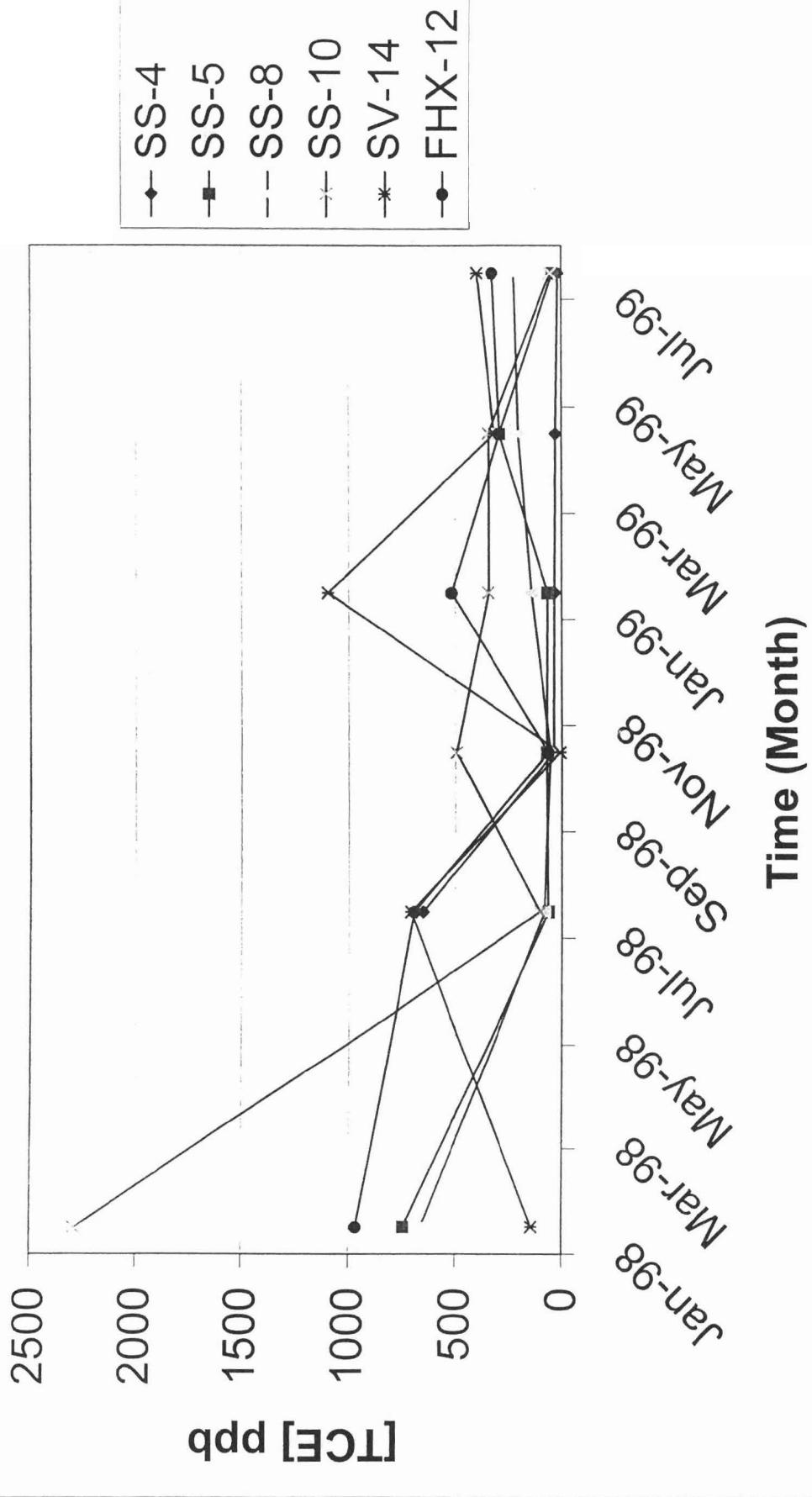


FIGURE 3
[TCE] vrs TIME - Deep Aquifer

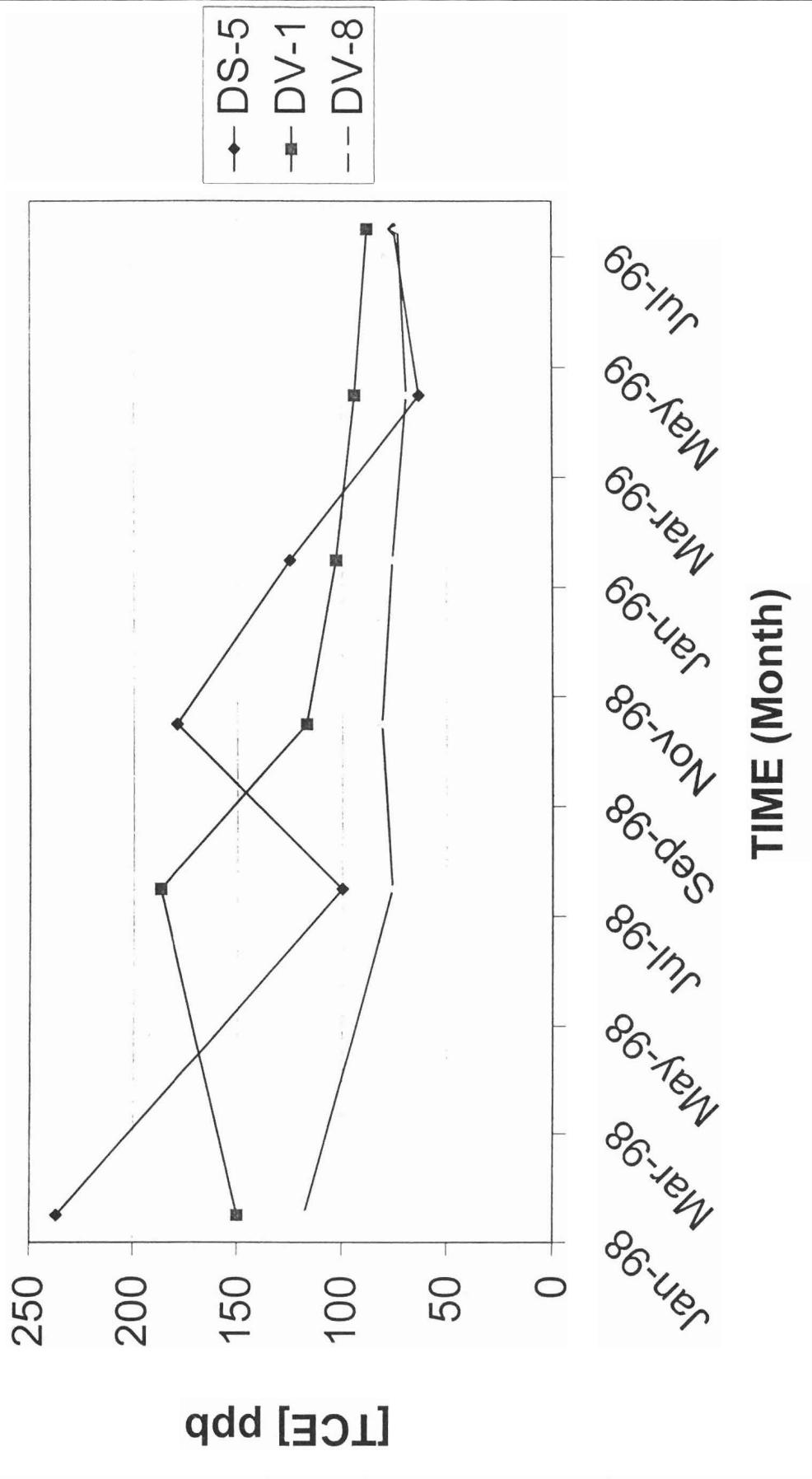


TABLE 1
NYS DOT BARLOW ROAD
SUMMARY OF GROUNDWATER VOC ANALYTICAL RESULTS
SHALLOW WATER TABLE AQUIFER

SAMPLE NUMBER/ LOCATION	ANALYTE	CONCENTRATION (ppb) 1/21/98 BASELINE	CONCENTRATION (ppb) 7/15&16/1998 1ST QUARTER	CONCENTRATION (ppb) 10/14/98 2ND QUARTER	CONCENTRATION (ppb) 1/12/99 3RD QUARTER	CONCENTRATION (ppb) 4/6/99 4TH QUARTER	CONCENTRATION (ppb) 7/7/99 5TH QUARTER	NYSDEC GROUNDWATER STANDARD OR GUIDANCE (ppb)
SS-4 Crossgradient East	trans-1,2-Dichloroethene	NS	2.6	ND	ND	ND	ND	5
	cis-1,2-Dichloroethene	NS	172	9.4	4.6	5.8	ND	5
	Trichloroethene	NS	653	36	33	28	17	5
	Benzene	NS	ND	ND	ND	ND	2.2	1
	Toluene	NS	ND	ND	ND	ND	7.0	5
	Ethylbenzene	NS	ND	ND	ND	ND	2.1	5
	m+p-Xylene	NS	ND	ND	ND	ND	13	5
	o-Xylene	NS	ND	ND	ND	ND	6.1	5
	n-Propylbenzene	NS	ND	ND	ND	ND	2.0	5
	1,3,5-Trimethylbenzene	NS	ND	ND	ND	ND	6.2	5
	4-Isopropyltoluene	NS	ND	ND	ND	ND	1.0	5
	1,2,4-Trimethylbenzene	NS	ND	ND	ND	ND	24	5
	tertiary-Butylbenzene	NS	ND	ND	ND	ND	2.9	5
	Naphthalene	NS	ND	ND	ND	ND	63	10
SS-5 Downgradient Plume Spine	MTBE	NS	ND	ND	ND	ND	474	NR
	Vinyl Chloride	0.8	ND	ND	ND	ND	ND	2
	1,1-Dichloroethane	0.8	ND	ND	ND	ND	ND	5
	cis-1,2-Dichloroethene	198	24	18	16	38	11	5
	1,1,1-Trichloroethane	2.4	ND	ND	ND	ND	ND	5
	Benzene	1.1	ND	ND	ND	ND	ND	0.7
	1,2-Dichloroethane	4.3	ND	ND	ND	ND	ND	5
SS-8 Downgradient Plume Spine	Trichloroethene	745	63	70	64	293	40	5
	MTBE	ND	ND	ND	ND	ND	ND	NR
	Vinyl Chloride	1.7	ND	ND	ND	ND	ND	2
	1,1-Dichloroethane	1.2	ND	ND	ND	ND	ND	5
	cis-1,2-Dichloroethene	44	5.4	5.3	9.1	13	15	5
	1,1,1-Trichloroethane	2.8	0.6	ND	ND	ND	ND	5
	Benzene	1.9	ND	ND	ND	ND	ND	0.7
SS-10 Plume Core South	1,2-Dichloroethane	14	2.3	ND	ND	ND	ND	5
	Trichloroethene	661	82	52	141	203	223	5
	Ethylbenzene	0.7	ND	ND	ND	ND	ND	5
	MTBE	ND	ND	ND	ND	ND	23	NR
	trans-1,2-Dichloroethene	0.8	ND	ND	ND	ND	ND	5
	1,1-Dichloroethane	0.7	ND	ND	ND	ND	ND	5
	cis-1,2-Dichloroethene	89	2.1	47	24	14	28	5
SS-11 Plume Core North	1,1,1-Trichloroethane	1.4	ND	ND	ND	ND	ND	5
	Benzene	2.3	ND	0.6	ND	ND	ND	0.7
	1,2-Dichloroethane	3.8	ND	4.4	ND	ND	ND	5
SS-16 BTEX Plume	Trichloroethene	2289	103	493	345	344	52	5
	Toluene	1.4	ND	ND	ND	ND	ND	5
	Ethylbenzene	1.1	ND	ND	ND	ND	ND	5
	m+p-Xylene	4.3	ND	ND	ND	ND	ND	5
	o-Xylene	2.5	ND	ND	ND	ND	ND	5
	MTBE	ND	ND	ND	ND	ND	17	NR
	cis-1,2-Dichloroethene	376	NS	NS	NS	NS	NS	5
SV-9 Crossgradient East	1,2-Dichloroethane	1185	NS	NS	NS	NS	NS	5
	VOC	ND	NS	NS	NS	NS	NS	
SV-9 Crossgradient East	Vinyl Chloride	8.9	NS	NS	NS	NS	NS	2
	trans-1,2-Dichloroethene	1.1	NS	NS	NS	NS	NS	5
	1,1-Dichloroethane	0.6	NS	NS	NS	NS	NS	5
	cis-1,2-Dichloroethene	40	NS	NS	NS	NS	NS	5
	1,2-Dichloroethane	1.3	NS	NS	NS	NS	NS	5
SV-9 Crossgradient East	Trichloroethene	146	NS	NS	NS	NS	NS	5

VOC = Project target list volatile organic compounds.

ND = Not Detected.

NYSDEC standards and guidance values from TOGS 1.1.1

Bold and shaded numbers exceed standards or guidance values.

NA = Compound not analyzed for during sampling event.

NS = Well not sampled during sampling event.

NR = Not Regulated.

TABLE 1
(Continued)
NYSDOT BARLOW ROAD
SUMMARY OF GROUNDWATER VOC ANALYTICAL RESULTS
SHALLOW WATER TABLE AQUIFER

SAMPLE NUMBER/ LOCATION	ANALYTE	CONCENTRATION (ppb) 1/21/98 BASELINE	CONCENTRATION (ppb) 7/15&16/1998 1ST QUARTER	CONCENTRATION (ppb) 10/14/98 2ND QUARTER	CONCENTRATION (ppb) 1/12/99 3RD QUARTER	CONCENTRATION (ppb) 4/6/99 4TH QUARTER	CONCENTRATION (ppb) 7/7/99 5TH QUARTER	NYSDEC GROUNDWATER STANDARD OR GUIDANCE (ppb)
SV-12 Crossgradient West	trans-1,2-Dichloroethene	1.0	NS	NS	NS	NS	NS	5
	1,1-Dichloroethane	0.8	NS	NS	NS	NS	NS	5
	cis-1,2-Dichloroethene	351	NS	NS	NS	NS	NS	5
	1,1,1-Trichloroethane	0.6	NS	NS	NS	NS	NS	5
	Benzene	0.9	NS	NS	NS	NS	NS	0.7
	1,2-Dichloroethane	5.4	NS	NS	NS	NS	NS	5
	Trichloroethene	233	NS	NS	NS	NS	NS	5
SV-14 Upgradient Plume Spine	Tetrachloroethene	0.6	NS	NS	NS	NS	NS	5
	1,1-Dichloroethane	2.4	4.2	ND	ND	ND	ND	5
	cis-1,2-Dichloroethene	1451	667	1.2	534	418	367	5
	1,1,1-Trichloroethane	2.5	42	ND	ND	ND	ND	5
	Benzene	2.3	1.4	ND	ND	ND	ND	0.7
	1,2-Dichloroethane	5.5	3.1	ND	ND	ND	ND	5
	Trichloroethene	144	708	7	1097	317	398	5
	Toluene	635	1276	ND	ND	ND	59	5
	Tetrachloroethene	2.9	13	ND	ND	ND	ND	5
	Ethylbenzene	719	360	ND	ND	ND	874	5
	m+p-Xylene	1753	8457	ND	ND	ND	2494	5
	o-Xylene	1400	3980	ND	ND	ND	849	5
	Isopropylbenzene	NA	1.9	ND	ND	ND	ND	5
	1,2,4-Trimethylbenzene	NA	4.9	ND	ND	ND	ND	5
	1,3,5-Trimethylbenzene	NA	4.1	ND	ND	ND	ND	5
MW-3 Downgradient	Carbon Tetrachloride	NA	8.6	ND	ND	ND	ND	5
	Trichlorofluoromethane	NA	5.6	ND	ND	ND	ND	5
*MW-13 Downgradient Property Line	VOC	ND	NS	NS	NS	NS	NS	
*FHX-3 Downgradient	VOC	ND	NS	NS	NS	NS	NS	
	Vinyl Chloride	0.8	NS	NS	NS	NS	NS	2
	1,1-Dichloroethane	0.8	NS	NS	NS	NS	NS	5
	cis-1,2-Dichloroethene	28	NS	NS	NS	NS	NS	5
	1,1,1-Trichloroethane	1.0	NS	NS	NS	NS	NS	5
	Trichloroethene	174	NS	NS	NS	NS	NS	5
FHX-12 Plume Core Center	m+p-Xylene	0.7	NS	NS	NS	NS	NS	5
	trans-1,2-Dichloroethene	0.8	ND	0.7	ND	ND	ND	5
	1,1-Dichloroethane	ND	ND	1.8	ND	ND	ND	5
	cis-1,2-Dichloroethene	117	46	850	41	24	25	5
	1,1,1-Trichloroethane	ND	0.6	ND	ND	ND	ND	5
	Benzene	ND	ND	0.8	ND	ND	ND	0.7
	1,2-Dichloroethane	ND	2.3	ND	ND	ND	ND	5
	Trichloroethene	966	694	63	516	291	326	5
	Tetrachloroethene	1.3	0.8	0.9	ND	ND	ND	5
	m+p-Xylene	ND	1.2	ND	ND	ND	ND	5
NA = Compound not analyzed for during sampling event. NS = Well not sampled during sampling event. NR = Not Regulated.	Chloroform	ND	ND	ND	ND	ND	8.5	7
	MTBE	ND	ND	ND	ND	ND	17	NR

= First groundwater at MW-13 and FHX-3 is within the lower sand and gravel

VOC = Project target list volatile organic compounds.

ND = Not Detected.

NYSDEC standards and guidance values from TOGS 1.1.1

Bold and shaded numbers exceed standards or guidance values.

NA = Compound not analyzed for during sampling event.

NS = Well not sampled during sampling event.

NR = Not Regulated.

TABLE 2

SUMMARY OF HYDRAULIC CONDUCTIVITY
TEST RESULTS

NYSDOT - BARLOW ROAD MAINTENANCE FACILITY

SPARGE POINT	TEST DATE					
	Jan-98	Jul-98	Oct-98	Jan-99	Apr-99	Jul-99
SS-8	0.03	0.01	<0.01	<0.01	0.01	0.03
SS-10	0.03	0.15	0.15	0.22	0.05	0.22
SS-11	0.04	No Test				
DS-2	0.06	1.50	3.29	No Test	6.06	No Test
DS-5	0.10	0.08	6.86	No Test	12.3	No Test

NOTES:

1. Hydraulic conductivity units are gallons/day/square foot.
2. January 1998 data are pre-sparging baseline test results.
3. Site sparging initiated April 1, 1998.

TABLE 3
NYS DOT BARLOW ROAD
SUMMARY OF GROUNDWATER VOC ANALYTICAL RESULTS
DEEP WATER TABLE AQUIFER

SAMPLE NUMBER/ LOCATION	ANALYTE	CONCENTRATION (ppb) 1/21/98 BASELINE	CONCENTRATION (ppb) 7/15&16/1998 1ST QUARTER	CONCENTRATION (ppb) 10/14/98 2ND QUARTER	CONCENTRATION (ppb) 1/12/99 3RD QUARTER	CONCENTRATION (ppb) 4/6/99 4TH QUARTER	CONCENTRATION (ppb) 7/7/99 4TH QUARTER	NYSDEC GROUNDWATER STANDARD OR GUIDANCE (ppb)
DS-2 Plume Core South	cis-1,2-Dichloroethene	ND	NS	106	NS	NS	NS	5
	Benzene	ND	NS	15	NS	NS	NS	0.7
	Trichloroethene	ND	NS	68	NS	NS	NS	5
DS-5 Plume Core North	1,1-Dichloroethane	0.5	ND	0.6	ND	ND	ND	5
	cis-1,2-Dichloroethene	196	101	181	125	75	102	5
	1,1,1-Trichloroethane	1.7	1.0	ND	ND	ND	ND	5
	Benzene	ND	ND	6.7	ND	ND	ND	0.7
	1,2-Dichloroethane	3.0	ND	ND	ND	ND	ND	5
	Trichloroethene	237	100	179	125	63	75	5
	Toluene	2.1	ND	ND	ND	ND	ND	5
	Ethylbenzene	2.9	ND	ND	ND	ND	ND	5
	m+p-Xylene	12	ND	ND	ND	ND	ND	5
DV-1 Crossgradient East	o-Xylene	7.7	ND	ND	ND	ND	ND	5
	cis-1,2-Dichloroethene	230	165	119	66	77	249	5
	Benzene	2.7	ND	ND	ND	ND	ND	0.7
	1,2-Dichloroethane	3.1	ND	ND	ND	ND	ND	5
	Trichloroethene	150	187	117	103	94	88	5
DV-4 Downgradient Plume Spine	Toluene	0.7	ND	ND	ND	ND	ND	5
	cis-1,2-Dichloroethene	131	NS	NS	NS	NS	NS	5
	Toluene	174	NS	NS	NS	NS	NS	5
DV-5 Crossgradient West	cis-1,2-Dichloroethene	15	NS	NS	NS	NS	NS	5
	Trichloroethene	20	NS	NS	NS	NS	NS	5
DV-8 Upgradient Plume Spine	1,1-Dichloroethane	1.6	ND	0.8	ND	ND	ND	5
	cis-1,2-Dichloroethene	594	215	290	233	195	249	5
	Benzene	0.7	ND	0.9	ND	ND	ND	0.7
	1,2-Dichloroethane	3.4	ND	1.2	ND	ND	ND	5
	Trichloroethene	118	76	81	76	69	73	5
	Toluene	0.9	ND	ND	ND	ND	ND	5
	m+p-Xylene	0.9	ND	ND	ND	ND	ND	5

VOC = Project target list volatile organic compounds.

ND = Not Detected.

NYSDEC standards and guidance values from TOGS 1.1.1

Bold and shaded numbers equal or exceed standards or guidance values.

NA = Compound not analyzed for during sampling event.

NS = Well not sampled during sampling event.

TABLE 4
NYSDOT BARLOW ROAD
SUMMARY OF SOIL VAPOR MONITORING

SOIL VAPOR PROBE	[TCE] µg/m ³	PID (ppm)	%O ₂	VAPOR PRESSURE (psi)
BASELINE: 2-18-98				
VP-1	640	6.8	19.5	0
VP-2	95.4	8.8	17.1	0
VP-3	152	14.6	19.3	0
VP-4	349	8.0	17.0	0
VP-5	1570	10.1	19.4	0
VP-6	0	9.2	16.5	0
Average	467.7	9.6	18.1	0
FIRST QUARTER: 7-20-98				
VP-1	NS	0	17.7	0.1
VP-2	NS	0	21.4	0.1
VP-3	NS	0	18.2	0.1
VP-4	NS	3.5	11.3	0.1
VP-5	NS	7.5	21.6	0.2
VP-6	NS	0	9.0	0.1
Average	NS	1.8	16.5	0.1
SECOND QUARTER: 10-15-98				
VP-1	NS	0.0	18.9	0.04
VP-2	NS	1.0	21.0	0.06
VP-3	NS	0.8	19.2	0.03
VP-4	NS	0.0	16.6	0.00
VP-5	NS	1.0	20.0	0.26
VP-6	NS	0.5	14.1	0.05
Average	NS	0.6	18.3	0.07
THIRD QUARTER: 1-13-99				
No readings taken.				
FOURTH QUARTER: 4-7-99				
VP-1	NS	3.6	20.2	NS
VP-2	NS	1.3	19.1	NS
VP-3	NS	6.2	20.0	NS
VP-4	NS	0.2	19.8	NS
VP-5	NS	4.0	19.9	NS
VP-6	NS	2.0	18.5	NS
Average	NS	2.9	19.6	NS
FIFTH QUARTER: 7-15-99				
VP-1	NS	4.1	NS	0.01
VP-2	NS	3.1	NS	0.01
VP-3	NS	6.7	NS	0.01
VP-4	NS	3.8	NS	0.01
VP-5	NS	NS	NS	NS
VP-6	NS	3.4	NS	0.01
Average	NS	4.2	NS	0.01

Note: System off during baseline and 4th quarter.

NS = Not sampled.

TABLE 5
NYSDOT BARLOW ROAD
SUMMARY OF AIR DISCHARGE MONITORING

AIR DISCHARGE STACK	[VOC] µg/m ³	STACK FLOW RATE (cfm)	UPWIND PID (ppm)	DOWNDOWN PID (ppm)
BASELINE: 1-29-98 (No sparging)			1.9	NS
SVS				
cis-1,2-DCE	405	2.9		
DVS				
1,1-DCE	25.1	0.6		
Site Check 4-3-98			0.0	0.0
Site Check 4-8-98			0.0	0.0
STARTUP: 4-15-98 (Sparging)			4.1	2.8
SVS				
Toluene	44.9	74		
Xylene	17.8			
TCE	895			
cis-1,2-DCE	88.8			
DVS				
TCE	2300	105		
cis-1,2-DCE	282			
Site Check 4-22-98			0.0	0.0
Site Check 4-29-98			0.0	0.0
FIRST QUARTER: 7-20&21-98			0.0	0.2
SVS				
TCE	36.9	75		
DVS				
TCE	4300	13		
cis-1,2-DCE	951			
1,1,1-TCA	21.5			
SECOND QUARTER: 10-15-98			0.0	0.0
SVS				
TCE	38.2	33		
DVS				
TCE	3890	10		
cis-1,2-DCE	1650			
1,1,1-TCA	22.5			
THIRD QUARTER: 1-13-99			NR	NR
SVS				
TCE	90.2	6.0		
cis-1,2-DCE	25.3			
Toluene	58.2			
DVS				
TCE	8120	16		
cis-1,2-DCE	4190			
trans-1,2-DCE	19.4			
1,1-DCA	15.3			
Toluene	118			
1,1,1-TCA	105			
FOURTH QUARTER: 4-7-99			0.0	0.0
SVS	NA	3.7		
DVS	NA	3.0		
FIFTH QUARTER: 7-15-99			NR	NR
SVS				
TCE	527	7.5		
cis-1,2-DCE	23.7			
Toluene	23.6			
DVS			0.1	0.1
TCE	2030	20		
cis-1,2-DCE	376			
Toluene	87.1			
Ethylbenzene	8.3			
1,1,1-TCA	15.5			

Upwind and downwind PID readings taken at IRM area fence line.

NS = Not Sampled. NA = Not Analyzed

SVS = Shallow vent stack.

DVS = Deep vent stack.

ATTACHMENT 1
LABORATORY REPORT
JULY 1999 GROUNDWATER MONITORING



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza Northeast

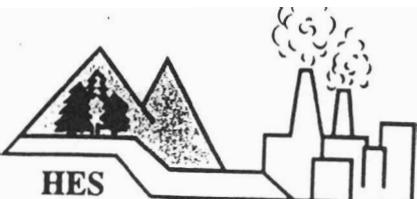
SAMPLE DESCRIPTION: SS-4

H.E.S. #: 990709B02 (Continued)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
1,1,1,2-Tetrachloroethane	SW846-8021B	<0.5	ug/l	07/20/99
Ethylbenzene	SW846-8021B	2.1	ug/l	07/20/99
m-Xylene-p-Xylene	SW846-8021B	13	ug/l	07/20/99
o-Xylene	SW846-8021B	6.1	ug/l	07/20/99
Styrene	SW846-8021B	<0.5	ug/l	07/20/99
Bromoform	SW846-8021B	<0.5	ug/l	07/20/99
Isopropylbenzene	SW846-8021B	<0.5	ug/l	07/20/99
Bromobenzene	SW846-8021B	<0.5	ug/l	07/20/99
1,1,2,2-Tetrachloroethane	SW846-8021B	<0.5	ug/l	07/20/99
1,2,3-Trichloropropane	SW846-8021B	<0.5	ug/l	07/20/99
n-Propylbenzene	SW846-8021B	2.0	ug/l	07/20/99
2-Chlorotoluene	SW846-8021B	<0.5	ug/l	07/20/99
4-Chlorotoluene	SW846-8021B	<0.5	ug/l	07/20/99
1,3,5-Trimethylbenzene	SW846-8021B	6.2	ug/l	07/20/99
4-Isopropyltoluene	SW846-8021B	1.0	ug/l	07/20/99
1,2,4-Trimethylbenzene	SW846-8021B	24	ug/l	07/20/99
sec-Butylbenzene	SW846-8021B	<0.5	ug/l	07/20/99
1,3-Dichlorobenzene	SW846-8021B	<0.5	ug/l	07/20/99
tert-Butylbenzene	SW846-8021B	2.9	ug/l	07/20/99
1,4-Dichlorobenzene	SW846-8021B	<0.5	ug/l	07/20/99
1,2-Dichlorobenzene	SW846-8021B	<0.5	ug/l	07/20/99
n-Butylbenzene	SW846-8021B	<0.5	ug/l	07/20/99
1,2-Dibromo-3-chloropropane	SW846-8021B	<0.5	ug/l	07/20/99
1,2,4-Trichlorobenzene	SW846-8021B	<0.5	ug/l	07/20/99
Hexachlorobutadiene	SW846-8021B	<0.5	ug/l	07/20/99
Naphthalene	SW846-8021B	63	ug/l	07/20/99
1,2,3-Trichlorobenzene	SW846-8021B	<0.5	ug/l	07/20/99
MTBE	SW846-8021B	474	ug/l	07/20/99

Non-Target Peaks

Positive



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza Northeast

DATE SAMPLED: 07/07/99

SAMPLE DESCRIPTION: SS-4

DATE SAMPLE RECD: 07/09/99

PIN #: 9803.62.301

MATRIX: Groundwater

LOCATION: NYSDOT-Barlow Road

TYPE: Grab

H.E.S. #: 990709B02

SAMPLER: R.Koslosky/Harza NE

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
Dichlorodifluoromethane	SW846-8021B	<0.5	ug/l	07/20/99
Chloromethane	SW846-8021B	<0.5	ug/l	07/20/99
Vinyl chloride	SW846-8021B	<0.5	ug/l	07/20/99
Chloroethane	SW846-8021B	<0.5	ug/l	07/20/99
Bromomethane	SW846-8021B	<0.5	ug/l	07/20/99
Trichlorofluoromethane	SW846-8021B	<0.5	ug/l	07/20/99
1,1-Dichloroethene	SW846-8021B	<0.5	ug/l	07/20/99
Methylene chloride	SW846-8021B	<0.5	ug/l	07/20/99
trans-1,2-Dichloroethene	SW846-8021B	<0.5	ug/l	07/20/99
1,1-Dichloroethane	SW846-8021B	<0.5	ug/l	07/20/99
2,2-Dichloropropane	SW846-8021B	<0.5	ug/l	07/20/99
cis-1,2-Dichloroethene	SW846-8021B	<0.5	ug/l	07/20/99
Bromochloromethane	SW846-8021B	<0.5	ug/l	07/20/99
Chloroform	SW846-8021B	<0.5	ug/l	07/20/99
1,1,1-Trichloroethane	SW846-8021B	<0.5	ug/l	07/20/99
1,1-Dichloropropene	SW846-8021B	<0.5	ug/l	07/20/99
Carbon Tetrachloride	SW846-8021B	<0.5	ug/l	07/20/99
Benzene	SW846-8021B	2.2	ug/l	07/20/99
1,2-Dichloroethane	SW846-8021B	<0.5	ug/l	07/20/99
Trichloroethene	SW846-8021B	17	ug/l	07/20/99
1,2-Dichloropropane	SW846-8021B	<0.5	ug/l	07/20/99
Dibromomethane	SW846-8021B	<0.5	ug/l	07/20/99
Bromodichloromethane	SW846-8021B	<0.5	ug/l	07/20/99
cis-1,3-Dichloropropene	SW846-8021B	<0.5	ug/l	07/20/99
Toluene	SW846-8021B	7.0	ug/l	07/20/99
trans-1,3-Dichloropropene	SW846-8021B	<0.5	ug/l	07/20/99
1,1,2-Trichloroethane	SW846-8021B	<0.5	ug/l	07/20/99
Tetrachloroethene	SW846-8021B	<0.5	ug/l	07/20/99
1,3-Dichloropropane	SW846-8021B	<0.5	ug/l	07/20/99
Dibromochloromethane	SW846-8021B	<0.5	ug/l	07/20/99
1,2-Dibromoethane	SW846-8021B	<0.5	ug/l	07/20/99
Chlorobenzene	SW846-8021B	<0.5	ug/l	07/20/99



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza Northeast

SAMPLE DESCRIPTION: SS-5

H.E.S. #: 990709B03 (Continued)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
1,1,1,2-Tetrachloroethane	SW846-8021B	<0.5	ug/l	07/20/99
Ethylbenzene	SW846-8021B	<0.5	ug/l	07/20/99
m-Xylene-p-Xylene	SW846-8021B	<0.5	ug/l	07/20/99
o-Xylene	SW846-8021B	<0.5	ug/l	07/20/99
Styrene	SW846-8021B	<0.5	ug/l	07/20/99
Bromoform	SW846-8021B	<0.5	ug/l	07/20/99
Isopropylbenzene	SW846-8021B	<0.5	ug/l	07/20/99
Bromobenzene	SW846-8021B	<0.5	ug/l	07/20/99
1,1,2,2-Tetrachloroethane	SW846-8021B	<0.5	ug/l	07/20/99
1,2,3-Trichloropropane	SW846-8021B	<0.5	ug/l	07/20/99
n-Propylbenzene	SW846-8021B	<0.5	ug/l	07/20/99
2-Chlorotoluene	SW846-8021B	<0.5	ug/l	07/20/99
4-Chlorotoluene	SW846-8021B	<0.5	ug/l	07/20/99
1,3,5-Trimethylbenzene	SW846-8021B	<0.5	ug/l	07/20/99
4-Isopropyltoluene	SW846-8021B	<0.5	ug/l	07/20/99
1,2,4-Trimethylbenzene	SW846-8021B	<0.5	ug/l	07/20/99
sec-Butylbenzene	SW846-8021B	<0.5	ug/l	07/20/99
1,3-Dichlorobenzene	SW846-8021B	<0.5	ug/l	07/20/99
tert-Butylbenzene	SW846-8021B	<0.5	ug/l	07/20/99
1,4-Dichlorobenzene	SW846-8021B	<0.5	ug/l	07/20/99
1,2-Dichlorobenzene	SW846-8021B	<0.5	ug/l	07/20/99
n-Butylbenzene	SW846-8021B	<0.5	ug/l	07/20/99
1,2-Dibromo-3-chloropropane	SW846-8021B	<0.5	ug/l	07/20/99
1,2,4-Trichlorobenzene	SW846-8021B	<0.5	ug/l	07/20/99
Hexachlorobutadiene	SW846-8021B	<0.5	ug/l	07/20/99
Naphthalene	SW846-8021B	<0.5	ug/l	07/20/99
1,2,3-Trichlorobenzene	SW846-8021B	<0.5	ug/l	07/20/99
MTBE	SW846-8021B	5.0	ug/l	07/20/99

Non-Target Peaks

Negative



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza Northeast

DATE SAMPLED: 07/07/99

SAMPLE DESCRIPTION: SS-5

DATE SAMPLE RECD: 07/09/99

PIN #: 9803.62.301

MATRIX: Groundwater

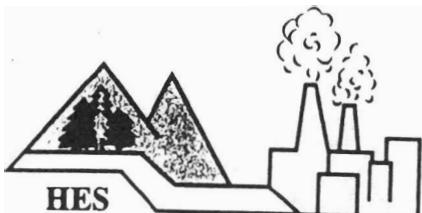
LOCATION: NYSDOT-Barlow Road

TYPE: Grab

H.E.S. #: 990709B03

SAMPLER: R.Koslosky/Harza NE

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
Dichlorodifluoromethane	SW846-8021B	<0.5	ug/l	07/20/99
Chloromethane	SW846-8021B	<0.5	ug/l	07/20/99
Vinyl chloride	SW846-8021B	<0.5	ug/l	07/20/99
Chloroethane	SW846-8021B	<0.5	ug/l	07/20/99
Bromomethane	SW846-8021B	<0.5	ug/l	07/20/99
Trichlorofluoromethane	SW846-8021B	<0.5	ug/l	07/20/99
1,1-Dichloroethene	SW846-8021B	<0.5	ug/l	07/20/99
Methylene chloride	SW846-8021B	<0.5	ug/l	07/20/99
trans-1,2-Dichloroethene	SW846-8021B	<0.5	ug/l	07/20/99
1,1-Dichloroethane	SW846-8021B	<0.5	ug/l	07/20/99
2,2-Dichloropropane	SW846-8021B	<0.5	ug/l	07/20/99
cis-1,2-Dichloroethene	SW846-8021B	11	ug/l	07/20/99
Bromochloromethane	SW846-8021B	<0.5	ug/l	07/20/99
Chloroform	SW846-8021B	<0.5	ug/l	07/20/99
1,1,1-Trichloroethane	SW846-8021B	<0.5	ug/l	07/20/99
1,1-Dichloropropene	SW846-8021B	<0.5	ug/l	07/20/99
Carbon Tetrachloride	SW846-8021B	<0.5	ug/l	07/20/99
Benzene	SW846-8021B	<0.5	ug/l	07/20/99
1,2-Dichloroethane	SW846-8021B	<0.5	ug/l	07/20/99
Trichloroethene	SW846-8021B	40	ug/l	07/20/99
1,2-Dichloropropane	SW846-8021B	<0.5	ug/l	07/20/99
Dibromomethane	SW846-8021B	<0.5	ug/l	07/20/99
Bromodichloromethane	SW846-8021B	<0.5	ug/l	07/20/99
cis-1,3-Dichloropropene	SW846-8021B	<0.5	ug/l	07/20/99
Toluene	SW846-8021B	<0.5	ug/l	07/20/99
trans-1,3-Dichloropropene	SW846-8021B	<0.5	ug/l	07/20/99
1,1,2-Trichloroethane	SW846-8021B	<0.5	ug/l	07/20/99
Tetrachloroethene	SW846-8021B	<0.5	ug/l	07/20/99
1,3-Dichloropropane	SW846-8021B	<0.5	ug/l	07/20/99
Dibromochloromethane	SW846-8021B	<0.5	ug/l	07/20/99
1,2-Dibromoethane	SW846-8021B	<0.5	ug/l	07/20/99
Chlorobenzene	SW846-8021B	<0.5	ug/l	07/20/99



HUDSON ENVIRONMENTAL SERVICES, INC.

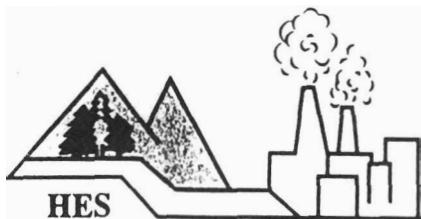
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza NortheastDATE SAMPLED: 07/07/99SAMPLE DESCRIPTION: SS-8DATE SAMPLE RECD: 07/09/99PIN #: 9803.62.301MATRIX: GroundwaterLOCATION: NYSDOT-Barlow RoadTYPE: GrabH.E.S. #: 990709B04SAMPLER: R.Koslosky/Harza NE

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
Dichlorodifluoromethane	SW846-8021B	<5.0	ug/l	07/20/99
Chloromethane	SW846-8021B	<5.0	ug/l	07/20/99
Vinyl chloride	SW846-8021B	<5.0	ug/l	07/20/99
Chloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Bromomethane	SW846-8021B	<5.0	ug/l	07/20/99
Trichlorofluoromethane	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloroethene	SW846-8021B	<5.0	ug/l	07/20/99
Methylene chloride	SW846-8021B	<5.0	ug/l	07/20/99
trans-1,2-Dichloroethene	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
2,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
cis-1,2-Dichloroethene	SW846-8021B	15	ug/l	07/20/99
Bromochloromethane	SW846-8021B	<5.0	ug/l	07/20/99
Chloroform	SW846-8021B	<5.0	ug/l	07/20/99
1,1,1-Trichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
Carbon Tetrachloride	SW846-8021B	<5.0	ug/l	07/20/99
Benzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Trichloroethene	SW846-8021B	223	ug/l	07/20/99
1,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
Dibromomethane	SW846-8021B	<5.0	ug/l	07/20/99
Bromodichloromethane	SW846-8021B	<5.0	ug/l	07/20/99
cis-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
Toluene	SW846-8021B	<5.0	ug/l	07/20/99
trans-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
1,1,2-Trichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Tetrachloroethene	SW846-8021B	<5.0	ug/l	07/20/99
1,3-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
Dibromochloromethane	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dibromoethane	SW846-8021B	<5.0	ug/l	07/20/99
Chlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza Northeast

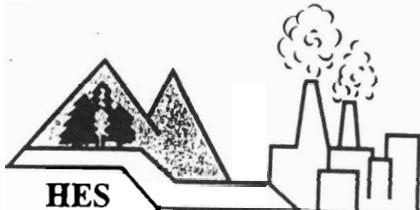
SAMPLE DESCRIPTION: SS-8

H.E.S. #: 990709B04 (Continued)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
1,1,1,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Ethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
m-Xylene-p-Xylene	SW846-8021B	<5.0	ug/l	07/20/99
o-Xylene	SW846-8021B	<5.0	ug/l	07/20/99
Styrene	SW846-8021B	<5.0	ug/l	07/20/99
Bromoform	SW846-8021B	<5.0	ug/l	07/20/99
Isopropylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
Bromobenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,1,2,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/20/99
1,2,3-Trichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
n-Propylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
2-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/20/99
4-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/20/99
1,3,5-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
4-Isopropyltoluene	SW846-8021B	<5.0	ug/l	07/20/99
1,2,4-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
sec-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,3-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
tert-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,4-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
n-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dibromo-3-chloropropane	SW846-8021B	<5.0	ug/l	07/20/99
1,2,4-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
Hexachlorobutadiene	SW846-8021B	<5.0	ug/l	07/20/99
Naphthalene	SW846-8021B	<5.0	ug/l	07/20/99
1,2,3-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
MTBE	SW846-8021B	23	ug/l	07/20/99

Non-Target Peaks

Negative



HUDSON ENVIRONMENTAL SERVICES, INC.

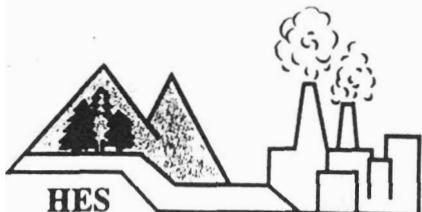
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza NortheastDATE SAMPLED: 07/07/99SAMPLE DESCRIPTION: SS-10DATE SAMPLE RECD: 07/09/99PIN #: 9803.62.301MATRIX: GroundwaterLOCATION: NYSDOT-Barlow RoadTYPE: GrabH.E.S. #: 990709B05SAMPLER: R.Koslosky/Harza NE

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
Dichlorodifluoromethane	SW846-8021B	<5.0	ug/l	07/20/99
Chloromethane	SW846-8021B	<5.0	ug/l	07/20/99
Vinyl chloride	SW846-8021B	<5.0	ug/l	07/20/99
Chloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Bromomethane	SW846-8021B	<5.0	ug/l	07/20/99
Trichlorofluoromethane	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloroethene	SW846-8021B	<5.0	ug/l	07/20/99
Methylene chloride	SW846-8021B	<5.0	ug/l	07/20/99
trans-1,2-Dichloroethene	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
2,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
cis-1,2-Dichloroethene	SW846-8021B	28	ug/l	07/20/99
Bromochloromethane	SW846-8021B	<5.0	ug/l	07/20/99
Chloroform	SW846-8021B	<5.0	ug/l	07/20/99
1,1,1-Trichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
Carbon Tetrachloride	SW846-8021B	<5.0	ug/l	07/20/99
Benzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Trichloroethene	SW846-8021B	52	ug/l	07/20/99
1,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
Dibromomethane	SW846-8021B	<5.0	ug/l	07/20/99
Bromodichloromethane	SW846-8021B	<5.0	ug/l	07/20/99
cis-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
Toluene	SW846-8021B	<5.0	ug/l	07/20/99
trans-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
1,1,2-Trichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Tetrachloroethene	SW846-8021B	<5.0	ug/l	07/20/99
1,3-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
Dibromochloromethane	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dibromoethane	SW846-8021B	<5.0	ug/l	07/20/99
Chlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza Northeast

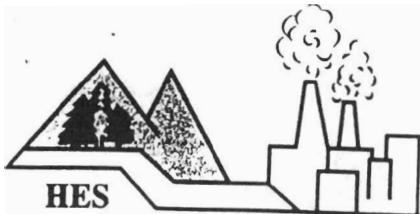
SAMPLE DESCRIPTION: SS-10

H.E.S. #: 990709B05 (Continued)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
1,1,1,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Ethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
m-Xylene-p-Xylene	SW846-8021B	<5.0	ug/l	07/20/99
o-Xylene	SW846-8021B	<5.0	ug/l	07/20/99
Styrene	SW846-8021B	<5.0	ug/l	07/20/99
Bromoform	SW846-8021B	<5.0	ug/l	07/20/99
Isopropylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
Bromobenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,1,2,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/20/99
1,2,3-Trichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
n-Propylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
2-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/20/99
4-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/20/99
1,3,5-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
4-Isopropyltoluene	SW846-8021B	<5.0	ug/l	07/20/99
1,2,4-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
sec-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,3-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
tert-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,4-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
n-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dibromo-3-chloropropane	SW846-8021B	<5.0	ug/l	07/20/99
1,2,4-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
Hexachlorobutadiene	SW846-8021B	<5.0	ug/l	07/20/99
Naphthalene	SW846-8021B	<5.0	ug/l	07/20/99
1,2,3-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
MTBE	SW846-8021B	17	ug/l	07/20/99

Non-Target Peaks

Negative



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza Northeast

DATE SAMPLED: 07/07/99

SAMPLE DESCRIPTION: SV-14

DATE SAMPLE RECD: 07/09/99

PIN #: 9803.62.301

MATRIX: Groundwater

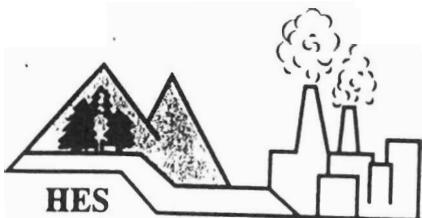
LOCATION: NYSDOT-Barlow Road

TYPE: Grab

H.E.S. #: 990709B01

SAMPLER: R.Koslosky/Harza NE

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
Dichlorodifluoromethane	SW846-8021B	<5.0	ug/l	07/21/99
Chloromethane	SW846-8021B	<5.0	ug/l	07/21/99
Vinyl chloride	SW846-8021B	<5.0	ug/l	07/21/99
Chloroethane	SW846-8021B	<5.0	ug/l	07/21/99
Bromomethane	SW846-8021B	<5.0	ug/l	07/21/99
Trichlorofluoromethane	SW846-8021B	<5.0	ug/l	07/21/99
1,1-Dichloroethene	SW846-8021B	<5.0	ug/l	07/21/99
Methylene chloride	SW846-8021B	<5.0	ug/l	07/21/99
trans-1,2-Dichloroethene	SW846-8021B	<5.0	ug/l	07/21/99
1,1-Dichloroethane	SW846-8021B	<5.0	ug/l	07/21/99
2,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/21/99
cis-1,2-Dichloroethene	SW846-8021B	367	ug/l	07/21/99
Bromochloromethane	SW846-8021B	<5.0	ug/l	07/21/99
Chloroform	SW846-8021B	<5.0	ug/l	07/21/99
1,1,1-Trichloroethane	SW846-8021B	<5.0	ug/l	07/21/99
1,1-Dichloropropene	SW846-8021B	<5.0	ug/l	07/21/99
Carbon Tetrachloride	SW846-8021B	<5.0	ug/l	07/21/99
Benzene	SW846-8021B	<5.0	ug/l	07/21/99
1,2-Dichloroethane	SW846-8021B	<5.0	ug/l	07/21/99
Trichloroethene	SW846-8021B	398	ug/l	07/21/99
1,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/21/99
Dibromomethane	SW846-8021B	<5.0	ug/l	07/21/99
Bromodichloromethane	SW846-8021B	<5.0	ug/l	07/21/99
cis-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/21/99
Toluene	SW846-8021B	59	ug/l	07/21/99
trans-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/21/99
1,1,2-Trichloroethane	SW846-8021B	<5.0	ug/l	07/21/99
Tetrachloroethene	SW846-8021B	<5.0	ug/l	07/21/99
1,3-Dichloropropane	SW846-8021B	<5.0	ug/l	07/21/99
Dibromochloromethane	SW846-8021B	<5.0	ug/l	07/21/99
1,2-Dibromoethane	SW846-8021B	<5.0	ug/l	07/21/99
Chlorobenzene	SW846-8021B	<5.0	ug/l	07/21/99



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Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza Northeast

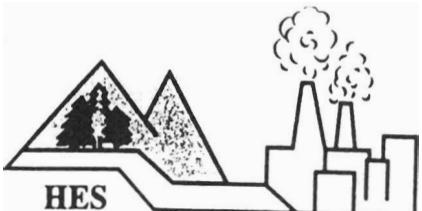
SAMPLE DESCRIPTION: SV-14

H.E.S. #: 990709B01 (Continued)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
1,1,1,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/21/99
Ethylbenzene	SW846-8021B	874	ug/l	07/21/99
m-Xylene-p-Xylene	SW846-8021B	2,494	ug/l	07/21/99
o-Xylene	SW846-8021B	849	ug/l	07/21/99
Styrene	SW846-8021B	<5.0	ug/l	07/21/99
Bromoform	SW846-8021B	<5.0	ug/l	07/21/99
Isopropylbenzene	SW846-8021B	<5.0	ug/l	07/21/99
Bromobenzene	SW846-8021B	<5.0	ug/l	07/21/99
1,1,2,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/21/99
1,2,3-Trichloropropane	SW846-8021B	<5.0	ug/l	07/21/99
n-Propylbenzene	SW846-8021B	<5.0	ug/l	07/21/99
2-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/21/99
4-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/21/99
1,3,5-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/21/99
4-Isopropyltoluene	SW846-8021B	<5.0	ug/l	07/21/99
1,2,4-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/21/99
sec-Butylbenzene	SW846-8021B	<5.0	ug/l	07/21/99
1,3-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/21/99
tert-Butylbenzene	SW846-8021B	<5.0	ug/l	07/21/99
1,4-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/21/99
1,2-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/21/99
n-Butylbenzene	SW846-8021B	<5.0	ug/l	07/21/99
1,2-Dibromo-3-chloropropane	SW846-8021B	<5.0	ug/l	07/21/99
1,2,4-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/21/99
Hexachlorobutadiene	SW846-8021B	<5.0	ug/l	07/21/99
Naphthalene	SW846-8021B	<5.0	ug/l	07/21/99
1,2,3-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/21/99
MTBE	SW846-8021B	<5.0	ug/l	07/21/99

Non-Target Peaks

Positive



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza Northeast

DATE SAMPLED: 07/07/99

SAMPLE DESCRIPTION: FHX-12

DATE SAMPLE RECD: 07/09/99

PIN #: 9803.62.301

MATRIX: Groundwater

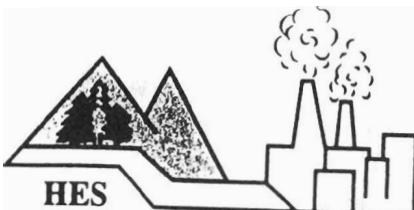
LOCATION: NYSDOT-Barlow Road

TYPE: Grab

H.E.S. #: 990709B06

SAMPLER: R.Koslosky/Harza NE

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
Dichlorodifluoromethane	SW846-8021B	<5.0	ug/l	07/20/99
Chloromethane	SW846-8021B	<5.0	ug/l	07/20/99
Vinyl chloride	SW846-8021B	<5.0	ug/l	07/20/99
Chloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Bromomethane	SW846-8021B	<5.0	ug/l	07/20/99
Trichlorofluoromethane	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloroethene	SW846-8021B	<5.0	ug/l	07/20/99
Methylene chloride	SW846-8021B	<5.0	ug/l	07/20/99
trans-1,2-Dichloroethene	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
2,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
cis-1,2-Dichloroethene	SW846-8021B	25	ug/l	07/20/99
Bromochloromethane	SW846-8021B	<5.0	ug/l	07/20/99
Chloroform	SW846-8021B	8.5	ug/l	07/20/99
1,1,1-Trichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
Carbon Tetrachloride	SW846-8021B	<5.0	ug/l	07/20/99
Benzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Trichloroethene	SW846-8021B	326	ug/l	07/20/99
1,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
Dibromomethane	SW846-8021B	<5.0	ug/l	07/20/99
Bromodichloromethane	SW846-8021B	<5.0	ug/l	07/20/99
cis-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
Toluene	SW846-8021B	<5.0	ug/l	07/20/99
trans-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
1,1,2-Trichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Tetrachloroethene	SW846-8021B	<5.0	ug/l	07/20/99
1,3-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
Dibromochloromethane	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dibromoethane	SW846-8021B	<5.0	ug/l	07/20/99
Chlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99



HUDSON ENVIRONMENTAL SERVICES, INC.

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Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza NortheastSAMPLE DESCRIPTION: FHX-12H.E.S. #: 990709B06 (Continued)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
1,1,1,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Ethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
m-Xylene-p-Xylene	SW846-8021B	<5.0	ug/l	07/20/99
o-Xylene	SW846-8021B	<5.0	ug/l	07/20/99
Styrene	SW846-8021B	<5.0	ug/l	07/20/99
Bromoform	SW846-8021B	<5.0	ug/l	07/20/99
Isopropylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
Bromobenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,1,2,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/20/99
1,2,3-Trichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
n-Propylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
2-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/20/99
4-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/20/99
1,3,5-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
4-Isopropyltoluene	SW846-8021B	<5.0	ug/l	07/20/99
1,2,4-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
sec-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,3-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
tert-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,4-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
n-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dibromo-3-chloropropane	SW846-8021B	<5.0	ug/l	07/20/99
1,2,4-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
Hexachlorobutadiene	SW846-8021B	<5.0	ug/l	07/20/99
Naphthalene	SW846-8021B	<5.0	ug/l	07/20/99
1,2,3-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
MTBE	SW846-8021B	17	ug/l	07/20/99

Non-Target Peaks

Negative



HUDSON ENVIRONMENTAL SERVICES, INC.

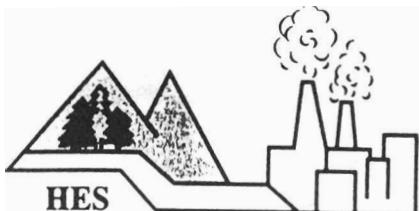
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza NortheastDATE SAMPLED: 07/07/99SAMPLE DESCRIPTION: DS-5DATE SAMPLE RECD: 07/09/99PIN #: 9803.62.301MATRIX: GroundwaterLOCATION: NYSDOT-Barlow RoadTYPE: GrabH.E.S. #: 990709B07SAMPLER: R.Koslosky/Harza NE

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
Dichlorodifluoromethane	SW846-8021B	<5.0	ug/l	07/20/99
Chloromethane	SW846-8021B	<5.0	ug/l	07/20/99
Vinyl chloride	SW846-8021B	<5.0	ug/l	07/20/99
Chloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Bromomethane	SW846-8021B	<5.0	ug/l	07/20/99
Trichlorofluoromethane	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloroethene	SW846-8021B	<5.0	ug/l	07/20/99
Methylene chloride	SW846-8021B	<5.0	ug/l	07/20/99
trans-1,2-Dichloroethene	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
2,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
cis-1,2-Dichloroethene	SW846-8021B	102	ug/l	07/20/99
Bromochloromethane	SW846-8021B	<5.0	ug/l	07/20/99
Chloroform	SW846-8021B	<5.0	ug/l	07/20/99
1,1,1-Trichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
Carbon Tetrachloride	SW846-8021B	<5.0	ug/l	07/20/99
Benzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Trichloroethene	SW846-8021B	75	ug/l	07/20/99
1,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
Dibromomethane	SW846-8021B	<5.0	ug/l	07/20/99
Bromodichloromethane	SW846-8021B	<5.0	ug/l	07/20/99
cis-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
Toluene	SW846-8021B	<5.0	ug/l	07/20/99
trans-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
1,1,2-Trichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Tetrachloroethene	SW846-8021B	<5.0	ug/l	07/20/99
1,3-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
Dibromochloromethane	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dibromoethane	SW846-8021B	<5.0	ug/l	07/20/99
Chlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

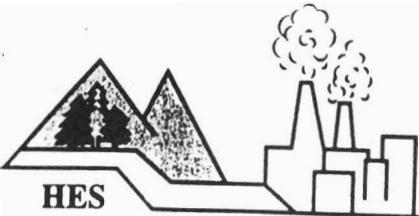
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza NortheastSAMPLE DESCRIPTION: DS-5H.E.S. #: 990709B07 (Continued)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
1,1,1,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Ethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
m-Xylene-p-Xylene	SW846-8021B	<5.0	ug/l	07/20/99
o-Xylene	SW846-8021B	<5.0	ug/l	07/20/99
Styrene	SW846-8021B	<5.0	ug/l	07/20/99
Bromoform	SW846-8021B	<5.0	ug/l	07/20/99
Isopropylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
Bromobenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,1,2,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/20/99
1,2,3-Trichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
n-Propylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
2-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/20/99
4-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/20/99
1,3,5-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
4-Isopropyltoluene	SW846-8021B	<5.0	ug/l	07/20/99
1,2,4-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
sec-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,3-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
tert-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,4-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
n-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dibromo-3-chloropropane	SW846-8021B	<5.0	ug/l	07/20/99
1,2,4-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
Hexachlorobutadiene	SW846-8021B	<5.0	ug/l	07/20/99
Naphthalene	SW846-8021B	<5.0	ug/l	07/20/99
1,2,3-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
MTBE	SW846-8021B	<5.0	ug/l	07/20/99

Non-Target Peaks

Negative



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza Northeast

DATE SAMPLED: 07/07/99

SAMPLE DESCRIPTION: DV-1

DATE SAMPLE RECD: 07/09/99

PIN #: 9803.62.301

MATRIX: Groundwater

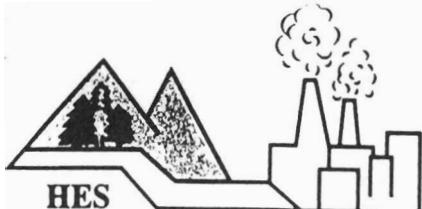
LOCATION: NYSDOT-Barlow Road

TYPE: Grab

H.E.S. #: 990709B08

SAMPLER: R.Koslosky/Harza NE

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
Dichlorodifluoromethane	SW846-8021B	<5.0	ug/l	07/20/99
Chloromethane	SW846-8021B	<5.0	ug/l	07/20/99
Vinyl chloride	SW846-8021B	<5.0	ug/l	07/20/99
Chloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Bromomethane	SW846-8021B	<5.0	ug/l	07/20/99
Trichlorofluoromethane	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloroethene	SW846-8021B	<5.0	ug/l	07/20/99
Methylene chloride	SW846-8021B	<5.0	ug/l	07/20/99
trans-1,2-Dichloroethene	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
2,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
cis-1,2-Dichloroethene	SW846-8021B	249	ug/l	07/20/99
Bromochloromethane	SW846-8021B	<5.0	ug/l	07/20/99
Chloroform	SW846-8021B	<5.0	ug/l	07/20/99
1,1,1-Trichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
Carbon Tetrachloride	SW846-8021B	<5.0	ug/l	07/20/99
Benzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Trichloroethene	SW846-8021B	88	ug/l	07/20/99
1,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
Dibromomethane	SW846-8021B	<5.0	ug/l	07/20/99
Bromodichloromethane	SW846-8021B	<5.0	ug/l	07/20/99
cis-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
Toluene	SW846-8021B	<5.0	ug/l	07/20/99
trans-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
1,1,2-Trichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Tetrachloroethene	SW846-8021B	<5.0	ug/l	07/20/99
1,3-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
Dibromochloromethane	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dibromoethane	SW846-8021B	<5.0	ug/l	07/20/99
Chlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza Northeast

SAMPLE DESCRIPTION: DV-1

H.E.S. #: 990709B08 (Continued)

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
1,1,1,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Ethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
m-Xylene-p-Xylene	SW846-8021B	<5.0	ug/l	07/20/99
o-Xylene	SW846-8021B	<5.0	ug/l	07/20/99
Styrene	SW846-8021B	<5.0	ug/l	07/20/99
Bromoform	SW846-8021B	<5.0	ug/l	07/20/99
Isopropylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
Bromobenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,1,2,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/20/99
1,2,3-Trichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
n-Propylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
2-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/20/99
4-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/20/99
1,3,5-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
4-Isopropyltoluene	SW846-8021B	<5.0	ug/l	07/20/99
1,2,4-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
sec-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,3-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
tert-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,4-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
n-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dibromo-3-chloropropane	SW846-8021B	<5.0	ug/l	07/20/99
1,2,4-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
Hexachlorobutadiene	SW846-8021B	<5.0	ug/l	07/20/99
Naphthalene	SW846-8021B	<5.0	ug/l	07/20/99
1,2,3-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
MTBE	SW846-8021B	<5.0	ug/l	07/20/99
Non-Target Peaks		Negative		



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza NortheastDATE SAMPLED: 07/07/99SAMPLE DESCRIPTION: DV-8DATE SAMPLE RECD: 07/09/99PIN #: 9803.62.301MATRIX: GroundwaterLOCATION: NYSDOT-Barlow RoadTYPE: GrabH.E.S. #: 990709B09SAMPLER: R.Koslosky/Harza NE

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
Dichlorodifluoromethane	SW846-8021B	<5.0	ug/l	07/20/99
Chloromethane	SW846-8021B	<5.0	ug/l	07/20/99
Vinyl chloride	SW846-8021B	<5.0	ug/l	07/20/99
Chloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Bromomethane	SW846-8021B	<5.0	ug/l	07/20/99
Trichlorofluoromethane	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloroethene	SW846-8021B	<5.0	ug/l	07/20/99
Methylene chloride	SW846-8021B	<5.0	ug/l	07/20/99
trans-1,2-Dichloroethene	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
2,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
cis-1,2-Dichloroethene	SW846-8021B	249	ug/l	07/20/99
Bromochloromethane	SW846-8021B	<5.0	ug/l	07/20/99
Chloroform	SW846-8021B	<5.0	ug/l	07/20/99
1,1,1-Trichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
1,1-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
Carbon Tetrachloride	SW846-8021B	<5.0	ug/l	07/20/99
Benzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Trichloroethene	SW846-8021B	73	ug/l	07/20/99
1,2-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
Dibromomethane	SW846-8021B	<5.0	ug/l	07/20/99
Bromodichloromethane	SW846-8021B	<5.0	ug/l	07/20/99
cis-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
Toluene	SW846-8021B	<5.0	ug/l	07/20/99
trans-1,3-Dichloropropene	SW846-8021B	<5.0	ug/l	07/20/99
1,1,2-Trichloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Tetrachloroethene	SW846-8021B	<5.0	ug/l	07/20/99
1,3-Dichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
Dibromochloromethane	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dibromoethane	SW846-8021B	<5.0	ug/l	07/20/99
Chlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: Harza Northeast

SAMPLE DESCRIPTION: DV-8

H.E.S. #: 990709B09 (Continued)

<u>PARAMETER</u>	<u>METHOD</u>	<u>RESULT</u>	<u>UNITS</u>	<u>TEST DATE</u>
1,1,1,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/20/99
Ethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
m-Xylene-p-Xylene	SW846-8021B	<5.0	ug/l	07/20/99
o-Xylene	SW846-8021B	<5.0	ug/l	07/20/99
Styrene	SW846-8021B	<5.0	ug/l	07/20/99
Bromoform	SW846-8021B	<5.0	ug/l	07/20/99
Isopropylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
Bromobenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,1,2,2-Tetrachloroethane	SW846-8021B	<5.0	ug/l	07/20/99
1,2,3-Trichloropropane	SW846-8021B	<5.0	ug/l	07/20/99
n-Propylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
2-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/20/99
4-Chlorotoluene	SW846-8021B	<5.0	ug/l	07/20/99
1,3,5-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
4-Isopropyltoluene	SW846-8021B	<5.0	ug/l	07/20/99
1,2,4-Trimethylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
sec-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,3-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
tert-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,4-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
n-Butylbenzene	SW846-8021B	<5.0	ug/l	07/20/99
1,2-Dibromo-3-chloropropane	SW846-8021B	<5.0	ug/l	07/20/99
1,2,4-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
Hexachlorobutadiene	SW846-8021B	<5.0	ug/l	07/20/99
Naphthalene	SW846-8021B	<5.0	ug/l	07/20/99
1,2,3-Trichlorobenzene	SW846-8021B	<5.0	ug/l	07/20/99
MTBE	SW846-8021B	<5.0	ug/l	07/20/99

Non-Target Peaks

Negative

Approval By: MLHough

Date: 7-28-99

All samples were analyzed within EPA prescribed holding times.

N.Y.S.D.O.H. Lab ID #11140



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Road, South Glens Falls, NY 12803
 Delivery: 211 Ferry Blvd., South Glens Falls, NY 12803
 Phone: 518/747-1060 Fax: 518/747-1062

CHAIN OF CUSTODY RECORD/ Lab Work Request

Client HARZA NORTHEAST
 Client Contact/Person # ROBERT KOSLOSKY
 Project Location NYSDOT BARLOW ROAD
 Purchase Order 8334
 HES Contact _____

Mail Address 181 GENESEE St.
UTICA, NY 13501
 Phone # (315) 797-5800

HES Use Only		HES Use Only	
Samples Were: <input checked="" type="checkbox"/> Shipped or Hand Delivered <input type="checkbox"/> Mailed <input type="checkbox"/> Hand Carried <input type="checkbox"/> Other NOTES: <u>R</u>		Samples Were: <input checked="" type="checkbox"/> Shipped or Hand Delivered <input type="checkbox"/> Mailed <input type="checkbox"/> Hand Carried <input type="checkbox"/> Other NOTES: <u>R</u>	
2. Ambient or Chilled NOTES: _____		3. Received Broken/ Leaking (Improperly Scaled) <input checked="" type="checkbox"/> Y <input type="checkbox"/> N NOTES: <u>N</u>	
4. Properly Preserved NOTES: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		5. Received Within Holding Times <input checked="" type="checkbox"/> Y <input type="checkbox"/> N NOTES: <u>N</u>	

HES Use Only Lab ID	Sample ID / Description	Date Collected	TIME A=a.m. P=p.m.	SAMPLE TYPE C=Composite G=Grab	# Conts.	ANALYSIS REQUIRED	
P0101601	SV-14	7-7-99 1400	A	GW	X	2X 40ml	8021b + PCE
Bob	SS-4	7-7-99 1620	A	GW	X	2X 40ml	8021b + PCE
Bob	SS-5	7-7-99 1555	A	GW	X	2X 40ml	8021b + PCE
Bob	SS-8	7-7-99 1425	A	GW	X	2X 40ml	8021b + PCE
Bob	SS-10	7-7-99 1500	A	GW	X	2X 40ml	8021b + PCE
Bob	FHX-12	7-7-99 1520	A	GW	X	2X 40ml	8021b + PCE
Bob	DS-5	7-7-99 1335	A	GW	X	2X 40ml	8021b + PCE
Bob	DV-1	7-7-99 1315	A	GW	X	2X 40ml	8021b + PCE
Matrix	SL - Sludge	SW - Surface Water	DS - Drum Solids DL - Drum Liquids X - Other WW - Waste Water	Special Instructions: <u>INVOICE HARZA</u>		Date/Time	
S - Soil	O - Oil	L - Leachate					
SE - Sediment	DW - Drinking Water	A - Air					
SO - Solid	GW - Ground Water	W - Wipe					

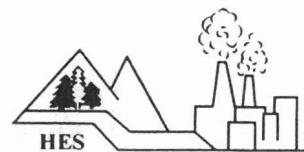
Sampled by: <u>Robert Koslosky</u>	Date/Time <u>7-8-99, 13:00</u>	Received by: (Signature) <u>UPS</u>	Date/Time
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Dispatched by: (Signature)	Method of Shipment:		Date/Time
Retrieved @ Laboratory: <u>WHD</u>	Date/Time <u>7-9-99 11:20</u>	Turnaround Time <u>12 hours</u>	Lab Appro'd: <u>WHD</u>

Discrepancies Between
Sample Labels and COC
Record?
 Y N
NOTES: N

PINK - Generator Copy

WHITE - Lab Copy

YELLOW - Sampler Copy



HUDSON ENVIRONMENTAL SERVICES, INC.

Mail: 22 Hudson Falls Road, South Glens Falls, NY 12803

Delivery: 211 Ferry Blvd., South Glens Falls, NY 12803

Phone: 518/747-1060 Fax: 518/747-1062

CHAIN OF CUSTODY RECORD Lab Work Request

Client HARZA NORTHEAST

Client Contact/Person # ROBERT KOSLOSKY

Project Location NYS DOT BARLOW ROAD

Purchase Order 8334

HES Contact _____

Mail Address 181 GENESEE ST.

UTICA, NY 13501

Phone # (315) 797 - 5800

HES
Use Only

Samples Were:

1. Shipped or Hand-Delivered

2. Ambient or Chilled

3. Received Broken/Leaking (Improperly Scaled)

- Y N
NOTES:

4. Properly P

N

5. Received Within Holding Times

- Y N
NOTES:

COC Tape Was:

1. Present on Outer Package

- Y N

2. Unbroken on Outer Package

- Y N

3. Present on Sample

4. Unbroken on Sample

- Y N
NOTES:

HES Use Only Lab ID	Sample ID / Description	Date Collected	A=a.m.	SAMPLE TYPE			# Conts.	ANALYSIS REQUIRED
				MATRIX	C	G		
990109B09	DV - 8	7-7-99	12 45P	A GW	X	2X 40ml		8021b + PCE
				A				
				P				
				A				
				P				
				A				
				P				
				A				
				P				
				A				
				P				
				A				
				P				

Matrix
S - Soil SL - Sludge SW - Surface Water DS - Drum Solids
O - Oil L - Leachate DL - Drum Liquids
SE - Sediment DW - Drinking Water A - Air X - Other
SO - Solid GW - Ground Water WI - Wipe WW - Waste Water

Special Instructions:

INVOICE HARZA

Sampled by: (Signature) <u>Robert Koslosky</u>	Date/Time <u>7-8-99 / 1300</u>	Received by: (Signature)	UPS	Date/Time
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		Date/Time
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		Date/Time
Dispatched by: (Signature)	Method of Shipment:			Date/Time
Received @ Laboratory: <u>Walter</u>	Date/Time <u>7-9-99 1120</u>	Turnaround Time:		Lab Approval:

COC Record Was:

1. Present upon Receipt of Samples

Y N

Discrepancies Between
Sample Labels and COC
Record?

Y N

NOTES:

ATTACHMENT 2
LABORATORY REPORT
JULY 1999 STACK SAMPLING

**BUCK**

ENVIRONMENTAL LABORATORIES, INC.

NYS ELAP ID 10795

LABORATORY REPORT

Client: **Harza Northeast**
181 Genesee Street
Utica, NY 13501
Site: Barlow Road
Sample: SVS

Report Date: 08/10/99
Date Received: 07/16/99
Sampled By: R.K.
Analysis Date: 07/26/99
Lab Log No: 9907211

**NYSDOH 311-2 Air Sample Analysis
(Instrument Tuning Conforming with EPA 8260 Criteria)**

CAS #	Compound	DL	RESULT
71-43-2	benzene	8.4	ND
108-88-3	Toluene	8.4	23.6
100-41-1	Ethylbenzene	8.4	ND
1330-20-7	xlenes (m, o & p)	8.4	ND
79-01-6	trichloroethene	8.4	527
75-01-4	vinyl chloride	20.9	ND
75-34-3	1,1-dichloroethane	10.4	ND
107-06-2	1,2-dichloroethane	10.4	ND
156-59-4	cis-1,2-dichloroethene	10.4	23.7
156-60-5	trans-1,2-dichloroethene	10.4	ND
127-18-4	tetrachloroethene	10.4	ND
71-55-6	1,1,1-trichloroethane	10.4	ND
865-49-6	chloroform	10.4	ND

All concentrations are reported as ug/m³.

ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation

John H. Buck, P.E.
Laboratory Director

**BUCK**

ENVIRONMENTAL LABORATORIES, INC.

NYS ELAP ID 10795

LABORATORY REPORT

Client: **Harza Northeast**
181 Genesee Street
Utica, NY 13501
Site: Barlow Road
Sample: DVS

Report Date: 08/10/99
Date Received: 07/16/99
Sampled By: R.K.
Analysis Date: 07/26/99
Lab Log No: 9907211

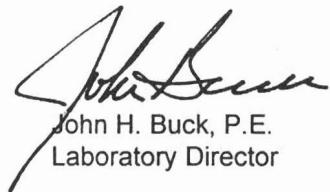
NYSDOH 311-2 Air Sample Analysis
(Instrument Tuning Conforming with EPA 8260 Criteria)

CAS #	Compound	DL	RESULT
71-43-2	benzene	8.0	ND
108-88-3	Toluene	8.0	87.1
100-41-1	Ethylbenzene	8.0	8.3
1330-20-7	xylenes (m, o & p)	8.0	ND
79-01-6	trichloroethene	8.0	2030
75-01-4	vinyl chloride	20.1	ND
75-34-3	1,1-dichloroethane	10.0	ND
107-06-2	1,2-dichloroethane	10.0	ND
156-59-4	cis-1,2-dichloroethene	10.0	676
156-60-5	trans-1,2-dichloroethene	10.0	ND
127-18-4	tetrachloroethene	10.0	ND
71-55-6	1,1,1-trichloroethane	10.0	15.5
865-49-6	chloroform	10.0	ND

All concentrations are reported as ug/m³.

ND indicates that no amount greater than the detection limit (DL) was detected.

These analyses are certified as conforming to generally accepted laboratory practices, the analytical method cited, requirements of the New York State Health Department ELAP program, and the New York State Department of Environmental Conservation



John H. Buck, P.E.
Laboratory Director