APPENDIX F

REMEDIATION SYSTEM DATA TABLES

OU I SOUTH BOUNDARY SYSTEM

Table F-1
Extraction Wells 1,2 Tritium and VOC Data
OU I South Boundary
2002 BNL Groundwater Status Report

Site ID: 115-27 **(EW-1)**							
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Error**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/10/2002	0.46	0.5	--	UG/L	170	J
1,1-Dichloroethane	1/10/2002	1.8	0.5	--	UG/L	170	
524.2 TVOC	1/10/2002	5.16	--	--	UG/L	170	
Chloroethane	1/10/2002	1.7	0.5	--	UG/L	170	
Chloroform	1/10/2002	1.2	0.5	--	UG/L	170	
Tritium	1/10/2002	545	384	244	PCI/L	170	J
1,1,1-Trichloroethane	3/25/2002	0.31	0.5	--	UG/L	170	J
1,1-Dichloroethane	3/25/2002	0.89	0.5	--	UG/L	170	
524.2 TVOC	3/25/2002	3.7	--	--	UG/L	170	
Chloroethane	3/25/2002	1	0.5	--	UG/L	170	
Chloroform	3/25/2002	1.5	0.5	--	UG/L	170	
1,1,1-Trichloroethane	5/1/2002	0.33	0.5	--	UG/L	170	J
1,1-Dichloroethane	5/1/2002	1.4	0.5	--	UG/L	170	
524.2 TVOC	5/1/2002	4.32	--	--	UG/L	170	
Chloroethane	5/1/2002	1.7	0.5	--	UG/L	170	
Chloroform	5/1/2002	0.89	0.5	--	UG/L	170	
Tritium	5/1/2002	613	378	247	PCI/L	170	J
1,1,1-Trichloroethane	7/25/2002	0.36	0.5	--	UG/L	170	J
1,1-Dichloroethane	7/25/2002	1.8	0.5	--	UG/L	170	
524.2 TVOC	7/25/2002	5.65	--	--	UG/L	170	
Chloroethane	7/25/2002	2.1	0.5	--	UG/L	170	
Chloroform	7/25/2002	0.83	0.5	--	UG/L	170	
cis-1,2-Dichloroethylene	7/25/2002	0.26	0.5	--	UG/L	170	J
Methyl chloride	7/25/2002	0.3	0.5	--	UG/L	170	J
Tritium	7/25/2002	783	415	275	PCI/L	170	J
1,1,1-Trichloroethane	9/23/2002	0.31	0.5	--	UG/L	170	J
1,1-Dichloroethane	9/23/2002	1.2	0.5	--	UG/L	170	
524.2 TVOC	9/23/2002	4.39	--	--	UG/L	170	
Chloroethane	9/23/2002	2.1	0.5	--	UG/L	170	
Chloroform	9/23/2002	0.78	0.5	--	UG/L	170	
Tritium	9/23/2002	568	520	325	PCI/L	170	J
1,1,1-Trichloroethane	11/15/2002	0.42	0.5	--	UG/L	170	J
1,1-Dichloroethane	11/15/2002	2	0.5	--	UG/L	170	
524.2 TVOC	11/15/2002	5.25	--	--	UG/L	170	
Chloroethane	11/15/2002	2	0.5	--	UG/L	170	
Chloroform	11/15/2002	0.83	0.5	--	UG/L	170	
Tritium	11/15/2002	610	300	218	PCI/L	170	J

Table F-1

Extraction Wells 1,2 Tritium and VOC Data

OU I South Boundary

2002 BNL Groundwater Status Report

Site ID: 115-43 **(EW-2)**							
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Error**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/10/2002	1.4	0.5	--	UG/L	130	
1,1-Dichloroethane	1/10/2002	5.7	0.5	--	UG/L	130	
1,1-Dichloroethylene	1/10/2002	0.52	0.5	--	UG/L	130	
524.2 TVOC	1/10/2002	13.63	--	--	UG/L	130	
Chloroethane	1/10/2002	3.1	0.5	--	UG/L	130	
Chloroform	1/10/2002	1.6	0.5	--	UG/L	130	
cis-1,2-Dichloroethylene	1/10/2002	0.56	0.5	--	UG/L	130	
Tetrachloroethylene	1/10/2002	0.41	0.5	--	UG/L	130	J
Trichloroethylene	1/10/2002	0.34	0.5	--	UG/L	130	J
Tritium	1/10/2002	1040	384	265	PCI/L	130	
1,1,1-Trichloroethane	3/25/2002	1	0.5	--	UG/L	130	
1,1-Dichloroethane	3/25/2002	4.6	0.5	--	UG/L	130	
1,1-Dichloroethylene	3/25/2002	0.35	0.5	--	UG/L	130	J
524.2 TVOC	3/25/2002	11.96	--	--	UG/L	130	
Chloroethane	3/25/2002	3.3	0.5	--	UG/L	130	
Chloroform	3/25/2002	1.5	0.5	--	UG/L	130	
cis-1,2-Dichloroethylene	3/25/2002	0.44	0.5	--	UG/L	130	J
Tetrachloroethylene	3/25/2002	0.43	0.5	--	UG/L	130	J
Trichloroethylene	3/25/2002	0.34	0.5	--	UG/L	130	J
Tritium	3/25/2002	795	264	173	PCI/L	130	J
1,1,1-Trichloroethane	5/1/2002	0.9	0.5	--	UG/L	130	
1,1-Dichloroethane	5/1/2002	4	0.5	--	UG/L	130	
1,1-Dichloroethylene	5/1/2002	0.29	0.5	--	UG/L	130	J
524.2 TVOC	5/1/2002	10.08	--	--	UG/L	130	
Chloroethane	5/1/2002	3	0.5	--	UG/L	130	
Chloroform	5/1/2002	1.2	0.5	--	UG/L	130	
cis-1,2-Dichloroethylene	5/1/2002	0.39	0.5	--	UG/L	130	J
Tetrachloroethylene	5/1/2002	0.3	0.5	--	UG/L	130	J
Tritium	5/1/2002	1280	363	269	PCI/L	130	
1,1,1-Trichloroethane	8/15/2002	0.5	0.5	--	UG/L	130	
1,1-Dichloroethane	8/15/2002	2.7	0.5	--	UG/L	130	
524.2 TVOC	8/15/2002	7.55	--	--	UG/L	130	
Chloroethane	8/15/2002	2.2	0.5	--	UG/L	130	
Chloroform	8/15/2002	1.7	0.5	--	UG/L	130	
Methyl chloride	8/15/2002	0.45	0.5	--	UG/L	130	J
Tritium	8/15/2002	2580	391	322	PCI/L	130	
1,1,1-Trichloroethane	9/23/2002	0.8	0.5	--	UG/L	130	
1,1-Dichloroethane	9/23/2002	3.8	0.5	--	UG/L	130	
1,1-Dichloroethylene	9/23/2002	0.28	0.5	--	UG/L	130	J
524.2 TVOC	9/23/2002	9.79	--	--	UG/L	130	
Chloroethane	9/23/2002	3.1	0.5	--	UG/L	130	
Chloroform	9/23/2002	1.2	0.5	--	UG/L	130	
cis-1,2-Dichloroethylene	9/23/2002	0.35	0.5	--	UG/L	130	J
Trichloroethylene	9/23/2002	0.26	0.5	--	UG/L	130	J
Tritium	9/23/2002	1440	515	362	PCI/L	130	

Table F-1

Extraction Wells 1,2 Tritium and VOC Data

OU I South Boundary

2002 BNL Groundwater Status Report

Site ID: 115-43 **(EW-2)**							
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Error**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	11/15/2002	0.88	0.5	--	UG/L	130	
1,1-Dichloroethane	11/15/2002	4.4	0.5	--	UG/L	130	
1,1-Dichloroethylene	11/15/2002	0.31	0.5	--	UG/L	130	J
524.2 TVOC	11/15/2002	10.7	--	--	UG/L	130	
Chloroethane	11/15/2002	2.6	0.5	--	UG/L	130	
Chloroform	11/15/2002	1.5	0.5	--	UG/L	130	
cis-1,2-Dichloroethylene	11/15/2002	0.49	0.5	--	UG/L	130	J
Trichloroethylene	11/15/2002	0.26	0.5	--	UG/L	130	J
Trichlorofluoromethane	11/15/2002	0.26	0.5	--	UG/L	130	J
Tritium	11/15/2002	1100	319	265	PCI/L	130	

J - Estimated value.
ug/L - Micrograms per liter.
pCi/L - Picocuries per liter.

Table F-2
Air Stripper Influent Tritium and VOC Data
OU I South Boundary
2002 BNL Groundwater Status Report

Site ID: 076-259 (Influent)

Chemical Name	Units	1/10/2002	2/15/2002	3/25/2002	4/15/2002	5/1/2002	6/4/2002	7/25/2002	8/15/2002	9/23/2002	10/1/2002
Tritium	pCi/L	958J	985J	692J	832J	904J	769J	688J	**1690**	695J	903J
1,1,1-Trichloroethane	ug/L	**1**	**0.86**	**0.78**	**0.98**	**0.71**	**0.86**	0.33J	0.44J	**0.62**	**0.58**
1,1-Dichloroethane	ug/L	**4.2**	**4.2**	**3.3**	**4.1**	**3.2**	**3.9**	**1.8**	**2.6**	**2.9**	**2.9**
1,1-Dichloroethylene	ug/L	0.36J	0.34J	0.26J	0.31J	<0.5	0.34J	<0.5	<0.5	<0.5	0.25J
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	**1.9**	**2.1**	**2.1**	**2.5**	**2.1**	**2**	**1.5**	**1.8**	**1.9**	**2**
Chloroform	ug/L	**1.4**	**1.4**	**1.4**	**1.4**	**1.1**	**1.4**	**0.81**	**1.4**	**1**	**1.2**
cis-1,2-Dichloroethylene	ug/L	0.41J	0.4J	0.33J	0.41J	0.38J	0.36J	<0.5	0.26J	0.28J	0.29J
Methyl chloride	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methylene chloride	ug/L	<0.5	<0.5	<0.5	0.36J	<0.5	1.8B	<0.5	<0.5	<0.5	<0.5
o-Xylene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethylene	ug/L	0.3J	0.31J	0.29J	0.3J	<0.5	0.29J	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	ug/L	0.26J	<0.5	0.26J	0.35J	<0.5	0.3J	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
524.2 TVOC	ug/L	**9.83**	**9.61**	**8.72**	**10.71**	**7.49**	**11.25**	**4.44**	**6.5**	**6.7**	**7.22**

ug/L - Micrograms per Liter

Table F-2
Air Stripper Influent Tritium and VOC Data
OU I South Boundary
2002 BNL Groundwater Status Report

11/15/2002	**12/2/2002**
816J	**1080**
0.75	**0.74**
3.6	**3.6**
0.36J	0.28J
<0.5	<0.5
<0.5	<0.5
<0.5	<0.5
<0.5	<0.5
1.6	**1.8**
1.3	**1.3**
<0.5	0.4J
<0.5	<0.5
<0.5	<0.5
<0.5	<0.5
<0.5	0.27J
<0.5	<0.5
<0.5	<0.5
7.61	**8.39**

Table F-3
Air Stripper Effluent Tritium and VOC Data
OU I South Boundary
2002 BNL Groundwater Status Report

Site ID: 076-261 (Effluent)													
Chemical Name	**Units**	**1/10/2002**	**2/15/2002**	**3/25/2002**	**4/15/2002**	**5/1/2002**	**6/4/2002**	**7/25/2002**	**8/15/2002**	**9/23/2002**	**10/1/2002**	**11/15/2002**	**12/2/2002**
Tritium	pCi/L	**1070**	707J	684J	966J	**1050**	692J	827J	**1830**	**1290**	**1110**	923J	976J
1,1,1-Trichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methyl chloride	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methylene chloride	ug/L	<0.5	0.3J	<0.5	0.45J	<0.5	**1.3B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
p-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichloroethylene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
524.2 TVOC	ug/L	0	0.3	0	0.45	0	**1.3**	0	0	0	0	0	0

ug/L - Micrograms per Liter

Table F-4
Air Stripper Effluent Rad, Pesticide, and Metals Data
OU I South Boundary
2002 BNL Groundwater Status Report

Site ID: 076-261						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Error**	**Units**	**Qual.**
Rad						
Americium-241	1/10/2002	1.15	13.3	7.55	pCi/L	U
Beryllium-7	1/10/2002	4.39	20.9	11.7	pCi/L	U
Cesium-134	1/10/2002	-0.485	2.24	1.34	pCi/L	U
Cesium-137	1/10/2002	-0.963	2.35	1.44	pCi/L	U
Co-60	1/10/2002	0.363	2.31	1.22	pCi/L	U
Cobalt-57	1/10/2002	-1.08	2.02	1.23	pCi/L	U
Europium-152	1/10/2002	-1.2	7.23	4.18	pCi/L	U
Europium-154	1/10/2002	1.09	7.43	4.03	pCi/L	U
Europium-155	1/10/2002	-0.559	9	5.29	pCi/L	U
Gross Alpha	1/10/2002	0.261	0.64	0.346	pCi/L	U
Gross Beta	1/10/2002	1.05	0.576	0.349	pCi/L	J
Manganese-54	1/10/2002	-0.217	2.35	1.32	pCi/L	U
Sodium-22	1/10/2002	0.482	2.65	1.43	pCi/L	U
Strontium-90	1/10/2002	0.0555	0.426	0.203	pCi/L	U
Tritium	1/10/2002	1070	388	268	pCi/L	
Zinc-65	1/10/2002	-2.14	4.66	2.83	pCi/L	U
Pesticides & PCB's						
4,4''-DDD	1/10/2002	0.048	0.048	--	ug/L	U
4,4''-DDE	1/10/2002	0.096	0.096	--	ug/L	U
4,4''-DDT	1/10/2002	0.0072	0.096	--	ug/L	JP
Aldrin	1/10/2002	0.048	0.048	--	ug/L	U
alpha-BHC	1/10/2002	0.048	0.048	--	ug/L	U
Aroclor 1016	1/10/2002	0.1	0.1	--	ug/L	U
Aroclor 1221	1/10/2002	0.1	0.1	--	ug/L	U
Aroclor 1232	1/10/2002	0.1	0.1	--	ug/L	U
Aroclor 1248	1/10/2002	0.1	0.1	--	ug/L	U
Aroclor 1254	1/10/2002	0.1	0.1	--	ug/L	U
Aroclor 1260	1/10/2002	0.1	0.1	--	ug/L	U
Aroclor-1242	1/10/2002	0.1	0.1	--	ug/L	U
beta-BHC	1/10/2002	0.048	0.048	--	ug/L	U
Chlordane	1/10/2002	0.048	0.048	--	ug/L	U
delta-BHC	1/10/2002	0.096	0.096	--	ug/L	U
Dieldrin	1/10/2002	0.096	0.096	--	ug/L	U
Endosulfan I	1/10/2002	0.048	0.048	--	ug/L	U
Endosulfan II	1/10/2002	0.096	0.096	--	ug/L	U
Endosulfan sulfate	1/10/2002	0.096	0.096	--	ug/L	U
Endrin	1/10/2002	0.096	0.096	--	ug/L	U
Endrin aldehyde	1/10/2002	0.096	0.096	--	ug/L	U
Endrin ketone	1/10/2002	0.096	0.096	--	ug/L	U
Heptachlor	1/10/2002	0.048	0.048	--	ug/L	U
Heptachlor epoxide	1/10/2002	0.048	0.048	--	ug/L	U
Lindane	1/10/2002	0.048	0.048	--	ug/L	U
Methoxychlor	1/10/2002	0.48	0.48	--	ug/L	U
Toxaphene	1/10/2002	4.8	4.8	--	ug/L	U

Table F-4

Air Stripper Effluent Rad, Pesticide, and Metals Data

OU I South Boundary

2002 BNL Groundwater Status Report

Site ID: 076-261						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Error**	**Units**	**Qual.**
Metals						
Arsenic	1/10/2002	2.6	2.6	--	ug/L	U
Barium	1/10/2002	38.6	0.248	--	ug/L	
Cadmium	1/10/2002	0.416	0.416	--	ug/L	U
Chromium	1/10/2002	0.57	0.57	--	ug/L	U
Lead	1/10/2002	2.43	2.43	--	ug/L	U
Mercury	1/10/2002	0.064	0.064	--	ug/L	U
Selenium	1/10/2002	3.49	3.49	--	ug/L	U
Silver	1/10/2002	0.666	0.666	--	ug/L	U

ug/L - Micrograms per Liter
pCi/L - Picocuries per Liter.

Table F-5
Cumulative Mass Removal
OU I South Boundary
2002 BNL Groundwater Status Report

Date Sampled	Total VOCs (ug/L)	Flow Rates (gpm)	Cumulative VOCs (lbs)
1/10/02	9.83	618	258.5
2/15/02	9.61	611	261.1
3/25/02	8.72	583	263.4
4/15/02	10.71	611.5	265.0
5/1/02	7.49	598.68	265.9
6/4/02	11.25	610	268.7
7/25/02	4.44	658	270.5
8/15/02	6.5	663.9	271.6
9/23/02	6.7	685.7	273.7
10/1/02	7.22	671.5	274.2
11/15/02	7.61	663.8	276.9
12/2/02	8.39	655.8	278.1
12/31/02*	8.39	655.8	280.0

ug/L Micrograms per liter.
gpm Gallons per minute.
lbs Pounds.
* Results estimated based on sample collected 12/2/2002.

OU III CARBON TETRACHLORIDE

Table F-6
Influent Analytical Data
OU III Carbon Tetrachloride System
2002 BNL Groundwater Status Report

Chemical Name	Sample Date	Value	Detection Limit	Units	Qualifier
1,1,1-Trichloroethane	1/2/2002	0.87	0.5	ug/L	
1,1-Dichloroethylene	1/2/2002	0.28	0.5	ug/L	J
524.2 TVOC	1/2/2002	589.05	0	ug/L	
Carbon tetrachloride	1/2/2002	**583**	10	ug/L	D
Chloroform	1/2/2002	3.7	0.5	ug/L	
Tetrachloroethylene	1/2/2002	1.2	0.5	ug/L	
1,1,1-Trichloroethane	1/14/2002	1.2	0.5	ug/L	
1,1-Dichloroethylene	1/14/2002	0.44	0.5	ug/L	J
524.2 TVOC	1/14/2002	649.84	0	ug/L	
Carbon tetrachloride	1/14/2002	**642**	5	ug/L	D
Chloroform	1/14/2002	4.6	0.5	ug/L	
Tetrachloroethylene	1/14/2002	1.3	0.5	ug/L	
Trichloroethylene	1/14/2002	0.3	0.5	ug/L	J
1,1,1-Trichloroethane	2/1/2002	0.73	0.5	ug/L	
1,1-Dichloroethylene	2/1/2002	0.25	0.5	ug/L	J
524.2 TVOC	2/1/2002	527.95	0	ug/L	
Carbon tetrachloride	2/1/2002	**522**	5	ug/L	D
Chloroform	2/1/2002	3.8	0.5	ug/L	
Tetrachloroethylene	2/1/2002	0.9	0.5	ug/L	
Trichloroethylene	2/1/2002	0.27	0.5	ug/L	J
1,1,1-Trichloroethane	2/15/2002	0.68	0.5	ug/L	
524.2 TVOC	2/15/2002	531.35	0	ug/L	
Carbon tetrachloride	2/15/2002	**525**	5	ug/L	D
Chloroform	2/15/2002	3.8	0.5	ug/L	
Methylene chloride	2/15/2002	0.54	0.5	ug/L	
Tetrachloroethylene	2/15/2002	0.95	0.5	ug/L	
Trichloroethylene	2/15/2002	0.38	0.5	ug/L	J
1,1,1-Trichloroethane	3/1/2002	0.62	0.5	ug/L	
524.2 TVOC	3/1/2002	576.83	0	ug/L	
Carbon tetrachloride	3/1/2002	**562**	10	ug/L	D
Chloroform	3/1/2002	**12.9**	0.5	ug/L	
Tetrachloroethylene	3/1/2002	0.9	0.5	ug/L	
Trichloroethylene	3/1/2002	0.41	0.5	ug/L	J
1,1,1-Trichloroethane	3/15/2002	0.92	0.5	ug/L	
1,1-Dichloroethylene	3/15/2002	0.31	0.5	ug/L	J
524.2 TVOC	3/15/2002	590.25	0	ug/L	
Carbon tetrachloride	3/15/2002	**581**	10	ug/L	D
Chloroform	3/15/2002	4.3	0.5	ug/L	
Methylene chloride	3/15/2002	1.9	0.5	ug/L	
Tetrachloroethylene	3/15/2002	1.1	0.5	ug/L	
Trichloroethylene	3/15/2002	0.72	0.5	ug/L	
1,1,1-Trichloroethane	4/1/2002	0.79	0.5	ug/L	
524.2 TVOC	4/1/2002	398.46	0	ug/L	
Carbon tetrachloride	4/1/2002	**385**	5	ug/L	D
Chloroform	4/1/2002	**11.1**	0.5	ug/L	
Tetrachloroethylene	4/1/2002	0.95	0.5	ug/L	
Trichloroethylene	4/1/2002	0.62	0.5	ug/L	

Table F-6
Influent Analytical Data
OU III Carbon Tetrachloride System
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Chemical Name	Sample Date	Value	Detection Limit	Units	Qualifier
1,1,1-Trichloroethane	4/15/2002	1	0.5	ug/L	
1,1-Dichloroethylene	4/15/2002	0.26	0.5	ug/L	J
524.2 TVOC	4/15/2002	423.94	0	ug/L	
Carbon tetrachloride	4/15/2002	**417**	5	ug/L	D
Chloroform	4/15/2002	3.3	0.5	ug/L	
Methylene chloride	4/15/2002	0.57	0.5	ug/L	
Tetrachloroethylene	4/15/2002	1	0.5	ug/L	
Trichloroethylene	4/15/2002	0.81	0.5	ug/L	
1,1,1-Trichloroethane	5/1/2002	0.81	0.5	ug/L	
524.2 TVOC	5/1/2002	332.99	0	ug/L	
Carbon tetrachloride	5/1/2002	**328**	5	ug/L	D
Chloroform	5/1/2002	2.6	0.5	ug/L	
Tetrachloroethylene	5/1/2002	0.96	0.5	ug/L	
Trichloroethylene	5/1/2002	0.62	0.5	ug/L	
1,1,1-Trichloroethane	5/15/2002	0.94	0.5	ug/L	
524.2 TVOC	5/15/2002	325.68	0	ug/L	
Carbon tetrachloride	5/15/2002	**320**	5	ug/L	D
Chloroform	5/15/2002	3	0.5	ug/L	
Tetrachloroethylene	5/15/2002	0.98	0.5	ug/L	
Trichloroethylene	5/15/2002	0.76	0.5	ug/L	
1,1,1-Trichloroethane	6/3/2002	0.79	0.5	ug/L	
524.2 TVOC	6/3/2002	266.15	0	ug/L	
Carbon tetrachloride	6/3/2002	**252**	2.5	ug/L	D
Chloroform	6/3/2002	**11**	0.5	ug/L	
Methylene chloride	6/3/2002	1.1	0.5	ug/L	B
Tetrachloroethylene	6/3/2002	0.68	0.5	ug/L	
Trichloroethylene	6/3/2002	0.58	0.5	ug/L	
1,1,1-Trichloroethane	6/14/2002	1	0.5	ug/L	
1,1-Dichloroethylene	6/14/2002	0.27	0.5	ug/L	J
524.2 TVOC	6/14/2002	304.05	0	ug/L	
Carbon tetrachloride	6/14/2002	**297**	5	ug/L	D
Chloroform	6/14/2002	3.2	0.5	ug/L	
Methylene chloride	6/14/2002	0.54	0.5	ug/L	B
p-Dichlorobenzene	6/14/2002	0.27	0.5	ug/L	J
Tetrachloroethylene	6/14/2002	0.99	0.5	ug/L	
Trichloroethylene	6/14/2002	0.78	0.5	ug/L	
1,1,1-Trichloroethane	7/1/2002	0.79	0.5	ug/L	
524.2 TVOC	7/1/2002	228.1	0	ug/L	
Carbon tetrachloride	7/1/2002	**216**	5	ug/L	D
Chloroform	7/1/2002	**9.8**	0.5	ug/L	
Tetrachloroethylene	7/1/2002	0.79	0.5	ug/L	
Trichloroethylene	7/1/2002	0.72	0.5	ug/L	
1,1,1-Trichloroethane	7/15/2002	0.78	0.5	ug/L	
524.2 TVOC	7/15/2002	152.29	0	ug/L	
Carbon tetrachloride	7/15/2002	**148**	5	ug/L	D
Chloroform	7/15/2002	2.1	0.5	ug/L	
Tetrachloroethylene	7/15/2002	0.75	0.5	ug/L	
Trichloroethylene	7/15/2002	0.66	0.5	ug/L	

Table F-6
Influent Analytical Data
OU III Carbon Tetrachloride System
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Chemical Name	Sample Date	Value	Detection Limit	Units	Qualifier
1,1,1-Trichloroethane	8/1/2002	0.68	0.5	ug/L	
524.2 TVOC	8/1/2002	143.41	0	ug/L	
Carbon tetrachloride	8/1/2002	**134**	5	ug/L	D
Chloroform	8/1/2002	7	0.5	ug/L	
Methyl chloride	8/1/2002	0.39	0.5	ug/L	J
Tetrachloroethylene	8/1/2002	0.6	0.5	ug/L	
Trichloroethylene	8/1/2002	0.74	0.5	ug/L	
1,1,1-Trichloroethane	8/15/2002	0.8	0.5	ug/L	
1,1-Dichloroethylene	8/15/2002	0.26	0.5	ug/L	J
524.2 TVOC	8/15/2002	106.64	0	ug/L	
Carbon tetrachloride	8/15/2002	**102**	5	ug/L	D
Chloroform	8/15/2002	2.2	0.5	ug/L	
Tetrachloroethylene	8/15/2002	0.64	0.5	ug/L	
Trichloroethylene	8/15/2002	0.74	0.5	ug/L	
1,1,1-Trichloroethane	9/3/2002	0.88	0.5	ug/L	
1,1-Dichloroethylene	9/3/2002	0.3	0.5	ug/L	J
524.2 TVOC	9/3/2002	103.81	0	ug/L	
Carbon tetrachloride	9/3/2002	**99.3**	0.5	ug/L	
Chloroform	9/3/2002	2	0.5	ug/L	
Tetrachloroethylene	9/3/2002	0.43	0.5	ug/L	J
Trichloroethylene	9/3/2002	0.9	0.5	ug/L	
1,1,1-Trichloroethane	9/16/2002	0.8	0.5	ug/L	
1,1-Dichloroethylene	9/16/2002	0.37	0.5	ug/L	J
524.2 TVOC	9/16/2002	84.69	0	ug/L	
Carbon tetrachloride	9/16/2002	**80**	0.5	ug/L	
Chloroform	9/16/2002	2.1	0.5	ug/L	
Tetrachloroethylene	9/16/2002	0.45	0.5	ug/L	J
Trichloroethylene	9/16/2002	0.97	0.5	ug/L	
1,1,1-Trichloroethane	10/1/2002	0.61	0.5	ug/L	
524.2 TVOC	10/1/2002	86.8	0	ug/L	
Carbon tetrachloride	10/1/2002	**80.5**	0.5	ug/L	
Chloroform	10/1/2002	4.4	0.5	ug/L	
Tetrachloroethylene	10/1/2002	0.42	0.5	ug/L	J
Trichloroethylene	10/1/2002	0.87	0.5	ug/L	
1,1,1-Trichloroethane	10/15/2002	0.86	0.5	ug/L	
1,1-Dichloroethylene	10/15/2002	0.35	0.5	ug/L	J
524.2 TVOC	10/15/2002	60.65	0	ug/L	
Carbon tetrachloride	10/15/2002	**56**	0.5	ug/L	
Chloroform	10/15/2002	1.9	0.5	ug/L	
Tetrachloroethylene	10/15/2002	0.44	0.5	ug/L	J
Trichloroethylene	10/15/2002	1.1	0.5	ug/L	
524.2 TVOC	11/1/2002	46.66	0	ug/L	
Carbon tetrachloride	11/1/2002	**40.3**	0.5	ug/L	
Chloroform	11/1/2002	6.1	0.5	ug/L	
Methylene chloride	11/1/2002	0.26	0.5	ug/L	J

Table F-6
Influent Analytical Data
OU III Carbon Tetrachloride System
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Chemical Name	Sample Date	Value	Detection Limit	Units	Qualifier
1,1,1-Trichloroethane	11/15/2002	1.4	0.5	ug/L	
1,1-Dichloroethylene	11/15/2002	0.6	0.5	ug/L	
524.2 TVOC	11/15/2002	86.97	0	ug/L	
Carbon tetrachloride	11/15/2002	**81**	0.5	ug/L	
Chloroform	11/15/2002	1.6	0.5	ug/L	
Tetrachloroethylene	11/15/2002	0.37	0.5	ug/L	J
Trichloroethylene	11/15/2002	2	0.5	ug/L	
1,1,1-Trichloroethane	12/2/2002	1.2	0.5	ug/L	
1,1-Dichloroethylene	12/2/2002	0.43	0.5	ug/L	J
524.2 TVOC	12/2/2002	74.2	0	ug/L	
Carbon tetrachloride	12/2/2002	**68.7**	0.5	ug/L	
Chloroform	12/2/2002	1.4	0.5	ug/L	
Tetrachloroethylene	12/2/2002	0.47	0.5	ug/L	J
Trichloroethylene	12/2/2002	2	0.5	ug/L	
1,1,1-Trichloroethane	12/16/2002	1.2	0.5	ug/L	
1,1-Dichloroethylene	12/16/2002	0.43	0.5	ug/L	J
524.2 TVOC	12/16/2002	70.13	0	ug/L	
Carbon tetrachloride	12/16/2002	**64.4**	0.5	ug/L	
Chloroform	12/16/2002	1.5	0.5	ug/L	
Tetrachloroethylene	12/16/2002	0.5	0.5	ug/L	
Trichloroethylene	12/16/2002	2.1	0.5	ug/L	

ug/L - Micrograms per liter.

TABLE F-7
MIDPOINT 1 ANALYTICAL DATA
OU III CARBON TETRACHLORIDE
2002 BNL Groundwater Status Report

085-202													
Carbon Tetrachloride (Midpoint1)	**WED**	**MON**	**FRI**	**FRI**	**FRI**	**FRI**	**MON**	**MON**	**WED**	**WED**	**MON**	**FRI**	**MON**
Parameters	1/2/2002	1/14/2002	2/1/2002	2/15/2002	3/1/2002	3/15/2002	4/1/2002	4/15/2002	5/1/2002	5/15/2002	6/3/2002	6/14/2002	7/1/2002
1,1-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-trichloroethane	1.8	<0.50	0.60	0.708	<0.50	0.39J	0.79	0.94	<0.50	0.75	1.1	<0.50	0.34J
Bromodichloromethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	244.0	19.2	241.0	389.0	0.56	152.0	366.00	344.0	37.10	166.0	243.0	0.93	22.4
Chloroform	3.0	<0.50	1.0	2.01	<0.50	<0.50	1.2	2.0	<0.50	0.76	2	0.33B	<0.50
Methylene Chloride	<0.50	<0.50	<0.50	<0.51B	<0.50	1.7B	<0.50	0.83B	<0.50	<0.50	0.76B	<0.50	<0.50
Tetrachloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of 1,3-and 1,4-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

J - Estimated Value
B - Detected in Blank
E - Estimated Value
ND - Non-detect
NA - Not Available
Values in micrograms per liter.

TABLE F-7
MIDPOINT 1 ANALYTICAL DATA
OU III CARBON TETRACHLORIDE
2002 BNL Groundwater Status Report

085-202										
Carbon Tetrachloride (Midpoint1)	**FRI**	**THUR**	**THUR**	**TUE**	**MON**	**TUE**	**TUE**	**FRI**	**FRI**	**MON**
Parameters	7/15/2002	8/1/2002	8/15/2002	9/3/2002	9/16/2002	10/1/2002	10/15/2002	11/1/2002	11/15/2002	12/2/2002
1,1-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-trichloroethane	0.62	0.90	<0.50	0.42J	0.65	0.74	0.75	<0.50	<0.50	0.62
Bromodichloromethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	74.20	105.0	<0.50	23.6	41.6	47.8	52.4	0.37J	4.0	14.6
Chloroform	0.40J	1.2	<0.50	0.48J	0.98	1.2	1.5	<0.50	<0.50	0.43J
Methylene Chloride	<0.50	<0.50	0.26JB	<0.50	<0.50	<0.50	<0.50	<0.50	0.27JB	<0.50
Tetrachloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of 1,3-and 1,4-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

J - Estimated Value
B - Detected in Blank
E - Estimated Value
ND - Non-detect
NA - Not Available
Values in micrograms per liter.

TABLE F-7
MIDPOINT 1 ANALYTICAL DATA
OU III CARBON TETRACHLORIDE
2002 BNL Groundwater Status Report

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Carbon Tetrachloride (Midpoint1)	**MON**
Parameters	12/16/2002
1,1-Dichloroethylene	<0.50
1,1,1-trichloroethane	0.86
Bromodichloromethane	<0.50
Carbon Tetrachloride	26.6
Chloroform	0.65
Methylene Chloride	0.41JB
Tetrachloroethylene	<0.50
Toluene	<0.50
Trichloroethylene	<0.50
Trichlorofluoromethane	<0.50
1,2-Xylene	<0.50
Sum of 1,3-and 1,4-Xylene	<0.50

J - Estimated Value
B - Detected in Blank
E - Estimated Value
ND - Non-detect
NA - Not Available
Values in micrograms per liter.

TABLE F-8
MIDPOINT 2 ANALYTICAL DATA
OU III CARBON TETRACHLORIDE
2002 BNL Groundwater Status Report

Carbon Tetrachloride (Midpoint 2)	**WED**	**MON**	**FRI**	**FRI**	**FRI**	**FRI**	**MON**	**MON**	**WED**	**WED**
Parameters	1/2/2002	1/14/2002	2/1/2002	2/15/2002	3/1/2002	3/15/2002	4/1/2002	4/15/2002	5/1/2002	5/15/2002
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	0.99	<0.50	7.6	52.4	0.86	<0.50	2.7	32.0	<0.50	5.8
Chloroform	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	<0.50	<0.50	<0.50	<0.50	<0.50	0.94B	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Xylene (o-isomers)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Xylene (sum of M & P isomers)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Values in micrograms per liter.
J - Estimated Value
B - Detected in Blank
E - Estimated Value
ND - Non-detect
N - Not Available

TABLE F-8
MIDPOINT 2 ANALYTICAL DATA
OU III CARBON TETRACHLORIDE
2002 BNL Groundwater Status Report

Carbon Tetrachloride (Midpoint 2)	**MON**	**FRI**	**MON**	**MON**	**THUR**	**THUR**	**TUE**	**MON**	**TUE**	**TUE**
Parameters	6/3/2002	6/14/2002	7/1/2002	7/15/2002	8/1/2002	8/15/2002	9/3/2002	9/16/2002	10/1/2002	10/15/2002
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.37J
1,1-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	68.2	<0.50	0.32J	<0.50	5.2	<0.50	<0.50	<0.50	2.8	11.5
Chloroform	<0.50	0.38B	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	0.79B	0.46B	<0.50	<0.50	<0.50	0.32JB	<0.50	<0.50	<0.50	0.40J
Tetrachloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Xylene (o-isomers)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Xylene (sum of M & P isomers)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Values in micrograms per liter.
J - Estimated Value
B - Detected in Blank
E - Estimated Value
ND - Non-detect
N - Not Available

TABLE F-8
MIDPOINT 2 ANALYTICAL DATA
OU III CARBON TETRACHLORIDE
2002 BNL Groundwater Status Report

Carbon Tetrachloride (Midpoint 2)	**FRI**	**FRI**	**MON**	**MON**
Parameters	11/1/2002	11/15/2002	12/2/2002	12/16/2002
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	<0.50	<0.50	0.26J	<0.50
Chloroform	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	<0.50	0.26J	<0.50	<0.50
Tetrachloroethylene	<0.50	<0.50	<0.50	<0.50
Toluene	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane	<0.50	<0.50	<0.50	<0.50
Xylene (o-isomers)	<0.50	<0.50	<0.50	<0.50
Xylene (sum of M & P isomers)	<0.50	<0.50	<0.50	<0.50

Values in micrograms per liter.
J - Estimated Value
B - Detected in Blank
E - Estimated Value
ND - Non-detect
N - Not Available

TABLE F-9
SYSTEM EFFLUENT DATA
OU III CARBON TETRACHLORIDE
2002 BNL Groundwater Status Report

Outfall 001 - Treated Groundwater Remediation Discharge

085-204										
Carbon Tetrachloride (Effluent)	**WED**	**MON**	**FRI**	**FRI**	**FRI**	**FRI**	**MON**	**MON**	**WED**	**WED**
Parameters	1/2/2002	1/14/2002	2/1/2002	2/15/2002	3/1/2002	3/15/2002	4/1/2002	4/15/2002	5/1/2002	5/15/2002
1,1-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	<0.50	<0.50	<0.50	0.60B	<0.50	0.88B	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of 1,3- and 1,4-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Flow (GPM)	78.3	78.3	72.3	72.3	67.9	67.9	76.7	76.7	71.2	71.2

Values in micrograms per liter.
NS - Not Sampled
E - Estimated Value
J - Estimated Value
B - Detected in Blank
ND - Non-detect
NA - Not Available

TABLE F-9
SYSTEM EFFLUENT DATA
OU III CARBON TETRACHLORIDE
2002 BNL Groundwater Status Report

Outfall 001 - Treated Groundwater Remediation Discharge

085-204										
Carbon Tetrachloride (Effluent)	**MON**	**FRI**	**MON**	**MON**	**THUR**	**THUR**	**TUE**	**MON**	**TUE**	**TUE**
Parameters	6/3/2002	6/14/2002	7/1/2002	7/15/2002	8/1/2002	8/15/2002	9/3/2002	9/16/2002	10/1/2002	10/15/2002
1,1-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	0.67B	0.43B	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	<0.50	0.44B	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of 1,3- and 1,4-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Flow (GPM)	73.6	73.6	69.0	69.0	68.0	68.0	72.0	72.0	60.0	60.0

Values in micrograms per liter.
NS - Not Sampled
E - Estimated Value
J - Estimated Value
B - Detected in Blank
ND - Non-detect
NA - Not Available

TABLE F-9
SYSTEM EFFLUENT DATA
OU III CARBON TETRACHLORIDE
2002 BNL Groundwater Status Report

Outfall 001 - Treated Groundwater Remediation Discharge

085-204				
Carbon Tetrachloride (Effluent)	**FRI**	**FRI**	**MON**	**MON**
Parameters	11/1/2002	11/15/2002	12/2/2002	12/16/2002
1,1-Dichloroethylene	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	<0.50	<0.50	<0.50	<0.50
Chloroform	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	<0.50	<0.50	<0.50	0.56B
Tetrachloroethylene	<0.50	<0.50	<0.50	<0.50
Toluene	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane	<0.50	<0.50	<0.50	<0.50
1,2-Xylene	<0.50	<0.50	<0.50	<0.50
Sum of 1,3- and 1,4-Xylene	<0.50	<0.50	<0.50	<0.50
Flow (GPM)	52.0	52.0	51.0	51.0

Values in micrograms per liter.
NS - Not Sampled
E - Estimated Value
J - Estimated Value
B - Detected in Blank
ND - Non-detect
NA - Not Available

Table F-10
Cumulative Mass Removed
OU III Carbon Tetrachloride System
2002 BNL Groundwater Status Report

DATE	FLOW (GPM)	CCL4 (ug/L)	LBS/DAY	CUM. LBS
1/2/2002	78	549	0.51	242.54
1/14/2002	78	642	0.60	248.71
2/1/2002	72	522	0.45	259.54
2/15/2002	72	525	0.45	265.86
3/1/2002	68	562	0.46	272.21
3/15/2002	68	581	0.47	278.64
4/1/2002	77	385	0.36	286.70
4/15/2002	77	417	0.39	291.69
5/1/2002	71	328	0.28	297.86
5/15/2002	71	320	0.27	301.77
6/3/2002	74	252	0.22	306.96
6/14/2002	74	297	0.26	309.42
7/1/2002	69	216	0.18	313.91
7/15/2002	69	148	0.12	316.42
8/1/2002	68	134	0.11	318.50
8/15/2002	68	102	0.08	320.03
9/3/2002	72	99.3	0.09	321.62
9/16/2002	72	80	0.07	322.73
10/1/2002	60	80.5	0.06	323.77
10/15/2002	60	56	0.04	324.58
11/1/2002	52	40.3	0.03	325.27
11/15/2002	52	81	0.05	325.62
12/2/2002	51	68.7	0.04	326.48
12/16/2002	51	64.4	0.04	327.07
12/31/2002	51	64.4	0.04	327.66

GPM - Gallons per minute.
ug/L - micrograms per liter.
CUM. LBS - Cumulative pounds.
* Results for 12/31/2002 estimated based on sample collected 12/16/2002.

OU III BUIDING 96 SYSTEM

Table F-11
Summary of 2002 Geoprobe Results
OUIII Building 96 System
2002 BNL Groundwater Status Report

Site Id#	**085-313***	**095-281***	**095-282***	**095-283***
Depth (ft bls)	**TVOC Concentration**			
28-32	2,244.88	0.85	NSP	NSP
36-40	**3,718.07**	3.06	136.95	NSP
44-48	NSP	NSP	**561.41**	NSP
52-56	NSP	NSP	32.09	NSP
60-64	NSP	NSP	124.15	8.13
68-72	NSP	NSP	**405.42**	13.57
76-80	NSP	NSP	2.2	**139.17**

Site Id#	**095-284***	**095-286****	**095-287****
Depth (ft bls)	**TVOC Concentration**		
28-32	NSP	10.3	Dry
32-36	0.46 J	21.51	3.49
40-44	19.8	64.88	5.16
48-52	39.28	**389.95**	31.62
56-60	87.9	7.5	**593.10**
64-68	**848.98**	37.7	40.82
72-76	245.78	5.6	0.3
80-84	19.6	8.24	1.6
88-92	24.9	2.15	1.3
96-100	11.19	6.3	1.7

Site Id#	**085-315****	**095-288****	**095-289****	**085-316****	**085-317****
Depth (ft bls)	**TVOC Concentration**				
24-28	Dry	23.10	Dry	Dry	Dry
28-32	433	24.2	261.62	1,592.9	426.86
36-40	**1,446**	185.5	36.90	**3,472.6**	474.9
44-48	13.75	**561.80**	**1,459.85**	632.9	**882.7**
52-56	0.34 J	530.10	94.84	7.00	0.85
60-64	ND	1.23	40.45	4.09	1.19
68-72	0.88 J	22.90	3.11	ND	1.48
76-80	0.33 J	3.5	1.01	0.28 J	1.0

TVOC concentrations are reported in ug/L.
ft bls = feet below land surface.
NSP = No sampling proposed.
* = August/September 2002 Geoprobe Location
** = November 2002 Geoprobe Location

Table F-12
Air-Sampling Results
OUIII Building 96 System
2002 BNL Groundwater Status Report

Location: 095-246 **(GAC Unit Influent)**				
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**
1,1,1-Trichloroethane	1/2/2002	36	7.4	UG/M3
Methylene chloride	1/2/2002	5.7	4.7	UG/M3
Tetrachloroethylene	1/2/2002	540	9.2	UG/M3
1,1,1-Trichloroethane	2/1/2002	84	7.4	UG/M3
1,1-Dichloroethylene	2/1/2002	8.9	5.3	UG/M3
1,2,4-Trichlorobenzene	2/1/2002	13	10	UG/M3
Benzene	2/1/2002	4.8	4.3	UG/M3
Tetrachloroethylene	2/1/2002	700	9.2	UG/M3
1,1,1-Trichloroethane	3/1/2002	44	7.4	UG/M3
Benzene	3/1/2002	4.4	4.3	UG/M3
Tetrachloroethylene	3/1/2002	460	9.2	UG/M3
1,1,1-Trichloroethane	4/1/2002	33	7.4	UG/M3
Benzene	4/1/2002	7.6	4.3	UG/M3
Tetrachloroethylene	4/1/2002	380	9.2	UG/M3
1,1,1-Trichloroethane	5/1/2002	34	7.4	UG/M3
Benzene	5/1/2002	5.5	4.3	UG/M3
Tetrachloroethylene	5/1/2002	380	9.2	UG/M3
1,1,1-Trichloroethane	6/3/2002	24	3.6	UG/M3
Benzene	6/3/2002	5.4	2.1	UG/M3
Methylene chloride	6/3/2002	5.6	2.3	UG/M3
Tetrachloroethylene	6/3/2002	280	4.5	UG/M3
1,1,1-Trichloroethane	8/1/2002	26	2.7	UG/M3
Benzene	8/1/2002	8.4	1.6	UG/M3
Benzene, 1,2,4-trimethyl	8/1/2002	3.6	2.5	UG/M3
Tetrachloroethylene	8/1/2002	240	3.4	UG/M3
Toluene	8/1/2002	2.2	1.9	UG/M3
1,1,1-Trichloroethane	10/2/2002	21	2.7	UG/M3
Benzene	10/2/2002	18	1.6	UG/M3
Benzene, 1,2,4-trimethyl	10/2/2002	8	2.5	UG/M3
Dichlorodifluoromethane	10/2/2002	3.6	2.5	UG/M3
Methyl chloride	10/2/2002	1.1	1	UG/M3
Tetrachloroethylene	10/2/2002	180	3.4	UG/M3
Toluene	10/2/2002	3.9	1.9	UG/M3

Infuent = influent to Granular Activated Carbon (GAC) units

Table F-12
Air-Sampling Results
OUIII Building 96 System
2002 BNL Groundwater Status Report

Location: 095-247 **(GAC Unit Mid-point)**				
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**
1,1,1-Trichloroethane	1/2/2002	18	2.7	UG/M3
1,1-Dichloroethylene	1/2/2002	3.9	2	UG/M3
1,2,4-Trichlorobenzene	1/2/2002	7.5	3.7	UG/M3
Benzene	1/2/2002	6.6	1.6	UG/M3
Hexachlorobutadiene	1/2/2002	6.2	5.3	UG/M3
Methylene chloride	1/2/2002	2.1	1.7	UG/M3
1,1,1-Trichloroethane	2/1/2002	40	2.7	UG/M3
1,1-Dichloroethylene	2/1/2002	4.5	2	UG/M3
Benzene	2/1/2002	6	1.6	UG/M3
Toluene	2/1/2002	2.6	1.9	UG/M3
Dichlorodifluoromethane	3/1/2002	2.8	2.5	UG/M3
Methyl chloride	3/1/2002	1.1	1	UG/M3
Methylene chloride	3/1/2002	10	1.7	UG/M3
1,1,1-Trichloroethane	4/1/2002	23	2.7	UG/M3
1,1-Dichloroethylene	4/1/2002	4.4	2	UG/M3
Benzene	4/1/2002	5.2	1.6	UG/M3
1,1,1-Trichloroethane	5/1/2002	13	2.7	UG/M3
1,1-Dichloroethylene	5/1/2002	3	2	UG/M3
Benzene	5/1/2002	7	1.6	UG/M3
1,1,1-Trichloroethane	6/3/2002	6.8	2.7	UG/M3
1,1-Dichloroethylene	6/3/2002	2.6	2	UG/M3
Benzene	6/3/2002	9.3	1.6	UG/M3
Benzene, 1,2,4-trimethyl	6/3/2002	2.5	2.5	UG/M3
Toluene	6/3/2002	4.6	1.9	UG/M3
1,1,1-Trichloroethane	8/1/2002	3.2	2.7	UG/M3
1,1-Dichloroethylene	8/1/2002	2.7	2	UG/M3
Benzene	8/1/2002	18	1.6	UG/M3
1,1,1-Trichloroethane	10/2/2002	6.2	2.7	UG/M3
1,1-Dichloroethylene	10/2/2002	2.7	2	UG/M3
Benzene	10/2/2002	25	1.6	UG/M3
Benzene, 1,2,4-trimethyl	10/2/2002	4.2	2.5	UG/M3
Dichlorodifluoromethane	10/2/2002	3	2.5	UG/M3
Methyl chloride	10/2/2002	1.5	1	UG/M3

Mid-point = mid-point between GAC units

Table F-12
Air-Sampling Results
OUIII Building 96 System
2002 BNL Groundwater Status Report

Location: 095-253 **(GAC Unit Effluent)**				
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**
1,2,4-Trichlorobenzene	1/2/2002	6.5	3.7	UG/M3
Benzene	1/2/2002	4	1.6	UG/M3
Benzene, 1,2,4-trimethyl	1/2/2002	4.6	2.5	UG/M3
Dichlorodifluoromethane	1/2/2002	2.6	2.5	UG/M3
Methyl chloride	1/2/2002	1.1	1	UG/M3
Methylene chloride	1/2/2002	2.2	1.7	UG/M3
1,2,4-Trichlorobenzene	2/1/2002	5.5	3.7	UG/M3
Benzene	2/1/2002	5.6	1.6	UG/M3
Benzene, 1,2,4-trimethyl	2/1/2002	6.3	2.5	UG/M3
1,1-Dichloroethylene	3/1/2002	4.4	2	UG/M3
Benzene	3/1/2002	6.1	1.6	UG/M3
Benzene, 1,2,4-trimethyl	3/1/2002	9.1	2.5	UG/M3
Benzene, 1,3,5-trimethyl-	3/1/2002	3.5	2.5	UG/M3
Dichlorodifluoromethane	3/1/2002	2.8	2.5	UG/M3
m/p xylene	3/1/2002	5	4.3	UG/M3
Methyl chloride	3/1/2002	1.4	1	UG/M3
Methylene chloride	3/1/2002	4.4	1.7	UG/M3
Toluene	3/1/2002	79	1.9	UG/M3
1,1,1-Trichloroethane	4/1/2002	5.8	2.7	UG/M3
1,1-Dichloroethylene	4/1/2002	3.8	2	UG/M3
Benzene	4/1/2002	6.9	1.6	UG/M3
Benzene, 1,2,4-trimethyl	4/1/2002	9.3	2.5	UG/M3
Benzene, 1,3,5-trimethyl-	4/1/2002	3	2.5	UG/M3
Benzene	5/1/2002	5.4	1.6	UG/M3
Benzene, 1,2,4-trimethyl	5/1/2002	5.5	2.5	UG/M3
Methylene chloride	5/1/2002	20	1.7	UG/M3
Toluene	5/1/2002	5.5	1.9	UG/M3
1,1-Dichloroethylene	6/3/2002	2.5	2	UG/M3
1,2,4-Trichlorobenzene	6/3/2002	6.1	3.7	UG/M3
Benzene	6/3/2002	16	1.6	UG/M3
Benzene, 1,2,4-trimethyl	6/3/2002	20	2.5	UG/M3
Benzene, 1,3,5-trimethyl-	6/3/2002	6.6	2.5	UG/M3
Methyl chloride	6/3/2002	2.4	1	UG/M3
1,1-Dichloroethylene	8/1/2002	2.2	2	UG/M3
Benzene	8/1/2002	30	1.6	UG/M3
Benzene, 1,2,4-trimethyl	8/1/2002	23	2.5	UG/M3
Benzene, 1,3,5-trimethyl-	8/1/2002	8.2	2.5	UG/M3
Toluene	8/1/2002	2	1.9	UG/M3
1,1-Dichloroethylene	10/2/2002	2.4	2	UG/M3
Benzene	10/2/2002	36	1.6	UG/M3
Benzene, 1,2,4-trimethyl	10/2/2002	27	2.5	UG/M3
Benzene, 1,3,5-trimethyl-	10/2/2002	9.6	2.5	UG/M3
Dichlorodifluoromethane	10/2/2002	3	2.5	UG/M3
Methyl chloride	10/2/2002	1.4	1	UG/M3

UG/M3 - micrograms per cubic meter.
Effluent = final effluent from GAC units

Table F-13
Influent and Effluent TVOC Concentrations
OU III Building 96 System
2002 BNL Groundwater Status Report

Well	RTW-1		RTW-2		RTW-3		RTW-4	
Site Id #	095-151	095-152	095-153	095-154	095-155	095-156	095-157	095-158
	Inf	Eff	Inf	Eff	Inf	Eff	Inf	Eff
Units	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
1/2/02	178.01	0.29	38.27	0.27	21.13	0.26	6.5	0.55
2/1/02	137.29	ND	26.3	ND	ND	ND	5.3	ND
3/1/02	98.77	ND	26.04	3.6	11.31	ND	5.4	ND
4/1/02	88.98	0.26	10.82	0.27	8.08	ND	3.6	ND
5/1/02	67.28	0.85	10.28	0.78	8.26	0.92	3.56	0.80
6/3/02	71.34	1.01	8.23	1.11	7.62	0.83	4.07	1.00
7/1/02	51.74	ND	6.64	0.41	7.43	ND	4.11	ND
8/1/02	57.58	ND	5.6	ND	7.26	ND	4.5	ND
9/3/02	57.5	ND	4.78	ND	8.34	ND	3.86	ND
10/1/02	44.11	ND	3.8	ND	4.6	ND	2.6	ND
11/1/02	45.8	0.47	4.19	0.46	4.24	0.42	3.62	0.44
12/2/02	41.03	ND	2.72	ND	3.6	ND	2.5	ND

NOTES:

Inf = Influent total VOC results

Eff = Effluent total VOC results

ND = Non Detectable constituents above the method detection limit (MDL) of 0.50 ug/L.

ug/L - Micrograms per Liter.

Table F-14
PUMPAGE AND MASS REMOVAL
OU III BUILDING 96 SYSTEM
2002 BNL Groundwater Status Report

	RTW-1		RTW-2		RTW-3		RTW-4	
Date	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*
1/18/01	0	0.00	0	0.00	0	0.00	1,320	0.00
2/6/01	39,960	0.05	22,680	0.00	25,920	0.21	25,080	0.00
2/7/01	91,020	0.09	50,400	0.00	59,040	0.29	54,120	0.00
2/8/01	142,080	0.26	80,640	0.00	92,160	0.22	85,800	0.01
2/9/01	199,800	0.34	113,400	0.00	129,600	0.26	120,120	0.01
2/10/01	304,140	0.66	172,620	0.01	197,280	0.37	180,840	0.02
2/12/01	357,420	0.32	176,400	0.00	231,840	0.18	213,840	0.01
3/9/01	768,120	2.65	322,560	0.01	498,240	1.33	458,040	0.10
3/28/01	1,582,860	5.20	728,280	0.03	1,026,720	2.71	941,160	0.07
4/4/01	1,762,680	0.61	830,340	0.08	1,143,360	0.20	1,048,080	0.09
5/7/01	1,973,580	0.68	956,340	0.08	1,280,160	0.21	1,176,120	0.08
6/12/01	3,053,580	1.86	1,676,340	0.26	2,000,160	1.07	1,896,120	0.54
7/16/01	3,698,700	0.91	2,482,740	0.39	2,806,560	0.79	2,702,520	1.18
8/13/01	4,343,820	0.98	3,208,500	0.53	3,612,960	0.57	3,468,600	0.88
9/5/01	4,873,740	0.52	3,804,660	0.45	4,275,360	0.50	4,097,880	0.62
10/2/01	5,397,345	0.67	4,405,393	0.51	4,945,772	0.36	4,749,934	0.38
11/1/01	6,033,079	1.05	5,133,686	0.68	5,759,659	0.40	5,547,867	0.24
12/7/01	6,281,676	0.39	5,605,726	0.37	6,283,103	0.20	6,067,911	0.09
1/2/02	6,953,724	1.00	6,337,777	0.23	7,088,353	0.14	6,873,161	0.04
2/1/02	8,138,324	1.36	7,097,468	0.17	7,852,723	0.00	7,630,802	0.03
3/1/02	9,438,485	1.07	7,933,881	0.18	8,682,452	0.08	8,464,356	0.04
4/1/02	10,738,646	0.96	8,770,294	0.08	9,512,181	0.06	9,297,910	0.03
5/1/02	11,994,906	0.70	9,590,008	0.07	10,321,344	0.06	10,114,663	0.02
6/3/02	13,418,012	0.85	10,544,112	0.07	11,253,969	0.06	11,081,608	0.03
7/1/02	14,637,525	0.53	11,361,779	0.05	12,049,136	0.05	11,908,916	0.03
8/1/02	15,838,038	0.58	12,145,419	0.04	12,835,173	0.05	12,713,560	0.03
9/3/02	17,244,306	0.67	13,101,051	0.04	13,752,178	0.06	13,664,127	0.03
10/1/02	18,421,996	0.43	13,907,894	0.03	14,519,888	0.03	14,430,693	0.02
11/1/02	19,824,678	0.54	14,802,436	0.03	15,437,805	0.03	15,287,459	0.03
12/2/02	21,150,755	0.45	15,685,023	0.02	16,209,167	0.02	16,137,219	0.02
12/31/02**	22,296,027	0.39	16,448,088	0.02	16,964,154	0.02	16,880,317	0.02
Mass Removed each RTW:		26.78		4.41		10.53		4.68

Total lbs. Removed = 46.39

* Mass Removed: Total VOC concentration in ug/liter (ppb) x 3.785 liter/gallon x gallons pumped x 1 lb./454,000,000 ug = lbs.
** Results estimated based on sample collected 12/2/2002.
lbs - pounds

OU III MIDDLE ROAD SYSTEM

TABLE F-15
AIR STRIPPER INFLUENT VOC DATA
OU III MIDDLE ROAD SYSTEM
2002 BNL Groundwater Status Report

OU III: Middle Road	**WED**	**TUE**	**MON**	**TUE**	**FRI**	**FRI**	**MON**	**MON**	**WED**	**WED**	**THUR**
Influent (Site ID 113-28)	**1/2/02**	**1/15/02**	**2/4/02**	**2/19/02**	**3/1/02**	**3/15/02**	**4/1/02**	**4/15/02**	**5/1/02**	**5/15/02**	**6/27/02**
Parameters											
Carbon Tetrachloride	10.3	11.9	10.4	11.9	10.8	11.9	9.5	8.8	6.8	7.5	9.4
Chloroform	1.0	1.2	1.2	1.2	1.1	1.3	1.1	0.99	0.86	0.99	1.3
1,1-Dichloroethane	<0.50	0.3	0.28	0.32	0.28	0.31	<0.50	0.25	<0.50	<0.50	0.30
1,2-Dichloroethane	0.3	0.37	0.28	0.35	0.32	0.34	0.29	<0.50	<0.50	<0.50	0.42
1,1-Dichloroethylene	1.2	1.5	1.3	1.6	1.4	2.0	1.5	1.3	0.98	1.2	1.6
cis-1,2-Dichloroethylene	0.87	0.99	0.92	1.0	0.93	1.0	0.87	0.82	0.72	0.71	1.4
trans-1,2-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	65.4	60.2	76.5	74.1	66.7	79.9	67.5	63.4	58.3	60.3	48.9
1,1,1-Trichloroethane	4.5	5.6	4.6	5.5	5.1	5.8	5.2	4.6	3.8	4.3	5.7
Trichloroethylene	1.9	2.2	1.8	2.3	2.0	2.4	2.0	1.8	1.7	1.8	1.9
1,2-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of 1,3-and 1,4-Xylenes	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total VOCs	**85.17**	**83.59**	**97.28**	**98.27**	**88.63**	**104.95**	**87.96**	**81.96**	**73.16**	**76.80**	**70.92**
Flow (GPM)	615	615	504	504	519	519	672	672	579	579	74

Results in micrograms per liter.

TABLE F-15
AIR STRIPPER INFLUENT VOC DATA
OU III MIDDLE ROAD SYSTEM
2002 BNL Groundwater Status Report

OU III: Middle Road	**MON**	**MON**	**THUR**	**THUR**	**TUE**	**MON**	**TUE**	**TUE**	**FRI**	**FRI**	**MON**	**MON**
Influent (Site ID 113-28)	**7/1/02**	**7/15/02**	**8/1/02**	**8/15/02**	**9/3/02**	**9/16/02**	**10/1/02**	**10/15/02**	**11/1/02**	**11/15/02**	**12/2/02**	**12/16/02**
Parameters												
Carbon Tetrachloride	1.2	9.7	7.3	7.6	6.24	5.9	5.6	5.1	3.9	5.6	5.1	5.0
Chloroform	0.91	0.93	0.92	0.91	0.89	0.90	0.83	0.78	0.76	0.83	0.90	0.89
1,1-Dichloroethane	<0.50	0.27	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	0.28	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	1.2	1.3	1.1	1.1	1.0	1.0	0.91	0.93	0.82	1.2	0.94	0.96
cis-1,2-Dichloroethylene	1.00	0.76	0.64	0.68	0.65	0.75	0.61	0.66	0.67	0.59	0.64	0.66
trans-1,2-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	17.2	70.4	65.2	70.6	58.8	60.2	55.3	45.3	46.8	54.8	50.7	51.2
1,1,1-Trichloroethane	5.7	4.6	4.1	4.2	3.83	4.1	3.4	3.6	2.9	4.0	3.4	3.5
Trichloroethylene	1.6	1.8	1.6	1.7	1.65	1.7	1.6	1.5	1.4	1.7	1.6	1.6
1,2-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of 1,3-and 1,4-Xylenes	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total VOCs	**29.09**	**89.76**	**80.86**	**86.79**	**73.06**	**74.55**	**68.25**	**57.87**	**57.25**	**68.72**	**63.28**	**63.81**
Flow (GPM)	582	582	614	614	568	568	557	557	602	602	517	517

Results in micrograms per liter.

Table F-16
Air Stripper Effluent Data
OU III Middle Road System
2002 BNL Groundwater Status Report

OU III: Middle Road	**WED**	**TUE**	**MON**	**TUE**	**FRI**	**FRI**	**MON**	**MON**	**WED**	**WED**	**THUR**
Effluent (Site ID#095-270)	**1/2/02**	**1/15/02**	**2/4/02**	**2/19/02**	**3/1/02**	**3/15/02**	**4/1/02**	**4/15/02**	**5/1/02**	**5/15/02**	**6/27/02**
Parameters											
Carbon Tetrachloride	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	**0.33J**	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,2-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	<0.50	<0.50	<0.50	**0.29J**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of 1,3-and 1,4-Xylenes	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total VOC's	**ND**	**ND**	**ND**	**0.29J**	**ND**	**0.33J**	**ND**	**ND**	**ND**	**ND**	**ND**

NOTE: All concentrations are in micrograms per liter (ug/L) unless otherwise noted.
Flow rate is reported as monthly average flow.
<0.50 = Not detected above the method detection limit of 0.50 ug/L.
J = Estimated value below the method detection limit of 0.50 ug/L.

Table F-16
Air Stripper Effluent Data
OU III Middle Road System
2002 BNL Groundwater Status Report

OU III: Middle Road	**MON**	**MON**	**THUR**	**THUR**	**TUE**	**MON**	**TUE**	**TUE**	**FRI**	**FRI**	**MON**	**MON**
Effluent (Site ID#095-270)	**7/1/02**	**7/15/02**	**8/1/02**	**8/15/02**	**9/3/02**	**9/16/02**	**10/1/02**	**10/15/02**	**11/1/02**	**11/15/02**	**12/2/02**	**12/16/02**
Parameters												
Carbon Tetrachloride	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,2-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of 1,3-and 1,4-Xylenes	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total VOC's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

NOTE: All concentrations are in micrograms per liter (ug/L) unless otherwise noted.
Flow rate is reported as monthly average flow.
<0.50 = Not detected above the method detection limit of 0.50 ug/L.
J = Estimated value below the method detection limit of 0.50 ug/L.

Table F-17
Cumulative Mass Removal
OUIII Middle Road System
2002 BNL Groundwater Status Report

DATE	CUM. LBS	LBS/DAY	TVOC (ug/L)	FLOW (GPM)
10/23/2001	0	Began 5 day pump Test		
10/24/01	0.88	0.88	127.61	577
10/25/01	1.73	0.85	123.14	577
10/26/01	2.61	0.88	127.55	577
10/27/01	3.52	0.91	131.28	577
10/29/01	5.3	0.89	128.6	577
01/02/02	51	0.63	85.77	615
01/15/02	59.06	0.62	84.26	615
02/04/02	70.86	0.59	97.28	504
02/19/02	79.71	0.59	98.91	504
03/01/02	85.21	0.55	88.63	519
03/15/02	94.31	0.65	104.95	519
04/01/02	106.38	0.71	88.0	672
04/15/02	115.62	0.66	82.0	672
05/01/02	123.78	0.51	73.2	579
05/15/02	131.2	0.53	76.8	579
06/27/02	133.78	0.06	71.5	74
07/01/02	134.58	0.2	29.09	582
07/15/02	143.4	0.63	89.76	582
08/01/02	153.6	0.6	80.86	614
08/15/02	162.56	0.64	86.79	614
09/03/02	172.06	0.5	73.54	568
09/16/02	178.69	0.51	74.55	568
10/01/02	185.59	0.46	68.25	557
10/15/02	191.05	0.39	57.87	557
11/01/02	198.02	0.41	57.25	602
11/15/02	205.02	0.50	68.72	602
12/02/02	211.65	0.39	63.28	517
12/16/02	217.25	0.40	63.81	517
12/31/02	223.25	0.40	63.81	517
		Average	94.86	589

ug/L - Micrograms per liter.
GPM - Gallons er minute.

Table F-18
Extraction Well Analytical Data
OUIII Middle Road System
2002 BNL Groundwater Status Report

Site ID: 113-23 (MRW-1)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/17/2002	7.5	0.5	ug/L	110	
1,1-Dichloroethylene	1/17/2002	1.7	0.5	ug/L	110	
524.2 TVOC	1/17/2002	**83.07**	--	ug/L	110	
Chloroform	1/17/2002	0.72	0.5	ug/L	110	
cis-1,2-Dichloroethylene	1/17/2002	0.54	0.5	ug/L	110	
Tetrachloroethylene	1/17/2002	72.3	0.5	ug/L	110	
Trichloroethylene	1/17/2002	0.31	0.5	ug/L	110	J
1,1,1-Trichloroethane	2/19/2002	7.5	0.5	ug/L	110	
1,1-Dichloroethylene	2/19/2002	0.71	0.5	ug/L	110	
524.2 TVOC	2/19/2002	**138.03**	--	ug/L	110	
Chloroform	2/19/2002	0.52	0.5	ug/L	110	
cis-1,2-Dichloroethylene	2/19/2002	0.3	0.5	ug/L	110	J
Tetrachloroethylene	2/19/2002	129	1	ug/L	110	D
1,1,1-Trichloroethane	3/15/2002	9.2	0.5	ug/L	110	
1,1-Dichloroethylene	3/15/2002	2.2	0.5	ug/L	110	
524.2 TVOC	3/15/2002	**104.58**	--	ug/L	110	
Chloroform	3/15/2002	0.5	0.5	ug/L	110	
cis-1,2-Dichloroethylene	3/15/2002	0.28	0.5	ug/L	110	J
Tetrachloroethylene	3/15/2002	92.1	1	ug/L	110	D
Trichloroethylene	3/15/2002	0.3	0.5	ug/L	110	J
1,1,1-Trichloroethane	4/15/2002	10	0.5	ug/L	110	
1,1-Dichloroethylene	4/15/2002	2.3	0.5	ug/L	110	
524.2 TVOC	4/15/2002	**135.59**	--	ug/L	110	
Chloroform	4/15/2002	0.51	0.5	ug/L	110	
Methylene chloride	4/15/2002	0.4	0.5	ug/L	110	J
Tetrachloroethylene	4/15/2002	122	1	ug/L	110	D
Trichloroethylene	4/15/2002	0.38	0.5	ug/L	110	J
1,1,1-Trichloroethane	5/15/2002	10.7	0.5	ug/L	110	
1,1-Dichloroethylene	5/15/2002	2.6	0.5	ug/L	110	
524.2 TVOC	5/15/2002	**142.12**	--	ug/L	110	
Chloroform	5/15/2002	0.57	0.5	ug/L	110	
Tetrachloroethylene	5/15/2002	128	1	ug/L	110	D
Trichloroethylene	5/15/2002	0.25	0.5	ug/L	110	J
1,1,1-Trichloroethane	6/27/2002	13.1	0.5	ug/L	110	
1,1-Dichloroethane	6/27/2002	0.26	0.5	ug/L	110	J
1,1-Dichloroethylene	6/27/2002	3.6	0.5	ug/L	110	
1,2-Dichloroethane	6/27/2002	1.4	0.5	ug/L	110	
524.2 TVOC	6/27/2002	**77.21**	--	ug/L	110	
Carbon tetrachloride	6/27/2002	6.8	0.5	ug/L	110	
Chloroform	6/27/2002	1.5	0.5	ug/L	110	
cis-1,2-Dichloroethylene	6/27/2002	0.65	0.5	ug/L	110	
Methylene chloride	6/27/2002	1.4	0.5	ug/L	110	
Tetrachloroethylene	6/27/2002	46.7	0.5	ug/L	110	
Trichloroethylene	6/27/2002	1.8	0.5	ug/L	110	
1,1,1-Trichloroethane	7/15/2002	11.2	0.5	ug/L	110	
1,1-Dichloroethylene	7/15/2002	1.8	0.5	ug/L	110	
524.2 TVOC	7/15/2002	**139.17**	--	ug/L	110	
Carbon tetrachloride	7/15/2002	0.32	0.5	ug/L	110	J
Chloroform	7/15/2002	0.34	0.5	ug/L	110	J
Methylene chloride	7/15/2002	0.25	0.5	ug/L	110	J
Tetrachloroethylene	7/15/2002	125	5	ug/L	110	D
Trichloroethylene	7/15/2002	0.26	0.5	ug/L	110	J
1,1,1-Trichloroethane	8/15/2002	7.6	0.5	ug/L	110	
1,1-Dichloroethylene	8/15/2002	1.7	0.5	ug/L	110	
524.2 TVOC	8/15/2002	**119.64**	--	ug/L	110	
Chloroform	8/15/2002	0.34	0.5	ug/L	110	J
Tetrachloroethylene	8/15/2002	110	5	ug/L	110	D
1,1,1-Trichloroethane	9/17/2002	6.9	0.5	ug/L	110	
1,1-Dichloroethylene	9/17/2002	1.6	0.5	ug/L	110	
524.2 TVOC	9/17/2002	**106.15**	--	ug/L	110	
Chloroform	9/17/2002	0.35	0.5	ug/L	110	J
Tetrachloroethylene	9/17/2002	97.3	5	ug/L	110	D
1,1,1-Trichloroethane	10/15/2002	5.2	0.5	ug/L	110	
1,1-Dichloroethylene	10/15/2002	1.3	0.5	ug/L	110	
524.2 TVOC	10/15/2002	**78.2**	--	ug/L	110	
Chloroform	10/15/2002	0.4	0.5	ug/L	110	J
Tetrachloroethylene	10/15/2002	71.3	0.5	ug/L	110	
1,1,1-Trichloroethane	11/15/2002	7.1	0.5	ug/L	110	
1,1-Dichloroethylene	11/15/2002	1.5	0.5	ug/L	110	
524.2 TVOC	11/15/2002	**73.5**	--	ug/L	110	
Chloroform	11/15/2002	0.5	0.5	ug/L	110	
Tetrachloroethylene	11/15/2002	64.4	0.5	ug/L	110	
1,1,1-Trichloroethane	12/16/2002	5.1	0.5	ug/L	110	
1,1-Dichloroethylene	12/16/2002	1.1	0.5	ug/L	110	
524.2 TVOC	12/16/2002	**60.59**	--	ug/L	110	
Chloroform	12/16/2002	0.42	0.5	ug/L	110	J
Methylene chloride	12/16/2002	0.27	0.5	ug/L	110	J
Tetrachloroethylene	12/16/2002	53.7	0.5	ug/L	110	

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Site ID: 113-24 (MRW-2)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/17/2002	2.7	0.5	ug/L	185	
1,1-Dichloroethylene	1/17/2002	0.88	0.5	ug/L	185	
524.2 TVOC	1/17/2002	342.58	--	ug/L	185	
Carbon tetrachloride	1/17/2002	76.1	0.5	ug/L	185	
Chloroform	1/17/2002	2.6	0.5	ug/L	185	
Tetrachloroethylene	1/17/2002	256	2.5	ug/L	185	D
Trichloroethylene	1/17/2002	4.3	0.5	ug/L	185	
1,1,1-Trichloroethane	2/19/2002	2.3	0.5	ug/L	185	
1,1-Dichloroethylene	2/19/2002	0.79	0.5	ug/L	185	
524.2 TVOC	2/19/2002	**488.99**	--	ug/L	185	
Carbon tetrachloride	2/19/2002	56.8	0.5	ug/L	185	
Chloroform	2/19/2002	2.2	0.5	ug/L	185	
Methylene chloride	2/19/2002	0.7	0.5	ug/L	185	
Tetrachloroethylene	2/19/2002	423	2.5	ug/L	185	D
Trichloroethylene	2/19/2002	3.2	0.5	ug/L	185	
1,1,1-Trichloroethane	3/15/2002	1.8	2.5	ug/L	185	J
524.2 TVOC	3/15/2002	229.7	--	ug/L	185	
Carbon tetrachloride	3/15/2002	28.3	2.5	ug/L	185	
Chloroform	3/15/2002	1.9	2.5	ug/L	185	J
Tetrachloroethylene	3/15/2002	195	2.5	ug/L	185	
Trichloroethylene	3/15/2002	2.7	2.5	ug/L	185	
1,1,1-Trichloroethane	4/15/2002	3.6	0.5	ug/L	185	
1,1,2,2-Tetrachloroethane	4/15/2002	0.52	0.5	ug/L	185	
1,1-Dichloroethylene	4/15/2002	1.3	0.5	ug/L	185	
524.2 TVOC	4/15/2002	**390.82**	--	ug/L	185	
Carbon tetrachloride	4/15/2002	55.9	0.5	ug/L	185	
Chloroform	4/15/2002	2.1	0.5	ug/L	185	
Tetrachloroethylene	4/15/2002	324	2.5	ug/L	185	D
Trichloroethylene	4/15/2002	3.4	0.5	ug/L	185	
1,1,1-Trichloroethane	5/15/2002	4.2	0.5	ug/L	185	
1,1,2,2-Tetrachloroethane	5/15/2002	0.72	0.5	ug/L	185	
1,1-Dichloroethane	5/15/2002	0.27	0.5	ug/L	185	J
1,1-Dichloroethylene	5/15/2002	1.5	0.5	ug/L	185	
524.2 TVOC	5/15/2002	**398.19**	--	ug/L	185	
Carbon tetrachloride	5/15/2002	51.2	0.5	ug/L	185	
Chloroform	5/15/2002	2.3	0.5	ug/L	185	
Tetrachloroethylene	5/15/2002	334	5	ug/L	185	D
Trichloroethylene	5/15/2002	4	0.5	ug/L	185	
1,1,1-Trichloroethane	6/27/2002	4.8	0.5	ug/L	185	
1,1-Dichloroethylene	6/27/2002	1.5	0.5	ug/L	185	
524.2 TVOC	6/27/2002	**324.7**	--	ug/L	185	
Carbon tetrachloride	6/27/2002	47.7	0.5	ug/L	185	
Chloroform	6/27/2002	1.8	0.5	ug/L	185	
Methylene chloride	6/27/2002	1	0.5	ug/L	185	
Tetrachloroethylene	6/27/2002	265	5	ug/L	185	D
Trichloroethylene	6/27/2002	2.9	0.5	ug/L	185	
1,1,1-Trichloroethane	7/15/2002	4.2	0.5	ug/L	185	
1,1,2,2-Tetrachloroethane	7/15/2002	0.47	0.5	ug/L	185	J
1,1-Dichloroethylene	7/15/2002	1.2	0.5	ug/L	185	
524.2 TVOC	7/15/2002	**314.88**	--	ug/L	185	
Carbon tetrachloride	7/15/2002	47.1	0.5	ug/L	185	
Chloroform	7/15/2002	1.9	0.5	ug/L	185	
Methylene chloride	7/15/2002	0.71	0.5	ug/L	185	
Tetrachloroethylene	7/15/2002	256	5	ug/L	185	D
Trichloroethylene	7/15/2002	3.3	0.5	ug/L	185	
1,1,1-Trichloroethane	8/15/2002	4.5	0.5	ug/L	185	
1,1,2,2-Tetrachloroethane	8/15/2002	0.83	0.5	ug/L	185	
1,1-Dichloroethylene	8/15/2002	1.5	0.5	ug/L	185	
524.2 TVOC	8/15/2002	**326.53**	--	ug/L	185	
Carbon tetrachloride	8/15/2002	41.1	0.5	ug/L	185	
Chloroform	8/15/2002	1.9	0.5	ug/L	185	
Tetrachloroethylene	8/15/2002	273	5	ug/L	185	D
Trichloroethylene	8/15/2002	3.7	0.5	ug/L	185	
1,1,1-Trichloroethane	9/17/2002	4.4	0.5	ug/L	185	
1,1,2,2-Tetrachloroethane	9/17/2002	0.9	0.5	ug/L	185	
1,1-Dichloroethylene	9/17/2002	1.6	0.5	ug/L	185	
524.2 TVOC	9/17/2002	**332.62**	--	ug/L	185	
Carbon tetrachloride	9/17/2002	37	0.5	ug/L	185	
Chloroform	9/17/2002	1.8	0.5	ug/L	185	
cis-1,2-Dichloroethylene	9/17/2002	0.42	0.5	ug/L	185	J
Methyl chloride	9/17/2002	0.5	0.5	ug/L	185	
Tetrachloroethylene	9/17/2002	282	5	ug/L	185	D
Trichloroethylene	9/17/2002	4	0.5	ug/L	185	

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Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	10/15/2002	4	0.5	ug/L	185	
1,1,2,2-Tetrachloroethane	10/15/2002	1.3	0.5	ug/L	185	
1,1-Dichloroethylene	10/15/2002	1.6	0.5	ug/L	185	
524.2 TVOC	10/15/2002	**302.12**	--	ug/L	185	
Carbon tetrachloride	10/15/2002	29.4	0.5	ug/L	185	
Chloroform	10/15/2002	1.8	0.5	ug/L	185	
cis-1,2-Dichloroethylene	10/15/2002	0.52	0.5	ug/L	185	
Tetrachloroethylene	10/15/2002	260	5	ug/L	185	D
Trichloroethylene	10/15/2002	3.5	0.5	ug/L	185	
1,1,1-Trichloroethane	11/15/2002	5.6	0.5	ug/L	185	
1,1,2,2-Tetrachloroethane	11/15/2002	1.4	0.5	ug/L	185	
1,1-Dichloroethylene	11/15/2002	1.9	0.5	ug/L	185	
1,2-Dichloroethane	11/15/2002	0.26	0.5	ug/L	185	J
524.2 TVOC	11/15/2002	**290.48**	--	ug/L	185	
Carbon tetrachloride	11/15/2002	36.3	0.5	ug/L	185	
Chloroform	11/15/2002	2.1	0.5	ug/L	185	
cis-1,2-Dichloroethylene	11/15/2002	0.5	0.5	ug/L	185	
Methylene chloride	11/15/2002	0.42	0.5	ug/L	185	J
Tetrachloroethylene	11/15/2002	238	5	ug/L	185	D
Trichloroethylene	11/15/2002	4	0.5	ug/L	185	
1,1,1-Trichloroethane	12/16/2002	4.8	0.5	ug/L	185	
1,1,2,2-Tetrachloroethane	12/16/2002	1.4	0.5	ug/L	185	
1,1-Dichloroethane	12/16/2002	0.26	0.5	ug/L	185	J
1,1-Dichloroethylene	12/16/2002	1.7	0.5	ug/L	185	
524.2 TVOC	12/16/2002	**289.71**	--	ug/L	185	
Carbon tetrachloride	12/16/2002	26.2	0.5	ug/L	185	
Chloroform	12/16/2002	1.7	0.5	ug/L	185	
cis-1,2-Dichloroethylene	12/16/2002	0.56	0.5	ug/L	185	
Methylene chloride	12/16/2002	0.29	0.5	ug/L	185	J
Tetrachloroethylene	12/16/2002	249	2.5	ug/L	185	D
Trichloroethylene	12/16/2002	3.8	0.5	ug/L	185	
Site ID: 113-25 (MRW-3)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/17/2002	16.1	0.5	ug/L	248	
1,1-Dichloroethane	1/17/2002	0.94	0.5	ug/L	248	
1,1-Dichloroethylene	1/17/2002	4.2	0.5	ug/L	248	
1,2-Dichloroethane	1/17/2002	0.54	0.5	ug/L	248	
524.2 TVOC	1/17/2002	**27.85**	--	ug/L	248	
Carbon tetrachloride	1/17/2002	1	0.5	ug/L	248	
Chloroform	1/17/2002	1.1	0.5	ug/L	248	
cis-1,2-Dichloroethylene	1/17/2002	0.37	0.5	ug/L	248	J
Trichloroethylene	1/17/2002	3.6	0.5	ug/L	248	
1,1,1-Trichloroethane	2/19/2002	13.8	0.5	ug/L	248	
1,1-Dichloroethane	2/19/2002	0.91	0.5	ug/L	248	
1,1-Dichloroethylene	2/19/2002	3.8	0.5	ug/L	248	
1,2-Dichloroethane	2/19/2002	0.52	0.5	ug/L	248	
524.2 TVOC	2/19/2002	**25.28**	--	ug/L	248	
Carbon tetrachloride	2/19/2002	0.9	0.5	ug/L	248	
Chloroform	2/19/2002	1.1	0.5	ug/L	248	
cis-1,2-Dichloroethylene	2/19/2002	0.36	0.5	ug/L	248	J
Methylene chloride	2/19/2002	0.59	0.5	ug/L	248	
Trichloroethylene	2/19/2002	3.3	0.5	ug/L	248	
1,1,1-Trichloroethane	3/15/2002	13.9	0.5	ug/L	248	
1,1-Dichloroethane	3/15/2002	0.88	0.5	ug/L	248	
1,1-Dichloroethylene	3/15/2002	3.8	0.5	ug/L	248	
1,2-Dichloroethane	3/15/2002	0.5	0.5	ug/L	248	
524.2 TVOC	3/15/2002	**25.07**	--	ug/L	248	
Carbon tetrachloride	3/15/2002	0.93	0.5	ug/L	248	
Chloroform	3/15/2002	1.1	0.5	ug/L	248	
cis-1,2-Dichloroethylene	3/15/2002	0.36	0.5	ug/L	248	J
Trichloroethylene	3/15/2002	3.6	0.5	ug/L	248	
1,1,1-Trichloroethane	4/15/2002	14.1	0.5	ug/L	248	
1,1-Dichloroethane	4/15/2002	0.92	0.5	ug/L	248	
1,1-Dichloroethylene	4/15/2002	3.8	0.5	ug/L	248	
1,2-Dichloroethane	4/15/2002	0.5	0.5	ug/L	248	
524.2 TVOC	4/15/2002	**26.41**	--	ug/L	248	
Carbon tetrachloride	4/15/2002	1	0.5	ug/L	248	
Chloroform	4/15/2002	1.1	0.5	ug/L	248	
cis-1,2-Dichloroethylene	4/15/2002	0.39	0.5	ug/L	248	J
Methylene chloride	4/15/2002	0.62	0.5	ug/L	248	
Tetrachloroethylene	4/15/2002	0.28	0.5	ug/L	248	J
Trichloroethylene	4/15/2002	3.7	0.5	ug/L	248	
1,1,1-Trichloroethane	5/15/2002	12.4	0.5	ug/L	248	
1,1-Dichloroethane	5/15/2002	0.86	0.5	ug/L	248	
1,1-Dichloroethylene	5/15/2002	3.3	0.5	ug/L	248	
1,2-Dichloroethane	5/15/2002	0.48	0.5	ug/L	248	J
524.2 TVOC	5/15/2002	**27.38**	--	ug/L	248	
Carbon tetrachloride	5/15/2002	0.97	0.5	ug/L	248	
Chloroform	5/15/2002	1.1	0.5	ug/L	248	
cis-1,2-Dichloroethylene	5/15/2002	0.37	0.5	ug/L	248	J
Methylene chloride	5/15/2002	4.3	0.5	ug/L	248	B
Trichloroethylene	5/15/2002	3.6	0.5	ug/L	248	

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Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	6/27/2002	12.8	0.5	ug/L	248	
1,1-Dichloroethane	6/27/2002	0.75	0.5	ug/L	248	
1,1-Dichloroethylene	6/27/2002	3.1	0.5	ug/L	248	
1,2-Dichloroethane	6/27/2002	0.46	0.5	ug/L	248	J
524.2 TVOC	6/27/2002	**23.29**	--	ug/L	248	
Carbon tetrachloride	6/27/2002	0.89	0.5	ug/L	248	
Chloroform	6/27/2002	1.1	0.5	ug/L	248	
cis-1,2-Dichloroethylene	6/27/2002	0.4	0.5	ug/L	248	J
Tetrachloroethylene	6/27/2002	0.39	0.5	ug/L	248	J
Trichloroethylene	6/27/2002	3.4	0.5	ug/L	248	
1,1,1-Trichloroethane	7/15/2002	11.5	0.5	ug/L	248	
1,1-Dichloroethane	7/15/2002	0.72	0.5	ug/L	248	
1,1-Dichloroethylene	7/15/2002	3	0.5	ug/L	248	
1,2-Dichloroethane	7/15/2002	0.4	0.5	ug/L	248	J
524.2 TVOC	7/15/2002	**21.32**	--	ug/L	248	
Carbon tetrachloride	7/15/2002	0.91	0.5	ug/L	248	
Chloroform	7/15/2002	1	0.5	ug/L	248	
cis-1,2-Dichloroethylene	7/15/2002	0.32	0.5	ug/L	248	J
Methylene chloride	7/15/2002	0.37	0.5	ug/L	248	J
Trichloroethylene	7/15/2002	3.1	0.5	ug/L	248	
1,1,1-Trichloroethane	8/15/2002	11	0.5	ug/L	248	
1,1-Dichloroethane	8/15/2002	0.7	0.5	ug/L	248	
1,1-Dichloroethylene	8/15/2002	2.7	0.5	ug/L	248	
1,2-Dichloroethane	8/15/2002	0.32	0.5	ug/L	248	J
524.2 TVOC	8/15/2002	**20.14**	--	ug/L	248	
Carbon tetrachloride	8/15/2002	0.88	0.5	ug/L	248	
Chloroform	8/15/2002	1	0.5	ug/L	248	
cis-1,2-Dichloroethylene	8/15/2002	0.34	0.5	ug/L	248	J
Trichloroethylene	8/15/2002	3.2	0.5	ug/L	248	
1,1,1-Trichloroethane	9/17/2002	10.5	0.5	ug/L	248	
1,1-Dichloroethane	9/17/2002	0.65	0.5	ug/L	248	
1,1-Dichloroethylene	9/17/2002	2.6	0.5	ug/L	248	
1,2-Dichloroethane	9/17/2002	0.33	0.5	ug/L	248	J
524.2 TVOC	9/17/2002	**19.75**	--	ug/L	248	
Carbon tetrachloride	9/17/2002	0.85	0.5	ug/L	248	
Chloroform	9/17/2002	0.94	0.5	ug/L	248	
cis-1,2-Dichloroethylene	9/17/2002	0.34	0.5	ug/L	248	J
Methyl chloride	9/17/2002	0.54	0.5	ug/L	248	
Trichloroethylene	9/17/2002	3	0.5	ug/L	248	
1,1,1-Trichloroethane	10/15/2002	9.5	0.5	ug/L	248	
1,1-Dichloroethane	10/15/2002	0.61	0.5	ug/L	248	
1,1-Dichloroethylene	10/15/2002	2	0.5	ug/L	248	
1,2-Dichloroethane	10/15/2002	0.36	0.5	ug/L	248	J
524.2 TVOC	10/15/2002	**17.18**	--	ug/L	248	
Carbon tetrachloride	10/15/2002	0.93	0.5	ug/L	248	
Chloroform	10/15/2002	0.9	0.5	ug/L	248	
cis-1,2-Dichloroethylene	10/15/2002	0.28	0.5	ug/L	248	J
Trichloroethylene	10/15/2002	2.6	0.5	ug/L	248	
1,1,1-Trichloroethane	11/15/2002	11.1	0.5	ug/L	248	
1,1-Dichloroethane	11/15/2002	0.74	0.5	ug/L	248	
1,1-Dichloroethylene	11/15/2002	2.5	0.5	ug/L	248	
1,2-Dichloroethane	11/15/2002	0.4	0.5	ug/L	248	J
524.2 TVOC	11/15/2002	**19.94**	--	ug/L	248	
Carbon tetrachloride	11/15/2002	1.2	0.5	ug/L	248	
Chloroform	11/15/2002	1	0.5	ug/L	248	
Trichloroethylene	11/15/2002	3	0.5	ug/L	248	
1,1,1-Trichloroethane	12/16/2002	8.8	0.5	ug/L	248	
1,1-Dichloroethane	12/16/2002	0.61	0.5	ug/L	248	
1,1-Dichloroethylene	12/16/2002	2	0.5	ug/L	248	
1,2-Dichloroethane	12/16/2002	0.37	0.5	ug/L	248	J
524.2 TVOC	12/16/2002	**16.38**	--	ug/L	248	
Carbon tetrachloride	12/16/2002	0.84	0.5	ug/L	248	
Chloroform	12/16/2002	0.88	0.5	ug/L	248	
cis-1,2-Dichloroethylene	12/16/2002	0.28	0.5	ug/L	248	J
Trichloroethylene	12/16/2002	2.6	0.5	ug/L	248	

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Site ID: 113-26 (MRW-4)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/17/2002	2.4	0.5	ug/L	165	
1,1-Dichloroethylene	1/17/2002	0.63	0.5	ug/L	165	
524.2 TVOC	1/17/2002	**11.55**	--	ug/L	165	
Carbon tetrachloride	1/17/2002	2.9	0.5	ug/L	165	
Chloroform	1/17/2002	1.3	0.5	ug/L	165	
cis-1,2-Dichloroethylene	1/17/2002	0.92	0.5	ug/L	165	
Tetrachloroethylene	1/17/2002	2	0.5	ug/L	165	
Trichloroethylene	1/17/2002	1.4	0.5	ug/L	165	
1,1,1-Trichloroethane	2/19/2002	1.6	0.5	ug/L	165	
1,1-Dichloroethylene	2/19/2002	0.57	0.5	ug/L	165	
524.2 TVOC	2/19/2002	**8.97**	--	ug/L	165	
Carbon tetrachloride	2/19/2002	2	0.5	ug/L	165	
Chloroform	2/19/2002	1	0.5	ug/L	165	
cis-1,2-Dichloroethylene	2/19/2002	0.83	0.5	ug/L	165	
Tetrachloroethylene	2/19/2002	2	0.5	ug/L	165	
Trichloroethylene	2/19/2002	0.97	0.5	ug/L	165	
1,1,1-Trichloroethane	3/15/2002	1.5	0.5	ug/L	165	
1,1-Dichloroethylene	3/15/2002	0.69	0.5	ug/L	165	
524.2 TVOC	3/15/2002	**8.23**	--	ug/L	165	
Carbon tetrachloride	3/15/2002	1.8	0.5	ug/L	165	
Chloroform	3/15/2002	0.95	0.5	ug/L	165	
cis-1,2-Dichloroethylene	3/15/2002	0.69	0.5	ug/L	165	
Tetrachloroethylene	3/15/2002	1.6	0.5	ug/L	165	
Trichloroethylene	3/15/2002	1	0.5	ug/L	165	
1,1,1-Trichloroethane	4/15/2002	1.6	0.5	ug/L	165	
1,1-Dichloroethylene	4/15/2002	0.53	0.5	ug/L	165	
524.2 TVOC	4/15/2002	**8.87**	--	ug/L	165	
Carbon tetrachloride	4/15/2002	1.9	0.5	ug/L	165	
Chloroform	4/15/2002	1	0.5	ug/L	165	
cis-1,2-Dichloroethylene	4/15/2002	0.74	0.5	ug/L	165	
Tetrachloroethylene	4/15/2002	2	0.5	ug/L	165	
Trichloroethylene	4/15/2002	1.1	0.5	ug/L	165	
1,1,1-Trichloroethane	5/15/2002	1.4	0.5	ug/L	165	
1,1-Dichloroethylene	5/15/2002	0.28	0.5	ug/L	165	J
524.2 TVOC	5/15/2002	**7.57**	--	ug/L	165	
Carbon tetrachloride	5/15/2002	1.6	0.5	ug/L	165	
Chloroform	5/15/2002	1	0.5	ug/L	165	
cis-1,2-Dichloroethylene	5/15/2002	0.75	0.5	ug/L	165	
Tetrachloroethylene	5/15/2002	1.6	0.5	ug/L	165	
Trichloroethylene	5/15/2002	0.94	0.5	ug/L	165	
1,1,1-Trichloroethane	6/27/2002	1.4	0.5	ug/L	165	
1,1-Dichloroethylene	6/27/2002	0.53	0.5	ug/L	165	
524.2 TVOC	6/27/2002	**8.11**	--	ug/L	165	
Carbon tetrachloride	6/27/2002	2	0.5	ug/L	165	
Chloroform	6/27/2002	1.3	0.5	ug/L	165	
cis-1,2-Dichloroethylene	6/27/2002	0.97	0.5	ug/L	165	
Tetrachloroethylene	6/27/2002	0.97	0.5	ug/L	165	
Trichloroethylene	6/27/2002	0.94	0.5	ug/L	165	
1,1,1-Trichloroethane	7/15/2002	1.1	0.5	ug/L	165	
524.2 TVOC	7/15/2002	**7.02**	--	ug/L	165	
Carbon tetrachloride	7/15/2002	1.5	0.5	ug/L	165	
Chloroform	7/15/2002	0.94	0.5	ug/L	165	
cis-1,2-Dichloroethylene	7/15/2002	0.72	0.5	ug/L	165	
Methylene chloride	7/15/2002	0.57	0.5	ug/L	165	
Tetrachloroethylene	7/15/2002	1.4	0.5	ug/L	165	
Trichloroethylene	7/15/2002	0.79	0.5	ug/L	165	
1,1,1-Trichloroethane	8/15/2002	1.1	0.5	ug/L	165	
1,1-Dichloroethylene	8/15/2002	0.38	0.5	ug/L	165	J
524.2 TVOC	8/15/2002	**6.68**	--	ug/L	165	
Carbon tetrachloride	8/15/2002	1.3	0.5	ug/L	165	
Chloroform	8/15/2002	0.9	0.5	ug/L	165	
cis-1,2-Dichloroethylene	8/15/2002	0.66	0.5	ug/L	165	
Tetrachloroethylene	8/15/2002	1.5	0.5	ug/L	165	
Trichloroethylene	8/15/2002	0.84	0.5	ug/L	165	
1,1,1-Trichloroethane	9/17/2002	1	0.5	ug/L	165	
1,1-Dichloroethylene	9/17/2002	0.33	0.5	ug/L	165	J
524.2 TVOC	9/17/2002	6.15	--	ug/L	165	
Carbon tetrachloride	9/17/2002	1.2	0.5	ug/L	165	
Chloroform	9/17/2002	0.84	0.5	ug/L	165	
cis-1,2-Dichloroethylene	9/17/2002	0.77	0.5	ug/L	165	
Tetrachloroethylene	9/17/2002	1.3	0.5	ug/L	165	
Trichloroethylene	9/17/2002	0.71	0.5	ug/L	165	
1,1,1-Trichloroethane	10/15/2002	0.99	0.5	ug/L	165	
1,1-Dichloroethylene	10/15/2002	0.33	0.5	ug/L	165	J
524.2 TVOC	10/15/2002	6.33	--	ug/L	165	
Carbon tetrachloride	10/15/2002	1.1	0.5	ug/L	165	
Chloroform	10/15/2002	0.74	0.5	ug/L	165	
cis-1,2-Dichloroethylene	10/15/2002	0.76	0.5	ug/L	165	
Methylene chloride	10/15/2002	0.3	0.5	ug/L	165	J
Tetrachloroethylene	10/15/2002	1.4	0.5	ug/L	165	
Trichloroethylene	10/15/2002	0.71	0.5	ug/L	165	

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Site ID: 113-26 (MRW-4)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	11/15/2002	1.2	0.5	ug/L	165	
524.2 TVOC	11/15/2002	**5.91**	--	ug/L	165	
Carbon tetrachloride	11/15/2002	1.4	0.5	ug/L	165	
Chloroform	11/15/2002	0.93	0.5	ug/L	165	
Tetrachloroethylene	11/15/2002	1.5	0.5	ug/L	165	
Trichloroethylene	11/15/2002	0.88	0.5	ug/L	165	
1,1,1-Trichloroethane	12/16/2002	0.96	0.5	ug/L	165	
1,1-Dichloroethylene	12/16/2002	0.32	0.5	ug/L	165	J
524.2 TVOC	12/16/2002	**5.96**	--	ug/L	165	
Carbon tetrachloride	12/16/2002	1	0.5	ug/L	165	
Chloroform	12/16/2002	0.85	0.5	ug/L	165	
cis-1,2-Dichloroethylene	12/16/2002	0.8	0.5	ug/L	165	
Methylene chloride	12/16/2002	0.26	0.5	ug/L	165	J
Tetrachloroethylene	12/16/2002	1.1	0.5	ug/L	165	
Trichloroethylene	12/16/2002	0.67	0.5	ug/L	165	
Site ID: 113-27 (MRW-5)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/17/2002	0.89	0.5	ug/L	165	
524.2 TVOC	1/17/2002	**5.61**	--	ug/L	165	
Carbon tetrachloride	1/17/2002	2.2	0.5	ug/L	165	
Chloroform	1/17/2002	0.67	0.5	ug/L	165	
cis-1,2-Dichloroethylene	1/17/2002	0.29	0.5	ug/L	165	J
Tetrachloroethylene	1/17/2002	0.26	0.5	ug/L	165	J
Trichloroethylene	1/17/2002	1.3	0.5	ug/L	165	
1,1,1-Trichloroethane	2/19/2002	0.73	0.5	ug/L	165	
524.2 TVOC	2/19/2002	**4.77**	--	ug/L	165	
Carbon tetrachloride	2/19/2002	1.4	0.5	ug/L	165	
Chloroform	2/19/2002	0.55	0.5	ug/L	165	
cis-1,2-Dichloroethylene	2/19/2002	0.31	0.5	ug/L	165	J
Methylene chloride	2/19/2002	0.56	0.5	ug/L	165	
Tetrachloroethylene	2/19/2002	0.33	0.5	ug/L	165	J
Trichloroethylene	2/19/2002	0.89	0.5	ug/L	165	
1,1,1-Trichloroethane	3/15/2002	0.83	0.5	ug/L	165	
1,1-Dichloroethylene	3/15/2002	0.37	0.5	ug/L	165	J
524.2 TVOC	3/15/2002	**4.6**	--	ug/L	165	
Carbon tetrachloride	3/15/2002	1.4	0.5	ug/L	165	
Chloroform	3/15/2002	0.54	0.5	ug/L	165	
cis-1,2-Dichloroethylene	3/15/2002	0.27	0.5	ug/L	165	J
Tetrachloroethylene	3/15/2002	0.27	0.5	ug/L	165	J
Trichloroethylene	3/15/2002	0.92	0.5	ug/L	165	
1,1,1-Trichloroethane	4/15/2002	0.79	0.5	ug/L	165	
524.2 TVOC	4/15/2002	**4.43**	--	ug/L	165	
Carbon tetrachloride	4/15/2002	1.3	0.5	ug/L	165	
Chloroform	4/15/2002	0.6	0.5	ug/L	165	
cis-1,2-Dichloroethylene	4/15/2002	0.35	0.5	ug/L	165	J
Tetrachloroethylene	4/15/2002	0.46	0.5	ug/L	165	J
Trichloroethylene	4/15/2002	0.93	0.5	ug/L	165	
1,1,1-Trichloroethane	5/15/2002	0.77	0.5	ug/L	165	
524.2 TVOC	5/15/2002	**4.34**	--	ug/L	165	
Carbon tetrachloride	5/15/2002	1	0.5	ug/L	165	
Chloroform	5/15/2002	0.54	0.5	ug/L	165	
cis-1,2-Dichloroethylene	5/15/2002	0.37	0.5	ug/L	165	J
Methyl chloride	5/15/2002	0.3	0.5	ug/L	165	J
Tetrachloroethylene	5/15/2002	0.64	0.5	ug/L	165	
Trichloroethylene	5/15/2002	0.72	0.5	ug/L	165	
1,1,1-Trichloroethane	6/27/2002	4.1	0.5	ug/L	165	
1,1-Dichloroethylene	6/27/2002	1.3	0.5	ug/L	165	
1,2-Dichloroethane	6/27/2002	0.38	0.5	ug/L	165	J
524.2 TVOC	6/27/2002	**27.1**	--	ug/L	165	
Carbon tetrachloride	6/27/2002	2.4	0.5	ug/L	165	
Chloroform	6/27/2002	0.8	0.5	ug/L	165	
cis-1,2-Dichloroethylene	6/27/2002	0.63	0.5	ug/L	165	
Methyl chloride	6/27/2002	0.25	0.5	ug/L	165	J
Methylene chloride	6/27/2002	0.54	0.5	ug/L	165	
Tetrachloroethylene	6/27/2002	15.7	0.5	ug/L	165	
Trichloroethylene	6/27/2002	1	0.5	ug/L	165	
1,1,1-Trichloroethane	7/15/2002	0.52	0.5	ug/L	165	
524.2 TVOC	7/15/2002	**3.47**	--	ug/L	165	
Carbon tetrachloride	7/15/2002	0.82	0.5	ug/L	165	
Chloroform	7/15/2002	0.5	0.5	ug/L	165	
cis-1,2-Dichloroethylene	7/15/2002	0.37	0.5	ug/L	165	J
Methylene chloride	7/15/2002	0.31	0.5	ug/L	165	J
Tetrachloroethylene	7/15/2002	0.42	0.5	ug/L	165	J
Trichloroethylene	7/15/2002	0.53	0.5	ug/L	165	
1,1,1-Trichloroethane	8/15/2002	0.7	0.5	ug/L	165	
524.2 TVOC	8/15/2002	**2.89**	--	ug/L	165	
Carbon tetrachloride	8/15/2002	0.66	0.5	ug/L	165	
Chloroform	8/15/2002	0.45	0.5	ug/L	165	J
cis-1,2-Dichloroethylene	8/15/2002	0.25	0.5	ug/L	165	J
Tetrachloroethylene	8/15/2002	0.28	0.5	ug/L	165	J
Trichloroethylene	8/15/2002	0.55	0.5	ug/L	165	

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Site ID: 113-27 (MRW-5)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	9/17/2002	0.91	0.5	ug/L	165	
524.2 TVOC	9/17/2002	**3.19**	--	ug/L	165	
Carbon tetrachloride	9/17/2002	0.57	0.5	ug/L	165	
Chloroform	9/17/2002	0.47	0.5	ug/L	165	J
cis-1,2-Dichloroethylene	9/17/2002	0.26	0.5	ug/L	165	J
Methyl chloride	9/17/2002	0.43	0.5	ug/L	165	J
Trichloroethylene	9/17/2002	0.55	0.5	ug/L	165	
1,1,1-Trichloroethane	10/15/2002	1	0.5	ug/L	165	
524.2 TVOC	10/15/2002	**2.98**	--	ug/L	165	
Carbon tetrachloride	10/15/2002	0.51	0.5	ug/L	165	
Chloroform	10/15/2002	0.44	0.5	ug/L	165	J
cis-1,2-Dichloroethylene	10/15/2002	0.26	0.5	ug/L	165	J
Methylene chloride	10/15/2002	0.33	0.5	ug/L	165	J
Trichloroethylene	10/15/2002	0.44	0.5	ug/L	165	J
1,1,1-Trichloroethane	11/15/2002	1	0.5	ug/L	165	
524.2 TVOC	11/15/2002	**3.54**	--	ug/L	165	
Carbon tetrachloride	11/15/2002	0.66	0.5	ug/L	165	
Chloroform	11/15/2002	0.51	0.5	ug/L	165	
Methylene chloride	11/15/2002	0.34	0.5	ug/L	165	J
Tetrachloroethylene	11/15/2002	0.62	0.5	ug/L	165	
Trichloroethylene	11/15/2002	0.41	0.5	ug/L	165	J
1,1,1-Trichloroethane	12/16/2002	0.62	0.5	ug/L	165	
524.2 TVOC	12/16/2002	**2.51**	--	ug/L	165	
Carbon tetrachloride	12/16/2002	0.38	0.5	ug/L	165	J
Chloroform	12/16/2002	0.46	0.5	ug/L	165	J
cis-1,2-Dichloroethylene	12/16/2002	0.29	0.5	ug/L	165	J
Methylene chloride	12/16/2002	0.37	0.5	ug/L	165	J
Trichloroethylene	12/16/2002	0.39	0.5	ug/L	165	J
Site ID: 106-66 (MRW-6)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/17/2002	1.7	0.5	ug/L	203	
1,1-Dichloroethylene	1/17/2002	0.4	0.5	ug/L	203	J
1,2-Dichloroethane	1/17/2002	1.4	0.5	ug/L	203	
524.2 TVOC	1/17/2002	**18.6**	--	ug/L	203	
Chloroform	1/17/2002	1.6	0.5	ug/L	203	
cis-1,2-Dichloroethylene	1/17/2002	4.4	0.5	ug/L	203	
Tetrachloroethylene	1/17/2002	6.8	0.5	ug/L	203	
Trichloroethylene	1/17/2002	2.3	0.5	ug/L	203	
1,1,1-Trichloroethane	2/19/2002	1.4	0.5	ug/L	203	
1,1-Dichloroethylene	2/19/2002	0.35	0.5	ug/L	203	J
1,2-Dichloroethane	2/19/2002	0.88	0.5	ug/L	203	
524.2 TVOC	2/19/2002	**15.67**	--	ug/L	203	
Chloroform	2/19/2002	1.1	0.5	ug/L	203	
cis-1,2-Dichloroethylene	2/19/2002	3.6	0.5	ug/L	203	
Methylene chloride	2/19/2002	0.54	0.5	ug/L	203	
Tetrachloroethylene	2/19/2002	6	0.5	ug/L	203	
Trichloroethylene	2/19/2002	1.8	0.5	ug/L	203	
1,1,1-Trichloroethane	3/15/2002	1.5	0.5	ug/L	203	
1,1-Dichloroethylene	3/15/2002	0.64	0.5	ug/L	203	
1,2-Dichloroethane	3/15/2002	0.78	0.5	ug/L	203	
524.2 TVOC	3/15/2002	**14.72**	--	ug/L	203	
Chloroform	3/15/2002	1	0.5	ug/L	203	
cis-1,2-Dichloroethylene	3/15/2002	3.3	0.5	ug/L	203	
Tetrachloroethylene	3/15/2002	5.5	0.5	ug/L	203	
Trichloroethylene	3/15/2002	2	0.5	ug/L	203	
1,1,1-Trichloroethane	4/15/2002	1.5	0.5	ug/L	203	
1,1-Dichloroethylene	4/15/2002	0.38	0.5	ug/L	203	J
1,2-Dichloroethane	4/15/2002	0.78	0.5	ug/L	203	
524.2 TVOC	4/15/2002	**14.46**	--	ug/L	203	
Chloroform	4/15/2002	1	0.5	ug/L	203	
cis-1,2-Dichloroethylene	4/15/2002	3.1	0.5	ug/L	203	
Tetrachloroethylene	4/15/2002	5.6	0.5	ug/L	203	
Trichloroethylene	4/15/2002	2.1	0.5	ug/L	203	
1,1,1-Trichloroethane	5/15/2002	1.5	0.5	ug/L	203	
1,2-Dichloroethane	5/15/2002	0.8	0.5	ug/L	203	
524.2 TVOC	5/15/2002	**14.6**	--	ug/L	203	
Chloroform	5/15/2002	1	0.5	ug/L	203	
cis-1,2-Dichloroethylene	5/15/2002	3	0.5	ug/L	203	
Tetrachloroethylene	5/15/2002	6	0.5	ug/L	203	
Trichloroethylene	5/15/2002	2.3	0.5	ug/L	203	
1,1,1-Trichloroethane	6/27/2002	0.56	0.5	ug/L	203	
524.2 TVOC	6/27/2002	**16.23**	--	ug/L	203	
Chloroform	6/27/2002	0.77	0.5	ug/L	203	
cis-1,2-Dichloroethylene	6/27/2002	5.5	0.5	ug/L	203	
Tetrachloroethylene	6/27/2002	7.5	0.5	ug/L	203	
Trichloroethylene	6/27/2002	1.9	0.5	ug/L	203	

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Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	7/15/2002	1	0.5	ug/L	203	
1,2-Dichloroethane	7/15/2002	0.34	0.5	ug/L	203	J
524.2 TVOC	7/15/2002	**11.94**	--	ug/L	203	
Chloroform	7/15/2002	0.7	0.5	ug/L	203	
cis-1,2-Dichloroethylene	7/15/2002	2.9	0.5	ug/L	203	
Tetrachloroethylene	7/15/2002	5.3	0.5	ug/L	203	
Trichloroethylene	7/15/2002	1.7	0.5	ug/L	203	
1,1,1-Trichloroethane	8/15/2002	0.94	0.5	ug/L	203	
1,1-Dichloroethylene	8/15/2002	0.27	0.5	ug/L	203	J
1,2-Dichloroethane	8/15/2002	0.37	0.5	ug/L	203	J
524.2 TVOC	8/15/2002	**11.35**	--	ug/L	203	
Chloroform	8/15/2002	0.67	0.5	ug/L	203	
cis-1,2-Dichloroethylene	8/15/2002	2.4	0.5	ug/L	203	
Tetrachloroethylene	8/15/2002	5	0.5	ug/L	203	
Trichloroethylene	8/15/2002	1.7	0.5	ug/L	203	
1,1,1-Trichloroethane	9/17/2002	0.78	0.5	ug/L	203	
1,2-Dichloroethane	9/17/2002	0.33	0.5	ug/L	203	J
524.2 TVOC	9/17/2002	**11.09**	--	ug/L	203	
Chloroform	9/17/2002	0.67	0.5	ug/L	203	
cis-1,2-Dichloroethylene	9/17/2002	2.4	0.5	ug/L	203	
Methyl chloride	9/17/2002	0.51	0.5	ug/L	203	
Tetrachloroethylene	9/17/2002	4.8	0.5	ug/L	203	
Trichloroethylene	9/17/2002	1.6	0.5	ug/L	203	
1,1,1-Trichloroethane	10/15/2002	0.74	0.5	ug/L	203	
1,1-Dichloroethylene	10/15/2002	0.26	0.5	ug/L	203	J
1,2-Dichloroethane	10/15/2002	0.36	0.5	ug/L	203	J
524.2 TVOC	10/15/2002	**10.41**	--	ug/L	203	
Chloroform	10/15/2002	0.67	0.5	ug/L	203	
cis-1,2-Dichloroethylene	10/15/2002	2	0.5	ug/L	203	
Methylene chloride	10/15/2002	0.28	0.5	ug/L	203	J
Tetrachloroethylene	10/15/2002	4.6	0.5	ug/L	203	
Trichloroethylene	10/15/2002	1.5	0.5	ug/L	203	
1,1,1-Trichloroethane	11/15/2002	0.93	0.5	ug/L	203	
1,2-Dichloroethane	11/15/2002	0.43	0.5	ug/L	203	J
524.2 TVOC	11/15/2002	**10.62**	--	ug/L	203	
Chloroform	11/15/2002	0.76	0.5	ug/L	203	
cis-1,2-Dichloroethylene	11/15/2002	2	0.5	ug/L	203	
Tetrachloroethylene	11/15/2002	4.9	0.5	ug/L	203	
Trichloroethylene	11/15/2002	1.6	0.5	ug/L	203	
1,1,1-Trichloroethane	12/16/2002	0.68	0.5	ug/L	203	
1,2-Dichloroethane	12/16/2002	0.32	0.5	ug/L	203	J
524.2 TVOC	12/16/2002	**9.26**	--	ug/L	203	
Benzene	12/16/2002	0.27	0.5	ug/L	203	J
Chloroform	12/16/2002	0.69	0.5	ug/L	203	
cis-1,2-Dichloroethylene	12/16/2002	1.9	0.5	ug/L	203	
Tetrachloroethylene	12/16/2002	4	0.5	ug/L	203	
Trichloroethylene	12/16/2002	1.4	0.5	ug/L	203	

J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.
D = Compound was quantified in an analysis at a secondary dilution factor.
ug/L - Micrograms per Liter.

OU III SOUTH BOUNDARY SYSTEM

Table F-19
Air-Stripper Influent Analytical Data
OUIII South Boundary System
2002 BNL Groundwater Status Report

OU 3 South Boundary	**WED**	**TUE**	**MON**	**TUE**	**FRI**	**FRI**	**MON**	**MON**	**WED**	**WED**	**MON**	**THUR**
Influent (095-127)	**1/2/02**	**1/15/02**	**2/4/02**	**2/19/02**	**3/1/02**	**3/15/02**	**4/1/02**	**4/15/02**	**5/1/02**	**5/15/02**	**6/3/02**	**6/20/02**
Parameters												
Tritium (pCi/L)	212 J	359U	134U	117U	158U	26.2U	185U	455J	113U	NA*	86.2U	249U
Tritium Uncertain	124	280	230	236	193	141	254	250	206	NA*	239	185
Carbon Tetrachloride	6.0	8.1	7.0	6.9	8.8	7.7	8.2	8.2	6.2	8.4	6.7	7.2
Chloroform	1.3	1.7	1.6	1.6	2.0	1.6	1.8	1.6	1.5	1.8	1.7	1.5
1,1-Dichloroethane	0.25J	0.34J	0.31J	0.31J	0.37J	<0.50	0.34J	0.33J	<0.50	0.33J	0.29J	0.27J
1,2-Dichloroethane	1.2	1.6	1.5	1.6	1.9	1.5	1.6	1.5	1.1	1.6	1.5	1.2
1,1-Dichloroethylene	4.6	5.9	5.0	4.9	6.5	5.2	5.6	4.8	3.4	4.4	4.6	3.7
cis-1,2-Dichloroethylene	0.55	0.74	0.73	0.77	0.91	0.80	0.86	0.79	0.70	0.92	0.74	0.67
trans-1,2-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	45.5	48.4	51.9	55.8	53.9	52.8	56.0	55.0	48.1	60.1	46.4	51.1
1,1,1-Trichloroethane	13.9	18.1	14.8	15.0	18.5	16.6	16.8	15.4	12.2	16.1	14.7	12.5
Trichloroethylene	1.8	2.3	1.9	1.9	2.5	2.2	2.3	2.2	1.8	2.3	2.1	1.8
1,2-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of 1,3-and 1,4-Xylenes	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total VOCs	**74.85**	**86.84**	**84.74**	**88.78**	**95.38**	**88.40**	**93.50**	**89.82**	**75.0**	**95.95**	**78.73**	**79.94**

NOTE: All concentrations are in micrograms per liter (ug/L) unless otherwise noted.
<0.50 = Not detected above the method detection limit of 0.50 ug/L.
J = Estimated value below the method detection limit of 0.50 ug/L.

Table F-19
Air-Stripper Influent Analytical Data
OUIII South Boundary System
2002 BNL Groundwater Status Report

OU 3 South Boundary	**MON**	**MON**	**THUR**	**THUR**	**TUE**	**MON**	**TUE**	**TUE**	**FRI**	**FRI**	**MON**	**MON**
Influent (095-127)	**7/1/02**	**7/15/02**	**8/1/02**	**8/15/02**	**9/3/02**	**9/16/02**	**10/1/02**	**10/15/02**	**11/1/02**	**11/15/02**	**12/2/02**	**12/16/02**
Parameters												
Tritium (pCi/L)	67.7U	285U	291U	254U	290U	401U	194U	-48.6U	142U	199U	53.9U	137U
Tritium Uncertain	236	237	233	238	216	256	223	202	240	185	254	103
Carbon Tetrachloride	8.6	7.8	6.3	6.3	7.65	7.1	6.2	6.8	5.5	8.9	8.2	7.4
Chloroform	1.8	1.6	1.6	1.6	1.62	1.7	1.4	1.5	1.3	1.8	1.5	1.7
1,1-Dichloroethane	0.29J	0.32J	0.28 J	0.28J	<0.50	0.27J	<0.50	<0.50	<0.50	0.26J	0.26J	0.26J
1,2-Dichloroethane	1.6	1.4	1.6	1.4	1.56	1.6	1.4	1.4	1.2	1.9	1.5	1.6
1,1-Dichloroethylene	4.4	4.1	3.8	3.5	3.25	3.6	3.0	3.2	3.2	3.6	3.2	3.0
cis-1,2-Dichloroethylene	0.72	0.71	0.66	0.70	0.66	0.74	0.63	0.64	0.66	0.80	0.65	0.68
trans-1,2-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	49.6	47.8	44.4	42.1	45.1	46.4	41.2	39.6	39.0	41.3	39.5	38.4
1,1,1-Trichloroethane	15.0	13.3	12.1	11.8	11.6	11.7	9.8	10.2	7.9	12.0	9.4	9.2
Trichloroethylene	1.9	1.8	1.6	1.7	1.82	1.8	1.6	1.7	1.5	1.6	1.6	1.5
1,2-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of 1,3-and 1,4-Xylenes	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total VOCs	**83.91**	**78.83**	**72.34**	**69.38**	**73.26**	**74.91**	**65.23**	**65.04**	**60.26**	**72.16**	**65.81**	**63.74**

NOTE: All concentrations are in micrograms per liter (ug/L) unless otherwise noted.
<0.50 = Not detected above the method detection limit of 0.50 ug/L.
J = Estimated value below the method detection limit of 0.50 ug/L.

Table F-20
Air-Stripper Effluent Analytical Data
OU III South Boundary System
2002 BNL Groundwater Status Report

OU III: South Boundary	**WED**	**TUE**	**MON**	**TUE**	**FRI**	**FRI**	**MON**	**MON**	**WED**	**WED**	**MON**	**THUR**
Effluent (Site ID 095-126)	**1/2/02**	**1/15/02**	**2/4/02**	**2/19/02**	**3/1/02**	**3/15/02**	**4/1/02**	**4/15/02**	**5/1/02**	**5/15/02**	**6/3/02**	**6/20/02**
Parameters												
Carbon Tetrachloride	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	<0.50	**0.33J**	<0.50	<0.50	**0.38J**	**0.36J**	**0.34J**	**0.34J**	**0.26J**	<0.50	**0.71**	**0.60**
1,1-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	**0.25J**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,2-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of 1,3-and 1,4-Xylenes	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total VOC's	**ND**	**0.33J**	**ND**	**ND**	**0.38J**	**0.61 J**	**0.34J**	**0.34J**	**0.26J**	**ND**	**0.71**	**0.60**

NOTE: All concentrations are in parts micrograms per liter (ug/L) unless otherwise noted.
<0.50 = Not detected above the method detection limit of 0.50 ug/L.
J = Estimated value below the method detection limit of 0.50 ug/L.
ND = Not Detected above the method detection limit of 0.50 ug/L.

Table F-20
Air-Stripping Tower Effluent Analytical Data
OU III South Boundary System
2002 BNL Groundwater Status Report

OU III: South Boundary	**MON**	**MON**	**THUR**	**THUR**	**TUE**	**MON**	**TUE**	**TUE**	**FRI**	**FRI**	**MON**	**MON**
Effluent (Site ID 095-126)	**7/1/02**	**7/15/02**	**8/1/02**	**8/15/02**	**9/3/02**	**9/16/02**	**10/1/02**	**10/15/02**	**11/1/02**	**11/15/02**	**12/2/02**	**12/16/02**
Parameters												
Carbon Tetrachloride	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	**0.37J**	**0.38J**	**0.35J**	**0.35J**	**0.30J**	**0.37J**	**0.30J**	**0.30J**	**0.25J**	**0.32J**	<0.50	**0.33J**
1,1-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,2-Dichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of 1,3-and 1,4-Xylenes	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total VOC's	**0.37J**	**0.38J**	**0.35J**	**0.35J**	**0.30J**	**0.37J**	**0.30J**	**0.30J**	**0.25J**	**0.32J**	**ND**	**0.33J**

NOTE: All concentrations are in parts micrograms per liter (ug/L) unless otherwise noted.
<0.50 = Not detected above the method detection limit of 0.50 ug/L.
J = Estimated value below the method detection limit of 0.50 ug/L.
ND = Not Detected above the method detection limit of 0.50 ug/L.

Table F-21
Cumulative Mass Removal
OUIII South Boundary System
2002 BNL Groundwater Status Report

DATE	CUM. LBS	LBS/DAY	TVOC (ug/L)	FLOW (GPM)
01/02/02	1707.84	0.62	74.85	689
01/15/02	1717.18	0.72	86.84	689
02/04/02	1729.62	0.62	84.74	612
02/19/02	1739.40	0.65	88.78	612
03/01/02	1745.87	0.65	95.38	565
03/15/02	1754.26	0.60	88.40	565
04/01/02	1767.77	0.79	93.5	708
04/15/02	1778.45	0.76	89.82	708
05/01/02	1788.11	0.60	75	671
05/15/02	1799.01	0.78	96.66	671
06/03/02	1810.78	0.62	79.90	646
06/20/02	1821.31	0.62	79.94	646
07/01/02	1829.25	0.72	83.91	717
07/15/02	1838.75	0.68	78.83	717
08/01/02	1849.11	0.61	72.34	702
08/15/02	1857.29	0.58	69.38	702
09/03/02	1868.58	0.59	74.26	667
09/16/02	1876.50	0.61	76.03	667
10/01/02	1884.16	0.51	65.23	653
10/15/02	1891.30	0.51	65.04	653
11/01/02	1899.60	0.49	60.26	675
11/15/02	1907.78	0.58	72.16	675
12/02/02	1915.18	0.44	65.81	551
12/15/02	1920.65	0.42	63.74	551
12/31/02	1927.40	0.42	63.74	551

GPM - Gallons per minute.
ug/L - micrograms per liter.
Results for 12/31/2002 estimated based on sample collected 12/15/2002.
CUM. LBS - Cumulative pounds.

TABLE F-22
AIR EMISSIONS 1/1/02 - 12/31/02
OU III SOUTH BOUNDARY AIR STRIPPER
2002 BNL Groundwater Status Report

Emission Rates from the OUIII South Boundary Air Stripping Tower

-assume 100% mass transfer from liquid to gas in air stripping tower

Flow Rate:

Water = 651 gpm average for operational period

Dimensional Conversion:

[gpm] * 3.785 l/gal * [ug/l] * 10e-9 kg/ug * 2.205 lb/kg * 60 Min/hr = [ ] pounds per hour
[gpm] * [ug/l] * 0.0000005

Contaminants:	influent (ppb)	units	ER	units	allowable
1,1,1-Trichloroethane	13.3	(ug/l)	0.0043	lb/hour	10
Trichloroethylene	1.9	(ug/l)	0.0006	lb/hour	0.143
Tetrachloroethylene	47.5	(ug/l)	0.0155	lb/hour	0.387
trans-1,2-Dichloroethylene	<0.50	(ug/l)	0.0000	lb/hour	10
1,1-Dichloroethylene	4.2	(ug/l)	0.0014	lb/hour	0.034
Carbon Tetrachloride	7.3	(ug/l)	0.0024	lb/hour	0.022
1,1-Dichloroethane	0.20	(ug/l)	0.0001	lb/hour	10
cis-1,2-Dichloroethylene	0.73	(ug/l)	0.0002	lb/hour	10
1,2-Dichloroethane	1.5	(ug/l)	0.0005	lb/hour	0.008
Chloroform	1.6	(ug/l)	0.0005	lb/hour	0.0031
TVOCs	78.20	(ug/l)	0.0255	lb/hour	

Note: All concentrations and flow rates are the average for the operational period
Allowable levels based uon NYSDEC Airguide 1 regulations.
1,1 DCE value determined from more detailed ISCL2 air modeling.
ER = Actual emmission rates

TABLE F-23
EXTRATION WELL ANALYTICAL DATA
OU III SOUTH BOUNDARY SYSTEM
2002 Groundwater Status Report

Site ID: 121-17 (EW-3)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/17/2002	1.1	0.5	ug/L	170	
1,1-Dichloroethane	1/17/2002	0.3	0.5	ug/L	170	J
1,1-Dichloroethylene	1/17/2002	0.32	0.5	ug/L	170	J
524.2 TVOC	1/17/2002	**34.23**	--	ug/L	170	
Carbon tetrachloride	1/17/2002	4.4	0.5	ug/L	170	
Chloroform	1/17/2002	2.2	0.5	ug/L	170	
Methylene chloride	1/17/2002	0.67	0.5	ug/L	170	
Tetrachloroethylene	1/17/2002	24.8	0.5	ug/L	170	
Trichloroethylene	1/17/2002	0.44	0.5	ug/L	170	J
1,1,1-Trichloroethane	4/1/2002	0.96	0.5	ug/L	170	
1,1-Dichloroethane	4/1/2002	0.27	0.5	ug/L	170	J
1,1-Dichloroethylene	4/1/2002	0.34	0.5	ug/L	170	J
524.2 TVOC	4/1/2002	**31.24**	--	ug/L	170	
Carbon tetrachloride	4/1/2002	3.4	0.5	ug/L	170	
Chloroform	4/1/2002	2.1	0.5	ug/L	170	
Tetrachloroethylene	4/1/2002	23.7	0.5	ug/L	170	
Trichloroethylene	4/1/2002	0.47	0.5	ug/L	170	J
1,1,1-Trichloroethane	7/1/2002	0.94	0.5	ug/L	170	
524.2 TVOC	7/1/2002	**27.27**	--	ug/L	170	
Carbon tetrachloride	7/1/2002	3.7	0.5	ug/L	170	
Chloroform	7/1/2002	2.2	0.5	ug/L	170	
Methylene chloride	7/1/2002	0.28	0.5	ug/L	170	J
Tetrachloroethylene	7/1/2002	19.8	0.5	ug/L	170	
Trichloroethylene	7/1/2002	0.35	0.5	ug/L	170	J
1,1,1-Trichloroethane	10/1/2002	0.68	0.5	ug/L	170	
524.2 TVOC	10/1/2002	**22.31**	--	ug/L	170	
Carbon tetrachloride	10/1/2002	3	0.5	ug/L	170	
Chloroform	10/1/2002	1.8	0.5	ug/L	170	
Tetrachloroethylene	10/1/2002	16.5	0.5	ug/L	170	
Trichloroethylene	10/1/2002	0.33	0.5	ug/L	170	J

TABLE F-23
EXTRATION WELL ANALYTICAL DATA
OU III SOUTH BOUNDARY SYSTEM
2002 Groundwater Status Report

Site ID: 121-16 (EW-4)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/17/2002	21.6	0.5	ug/L	180	
1,1-Dichloroethane	1/17/2002	0.43	0.5	ug/L	180	J
1,1-Dichloroethylene	1/17/2002	7.6	0.5	ug/L	180	
1,2-Dichloroethane	1/17/2002	0.42	0.5	ug/L	180	J
Carbon tetrachloride	1/17/2002	48.6	0.5	ug/L	180	
Chloroform	1/17/2002	1.9	0.5	ug/L	180	
Methylene chloride	1/17/2002	0.63	0.5	ug/L	180	
Tetrachloroethylene	1/17/2002	255	2.5	ug/L	180	D
Trichloroethylene	1/17/2002	2.2	0.5	ug/L	180	
524.2 TVOC	1/17/2002	**338.38**	--	ug/L	180	
1,1,1-Trichloroethane	4/1/2002	21.2	0.5	ug/L	180	
1,1-Dichloroethane	4/1/2002	0.44	0.5	ug/L	180	J
1,1-Dichloroethylene	4/1/2002	7.4	0.5	ug/L	180	
1,2-Dichloroethane	4/1/2002	0.44	0.5	ug/L	180	J
Carbon tetrachloride	4/1/2002	50.2	0.5	ug/L	180	
Chloroform	4/1/2002	1.6	0.5	ug/L	180	
cis-1,2-Dichloroethylene	4/1/2002	0.27	0.5	ug/L	180	J
Tetrachloroethylene	4/1/2002	346	2.5	ug/L	180	D
Trichloroethylene	4/1/2002	2.2	0.5	ug/L	180	
524.2 TVOC	4/1/2002	**429.75**	--	ug/L	180	
1,1,1-Trichloroethane	7/1/2002	20.8	0.5	ug/L	180	
1,1-Dichloroethane	7/1/2002	0.38	0.5	ug/L	180	J
1,1-Dichloroethylene	7/1/2002	6	0.5	ug/L	180	
1,2-Dichloroethane	7/1/2002	0.45	0.5	ug/L	180	J
Carbon tetrachloride	7/1/2002	45.5	0.5	ug/L	180	
Chloroform	7/1/2002	1.5	0.5	ug/L	180	
cis-1,2-Dichloroethylene	7/1/2002	0.33	0.5	ug/L	180	J
Methylene chloride	7/1/2002	1.6	0.5	ug/L	180	
p-Dichlorobenzene	7/1/2002	0.28	0.5	ug/L	180	J
Tetrachloroethylene	7/1/2002	318	5	ug/L	180	D
Trichloroethylene	7/1/2002	2	0.5	ug/L	180	
524.2 TVOC	7/1/2002	**396.84**	--	ug/L	180	
1,1,1-Trichloroethane	10/1/2002	15.7	0.5	ug/L	180	
1,1-Dichloroethane	10/1/2002	0.36	0.5	ug/L	180	J
1,1-Dichloroethylene	10/1/2002	4.6	0.5	ug/L	180	
Carbon tetrachloride	10/1/2002	41	0.5	ug/L	180	
Chloroform	10/1/2002	1.4	0.5	ug/L	180	
cis-1,2-Dichloroethylene	10/1/2002	0.43	0.5	ug/L	180	J
Tetrachloroethylene	10/1/2002	222	5	ug/L	180	D
Trichloroethylene	10/1/2002	1.9	0.5	ug/L	180	
524.2 TVOC	10/1/2002	**287.39**	--	ug/L	180	

TABLE F-23
EXTRATION WELL ANALYTICAL DATA
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Site ID: 121-15 (EW-5)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/17/2002	40	0.5	ug/L	180	
1,1-Dichloroethane	1/17/2002	0.51	0.5	ug/L	180	
1,1-Dichloroethylene	1/17/2002	13.4	0.5	ug/L	180	
1,2-Dichloroethane	1/17/2002	2.5	0.5	ug/L	180	
Carbon tetrachloride	1/17/2002	1.5	0.5	ug/L	180	
Chloroform	1/17/2002	1.8	0.5	ug/L	180	
cis-1,2-Dichloroethylene	1/17/2002	2.9	0.5	ug/L	180	
Methylene chloride	1/17/2002	0.66	0.5	ug/L	180	
o-Xylene	1/17/2002	0.54	0.5	ug/L	180	
Tetrachloroethylene	1/17/2002	12.2	0.5	ug/L	180	
Trichloroethylene	1/17/2002	4.3	0.5	ug/L	180	
524.2 TVOC	1/17/2002	**80.31**	--	ug/L	180	
1,1,1-Trichloroethane	4/1/2002	35.4	0.5	ug/L	180	
1,1-Dichloroethane	4/1/2002	0.49	0.5	ug/L	180	J
1,1-Dichloroethylene	4/1/2002	11.8	0.5	ug/L	180	
1,2-Dichloroethane	4/1/2002	2.3	0.5	ug/L	180	
Carbon tetrachloride	4/1/2002	1.3	0.5	ug/L	180	
Chloroform	4/1/2002	1.9	0.5	ug/L	180	
cis-1,2-Dichloroethylene	4/1/2002	3.3	0.5	ug/L	180	
o-Xylene	4/1/2002	0.31	0.5	ug/L	180	J
Tetrachloroethylene	4/1/2002	14.6	0.5	ug/L	180	
Trichloroethylene	4/1/2002	4.2	0.5	ug/L	180	
524.2 TVOC	4/1/2002	**75.6**	--	ug/L	180	
1,1,1-Trichloroethane	7/1/2002	36.3	0.5	ug/L	180	
1,1-Dichloroethane	7/1/2002	0.52	0.5	ug/L	180	
1,1-Dichloroethylene	7/1/2002	10.4	0.5	ug/L	180	
1,2-Dichloroethane	7/1/2002	2.6	0.5	ug/L	180	
Carbon tetrachloride	7/1/2002	1.4	0.5	ug/L	180	
Chloroform	7/1/2002	2	0.5	ug/L	180	
cis-1,2-Dichloroethylene	7/1/2002	3.1	0.5	ug/L	180	
Tetrachloroethylene	7/1/2002	13.7	0.5	ug/L	180	
Trichloroethylene	7/1/2002	4	0.5	ug/L	180	
524.2 TVOC	7/1/2002	**74.02**	--	ug/L	180	
1,1,1-Trichloroethane	10/1/2002	27.4	0.5	ug/L	180	
1,1-Dichloroethane	10/1/2002	0.38	0.5	ug/L	180	J
1,1-Dichloroethylene	10/1/2002	6.4	0.5	ug/L	180	
1,2-Dichloroethane	10/1/2002	2	0.5	ug/L	180	
Carbon tetrachloride	10/1/2002	0.96	0.5	ug/L	180	
Chloroform	10/1/2002	1.6	0.5	ug/L	180	
cis-1,2-Dichloroethylene	10/1/2002	2.6	0.5	ug/L	180	
Tetrachloroethylene	10/1/2002	11	0.5	ug/L	180	
Trichloroethylene	10/1/2002	3.2	0.5	ug/L	180	
524.2 TVOC	10/1/2002	**55.54**	--	ug/L	180	

TABLE F-23
EXTRATION WELL ANALYTICAL DATA
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Site ID: 122-14 (EW-6)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/17/2002	29.6	0.5	ug/L	180	
1,1-Dichloroethane	1/17/2002	0.48	0.5	ug/L	180	J
1,1-Dichloroethylene	1/17/2002	8.2	0.5	ug/L	180	
1,2-Dichloroethane	1/17/2002	3.6	0.5	ug/L	180	
Carbon tetrachloride	1/17/2002	0.74	0.5	ug/L	180	
Chloroform	1/17/2002	1.9	0.5	ug/L	180	
cis-1,2-Dichloroethylene	1/17/2002	1.4	0.5	ug/L	180	
Tetrachloroethylene	1/17/2002	11.5	0.5	ug/L	180	
Trichloroethylene	1/17/2002	3	0.5	ug/L	180	
524.2 TVOC	1/17/2002	**60.42**	--	ug/L	180	
1,1,1-Trichloroethane	4/1/2002	31.2	0.5	ug/L	180	
1,1-Dichloroethane	4/1/2002	0.53	0.5	ug/L	180	
1,1-Dichloroethylene	4/1/2002	8.6	0.5	ug/L	180	
1,2-Dichloroethane	4/1/2002	3.8	0.5	ug/L	180	
Carbon tetrachloride	4/1/2002	0.76	0.5	ug/L	180	
Chloroform	4/1/2002	2	0.5	ug/L	180	
cis-1,2-Dichloroethylene	4/1/2002	1.7	0.5	ug/L	180	
Tetrachloroethylene	4/1/2002	13.7	0.5	ug/L	180	
Trichloroethylene	4/1/2002	3.3	0.5	ug/L	180	
524.2 TVOC	4/1/2002	**65.59**	--	ug/L	180	
1,1,1-Trichloroethane	7/1/2002	30.1	0.5	ug/L	180	
1,1-Dichloroethane	7/1/2002	0.54	0.5	ug/L	180	
1,1-Dichloroethylene	7/1/2002	6.7	0.5	ug/L	180	
1,2-Dichloroethane	7/1/2002	4	0.5	ug/L	180	
Carbon tetrachloride	7/1/2002	0.79	0.5	ug/L	180	
Chloroform	7/1/2002	2	0.5	ug/L	180	
cis-1,2-Dichloroethylene	7/1/2002	1.7	0.5	ug/L	180	
Methylene chloride	7/1/2002	1.5	0.5	ug/L	180	
p-Dichlorobenzene	7/1/2002	0.32	0.5	ug/L	180	J
Tetrachloroethylene	7/1/2002	12.8	0.5	ug/L	180	
Trichloroethylene	7/1/2002	2.8	0.5	ug/L	180	
524.2 TVOC	7/1/2002	**63.25**	--	ug/L	180	
1,1,1-Trichloroethane	10/1/2002	23.8	0.5	ug/L	180	
1,1-Dichloroethane	10/1/2002	0.38	0.5	ug/L	180	J
1,1-Dichloroethylene	10/1/2002	5.3	0.5	ug/L	180	
1,2-Dichloroethane	10/1/2002	3.2	0.5	ug/L	180	
Carbon tetrachloride	10/1/2002	0.6	0.5	ug/L	180	
Chloroform	10/1/2002	1.8	0.5	ug/L	180	
cis-1,2-Dichloroethylene	10/1/2002	1.7	0.5	ug/L	180	
Tetrachloroethylene	10/1/2002	10.7	0.5	ug/L	180	
Trichloroethylene	10/1/2002	2.5	0.5	ug/L	180	
524.2 TVOC	10/1/2002	**49.98**	--	ug/L	180	

TABLE F-23
EXTRATION WELL ANALYTICAL DATA
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Site ID: 122-13 (EW-7)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/17/2002	10.4	0.5	ug/L	190	
1,1-Dichloroethane	1/17/2002	0.3	0.5	ug/L	190	J
1,1-Dichloroethylene	1/17/2002	4.5	0.5	ug/L	190	
1,2-Dichloroethane	1/17/2002	1.6	0.5	ug/L	190	
524.2 TVOC	1/17/2002	**28.86**	--	ug/L	190	
Carbon tetrachloride	1/17/2002	2.4	0.5	ug/L	190	
Chloroform	1/17/2002	1.6	0.5	ug/L	190	
Methylene chloride	1/17/2002	0.36	0.5	ug/L	190	J
Tetrachloroethylene	1/17/2002	3.9	0.5	ug/L	190	
Trichloroethylene	1/17/2002	3.8	0.5	ug/L	190	
1,1,1-Trichloroethane	4/1/2002	8.4	0.5	ug/L	190	
1,1-Dichloroethane	4/1/2002	0.25	0.5	ug/L	190	J
1,1-Dichloroethylene	4/1/2002	3.9	0.5	ug/L	190	
1,2-Dichloroethane	4/1/2002	1.5	0.5	ug/L	190	
524.2 TVOC	4/1/2002	**25.05**	--	ug/L	190	
Carbon tetrachloride	4/1/2002	2.4	0.5	ug/L	190	
Chloroform	4/1/2002	1.5	0.5	ug/L	190	
Tetrachloroethylene	4/1/2002	3.5	0.5	ug/L	190	
Trichloroethylene	4/1/2002	3.6	0.5	ug/L	190	
1,1,1-Trichloroethane	7/1/2002	6.9	0.5	ug/L	190	
1,1-Dichloroethylene	7/1/2002	2.7	0.5	ug/L	190	
1,2-Dichloroethane	7/1/2002	1.6	0.5	ug/L	190	
524.2 TVOC	7/1/2002	24	--	ug/L	190	
Carbon tetrachloride	7/1/2002	2.4	0.5	ug/L	190	
Chloroform	7/1/2002	1.5	0.5	ug/L	190	
Methylene chloride	7/1/2002	2.7	0.5	ug/L	190	
p-Dichlorobenzene	7/1/2002	0.3	0.5	ug/L	190	J
Tetrachloroethylene	7/1/2002	2.8	0.5	ug/L	190	
Trichloroethylene	7/1/2002	3.1	0.5	ug/L	190	
1,1,1-Trichloroethane	10/1/2002	5	0.5	ug/L	190	
1,1-Dichloroethylene	10/1/2002	1.9	0.5	ug/L	190	
1,2-Dichloroethane	10/1/2002	1.1	0.5	ug/L	190	
524.2 TVOC	10/1/2002	**16.41**	--	ug/L	190	
Carbon tetrachloride	10/1/2002	1.7	0.5	ug/L	190	
Chloroform	10/1/2002	1.2	0.5	ug/L	190	
Methylene chloride	10/1/2002	0.51	0.5	ug/L	190	
Tetrachloroethylene	10/1/2002	2.3	0.5	ug/L	190	
Trichloroethylene	10/1/2002	2.7	0.5	ug/L	190	

TABLE F-23
EXTRATION WELL ANALYTICAL DATA
OU III SOUTH BOUNDARY SYSTEM
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Site ID: 122-12 (EW-8)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/17/2002	18.5	0.5	ug/L	220	
1,1-Dichloroethane	1/17/2002	0.3	0.5	ug/L	220	J
1,1-Dichloroethylene	1/17/2002	7.7	0.5	ug/L	220	
1,2-Dichloroethane	1/17/2002	2.3	0.5	ug/L	220	
Chloroform	1/17/2002	1.5	0.5	ug/L	220	
Tetrachloroethylene	1/17/2002	2.8	0.5	ug/L	220	
Trichloroethylene	1/17/2002	1.8	0.5	ug/L	220	
524.2 TVOC	1/17/2002	**34.9**	--	ug/L	220	
1,1,1-Trichloroethane	4/1/2002	14.8	0.5	ug/L	220	
1,1-Dichloroethane	4/1/2002	0.27	0.5	ug/L	220	J
1,1-Dichloroethylene	4/1/2002	6.4	0.5	ug/L	220	
1,2-Dichloroethane	4/1/2002	2.4	0.5	ug/L	220	
Chloroform	4/1/2002	1.5	0.5	ug/L	220	
Tetrachloroethylene	4/1/2002	2	0.5	ug/L	220	
Trichloroethylene	4/1/2002	1.7	0.5	ug/L	220	
524.2 TVOC	4/1/2002	**29.07**	--	ug/L	220	
1,1,1-Trichloroethane	7/1/2002	11.2	0.5	ug/L	220	
1,1-Dichloroethylene	7/1/2002	4.3	0.5	ug/L	220	
1,2-Dichloroethane	7/1/2002	3.1	0.5	ug/L	220	
Chloroform	7/1/2002	1.7	0.5	ug/L	220	
Methylene chloride	7/1/2002	1.9	0.5	ug/L	220	
p-Dichlorobenzene	7/1/2002	0.32	0.5	ug/L	220	J
Tetrachloroethylene	7/1/2002	1.3	0.5	ug/L	220	
Trichloroethylene	7/1/2002	1.4	0.5	ug/L	220	
524.2 TVOC	7/1/2002	**25.22**	--	ug/L	220	
1,1,1-Trichloroethane	10/1/2002	5.4	0.5	ug/L	220	
1,1-Dichloroethylene	10/1/2002	2.1	0.5	ug/L	220	
1,2-Dichloroethane	10/1/2002	3.2	0.5	ug/L	220	
Chloroform	10/1/2002	1.7	0.5	ug/L	220	
Tetrachloroethylene	10/1/2002	0.7	0.5	ug/L	220	
Trichloroethylene	10/1/2002	1.1	0.5	ug/L	220	
524.2 TVOC	10/1/2002	**14.2**	--	ug/L	220	

TABLE F-23
EXTRATION WELL ANALYTICAL DATA
OU III SOUTH BOUNDARY SYSTEM
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Site ID: 122-30 (EW-12)						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	1/17/2002	5.9	0.5	ug/L	200	
1,1-Dichloroethylene	1/17/2002	2.2	0.5	ug/L	200	
1,2-Dichloroethane	1/17/2002	0.82	0.5	ug/L	200	
Chloroform	1/17/2002	1.4	0.5	ug/L	200	
Trichloroethylene	1/17/2002	0.59	0.5	ug/L	200	
524.2 TVOC	1/17/2002	**10.91**	--	ug/L	200	
1,1,1-Trichloroethane	4/1/2002	4.4	0.5	ug/L	200	
1,1-Dichloroethylene	4/1/2002	1.3	0.5	ug/L	200	
1,2-Dichloroethane	4/1/2002	0.76	0.5	ug/L	200	
Chloroform	4/1/2002	1.3	0.5	ug/L	200	
Trichloroethylene	4/1/2002	0.57	0.5	ug/L	200	
524.2 TVOC	4/1/2002	**8.33**	--	ug/L	200	
1,1,1-Trichloroethane	7/1/2002	3.9	0.5	ug/L	200	
1,1-Dichloroethylene	7/1/2002	1.3	0.5	ug/L	200	
1,2-Dichloroethane	7/1/2002	0.82	0.5	ug/L	200	
Chloroform	7/1/2002	1.4	0.5	ug/L	200	
Methylene chloride	7/1/2002	1.7	0.5	ug/L	200	
p-Dichlorobenzene	7/1/2002	0.3	0.5	ug/L	200	J
Trichloroethylene	7/1/2002	0.51	0.5	ug/L	200	
524.2 TVOC	7/1/2002	**9.93**	--	ug/L	200	
1,1,1-Trichloroethane	10/1/2002	2.8	0.5	ug/L	200	
1,1-Dichloroethylene	10/1/2002	0.9	0.5	ug/L	200	
1,2-Dichloroethane	10/1/2002	0.55	0.5	ug/L	200	
Chloroform	10/1/2002	1.1	0.5	ug/L	200	
Trichloroethylene	10/1/2002	0.45	0.5	ug/L	200	J
524.2 TVOC	10/1/2002	**5.8**	--	ug/L	200	

J = Estimated value.
B = Analyte was found in the associated blank as well as in the sample.
D = Compound was quantified using an analysis at a secondary dilution factor.
ug/L - Micrograms per liter.

Western South Boundary System

Table F-24
OU III Western South Boundary Extraction Wells 1,2 Voc Data
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Site ID: 126-12 **(WSB-1)**						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	5/12/2002	8.1	0.5	ug/L	150	
1,1-Dichloroethane	5/12/2002	1.4	0.5	ug/L	150	
1,1-Dichloroethylene	5/12/2002	5.1	0.5	ug/L	150	
524.2 TVOC	5/12/2002	32.36	--	ug/L	150	
Chloroform	5/12/2002	4.4	0.5	ug/L	150	
Dichlorodifluoromethane	5/12/2002	8.2	0.5	ug/L	150	
Tetrachloroethylene	5/12/2002	0.56	0.5	ug/L	150	
Trichloroethylene	5/12/2002	4.6	0.5	ug/L	150	
1,1,1-Trichloroethane	5/13/2002	7.2	0.5	ug/L	150	
1,1-Dichloroethane	5/13/2002	1.3	0.5	ug/L	150	
1,1-Dichloroethylene	5/13/2002	4.3	0.5	ug/L	150	
524.2 TVOC	5/13/2002	28.07	--	ug/L	150	
Chloroform	5/13/2002	3.8	0.5	ug/L	150	
Dichlorodifluoromethane	5/13/2002	6.6	0.5	ug/L	150	
Methyl chloride	5/13/2002	0.3	0.5	ug/L	150	J
Tetrachloroethylene	5/13/2002	0.47	0.5	ug/L	150	J
Trichloroethylene	5/13/2002	4.1	0.5	ug/L	150	
1,1,1-Trichloroethane	5/14/2002	7	0.5	ug/L	150	
1,1-Dichloroethane	5/14/2002	1.3	0.5	ug/L	150	
1,1-Dichloroethylene	5/14/2002	3.9	0.5	ug/L	150	
524.2 TVOC	5/14/2002	26.9	--	ug/L	150	
Chloroform	5/14/2002	3.8	0.5	ug/L	150	
Dichlorodifluoromethane	5/14/2002	6.4	0.5	ug/L	150	
Tetrachloroethylene	5/14/2002	0.4	0.5	ug/L	150	J
Trichloroethylene	5/14/2002	4.1	0.5	ug/L	150	
1,1,1-Trichloroethane	5/15/2002	6.4	0.5	ug/L	150	
1,1-Dichloroethane	5/15/2002	1.2	0.5	ug/L	150	
1,1-Dichloroethylene	5/15/2002	3.5	0.5	ug/L	150	
524.2 TVOC	5/15/2002	24.67	--	ug/L	150	
Chloroform	5/15/2002	3.6	0.5	ug/L	150	
Dichlorodifluoromethane	5/15/2002	5.7	0.5	ug/L	150	
Tetrachloroethylene	5/15/2002	0.37	0.5	ug/L	150	J
Trichloroethylene	5/15/2002	3.9	0.5	ug/L	150	
1,1,1-Trichloroethane	6/7/2002	5.3	0.5	ug/L	150	
1,1-Dichloroethane	6/7/2002	0.87	0.5	ug/L	150	
1,1-Dichloroethylene	6/7/2002	2.8	0.5	ug/L	150	
524.2 TVOC	6/7/2002	18.28	--	ug/L	150	
Chloroform	6/7/2002	2.9	0.5	ug/L	150	
Dichlorodifluoromethane	6/7/2002	3.1	0.5	ug/L	150	
Tetrachloroethylene	6/7/2002	0.31	0.5	ug/L	150	J
Trichloroethylene	6/7/2002	3	0.5	ug/L	150	
1,1,1-Trichloroethane	6/13/2002	4.1	0.5	ug/L	150	
1,1-Dichloroethane	6/13/2002	0.69	0.5	ug/L	150	
1,1-Dichloroethylene	6/13/2002	2	0.5	ug/L	150	
524.2 TVOC	6/13/2002	15.89	--	ug/L	150	
Chloroform	6/13/2002	2.4	0.5	ug/L	150	
Dichlorodifluoromethane	6/13/2002	2.2	0.5	ug/L	150	
Methylene chloride	6/13/2002	1.9	0.5	ug/L	150	B

Table F-24
OU III Western South Boundary Extraction Wells 1,2 Voc Data
2002 BNL Groundwater Status Reprt

Site ID: 126-12 **(WSB-1)**						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
Trichloroethylene	6/13/2002	2.6	0.5	ug/L	150	
1,1,1-Trichloroethane	6/20/2002	4	0.5	ug/L	150	
1,1-Dichloroethane	6/20/2002	0.61	0.5	ug/L	150	
1,1-Dichloroethylene	6/20/2002	2.1	0.5	ug/L	150	
524.2 TVOC	6/20/2002	14.03	--	ug/L	150	
Chloroform	6/20/2002	2.2	0.5	ug/L	150	
Dichlorodifluoromethane	6/20/2002	2	0.5	ug/L	150	
Tetrachloroethylene	6/20/2002	0.32	0.5	ug/L	150	J
Trichloroethylene	6/20/2002	2.8	0.5	ug/L	150	
1,1,1-Trichloroethane	8/1/2002	3.1	0.5	ug/L	150	
1,1-Dichloroethane	8/1/2002	0.54	0.5	ug/L	150	
1,1-Dichloroethylene	8/1/2002	1.9	0.5	ug/L	150	
524.2 TVOC	8/1/2002	11.64	--	ug/L	150	
Chloroform	8/1/2002	2.2	0.5	ug/L	150	
Dichlorodifluoromethane	8/1/2002	1.9	0.5	ug/L	150	
Trichloroethylene	8/1/2002	2	0.5	ug/L	150	
1,1,1-Trichloroethane	8/15/2002	3.2	0.5	ug/L	150	
1,1-Dichloroethane	8/15/2002	0.47	0.5	ug/L	150	J
1,1-Dichloroethylene	8/15/2002	1.9	0.5	ug/L	150	
524.2 TVOC	8/15/2002	11.97	--	ug/L	150	
Chloroform	8/15/2002	2.1	0.5	ug/L	150	
Dichlorodifluoromethane	8/15/2002	2.1	0.5	ug/L	150	
Trichloroethylene	8/15/2002	2.2	0.5	ug/L	150	
1,1,1-Trichloroethane	9/16/2002	3.5	0.5	ug/L	150	
1,1-Dichloroethane	9/16/2002	0.5	0.5	ug/L	150	
1,1-Dichloroethylene	9/16/2002	2	0.5	ug/L	150	
524.2 TVOC	9/16/2002	13.8	--	ug/L	150	
Chloroform	9/16/2002	2.2	0.5	ug/L	150	
Dichlorodifluoromethane	9/16/2002	3.2	0.5	ug/L	150	
Trichloroethylene	9/16/2002	2.4	0.5	ug/L	150	
1,1,1-Trichloroethane	10/15/2002	2.8	0.5	ug/L	150	
1,1-Dichloroethane	10/15/2002	0.45	0.5	ug/L	150	J
1,1-Dichloroethylene	10/15/2002	1.6	0.5	ug/L	150	
524.2 TVOC	10/15/2002	10.88	--	ug/L	150	
Chloroform	10/15/2002	2	0.5	ug/L	150	
Dichlorodifluoromethane	10/15/2002	1.6	0.5	ug/L	150	
Methylene chloride	10/15/2002	0.28	0.5	ug/L	150	JB
Tetrachloroethylene	10/15/2002	0.25	0.5	ug/L	150	J
Trichloroethylene	10/15/2002	1.9	0.5	ug/L	150	
1,1,1-Trichloroethane	11/15/2002	3.7	0.5	ug/L	150	
1,1-Dichloroethane	11/15/2002	0.48	0.5	ug/L	150	J
1,1-Dichloroethylene	11/15/2002	1.7	0.5	ug/L	150	
524.2 TVOC	11/15/2002	11.05	--	ug/L	150	
Chloroform	11/15/2002	2.6	0.5	ug/L	150	
Tetrachloroethylene	11/15/2002	0.27	0.5	ug/L	150	J
Trichloroethylene	11/15/2002	2.3	0.5	ug/L	150	
1,1,1-Trichloroethane	12/2/2002	2.4	0.5	ug/L	150	
1,1-Dichloroethane	12/2/2002	0.4	0.5	ug/L	150	J

Table F-24
OU III Western South Boundary Extraction Wells 1,2 Voc Data
2002 BNL Groundwater Status Reprt

Site ID: 126-12 **(WSB-1)**						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1-Dichloroethylene	12/2/2002	1.7	0.5	ug/L	150	
524.2 TVOC	12/2/2002	9.5	--	ug/L	150	
Chloroform	12/2/2002	2	0.5	ug/L	150	
Dichlorodifluoromethane	12/2/2002	1.4	0.5	ug/L	150	
Trichloroethylene	12/2/2002	1.6	0.5	ug/L	150	
1,1,1-Trichloroethane	12/17/2002	2.6	0.5	ug/L	150	
1,1-Dichloroethane	12/17/2002	0.45	0.5	ug/L	150	J
1,1-Dichloroethylene	12/17/2002	1.7	0.5	ug/L	150	
524.2 TVOC	12/17/2002	10	--	ug/L	150	
Chloroform	12/17/2002	2	0.5	ug/L	150	
Dichlorodifluoromethane	12/17/2002	1.2	0.5	ug/L	150	
Methylene chloride	12/17/2002	0.35	0.5	ug/L	150	JB
Trichloroethylene	12/17/2002	1.7	0.5	ug/L	150	

Table F-24
OU III Western South Boundary Extraction Wells 1,2 Voc Data
2002 BNL Groundwater Status Reprt

Site ID: 127-05 **(WSB-2)**						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
1,1,1-Trichloroethane	5/12/2002	5.2	0.5	ug/L	160	
1,1-Dichloroethane	5/12/2002	1.1	0.5	ug/L	160	
1,1-Dichloroethylene	5/12/2002	3	0.5	ug/L	160	
524.2 TVOC	5/12/2002	43.26	--	ug/L	160	
Chloroform	5/12/2002	2	0.5	ug/L	160	
Dichlorodifluoromethane	5/12/2002	26.5	0.5	ug/L	160	
Tetrachloroethylene	5/12/2002	0.26	0.5	ug/L	160	J
Trichloroethylene	5/12/2002	5.2	0.5	ug/L	160	
1,1,1-Trichloroethane	5/13/2002	5.4	0.5	ug/L	160	
1,1-Dichloroethane	5/13/2002	1.1	0.5	ug/L	160	
1,1-Dichloroethylene	5/13/2002	3.8	0.5	ug/L	160	
524.2 TVOC	5/13/2002	40.98	--	ug/L	160	
Chloroform	5/13/2002	2.3	0.5	ug/L	160	
Dichlorodifluoromethane	5/13/2002	23	0.5	ug/L	160	
Tetrachloroethylene	5/13/2002	0.28	0.5	ug/L	160	J
Trichloroethylene	5/13/2002	5.1	0.5	ug/L	160	
1,1,1-Trichloroethane	5/14/2002	5.6	0.5	ug/L	160	
1,1-Dichloroethane	5/14/2002	1.2	0.5	ug/L	160	
1,1-Dichloroethylene	5/14/2002	4	0.5	ug/L	160	
524.2 TVOC	5/14/2002	41.55	--	ug/L	160	
Chloroform	5/14/2002	2.6	0.5	ug/L	160	
Dichlorodifluoromethane	5/14/2002	22.6	0.5	ug/L	160	
Tetrachloroethylene	5/14/2002	0.35	0.5	ug/L	160	J
Trichloroethylene	5/14/2002	5.2	0.5	ug/L	160	
1,1,1-Trichloroethane	5/15/2002	5.8	0.5	ug/L	160	
1,1-Dichloroethane	5/15/2002	1.2	0.5	ug/L	160	
1,1-Dichloroethylene	5/15/2002	4.2	0.5	ug/L	160	
524.2 TVOC	5/15/2002	40.82	--	ug/L	160	
Chloroform	5/15/2002	2.8	0.5	ug/L	160	
Dichlorodifluoromethane	5/15/2002	21.4	0.5	ug/L	160	
Tetrachloroethylene	5/15/2002	0.32	0.5	ug/L	160	J
Trichloroethylene	5/15/2002	5.1	0.5	ug/L	160	
1,1,1-Trichloroethane	6/7/2002	6.5	0.5	ug/L	160	
1,1-Dichloroethane	6/7/2002	1.3	0.5	ug/L	160	
1,1-Dichloroethylene	6/7/2002	4.2	0.5	ug/L	160	
524.2 TVOC	6/7/2002	31.05	--	ug/L	160	
Chloroform	6/7/2002	3.3	0.5	ug/L	160	
Dichlorodifluoromethane	6/7/2002	10.8	0.5	ug/L	160	
Tetrachloroethylene	6/7/2002	0.45	0.5	ug/L	160	J
Trichloroethylene	6/7/2002	4.5	0.5	ug/L	160	
1,1,1-Trichloroethane	6/13/2002	5.9	0.5	ug/L	160	
1,1-Dichloroethane	6/13/2002	1.3	0.5	ug/L	160	
1,1-Dichloroethylene	6/13/2002	3.5	0.5	ug/L	160	
524.2 TVOC	6/13/2002	29.2	--	ug/L	160	
Chloroform	6/13/2002	3.7	0.5	ug/L	160	
Dichlorodifluoromethane	6/13/2002	8.9	0.5	ug/L	160	
Methylene chloride	6/13/2002	1.7	0.5	ug/L	160	B
Tetrachloroethylene	6/13/2002	0.4	0.5	ug/L	160	J

Table F-24
OU III Western South Boundary Extraction Wells 1,2 Voc Data
2002 BNL Groundwater Status Reprt

Site ID: 127-05 **(WSB-2)**						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
Trichloroethylene	6/13/2002	3.8	0.5	ug/L	160	
1,1,1-Trichloroethane	6/20/2002	6	0.5	ug/L	160	
1,1-Dichloroethane	6/20/2002	1.2	0.5	ug/L	160	
1,1-Dichloroethylene	6/20/2002	3.3	0.5	ug/L	160	
524.2 TVOC	6/20/2002	25.4	--	ug/L	160	
Chloroform	6/20/2002	3.5	0.5	ug/L	160	
Dichlorodifluoromethane	6/20/2002	7.1	0.5	ug/L	160	
Tetrachloroethylene	6/20/2002	0.5	0.5	ug/L	160	
Trichloroethylene	6/20/2002	3.8	0.5	ug/L	160	
1,1,1-Trichloroethane	8/1/2002	5.3	0.5	ug/L	160	
1,1-Dichloroethane	8/1/2002	1.2	0.5	ug/L	160	
1,1-Dichloroethylene	8/1/2002	2.9	0.5	ug/L	160	
524.2 TVOC	8/1/2002	22.68	--	ug/L	160	
Chloroform	8/1/2002	3.4	0.5	ug/L	160	
Dichlorodifluoromethane	8/1/2002	7	0.5	ug/L	160	
Tetrachloroethylene	8/1/2002	0.28	0.5	ug/L	160	J
Trichloroethylene	8/1/2002	2.6	0.5	ug/L	160	
1,1,1-Trichloroethane	8/15/2002	5.3	0.5	ug/L	160	
1,1-Dichloroethane	8/15/2002	1	0.5	ug/L	160	
1,1-Dichloroethylene	8/15/2002	3	0.5	ug/L	160	
524.2 TVOC	8/15/2002	20.99	--	ug/L	160	
Chloroform	8/15/2002	3.2	0.5	ug/L	160	
Dichlorodifluoromethane	8/15/2002	5.6	0.5	ug/L	160	
Tetrachloroethylene	8/15/2002	0.39	0.5	ug/L	160	J
Trichloroethylene	8/15/2002	2.5	0.5	ug/L	160	
1,1,1-Trichloroethane	9/16/2002	5.3	0.5	ug/L	160	
1,1-Dichloroethane	9/16/2002	0.98	0.5	ug/L	160	
1,1-Dichloroethylene	9/16/2002	2.9	0.5	ug/L	160	
524.2 TVOC	9/16/2002	24.06	--	ug/L	160	
Chloroform	9/16/2002	3.2	0.5	ug/L	160	
Dichlorodifluoromethane	9/16/2002	8.6	0.5	ug/L	160	
Tetrachloroethylene	9/16/2002	0.48	0.5	ug/L	160	J
Trichloroethylene	9/16/2002	2.6	0.5	ug/L	160	
1,1,1-Trichloroethane	10/15/2002	4	0.5	ug/L	160	
1,1-Dichloroethane	10/15/2002	0.81	0.5	ug/L	160	
1,1-Dichloroethylene	10/15/2002	2.2	0.5	ug/L	160	
524.2 TVOC	10/15/2002	16.36	--	ug/L	160	
Chloroform	10/15/2002	2.9	0.5	ug/L	160	
Dichlorodifluoromethane	10/15/2002	3.8	0.5	ug/L	160	
Methylene chloride	10/15/2002	0.32	0.5	ug/L	160	JB
Tetrachloroethylene	10/15/2002	0.33	0.5	ug/L	160	J
Trichloroethylene	10/15/2002	2	0.5	ug/L	160	
1,1,1-Trichloroethane	11/15/2002	4.6	0.5	ug/L	160	
1,1-Dichloroethane	11/15/2002	0.8	0.5	ug/L	160	
1,1-Dichloroethylene	11/15/2002	2	0.5	ug/L	160	
524.2 TVOC	11/15/2002	16.62	--	ug/L	160	
Chloroform	11/15/2002	3.4	0.5	ug/L	160	
Dichlorodifluoromethane	11/15/2002	3.1	0.5	ug/L	160	

Table F-24
OU III Western South Boundary Extraction Wells 1,2 Voc Data
2002 BNL Groundwater Status Reprt

Site ID: 127-05 **(WSB-2)**						
Chemical Name	**Sample Date**	**Value**	**Det. Limit**	**Units**	**Depth**	**Qual.**
Tetrachloroethylene	11/15/2002	0.52	0.5	ug/L	160	
Trichloroethylene	11/15/2002	2.2	0.5	ug/L	160	
1,1,1-Trichloroethane	12/2/2002	3.6	0.5	ug/L	160	
1,1-Dichloroethane	12/2/2002	0.88	0.5	ug/L	160	
1,1-Dichloroethylene	12/2/2002	2.2	0.5	ug/L	160	
524.2 TVOC	12/2/2002	15.15	--	ug/L	160	
Chloroform	12/2/2002	2.8	0.5	ug/L	160	
Dichlorodifluoromethane	12/2/2002	3.3	0.5	ug/L	160	
Tetrachloroethylene	12/2/2002	0.27	0.5	ug/L	160	J
Trichloroethylene	12/2/2002	2.1	0.5	ug/L	160	

ug/L - Micrograms per liter.

OU III INDUSTRIAL PARK SYSTEM

TABLE F-25

TVOC Influent, Effluent and Efficiency Performance
2002 BNL Groundwater Status Report

Date	UVB1			UVB2			UVB3			UVB4			UVB5			UVB6			UVB7		
	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency
Units	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*
9/29/1999	1900.00	184.42	90.29	70.02	3.03	95.67	49.45	3.08	93.77	158.10	10.70	93.23	284.50	29.19	89.74	90.69	1.97	97.83	NS	NS	0.00
10/07/99	1352.98	97.69	92.78	71.48	3.08	95.69	25.38	3.44	86.45	110.38	8.38	92.41	315.10	33.77	89.28	89.13	9.73	89.08	NS	NS	0.00
10/12/1999	1485.00	59.78	95.97	94.75	2.12	97.76	20.11	2.23	88.91	92.28	6.75	92.69	359.44	31.23	91.31	96.88	1.70	98.25	NS	NS	0.00
10/19/99	820.50	52.42	93.61	875.60	39.47	95.49	19.59	1.91	90.25	84.58	5.96	92.95	230.58	29.94	87.02	98.78	1.50	98.48	NS	NS	0.00
10/26/1999	730.22	47.73	93.46	571.49	25.18	95.59	18.56	1.15	93.80	77.02	4.10	94.68	192.19	25.99	86.48	90.21	1.39	98.46	NS	NS	0.00
11/2/1999~	608.70	23.48	96.14	461.20	11.25	97.56	16.26	1.63	89.98	72.14	4.73	93.44	181.98	22.39	87.70	95.15	1.78	98.13	43.62	4.79	89.02
11/9/1999#	574.00	26.60	95.37	420.50	8.95	97.87	15.62	1.09	93.02	69.44	3.92	94.35	170.97	21.01	87.71	NS	NS	-	32.12	2.58	91.97
11/16/1999~	602.30	36.06	94.01	383.30	14.05	96.33	23.37	0.92	96.06	77.12	3.49	95.47	181.90	23.91	86.86	NS	NS	-	38.06	6.43	83.11
11/23/1999%	461.18	15.28	96.69	245.86	7.25	97.05	19.58	2.13	89.12	63.16	4.43	92.99	143.04	16.23	88.65	NS	NS	-	32.92	6.92	78.98
12/7/1999$	410.00	27.07	93.40	265.80	11.10	95.82	14.41	0.00	100.00	62.33	4.42	92.91	152.74	16.90	88.94	133.08	12.53	90.58	35.90	4.82	86.57
12/14/1999	394.00	23.80	93.96	212.40	6.80	96.80	18.36	0.00	100.00	62.40	3.48	94.42	157.11	20.64	86.86	89.82	5.83	93.51	33.41	3.49	89.55
12/21/99	459.00	27.36	94.04	193.20	6.10	96.84	18.01	0.00	100.00	62.09	3.55	94.28	154.30	16.30	89.44	**	4.85	-	84.61	2.37	97.20
1/27/2000	85.26	33.14	61.13	125.69	6.48	94.84	18.23	1.26	93.09	70.91	5.67	92.00	161.47	22.44	86.10	84.33	9.92	88.24	34.94	4.18	88.04
2/24/2000	106.56	25.44	76.13	126.18	7.90	93.74	23.82	4.65	80.48	80.78	10.78	86.66	69.66	25.73	63.06	75.02	10.17	86.44	37.31	3.10	91.69
3/20/2000	439.47	27.69	93.70	138.15	9.69	92.99	21.41	1.78	91.69	94.02	8.62	90.83	219.34	16.19	92.62	71.94	4.11	94.29	34.30	2.44	92.89
4/18/2000	238.38	23.18	90.28	126.68	7.84	93.81	26.01	1.78	93.16	92.87	8.16	91.21	195.77	19.70	89.94	65.93	5.48	91.69	33.06	2.26	93.16
5/16/2000	375.40	16.50	95.60	92.10	7.80	91.53	24.90	1.60	93.57	117.60	5.30	95.49	195.10	19.70	89.90	67.60	3.10	95.41	29.90	1.10	96.32
6/14/2000	349.00	18.30	94.76	158.90	6.40	95.97	27.30	1.30	95.24	103.10	8.20	92.05	236.50	15.80	93.32	63.60	1.60	97.48	27.30	0.90	96.70
7/24/2000	319.10	25.70	91.95	157.30	7.30	95.36	28.10	1.80	93.59	106.10	9.60	90.95	234.00	19.60	91.62	69.30	1.60	97.69	30.00	0.80	97.33
8/15/2000	282.00	27.80	90.14	175.60	8.80	94.99	28.80	1.90	93.40	143.80	10.90	92.42	196.10	18.40	90.62	59.80	1.80	96.99	27.10	0.80	97.05
9/19/2000	272.60	20.70	92.41	203.70	8.90	95.63	28.20	1.70	93.97	101.60	6.80	93.31	NS	NS		56.50	2.50	95.58	49.10	1.20	97.56
10/24/2000	41.10	15.00	63.50	156.90	10.40	93.37	27.70	0.00	100.00	101.10	6.80	93.27	431.10	30.60	92.90	65.20	2.20	96.63	58.80	0.00	100.00
11/13/2000	185.20	15.10	91.85	153.70	11.20	92.71	33.30	0.00	100.00	85.50	10.50	87.72	274.80	23.70	91.38	70.50	0.00	100.00	73.90	0.00	100.00
12/19/2000	259.50	14.60	94.37	206.60	8.50	95.89	NS	NS		NS	NS		299.40	24.40	91.85	52.50	2.40	95.43	39.10	0.00	100.00
1/24/2001	200.00	12.50	93.75	242.90	12.60	94.81	45.60	1.70	96.27	124.80	4.00	96.79	326.60	22.20	93.20	96.40	4.30	95.54	44.40	3.30	92.57
2/26/2001	149.20	10.10	93.23	232.10	12.00	94.83	54.60	3.30	93.96	129.80	7.10	94.53	299.20	23.00	92.31	91.20	4.50	95.07	44.20	2.80	93.67
3/20/2001	157.10	8.10	94.84	230.80	12.30	94.67	53.00	3.40	93.58	120.80	4.00	96.69	NS	NS		102.90	4.40	95.72	41.00	3.20	92.20
4/19/2001	124.90	5.30	95.76	230.50	12.00	94.79	59.80	5.20	91.30	154.70	7.40	95.22	306.40	23.20	92.43	122.20	4.80	96.07	46.40	3.30	92.89
5/29/2001	72.81	5.99	91.77	173.20	13.31	92.32	64.49	5.55	91.39	162.34	9.29	94.28	291.82	21.19	92.74	105.34	5.20	95.06	43.86	3.53	91.95
6/26/2001	73.25	6.82	90.69	232.85	17.21	92.61	58.15	5.70	90.20	145.44	5.40	96.29	228.30	18.99	91.68	111.77	6.74	93.97	48.51	4.87	89.96
7/31/2001	73.25	6.82	90.69	232.85	17.21	92.61	58.15	5.70	90.20	145.44	5.40	96.29	228.30	18.99	91.68	111.77	6.74	93.97	48.51	4.87	89.96
8/31/2001	73.25	6.82	90.69	232.85	17.21	92.61	58.15	5.70	90.20	145.44	5.40	96.29	228.30	18.99	91.68	111.77	6.74	93.97	48.51	4.87	89.96
9/30/2001	73.25	6.82	90.69	232.85	17.21	92.61	58.15	5.70	90.20	145.44	5.40	96.29	228.30	18.99	91.68	111.77	6.74	93.97	48.51	4.87	89.96
10/2/2001	67.76	5.93	91.25	254.28	15.84	93.77	74.34	8.21	88.96	155.95	18.55	88.11	312.77	14.69	95.30	117.30	5.94	94.94	41.93	2.98	92.89
11/2/2001	58.61	6.19	89.44	238.11	19.32	91.89	96.97	10.16	89.52	205.18	13.59	93.38	420.87	19.73	95.31	160.04	7.14	95.54	73.21	3.40	95.36
12/19/2001	56.33	3.19	94.34	172.19	17.36	89.92	63.98	4.22	93.40	151.04	14.66	90.29	303.89	15.26	94.98	141.04	5.15	96.35	82.96	4.31	94.80
1/14/2002	42.71	3.07	92.81	181.37	14.56	91.97	70.28	4.47	93.64	145.98	19.39	86.72	321.73	20.69	93.57	132.80	5.46	95.89	62.07	3.32	94.65
2/25/2002	25.64	2.62	89.78	208.09	15.21	92.69	66.69	5.34	91.99	134.41	17.81	86.75	278.49	14.41	94.83	152.11	6.51	95.72	63.16	4.22	93.32
3/25/2002	12.32	1.59	87.09	191.99	15.17	92.10	60.15	4.64	92.29	117.92	15.04	87.25	243.94	8.88	96.36	136.04	6.43	95.27	55.36	4.49	91.89
4/30/2002	0.00	0.00	0.00	224.95	16.80	92.53	82.43	6.30	92.36	111.75	18.13	83.78	281.15	13.96	95.03	138.72	6.88	95.04	57.88	4.15	92.83
5/29/2002	0.00	0.00	0.00	174.95	17.26	90.13	72.81	7.38	89.86	111.48	15.52	86.08	247.56	13.77	94.44	145.59	7.99	94.51	60.89	6.46	89.39
6/26/2002	9.31	1.17	87.43	207.51	18.40	91.13	64.07	5.21	91.87	95.49	13.02	86.37	216.80	9.69	95.53	131.10	6.07	95.37	55.57	4.64	91.65
7/25/2002	21.66	2.38	89.01	210.54	18.25	91.33	70.55	6.64	90.59	94.05	7.19	92.36	226.54	6.87	96.97	148.11	5.95	95.98	48.51	4.41	90.91
8/27/2002	27.80	2.52	90.94	218.79	19.17	91.24	64.52	7.63	88.17	95.05	11.87	87.51	212.32	7.72	96.36	145.48	5.58	96.16	65.36	3.96	93.94
9/23/2002	22.42	1.66	92.60	239.94	20.13	91.61	73.34	6.22	91.52	100.22	9.40	90.62	207.98	15.28	92.65	158.22	4.10	97.41	65.36	3.96	93.94
10/29/2002	18.55	1.82	90.19	197.88	15.79	92.02	127.93	11.72	90.84	88.12	11.27	87.21	338.48	3.57	98.95	146.42	4.57	96.88	65.36	0.30	99.54
11/19/2002	14.40	0.00	100.00	154.00	13.20	91.43	66.30	5.30	92.01	100.90	5.30	94.75	168.10	11.40	93.22	146.42	4.57	96.88	61.60	0.00	100.00
12/19/2002	15.30	0.00	100.00	155.00	10.20	93.42	52.70	4.40	91.65	87.40	4.40	94.97	146.50	10.50	92.83	146.42	4.57	96.88	56.90	0.80	98.59
Average Efficiency			**87.34**			**93.92**			**92.46**			**92.76**			**90.00**			**95.06**			**92.74**
1st qtr. 2002 Average Efficiency			**89.89**			**92.25**			**92.64**			**86.91**			**94.92**			**95.63**			**93.29**
2nd qtr. 2002 Average Efficiency			**87.43**			**91.26**			**91.36**			**85.41**			**95.00**			**94.97**			**91.29**
3rd qtr. 2002 Average Efficiency			**90.85**			**91.39**			**90.09**			**90.16**			**95.33**			**96.52**			**92.93**
4th qtr. 2002 Average Efficiency			**96.73**			**92.29**			**91.50**			**92.31**			**95.00**			**96.88**			**99.38**

1st qtr. 2002 AVERAGE SYSTEM EFFICIENCY	**92.22**
2nd qtr. 2002 AVERAGE SYSTEM EFFICIENCY	**90.96**
3rd qtr. 2002 AVERAGE SYSTEM EFFICIENCY	**92.47**
4th qtr. 2002 AVERAGE SYSTEM EFFICIENCY	**94.87**
2002 AVERAGE SYSTEM EFFICIENCY	**92.63**

NOTES:

Efficiency Percent = 100 - (effluent concentration/influent concentration) * 100
NS = Not Sampled
** Laboratory lost sample.
^ Flow rate reduced to 40 gallons per minute for UVB-1 and UVB-2
# Flow rate reduced to 45 gallons per minute for UVB-1 and UVB-2
~ Flow rate reduced to 50 gallons per minute for UVB-1 and UVB-2
% Flow rate reduced to 30 gallons per minute for UVB-1 and UVB-2
$ Flow rate returned to 60 gallons per minute for UVB-1 and UVB-2

TABLE F-26
Cumulative Mass Removal
OU III Industrial Park System
2002 BNL Groundwater Status Report

Date	UVB1		UVB2		UVB3		UVB4		UVB5		UVB6		UVB7		Total	Cumulative
	Total Pumped (Gallons)	Mass Recovered (lbs)	Total Pumped (Gallons)	Mass Recovered (lbs)	Total Pumped (Gallons)	Mass Recovered (lbs)	Total Pumped (Gallons)	Mass Recovered (lbs)	Total Pumped (Gallons)	Mass Recovered (lbs)	Total Pumped (Gallons)	Mass Recovered (lbs)	Total Pumped (Gallons)	Mass Recovered (lbs)	Mass Recovered (lbs)	Mass Recovered (lbs)
09/30/99	96,000	1.38	72,000	0.04	107,000	0.04	103,000	0.13	116,000	0.25	14,400	0.01	NO	0.00	1.85	1.85
10/07/99	384,000	3.04	460,800	0.22	506,000	0.07	488,000	0.33	360,000	0.58	100,800	0.06	NO	0.00	4.30	6.15
10/12/99	824,000	5.27	892,800	0.34	944,000	0.07	926,000	0.31	798,000	1.21	172,800	0.06	NO	0.00	7.25	13.40
10/19/99	1,388,000	3.64	1,497,600	4.25	1,508,000	0.08	1,497,000	0.38	1,363,000	0.95	273,600	0.08	NO	0.00	9.38	22.78
10/26/99	2,071,000	3.92	2,102,400	2.78	2,192,000	0.10	2,186,000	0.42	2,047,000	0.95	388,800	0.09	0	0.00	8.25	31.04
11/02/99	2,562,000	2.41	2,622,400	1.97	2,712,000	0.06	2,710,000	0.30	2,569,000	0.70	540,800	0.12	529,000	0.17	5.73	36.77
11/09/99	2,998,000	2.00	3,019,400	1.37	3,293,000	0.07	3,291,000	0.32	3,148,000	0.73	540,800	NO	1,125,000	0.15	4.65	41.41
11/16/99	3,327,000	1.56	3,358,400	1.05	3,732,000	0.08	3,730,000	0.27	3,587,000	0.58	540,800	NO	1,564,000	0.12	3.67	45.08
11/23/99	3,682,000	1.33	3,758,400	0.80	4,237,000	0.07	4,235,000	0.25	4,092,000	0.54	540,800	NO	2,069,000	0.11	3.10	48.18
12/07/99	4,620,000	3.02	4,697,400	2.01	5,359,000	0.14	5,355,000	0.54	5,135,000	1.19	540,800	0.00	3,109,000	0.27	7.17	55.35
12/14/99	5,237,000	1.92	5,312,400	1.06	5,975,000	0.10	5,972,000	0.31	5,751,000	0.71	1,167,800	0.44	3,725,000	0.15	4.68	60.04
12/21/99	5,579,000	1.24	5,654,400	0.54	6,317,000	0.05	6,313,000	0.17	6,093,000	0.40	1,380,800	NO	3,984,000	0.18	2.57	62.61
01/27/00	7,090,000	0.66	7,164,400	1.51	8,102,000	0.25	8,098,000	0.98	7,878,000	2.08	3,167,800	1.12	5,769,000	0.46	7.07	69.68
02/24/00	9,185,000	1.43	9,491,400	2.31	10,229,000	0.34	10,305,000	1.30	10,092,000	0.82	5,466,800	1.25	8,066,000	0.66	8.11	77.79
03/20/00	10,551,000	4.72	10,935,400	1.56	11,756,000	0.25	11,896,000	1.14	11,664,000	2.68	7,131,800	0.95	9,730,000	0.45	11.75	89.54
04/18/00	12,832,000	4.12	12,980,400	2.04	14,431,000	0.54	14,632,000	1.95	14,292,000	3.89	9,934,800	1.42	12,274,000	0.66	14.62	104.17
05/16/00	15,010,000	6.57	14,963,400	1.40	16,867,000	0.48	17,125,000	2.35	16,887,000	3.82	12,548,800	1.42	14,482,000	0.53	16.57	120.74
06/14/00	17,569,000	7.11	17,470,400	3.21	19,375,000	0.55	19,778,000	2.11	19,435,000	4.72	15,129,800	1.34	16,914,000	0.54	19.59	140.33
07/24/00	20,233,000	6.57	20,148,400	3.37	22,009,000	0.58	22,449,000	2.17	22,106,000	4.81	17,830,800	1.54	19,622,000	0.66	19.70	160.03
08/15/00	22,904,000	5.70	22,871,400	3.82	24,628,000	0.59	25,135,000	3.00	24,777,000	3.99	20,523,800	1.31	22,323,000	0.60	19.00	179.03
09/19/00	25,502,000	5.50	25,469,400	4.25	27,195,000	0.57	27,739,000	2.07	25,887,000	NO	23,109,800	1.17	24,909,000	1.04	14.61	193.64
10/24/00	28,000,000	0.55	28,232,400	3.40	29,614,000	0.56	30,231,000	1.97	28,306,000	8.14	25,068,800	1.04	27,407,000	1.23	16.89	210.53
11/13/00	30,323,000	3.32	30,788,400	3.06	32,156,000	0.70	32,787,000	1.61	30,864,000	5.40	27,727,800	1.57	29,962,000	1.59	17.25	227.78
12/19/00	31,653,000	2.74	32,323,400	2.55	33,312,000		34,462,000		33,117,000	5.20	30,318,800	1.09	32,408,000	0.80	12.39	240.17
01/24/01	34,392,000	4.31	34,540,400	4.29	35,904,000	0.96	37,239,000	2.82	36,254,000	8.02	33,095,800	2.15	34,399,000	0.69	23.23	263.40
02/26/01	36,439,000	2.39	36,406,400	3.45	38,202,000	0.99	39,488,000	2.32	38,266,000	4.67	35,497,800	1.75	36,809,000	0.84	16.41	279.81
03/20/01	38,622,000	2.73	39,046,400	4.85	40,765,000	1.07	41,918,000	2.38	40,079,000		38,067,800	2.13	39,493,000	0.85	14.01	293.82
4/19/2001	41,226,000	2.62	42,011,400	5.44	43,196,000	1.11	44,513,000	3.21	42,641,000	6.09	40,643,800	2.54	42,102,000	0.94	21.96	315.78
5/29/2001	43,912,000	1.51	44,695,400	3.60	45,716,000	1.25	47,173,000	3.42	45,281,000	6.00	43,339,800	2.27	44,767,000	0.90	18.95	334.73
6/26/2001	46,251,000	1.31	47,036,400	4.24	48,031,000	1.02	49,605,000	2.86	47,718,000	4.28	45,752,800	2.13	47,292,000	0.93	16.77	351.50
7/30/2001	48,071,160	1.02	48,863,760	3.31	49,714,360	0.74	51,420,840	2.14	49,548,240	3.22	47,572,960	1.61	49,120,800	0.67	12.70	364.19
8/30/2001	48,099,960	0.02	48,892,560	0.05	49,741,720	0.01	51,449,640	0.03	49,577,040	0.05	47,602,240	0.03	49,150,080	0.01	0.20	364.40
9/30/2001	50,684,840	1.44	51,487,440	4.70	52,149,400	1.06	54,020,040	3.02	52,146,000	4.52	50,189,920	2.28	51,753,600	0.95	17.98	382.38
10/2/2001	53,365,840	1.39	49,700,400	(3.58)	50,551,000	1.40	52,278,000	3.09	50,388,000	6.69	48,435,800	2.51	49,993,000	0.88	12.38	394.75
11/5/2001	55,961,840	1.14	52,295,280	4.77	52,958,680	3.59	54,848,400	4.14	52,956,960	8.66	51,023,480	6.77	52,596,520	3.11	32.18	426.93
12/31/2001	58,651,760	1.20	54,985,200	3.50	55,444,120	2.88	57,516,720	3.06	55,638,240	6.50	53,706,200	3.06	54,750,760	1.42	21.62	448.55
1/14/2002	59,865,406	0.4	60,565,756	1.7	60,678,898	0.62	63,134,429	1.28	61,271,289	3.05	59,353,552	1.29	60,387,491	0.58	8.92	457.77
2/25/2002	62,654,405	0.54	64,208,092	5.9	64,175,587	1.8	66,662,065	3.46	64,807,214	7.84	62,906,963	4.35	63,880,944	1.73	25.62	483.39
3/25/2002	62,884,256	0.02	66,645,482	3.62	66,415,991	1.04	69,062,604	2.07	67,226,261	4.78	65,327,396	2.64	66,318,661	1.04	15.21	498.6
4/30/2002	62,901,540	0	69,657,962	5.27	69,024,025	1.67	72,142,822	2.42	70,316,661	6.94	68,420,796	3.43	69,418,801	1.4	21.12	519.72
5/29/2002	62,993,217	0	72,116,414	3.26	71,204,622	1.2	74,625,599	2	72,805,035	4.89	70,911,983	2.88	71,914,657	1.14	15.36	535.09
6/26/2002	63,910,406	0.06	74,359,029	3.56	73,228,724	1	76,869,025	1.55	75,054,047	3.91	73,150,107	2.35	74,168,527	0.96	13.41	548.49
7/25/2002	65,669,363	0.28	76,364,919	3.24	74,981,363	0.94	78,088,975	0.89	76,894,922	3.4	75,051,489	2.27	76,091,370	0.71	11.74	560.23
8/27/2002	67,877,330	0.47	78,599,694	3.75	76,662,779	0.8	79,928,728	1.29	79,102,103	3.79	77,278,398	2.62	77,350,785	0.65	13.37	573.59
9/23/2002	69,723,137	0.32	80,475,967	3.46	78,301,152	0.92	81,794,425	1.42	80,688,303	2.57	79,152,115	2.43	77,622,465	0.14	11.27	584.86
10/29/2002	72,651,897	0.41	83,353,257	4.4	80,577,202	2.22	84,672,035	1.86	83,331,153	7.43	82,038,565	3.44	80,043,185	1.32	21.09	605.95
11/19/2002	74,421,167	0.21	85,111,587	2.08	82,044,542	0.75	86,423,555	1.41	85,074,823	2.3	83,794,345	2.09	81,801,115	0.91	9.75	615.7
12/19/2002	76,920,897	0.32	87,631,297	3.06	84,210,742	0.88	88,932,545	1.75	87,586,953	2.87	85,731,925	2.31	84,320,385	1.19	12.38	628.08
12/31/2002	77,888,534	0.12	88,606,669	1.18	85,049,271	0.34	89,903,767	0.68	88,559,390	1.11	86,481,956	0.89	85,295,586	0.46	3.90	631.98
Total Recovered VOCs		103.94		132.02		36.63		78.94		167.91		78.29		34.81		

Total Recovered VOCs since start-up **631.98** **lbs.**

NOTES:

Mass recovered = total gallons pumped * influent concentration (ug/L) * (percent efficiency/100) * 8.4 X 10-9 (conversion factor)

NO = Not operational

* = Unable to calculate mass due to missing influent and effluent well data

No Samples were taken in April 2001 and the pounds removed were estimated using the 2nd quarter's average values for influent concentrations and system efficiency

TABLE F-27
AIR FLOW RATES
OU III INDUSTRIAL PARK SYSTEM
2002 BNL Groundwater Status Report

	1/2/2002 (cfm)	1/16/2002 (cfm)	2/1/2002 (cfm)	2/15/2002 (cfm)	3/1/2002 (cfm)	3/15/2002 (cfm)	4/1/2002 (cfm)	4/15/2002 (cfm)	5/1/2002 (cfm)	5/15/2002 (cfm)	6/3/2002 (cfm)	6/17/2002 (cfm)	7/1/2002 (cfm)
UVB-1	709	704	709	698	791	774	731	747	829	725	785	682	584
UVB-2	605	611	594	594	600	578	545	556	545	529	513	502	518
UVB-3	633	605	605	616	594	616	578	600	611	611	605	616	638
UVB-4	295	267	295	284	256	295	262	278	387	355	447	355	371
UVB-5	507	502	491	458	464	447	431	425	415	415	415	398	420
UVB-6	676	676	665	671	665	649	627	627	605	594	584	551	556
UVB-7	671	654	649	660	665	654	638	654	660	660	644	644	622

		(cfm)	(cfm)	(cfm)	(cfm)	(cfm)	(cfm)	(cfm)	(cfm)	(cfm)	(cfm)	Average Flow (cfm)
UVB-1	1170	1160	1150	1170	1130	1120	1090	1110	1110	1120	1140	**615**
UVB-2	960	910	940	960	960	970	950	960	980	980	970	**522**
UVB-3	1170	1130	1160	1120	1170	1190	1170	1200	1200	1170	1190	**638**
UVB-4	1150	910	910	870	860	970	880	870	880	860	880	**487**
UVB-5	760	1140	770	800	840	470	920	900	890	870	880	**455**
UVB-6	1010	970	990	1040	1000	1060	1000	1020	1040	1050	1040	**556**
UVB-7	1150	740	1130	1280	1250	1180	1130	1130	1130	1130	1140	**615**

1st Qtr. 2002 Average Flow (scfm)	**575**
2nd Qtr. 2002 Average Flow (scfm)	**557**
3rd Qtr. 2002 Average Flow (scfm)	**553**
4tht Qtr. 2002 Average Flow (scfm)	**557**
2002 Average Flow (scfm)	**560**