

APPENDIX F
REMEDICATION SYSTEM
DATA TABLES

OU I South Boundary System

Table F-1
Extraction Wells Tritium and VOC Data
OU I South Boundary System

2016 BNL Groundwater Status Report

Site ID : 115-27 (EW-1)

Chemical Name	Sample Date	Value	Detlim	STD Level	Units	Qual
1,1-Dichloroethane	1/22/2016	3.3	0.5	5	UG/L	
1,1-Dichloroethylene	1/22/2016	0.17	0.5	5	UG/L	J
524.2 TVOC	1/22/2016	7.09	0	-1	UG/L	
Benzene	1/22/2016	0.19	0.5	1	UG/L	J
Chloroethane	1/22/2016	3	0.5	5	UG/L	
cis-1,2-Dichloroethylene	1/22/2016	0.17	0.5	5	UG/L	J
Methyl tert-butyl ether	1/22/2016	0.26	0.5	10	UG/L	J
1,1-Dichloroethane	4/13/2016	2.7	0.5	5	UG/L	
1,1-Dichloroethylene	4/13/2016	0.16	0.5	5	UG/L	J
524.2 TVOC	4/13/2016	7.13	0	-1	UG/L	
Benzene	4/13/2016	0.19	0.5	1	UG/L	J
Chloroethane	4/13/2016	3.3	0.5	5	UG/L	
cis-1,2-Dichloroethylene	4/13/2016	0.16	0.5	5	UG/L	J
Methyl tert-butyl ether	4/13/2016	0.21	0.5	10	UG/L	J
Strontium-90	4/13/2016	0.648	0.235	8	PCI/L	
Tetrachloroethylene	4/13/2016	0.2	0.5	5	UG/L	J
Trichloroethylene	4/13/2016	0.21	0.5	5	UG/L	J
1,1-Dichloroethane	7/13/2016	3.2	0.5	5	UG/L	
1,1-Dichloroethylene	7/13/2016	0.12	0.5	5	UG/L	J
524.2 TVOC	7/13/2016	7.21	0	-1	UG/L	
Benzene	7/13/2016	0.22	0.5	1	UG/L	J
Chloroethane	7/13/2016	3.1	0.5	5	UG/L	
cis-1,2-Dichloroethylene	7/13/2016	0.19	0.5	5	UG/L	J
Methyl tert-butyl ether	7/13/2016	0.2	0.5	10	UG/L	J
Tetrachloroethylene	7/13/2016	0.18	0.5	5	UG/L	J
1,1-Dichloroethane	10/25/2016	3.7	0.5	5	UG/L	
1,1-Dichloroethylene	10/25/2016	0.13	0.5	5	UG/L	J
524.2 TVOC	10/25/2016	7.62	0	-1	UG/L	
Benzene	10/25/2016	0.21	0.5	1	UG/L	J
Chloroethane	10/25/2016	3.2	0.5	5	UG/L	
cis-1,2-Dichloroethylene	10/25/2016	0.22	0.5	5	UG/L	J
Methyl tert-butyl ether	10/25/2016	0.16	0.5	10	UG/L	J

Site ID : 115-43 (EW-2)

Chemical Name	Sample Date	Value	Detlim	STD Level	Units	Qual
1,1-Dichloroethane	1/22/2016	0.11	0.5	5	UG/L	J
524.2 TVOC	1/22/2016	0.88	0	-1	UG/L	
Chloroform	1/22/2016	0.77	0.5	7	UG/L	
1,1,1-Trichloroethane	4/13/2016	0.096	0.5	5	UG/L	J
1,1-Dichloroethane	4/13/2016	0.13	0.5	5	UG/L	J
524.2 TVOC	4/13/2016	1.076	0	-1	UG/L	
Chloroform	4/13/2016	0.85	0.5	7	UG/L	
1,1-Dichloroethane	7/13/2016	0.089	0.5	5	UG/L	J
524.2 TVOC	7/13/2016	1.019	0	-1	UG/L	
Chloroform	7/13/2016	0.93	0.5	7	UG/L	
1,1-Dichloroethane	10/25/2016	0.12	0.5	5	UG/L	J
524.2 TVOC	10/25/2016	1.09	0	-1	UG/L	
Chloroform	10/25/2016	0.97	0.5	7	UG/L	

Table F-2
Air Stripper Influent Tritium and VOC Data
OU I South Boundary System

2016 BNL Groundwater Status Report

OU I South Boundary Treatment System was in standby mode during 2016.

Table F-3
Air Stripper Effluent Tritium and VOC Data
OU I South Boundary System

2016 BNL Groundwater Status Report

OU I South Boundary Treatment System was in standby mode during 2016.

Table F-4
Cumulative Mass Removal
OU I South Boundary System

2016 BNL Groundwater Status Report

Date Sampled	Cumulative VOC's (lbs)
6/3/2013	Final mass removal
	368.97

lbs Pounds

OU III Building 96 System

**Table F-5
Influent and Effluent VOC Data
OU III Building 96 System**

2016 BNL Groundwater Status Report

Site ID : 095-151 (RTW-1 Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1,1,1-Trichloroethane	1/8/2016	0.29	0.5	UG/L	0	J
524.2 TVOC	1/8/2016	29.66	0	UG/L	0	
Chloroform	1/8/2016	0.22	0.5	UG/L	0	J
Methyl chloride	1/8/2016	0.15	0.5	UG/L	0	J
Tetrachloroethylene	1/8/2016	25	0.5	UG/L	0	
Trichlorofluoromethane	1/8/2016	4	0.5	UG/L	0	
1,1,1-Trichloroethane	1/20/2016	0.36	0.5	UG/L	0	J
1,1-Dichloroethylene	1/20/2016	0.11	0.5	UG/L	0	J
524.2 TVOC	1/20/2016	32.96	0	UG/L	0	
Chloroform	1/20/2016	0.29	0.5	UG/L	0	J
Tetrachloroethylene	1/20/2016	29	0.5	UG/L	0	
Trichlorofluoromethane	1/20/2016	3.2	0.5	UG/L	0	
1,1,1-Trichloroethane	2/2/2016	0.37	0.5	UG/L	0	J
524.2 TVOC	2/2/2016	28.57	0	UG/L	0	
Tetrachloroethylene	2/2/2016	25	0.5	UG/L	0	
Trichlorofluoromethane	2/2/2016	3.2	0.5	UG/L	0	
1,1,1-Trichloroethane	2/17/2016	0.32	0.5	UG/L	0	J
524.2 TVOC	2/17/2016	29.797	0	UG/L	0	
Chloroform	2/17/2016	0.38	0.5	UG/L	0	J
cis-1,2-Dichloroethylene	2/17/2016	0.097	0.5	UG/L	0	J
Tetrachloroethylene	2/17/2016	26	0.5	UG/L	0	
Trichlorofluoromethane	2/17/2016	3	0.5	UG/L	0	
1,1,1-Trichloroethane	3/3/2016	0.34	0.5	UG/L	0	J
1,1-Dichloroethylene	3/3/2016	0.092	0.5	UG/L	0	J
524.2 TVOC	3/3/2016	28.902	0	UG/L	0	
Chloroform	3/3/2016	0.37	0.5	UG/L	0	J
Tetrachloroethylene	3/3/2016	24	0.5	UG/L	0	
Trichlorofluoromethane	3/3/2016	4.1	0.5	UG/L	0	
1,1,1-Trichloroethane	3/14/2016	0.35	0.5	UG/L	0	J
524.2 TVOC	3/14/2016	29.63	0	UG/L	0	
Chloroform	3/14/2016	0.38	0.5	UG/L	0	J
Tetrachloroethylene	3/14/2016	25	0.5	UG/L	0	
Trichlorofluoromethane	3/14/2016	3.9	0.5	UG/L	0	
1,1,1-Trichloroethane	4/12/2016	0.25	0.5	UG/L	0	J
524.2 TVOC	4/12/2016	23.46	0	UG/L	0	
Bromodichloromethane	4/12/2016	0.11	0.5	UG/L	0	J
Chloroform	4/12/2016	0.5	0.5	UG/L	0	
Tetrachloroethylene	4/12/2016	20	0.5	UG/L	0	
Trichlorofluoromethane	4/12/2016	2.6	0.5	UG/L	0	
1,1,1-Trichloroethane	4/25/2016	0.3	0.5	UG/L	0	J
524.2 TVOC	4/25/2016	26.07	0	UG/L	0	
Bromodichloromethane	4/25/2016	0.14	0.5	UG/L	0	J
Chloroform	4/25/2016	0.73	0.5	UG/L	0	
Tetrachloroethylene	4/25/2016	23	0.5	UG/L	0	
Trichlorofluoromethane	4/25/2016	1.9	0.5	UG/L	0	
1,1,1-Trichloroethane	5/4/2016	0.27	0.5	UG/L	0	J
524.2 TVOC	5/4/2016	26.27	0	UG/L	0	
Bromodichloromethane	5/4/2016	0.24	0.5	UG/L	0	J
Chloroform	5/4/2016	0.86	0.5	UG/L	0	
Tetrachloroethylene	5/4/2016	23	0.5	UG/L	0	
Trichlorofluoromethane	5/4/2016	1.9	0.5	UG/L	0	
1,1,1-Trichloroethane	5/16/2016	0.33	0.5	UG/L	0	J
524.2 TVOC	5/16/2016	26.26	0	UG/L	0	
Bromodichloromethane	5/16/2016	0.17	0.5	UG/L	0	J
Chloroform	5/16/2016	0.76	0.5	UG/L	0	
Dibromochloromethane	5/16/2016	0.2	0.5	UG/L	0	J
Tetrachloroethylene	5/16/2016	23	0.5	UG/L	0	
Trichlorofluoromethane	5/16/2016	1.8	0.5	UG/L	0	
1,1,1-Trichloroethane	6/2/2016	0.34	0.5	UG/L	0	J
524.2 TVOC	6/2/2016	24.93	0	UG/L	0	
Bromodichloromethane	6/2/2016	0.16	0.5	UG/L	0	J
Chloroform	6/2/2016	0.78	0.5	UG/L	0	
Dibromochloromethane	6/2/2016	0.15	0.5	UG/L	0	J
Tetrachloroethylene	6/2/2016	22	0.5	UG/L	0	

**Table F-5
Influent and Effluent VOC Data
OU III Building 96 System**

2016 BNL Groundwater Status Report

Site ID : 095-151 (RTW-1 Influent) Continued

Trichlorofluoromethane	6/2/2016	1.5	0.5	UG/L	0	
1,1,1-Trichloroethane	6/13/2016	0.3	0.5	UG/L	0	J
524.2 TVOC	6/13/2016	25.1	0	UG/L	0	
Bromodichloromethane	6/13/2016	0.15	0.5	UG/L	0	J
Chloroform	6/13/2016	0.65	0.5	UG/L	0	
Tetrachloroethylene	6/13/2016	22	0.5	UG/L	0	
Trichlorofluoromethane	6/13/2016	2	0.5	UG/L	0	
524.2 TVOC	7/11/2016	3.61	0	UG/L	0	
Tetrachloroethylene	7/11/2016	3.3	0.5	UG/L	0	
Trichlorofluoromethane	7/11/2016	0.31	0.5	UG/L	0	J
624 TVOC	7/25/2016	4.18	0	UG/L	0	
Tetrachloroethylene	7/25/2016	3.83	1	UG/L	0	
Trichlorofluoromethane	7/25/2016	0.35	1	UG/L	0	J
524.2 TVOC	8/3/2016	7.1	0	UG/L	0	
Chloroform	8/3/2016	0.17	0.5	UG/L	0	J
Tetrachloroethylene	8/3/2016	6.3	0.5	UG/L	0	
Trichlorofluoromethane	8/3/2016	0.63	0.5	UG/L	0	
524.2 TVOC	8/15/2016	7.32	0	UG/L	0	
Chloroform	8/15/2016	0.18	0.5	UG/L	0	J
Tetrachloroethylene	8/15/2016	6.6	0.5	UG/L	0	
Trichlorofluoromethane	8/15/2016	0.54	0.5	UG/L	0	
524.2 TVOC	9/7/2016	7.69	0	UG/L	0	
Chloroform	9/7/2016	0.39	0.5	UG/L	0	J
Tetrachloroethylene	9/7/2016	5.6	0.5	UG/L	0	
Trichlorofluoromethane	9/7/2016	1.7	0.5	UG/L	0	
524.2 TVOC	9/12/2016	5.69	0	UG/L	0	
Chloroform	9/12/2016	0.14	0.5	UG/L	0	J
Tetrachloroethylene	9/12/2016	5.1	0.5	UG/L	0	
Trichlorofluoromethane	9/12/2016	0.45	0.5	UG/L	0	J
524.2 TVOC	10/6/2016	6.26	0	UG/L	0	
Chloroform	10/6/2016	0.18	0.5	UG/L	0	J
Tetrachloroethylene	10/6/2016	5.7	0.5	UG/L	0	
Trichlorofluoromethane	10/6/2016	0.38	0.5	UG/L	0	J
524.2 TVOC	10/17/2016	5.47	0	UG/L	0	
Chloroform	10/17/2016	0.17	0.5	UG/L	0	J
Tetrachloroethylene	10/17/2016	5	0.5	UG/L	0	
Trichlorofluoromethane	10/17/2016	0.3	0.5	UG/L	0	J
524.2 TVOC	12/8/2016	18.38	0	UG/L	0	
Chloroform	12/8/2016	0.8	0.5	UG/L	0	
Tetrachloroethylene	12/8/2016	17	0.5	UG/L	0	
Trichlorofluoromethane	12/8/2016	0.58	0.5	UG/L	0	
524.2 TVOC	12/19/2016	19.21	0	UG/L	0	
Chloroform	12/19/2016	0.71	0.5	UG/L	0	
Tetrachloroethylene	12/19/2016	17	0.5	UG/L	0	
Trichlorofluoromethane	12/19/2016	1.5	0.5	UG/L	0	

Site ID : 095-152 (RTW-1 Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
524.2 TVOC	1/8/2016	0	0	UG/L	0	
Chromium	1/8/2016	6.4	10	UG/L	0	B
Chromium hexavalent ion	1/8/2016	4	10	UG/L	0	B
524.2 TVOC	1/20/2016	0	0	UG/L	0	
524.2 TVOC	2/2/2016	0	0	UG/L	0	
Chromium	2/2/2016	6.5	10	UG/L	0	B
Chromium hexavalent ion	2/2/2016	4	10	UG/L	0	B
524.2 TVOC	2/17/2016	0	0	UG/L	0	
524.2 TVOC	3/3/2016	0	0	UG/L	0	
Chromium	3/3/2016	5.3	10	UG/L	0	B
Chromium hexavalent ion	3/3/2016	8.9	10	UG/L	0	B
524.2 TVOC	3/14/2016	0	0	UG/L	0	
524.2 TVOC	4/12/2016	0.46	0	UG/L	0	
Chromium	4/12/2016	4.8	10	UG/L	0	B
Methyl chloride	4/12/2016	0.1	0.5	UG/L	0	J
Tetrachloroethylene	4/12/2016	0.36	0.5	UG/L	0	J
524.2 TVOC	4/25/2016	0	0	UG/L	0	

**Table F-5
Influent and Effluent VOC Data
OU III Building 96 System**

2016 BNL Groundwater Status Report

Site ID : 095-152 (RTW-1 Effluent) Continued

524.2 TVOC	5/4/2016	0	0	UG/L	0	
Chromium	5/4/2016	5.7	10	UG/L	0	B
524.2 TVOC	5/16/2016	0	0	UG/L	0	
524.2 TVOC	6/2/2016	0	0	UG/L	0	
Chromium	6/2/2016	4.3	10	UG/L	0	B
Chromium hexavalent ion	6/2/2016	3.1	10	UG/L	0	B
524.2 TVOC	6/13/2016	0	0	UG/L	0	
524.2 TVOC	7/11/2016	0	0	UG/L	0	
Chromium	7/11/2016	3.9	10	UG/L	0	B
624 TVOC	7/25/2016	0	0	UG/L	0	
524.2 TVOC	8/3/2016	0.12	0	UG/L	0	
Chromium	8/3/2016	4.6	10	UG/L	0	B
Methyl chloride	8/3/2016	0.12	0.5	UG/L	0	J
524.2 TVOC	8/15/2016	0	0	UG/L	0	
524.2 TVOC	9/7/2016	0	0	UG/L	0	
Chromium	9/7/2016	7.7	10	UG/L	0	B
Chromium hexavalent ion	9/7/2016	2.9	10	UG/L	0	B
524.2 TVOC	9/12/2016	0	0	UG/L	0	
524.2 TVOC	10/6/2016	0	0	UG/L	0	
524.2 TVOC	10/17/2016	0	0	UG/L	0	
Chromium	10/17/2016	6.7	10	UG/L	0	B
524.2 TVOC	12/8/2016	0	0	UG/L	0	
Chromium	12/8/2016	11	10	UG/L	0	
Chromium hexavalent ion	12/8/2016	7.5	10	UG/L	0	B
524.2 TVOC	12/19/2016	0	0	UG/L	0	

Site ID : 095-153 (RTW-2 Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
524.2 TVOC	1/8/2016	0	0	UG/L	0	
524.2 TVOC	2/2/2016	0	0	UG/L	0	
524.2 TVOC	3/3/2016	0	0	UG/L	0	
1,1,1-Trichloroethane	4/12/2016	0.2	0.5	UG/L	0	J
1,1-Dichloroethylene	4/12/2016	0.16	0.5	UG/L	0	J
524.2 TVOC	4/12/2016	5.56	0	UG/L	0	
Chloroform	4/12/2016	0.12	0.5	UG/L	0	J
Methyl chloride	4/12/2016	0.12	0.5	UG/L	0	J
Tetrachloroethylene	4/12/2016	4.8	0.5	UG/L	0	
Trichlorofluoromethane	4/12/2016	0.16	0.5	UG/L	0	J
1,1,1-Trichloroethane	5/4/2016	0.15	0.5	UG/L	0	J
1,1-Dichloroethylene	5/4/2016	0.09	0.5	UG/L	0	J
524.2 TVOC	5/4/2016	4.19	0	UG/L	0	
Chloroform	5/4/2016	0.27	0.5	UG/L	0	J
Tetrachloroethylene	5/4/2016	3.2	0.5	UG/L	0	
Trichlorofluoromethane	5/4/2016	0.48	0.5	UG/L	0	J
524.2 TVOC	6/2/2016	3.34	0	UG/L	0	
Chloroform	6/2/2016	0.34	0.5	UG/L	0	J
Tetrachloroethylene	6/2/2016	1.6	0.5	UG/L	0	
Trichlorofluoromethane	6/2/2016	1.4	0.5	UG/L	0	
524.2 TVOC	7/11/2016	2.76	0	UG/L	0	
Chloroform	7/11/2016	0.26	0.5	UG/L	0	J
Tetrachloroethylene	7/11/2016	1.5	0.5	UG/L	0	
Trichlorofluoromethane	7/11/2016	1	0.5	UG/L	0	
524.2 TVOC	8/3/2016	1.32	0	UG/L	0	
Chloroform	8/3/2016	0.19	0.5	UG/L	0	J
Tetrachloroethylene	8/3/2016	0.84	0.5	UG/L	0	
Trichlorofluoromethane	8/3/2016	0.29	0.5	UG/L	0	J
524.2 TVOC	9/7/2016	1.24	0	UG/L	0	
Chloroform	9/7/2016	0.23	0.5	UG/L	0	J
Tetrachloroethylene	9/7/2016	0.81	0.5	UG/L	0	
Trichlorofluoromethane	9/7/2016	0.2	0.5	UG/L	0	J
524.2 TVOC	10/17/2016	1.63	0	UG/L	0	
Chloroform	10/17/2016	0.23	0.5	UG/L	0	J
Tetrachloroethylene	10/17/2016	1.4	0.5	UG/L	0	
1,1,1-Trichloroethane	12/8/2016	0.26	0.5	UG/L	0	J
524.2 TVOC	12/8/2016	9.4	0	UG/L	0	

**Table F-5
Influent and Effluent VOC Data
OU III Building 96 System**

2016 BNL Groundwater Status Report

Site ID : 095-153 (RTW-2 Influent) Continued

Chloroform	12/8/2016	0.33	0.5	UG/L	0	J
Tetrachloroethylene	12/8/2016	8.6	0.5	UG/L	0	
Toluene	12/8/2016	0.21	0.5	UG/L	0	J

Site ID : 095-154 (RTW-2 Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
524.2 TVOC	1/8/2016	0	0	UG/L	0	

Site ID : 095-155 (RTW-3 Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
524.2 TVOC	1/8/2016	0.48	0	UG/L	0	
Tetrachloroethylene	1/8/2016	0.48	0.5	UG/L	0	J
524.2 TVOC	2/2/2016	0	0	UG/L	0	
1,1,1-Trichloroethane	3/3/2016	0.075	0.5	UG/L	0	J
524.2 TVOC	3/3/2016	6.185	0	UG/L	0	
Chloroform	3/3/2016	0.21	0.5	UG/L	0	J
Tetrachloroethylene	3/3/2016	2.3	0.5	UG/L	0	
Trichlorofluoromethane	3/3/2016	3.6	0.5	UG/L	0	
524.2 TVOC	4/12/2016	5.12	0	UG/L	0	
Chloroform	4/12/2016	0.32	0.5	UG/L	0	J
Tetrachloroethylene	4/12/2016	2.2	0.5	UG/L	0	
Trichlorofluoromethane	4/12/2016	2.6	0.5	UG/L	0	
524.2 TVOC	5/4/2016	0.22	0	UG/L	0	
Tetrachloroethylene	5/4/2016	0.22	0.5	UG/L	0	J
524.2 TVOC	6/2/2016	1.53	0	UG/L	0	
Chloroform	6/2/2016	0.24	0.5	UG/L	0	J
Tetrachloroethylene	6/2/2016	0.6	0.5	UG/L	0	
Trichlorofluoromethane	6/2/2016	0.69	0.5	UG/L	0	
524.2 TVOC	7/11/2016	0.48	0	UG/L	0	
Chloroform	7/11/2016	0.1	0.5	UG/L	0	J
Tetrachloroethylene	7/11/2016	0.38	0.5	UG/L	0	J
524.2 TVOC	8/3/2016	0.45	0	UG/L	0	
Chloroform	8/3/2016	0.15	0.5	UG/L	0	J
Tetrachloroethylene	8/3/2016	0.3	0.5	UG/L	0	J
524.2 TVOC	9/7/2016	0.63	0	UG/L	0	
Chloroform	9/7/2016	0.33	0.5	UG/L	0	J
Tetrachloroethylene	9/7/2016	0.3	0.5	UG/L	0	J
524.2 TVOC	10/17/2016	2.42	0	UG/L	0	
Bromodichloromethane	10/17/2016	0.43	0.5	UG/L	0	J
Chloroform	10/17/2016	1.3	0.5	UG/L	0	
Dibromochloromethane	10/17/2016	0.37	0.5	UG/L	0	J
Tetrachloroethylene	10/17/2016	0.32	0.5	UG/L	0	J
524.2 TVOC	12/8/2016	3.96	0	UG/L	0	
Bromodichloromethane	12/8/2016	0.82	0.5	UG/L	0	
Chloroform	12/8/2016	2.2	0.5	UG/L	0	
Dibromochloromethane	12/8/2016	0.7	0.5	UG/L	0	
Tetrachloroethylene	12/8/2016	0.24	0.5	UG/L	0	J

Site ID : 095-156 (RTW-3 Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
524.2 TVOC	1/8/2016	0	0	UG/L	0	

Site ID : 095-157 (RTW-4 Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
524.2 TVOC	1/8/2016	0	0	UG/L	0	
524.2 TVOC	2/2/2016	0.12	0	UG/L	0	
Methyl chloride	2/2/2016	0.12	0.5	UG/L	0	J
524.2 TVOC	3/3/2016	0.26	0	UG/L	0	
Tetrachloroethylene	3/3/2016	0.26	0.5	UG/L	0	J
524.2 TVOC	4/12/2016	0.2	0	UG/L	0	
Tetrachloroethylene	4/12/2016	0.2	0.5	UG/L	0	J

**Table F-5
Influent and Effluent VOC Data
OU III Building 96 System**

2016 BNL Groundwater Status Report

Site ID : 095-156 (RTW-3 Effluent) Continued

524.2 TVOC	5/4/2016	0	0	UG/L	0	
524.2 TVOC	6/2/2016	0	0	UG/L	0	
524.2 TVOC	7/11/2016	0.98	0	UG/L	0	
Chloroform	7/11/2016	0.74	0.5	UG/L	0	
Tetrachloroethylene	7/11/2016	0.24	0.5	UG/L	0	J
524.2 TVOC	8/3/2016	1.34	0	UG/L	0	
Bromodichloromethane	8/3/2016	0.2	0.5	UG/L	0	J
Chloroform	8/3/2016	0.76	0.5	UG/L	0	
Dibromochloromethane	8/3/2016	0.18	0.5	UG/L	0	J

Site ID : 095-157 (RTW-4 Influent) Continued

Tetrachloroethylene	8/3/2016	0.2	0.5	UG/L	0	J
524.2 TVOC	9/7/2016	0.6	0	UG/L	0	
Chloroform	9/7/2016	0.6	0.5	UG/L	0	
524.2 TVOC	10/17/2016	0.98	0	UG/L	0	
Bromodichloromethane	10/17/2016	0.15	0.5	UG/L	0	J
Chloroform	10/17/2016	0.83	0.5	UG/L	0	
524.2 TVOC	12/8/2016	0.43	0	UG/L	0	
Chloroform	12/8/2016	0.43	0.5	UG/L	0	J

Site ID : 095-158 (RTW-4 Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
524.2 TVOC	1/8/2016	0.16	0	UG/L	0	
Methyl chloride	1/8/2016	0.16	0.5	UG/L	0	J

J = Estimated Value below the method detection limit of 0.50 UG/L

B = Compound was found in both the sample and associated laboratory blank.

Table F-6
Source Control Air Sampling Results (Hits Only)
OU III Building 96 System

2016 BNL Groundwater Status Report

Location: 095-246 (GAC Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1,1,1-Trichloroethane	2/2/2016	2.8	1.6	UG/M3	0	
Chloroform	2/2/2016	3	1.5	UG/M3	0	
Tetrachloroethylene	2/2/2016	190	2	UG/M3	0	
Trichlorofluoromethane	2/2/2016	25	1.7	UG/M3	0	
1,1,1-Trichloroethane	4/12/2016	3.1	1.1	UG/M3	0	
Chloroform	4/12/2016	5.2	0.98	UG/M3	0	
Methyl chloride	4/12/2016	1.2	1	UG/M3	0	
Tetrachloroethylene	4/12/2016	190	1.4	UG/M3	0	
Trichlorofluoromethane	4/12/2016	22	1.1	UG/M3	0	
1,1,1-Trichloroethane	7/11/2016	1.2	1.1	UG/M3	0	
Benzene	7/11/2016	2	0.64	UG/M3	0	
Chloroform	7/11/2016	1.4	0.98	UG/M3	0	
Tetrachloroethylene	7/11/2016	110	1.4	UG/M3	0	
Trichlorofluoromethane	7/11/2016	10	1.1	UG/M3	0	
Benzene	10/6/2016	2.4	0.64	UG/M3	0	
Chloroform	10/6/2016	1	0.98	UG/M3	0	
Methyl chloride	10/6/2016	1.1	1	UG/M3	0	
Tetrachloroethylene	10/6/2016	20	1.4	UG/M3	0	
Trichlorofluoromethane	10/6/2016	2.8	1.1	UG/M3	0	

Location: 095-247 (GAC Midpoint)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Tetrachloroethylene	2/2/2016	79	1.4	UG/M3	0	
Trichlorofluoromethane	2/2/2016	11	1.1	UG/M3	0	
1,1,1-Trichloroethane	4/12/2016	2.3	1.1	UG/M3	0	
Chloroform	4/12/2016	3.9	0.98	UG/M3	0	
Tetrachloroethylene	4/12/2016	250	1.4	UG/M3	0	
Trichlorofluoromethane	4/12/2016	25	1.1	UG/M3	0	
1,1,1-Trichloroethane	7/11/2016	5.7	2.2	UG/M3	0	
Benzene	7/11/2016	23	1.3	UG/M3	0	
Benzene, 1,2,4-trimethyl	7/11/2016	3.7	2	UG/M3	0	
Chloroform	7/11/2016	9.5	2	UG/M3	0	
Tetrachloroethylene	7/11/2016	190	2.7	UG/M3	0	
Toluene	7/11/2016	3.2	1.5	UG/M3	0	
Trichloroethylene	7/11/2016	2.7	2.1	UG/M3	0	
Trichlorofluoromethane	7/11/2016	18	2.2	UG/M3	0	
Benzene	10/6/2016	2.7	0.64	UG/M3	0	
Chloroform	10/6/2016	3.9	0.98	UG/M3	0	
Dichlorodifluoromethane	10/6/2016	2.7	2.5	UG/M3	0	
Methyl chloride	10/6/2016	1.9	1	UG/M3	0	
Tetrachloroethylene	10/6/2016	120	1.4	UG/M3	0	
Trichlorofluoromethane	10/6/2016	3.8	1.1	UG/M3	0	

Table F-6
Source Control Air Sampling Results (Hits Only)
OU III Building 96 System

2016 BNL Groundwater Status Report

Location: 095-253 (GAC Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Benzene	2/2/2016	14	0.64	UG/M3	0	
Benzene, 1,2,4-trimethyl	2/2/2016	2	0.98	UG/M3	0	
Tetrachloroethylene	2/2/2016	55	1.4	UG/M3	0	
Trichlorofluoromethane	2/2/2016	9.9	1.1	UG/M3	0	
1,1,1-Trichloroethane	4/12/2016	1.3	1.1	UG/M3	0	
Benzene	4/12/2016	5.6	0.64	UG/M3	0	
Chloroform	4/12/2016	1.1	0.98	UG/M3	0	
Dichlorodifluoromethane	4/12/2016	2.5	2.5	UG/M3	0	
Tetrachloroethylene	4/12/2016	83	1.4	UG/M3	0	
Trichlorofluoromethane	4/12/2016	31	1.1	UG/M3	0	
Methyl chloride	7/11/2016	1.3	1	UG/M3	0	
Toluene	7/11/2016	1.5	0.75	UG/M3	0	
Trichlorofluoromethane	7/11/2016	1.3	1.1	UG/M3	0	
Benzene	10/6/2016	12	0.64	UG/M3	0	
Benzene, 1,2,4-trimethyl	10/6/2016	1.1	0.98	UG/M3	0	
Dichlorodifluoromethane	10/6/2016	2.5	2.5	UG/M3	0	
Methyl chloride	10/6/2016	2.6	1	UG/M3	0	
Tetrachloroethylene	10/6/2016	13	1.4	UG/M3	0	
Trichlorofluoromethane	10/6/2016	4.8	1.1	UG/M3	0	

**Table F-7
Pumpage and Mass Removal
OU III Building 96 System**

2016 BNL Groundwater Status Report

Date	RTW-1		RTW-2		RTW-3		RTW-4	
	Total Pumped*	Mass Recovered	Total Pumped*	Mass Recovered	Total Pumped*	Mass Recovered	Total Pumped*	Mass Recovered
	(Gallons)	(lbs)	(Gallons)	(lbs)	(Gallons)	(lbs)	(Gallons)	(lbs)
1/18/2001	0	0.00	0	0.00	0	0.00	1,320	0.00
2/6/2001	39,960	0.05	22,680	0.00	25,920	0.21	25,080	0.00
2/7/2001	91,020	0.09	50,400	0.00	59,040	0.29	54,120	0.00
2/8/2001	142,080	0.26	80,640	0.00	92,160	0.22	85,800	0.01
2/9/2001	199,800	0.34	113,400	0.00	129,600	0.26	120,120	0.01
2/10/2001	304,140	0.66	172,620	0.01	197,280	0.37	180,840	0.02
2/12/2001	357,420	0.32	176,400	0.00	231,840	0.18	213,840	0.01
3/9/2001	768,120	2.65	322,560	0.01	498,240	1.33	458,040	0.10
3/28/2001	1,582,860	5.20	728,280	0.03	1,026,720	2.71	941,160	0.07
4/4/2001	1,762,680	0.61	830,340	0.08	1,143,360	0.20	1,048,080	0.09
5/7/2001	1,973,580	0.68	956,340	0.08	1,280,160	0.21	1,176,120	0.08
6/12/2001	3,053,580	1.86	1,676,340	0.26	2,000,160	1.07	1,896,120	0.54
7/16/2001	3,698,700	0.91	2,482,740	0.39	2,806,560	0.79	2,702,520	1.18
8/13/2001	4,343,820	0.98	3,208,500	0.53	3,612,960	0.57	3,468,600	0.88
9/5/2001	4,873,740	0.52	3,804,660	0.45	4,275,360	0.50	4,097,880	0.62
10/2/2001	5,397,345	0.67	4,405,393	0.51	4,945,772	0.36	4,749,934	0.38
11/1/2001	6,033,079	1.05	5,133,686	0.68	5,759,659	0.40	5,547,867	0.24
12/7/2001	6,281,676	0.39	5,605,726	0.37	6,283,103	0.20	6,067,911	0.09
1/2/2002	6,953,724	1.00	6,337,777	0.23	7,088,353	0.14	6,873,161	0.04
2/1/2002	8,138,324	1.36	7,097,468	0.17	7,852,723	0.00	7,630,802	0.03
3/1/2002	9,438,485	1.07	7,933,881	0.18	8,682,452	0.08	8,464,356	0.04
4/1/2002	10,738,646	0.96	8,770,294	0.08	9,512,181	0.06	9,297,910	0.03
5/1/2002	11,994,906	0.70	9,590,008	0.07	10,321,344	0.06	10,114,663	0.02
6/3/2002	13,418,012	0.85	10,544,112	0.07	11,253,969	0.06	11,081,608	0.03
7/1/2002	14,637,525	0.53	11,361,779	0.05	12,049,136	0.05	11,908,916	0.03
8/1/2002	15,838,038	0.58	12,145,419	0.04	12,835,173	0.05	12,713,560	0.03
9/3/2002	17,244,306	0.67	13,101,051	0.04	13,752,178	0.06	13,664,127	0.03
10/1/2002	18,421,996	0.43	13,907,894	0.03	14,519,888	0.03	14,430,693	0.02
11/1/2002	19,824,678	0.54	14,802,436	0.03	15,437,805	0.03	15,287,459	0.03
12/2/2002	21,150,755	0.45	15,685,023	0.02	16,209,167	0.02	16,137,219	0.02
1/3/2003	22,296,027	0.41	16,448,088	0.02	16,964,154	0.04	16,880,317	0.01
2/4/2003	23,723,049	0.52	17,399,860	0.03	17,920,702	0.07	17,825,363	0.01
3/3/2003	24,881,283	0.51	18,171,948	0.02	18,696,672	0.06	18,588,383	0.02
4/1/2003	25,982,363	0.37	18,895,607	0.01	19,427,732	0.03	19,278,997	0.02
5/1/2003	27,252,775	0.53	19,719,678	0.06	20,264,804	0.03	20,056,403	0.02
5/18/2003	27,905,079	NA	20,135,774	NA	20,681,555	NA	20,446,633	NA
7/1/2003	27,905,079	0.31	20,135,774	0.00	20,681,555	0.002	20,446,633	0.01
7/15/2003	28,284,425	NA	20,534,396	NA	21,080,269	NA	20,762,535	NA
9/15/2003	28,284,425	2.15	20,534,396	0.01	21,080,269	0.02	20,762,535	0.005
10/1/2003	28,853,917	1.60	20,890,592	0.01	21,498,423	0.02	21,091,161	0.004
11/3/2003	30,118,477	0.68	21,733,662	0.02	22,425,833	0.03	21,805,409	0.005
12/1/2003	31,256,257	1.57	21,949,542	0.00	23,260,139	0.02	22,430,473	0.004

**Table F-7
Pumpage and Mass Removal
OU III Building 96 System**

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Date	RTW-1		RTW-2		RTW-3		RTW-4	
	Total Pumped* (Gallons)	Mass Recovered (lbs)	Total Pumped* (Gallons)	Mass Recovered (lbs)	Total Pumped* (Gallons)	Mass Recovered (lbs)	Total Pumped* (Gallons)	Mass Recovered (lbs)
1/6/2004	32,446,597	1.53	21,949,542	0.00	24,132,989	0.03	23,086,025	0.003
2/2/2004	33,267,247	1.01	21,949,542	0.00	24,734,997	0.06	23,220,645	0.000
3/1/2004	34,384,807	1.30	21,949,542	0.00	25,553,353	0.09	23,220,645	0.000
4/2/2004	35,460,667	0.85	21,949,542	0.00	26,342,251	0.36	23,220,645	0.000
5/4/2004	36,837,217	0.91	22,161,956	0.02	27,351,809	0.36	23,436,889	0.007
6/2/2004	38,082,937	0.72	23,056,442	0.08	28,265,337	0.27	24,348,877	0.024
7/1/2004	39,276,293	0.80	23,953,258	0.12	29,088,351	0.15	25,261,235	0.016
7/13/04*	39,740,085	NA	24,151,174	NA	29,419,431	NA	25,625,291	NA
8/3/2004	40,583,081	0.83	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
9/1/2004	41,748,693	0.70	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
10/4/2004	43,144,141	0.70	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
11/3/2004	44,528,109	0.60	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
12/2/2004	45,556,469	0.52	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
1/4/2005	47,065,453	0.91	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
2/2/2005	48,275,053	0.55	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
3/4/2005	49,614,253	0.37	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
4/21/2005	51,687,853	0.48	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
5/19/2005	52,897,853	0.24	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
6/1/2005	53,373,053	0.13	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
7/1/2005	53,373,053	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
8/30/2005	53,373,053	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
9/30/2005	53,373,053	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
10/31/2005	53,621,149	0.11	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
11/30/2005	54,435,113	0.16	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
12/30/2005	55,249,077	0.03	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
1/31/2006	55,766,745	0.15	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
2/28/2006	55,766,745	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
3/31/2006	55,947,421	0.05	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
4/30/2006	55,956,057	0.23	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
5/31/2006	58,190,277	0.20	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
6/30/2006	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
7/31/2006	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
8/31/2006	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
9/30/2006	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
10/31/2006	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
11/30/2006	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
12/31/2006	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
1/31/2007	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
2/28/2007	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
3/31/2007	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
4/30/2007	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00

**Table F-7
Pumpage and Mass Removal
OU III Building 96 System**

2016 BNL Groundwater Status Report

Date	RTW-1		RTW-2		RTW-3		RTW-4	
	Total Pumped* (Gallons)	Mass Recovered (lbs)	Total Pumped* (Gallons)	Mass Recovered (lbs)	Total Pumped* (Gallons)	Mass Recovered (lbs)	Total Pumped* (Gallons)	Mass Recovered (lbs)
5/31/2007	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
6/30/2007	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
7/31/2007	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
8/31/2007	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
9/30/2007	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
10/31/2007	58,190,277	0.00	24,419,826	0.01	29,419,431	0.00	25,625,291	0.00
11/30/2007	58,190,277	0.00	25,888,822	0.06	29,419,431	0.00	25,625,291	0.00
12/31/2007	58,190,277	0.00	26,967,734	0.07	29,419,431	0.00	25,625,291	0.00
1/31/2008	58,190,277	0.00	27,948,548	0.03	29,419,431	0.00	25,625,291	0.00
2/28/2008	58,190,277	0.00	28,572,246	0.02	29,419,431	0.00	25,642,079	0.00
3/31/2008	58,190,277	0.00	29,682,602	0.04	30,480,807	0.22	26,742,201	1.11
4/30/2008	58,190,277	0.00	30,187,210	0.01	31,062,687	0.35	27,095,357	0.05
5/31/2008	59,195,217	1.42	31,279,392	0.05	32,315,577	0.58	27,771,579	0.14
6/30/2008	60,003,465	0.74	31,863,560	0.04	32,989,197	0.61	28,131,035	0.05
7/31/2008	61,598,386	1.29	32,013,086	0.00	34,462,977	0.73	28,761,501	0.11
8/31/2008	62,356,297	0.52	32,846,646	0.04	35,424,747	0.61	28,761,501	0.00
9/30/2008	62,994,481	0.47	33,771,648	0.06	36,492,117	0.70	28,761,501	0.00
10/31/2008	64,281,093	0.90	34,865,260	0.03	37,750,335	0.45	29,216,663	0.00
11/30/2008	65,599,609	0.66	35,486,892	0.01	38,953,743	0.23	30,204,617	0.00
12/31/2008	66,795,541	0.62	36,353,662	0.02	40,058,415	0.18	31,110,945	0.00
1/31/2009	67,805,949	0.66	37,113,184	0.01	41,068,903	0.19	32,029,877	0.03
2/28/2009	68,903,125	0.68	38,016,552	0.02	42,072,383	0.11	32,946,601	0.01
3/31/2009	70,176,037	0.66	39,066,128	0.02	43,233,715	0.08	34,026,172	0.03
4/30/2009	71,058,925	0.42	39,914,876	0.01	44,173,991	0.04	34,884,771	0.00
5/31/2009	72,379,037	0.70	41,022,336	0.01	45,415,887	0.03	35,939,465	0.00
6/30/2009	73,380,029	0.53	41,859,828	0.01	46,408,673	0.02	36,753,597	0.00
7/31/2009	74,696,413	0.78	43,011,636	0.01	47,363,555	0.03	37,901,937	0.01
8/31/2009	76,098,205	0.82	44,238,176	0.01	48,545,471	0.03	39,128,397	0.00
9/30/2009	77,253,341	0.73	45,248,920	0.00	49,590,855	0.01	40,136,693	0.00
10/31/2009	78,357,981	0.66	46,297,236	0.01	50,658,495	0.02	41,118,557	0.03
11/30/2009	79,590,733	0.78	47,500,172	0.00	51,861,291	0.01	42,306,641	0.00
12/31/2009	80,512,829	0.61	48,305,216	0.00	52,666,347	0.01	43,111,557	0.00
1/31/2010	81,417,989	0.74	49,047,020	0.00	53,363,759	0.01	43,808,529	0.00
2/28/2010	82,405,421	0.59	49,911,184	0.01	53,506,123	0.00	44,549,253	0.00
3/31/2010	83,045,517	0.56	50,233,268	0.00	53,589,955	0.00	45,058,681	0.00
4/30/2010	83,269,101	0.12	50,233,268	0.00	53,740,191	0.00	46,653,141	0.00
5/31/2010	84,914,765	0.62	50,234,192	0.00	54,072,647	0.01	47,316,405	0.00
6/30/2010	85,987,149	0.57	51,299,164	0.02	54,229,587	0.01	48,077,501	0.00
7/31/2010	87,269,625	1.10	51,299,164	0.00	54,229,587	0.00	48,838,597	0.00
8/31/2010	87,269,625	0.00	51,299,164	0.00	54,229,587	0.00	48,838,597	0.00
9/30/2010	87,269,625	0.00	51,299,164	0.00	54,398,735	0.00	48,838,597	0.00
10/31/2010	87,638,109	0.09	51,646,060	0.01	55,537,327	0.02	48,975,037	0.00

**Table F-7
Pumpage and Mass Removal
OU III Building 96 System**

2016 BNL Groundwater Status Report

Date	RTW-1		RTW-2		RTW-3		RTW-4	
	Total Pumped*	Mass Recovered	Total Pumped*	Mass Recovered	Total Pumped*	Mass Recovered	Total Pumped*	Mass Recovered
	(Gallons)	(lbs)	(Gallons)	(lbs)	(Gallons)	(lbs)	(Gallons)	(lbs)
11/30/2010	89,074,525	1.27	52,985,744	0.01	56,565,347	0.01	49,978,593	0.01
12/31/2010	90,249,629	0.83	54,060,748	0.01	57,149,287	0.02	51,006,753	0.00
1/31/2011	90,917,021	0.46	54,602,976	0.01	58,152,191	0.02	51,590,665	0.00
2/28/2011	92,063,129	0.80	55,610,572	0.01	59,388,979	0.02	52,593,513	0.01
3/31/2011	93,476,701	0.73	56,853,412	0.01	60,338,347	0.01	53,826,065	0.01
4/30/2011	94,561,725	0.56	57,806,852	0.01	61,303,423	0.01	54,779,401	0.00
5/31/2011	95,664,701	0.60	58,778,244	0.01	62,168,651	0.01	55,665,453	0.00
6/30/2011	96,614,429	0.56	59,643,639	0.01	63,289,153	0.01	56,394,713	0.00
7/31/2011	97,048,997	0.23	60,769,676	0.01	64,182,579	0.02	57,328,665	0.00
8/31/2011	98,084,613	0.67	61,676,660	0.01	64,974,447	0.03	58,011,349	0.00
9/30/2011	99,163,061	0.82	62,468,808	0.02	66,234,337	0.03	58,609,481	0.00
10/31/2011	100,647,805	1.20	63,728,448	0.04	67,330,395	0.02	59,528,921	0.00
11/30/2011	101,898,173	0.96	64,778,552	0.01	68,516,783	0.03	60,016,017	0.00
12/30/2011	102,962,109	0.34	65,520,040	0.01	69,543,007	0.02	61,371,953	0.00
1/31/2012	103,570,227	0.21	66,295,796	0.02	70,507,639	0.03	62,316,145	0.00
2/28/2012	104,901,373	0.51	67,244,756	0.03	71,575,283	0.03	63,645,481	0.00
3/31/2012	106,004,285	0.51	68,210,312	0.03	72,888,403	0.00	64,739,109	0.00
4/30/2012	107,306,941	0.59	69,342,556	0.03	73,748,275	0.02	65,951,313	0.00
5/31/2012	108,180,093	0.49	70,031,860	0.00	74,946,995	0.02	66,748,825	0.00
6/30/2012	108,528,605	0.27	71,178,836	0.02	75,961,715	0.02	67,802,341	0.00
7/31/2012	109,543,325	1.08	72,192,436	0.01	77,038,803	0.02	68,690,221	0.00
8/31/2012	110,620,381	1.41	73,269,492	0.01	78,008,467	0.01	69,632,589	0.00
9/30/2012	111,590,077	0.95	74,233,300	0.02	78,731,827	0.02	70,478,833	0.00
10/31/2012	112,405,597	0.65	74,742,292	0.01	79,738,323	0.02	70,478,889	0.00
11/30/2012	113,411,773	0.85	75,446,644	0.02	81,060,307	0.02	70,479,029	0.00
12/31/2012	114,313,405	1.35	76,810,292	0.08	82,399,955	0.02	70,479,113	0.00
1/31/2013	114,794,781	0.18	77,501,492	0.00	83,117,463	0.02	70,479,113	0.00
2/28/2013	114,882,205	0.08	77,718,676	0.00	84,489,875	0.02	70,479,113	0.00
3/31/2013	115,973,437	0.24	78,834,836	0.17	85,808,883	0.03	70,479,113	0.00
4/30/2013	117,052,821	0.44	79,748,404	0.08	87,230,003	0.05	70,479,113	0.00
5/31/2013	118,223,661	0.33	80,341,972	0.04	88,631,347	0.10	70,479,113	0.00
6/30/2013	119,657,389	1.12	81,603,860	0.04	89,971,763	0.32	70,479,113	0.00
7/31/2013	120,997,773	1.25	82,944,276	0.07	91,406,291	0.26	70,479,113	0.00
8/31/2013	122,440,557	1.22	84,499,476	0.07	92,704,147	0.17	70,479,113	0.00
9/30/2013	123,595,981	0.95	85,857,332	0.07	94,126,131	0.19	70,479,113	0.00
10/31/2013	125,017,965	0.85	87,219,316	0.07	95,609,779	0.21	70,479,113	0.00
11/30/2013	126,330,797	0.75	88,661,876	0.05	96,795,539	0.18	70,479,113	0.00
12/31/2013	127,090,829	0.27	89,342,420	0.02	96,895,539	0.10	70,479,113	0.00
1/31/2014	127,870,797	0.50	89,342,612	0.00	98,184,723	0.08	70,725,709	0.00
2/28/2014	128,415,533	0.39	90,303,356	0.01	99,380,723	0.06	70,725,793	0.00
3/31/2014	129,580,653	0.49	91,362,500	0.00	100,792,819	0.07	70,725,793	0.00
4/30/2014	130,475,725	0.32	92,376,780	0.00	102,131,827	0.08	70,726,521	0.00

Building 452 Freon-11 Treatment System

Table F- 8
System Influent VOC Data
Building 452 Freon Extraction System

2016 BNL Groundwater Status Report

Site ID : 095-316 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1,1,1-Trichloroethane	1/8/2016	0.29	0.5	UG/L	0	J
524.2 TVOC	1/8/2016	21.76	0	UG/L	0	
Chloroform	1/8/2016	0.59	0.5	UG/L	0	
Methylene chloride	1/8/2016	0.18	0.5	UG/L	0	J
Trichloroethylene	1/8/2016	0.2	0.5	UG/L	0	J
Trichlorofluoromethane	1/8/2016	20.5	0.5	UG/L	0	
624 TVOC	3/3/2016	34.82	0	UG/L	0	
Chloroform	3/3/2016	0.62	1	UG/L	0	J
Trichlorofluoromethane	3/3/2016	34.2	1	UG/L	0	
624 TVOC	6/2/2016	2.7	0	UG/L	0	
Trichlorofluoromethane	6/2/2016	2.7	1	UG/L	0	
524.2 TVOC	10/27/2016	92.12	0	UG/L	0	
Chloroform	10/27/2016	0.25	0.5	UG/L	0	J
Tetrachloroethylene	10/27/2016	0.17	0.5	UG/L	0	J
Trichlorofluoromethane	10/27/2016	91.7	2.5	UG/L	0	
524.2 TVOC	11/21/2016	84.33	0	UG/L	0	
Chloroform	11/21/2016	0.53	0.5	UG/L	0	
Trichlorofluoromethane	11/21/2016	83.8	2.5	UG/L	0	
524.2 TVOC	12/6/2016	42.09	0	UG/L	0	
Chloroform	12/6/2016	0.59	0.5	UG/L	0	
Trichlorofluoromethane	12/6/2016	41.5	1	UG/L	0	

J - Estimated value.

B = Compound was found in both the sample and associated laboratory blank.

Table F-9
System Effluent VOC Data
Building 452 Freon Extraction System

2016 BNL Groundwater Status Report

Site ID : 095-317 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
524.2 TVOC	1/8/2016	0.2	0	UG/L	0	
Methylene chloride	1/8/2016	0.2	0.5	UG/L	0	J
624 TVOC	3/3/2016	0	0	UG/L	0	
524.2 TVOC	11/21/2016	0	0	UG/L	0	
524.2 TVOC	12/6/2016	0	0	UG/L	0	

J = Estimated Value below the method detection limit of 0.50 UG/L

B = Compound was found in both the sample and associated laboratory blank.

Table F-10
Cumulative Mass Removal
Building 452 Freon Extraction System

2016 BNL Groundwater Status Report

DATE	FLOW (GPM)	TVOC's (PPB)	LBS/DAY	CUM. LBS
3/15/2012	--	--	--	0.00
3/16/2012	75	482	0.01	0.11
3/26/2012	74	266	0.24	0.21
3/28/2012	74	267	0.24	0.68
3/29/2012	74	266	0.24	0.92
3/30/2012	74	468	0.42	1.16
4/4/2012	53	780	0.50	3.24
4/10/2012	53	1300	0.83	6.22
4/17/2012	53	1100	0.70	12.01
4/24/2012	53	732	0.47	16.91
5/2/2012	75	623	0.56	20.64
5/7/2012	75	499	0.45	23.44
5/15/2012	75	570	0.51	27.04
5/21/2012	75	447	0.40	30.12
5/30/2012	75	480	0.43	33.75
6/7/2012	69	402	0.33	37.21
6/11/2012	69	464	0.38	38.54
6/19/2012	69	413	0.34	41.62
6/27/2012	69	390	0.32	44.36
7/5/2012	66	317	0.25	46.94
7/11/2012	66	312	0.25	48.45
7/17/2012	66	246	0.19	49.93
7/24/2012	66	293	0.23	51.30
8/1/2012	75	278	0.25	53.15
8/7/2012	75	268	0.24	54.66
8/13/2012	75	234	0.21	56.10
8/20/2012	75	218	0.20	57.58
8/29/2012	75	232	0.21	59.35
9/5/2012	76	164	0.15	60.81
10/2/2012	64	165	0.13	64.85
11/6/2012	75	62	0.06	69.29
12/4/2012	65	112	0.09	70.85
1/2/2013	76	82	0.07	73.19
2/4/2013	39	25	0.01	75.65
3/5/2013	73	96	0.08	75.98
4/8/2013	74	58	0.05	78.85
5/2/2013	9	74	0.01	80.09
6/6/2013	26	97	0.03	80.37
7/2/2013	73	67.1	0.06	81.15
8/5/2013	77	45.5	0.04	83.15
9/4/2013	70	41.4	0.03	84.42
10/2/2013	80	38.61	0.04	85.39
11/6/2013	76	33.71	0.03	86.69
12/4/2013	60	31.32	0.02	87.55
1/14/2014	76	24.02	0.02	88.48
2/4/2014	73	21.34	0.02	88.94
3/3/2014	75	18.9	0.02	89.44
4/3/2014	73	15.03	0.01	89.97
5/1/2014	75	15.34	0.01	90.34
6/2/2014	75	15.61	0.01	90.78
7/7/2014	70	13.4	0.01	91.27

Table F-10
Cumulative Mass Removal
Building 452 Freon Extraction System

2016 BNL Groundwater Status Report

DATE	FLOW (GPM)	TVOC's (PPB)	LBS/DAY	CUM. LBS
8/4/2014	75	16.15	0.01	91.59
9/3/2014	67	15.07	0.01	92.02
10/2/2014	76	15.90	0.01	92.38
11/4/2014	76	15.24	0.01	92.85
12/3/2014	75	15.40	0.01	93.26
1/7/2015	70	13.8	0.012	93.74
3/23/2015	34	21.5	0.009	94.61
5/4/2015	79	34.96	0.03	94.98
7/8/2015	39	28.32	0.01	97.14
9/2/2015	66	29.02	0.02	97.88
11/4/2015	77	41.97	0.04	99.33
1/8/2016	76	21.76	0.02	101.85
3/3/2016	27	34.82	0.01	102.95
6/2/2016	0	2.7	0	103.97
10/27/2016	0	91.7	0	103.97
11/21/2016	28	83.8	0.028	103.97
12/6/2016	29	41.5	0.014	104.40

OU III Middle Road System

Table F-11
Extraction Well VOC Data
OU III Middle Road System

2016 BNL Groundwater Status Report

Site ID : 106-66 (RW-6)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	1.5	0.5	UG/L	
1,1-Dichloroethane	1/12/2016	0.28	0.5	UG/L	J
1,1-Dichloroethylene	1/12/2016	0.48	0.5	UG/L	J
524.2 TVOC	1/12/2016	14.77	0	UG/L	
Carbon tetrachloride	1/12/2016	1.3	0.5	UG/L	
Chloroform	1/12/2016	0.42	0.5	UG/L	J
Tetrachloroethylene	1/12/2016	10	0.5	UG/L	
Trichloroethylene	1/12/2016	0.79	0.5	UG/L	
1,1,1-Trichloroethane	4/13/2016	1.3	0.5	UG/L	
1,1-Dichloroethane	4/13/2016	0.22	0.5	UG/L	J
1,1-Dichloroethylene	4/13/2016	0.53	0.5	UG/L	
524.2 TVOC	4/13/2016	16.68	0	UG/L	
Carbon tetrachloride	4/13/2016	1.4	0.5	UG/L	
Chloroform	4/13/2016	0.39	0.5	UG/L	J
Tetrachloroethylene	4/13/2016	12	0.5	UG/L	
Trichloroethylene	4/13/2016	0.84	0.5	UG/L	
1,1,1-Trichloroethane	12/21/2016	1.5	0.5	UG/L	
1,1-Dichloroethane	12/21/2016	0.16	0.5	UG/L	J
1,1-Dichloroethylene	12/21/2016	0.61	0.5	UG/L	
524.2 TVOC	12/21/2016	27.11	0	UG/L	
Carbon tetrachloride	12/21/2016	2.4	0.5	UG/L	
Chloroform	12/21/2016	0.52	0.5	UG/L	
cis-1,2-Dichloroethylene	12/21/2016	0.11	0.5	UG/L	J
Tetrachloroethylene	12/21/2016	21	0.5	UG/L	
Trichloroethylene	12/21/2016	0.81	0.5	UG/L	

Site ID : 113-23 (RW-1)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	0.7	0.5	UG/L	
1,1,2,2-Tetrachloroethane	1/12/2016	0.24	0.5	UG/L	J
1,1-Dichloroethane	1/12/2016	0.13	0.5	UG/L	J
1,1-Dichloroethylene	1/12/2016	0.26	0.5	UG/L	J
524.2 TVOC	1/12/2016	23.78	0	UG/L	
Carbon tetrachloride	1/12/2016	2.1	0.5	UG/L	
Chloroform	1/12/2016	0.63	0.5	UG/L	
Tetrachloroethylene	1/12/2016	19	0.5	UG/L	
Trichloroethylene	1/12/2016	0.72	0.5	UG/L	
1,1,1-Trichloroethane	4/13/2016	0.59	0.5	UG/L	
1,1-Dichloroethane	4/13/2016	0.12	0.5	UG/L	J
1,1-Dichloroethylene	4/13/2016	0.36	0.5	UG/L	J
524.2 TVOC	4/13/2016	24.39	0	UG/L	
Carbon tetrachloride	4/13/2016	2	0.5	UG/L	
Chloroform	4/13/2016	0.48	0.5	UG/L	J
cis-1,2-Dichloroethylene	4/13/2016	0.11	0.5	UG/L	J
Tetrachloroethylene	4/13/2016	20	0.5	UG/L	
Trichloroethylene	4/13/2016	0.73	0.5	UG/L	
1,1,1-Trichloroethane	7/7/2016	0.73	0.5	UG/L	
1,1-Dichloroethane	7/7/2016	0.077	0.5	UG/L	J

**Table F-11
Extraction Well VOC Data
OU III Middle Road System**

2016 BNL Groundwater Status Report

Site ID : 113-23 (RW-1) Continued

1,1-Dichloroethylene	7/7/2016	0.28	0.5	UG/L	J
524.2 TVOC	7/7/2016	18.247	0	UG/L	
Carbon tetrachloride	7/7/2016	1.3	0.5	UG/L	
Chloroform	7/7/2016	0.41	0.5	UG/L	J
Tetrachloroethylene	7/7/2016	15	0.5	UG/L	
Trichloroethylene	7/7/2016	0.45	0.5	UG/L	J
1,1,1-Trichloroethane	12/21/2016	0.38	0.5	UG/L	J
1,1-Dichloroethylene	12/21/2016	0.15	0.5	UG/L	J
524.2 TVOC	12/21/2016	10.19	0	UG/L	
Carbon tetrachloride	12/21/2016	0.53	0.5	UG/L	
Chloroform	12/21/2016	0.28	0.5	UG/L	J
Tetrachloroethylene	12/21/2016	8.5	0.5	UG/L	
Trichloroethylene	12/21/2016	0.35	0.5	UG/L	J

Site ID : 113-24 (RW-2)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	0.63	0.5	UG/L	
1,1,2,2-Tetrachloroethane	1/12/2016	0.15	0.5	UG/L	J
1,1-Dichloroethane	1/12/2016	0.12	0.5	UG/L	J
1,1-Dichloroethylene	1/12/2016	0.25	0.5	UG/L	J
524.2 TVOC	1/12/2016	22.55	0	UG/L	
Carbon tetrachloride	1/12/2016	2.1	0.5	UG/L	
Chloroform	1/12/2016	0.6	0.5	UG/L	
Tetrachloroethylene	1/12/2016	18	0.5	UG/L	
Trichloroethylene	1/12/2016	0.7	0.5	UG/L	
1,1,1-Trichloroethane	4/13/2016	0.58	0.5	UG/L	
1,1-Dichloroethane	4/13/2016	0.12	0.5	UG/L	J
1,1-Dichloroethylene	4/13/2016	0.3	0.5	UG/L	J
524.2 TVOC	4/13/2016	24.32	0	UG/L	
Carbon tetrachloride	4/13/2016	2	0.5	UG/L	
Chloroform	4/13/2016	0.6	0.5	UG/L	
Tetrachloroethylene	4/13/2016	20	0.5	UG/L	
Trichloroethylene	4/13/2016	0.72	0.5	UG/L	
1,1,1-Trichloroethane	7/7/2016	0.57	0.5	UG/L	
1,1-Dichloroethylene	7/7/2016	0.34	0.5	UG/L	J
524.2 TVOC	7/7/2016	23.29	0	UG/L	
Carbon tetrachloride	7/7/2016	2	0.5	UG/L	
Chloroform	7/7/2016	0.55	0.5	UG/L	
cis-1,2-Dichloroethylene	7/7/2016	0.11	0.5	UG/L	J
Tetrachloroethylene	7/7/2016	19	0.5	UG/L	
Trichloroethylene	7/7/2016	0.72	0.5	UG/L	
1,1,1-Trichloroethane	12/21/2016	0.3	0.5	UG/L	J
1,1-Dichloroethylene	12/21/2016	0.1	0.5	UG/L	J
1,2,3-Trichloropropane	12/21/2016	19	0.5	UG/L	
524.2 TVOC	12/21/2016	33.54	0	UG/L	
Carbon tetrachloride	12/21/2016	1.2	0.5	UG/L	
Chloroform	12/21/2016	0.4	0.5	UG/L	J
Tetrachloroethylene	12/21/2016	12	0.5	UG/L	
Trichloroethylene	12/21/2016	0.54	0.5	UG/L	

**Table F-11
Extraction Well VOC Data
OU III Middle Road System**

2016 BNL Groundwater Status Report

Site ID : 113-25 (RW-3)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	2.6	0.5	UG/L	
1,1-Dichloroethane	1/12/2016	0.44	0.5	UG/L	J
1,1-Dichloroethylene	1/12/2016	0.88	0.5	UG/L	
524.2 TVOC	1/12/2016	5.69	0	UG/L	
Carbon tetrachloride	1/12/2016	0.27	0.5	UG/L	J
Chloroform	1/12/2016	0.17	0.5	UG/L	J
cis-1,2-Dichloroethylene	1/12/2016	0.12	0.5	UG/L	J
Tetrachloroethylene	1/12/2016	0.21	0.5	UG/L	J
Trichloroethylene	1/12/2016	1	0.5	UG/L	
1,1,1-Trichloroethane	4/13/2016	2.2	0.5	UG/L	
1,1-Dichloroethane	4/13/2016	0.37	0.5	UG/L	J
1,1-Dichloroethylene	4/13/2016	0.74	0.5	UG/L	
524.2 TVOC	4/13/2016	4.92	0	UG/L	
Carbon tetrachloride	4/13/2016	0.23	0.5	UG/L	J
Chloroform	4/13/2016	0.17	0.5	UG/L	J
Tetrachloroethylene	4/13/2016	0.26	0.5	UG/L	J
Trichloroethylene	4/13/2016	0.95	0.5	UG/L	
1,1,1-Trichloroethane	7/7/2016	2.2	0.5	UG/L	
1,1-Dichloroethane	7/7/2016	0.37	0.5	UG/L	J
1,1-Dichloroethylene	7/7/2016	0.64	0.5	UG/L	
524.2 TVOC	7/7/2016	4.92	0	UG/L	
Carbon tetrachloride	7/7/2016	0.22	0.5	UG/L	J
Chloroform	7/7/2016	0.16	0.5	UG/L	J
Tetrachloroethylene	7/7/2016	0.23	0.5	UG/L	J
Trichloroethylene	7/7/2016	1.1	0.5	UG/L	
1,1,1-Trichloroethane	12/21/2016	2	0.5	UG/L	
1,1-Dichloroethane	12/21/2016	0.37	0.5	UG/L	J
1,1-Dichloroethylene	12/21/2016	0.68	0.5	UG/L	
524.2 TVOC	12/21/2016	4.93	0	UG/L	
Carbon tetrachloride	12/21/2016	0.19	0.5	UG/L	J
Chloroform	12/21/2016	0.15	0.5	UG/L	J
Tetrachloroethylene	12/21/2016	0.57	0.5	UG/L	
Trichloroethylene	12/21/2016	0.97	0.5	UG/L	

Site ID : 113-26 (RW-4)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	0.23	0.5	UG/L	J
1,1-Dichloroethane	1/12/2016	0.16	0.5	UG/L	J
1,1-Dichloroethylene	1/12/2016	0.15	0.5	UG/L	J
1,2-Dichloroethane	1/12/2016	0.16	0.5	UG/L	J
524.2 TVOC	1/12/2016	4.23	0	UG/L	
Carbon tetrachloride	1/12/2016	1.2	0.5	UG/L	
Chloroform	1/12/2016	0.66	0.5	UG/L	
Tetrachloroethylene	1/12/2016	0.68	0.5	UG/L	
Trichloroethylene	1/12/2016	0.99	0.5	UG/L	
1,1,1-Trichloroethane	4/13/2016	0.11	0.5	UG/L	J
1,1-Dichloroethane	4/13/2016	0.12	0.5	UG/L	J
1,1-Dichloroethylene	4/13/2016	0.13	0.5	UG/L	J

**Table F-11
Extraction Well VOC Data
OU III Middle Road System**

2016 BNL Groundwater Status Report

Site ID : 113-26 (RW-4) Continued

1,2-Dichloroethane	4/13/2016	0.12	0.5	UG/L	J
524.2 TVOC	4/13/2016	3.16	0	UG/L	
Carbon tetrachloride	4/13/2016	0.72	0.5	UG/L	
Chloroform	4/13/2016	0.6	0.5	UG/L	
Tetrachloroethylene	4/13/2016	0.36	0.5	UG/L	J
Toluene	4/13/2016	0.11	0.5	UG/L	J
Trichloroethylene	4/13/2016	0.89	0.5	UG/L	
1,1-Dichloroethane	7/7/2016	0.11	0.5	UG/L	J
1,1-Dichloroethylene	7/7/2016	0.1	0.5	UG/L	J
524.2 TVOC	7/7/2016	3.32	0	UG/L	
Carbon tetrachloride	7/7/2016	1	0.5	UG/L	
Chloroform	7/7/2016	0.54	0.5	UG/L	
Tetrachloroethylene	7/7/2016	0.47	0.5	UG/L	J
Trichloroethylene	7/7/2016	1.1	0.5	UG/L	
1,1,1-Trichloroethane	12/21/2016	0.96	0.5	UG/L	
1,1-Dichloroethane	12/21/2016	0.15	0.5	UG/L	J
1,1-Dichloroethylene	12/21/2016	0.32	0.5	UG/L	J
524.2 TVOC	12/21/2016	15.95	0	UG/L	
Carbon tetrachloride	12/21/2016	1.5	0.5	UG/L	
Chloroform	12/21/2016	0.41	0.5	UG/L	J
Tetrachloroethylene	12/21/2016	12	0.5	UG/L	
Trichloroethylene	12/21/2016	0.61	0.5	UG/L	

Site ID : 113-27 (RW-5)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	0.16	0.5	UG/L	J
1,1-Dichloroethane	1/12/2016	0.19	0.5	UG/L	J
524.2 TVOC	1/12/2016	1.54	0	UG/L	
Chloroform	1/12/2016	0.44	0.5	UG/L	J
Tetrachloroethylene	1/12/2016	0.75	0.5	UG/L	
1,1-Dichloroethane	4/13/2016	0.19	0.5	UG/L	J
1,1-Dichloroethylene	4/13/2016	0.18	0.5	UG/L	J
1,2-Dichloroethane	4/13/2016	0.23	0.5	UG/L	J
524.2 TVOC	4/13/2016	1.165	0	UG/L	
Chloroform	4/13/2016	0.48	0.5	UG/L	J
Toluene	4/13/2016	0.085	0.5	UG/L	J
1,1-Dichloroethane	7/7/2016	0.16	0.5	UG/L	J
1,1-Dichloroethylene	7/7/2016	0.11	0.5	UG/L	J
524.2 TVOC	7/7/2016	0.63	0	UG/L	
Chloroform	7/7/2016	0.36	0.5	UG/L	J
1,1,1-Trichloroethane	12/21/2016	0.82	0.5	UG/L	
1,1-Dichloroethane	12/21/2016	0.16	0.5	UG/L	J
1,1-Dichloroethylene	12/21/2016	0.29	0.5	UG/L	J
524.2 TVOC	12/21/2016	11.85	0	UG/L	
Carbon tetrachloride	12/21/2016	0.98	0.5	UG/L	
Chloroform	12/21/2016	0.35	0.5	UG/L	J
Tetrachloroethylene	12/21/2016	8.6	0.5	UG/L	
Trichloroethylene	12/21/2016	0.65	0.5	UG/L	

Table F-11
Extraction Well VOC Data
OU III Middle Road System

2016 BNL Groundwater Status Report

Site ID : 113-33 (RW-7)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	4.1	0.5	UG/L	
1,1,2,2-Tetrachloroethane	1/12/2016	0.53	0.5	UG/L	
1,1-Dichloroethane	1/12/2016	0.31	0.5	UG/L	J
1,1-Dichloroethylene	1/12/2016	2.4	0.5	UG/L	
524.2 TVOC	1/12/2016	60.344	0	UG/L	
Carbon tetrachloride	1/12/2016	1.6	0.5	UG/L	
Chloroform	1/12/2016	0.53	0.5	UG/L	
Dichlorodifluoromethane	1/12/2016	0.094	0.5	UG/L	J
Methyl tert-butyl ether	1/12/2016	0.18	0.5	UG/L	J
Tetrachloroethylene	1/12/2016	49	2.5	UG/L	
Trichloroethylene	1/12/2016	1.6	0.5	UG/L	
1,1,1-Trichloroethane	4/13/2016	1.6	0.5	UG/L	
1,1-Dichloroethane	4/13/2016	0.4	0.5	UG/L	J
1,1-Dichloroethylene	4/13/2016	1.4	0.5	UG/L	
524.2 TVOC	4/13/2016	43.564	0	UG/L	
Benzene, 1-methylethyl-	4/13/2016	0.12	0.5	UG/L	J
Carbon tetrachloride	4/13/2016	0.59	0.5	UG/L	
Chloroethane	4/13/2016	0.12	0.5	UG/L	J
Chloroform	4/13/2016	0.33	0.5	UG/L	J
Cymene	4/13/2016	0.094	0.5	UG/L	J
Ethene, 1,2-dichloro-, (E)-	4/13/2016	0.23	0.5	UG/L	J
Methylene chloride	4/13/2016	0.18	0.5	UG/L	J
Tetrachloroethylene	4/13/2016	35	0.5	UG/L	
Trichloroethylene	4/13/2016	3.5	0.5	UG/L	
1,1,1-Trichloroethane	7/7/2016	3	0.5	UG/L	
1,1,2,2-Tetrachloroethane	7/7/2016	0.41	0.5	UG/L	J
1,1-Dichloroethane	7/7/2016	0.18	0.5	UG/L	J
1,1-Dichloroethylene	7/7/2016	1.1	0.5	UG/L	
524.2 TVOC	7/7/2016	49.79	0	UG/L	
Carbon tetrachloride	7/7/2016	1.6	0.5	UG/L	
Chloroform	7/7/2016	0.3	0.5	UG/L	J
Tetrachloroethylene	7/7/2016	42	1	UG/L	
Trichloroethylene	7/7/2016	1.2	0.5	UG/L	
1,1,1-Trichloroethane	12/21/2016	5.9	0.5	UG/L	
1,1-Dichloroethane	12/21/2016	0.16	0.5	UG/L	J
1,1-Dichloroethylene	12/21/2016	2.3	0.5	UG/L	
524.2 TVOC	12/21/2016	45.97	0	UG/L	
Carbon tetrachloride	12/21/2016	3.7	0.5	UG/L	
Chloroform	12/21/2016	0.42	0.5	UG/L	J
Methyl tert-butyl ether	12/21/2016	0.29	0.5	UG/L	J
Tetrachloroethylene	12/21/2016	32	1	UG/L	
Trichloroethylene	12/21/2016	1.2	0.5	UG/L	

Table F-12
Air Stripper Influent VOC Data
OU III Middle Road System

2016 BNL Groundwater Status Report

Site ID : 113-34 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	2.1	0.5	UG/L	
1,1,2,2-Tetrachloroethane	1/12/2016	0.19	0.5	UG/L	J
1,1-Dichloroethane	1/12/2016	0.22	0.5	UG/L	J
1,1-Dichloroethylene	1/12/2016	0.57	0.5	UG/L	
524.2 TVOC	1/12/2016	20.19	0	UG/L	
Carbon tetrachloride	1/12/2016	0.18	0.5	UG/L	J
Chloroform	1/12/2016	0.35	0.5	UG/L	J
Tetrachloroethylene	1/12/2016	16	0.5	UG/L	
Trichloroethylene	1/12/2016	0.58	0.5	UG/L	
1,1,1-Trichloroethane	2/18/2016	1.62	1	UG/L	
1,1-Dichloroethylene	2/18/2016	0.46	1	UG/L	J
624 TVOC	2/18/2016	15.42	0	UG/L	
Carbon tetrachloride	2/18/2016	1.39	1	UG/L	
Chloroform	2/18/2016	0.43	1	UG/L	J
Tetrachloroethylene	2/18/2016	10.6	1	UG/L	
Trichloroethylene	2/18/2016	0.92	1	UG/L	J
1,1,1-Trichloroethane	3/7/2016	1.7	0.5	UG/L	
1,1-Dichloroethane	3/7/2016	0.25	0.5	UG/L	J
1,1-Dichloroethylene	3/7/2016	0.14	0.5	UG/L	J
524.2 TVOC	3/7/2016	18.68	0	UG/L	
Carbon tetrachloride	3/7/2016	2.3	0.5	UG/L	
Chloroform	3/7/2016	0.48	0.5	UG/L	J
Tetrachloroethylene	3/7/2016	13	0.5	UG/L	
Trichloroethylene	3/7/2016	0.81	0.5	UG/L	
1,1,1-Trichloroethane	4/13/2016	1.5	0.5	UG/L	
1,1,2,2-Tetrachloroethane	4/13/2016	0.13	0.5	UG/L	J
1,1-Dichloroethane	4/13/2016	0.2	0.5	UG/L	J
1,1-Dichloroethylene	4/13/2016	0.56	0.5	UG/L	
524.2 TVOC	4/13/2016	19.504	0	UG/L	
Carbon tetrachloride	4/13/2016	0.88	0.5	UG/L	
Chloroform	4/13/2016	0.41	0.5	UG/L	J
Dichlorodifluoromethane	4/13/2016	0.084	0.5	UG/L	J
Tetrachloroethylene	4/13/2016	15	0.5	UG/L	
Trichloroethylene	4/13/2016	0.74	0.5	UG/L	
1,1,1-Trichloroethane	5/3/2016	1.6	0.5	UG/L	
1,1-Dichloroethane	5/3/2016	0.23	0.5	UG/L	J
1,1-Dichloroethylene	5/3/2016	0.54	0.5	UG/L	
524.2 TVOC	5/3/2016	21.07	0	UG/L	
Carbon tetrachloride	5/3/2016	1.3	0.5	UG/L	
Chloroform	5/3/2016	0.48	0.5	UG/L	J
cis-1,2-Dichloroethylene	5/3/2016	0.11	0.5	UG/L	J
Tetrachloroethylene	5/3/2016	16	0.5	UG/L	
Trichloroethylene	5/3/2016	0.81	0.5	UG/L	
1,1,1-Trichloroethane	6/2/2016	1.9	0.5	UG/L	
1,1,2,2-Tetrachloroethane	6/2/2016	0.25	0.5	UG/L	J
1,1-Dichloroethane	6/2/2016	0.23	0.5	UG/L	J
1,1-Dichloroethylene	6/2/2016	0.75	0.5	UG/L	
524.2 TVOC	6/2/2016	26.08	0	UG/L	
Carbon tetrachloride	6/2/2016	1.6	0.5	UG/L	
Chloroform	6/2/2016	0.41	0.5	UG/L	J
Tetrachloroethylene	6/2/2016	20	0.5	UG/L	
Trichloroethylene	6/2/2016	0.94	0.5	UG/L	
1,1,1-Trichloroethane	7/7/2016	1.9	0.5	UG/L	
1,1-Dichloroethane	7/7/2016	0.23	0.5	UG/L	J
1,1-Dichloroethylene	7/7/2016	0.68	0.5	UG/L	

Table F-12
Air Stripper Influent VOC Data
OU III Middle Road System

2016 BNL Groundwater Status Report

Site ID : 113-34 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
524.2 TVOC	7/7/2016	28.56	0	UG/L	
Carbon tetrachloride	7/7/2016	1.2	0.5	UG/L	
Chloroform	7/7/2016	0.45	0.5	UG/L	J
Tetrachloroethylene	7/7/2016	23	0.5	UG/L	
Trichloroethylene	7/7/2016	1.1	0.5	UG/L	
1,1,1-Trichloroethane	8/2/2016	1.7	0.5	UG/L	
1,1,2,2-Tetrachloroethane	8/2/2016	0.17	0.5	UG/L	J
1,1-Dichloroethane	8/2/2016	0.19	0.5	UG/L	J
1,1-Dichloroethylene	8/2/2016	0.78	0.5	UG/L	
524.2 TVOC	8/2/2016	28.53	0	UG/L	
Carbon tetrachloride	8/2/2016	1.4	0.5	UG/L	
Chloroform	8/2/2016	0.37	0.5	UG/L	J
Tetrachloroethylene	8/2/2016	23	0.5	UG/L	
Trichloroethylene	8/2/2016	0.92	0.5	UG/L	
1,1,1-Trichloroethane	9/7/2016	1.6	0.5	UG/L	
1,1-Dichloroethane	9/7/2016	0.21	0.5	UG/L	J
1,1-Dichloroethylene	9/7/2016	0.74	0.5	UG/L	
524.2 TVOC	9/7/2016	26.9	0	UG/L	
Carbon tetrachloride	9/7/2016	1.2	0.5	UG/L	
Chloroform	9/7/2016	0.35	0.5	UG/L	J
Tetrachloroethylene	9/7/2016	22	0.5	UG/L	
Trichloroethylene	9/7/2016	0.8	0.5	UG/L	
1,1,1-Trichloroethane	12/21/2016	1.8	0.5	UG/L	
1,1-Dichloroethane	12/21/2016	0.14	0.5	UG/L	J
1,1-Dichloroethylene	12/21/2016	0.72	0.5	UG/L	
524.2 TVOC	12/21/2016	20.22	0	UG/L	
Carbon tetrachloride	12/21/2016	1.5	0.5	UG/L	
Chloroform	12/21/2016	0.32	0.5	UG/L	J
Tetrachloroethylene	12/21/2016	15	0.5	UG/L	
Trichloroethylene	12/21/2016	0.74	0.5	UG/L	

Table F-13
Air Stripper Effluent VOC Data
OU III Middle Road System

2016 BNL Groundwater Status Report

Site ID : 095-270 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
524.2 TVOC	1/12/2016	0	0	UG/L	
624 TVOC	2/18/2016	0	0	UG/L	
524.2 TVOC	3/7/2016	0	0	UG/L	
1,1,2,2-Tetrachloroethane	4/13/2016	0.11	0.5	UG/L	J
524.2 TVOC	4/13/2016	0.11	0	UG/L	
524.2 TVOC	5/3/2016	0	0	UG/L	
524.2 TVOC	12/21/2016	0	0	UG/L	

Table F-14
Cumulative Mass Removal
OU III Middle Road System

2016 BNL Groundwater Status Report

Date Sampled	Total VOC's (ug/L)	Flow Rates (gpm)	Cumulative VOC's (lbs)
1/12/2016	20.19	231	1174.85
2/18/2016	15.42	179	1176.07
3/7/2016	18.68	328	1177.40
4/30/2016	19.5	273	1180.85
5/3/2016	21.07	234	1181.02
6/2/2016	26.08	303	1183.87
7/7/2016	28.56	256	1186.94
8/2/2016	28.53	413	1190.62
9/7/2016	26.9	146	1192.31
12/21/2016	20.22	106	1195.01

ug/L Micrograms per liter
gpm Gallons per minute
lbs Pounds

OU III South Boundary System

Table F-15
Extraction Well VOC Data
OU III South Boundary System

2016 BNL Groundwater Status Report

Site ID : 121-15 (EW-5)

Chemical Name	Sample Date	Value	GW STD	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	0.11	5	0.5	UG/L	J
524.2 TVOC	1/12/2016	1.35	-1	0	UG/L	
Chloroform	1/12/2016	0.33	7	0.5	UG/L	J
Methylene chloride	1/12/2016	0.27	5	0.5	UG/L	J
Tetrachloroethylene	1/12/2016	0.64	5	0.5	UG/L	
1,1,1-Trichloroethane	4/13/2016	0.087	5	0.5	UG/L	J
524.2 TVOC	4/13/2016	0.777	-1	0	UG/L	
Chloroform	4/13/2016	0.17	7	0.5	UG/L	J
Methyl chloride	4/13/2016	0.11	5	0.5	UG/L	J
Tetrachloroethylene	4/13/2016	0.41	5	0.5	UG/L	J
524.2 TVOC	7/7/2016	0.77	-1	0	UG/L	
Chloroform	7/7/2016	0.29	7	0.5	UG/L	J
Tetrachloroethylene	7/7/2016	0.48	5	0.5	UG/L	J
1,1,1-Trichloroethane	12/21/2016	0.17	5	0.5	UG/L	J
1,1-Dichloroethane	12/21/2016	0.073	5	0.5	UG/L	J
1,1-Dichloroethylene	12/21/2016	0.12	5	0.5	UG/L	J
524.2 TVOC	12/21/2016	7.773	-1	0	UG/L	
Chloroform	12/21/2016	0.51	7	0.5	UG/L	
Methylene chloride	12/21/2016	3.2	5	0.5	UG/L	
Tetrachloroethylene	12/21/2016	3.7	5	0.5	UG/L	

Site ID : 121-16 (EW-4)

Chemical Name	Sample Date	Value	GW STD	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	0.2	5	0.5	UG/L	J
1,1-Dichloroethane	1/12/2016	0.098	5	0.5	UG/L	J
1,1-Dichloroethylene	1/12/2016	0.19	5	0.5	UG/L	J
524.2 TVOC	1/12/2016	11.888	-1	0	UG/L	
Carbon tetrachloride	1/12/2016	0.78	5	0.5	UG/L	
Chloroform	1/12/2016	0.8	7	0.5	UG/L	
Tetrachloroethylene	1/12/2016	9.6	5	0.5	UG/L	
Trichloroethylene	1/12/2016	0.22	5	0.5	UG/L	J
1,1,1-Trichloroethane	4/13/2016	0.22	5	0.5	UG/L	J
1,1-Dichloroethane	4/13/2016	0.11	5	0.5	UG/L	J
524.2 TVOC	4/13/2016	10.42	-1	0	UG/L	
Carbon tetrachloride	4/13/2016	0.59	5	0.5	UG/L	
Chloroform	4/13/2016	0.59	7	0.5	UG/L	
Tetrachloroethylene	4/13/2016	8.7	5	0.5	UG/L	
Trichloroethylene	4/13/2016	0.21	5	0.5	UG/L	J
1,1,1-Trichloroethane	7/7/2016	0.18	5	0.5	UG/L	J
1,1-Dichloroethane	7/7/2016	0.098	5	0.5	UG/L	J
1,1-Dichloroethylene	7/7/2016	0.13	5	0.5	UG/L	J
524.2 TVOC	7/7/2016	11.098	-1	0	UG/L	
Carbon tetrachloride	7/7/2016	0.68	5	0.5	UG/L	
Chloroform	7/7/2016	0.51	7	0.5	UG/L	
Tetrachloroethylene	7/7/2016	9.5	5	0.5	UG/L	
1,1,1-Trichloroethane	12/21/2016	0.24	5	0.5	UG/L	J
1,1-Dichloroethane	12/21/2016	0.17	5	0.5	UG/L	J
1,1-Dichloroethylene	12/21/2016	0.11	5	0.5	UG/L	J
524.2 TVOC	12/21/2016	6.6	-1	0	UG/L	
Chloroform	12/21/2016	0.68	7	0.5	UG/L	
Tetrachloroethylene	12/21/2016	5.4	5	0.5	UG/L	

Table F-15
Extraction Well VOC Data
OU III South Boundary System

2016 BNL Groundwater Status Report

Site ID : 121-17 (EW-3)

Chemical Name	Sample Date	Value	GW STD	Detlim	Units	Qual
524.2 TVOC	1/12/2016	0.22	-1	0	UG/L	
Tetrachloroethylene	1/12/2016	0.22	5	0.5	UG/L	J
524.2 TVOC	4/13/2016	0.67	-1	0	UG/L	
Tetrachloroethylene	4/13/2016	0.42	5	0.5	UG/L	J
Trichloroethylene	4/13/2016	0.25	5	0.5	UG/L	J
524.2 TVOC	7/7/2016	0.49	-1	0	UG/L	
Chloroform	7/7/2016	0.1	7	0.5	UG/L	J
Tetrachloroethylene	7/7/2016	0.39	5	0.5	UG/L	J
524.2 TVOC	12/21/2016	1.21	-1	0	UG/L	
Chloroform	12/21/2016	0.24	7	0.5	UG/L	J
Tetrachloroethylene	12/21/2016	0.97	5	0.5	UG/L	

Site ID : 121-46 (EW-17)

Chemical Name	Sample Date	Value	GW STD	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	0.86	5	0.5	UG/L	
1,1-Dichloroethane	1/12/2016	0.19	5	0.5	UG/L	J
1,1-Dichloroethylene	1/12/2016	0.67	5	0.5	UG/L	
524.2 TVOC	1/12/2016	20.61	-1	0	UG/L	
Carbon tetrachloride	1/12/2016	3.8	5	0.5	UG/L	
Chloroform	1/12/2016	1.2	7	0.5	UG/L	
cis-1,2-Dichloroethylene	1/12/2016	0.15	5	0.5	UG/L	J
Dichlorodifluoromethane	1/12/2016	0.17	5	0.5	UG/L	J
Tetrachloroethylene	1/12/2016	13	5	0.5	UG/L	
Trichloroethylene	1/12/2016	0.57	5	0.5	UG/L	
1,1,1-Trichloroethane	4/13/2016	0.72	5	0.5	UG/L	
1,1-Dichloroethane	4/13/2016	0.19	5	0.5	UG/L	J
1,1-Dichloroethylene	4/13/2016	0.61	5	0.5	UG/L	
524.2 TVOC	4/13/2016	19.15	-1	0	UG/L	
Carbon tetrachloride	4/13/2016	2.7	5	0.5	UG/L	
Chloroform	4/13/2016	1	7	0.5	UG/L	
cis-1,2-Dichloroethylene	4/13/2016	0.19	5	0.5	UG/L	J
Dichlorodifluoromethane	4/13/2016	0.19	5	0.5	UG/L	J
Tetrachloroethylene	4/13/2016	13	5	0.5	UG/L	
Trichloroethylene	4/13/2016	0.55	5	0.5	UG/L	
1,1,1-Trichloroethane	7/7/2016	0.86	5	0.5	UG/L	
1,1-Dichloroethane	7/7/2016	0.18	5	0.5	UG/L	J
1,1-Dichloroethylene	7/7/2016	0.54	5	0.5	UG/L	
524.2 TVOC	7/7/2016	21.12	-1	0	UG/L	
Carbon tetrachloride	7/7/2016	3.6	5	0.5	UG/L	
Chloroform	7/7/2016	1.1	7	0.5	UG/L	
cis-1,2-Dichloroethylene	7/7/2016	0.3	5	0.5	UG/L	J
Tetrachloroethylene	7/7/2016	14	5	0.5	UG/L	
Trichloroethylene	7/7/2016	0.54	5	0.5	UG/L	
1,1,1-Trichloroethane	12/21/2016	1.4	5	0.5	UG/L	
1,1-Dichloroethane	12/21/2016	0.17	5	0.5	UG/L	J
1,1-Dichloroethylene	12/21/2016	1.1	5	0.5	UG/L	
524.2 TVOC	12/21/2016	44.79	-1	0	UG/L	
Carbon tetrachloride	12/21/2016	7.9	5	0.5	UG/L	
Chloroform	12/21/2016	0.8	7	0.5	UG/L	
cis-1,2-Dichloroethylene	12/21/2016	0.32	5	0.5	UG/L	J
Tetrachloroethylene	12/21/2016	32	5	1	UG/L	
Trichloroethylene	12/21/2016	1.1	5	0.5	UG/L	

Table F-15
Extraction Well VOC Data
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Site ID : 122-12 (EW-8)

Chemical Name	Sample Date	Value	GW STD	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	0.14	5	0.5	UG/L	J
524.2 TVOC	1/12/2016	4.55	-1	0	UG/L	
Chloroform	1/12/2016	0.11	7	0.5	UG/L	J
cis-1,2-Dichloroethylene	1/12/2016	3.1	5	0.5	UG/L	
Tetrachloroethylene	1/12/2016	1.2	5	0.5	UG/L	
1,1,1-Trichloroethane	4/13/2016	0.14	5	0.5	UG/L	J
524.2 TVOC	4/13/2016	4.86	-1	0	UG/L	
Chloroform	4/13/2016	0.14	7	0.5	UG/L	J
cis-1,2-Dichloroethylene	4/13/2016	2.8	5	0.5	UG/L	
Tetrachloroethylene	4/13/2016	1.5	5	0.5	UG/L	
Trichloroethylene	4/13/2016	0.28	5	0.5	UG/L	J
524.2 TVOC	7/7/2016	3.8	-1	0	UG/L	
cis-1,2-Dichloroethylene	7/7/2016	2.7	5	0.5	UG/L	
Tetrachloroethylene	7/7/2016	1.1	5	0.5	UG/L	
524.2 TVOC	12/21/2016	6.55	-1	0	UG/L	
Chloroform	12/21/2016	0.11	7	0.5	UG/L	J
cis-1,2-Dichloroethylene	12/21/2016	5.2	5	0.5	UG/L	
Tetrachloroethylene	12/21/2016	0.94	5	0.5	UG/L	
Trichloroethylene	12/21/2016	0.3	5	0.5	UG/L	J

Site ID : 122-13 (EW-7)

Chemical Name	Sample Date	Value	GW STD	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	0.31	5	0.5	UG/L	J
1,1-Dichloroethylene	1/12/2016	0.24	5	0.5	UG/L	J
524.2 TVOC	1/12/2016	4.02	-1	0	UG/L	
Carbon tetrachloride	1/12/2016	0.83	5	0.5	UG/L	
Chloroform	1/12/2016	0.41	7	0.5	UG/L	J
cis-1,2-Dichloroethylene	1/12/2016	0.23	5	0.5	UG/L	J
Tetrachloroethylene	1/12/2016	2	5	0.5	UG/L	
1,1,1-Trichloroethane	4/13/2016	0.17	5	0.5	UG/L	J
1,1-Dichloroethylene	4/13/2016	0.14	5	0.5	UG/L	J
524.2 TVOC	4/13/2016	2.152	-1	0	UG/L	
Chloroform	4/13/2016	0.4	7	0.5	UG/L	J
cis-1,2-Dichloroethylene	4/13/2016	0.72	5	0.5	UG/L	
Dichlorodifluoromethane	4/13/2016	0.082	5	0.5	UG/L	J
Tetrachloroethylene	4/13/2016	0.64	5	0.5	UG/L	
524.2 TVOC	7/7/2016	1.35	-1	0	UG/L	
Chloroform	7/7/2016	0.28	7	0.5	UG/L	J
cis-1,2-Dichloroethylene	7/7/2016	0.29	5	0.5	UG/L	J
Methyl tert-butyl ether	7/7/2016	0.17	10	0.5	UG/L	J
Tetrachloroethylene	7/7/2016	0.61	5	0.5	UG/L	
524.2 TVOC	12/21/2016	0.96	-1	0	UG/L	
Chloroform	12/21/2016	0.26	7	0.5	UG/L	J
cis-1,2-Dichloroethylene	12/21/2016	0.22	5	0.5	UG/L	J
Tetrachloroethylene	12/21/2016	0.48	5	0.5	UG/L	J

Table F-15
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OU III South Boundary System

2016 BNL Groundwater Status Report

Site ID : 122-14 (EW-6)

Chemical Name	Sample Date	Value	GW STD	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	0.23	5	0.5	UG/L	J
524.2 TVOC	1/12/2016	7.48	-1	0	UG/L	
Carbon tetrachloride	1/12/2016	0.58	5	0.5	UG/L	
Chloroform	1/12/2016	0.57	7	0.5	UG/L	
Tetrachloroethylene	1/12/2016	6.1	5	0.5	UG/L	
1,1,1-Trichloroethane	4/13/2016	0.14	5	0.5	UG/L	J
1,1-Dichloroethane	4/13/2016	0.083	5	0.5	UG/L	J
1,1-Dichloroethylene	4/13/2016	0.14	5	0.5	UG/L	J
524.2 TVOC	4/13/2016	6.173	-1	0	UG/L	
Carbon tetrachloride	4/13/2016	0.4	5	0.5	UG/L	J
Chloroform	4/13/2016	0.62	7	0.5	UG/L	
cis-1,2-Dichloroethylene	4/13/2016	0.09	5	0.5	UG/L	J
Tetrachloroethylene	4/13/2016	4.7	5	0.5	UG/L	
1,1,1-Trichloroethane	12/21/2016	0.22	5	0.5	UG/L	J
1,1-Dichloroethylene	12/21/2016	0.12	5	0.5	UG/L	J
524.2 TVOC	12/21/2016	2.64	-1	0	UG/L	
Chloroform	12/21/2016	0.35	7	0.5	UG/L	J
cis-1,2-Dichloroethylene	12/21/2016	0.25	5	0.5	UG/L	J
Tetrachloroethylene	12/21/2016	1.7	5	0.5	UG/L	

Table F-16
Air Stripper Influent VOC Data
OU III South Boundary System

2016 BNL Groundwater Status Report

Site ID : 121-41 (Combo Inf.)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/12/2016	0.31	0.5	UG/L	J
1,1-Dichloroethane	1/12/2016	0.088	0.5	UG/L	J
1,1-Dichloroethylene	1/12/2016	0.28	0.5	UG/L	J
524.2 TVOC	1/12/2016	8.928	0	UG/L	
Carbon tetrachloride	1/12/2016	1.1	0.5	UG/L	
Chloroform	1/12/2016	0.53	0.5	UG/L	
cis-1,2-Dichloroethylene	1/12/2016	0.43	0.5	UG/L	J
Tetrachloroethylene	1/12/2016	5.9	0.5	UG/L	
Trichloroethylene	1/12/2016	0.29	0.5	UG/L	J
1,1,1-Trichloroethane	2/18/2016	1.03	1	UG/L	
1,1-Dichloroethylene	2/18/2016	0.74	1	UG/L	J
624 TVOC	2/18/2016	24.56	0	UG/L	
Carbon tetrachloride	2/18/2016	4.39	1	UG/L	
Chloroform	2/18/2016	1.33	1	UG/L	
Tetrachloroethylene	2/18/2016	16.4	1	UG/L	
Trichloroethylene	2/18/2016	0.67	1	UG/L	J
1,1,1-Trichloroethane	3/7/2016	0.6	0.5	UG/L	
1,1-Dichloroethane	3/7/2016	0.14	0.5	UG/L	J
1,1-Dichloroethylene	3/7/2016	0.42	0.5	UG/L	J
524.2 TVOC	3/7/2016	17.614	0	UG/L	
Carbon tetrachloride	3/7/2016	2.9	0.5	UG/L	
Chloroform	3/7/2016	0.95	0.5	UG/L	
cis-1,2-Dichloroethylene	3/7/2016	0.094	0.5	UG/L	J
Dichlorodifluoromethane	3/7/2016	0.11	0.5	UG/L	J
Tetrachloroethylene	3/7/2016	12	0.5	UG/L	
Trichloroethylene	3/7/2016	0.4	0.5	UG/L	J
1,1,1-Trichloroethane	4/13/2016	0.32	0.5	UG/L	J
1,1-Dichloroethane	4/13/2016	0.1	0.5	UG/L	J
1,1-Dichloroethylene	4/13/2016	0.28	0.5	UG/L	J
524.2 TVOC	4/13/2016	8.267	0	UG/L	
Carbon tetrachloride	4/13/2016	0.83	0.5	UG/L	
Chloroform	4/13/2016	0.57	0.5	UG/L	
cis-1,2-Dichloroethylene	4/13/2016	0.42	0.5	UG/L	J
Dichlorodifluoromethane	4/13/2016	0.097	0.5	UG/L	J
Tetrachloroethylene	4/13/2016	5.4	0.5	UG/L	
Trichloroethylene	4/13/2016	0.25	0.5	UG/L	J
1,1,1-Trichloroethane	5/3/2016	0.75	0.5	UG/L	
1,1-Dichloroethane	5/3/2016	0.15	0.5	UG/L	J
1,1-Dichloroethylene	5/3/2016	0.56	0.5	UG/L	
524.2 TVOC	5/3/2016	23.08	0	UG/L	
Carbon tetrachloride	5/3/2016	2.9	0.5	UG/L	
Chloroform	5/3/2016	0.95	0.5	UG/L	
cis-1,2-Dichloroethylene	5/3/2016	0.18	0.5	UG/L	J
Dichlorodifluoromethane	5/3/2016	0.13	0.5	UG/L	J
Tetrachloroethylene	5/3/2016	17	0.5	UG/L	
Trichloroethylene	5/3/2016	0.46	0.5	UG/L	J

Table F-16
Air Stripper Influent VOC Data
OU III South Boundary System

2016 BNL Groundwater Status Report

Site ID : 121-41 (Combo Inf.)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	6/2/2016	0.75	0.5	UG/L	
1,1-Dichloroethylene	6/2/2016	0.44	0.5	UG/L	J
524.2 TVOC	6/2/2016	17.26	0	UG/L	
Carbon tetrachloride	6/2/2016	2.6	0.5	UG/L	
Chloroform	6/2/2016	0.98	0.5	UG/L	
cis-1,2-Dichloroethylene	6/2/2016	0.11	0.5	UG/L	J
Tetrachloroethylene	6/2/2016	12	0.5	UG/L	
Trichloroethylene	6/2/2016	0.38	0.5	UG/L	J
1,1,1-Trichloroethane	7/7/2016	0.31	0.5	UG/L	J
1,1-Dichloroethane	7/7/2016	0.071	0.5	UG/L	J
1,1-Dichloroethylene	7/7/2016	0.21	0.5	UG/L	J
524.2 TVOC	7/7/2016	8.101	0	UG/L	
Carbon tetrachloride	7/7/2016	0.91	0.5	UG/L	
Chloroform	7/7/2016	0.5	0.5	UG/L	
cis-1,2-Dichloroethylene	7/7/2016	0.52	0.5	UG/L	
Tetrachloroethylene	7/7/2016	5.3	0.5	UG/L	
Trichloroethylene	7/7/2016	0.28	0.5	UG/L	J
1,1,1-Trichloroethane	8/2/2016	0.54	0.5	UG/L	
1,1-Dichloroethane	8/2/2016	0.12	0.5	UG/L	J
1,1-Dichloroethylene	8/2/2016	0.45	0.5	UG/L	J
524.2 TVOC	8/2/2016	16.52	0	UG/L	
Carbon tetrachloride	8/2/2016	2.1	0.5	UG/L	
Chloroform	8/2/2016	0.78	0.5	UG/L	
cis-1,2-Dichloroethylene	8/2/2016	0.11	0.5	UG/L	J
Tetrachloroethylene	8/2/2016	12	0.5	UG/L	
Trichloroethylene	8/2/2016	0.42	0.5	UG/L	J
1,1,1-Trichloroethane	9/7/2016	0.57	0.5	UG/L	
1,1-Dichloroethane	9/7/2016	0.14	0.5	UG/L	J
1,1-Dichloroethylene	9/7/2016	0.5	0.5	UG/L	
524.2 TVOC	9/7/2016	17.97	0	UG/L	
Carbon tetrachloride	9/7/2016	2.3	0.5	UG/L	
Chloroform	9/7/2016	0.89	0.5	UG/L	
cis-1,2-Dichloroethylene	9/7/2016	0.12	0.5	UG/L	J
Tetrachloroethylene	9/7/2016	13	0.5	UG/L	
Trichloroethylene	9/7/2016	0.45	0.5	UG/L	J
1,1,1-Trichloroethane	12/21/2016	0.71	0.5	UG/L	
1,1-Dichloroethane	12/21/2016	0.16	0.5	UG/L	J
1,1-Dichloroethylene	12/21/2016	0.5	0.5	UG/L	
524.2 TVOC	12/21/2016	24.92	0	UG/L	
Carbon tetrachloride	12/21/2016	3.2	0.5	UG/L	
Chloroform	12/21/2016	0.64	0.5	UG/L	
cis-1,2-Dichloroethylene	12/21/2016	0.13	0.5	UG/L	J
Tetrachloroethylene	12/21/2016	19	0.5	UG/L	
Trichloroethylene	12/21/2016	0.58	0.5	UG/L	

Table F-17
Air Stripper Effluent VOC Data
OUIII South Boundary System

2016 BNL Groundwater Status Report

Site ID : 095-126 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
524.2 TVOC	1/12/2016	0	0	UG/L	
624 TVOC	2/18/2016	0	0	UG/L	
524.2 TVOC	3/7/2016	0	0	UG/L	
524.2 TVOC	4/13/2016	0	0	UG/L	
524.2 TVOC	5/3/2016	0	0	UG/L	
524.2 TVOC	6/2/2016	0	0	UG/L	
524.2 TVOC	7/7/2016	0	0	UG/L	
524.2 TVOC	8/2/2016	0	0	UG/L	
524.2 TVOC	9/7/2016	0	0	UG/L	
524.2 TVOC	12/21/2016	0	0	UG/L	

Table F-18
Cumulative Mass Removal
OU III South Boundary System

2016 BNL Groundwater Status Report

Date Sampled	Total VOC's (ug/L)	Flow Rates (gpm)	Cumulative VOC's (lbs)
1/12/2016	8.928	232	3015.15
2/18/2016	24.56	235	3017.71
3/7/2016	17.614	341	3019.01
4/13/2016	8.26	231	3019.89
5/3/2016	23.08	194	3021.93
6/2/2016	17.26	262	3022.56
7/7/2016	8.101	271	3023.48
8/2/2016	16.52	289	3024.97
9/7/2016	17.97	87	3025.65
12/21/2016	24.92	36	3026.78

ug/L Micrograms per liter
gpm Gallons per minute
lbs Pounds

OU III Western South Boundary System

Table F-19
Extraction Wells VOC Data
OU III Western South Boundary System

2016 BNL Groundwater Status Report

Site ID : 126-12 (WSB-1)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	4.2	0.5	UG/L	
1,1-Dichloroethylene	1/5/2016	4.1	0.5	UG/L	
524.2 TVOC	1/5/2016	10.9	0	UG/L	
Chloroform	1/5/2016	1.2	0.5	UG/L	
Dichlorodifluoromethane	1/5/2016	0.74	0.5	UG/L	
Trichloroethylene	1/5/2016	0.66	0.5	UG/L	
1,1,1-Trichloroethane	4/11/2016	4	0.5	UG/L	
1,1-Dichloroethane	4/11/2016	0.22	0.5	UG/L	J
1,1-Dichloroethylene	4/11/2016	3.9	0.5	UG/L	
524.2 TVOC	4/11/2016	11.6	0	UG/L	
Chloroform	4/11/2016	1.2	0.5	UG/L	
Dichlorodifluoromethane	4/11/2016	0.64	0.5	UG/L	
Methylene chloride	4/11/2016	0.9	0.5	UG/L	
Trichloroethylene	4/11/2016	0.74	0.5	UG/L	
1,1,1-Trichloroethane	7/11/2016	3.6	0.5	UG/L	
1,1-Dichloroethane	7/11/2016	0.17	0.5	UG/L	J
1,1-Dichloroethylene	7/11/2016	3.8	0.5	UG/L	
524.2 TVOC	7/11/2016	10.15	0	UG/L	
Chloroform	7/11/2016	1	0.5	UG/L	
Dichlorodifluoromethane	7/11/2016	0.75	0.5	UG/L	
Trichloroethylene	7/11/2016	0.83	0.5	UG/L	
1,1,1-Trichloroethane	10/6/2016	3	0.5	UG/L	
1,1-Dichloroethane	10/6/2016	0.18	0.5	UG/L	J
1,1-Dichloroethylene	10/6/2016	2.4	0.5	UG/L	
524.2 TVOC	10/6/2016	7.8	0	UG/L	
Chloroform	10/6/2016	0.92	0.5	UG/L	
Dichlorodifluoromethane	10/6/2016	0.67	0.5	UG/L	
Trichloroethylene	10/6/2016	0.63	0.5	UG/L	

Table F-19
Extraction Wells VOC Data
OU III Western South Boundary System

2016 BNL Groundwater Status Report

Site ID : 127-05 (WSB-2)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	0.42	0.5	UG/L	J
1,1-Dichloroethane	1/5/2016	0.24	0.5	UG/L	J
1,1-Dichloroethylene	1/5/2016	0.51	0.5	UG/L	
524.2 TVOC	1/5/2016	2.68	0	UG/L	
Chloroform	1/5/2016	0.44	0.5	UG/L	J
Dichlorodifluoromethane	1/5/2016	0.4	0.5	UG/L	J
Trichloroethylene	1/5/2016	0.67	0.5	UG/L	
1,1,1-Trichloroethane	4/11/2016	0.43	0.5	UG/L	J
1,1-Dichloroethane	4/11/2016	0.21	0.5	UG/L	J
1,1-Dichloroethylene	4/11/2016	0.42	0.5	UG/L	J
524.2 TVOC	4/11/2016	3.76	0	UG/L	
Chloroform	4/11/2016	0.4	0.5	UG/L	J
Dichlorodifluoromethane	4/11/2016	0.38	0.5	UG/L	J
Methylene chloride	4/11/2016	1.2	0.5	UG/L	
Trichloroethylene	4/11/2016	0.72	0.5	UG/L	
1,1,1-Trichloroethane	7/11/2016	0.38	0.5	UG/L	J
1,1-Dichloroethane	7/11/2016	0.19	0.5	UG/L	J
1,1-Dichloroethylene	7/11/2016	0.43	0.5	UG/L	J
524.2 TVOC	7/11/2016	2.44	0	UG/L	
Chloroform	7/11/2016	0.36	0.5	UG/L	J
Dichlorodifluoromethane	7/11/2016	0.34	0.5	UG/L	J
Trichloroethylene	7/11/2016	0.74	0.5	UG/L	
1,1,1-Trichloroethane	10/6/2016	0.89	0.5	UG/L	
1,1-Dichloroethane	10/6/2016	0.36	0.5	UG/L	J
1,1-Dichloroethylene	10/6/2016	0.83	0.5	UG/L	
524.2 TVOC	10/6/2016	5.05	0	UG/L	
Chloroform	10/6/2016	0.92	0.5	UG/L	
Dichlorodifluoromethane	10/6/2016	0.65	0.5	UG/L	
Trichloroethylene	10/6/2016	1.4	0.5	UG/L	

Table F-20
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Site ID : 119-04 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	2.3	0.5	UG/L	
1,1-Dichloroethane	1/5/2016	0.22	0.5	UG/L	J
1,1-Dichloroethylene	1/5/2016	2.3	0.5	UG/L	
1,2-Dichloroethane	1/5/2016	0.12	0.5	UG/L	J
524.2 TVOC	1/5/2016	6.91	0	UG/L	
Chloroform	1/5/2016	0.78	0.5	UG/L	
Dichlorodifluoromethane	1/5/2016	0.55	0.5	UG/L	
Trichloroethylene	1/5/2016	0.64	0.5	UG/L	
1,1,1-Trichloroethane	1/20/2016	2.3	0.5	UG/L	
1,1-Dichloroethane	1/20/2016	0.2	0.5	UG/L	J
1,1-Dichloroethylene	1/20/2016	2.4	0.5	UG/L	
524.2 TVOC	1/20/2016	6.77	0	UG/L	
Chloroform	1/20/2016	0.74	0.5	UG/L	
Dichlorodifluoromethane	1/20/2016	0.46	0.5	UG/L	J
Trichloroethylene	1/20/2016	0.67	0.5	UG/L	
1,1,1-Trichloroethane	2/17/2016	4.85	1	UG/L	
1,1-Dichloroethylene	2/17/2016	3.97	1	UG/L	
624 TVOC	2/17/2016	11.71	0	UG/L	
Chloroform	2/17/2016	1.27	1	UG/L	
Dichlorodifluoromethane	2/17/2016	0.84	1	UG/L	J
Trichloroethylene	2/17/2016	0.78	1	UG/L	J
1,1,1-Trichloroethane	3/2/2016	4.8	0.5	UG/L	
1,1-Dichloroethane	3/2/2016	0.21	0.5	UG/L	J
1,1-Dichloroethylene	3/2/2016	4.5	0.5	UG/L	
524.2 TVOC	3/2/2016	12.38	0	UG/L	
Chloroform	3/2/2016	1.2	0.5	UG/L	
Dichlorodifluoromethane	3/2/2016	0.88	0.5	UG/L	
Trichloroethylene	3/2/2016	0.79	0.5	UG/L	
1,1,1-Trichloroethane	3/14/2016	4.5	0.5	UG/L	
1,1-Dichloroethane	3/14/2016	0.21	0.5	UG/L	J
1,1-Dichloroethylene	3/14/2016	4.5	0.5	UG/L	
524.2 TVOC	3/14/2016	11.96	0	UG/L	
Chloroform	3/14/2016	1.2	0.5	UG/L	
Dichlorodifluoromethane	3/14/2016	0.79	0.5	UG/L	
Trichloroethylene	3/14/2016	0.76	0.5	UG/L	
1,1,1-Trichloroethane	4/11/2016	2.2	0.5	UG/L	
1,1-Dichloroethane	4/11/2016	0.18	0.5	UG/L	J
1,1-Dichloroethylene	4/11/2016	2.1	0.5	UG/L	
524.2 TVOC	4/11/2016	7.31	0	UG/L	
Chloroform	4/11/2016	0.81	0.5	UG/L	
Dichlorodifluoromethane	4/11/2016	0.48	0.5	UG/L	J
Methylene chloride	4/11/2016	0.77	0.5	UG/L	
Trichloroethylene	4/11/2016	0.77	0.5	UG/L	
1,1,1-Trichloroethane	4/25/2016	2.2	0.5	UG/L	
1,1-Dichloroethane	4/25/2016	0.2	0.5	UG/L	J
1,1-Dichloroethylene	4/25/2016	2.2	0.5	UG/L	
524.2 TVOC	4/25/2016	6.66	0	UG/L	
Chloroform	4/25/2016	0.76	0.5	UG/L	
Dichlorodifluoromethane	4/25/2016	0.55	0.5	UG/L	

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Site ID : 119-04 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	2.3	0.5	UG/L	
Trichloroethylene	4/25/2016	0.75	0.5	UG/L	
1,1,1-Trichloroethane	5/3/2016	4.3	0.5	UG/L	
1,1-Dichloroethane	5/3/2016	0.22	0.5	UG/L	J
1,1-Dichloroethylene	5/3/2016	4.2	0.5	UG/L	
524.2 TVOC	5/3/2016	11.53	0	UG/L	
Chloroform	5/3/2016	1.2	0.5	UG/L	
Dichlorodifluoromethane	5/3/2016	0.83	0.5	UG/L	
Trichloroethylene	5/3/2016	0.78	0.5	UG/L	
1,1,1-Trichloroethane	5/16/2016	3.6	0.5	UG/L	
1,1-Dichloroethane	5/16/2016	0.2	0.5	UG/L	J
1,1-Dichloroethylene	5/16/2016	3.2	0.5	UG/L	
524.2 TVOC	5/16/2016	9.4	0	UG/L	
Chloroform	5/16/2016	1.1	0.5	UG/L	
Dichlorodifluoromethane	5/16/2016	0.63	0.5	UG/L	
Trichloroethylene	5/16/2016	0.67	0.5	UG/L	
1,1,1-Trichloroethane	6/7/2016	4.4	0.5	UG/L	
1,1-Dichloroethane	6/7/2016	0.18	0.5	UG/L	J
1,1-Dichloroethylene	6/7/2016	4	0.5	UG/L	
524.2 TVOC	6/7/2016	10.82	0	UG/L	
Chloroform	6/7/2016	1.1	0.5	UG/L	
Dichlorodifluoromethane	6/7/2016	0.39	0.5	UG/L	J
Trichloroethylene	6/7/2016	0.75	0.5	UG/L	
1,1,1-Trichloroethane	6/20/2016	3.6	0.5	UG/L	
1,1-Dichloroethane	6/20/2016	0.19	0.5	UG/L	J
1,1-Dichloroethylene	6/20/2016	3.7	0.5	UG/L	
524.2 TVOC	6/20/2016	9.89	0	UG/L	
Chloroform	6/20/2016	0.99	0.5	UG/L	
Dichlorodifluoromethane	6/20/2016	0.75	0.5	UG/L	
Trichloroethylene	6/20/2016	0.66	0.5	UG/L	
1,1,1-Trichloroethane	7/11/2016	2	0.5	UG/L	
1,1-Dichloroethane	7/11/2016	0.23	0.5	UG/L	J
1,1-Dichloroethylene	7/11/2016	2.2	0.5	UG/L	
524.2 TVOC	7/11/2016	6.53	0	UG/L	
Chloroform	7/11/2016	0.71	0.5	UG/L	
Dichlorodifluoromethane	7/11/2016	0.63	0.5	UG/L	
Trichloroethylene	7/11/2016	0.76	0.5	UG/L	
1,1,1-Trichloroethane	7/25/2016	1.83	1	UG/L	
1,1-Dichloroethylene	7/25/2016	1.8	1	UG/L	
624 TVOC	7/25/2016	4.89	0	UG/L	
Chloroform	7/25/2016	0.66	1	UG/L	J
Trichloroethylene	7/25/2016	0.6	1	UG/L	J
1,1,1-Trichloroethane	8/2/2016	4	0.5	UG/L	
1,1-Dichloroethane	8/2/2016	0.2	0.5	UG/L	J
1,1-Dichloroethylene	8/2/2016	4.3	0.5	UG/L	
524.2 TVOC	8/2/2016	11.28	0	UG/L	
Chloroform	8/2/2016	1.2	0.5	UG/L	
Dichlorodifluoromethane	8/2/2016	0.8	0.5	UG/L	
Trichloroethylene	8/2/2016	0.78	0.5	UG/L	

Table F-20
Air Stripper Influent Data
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Site ID : 119-04 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	2.3	0.5	UG/L	
1,1,1-Trichloroethane	8/15/2016	3.4	0.5	UG/L	
1,1-Dichloroethane	8/15/2016	0.18	0.5	UG/L	J
1,1-Dichloroethylene	8/15/2016	3.8	0.5	UG/L	
524.2 TVOC	8/15/2016	9.74	0	UG/L	
Chloroform	8/15/2016	0.98	0.5	UG/L	
Dichlorodifluoromethane	8/15/2016	0.71	0.5	UG/L	
Trichloroethylene	8/15/2016	0.67	0.5	UG/L	
1,1,1-Trichloroethane	9/1/2016	3.1	0.5	UG/L	
1,1-Dichloroethane	9/1/2016	0.18	0.5	UG/L	J
1,1-Dichloroethylene	9/1/2016	3.5	0.5	UG/L	
524.2 TVOC	9/1/2016	9.12	0	UG/L	
Chloroform	9/1/2016	0.96	0.5	UG/L	
Dichlorodifluoromethane	9/1/2016	0.73	0.5	UG/L	
Trichloroethylene	9/1/2016	0.65	0.5	UG/L	
1,1,1-Trichloroethane	9/15/2016	3.1	0.5	UG/L	
1,1-Dichloroethane	9/15/2016	0.18	0.5	UG/L	J
1,1-Dichloroethylene	9/15/2016	3.5	0.5	UG/L	
524.2 TVOC	9/15/2016	9.37	0	UG/L	
Chloroform	9/15/2016	0.91	0.5	UG/L	
Dichlorodifluoromethane	9/15/2016	0.78	0.5	UG/L	
Methyl chloride	9/15/2016	0.21	0.5	UG/L	J
Trichloroethylene	9/15/2016	0.69	0.5	UG/L	
1,1,1-Trichloroethane	10/6/2016	3.2	0.5	UG/L	
1,1-Dichloroethane	10/6/2016	0.19	0.5	UG/L	J
1,1-Dichloroethylene	10/6/2016	3.7	0.5	UG/L	
524.2 TVOC	10/6/2016	9.55	0	UG/L	
Chloroform	10/6/2016	1	0.5	UG/L	
Dichlorodifluoromethane	10/6/2016	0.76	0.5	UG/L	
Trichloroethylene	10/6/2016	0.7	0.5	UG/L	
1,1,1-Trichloroethane	10/17/2016	2.9	0.5	UG/L	
1,1-Dichloroethane	10/17/2016	0.17	0.5	UG/L	J
1,1-Dichloroethylene	10/17/2016	3.3	0.5	UG/L	
524.2 TVOC	10/17/2016	8.55	0	UG/L	
Chloroform	10/17/2016	0.9	0.5	UG/L	
Dichlorodifluoromethane	10/17/2016	0.68	0.5	UG/L	
Trichloroethylene	10/17/2016	0.6	0.5	UG/L	
1,1,1-Trichloroethane	11/1/2016	3.1	0.5	UG/L	
1,1-Dichloroethylene	11/1/2016	3.6	0.5	UG/L	
524.2 TVOC	11/1/2016	9.09	0	UG/L	
Chloroform	11/1/2016	0.99	0.5	UG/L	
Dichlorodifluoromethane	11/1/2016	0.73	0.5	UG/L	
Trichloroethylene	11/1/2016	0.67	0.5	UG/L	
1,1,1-Trichloroethane	11/17/2016	3	0.5	UG/L	
1,1-Dichloroethane	11/17/2016	0.17	0.5	UG/L	J
1,1-Dichloroethylene	11/17/2016	3.5	0.5	UG/L	
524.2 TVOC	11/17/2016	9.08	0	UG/L	
Chloroform	11/17/2016	0.97	0.5	UG/L	
Dichlorodifluoromethane	11/17/2016	0.74	0.5	UG/L	

Table F-20
Air Stripper Influent Data
OU III Western South Boundary System

2016 BNL Groundwater Status Report

Site ID : 119-04 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	2.3	0.5	UG/L	
Trichloroethylene	11/17/2016	0.7	0.5	UG/L	
1,1,1-Trichloroethane	12/1/2016	3	0.5	UG/L	
1,1-Dichloroethane	12/1/2016	0.17	0.5	UG/L	J
1,1-Dichloroethylene	12/1/2016	3.5	0.5	UG/L	
524.2 TVOC	12/1/2016	8.94	0	UG/L	
Chloroform	12/1/2016	0.96	0.5	UG/L	
Dichlorodifluoromethane	12/1/2016	0.69	0.5	UG/L	
Trichloroethylene	12/1/2016	0.62	0.5	UG/L	
1,1,1-Trichloroethane	12/13/2016	3.1	0.5	UG/L	
1,1-Dichloroethane	12/13/2016	0.2	0.5	UG/L	J
1,1-Dichloroethylene	12/13/2016	3.4	0.5	UG/L	
524.2 TVOC	12/13/2016	9.14	0	UG/L	
Chloroform	12/13/2016	1	0.5	UG/L	
Dichlorodifluoromethane	12/13/2016	0.76	0.5	UG/L	
Trichloroethylene	12/13/2016	0.68	0.5	UG/L	

Table F-21
Air Stripper Effluent Data
OU III Western South Boundary System

2016 BNL Groundwater Status Report

Site ID : 119-05 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
524.2 TVOC	1/5/2016	0	0	UG/L	
524.2 TVOC	1/20/2016	0	0	UG/L	
624 TVOC	2/17/2016	0	0	UG/L	
524.2 TVOC	3/2/2016	0	0	UG/L	
524.2 TVOC	3/14/2016	0	0	UG/L	
524.2 TVOC	4/11/2016	0.13	0	UG/L	
Methyl chloride	4/11/2016	0.13	0.5	UG/L	J
524.2 TVOC	4/25/2016	0	0	UG/L	
524.2 TVOC	5/3/2016	0	0	UG/L	
524.2 TVOC	5/16/2016	0	0	UG/L	
524.2 TVOC	6/7/2016	0	0	UG/L	
524.2 TVOC	6/20/2016	0	0	UG/L	
524.2 TVOC	7/11/2016	0	0	UG/L	
624 TVOC	7/25/2016	0	0	UG/L	
524.2 TVOC	8/2/2016	0	0	UG/L	
524.2 TVOC	8/15/2016	0	0	UG/L	
524.2 TVOC	9/1/2016	0	0	UG/L	
524.2 TVOC	9/15/2016	0	0	UG/L	
524.2 TVOC	10/6/2016	0	0	UG/L	
524.2 TVOC	10/17/2016	0	0	UG/L	
524.2 TVOC	11/1/2016	0	0	UG/L	
524.2 TVOC	11/17/2016	0	0	UG/L	
524.2 TVOC	12/1/2016	0	0	UG/L	
524.2 TVOC	12/13/2016	0	0	UG/L	

Table F-22
OU III Western South Boundary System
Cumulative Mass Removal

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Date Sampled	Total VOCs ($\mu\text{g/L}$)	Flow Rates (gpm)	Cumulative VOCs (lbs)
1/5/16	6.91	249	130.04
2/17/16	11.71	168	130.56
3/14/16	11.96	180	131.19
4/25/16	6.66	363	131.92
5/16/16	9.4	288	132.33
6/20/16	9.89	90	132.60
7/25/16	4.89	258	133.03
8/15/16	9.74	250	133.78
9/15/16	9.37	120	134.10
10/17/16	8.55	171	134.55
11/17/16	9.08	156	134.96
12/13/16	9.14	174	135.41

NOTES:

$\mu\text{g/L}$ - Micrograms per liter

gpm - Gallons per minute

lbs - Pounds

OU III Industrial Park System

TABLE F-23
TVOC Influent, Effluent and Efficiency Performance
OU III Industrial Park System

2016 BNL Groundwater Status Report

Date	UVB1			UVB2			UVB3			UVB4			UVB5			UVB6			UVB7		
	Infl	Eff	Efficiency	Infl	Eff	Efficiency	Infl	Eff	Efficiency	Infl	Eff	Efficiency	Infl	Eff	Efficiency	Infl	Eff	Efficiency	Infl	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 ^a	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 ^a	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 ^a	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 ^a	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 ^s	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
1/29/2003	9.8	0	100.00	188.2	14	92.56	51.8	3.7	92.86	103.2	9.5	90.79	168.7	8.9	94.72	185	6.8	96.32	61	2.1	96.56
2/25/2003	7.3	0.7	90.41	157.2	10.4	93.38	57.2	4.8	91.61	92.7	11.2	87.92	188.4	11.3	94.00	144	8.4	94.17	54.4	1.8	96.69

TABLE F-23
TVOC Influent, Effluent and Efficiency Performance
OU III Industrial Park System

2016 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)	(%)
3/20/2003	6.1	0	100.00	129.5	10.5	91.89	58.2	4.8	91.75	93.6	13.1	86.00	154.4	9.5	93.85	148.7	10.1	93.21	58.7	2.7	95.40
4/30/2003	7.1	0	100.00	133.7	10.2	92.37	41.7	2.9	93.05	79.2	11.1	85.98	127.6	12	90.60	101.7	7.3	92.82	34.1	0.9	97.36
5/31/2003	7.1	0	100.00	123.6	10.5	91.50	51.7	5.1	90.14	87.3	12.9	85.22	144	14.9	89.65	183	8	95.63	50.4	2	96.03
6/30/2003	4.6	1	78.26	176.5	10.2	94.22	46	4.9	89.35	79	11.3	85.70	134.9	13.6	89.92	146.8	10.3	92.98	50.6	2.1	95.85
7/31/2003	5.4	1.2	77.78	153.1	14.6	90.46	2.2	0	100.00	73	13.3	81.78	147.3	13.9	90.56	153.1	13.5	91.18	51.7	1.8	96.52
8/31/2003	5.7	0.9	84.21	158.8	16.6	89.55	49.8	5.6	88.76	68.2	13.2	80.65	121.8	13.2	89.16	132.1	14	89.40	46.9	1	97.87
9/30/2003	5	0	100.00	158.8	16.6	89.55	49.3	5.2	89.45	61.9	12.5	79.81	121.7	12.5	89.73	124.7	12	90.38	54.1	0.8	98.52
10/31/2003	2.16	0	100.00	132.79	14.53	89.06	42.87	4.01	90.65	49.7	9.82	80.24	99.74	10.8	89.17	110.23	10.66	90.33	35.98	0.98	97.28
11/30/2003	3.79	0	100.00	226.15	20.3	91.02	33.86	2.88	91.49	46.57	9.35	79.92	97.64	10.75	88.99	103.49	10.59	89.77	40.4	1.5	96.29
12/31/2003	1.99	0	100.00	361	74.4	79.39	36.7	3.03	91.74	48.42	8	83.48	92.79	10.56	88.62	105.01	7.39	92.96	45.21	0.76	98.32
1/26/2004	1.99	0.00	100.00	151.26	23.04	84.77	36.7	3.03	91.74	46.33	8.08	82.56	86.35	10.27	88.11	100.20	14.96	85.07	NA	NA	NA
2/25/2004	1.99	0.73	63.32	149.61	13.53	90.96	36.7	3.03	91.74	46.33	17.54	62.14	99.76	10.28	89.70	106.66	9.28	91.30	70.37	1.58	97.75
3/24/2004	2.06	0.69	66.50	133.38	12.63	90.53	36.7	3.03	91.74	44.82	14.33	68.03	77.91	11.86	84.78	88.61	8.02	90.95	70.37	1.58	97.75
4/27/2004	1.53	1.10	28.10	100.13	17.10	82.92	36.7	3.03	91.74	47.43	12.70	73.22	77.91	11.86	84.78	96.83	11.27	88.36	66.79	3.42	94.88
5/27/2004	3.65	1.12	69.32	123.20	16.54	86.57	36.7	3.03	91.74	47.88	12.70	73.48	77.91	11.86	84.78	99.49	12.09	87.85	65.11	4.15	93.63
6/29/2004	4.59	4.10	10.68	123.20	21.02	82.94	124.00	14.14	88.60	47.54	9.50	80.02	91.17	14.42	84.18	82.67	10.87	86.85	58.85	3.69	93.73
7/23/2004	4.59	4.10	10.68	NA	NA	NA	56.04	5.32	90.51	47.54	9.50	80.02	91.17	14.42	84.18	82.67	10.87	86.85	58.85	3.69	93.73
8/26/2004	2.96	0.22	92.53	190.88	0.00	100.00	56.04	5.32	90.51	43.70	9.43	78.42	91.17	12.78	85.98	36.75	13.28	63.86	55.34	2.29	95.86
9/21/2004	3.06	0.25	91.83	190.88	0.00	100.00	56.04	5.32	90.51	46.90	12.38	73.60	89.51	9.95	88.88	91.49	9.91	89.17	54.95	2.43	95.58
10/26/2004	2.82	0.13	95.39	190.88	0.00	100.00	52.13	5.50	89.45	37.35	9.00	75.90	97.02	12.62	86.99	67.00	8.21	87.75	51.39	3.08	94.01
11/23/2004	1.89	0.00	100.00	NA	NA	NA	52.13	5.50	89.45	34.74	9.87	71.59	60.84	11.50	81.10	64.01	6.92	89.19	52.40	2.77	94.71
12/15/2004	5.49	0.00	100.00	190.88	0.00	100.00	52.13	5.50	89.45	36.32	9.60	73.57	92.09	12.41	86.52	65.59	7.08	89.21	57.16	2.77	95.15
1/31/2005	3.34	0.66	80.24	115.00	10.00	91.30	54.51	5.04	90.75	41.12	9.80	76.17	81.30	10.53	87.05	42.18	7.77	81.58	59.11	4.22	92.86
2/28/2005	2.77	0.33	88.09	40.40	1.81	95.52	51.00	4.20	91.76	41.12	9.80	76.17	26.91	1.51	94.39	24.45	7.01	71.33	20.60	3.53	82.86
3/31/2005	2.20	0.00	100.00	40.40	1.81	95.52	47.70	3.84	91.95	41.12	9.80	76.17	79.31	14.50	81.72	98.59	8.58	91.30	62.83	4.15	93.39
4/30/2005	2.2	0.00	100.00	40.40	1.81	95.52	35.14	3.44	90.21	41.12	9.80	76.17	105.42	9.06	91.41	86.16	6.25	92.75	47.5	3.1	93.47
5/31/2005	2.2	0.00	100.00	40.40	1.81	95.52	48.07	2.95	93.86	41.12	9.80	76.17	81.43	10.23	87.44	79.35	7.36	90.72	47.5	3.1	93.47
6/31/2005	2.2	0.00	100.00	40.40	1.81	95.52	48.64	3.15	93.52	41.12	9.80	76.17	75	11.19	85.08	139.7	7.54	94.60	47.5	3.1	93.47
7/31/2005	1.49	0.07	95.30	160	10	93.75	50	3	94.00	51	3.5	93.14	100	17.5	82.5	78.6	8.4	89.31	95	3	96.84
8/31/2005	1.49	0.07	95.30	160	10	93.75	50	3	94.00	51	3.5	93.14	100	17.5	82.5	74	5.52	92.54	95	3	96.84
9/30/2005	1.49	0.07	95.30	160	10	93.75	50	3	94.00	51	3.5	93.14	100	17.5	82.5	80.71	6.55	91.88	95	3	96.84
10/31/2005	1.49	0.07	95.30	182.00	10.00	94.51	56.53	8.06	85.74	1.67	0.87	47.90	124.34	17.49	85.93	70.06	6.55	90.65	143.91	6.38	95.57
11/30/2005	1.00	0.00	100.00	204.71	10.57	94.84	72.90	7.71	89.42	0.65	0.42	35.38	116.55	12.04	89.67	72.11	6.49	91.00	101.44	5.08	94.99
12/31/2005	1.49	0.07	95.30	204.71	10.57	94.84	56.67	8.41	85.16	0.27	0.16	40.74	104.44	10.36	90.08	71.47	4.58	93.59	81.23	3.22	96.04
1/31/2006	1.57	0.19	87.90	295.58	17.48	94.09	52.82	7.78	85.27	5.67	0.32	94.36	86.11	9.57	88.89	64.60	5.19	91.97	53.82	2.33	95.67
2/28/2006	1.65	0.2	87.88	270.80	19.18	92.92	55.59	7.80	85.97	3.50	0.30	91.43	90.83	9.90	89.10	68.19	5.35	92.15	55.49	2.38	95.71
3/31/2006	1.85	0.33	82.16	246.02	20.89	91.51	58.36	7.92	86.43	0.33	0.29	12.12	95.56	10.23	89.29	71.77	5.51	92.32	57.16	2.42	95.77
4/30/2006	2.13	0.43	79.81	549.90	47.15	91.43	65.47	10.55	83.89	6.47	0.64	90.11	83.28	12.03	85.55	67.18	7.17	89.33	54.68	2.14	96.09
5/31/2006	2.10	0.62	70.48	343.56	25.48	92.58	59.23	10.57	82.15	0.77	0.31	59.74	83.17	11.12	86.63	62.12	5.55	91.07	49.15	3.00	93.90
6/30/2006	1.53	0.70	54.25	269.81	129.00	52.19	62.59	9.66	84.57	1.30	0.35	73.08	76.55	8.65	88.70	57.48	4.54	92.10	43.53	2.81	93.54
7/31/2006	2.19	0.79	63.93	244.73	34.89	85.74	73.36	12.79	82.57	6.20	0.40	93.55	84.98	10.62	87.50	55.36	5.11	90.77	44.72	3.38	92.44
8/31/2006	1.87	0.35	81.28	244.73	34.89	85.74	102.84	13.00	87.36	0.60	0.30	50.00	71.05	11.31	84.08	55.29	3.33	93.98	42.00	1.80	95.71
9/30/2006	2.07	0.22	89.37	244.73	34.89	85.74	132.32	14.12	89.33	2.24	0.00	100.00	65.90	8.98	86.37	53.35	4.31	91.92	46.83	1.59	96.60
10/31/2006	2.18	0.34	84.40	120.00	19.00	84.17	65.20	8.07	87.62	2.00	0.71	64.50	61.65	7.32	88.13	44.49	2.80	93.71	46.83	1.59	96.60
11/30/2006	1.19	0.40	66.39	60.00	8.00	86.67	64.78	8.65	86.65	1.53	0.37	75.82	61.65	7.32	88.13	44.49	2.80	93.71	100.96	0.35	99.65
12/31/2006	1.99	0.16	91.96	5.17	2.90	43.91	63.36	8.34	86.84	1.65	0.48	70.91	61.65	7.32	88.13	44.49	2.80	93.71	43.68	1.08	97.53
1/31/2007	1.75	0.25	85.71	8.40	2.18	74.05	52.83	7.99	84.88	2.76	0.50	81.88	127.06	12.95	89.81	199.58	0.56	99.72	0.58	0.46	20.69
2/28/2007	1.43	0.40	72.17	9.66	0.91	90.58	46.28	6.33	86.32	3.88	0.52	86.60	1.95	0.56	71.23	59.02	4.19	92.90	0.60	0.02	96.67
3/31/2007	1.60	0.53	66.79	0.45	0.36	20.00	52.97	5.36	89.88	1.07	0.39	63.55	2.32	0.94	59.70	191.48	4.65	97.57	0.74	0.07	90.54
4/30/2007	1.48	0.271	81.69	148.61	45.28	69.53	57.22	8.22	85.63	3.88	0.29	92.53	2.32	0.94	99.35	192.80	7.47	96.13	1.96	0.50	74.49

TABLE F-23
TVOC Influent, Effluent and Efficiency Performance
OU III Industrial Park System

2016 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)	(%)
5/30/2007	1.48	0.271	81.69	6.02	1.70	71.76	45.11	7.51	83.35	44.79	7.95	82.25	142.76	0.94	88.24	142.76	3.30	97.69	23.83	2.12	91.10
6/30/2007	1.48	0.271	81.69	2.60	1.90	26.92	45.33	7.70	83.01	2.81	0.84	70.11	7.95	0.94	88.24	7.95	2.02	74.59	4.26	1.22	71.36
7/31/2007	1.48	0.271	81.69	2.60	1.90	26.92	45.33	7.70	83.01	20	5	75	7.95	0.94	88.24	113.95	3.42	97.00	2.13	0.75	64.79
8/31/2007	1.48	0.271	81.69	2.42	0.56	76.86	45.33	7.70	83.01	41.68	10.77	74.16	7.95	0.94	88.24	113.95	3.42	97.00	0.79	0.4	49.37
9/30/2007	1.48	0.271	81.69	2.42	0.56	76.86	45.33	7.70	83.01	41.68	10.77	74.16	7.95	0.94	88.24	113.95	3.42	97.00	0.79	0.4	49.37
10/31/2007	2.00	0.50	75.00	4.38	0.47	89.27	56.88	9.66	83.02	41.60	9.57	77.00	105.00	80.47	23.36	53.51	3.05	94.30	2.57	0.56	78.21
11/30/2007	2.00	0.50	75.00	234.51	16.99	92.76	56.88	9.66	83.02	27.94	7.81	72.05	83.32	68.27	18.06	43.02	1.72	96.00	40.79	2.08	94.90
12/31/2007	2.63	1.20	54.37	2.00	1.20	40.00	68.44	11.63	83.01	18.91	7.70	59.28	71.52	55.00	23.10	31.09	1.52	95.11	17.92	1.42	92.08
1/31/2008	2.42	0.82	66.12	1.3	0.7	46.15	58.13	10.63	81.71	27.2	7.81	71.29	2.93	1.02	65.19	32.29	1.16	96.41	15.43	1.07	93.07
2/28/2008	1.66	0.13	92.17	41.27	4.39	89.36	53.8	7.65	85.78	19.6	5.19	73.52	28.59	2.8	90.21	29.17	1.11	96.19	11.16	1.48	86.74
3/31/2008	0.88	0.19	78.41	8.65	6.52	24.62	44.46	7.22	83.76	32.51	8.49	73.88	28.59	2.8	90.21	28.89	1.08	96.26	12.81	1.6	87.51
4/30/2008	1.70	0.21	87.65	82.30	5.13	93.77	26.03	6.06	76.72	22.01	8.40	61.84	23.73	2.40	89.89	5.37	0.00	100.00	1.01	0.30	70.30
5/31/2008	1.22	0.47	61.48	82.30	5.13	93.77	28.84	5.00	82.66	17.20	5.90	65.70	3.83	1.44	62.40	30.59	5.40	82.35	1.01	0.30	70.30
6/30/2008	1.22	0.47	61.48	82.30	5.13	93.77	28.84	5.00	82.66	17.20	5.90	65.70	3.83	1.44	62.40	30.59	5.40	82.35	1.01	0.30	70.30
7/31/2008	2.14	0.40	81.31	42.62	2.60	93.90	85.00	12.00	85.88	9.10	2.00	78.02	72.00	6.50	90.97	30.00	3.00	90.00	2.00	0.40	80.00
8/31/2008	2.14	0.40	81.31	42.62	2.60	93.90	85.00	12.00	85.88	9.10	2.00	78.02	72.00	6.50	90.97	30.00	3.00	90.00	2.00	0.40	80.00
9/30/2008	3.06	0.40	86.93	2.91	0.45	84.54	141.90	19.19	86.48	1.06	0.28	73.58	139.85	9.72	93.05	29.74	1.13	96.20	3.06	0.25	91.83
10/31/2008	2.34	0.84	64.10	42.29	4.24	89.97	30.30	4.42	85.41	12.40	2.90	76.61	71.00	5.00	92.96	22.24	1.13	94.92	2.34	0.11	95.30
11/30/2008	3.06	0.27	91.18	39.10	3.43	91.23	24.16	3.54	85.35	12.50	3.90	68.80	71.00	5.00	92.96	20.71	1.13	94.54	3.06	0.78	74.51
12/31/2008	19.31	5.48	71.62	31.00	2.14	93.10	18.24	2.78	84.76	12.50	3.90	68.80	71.00	5.00	92.96	20.71	1.13	94.54	3.06	0.78	74.51
1/31/2009	9.90	2.40	75.76	15.00	1.20	92.00	19.00	2.10	88.95	5.46	1.20	78.02	3.10	0.30	90.32	36.86	5.35	85.49	0.70	0.11	84.29
2/28/2009	0.63	0.24	62.09	0.44	0.28	36.36	20.80	1.42	93.17	6.27	1.03	83.57	25.24	2.40	90.49	51.33	8.36	83.71	0.49	0.38	23.27
3/31/2009	0.90	0.25	72.35	0.21	0.18	14.29	30.01	3.00	90.00	4.74	1.16	75.53	1.63	0.17	89.57	51.33	8.36	83.71	0.39	0.17	56.41
4/30/2009	0.83	0.41	50.30	1.01	0.23	77.23	15.69	2.60	83.43	6.44	1.13	82.45	33.43	5.00	85.04	55.00	7.89	85.65	0.62	0.12	80.65
5/31/2009	6.21	4.10	33.98	1.96	0.23	88.27	15.25	2.10	86.23	6.07	1.53	74.79	19.61	2.53	87.10	61.38	7.49	87.80	0.77	0.11	85.71
6/30/2009	3.81	2.60	31.76	3.53	0.59	83.29	14.44	1.97	86.36	6.04	1.78	70.53	25.70	3.21	87.51	26.62	4.41	83.43	0.88	0.47	46.59
7/31/2009	3.14	2.36	24.84	1.36	1.36	0.00	11.75	1.88	84.00	5.40	2.20	59.26	6.22	6.22	0.00	21.08	2.24	89.37	0.74	0.61	17.57
8/31/2009	3.56	3.33	6.46	1.45	1.28	11.72	10.52	1.57	85.08	5.64	1.00	82.27	14.90	3.55	76.17	14.18	2.03	85.68	7.58	1.28	83.11
9/30/2009	4.82	2.90	39.83	1.45	1.28	11.72	10.56	2.31	78.13	5.49	1.79	67.40	3.89	0.95	75.58	14.43	2.49	82.74	1.16	0.22	81.03
10/31/2009	3.73	2.46	34.05	1.62	0.60	62.96	10.56	2.31	78.13	0.93	0.58	37.63	1.79	0.55	69.27	12.78	1.52	88.11	0.35	0.27	22.86
11/30/2009	3.86	2.65	31.35	2.06	0.65	68.45	10.56	2.31	78.13	0.60	0.30	50.00	1.99	0.46	76.88	13.64	1.82	86.66	0.66	0.66	0.00
12/31/2009	4.19	2.67	36.28	3.69	0.45	87.80	10.56	2.31	78.13	0.26	0.08	69.23	1.99	1.15	42.21	13.64	1.82	86.66	0.89	0.32	64.04
1/31/2010	3.70	2.29	38.11	1.27	0.25	80.31	15.00	0.00	100.00	3.64	0.94	74.18	15.00	1.15	92.33	16.00	1.82	88.63	0.24	0.00	100.00
2/28/2010	4.89	2.60	46.83	1.96	0.48	75.51	15.00	0.00	100.00	4.24	0.95	77.59	15.00	1.15	92.33	16.00	1.82	88.63	7.55	1.91	74.70
3/31/2010	4.47	3.80	14.99	1.63	1.00	38.65	15.00	0.00	100.00	3.40	1.60	52.94	15.00	1.15	92.33	16.00	1.82	88.63	2.47	1.76	28.74
4/30/2010	4.25	3.52	17.18	32.80	3.64	88.90	17.50	1.30	92.57	0.42	0.33	21.43	25.00	3.25	87.00	13.68	2.00	85.38	2.31	0.00	100.00
5/31/2010	5.61	3.86	31.19	16.47	1.04	93.69	20.53	2.60	87.34	0.61	0.50	18.03	35.64	5.42	84.79	12.31	2.32	81.15	0.68	0.00	100.00
6/30/2010	3.32	2.42	27.11	0.76	0.36	52.63	13.17	2.01	84.74	0.56	0.46	17.86	19.30	2.92	84.87	10.56	2.32	78.03	0.49	0.00	100.00
7/31/2010	3.72	2.43	34.68	1.07	1.00	6.54	12.15	2.72	77.61	0.87	0.49	43.68	19.19	3.44	82.07	13.59	2.32	82.93	0.88	0.61	30.68
8/31/2010	3.69	2.00	45.80	12.91	1.83	85.82	10.68	3.65	65.82	5.69	2.36	58.52	17.78	4.53	74.52	11.62	2.32	80.03	1.24	1.10	11.29
9/30/2010	2.94	2.02	31.29	0.86	0.71	17.44	7.79	2.17	72.14	2.91	1.59	45.36	13.37	2.86	78.61	9.71	2.32	76.11	0.99	0.83	16.16
10/31/2010	2.83	2.00	29.33	1.20	1.07	10.83	10.28	2.54	75.29	1.88	1.17	37.77	5.36	1.55	71.08	13.00	5.50	57.69	1.49	1.25	16.11
11/30/2010	2.55	1.70	33.33	1.22	0.83	31.97	7.93	1.83	76.92	2.53	1.23	51.38	16.69	2.77	83.40	17.61	9.56	45.71	1.49	1.25	16.11
12/31/2010	2.28	1.60	29.82	8.72	1.11	87.27	9.28	1.63	82.44	2.60	0.92	64.62	17.11	2.41	85.91	23.74	9.56	59.73	1.49	1.25	16.11
1/31/2011	1.60	1.00	37.50	11.50	1.15	90.00	9.07	1.45	84.01	2.20	0.96	56.36	15.11	2.20	85.44	17.65	2.50	85.84	3.74	1.30	65.24
2/28/2011	1.13	0.70	38.05	14.71	1.15	92.18	8.86	1.30	85.33	1.97	0.97	50.76	13.50	2.00	85.19	17.65	2.50	85.84	6.11	1.35	77.91
3/31/2011	1.27	0.50	60.63	13.47	1.23	90.87	6.21	1.17	81.16	1.17	0.20	82.91	10.28	2.00	80.54	11.56	2.50	78.37	0.40	0.24	40.00

TABLE F-23
TVOC Influent, Effluent and Efficiency Performance
OU III Industrial Park System

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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)	(%)
4/30/2011	1.33	0.34	74.44	16.59	1.40	91.56	6.96	1.42	79.60	2.66	1.82	31.58	8.12	1.65	79.68	10.75	2.50	76.74	5.78	1.06	81.66
5/31/2011	1.39	0.54	61.15	16.92	1.55	90.84	7.25	1.32	81.79	2.66	1.82	31.58	8.12	1.65	79.68	10.75	2.50	76.74	5.85	1.00	82.91
6/30/2011	1.45	0.74	48.97	17.25	1.69	90.20	7.57	1.25	83.49	4.15	3.44	17.11	8.12	1.65	79.68	10.75	2.50	76.74	5.92	0.85	85.64
7/31/2011	1.57	0.85	45.86	23.50	2.40	89.79	7.78	1.54	80.21	0.37	0.00	100.00	32.18	21.00	34.74	0.48	0.00	100.00	4.78	1.31	72.59
8/31/2011	1.20	1.20	0.00	0.84	0.00	100.00	8.06	1.88	76.67	0.59	0.00	100.00	27.40	19.00	30.66	0.57	0.00	100.00	4.25	1.56	63.29
9/30/2011	1.43	0.86	39.86	1.01	0.60	40.59	6.46	1.25	80.65	0.59	0.00	100.00	27.44	18.00	34.40	10.51	1.88	82.11	4.10	1.24	69.76
10/31/2011	0.86	0.30	65.12	0.30	0.28	6.67	6.24	1.06	83.01	1.00	0.36	64.00	24.38	1.46	94.01	9.87	1.54	84.40	4.83	0.92	80.95
11/30/2011	0.87	0.40	54.02	0.40	0.22	45.00	5.67	0.89	84.30	1.86	0.72	61.29	17.52	2.68	84.70	7.92	1.50	81.06	0.29	0.27	6.90
12/31/2011	0.99	0.36	63.64	0.11	0.11	0.00	5.61	2.10	62.57	1.72	0.80	53.49	12.72	1.90	85.06	7.72	1.39	81.99	3.89	0.70	82.01
1/31/2012	0.85	0.19	77.65	0.10	0.00	100.00	5.26	2.95	43.92	1.22	0.39	68.03	9.70	1.11	88.56	6.48	1.05	83.80	4.26	0.40	90.61
2/28/2012	0.83	0.08	90.36	0.16	0.00	100.00	3.88	2.89	25.52	1.40	0.39	72.14	8.13	1.15	85.85	5.73	1.01	82.37	0.22	0.15	31.82
3/31/2012	1.04	0.50	51.92	0.26	0.23	11.54	6.85	3.74	45.40	1.29	0.72	44.19	6.45	1.14	82.33	5.81	1.12	80.72	0.40	0.05	88.75
4/30/2012	0.90	0.30	66.67	0.20	0.00	100.00	6.86	3.40	50.44	1.38	0.48	65.22	5.54	0.81	85.38	5.25	0.75	85.71	0.25	0.00	100.00
5/31/2012	0.93	0.00	100.00	0.10	0.00	100.00	6.10	1.14	81.31	1.75	0.56	68.00	6.52	1.38	78.83	5.88	1.26	78.57	0.55	0.20	63.64
6/30/2012	1.55	0.90	41.94	0.10	0.00	100.00	5.90	1.18	80.00	2.01	0.94	53.23	7.02	1.54	78.06	6.77	1.29	80.95	1.17	0.58	50.43
7/31/2012	1.48	0.93	37.16	0.43	0.36	16.28	4.31	1.02	76.33	1.90	1.00	47.37	7.00	1.63	76.71	3.60	0.81	77.50	0.84	0.55	34.52
8/31/2012	1.48	0.93	37.16	0.43	0.36	16.28	4.31	1.02	76.33	1.90	1.00	47.37	7.00	1.63	76.71	3.60	0.81	77.50	0.84	0.55	34.52
9/30/2012	1.48	0.93	37.16	0.43	0.36	16.28	4.31	1.02	76.33	1.90	1.00	47.37	7.00	1.63	76.71	3.60	0.81	77.50	0.84	0.55	34.52
10/31/2012	1.43	0.86	39.86	0.76	0.72	5.26	2.73	0.09	96.89	1.78	1.05	41.01	7.00	1.71	75.57	0.44	0.33	25.00	0.60	0.52	13.33
11/30/2012	1.41	0.59	58.16	1.04	0.28	73.08	6.62	0.85	87.16	1.57	0.75	52.23	7.56	1.35	82.14	0.27	0.20	25.93	0.31	0.28	9.68
12/31/2012	1.62	1.20	25.93	1.04	0.76	26.92	2.93	1.20	59.04	1.88	0.70	62.77	7.72	1.47	80.96	0.27	0.20	25.93	0.81	0.55	32.10
1/31/2013	1.19	0.57	52.10	0.40	0.24	41.25	0.92	0.33	63.70	1.56	0.70	55.13	7.60	1.23	83.82	15.93	0.25	98.43	0.57	0.21	63.51
2/28/2013	1.44	0.75	47.92	0.43	0.27	37.21	0.55	0.24	56.36	1.72	0.94	45.35	7.86	1.56	80.15	12.12	1.77	85.40	2.05	0.21	89.85
3/31/2013	1.69	1.03	39.05	0.46	0.31	32.39	0.19	0.16	19.07	1.88	1.18	37.23	8.12	1.89	76.72	8.31	1.52	81.71	3.54	0.40	88.70
4/30/2013	1.45	0.76	47.59	0.29	0.21	27.59	4.91	0.36	92.67	1.66	0.88	46.99	8.12	2.01	75.25	6.55	0.80	87.79	1.67	0.19	88.62
5/31/2013																					
6/30/2013																					
7/30/2013	1.22			0.38			1.04			2.37			34.96			11.06			0.31		
8/31/2013																					
9/30/2013																					
10/31/2013	1.58			0.47			0.29			3.46			54.02			15.57			0.34		
11/30/2013																					
12/31/2013																					
1/31/2014	1.11			1.08			2.98			3.71			51.14			14.57			0		
2/28/2014																					
3/21/2014	1.22						6.6	0.81	87.73	3.46	1.01	70.81	17.41	3.78	78.29	8.65	1.28	85.20	0.19	0.18	5.26
4/17/2014	1.6			261.92			0.3		100.00	2.86	0.86	69.93	11.26	2.9	74.25	6.55	1.4	78.63	3.07		
5/15/2014							1.62	0.86	46.91				8.65	2.37	72.60	4.88	1.01	79.30			
6/17/2014							4.038	3.16	21.74				10.18	6.11	39.98	4.68	1.07	77.14			
7/29/2014	2.2			10.81						2.58	1.19		14.58	2.33	84.02	4.93	0.72	85.40	2.81		
8/27/2014									1.31	2.96	1.28		8.53	1.80	78.90	0.91	0.90	1.10			
9/30/2014								0.94		2.44	0.96					0.37	0.30	18.92			
10/29/2014				14.38						2.03						0.23	1.27		2.7		
11/30/2014																					
12/31/2014																					
1/31/2015																					
2/28/2015																					

TABLE F-23
TVOC Influent, Effluent and Efficiency Performance
OU III Industrial Park System

2016 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)	(%)
3/31/2015																					
6/25/2015	0.48			3.19			1.87			2.09			33.58			0.66			3.34		
7/22/2015	1.058			5.62			3.35			4.16			15.12			1.42			3		
8/28/2015							3.33	0.62	81.38	1.77	0.74	58.19	8.18	2.33	71.52	1.08	0.24	77.78	3.32		
9/24/2015							1.65	0.57	65.45	1.53	0.7	54.25	5.79	1.89	67.36						
10/29/2015	1.09			2			3.66	0.79	78.42	1.64	0.7	57.32	5.42	1.62	70.11	0.43	0.31	27.91	2.65		
11/20/2015							3.34	0.65	80.54	1.25	0.64	48.80	7.9	2.11	73.29	0.28	0.19	32.14			
12/23/2015							3.28	0.68	79.27	0.91	0.52	42.86	6.3	1.44	77.14	0.29	0.19	34.48			
1/21/2016	0.774			1.85			1.53	0.56	63.40	1.11	0.67	39.64	9.56	1.81	81.07	0.40	0.00	100.00	7.36		
2/15/2016																					
3/24/2016							4.18	0.79	81.10	1.64	0.77	53.05									
4/27/2016	0.65			1.92			3.24	0.85	73.77	1.85	1.53	17.30	7.01	1.49	78.74	0.64	0.22	65.63	0.55		
5/25/2016							3.90	0.74	81.03	2.05	1.51	26.34	5.60	0.80	85.71	0.35	0.11	68.57			
6/16/2016							3.49	0.90	74.21	1.72	0.88	48.84				0.23	0.11	52.17			
7/27/2016	0.47			1.61			2.45	0.68	72.24	0.71	0.38	46.48	4.51	0.65	85.59	0.92	0.14	84.78	0.40		
8/24/2016							1.25	0.66	47.20	0.94	0.92	2.13	3.63	0.74	79.61	0.48	0.22	54.17			
9/15/2016							1.69	0.77	54.44	1.10	0.97	11.82	3.59	0.77	78.55	0.49	0.29	40.82			
10/19/2016	1.60			1.34			0.13	0.00	100.00	0.80	0.59	26.25	3.79	0.54	85.75	0.61	0.00	100.00	1.04		
11/22/2016							0.52	0.50	3.85	1.16	0.61	47.41	3.25	0.20	93.85	2.06	0.44	78.64			
12/21/2016										0.81	0.44	45.68	4.05	0.28	93.09	2.27	0.42	81.50			
NOTE: The system was placed in stand-by mode on May 1, 2013 and put back into full time operation in March 2014																					
Average Efficiency			NA			NA			84.13			71.39			83.23			85.69			NA
1st qtr. 2016 Average Efficiency			NA			NA			72.25			46.34			81.07			100.00			NA
2nd qtr. 2016 Average Efficiency			NA			NA			76.33			30.83			82.23			62.12			NA
3rd qtr. 2016 Average Efficiency			NA			NA			57.96			20.14			81.25			59.92			NA
4th qtr. 2016 Average Efficiency			NA			NA			51.92			39.78			90.89			86.71			NA

1st qtr. 2016 AVERAGE SYSTEM EFFICIENCY	<u>74.92</u>
2nd qtr. 2016 AVERAGE SYSTEM EFFICIENCY	<u>62.88</u>
3rd qtr. 2016 AVERAGE SYSTEM EFFICIENCY	<u>54.82</u>
4th qtr. 2016 AVERAGE SYSTEM EFFICIENCY	<u>67.33</u>
2016 AVERAGE SYSTEM EFFICIENCY	<u>64.99</u>

Wells 1,2 and 7 were not counted in average efficiency as they were on stand-by for the year.

Efficiency Percent = 100 - (effluent concentration/influent concentration) * 100
 NS = Not Sampled
 ** Laboratory lost sample.

TABLE F-24
Cumulative Mass Recovery
OU III Industrial Park System

2016 BNL Groundwater Status Report

EW-8 and EW-9

DATE	FLOW (GPM)	TVOC's (PPB)	LBS/DAY	CUM. LBS
1/14/2015	--	--	--	0.00
1/15/2015	81	0.32		
1/21/2015	81	0.18	0.01	0.01
1/22/2015	81	0.38	0.00	0.02
1/23/2015	81	0.33	0.00	0.02
2/4/2015	170	0.68	0.00	0.02
2/5/2015	170	0.66	0.00	0.03
2/9/2015	170	0.51	0.00	0.03
2/18/2015	170	0.62	0.00	0.04
2/26/2015	170	0.67	0.00	0.05
3/3/2015	227	0.55	0.00	0.06
3/9/2015	227	0.92	0.00	0.07
3/16/2015	227	1.04	0.00	0.08
3/23/2015	227	1.14	0.00	0.10
4/2/2015	222	1.47	0.00	0.13
4/7/2015	222	2.28	0.01	0.15
4/14/2015	222	1.49	0.00	0.20
4/20/2015	222	2.01	0.01	0.22
4/28/2015	222	2.13	0.01	0.26
5/6/2015	80	3.12	0.00	0.31
5/28/2015	80	2.36	0.00	0.38
6/1/2015	170	2.68	0.01	0.38
6/9/2015	170	2.57	0.01	0.43
6/15/2015	170	2.51	0.01	0.46
6/22/2015	170	2.68	0.01	0.50
7/1/2015	216	2.91	0.01	0.54
7/7/2015	216	2.56	0.01	0.59
7/14/2015	216	2.72	0.01	0.64
7/21/2015	216	3.02	0.01	0.69
7/28/2015	216	3.18	0.01	0.74
8/3/2015	236	2.93	0.01	0.79
8/10/2015	236	2.75	0.01	0.85
9/1/2015	208	2.83	0.01	1.02
9/22/2015	208	2.81	0.01	1.17
10/2/2015	217	3.27	0.01	1.24
11/2/2015	213	3.1	0.01	1.50
11/16/2015	213	3.45	0.01	1.61
12/3/2015	203	3.28	0.01	1.76
12/15/2015	203	3.08	0.01	1.86
1/4/2016	185	3.39	0.01	2.01
1/20/2016	185	3.49	0.01	2.13
2/1/2016	104	2.63	0.003	2.22
2/17/2016	104	1.99	0.002	2.28

TABLE F-24
Cumulative Mass Recovery
OU III Industrial Park System

2016 BNL Groundwater Status Report

EW-8 and EW-9

DATE	FLOW (GPM)	TVOC's (PPB)	LBS/DAY	CUM. LBS
3/2/2016	114	2.98	0.004	2.31
3/14/2016	114	3.03	0.004	2.36
4/4/2016	206	6.75	0.02	2.45
4/27/2016	206	3.49	0.01	2.83
5/2/2016	246	3.7	0.01	2.87
5/16/2016	246	3.62	0.01	3.03
6/1/2016	239	3.59	0.01	3.20
6/13/2016	239	3.83	0.01	3.32
7/6/2016	247	4.24	0.01	3.57
8/2/2016	233	3.24	0.01	3.91
8/15/2016	233	3.24	0.01	4.03
9/1/2016	221	3.3	0.01	4.19
9/12/2016	221	3.26	0.01	4.28
10/3/2016	239	2.81	0.01	4.46
10/17/2016	239	3.17	0.01	4.58
11/1/2016	225	3.17	0.01	4.71
11/21/2016	225	3.41	0.01	4.89
12/6/2016	221	3.27	0.01	5.02
12/19/2016	221	3.11	0.01	5.14

Mass recovered =

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

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

**TABLE F-25
AIR FLOW RATES
OU III INDUSTRIAL PARK SYSTEM**

2016 BNL Groundwater Status Report

Note: No data collected during 2016

Table F-26
Extraction Well VOC Data
OU III Industrial Park Modification System

2016 BNL Groundwater Status Report

	UVB-8, 9 Combined Effluent
Date	Effluent
1/4/2016	0.16
1/20/2016	0
2/1/2016	0
2/17/2016	0
3/2/2016	0
3/14/2016	0
4/4/2016	0
4/27/2016	0
5/2/2016	0
5/16/2016	0
6/1/2016	0
6/13/2016	0
7/6/2016	0
8/2/2016	0
8/15/2016	0
9/1/2016	0
9/12/2016	0
10/3/2016	0
10/17/2016	0.091
11/1/2016	0.096
11/21/2016	0.11
12/6/2016	0.082
12/19/2016	0.1

	UVB-8	UVB-9
Date	Influent	Influent
1/4/2016	2.47	3.32
2/1/2016	2.20	NA
3/2/2016	3.16	NA
4/4/2016	3.30	9.93
5/2/2016	5.62	3.42
6/1/2016	3.16	3.85
7/6/2016	0.93	2.60
8/2/2016	3.32	3.40
9/1/2016	2.59	0.65
10/3/2016	2.82	2.96
11/1/2016	3.04	3.42
12/6/2016	3.04	3.19

OU III North Street System

Table F-27
Cumulative Mass Removal
OU III North Street System

2016 BNL Groundwater Status Report

Date Sampled	Total VOC's (ug/L)	Flow Rates (gpm)	Cumulative VOC's (lbs)
1/4/2016	2.47	207	340.91
3/2/2016	2.66	194	341.27
3/14/2016	2.78	194	341.35
4/4/2016	5.78	78	341.46
5/25/2016	6.58	0	341.46
6/1/2016	6.22	156	341.55
7/7/2016	6.67	86	341.79
8/9/2016	5.32	0	341.79

ug/L Micrograms per liter
gpm Gallons per minute
lbs Pounds

Table F-28
Extraction Wells VOC Data and Tritium Data
OU III North Street System

2016 BNL Groundwater Status Report

Site ID : 000-471 (EW-1)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/4/2016	0.27	0.5	UG/L	J
1,1-Dichloroethane	1/4/2016	0.32	0.5	UG/L	J
1,1-Dichloroethylene	1/4/2016	0.091	0.5	UG/L	J
524.2 TVOC	1/4/2016	2.551	0	UG/L	
Carbon tetrachloride	1/4/2016	0.69	0.5	UG/L	
Chloroform	1/4/2016	0.81	0.5	UG/L	
Trichloroethylene	1/4/2016	0.37	0.5	UG/L	J
1,1,1-Trichloroethane	4/4/2016	0.24	0.5	UG/L	J
1,1-Dichloroethane	4/4/2016	0.33	0.5	UG/L	J
1,1-Dichloroethylene	4/4/2016	0.1	0.5	UG/L	J
524.2 TVOC	4/4/2016	2.81	0	UG/L	
Carbon tetrachloride	4/4/2016	0.83	0.5	UG/L	
Chloroform	4/4/2016	0.86	0.5	UG/L	
Trichloroethylene	4/4/2016	0.45	0.5	UG/L	J
1,1,2,2-Tetrachloroethane	7/7/2016	0.12	0.5	UG/L	J
524.2 TVOC	7/7/2016	2.19	0	UG/L	
Carbon tetrachloride	7/7/2016	0.91	0.5	UG/L	
Chloroform	7/7/2016	0.68	0.5	UG/L	
Trichloroethylene	7/7/2016	0.48	0.5	UG/L	J
1,1,1-Trichloroethane	10/3/2016	0.19	0.5	UG/L	J
1,1-Dichloroethane	10/3/2016	0.082	0.5	UG/L	J
524.2 TVOC	10/3/2016	2.102	0	UG/L	
Carbon tetrachloride	10/3/2016	0.69	0.5	UG/L	
Chloroform	10/3/2016	0.68	0.5	UG/L	
Trichloroethylene	10/3/2016	0.46	0.5	UG/L	J

Site ID : 000-473 (EW-2)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/4/2016	1.6	0.5	UG/L	
1,1-Dichloroethane	1/4/2016	0.16	0.5	UG/L	J
1,1-Dichloroethylene	1/4/2016	0.3	0.5	UG/L	J
524.2 TVOC	1/4/2016	5.46	0	UG/L	
Carbon tetrachloride	1/4/2016	0.5	0.5	UG/L	
Chloroform	1/4/2016	1.5	0.5	UG/L	
Tetrachloroethylene	1/4/2016	1.4	0.5	UG/L	
1,1,1-Trichloroethane	4/4/2016	2.6	0.5	UG/L	
1,1-Dichloroethane	4/4/2016	0.21	0.5	UG/L	J
1,1-Dichloroethylene	4/4/2016	0.78	0.5	UG/L	
524.2 TVOC	4/4/2016	10.06	0	UG/L	
Carbon tetrachloride	4/4/2016	0.79	0.5	UG/L	
Chloroform	4/4/2016	1.9	0.5	UG/L	
Methyl chloride	4/4/2016	0.18	0.5	UG/L	J
Tetrachloroethylene	4/4/2016	3.6	0.5	UG/L	
1,1,1-Trichloroethane	7/7/2016	2.7	0.5	UG/L	
1,1-Dichloroethane	7/7/2016	0.23	0.5	UG/L	J
1,1-Dichloroethylene	7/7/2016	1.1	0.5	UG/L	
524.2 TVOC	7/7/2016	9.85	0	UG/L	
Carbon tetrachloride	7/7/2016	0.72	0.5	UG/L	
Chloroform	7/7/2016	1.7	0.5	UG/L	
Tetrachloroethylene	7/7/2016	3.4	0.5	UG/L	
1,1,1-Trichloroethane	10/3/2016	3.9	0.5	UG/L	
1,1-Dichloroethane	10/3/2016	0.24	0.5	UG/L	J
1,1-Dichloroethylene	10/3/2016	1.5	0.5	UG/L	
524.2 TVOC	10/3/2016	12.88	0	UG/L	
Carbon tetrachloride	10/3/2016	0.89	0.5	UG/L	
Chloroform	10/3/2016	1.9	0.5	UG/L	
Dichlorodifluoromethane	10/3/2016	0.15	0.5	UG/L	J
Tetrachloroethylene	10/3/2016	4.3	0.5	UG/L	

**Table F-29
Carbon Influent VOC Data
OU III North Street System**

2016 BNL Groundwater Status Report

Site ID : 000-437 (Combo. Inf.)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/4/2016	0.25	0.5	UG/L	J
1,1-Dichloroethane	1/4/2016	0.3	0.5	UG/L	J
1,1-Dichloroethylene	1/4/2016	0.12	0.5	UG/L	J
524.2 TVOC	1/4/2016	2.47	0	UG/L	
Carbon tetrachloride	1/4/2016	0.73	0.5	UG/L	
Chloroform	1/4/2016	0.74	0.5	UG/L	
Trichloroethylene	1/4/2016	0.33	0.5	UG/L	J
1,1,1-Trichloroethane	3/2/2016	0.25	0.5	UG/L	J
1,1-Dichloroethane	3/2/2016	0.29	0.5	UG/L	J
1,1-Dichloroethylene	3/2/2016	0.12	0.5	UG/L	J
524.2 TVOC	3/2/2016	2.66	0	UG/L	
Carbon tetrachloride	3/2/2016	0.9	0.5	UG/L	
Chloroform	3/2/2016	0.76	0.5	UG/L	
Trichloroethylene	3/2/2016	0.34	0.5	UG/L	J
1,1,1-Trichloroethane	3/14/2016	0.27	0.5	UG/L	J
1,1,2,2-Tetrachloroethane	3/14/2016	0.11	0.5	UG/L	J
1,1-Dichloroethane	3/14/2016	0.32	0.5	UG/L	J
1,1-Dichloroethylene	3/14/2016	0.11	0.5	UG/L	J
524.2 TVOC	3/14/2016	2.78	0	UG/L	
Carbon tetrachloride	3/14/2016	0.79	0.5	UG/L	
Chloroform	3/14/2016	0.79	0.5	UG/L	
Trichloroethylene	3/14/2016	0.39	0.5	UG/L	J
1,1,1-Trichloroethane	4/4/2016	1.3	0.5	UG/L	
1,1-Dichloroethane	4/4/2016	0.26	0.5	UG/L	J
1,1-Dichloroethylene	4/4/2016	0.46	0.5	UG/L	J
524.2 TVOC	4/4/2016	5.78	0	UG/L	
Carbon tetrachloride	4/4/2016	0.73	0.5	UG/L	
Chloroform	4/4/2016	1.2	0.5	UG/L	
Tetrachloroethylene	4/4/2016	1.6	0.5	UG/L	
Trichloroethylene	4/4/2016	0.23	0.5	UG/L	J
1,1,1-Trichloroethane	5/25/2016	1.5	0.5	UG/L	
1,1-Dichloroethane	5/25/2016	0.18	0.5	UG/L	J
1,1-Dichloroethylene	5/25/2016	0.61	0.5	UG/L	
524.2 TVOC	5/25/2016	6.58	0	UG/L	
Carbon tetrachloride	5/25/2016	0.94	0.5	UG/L	
Chloroform	5/25/2016	1.3	0.5	UG/L	
Tetrachloroethylene	5/25/2016	1.7	0.5	UG/L	
Trichloroethylene	5/25/2016	0.35	0.5	UG/L	J
1,1,1-Trichloroethane	6/1/2016	1.3	0.5	UG/L	
1,1-Dichloroethane	6/1/2016	0.17	0.5	UG/L	J
1,1-Dichloroethylene	6/1/2016	0.51	0.5	UG/L	
524.2 TVOC	6/1/2016	6.22	0	UG/L	
Carbon tetrachloride	6/1/2016	0.84	0.5	UG/L	
Chloroform	6/1/2016	1.3	0.5	UG/L	
Tetrachloroethylene	6/1/2016	1.8	0.5	UG/L	
Trichloroethylene	6/1/2016	0.3	0.5	UG/L	J
1,1,1-Trichloroethane	7/7/2016	1.4	0.5	UG/L	
1,1-Dichloroethane	7/7/2016	0.13	0.5	UG/L	J
1,1-Dichloroethylene	7/7/2016	0.63	0.5	UG/L	
524.2 TVOC	7/7/2016	6.67	0	UG/L	
Carbon tetrachloride	7/7/2016	0.74	0.5	UG/L	
Chloroform	7/7/2016	1.2	0.5	UG/L	

Table F-29
Carbon Influent VOC Data
OU III North Street System

2016 BNL Groundwater Status Report

Site ID : 000-437 (Combo. Inf.)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
Tetrachloroethylene	7/7/2016	2.2	0.5	UG/L	
Trichloroethylene	7/7/2016	0.37	0.5	UG/L	J
1,1,1-Trichloroethane	8/9/2016	1.3	0.5	UG/L	
1,1-Dichloroethane	8/9/2016	0.22	0.5	UG/L	J
1,1-Dichloroethylene	8/9/2016	0.57	0.5	UG/L	
524.2 TVOC	8/9/2016	5.32	0	UG/L	
Carbon tetrachloride	8/9/2016	0.63	0.5	UG/L	
Chloroform	8/9/2016	1	0.5	UG/L	
Tetrachloroethylene	8/9/2016	1.6	0.5	UG/L	

Table F-30
Carbon Effluent VOC and Tritium Data
OU III North Street System

2016 BNL Groundwater Status Report

Site ID : 000-440 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1-Dichloroethane	1/4/2016	0.36	0.5	UG/L	J
524.2 TVOC	1/4/2016	1.86	0	UG/L	
Chloroform	1/4/2016	1.5	0.5	UG/L	
1,1-Dichloroethane	3/2/2016	0.36	0.5	UG/L	J
524.2 TVOC	3/2/2016	2.16	0	UG/L	
Chloroform	3/2/2016	1.8	0.5	UG/L	
1,1-Dichloroethane	3/14/2016	0.38	0.5	UG/L	J
524.2 TVOC	3/14/2016	1.98	0	UG/L	
Chloroform	3/14/2016	1.6	0.5	UG/L	
1,1-Dichloroethane	4/4/2016	0.41	0.5	UG/L	J
524.2 TVOC	4/4/2016	2.34	0	UG/L	
Chloroform	4/4/2016	1.8	0.5	UG/L	
Methyl tert-butyl ether	4/4/2016	0.13	0.5	UG/L	J
1,1-Dichloroethane	5/25/2016	0.37	0.5	UG/L	J
524.2 TVOC	5/25/2016	2.07	0	UG/L	
Chloroform	5/25/2016	1.7	0.5	UG/L	
1,1-Dichloroethane	6/1/2016	0.34	0.5	UG/L	J
524.2 TVOC	6/1/2016	2.14	0	UG/L	
Chloroform	6/1/2016	1.8	0.5	UG/L	
1,1,1-Trichloroethane	7/7/2016	0.32	0.5	UG/L	J
1,1-Dichloroethane	7/7/2016	0.16	0.5	UG/L	J
1,1-Dichloroethylene	7/7/2016	0.15	0.5	UG/L	J
524.2 TVOC	7/7/2016	1.85	0	UG/L	
Bromodichloromethane	7/7/2016	0.14	0.5	UG/L	J
Carbon tetrachloride	7/7/2016	0.32	0.5	UG/L	J
Chloroform	7/7/2016	0.76	0.5	UG/L	
1,1,1-Trichloroethane	8/9/2016	0.17	0.5	UG/L	J
524.2 TVOC	8/9/2016	0.53	0	UG/L	
Carbon tetrachloride	8/9/2016	0.2	0.5	UG/L	J
Chloroform	8/9/2016	0.16	0.5	UG/L	J

OU III North Street East System

Table F-31
Extraction Wells VOC Data
OU III North Street East System

2016 BNL Groundwater Status Report

Site ID : 000-487 (NSE-1)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/4/2016	0.74	0.5	UG/L	
1,1-Dichloroethylene	1/4/2016	0.37	0.5	UG/L	J
524.2 TVOC	1/4/2016	3.23	0	UG/L	
Chloroform	1/4/2016	1.5	0.5	UG/L	
Methylene chloride	1/4/2016	0.12	0.5	UG/L	J
Tetrachloroethylene	1/4/2016	0.22	0.5	UG/L	J
Trichloroethylene	1/4/2016	0.28	0.5	UG/L	J
1,1,1-Trichloroethane	4/4/2016	1.3	0.5	UG/L	
1,1-Dichloroethylene	4/4/2016	0.67	0.5	UG/L	
524.2 TVOC	4/4/2016	4.98	0	UG/L	
Chloroform	4/4/2016	2.3	0.5	UG/L	
Tetrachloroethylene	4/4/2016	0.3	0.5	UG/L	J
Trichloroethylene	4/4/2016	0.41	0.5	UG/L	J
1,1,1-Trichloroethane	7/7/2016	2.9	0.5	UG/L	
1,1-Dichloroethylene	7/7/2016	1.5	0.5	UG/L	
524.2 TVOC	7/7/2016	11.23	0	UG/L	
Carbon tetrachloride	7/7/2016	0.18	0.5	UG/L	J
Chloroform	7/7/2016	5.2	0.5	UG/L	
Tetrachloroethylene	7/7/2016	0.45	0.5	UG/L	J
Trichloroethylene	7/7/2016	1	0.5	UG/L	
1,1,1-Trichloroethane	10/3/2016	3.3	0.5	UG/L	
1,1-Dichloroethane	10/3/2016	0.074	0.5	UG/L	J
1,1-Dichloroethylene	10/3/2016	1.9	0.5	UG/L	
524.2 TVOC	10/3/2016	12.064	0	UG/L	
Chloroform	10/3/2016	4.8	0.5	UG/L	
Tetrachloroethylene	10/3/2016	0.49	0.5	UG/L	J
Trichloroethylene	10/3/2016	1.5	0.5	UG/L	

Site ID : 000-488 (NSE-2)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
524.2 TVOC	1/4/2016	0.55	0	UG/L	
Chloroform	1/4/2016	0.55	0.5	UG/L	
524.2 TVOC	4/4/2016	0.55	0	UG/L	
Chloroform	4/4/2016	0.55	0.5	UG/L	
524.2 TVOC	7/7/2016	0.96	0	UG/L	
Chloroform	7/7/2016	0.73	0.5	UG/L	
Tetrachloroethylene	7/7/2016	0.23	0.5	UG/L	J
524.2 TVOC	10/3/2016	0.86	0	UG/L	
Chloroform	10/3/2016	0.86	0.5	UG/L	

Table F-32
Carbon Influent VOC Data
OU III North Street East System

2016 BNL Groundwater Status Report

OU III North Street East Treatment System was in standby mode during 2016.

Table F-33
Carbon Effluent VOC and Tritium Data
OU III North Street East System

2016 BNL Groundwater Status Report

OU III North Street East Treatment System was in standby mode during 2016.

Table F-34
Cumulative Mass Removal
OU III North Street East System

2016 BNL Groundwater Status Report

OU III North Street East Treatment System was in standby mode during 2016.

OU III LIPA/Airport System

Table F-35
Cumulative Mass Removal
OU III LIPA/Airport System

2016 BNL Groundwater Status Report

Date Sampled	Total VOC's (ug/L)	Flow Rates (gpm)	Cumulative VOC's (lbs)
1/5/2016	5.13	424	410.48
2/1/2016	6.209	46	411.09
3/14/2016	6.44	418	413.20
4/25/2016	7.17	564	414.65
5/16/2016	6.8	461	416.91
6/13/2016	4.51	353	418.12
7/18/2016	5.23	361	419.18
8/15/2016	1.91	305	420.09
9/12/2016	5.85	241	421.26
10/17/2016	2.2	350	422.29
11/14/2016	5.7	486	424.27
12/13/2016	5.82	342	425.66

ug/L Micrograms per liter
gpm Gallons per minute
lbs Pounds

**Table F-36
Extraction Well VOC Data
OU III LIPA/Airport System**

2016 BNL Groundwater Status Report

Site ID : 000-453 (EW-1L)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	4.9	0.5	UG/L	
1,1-Dichloroethane	1/5/2016	0.081	0.5	UG/L	J
1,1-Dichloroethylene	1/5/2016	4.3	0.5	UG/L	
1,2-Dichloroethane	1/5/2016	0.42	0.5	UG/L	J
524.2 TVOC	1/5/2016	11.741	0	UG/L	
Carbon tetrachloride	1/5/2016	0.29	0.5	UG/L	J
Chloroform	1/5/2016	0.57	0.5	UG/L	
cis-1,2-Dichloroethylene	1/5/2016	0.18	0.5	UG/L	J
Trichloroethylene	1/5/2016	1	0.5	UG/L	
1,1,1-Trichloroethane	4/11/2016	7.9	0.5	UG/L	
1,1-Dichloroethane	4/11/2016	0.18	0.5	UG/L	J
1,1-Dichloroethylene	4/11/2016	4.3	0.5	UG/L	
1,2-Dichloroethane	4/11/2016	0.84	0.5	UG/L	
524.2 TVOC	4/11/2016	15.91	0	UG/L	
Carbon tetrachloride	4/11/2016	0.43	0.5	UG/L	J
Chloroform	4/11/2016	0.73	0.5	UG/L	
cis-1,2-Dichloroethylene	4/11/2016	0.23	0.5	UG/L	J
Trichloroethylene	4/11/2016	1.3	0.5	UG/L	
1,1,1-Trichloroethane	7/7/2016	5.6	0.5	UG/L	
1,1-Dichloroethane	7/7/2016	0.33	0.5	UG/L	J
1,1-Dichloroethylene	7/7/2016	4.8	0.5	UG/L	
1,2-Dichloroethane	7/7/2016	0.62	0.5	UG/L	
524.2 TVOC	7/7/2016	13.79	0	UG/L	
Carbon tetrachloride	7/7/2016	0.37	0.5	UG/L	J
Chloroform	7/7/2016	0.64	0.5	UG/L	
cis-1,2-Dichloroethylene	7/7/2016	0.23	0.5	UG/L	J
Trichloroethylene	7/7/2016	1.2	0.5	UG/L	
1,1,1-Trichloroethane	10/3/2016	11	0.5	UG/L	
1,1-Dichloroethane	10/3/2016	0.21	0.5	UG/L	J
1,1-Dichloroethylene	10/3/2016	10	0.5	UG/L	
1,2-Dichloroethane	10/3/2016	1.7	0.5	UG/L	
524.2 TVOC	10/3/2016	25.88	0	UG/L	
Carbon tetrachloride	10/3/2016	0.5	0.5	UG/L	
Chloroform	10/3/2016	1.1	0.5	UG/L	
cis-1,2-Dichloroethylene	10/3/2016	0.17	0.5	UG/L	J
Trichloroethylene	10/3/2016	1.2	0.5	UG/L	

Site ID : 000-455 (EW-2L)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	9.3	0.5	UG/L	
1,1-Dichloroethane	1/5/2016	0.19	0.5	UG/L	J
1,1-Dichloroethylene	1/5/2016	9	0.5	UG/L	
1,2-Dichloroethane	1/5/2016	1.1	0.5	UG/L	
524.2 TVOC	1/5/2016	23.05	0	UG/L	
Carbon tetrachloride	1/5/2016	0.72	0.5	UG/L	
Chloroform	1/5/2016	1.1	0.5	UG/L	
cis-1,2-Dichloroethylene	1/5/2016	0.24	0.5	UG/L	J
Trichloroethylene	1/5/2016	1.4	0.5	UG/L	
1,1,1-Trichloroethane	4/11/2016	16	0.5	UG/L	
1,1-Dichloroethane	4/11/2016	0.34	0.5	UG/L	J
1,1-Dichloroethylene	4/11/2016	11	0.5	UG/L	
1,2-Dichloroethane	4/11/2016	1.9	0.5	UG/L	
524.2 TVOC	4/11/2016	33.73	0	UG/L	
Carbon tetrachloride	4/11/2016	1.1	0.5	UG/L	
Chloroform	4/11/2016	1.7	0.5	UG/L	
cis-1,2-Dichloroethylene	4/11/2016	0.19	0.5	UG/L	J
Trichloroethylene	4/11/2016	1.5	0.5	UG/L	
1,1,1-Trichloroethane	7/6/2016	20	0.5	UG/L	
1,1-Dichloroethane	7/6/2016	0.39	0.5	UG/L	J
1,1-Dichloroethylene	7/6/2016	15	0.5	UG/L	

**Table F-36
Extraction Well VOC Data
OU III LIPA/Airport System**

2016 BNL Groundwater Status Report

Site ID : 000-455 (EW-2L) Continued

1,2-Dichloroethane	7/6/2016	3.1	0.5	UG/L	
524.2 TVOC	7/6/2016	44.23	0	UG/L	
Carbon tetrachloride	7/6/2016	1.7	0.5	UG/L	
Chloroform	7/6/2016	2	0.5	UG/L	
cis-1,2-Dichloroethylene	7/6/2016	0.24	0.5	UG/L	J
Trichloroethylene	7/6/2016	1.8	0.5	UG/L	
1,1,1-Trichloroethane	10/3/2016	17	0.5	UG/L	
1,1-Dichloroethane	10/3/2016	0.32	0.5	UG/L	J
1,1-Dichloroethylene	10/3/2016	16	0.5	UG/L	
1,2-Dichloroethane	10/3/2016	3.1	0.5	UG/L	
524.2 TVOC	10/3/2016	41.3	0	UG/L	
Carbon tetrachloride	10/3/2016	1.5	0.5	UG/L	
Chloroform	10/3/2016	1.7	0.5	UG/L	
cis-1,2-Dichloroethylene	10/3/2016	0.18	0.5	UG/L	J
Trichloroethylene	10/3/2016	1.5	0.5	UG/L	

Site ID : 000-457 (EW-3L)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	0.86	0.5	UG/L	
1,1-Dichloroethylene	1/5/2016	0.78	0.5	UG/L	
524.2 TVOC	1/5/2016	2.53	0	UG/L	
Chloroform	1/5/2016	0.65	0.5	UG/L	
Trichloroethylene	1/5/2016	0.24	0.5	UG/L	J
1,1,1-Trichloroethane	4/11/2016	0.84	0.5	UG/L	
1,1-Dichloroethylene	4/11/2016	0.31	0.5	UG/L	J
524.2 TVOC	4/11/2016	1.94	0	UG/L	
Chloroform	4/11/2016	0.55	0.5	UG/L	
Trichloroethylene	4/11/2016	0.24	0.5	UG/L	J
1,1,1-Trichloroethane	7/7/2016	0.55	0.5	UG/L	
1,1-Dichloroethane	7/7/2016	0.11	0.5	UG/L	J
1,1-Dichloroethylene	7/7/2016	0.73	0.5	UG/L	
524.2 TVOC	7/7/2016	1.99	0	UG/L	
Chloroform	7/7/2016	0.34	0.5	UG/L	J
Trichloroethylene	7/7/2016	0.26	0.5	UG/L	J
1,1,1-Trichloroethane	10/3/2016	0.75	0.5	UG/L	
1,1-Dichloroethylene	10/3/2016	0.68	0.5	UG/L	
524.2 TVOC	10/3/2016	1.72	0	UG/L	
Chloroform	10/3/2016	0.29	0.5	UG/L	J

Site ID : 000-461 (EW-4L)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	0.28	0.5	UG/L	J
1,1-Dichloroethane	1/5/2016	0.091	0.5	UG/L	J
1,1-Dichloroethylene	1/5/2016	0.18	0.5	UG/L	J
524.2 TVOC	1/5/2016	8.421	0	UG/L	
Carbon tetrachloride	1/5/2016	3.7	0.5	UG/L	
Chloroform	1/5/2016	0.67	0.5	UG/L	
Tetrachloroethylene	1/5/2016	2.2	0.5	UG/L	
Trichloroethylene	1/5/2016	1.3	0.5	UG/L	
1,1,1-Trichloroethane	4/11/2016	0.28	0.5	UG/L	J
1,1-Dichloroethane	4/11/2016	0.1	0.5	UG/L	J
1,1-Dichloroethylene	4/11/2016	0.16	0.5	UG/L	J
524.2 TVOC	4/11/2016	9.73	0	UG/L	
Carbon tetrachloride	4/11/2016	4.1	0.5	UG/L	
Chloroform	4/11/2016	0.79	0.5	UG/L	
Tetrachloroethylene	4/11/2016	2.8	0.5	UG/L	
Trichloroethylene	4/11/2016	1.5	0.5	UG/L	
1,1,1-Trichloroethane	7/6/2016	0.43	0.5	UG/L	J
1,1-Dichloroethane	7/6/2016	0.13	0.5	UG/L	J
1,1-Dichloroethylene	7/6/2016	0.23	0.5	UG/L	J
524.2 TVOC	7/6/2016	11.77	0	UG/L	
Carbon tetrachloride	7/6/2016	5.1	0.5	UG/L	

**Table F-36
Extraction Well VOC Data
OU III LIPA/Airport System**

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Site ID : 000-461 (EW-4L) Continued

Chloroform	7/6/2016	0.98	0.5	UG/L	
Tetrachloroethylene	7/6/2016	3.3	0.5	UG/L	
Trichloroethylene	7/6/2016	1.6	0.5	UG/L	
1,1,1-Trichloroethane	10/3/2016	0.22	0.5	UG/L	J
1,1-Dichloroethylene	10/3/2016	0.14	0.5	UG/L	J
524.2 TVOC	10/3/2016	6.9	0	UG/L	
Carbon tetrachloride	10/3/2016	2.9	0.5	UG/L	
Chloroform	10/3/2016	0.54	0.5	UG/L	
Tetrachloroethylene	10/3/2016	1.9	0.5	UG/L	
Trichloroethylene	10/3/2016	1.2	0.5	UG/L	

Site ID : 800-109 (RTW-1A)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
524.2 TVOC	1/5/2016	1.44	0	UG/L	
Carbon tetrachloride	1/5/2016	0.8	0.5	UG/L	
Chloroform	1/5/2016	0.64	0.5	UG/L	
524.2 TVOC	4/11/2016	1.7	0	UG/L	
Carbon tetrachloride	4/11/2016	1	0.5	UG/L	
Chloroform	4/11/2016	0.7	0.5	UG/L	
524.2 TVOC	7/6/2016	2.76	0	UG/L	
Carbon tetrachloride	7/6/2016	1.6	0.5	UG/L	
Chloroform	7/6/2016	0.76	0.5	UG/L	
Trichloroethylene	7/6/2016	0.4	0.5	UG/L	J
524.2 TVOC	10/3/2016	2.18	0	UG/L	
Carbon tetrachloride	10/3/2016	1.2	0.5	UG/L	
Chloroform	10/3/2016	0.65	0.5	UG/L	
Trichloroethylene	10/3/2016	0.33	0.5	UG/L	J

Site ID : 800-110 (RTW-2A)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	0.17	0.5	UG/L	J
1,1-Dichloroethylene	1/5/2016	0.3	0.5	UG/L	J
524.2 TVOC	1/5/2016	7.51	0	UG/L	
Carbon tetrachloride	1/5/2016	3.9	0.5	UG/L	
Chloroform	1/5/2016	0.84	0.5	UG/L	
Trichloroethylene	1/5/2016	2.3	0.5	UG/L	
524.2 TVOC	4/11/2016	0.73	0	UG/L	
Chloroform	4/11/2016	0.73	0.5	UG/L	
524.2 TVOC	7/6/2016	1.07	0	UG/L	
Carbon tetrachloride	7/6/2016	0.23	0.5	UG/L	J
Chloroform	7/6/2016	0.84	0.5	UG/L	
1,1,1-Trichloroethane	10/3/2016	0.18	0.5	UG/L	J
1,1-Dichloroethylene	10/3/2016	0.26	0.5	UG/L	J
524.2 TVOC	10/3/2016	6.67	0	UG/L	
Carbon tetrachloride	10/3/2016	3	0.5	UG/L	
Chloroform	10/3/2016	0.73	0.5	UG/L	
Trichloroethylene	10/3/2016	2.5	0.5	UG/L	

Site ID : 800-111 (RTW-3A)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,2,2-Tetrachloroethane	1/5/2016	0.24	0.5	UG/L	J
524.2 TVOC	1/5/2016	0.83	0	UG/L	
Chloroform	1/5/2016	0.25	0.5	UG/L	J
Methyl chloride	1/5/2016	0.13	0.5	UG/L	J
Trichloroethylene	1/5/2016	0.21	0.5	UG/L	J
524.2 TVOC	4/11/2016	0	0	UG/L	
524.2 TVOC	7/6/2016	0.28	0	UG/L	
Chloroform	7/6/2016	0.28	0.5	UG/L	J
1,1,1-Trichloroethane	10/3/2016	0.99	0.5	UG/L	
1,1-Dichloroethylene	10/3/2016	0.82	0.5	UG/L	
524.2 TVOC	10/3/2016	4.6	0	UG/L	
Carbon tetrachloride	10/3/2016	0.22	0.5	UG/L	J
Chloroform	10/3/2016	0.87	0.5	UG/L	
Trichloroethylene	10/3/2016	1.7	0.5	UG/L	

**Table F-36
Extraction Well VOC Data
OU III LIPA/Airport System**

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Site ID : 800-112 (RTW-4A)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	0.19	0.5	UG/L	J
1,1,2,2-Tetrachloroethane	1/5/2016	0.39	0.5	UG/L	J
1,2-Dichloroethane	1/5/2016	0.16	0.5	UG/L	J
524.2 TVOC	1/5/2016	3.04	0	UG/L	
Carbon tetrachloride	1/5/2016	0.41	0.5	UG/L	J
Chloroform	1/5/2016	1.5	0.5	UG/L	
Trichloroethylene	1/5/2016	0.39	0.5	UG/L	J
1,1,1-Trichloroethane	4/11/2016	0.19	0.5	UG/L	J
1,1,2,2-Tetrachloroethane	4/11/2016	0.28	0.5	UG/L	J
1,1-Dichloroethylene	4/11/2016	0.17	0.5	UG/L	J
1,2-Dichloroethane	4/11/2016	0.22	0.5	UG/L	J
524.2 TVOC	4/11/2016	3.21	0	UG/L	
Carbon tetrachloride	4/11/2016	0.36	0.5	UG/L	J
Chloroform	4/11/2016	1.5	0.5	UG/L	
Trichloroethylene	4/11/2016	0.49	0.5	UG/L	J
1,1,1-Trichloroethane	7/6/2016	0.2	0.5	UG/L	J
1,1,2,2-Tetrachloroethane	7/6/2016	0.33	0.5	UG/L	J
1,1-Dichloroethylene	7/6/2016	0.16	0.5	UG/L	J
1,2-Dichloroethane	7/6/2016	0.28	0.5	UG/L	J
524.2 TVOC	7/6/2016	3.46	0	UG/L	
Chloroform	7/6/2016	1.9	0.5	UG/L	
Trichloroethylene	7/6/2016	0.59	0.5	UG/L	
1,1,1-Trichloroethane	10/3/2016	0.17	0.5	UG/L	J
1,2-Dichloroethane	10/3/2016	0.23	0.5	UG/L	J
524.2 TVOC	10/3/2016	2.85	0	UG/L	
Carbon tetrachloride	10/3/2016	0.33	0.5	UG/L	J
Chloroform	10/3/2016	1.6	0.5	UG/L	
Trichloroethylene	10/3/2016	0.52	0.5	UG/L	

Site ID : 800-113 (RTW-5A)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
524.2 TVOC	1/5/2016	0.29	0	UG/L	
Chloroform	1/5/2016	0.29	0.5	UG/L	J
1,1,1-Trichloroethane	4/11/2016	0.091	0.5	UG/L	J
524.2 TVOC	4/11/2016	0.551	0	UG/L	
Chloroform	4/11/2016	0.46	0.5	UG/L	J
524.2 TVOC	7/6/2016	0.67	0	UG/L	
Chloroform	7/6/2016	0.57	0.5	UG/L	
Methyl chloride	7/6/2016	0.1	0.5	UG/L	J
524.2 TVOC	10/3/2016	0.39	0	UG/L	
Chloroform	10/3/2016	0.39	0.5	UG/L	J

Site ID : 800-132 (RTW-6A)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	0.26	0.5	UG/L	J
1,1-Dichloroethylene	1/5/2016	0.46	0.5	UG/L	J
524.2 TVOC	1/5/2016	10	0	UG/L	
Carbon tetrachloride	1/5/2016	4.9	0.5	UG/L	
Chloroform	1/5/2016	0.69	0.5	UG/L	
cis-1,2-Dichloroethylene	1/5/2016	0.09	0.5	UG/L	J
Trichloroethylene	1/5/2016	3.6	0.5	UG/L	
1,1,1-Trichloroethane	4/11/2016	0.29	0.5	UG/L	J
1,1-Dichloroethylene	4/11/2016	0.29	0.5	UG/L	J
524.2 TVOC	4/11/2016	10.67	0	UG/L	
Carbon tetrachloride	4/11/2016	5	0.5	UG/L	
Chloroform	4/11/2016	0.78	0.5	UG/L	
cis-1,2-Dichloroethylene	4/11/2016	0.11	0.5	UG/L	J
Trichloroethylene	4/11/2016	4.2	0.5	UG/L	
1,1,1-Trichloroethane	7/6/2016	0.3	0.5	UG/L	J
1,1-Dichloroethylene	7/6/2016	0.37	0.5	UG/L	J
524.2 TVOC	7/6/2016	11.25	0	UG/L	
Carbon tetrachloride	7/6/2016	5.1	0.5	UG/L	
Chloroform	7/6/2016	0.76	0.5	UG/L	
cis-1,2-Dichloroethylene	7/6/2016	0.12	0.5	UG/L	J
Trichloroethylene	7/6/2016	4.6	0.5	UG/L	

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Extraction Well VOC Data
OU III LIPA/Airport System

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Site ID : 800-132 (RTW-6A)

1,1,1-Trichloroethane	10/3/2016	0.23	0.5	UG/L	J
1,1-Dichloroethylene	10/3/2016	0.33	0.5	UG/L	J
524.2 TVOC	10/3/2016	7.87	0	UG/L	
Carbon tetrachloride	10/3/2016	3.3	0.5	UG/L	
Chloroform	10/3/2016	0.61	0.5	UG/L	
Trichloroethylene	10/3/2016	3.4	0.5	UG/L	

**Table F-37
Carbon influent VOC Data
OU III LIPA/Airport System**

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Site ID : 800-122 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/5/2016	0.19	0.5	UG/L	J
1,1,2,2-Tetrachloroethane	1/5/2016	0.16	0.5	UG/L	J
1,1-Dichloroethylene	1/5/2016	0.16	0.5	UG/L	J
524.2 TVOC	1/5/2016	5.13	0	UG/L	
Carbon tetrachloride	1/5/2016	2	0.5	UG/L	
Chloroform	1/5/2016	1	0.5	UG/L	
Methyl chloride	1/5/2016	0.12	0.5	UG/L	J
Trichloroethylene	1/5/2016	1.5	0.5	UG/L	
1,1,1-Trichloroethane	1/20/2016	0.23	0.5	UG/L	J
1,1,2,2-Tetrachloroethane	1/20/2016	0.12	0.5	UG/L	J
1,1-Dichloroethylene	1/20/2016	0.22	0.5	UG/L	J
524.2 TVOC	1/20/2016	3.35	0	UG/L	
Carbon tetrachloride	1/20/2016	1.1	0.5	UG/L	
Chloroform	1/20/2016	0.71	0.5	UG/L	
Trichloroethylene	1/20/2016	0.97	0.5	UG/L	
1,1-Dichloroethylene	2/1/2016	0.24	0.5	UG/L	J
524.2 TVOC	2/1/2016	6.209	0	UG/L	
Carbon tetrachloride	2/1/2016	2.7	0.5	UG/L	
Chloroform	2/1/2016	0.94	0.5	UG/L	
Methyl chloride	2/1/2016	0.099	0.5	UG/L	J
Tetrachloroethylene	2/1/2016	0.63	0.5	UG/L	
Trichloroethylene	2/1/2016	1.6	0.5	UG/L	
1,1,1-Trichloroethane	3/2/2016	0.27	0.5	UG/L	J
1,1-Dichloroethylene	3/2/2016	0.29	0.5	UG/L	J
1,2-Dichloroethane	3/2/2016	0.18	0.5	UG/L	J
524.2 TVOC	3/2/2016	7.54	0	UG/L	
Carbon tetrachloride	3/2/2016	3.3	0.5	UG/L	
Chloroform	3/2/2016	1.1	0.5	UG/L	
Trichloroethylene	3/2/2016	2.4	0.5	UG/L	
1,1,1-Trichloroethane	3/14/2016	0.22	0.5	UG/L	J
1,1,2,2-Tetrachloroethane	3/14/2016	0.13	0.5	UG/L	J
1,1-Dichloroethylene	3/14/2016	0.29	0.5	UG/L	J
524.2 TVOC	3/14/2016	6.44	0	UG/L	
Carbon tetrachloride	3/14/2016	2.7	0.5	UG/L	
Chloroform	3/14/2016	1.1	0.5	UG/L	
Trichloroethylene	3/14/2016	2	0.5	UG/L	
524.2 TVOC	4/11/2016	0	0	UG/L	
1,1,1-Trichloroethane	4/25/2016	0.2	0.5	UG/L	J
1,1-Dichloroethylene	4/25/2016	0.31	0.5	UG/L	J
524.2 TVOC	4/25/2016	7.17	0	UG/L	
Carbon tetrachloride	4/25/2016	3	0.5	UG/L	
Chloroform	4/25/2016	0.73	0.5	UG/L	
Tetrachloroethylene	4/25/2016	0.93	0.5	UG/L	
Trichloroethylene	4/25/2016	2	0.5	UG/L	
1,1,1-Trichloroethane	5/2/2016	0.2	0.5	UG/L	J
1,1-Dichloroethylene	5/2/2016	0.25	0.5	UG/L	J
524.2 TVOC	5/2/2016	6.77	0	UG/L	
Carbon tetrachloride	5/2/2016	3.1	0.5	UG/L	
Chloroform	5/2/2016	0.72	0.5	UG/L	
Trichloroethylene	5/2/2016	2.5	0.5	UG/L	
1,1,1-Trichloroethane	5/16/2016	0.23	0.5	UG/L	J
1,1-Dichloroethylene	5/16/2016	0.31	0.5	UG/L	J
524.2 TVOC	5/16/2016	6.8	0	UG/L	
Carbon tetrachloride	5/16/2016	2.8	0.5	UG/L	
Chloroform	5/16/2016	1.1	0.5	UG/L	
Tetrachloroethylene	5/16/2016	0.76	0.5	UG/L	
Trichloroethylene	5/16/2016	1.6	0.5	UG/L	
1,1,1-Trichloroethane	6/1/2016	0.21	0.5	UG/L	J

Table F-37
Carbon influent VOC Data
OU III LIPA/Airport System

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Site ID : 800-122 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1-Dichloroethylene	6/1/2016	0.2	0.5	UG/L	J
524.2 TVOC	6/1/2016	5.01	0	UG/L	
Carbon tetrachloride	6/1/2016	2	0.5	UG/L	
Chloroform	6/1/2016	1.1	0.5	UG/L	
Trichloroethylene	6/1/2016	1.5	0.5	UG/L	
1,1,1-Trichloroethane	6/13/2016	0.19	0.5	UG/L	J
1,1,2,2-Tetrachloroethane	6/13/2016	0.16	0.5	UG/L	J
1,1-Dichloroethylene	6/13/2016	0.22	0.5	UG/L	J
524.2 TVOC	6/13/2016	4.51	0	UG/L	
Carbon tetrachloride	6/13/2016	1.7	0.5	UG/L	
Chloroform	6/13/2016	0.94	0.5	UG/L	
Trichloroethylene	6/13/2016	1.3	0.5	UG/L	
1,1-Dichloroethylene	7/6/2016	0.13	0.5	UG/L	J
524.2 TVOC	7/6/2016	2.98	0	UG/L	
Carbon tetrachloride	7/6/2016	1.2	0.5	UG/L	
Chloroform	7/6/2016	0.65	0.5	UG/L	
Trichloroethylene	7/6/2016	1	0.5	UG/L	
1,1,1-Trichloroethane	7/18/2016	0.22	0.5	UG/L	J
1,1-Dichloroethylene	7/18/2016	0.21	0.5	UG/L	J
524.2 TVOC	7/18/2016	5.23	0	UG/L	
Carbon tetrachloride	7/18/2016	2	0.5	UG/L	
Chloroform	7/18/2016	0.83	0.5	UG/L	
Tetrachloroethylene	7/18/2016	0.57	0.5	UG/L	
Trichloroethylene	7/18/2016	1.4	0.5	UG/L	
1,1,1-Trichloroethane	8/2/2016	0.2	0.5	UG/L	J
1,1-Dichloroethylene	8/2/2016	0.18	0.5	UG/L	J
524.2 TVOC	8/2/2016	6.4	0	UG/L	
Carbon tetrachloride	8/2/2016	2.6	0.5	UG/L	
Chloroform	8/2/2016	0.93	0.5	UG/L	
Tetrachloroethylene	8/2/2016	0.79	0.5	UG/L	
Trichloroethylene	8/2/2016	1.7	0.5	UG/L	
524.2 TVOC	8/15/2016	1.91	0	UG/L	
Chloroform	8/15/2016	0.38	0.5	UG/L	J
Methylene chloride	8/15/2016	0.73	0.5	UG/L	
Tetrachloroethylene	8/15/2016	0.26	0.5	UG/L	J
Trichloroethylene	8/15/2016	0.54	0.5	UG/L	
1,1,1-Trichloroethane	9/1/2016	0.21	0.5	UG/L	J
1,1-Dichloroethylene	9/1/2016	0.2	0.5	UG/L	J
524.2 TVOC	9/1/2016	7.55	0	UG/L	
Carbon tetrachloride	9/1/2016	3.5	0.5	UG/L	
Chloroform	9/1/2016	0.7	0.5	UG/L	
Tetrachloroethylene	9/1/2016	0.94	0.5	UG/L	
Trichloroethylene	9/1/2016	2	0.5	UG/L	
1,1,1-Trichloroethane	9/12/2016	0.19	0.5	UG/L	J
1,1-Dichloroethylene	9/12/2016	0.2	0.5	UG/L	J
524.2 TVOC	9/12/2016	5.85	0	UG/L	
Carbon tetrachloride	9/12/2016	2.3	0.5	UG/L	
Chloroform	9/12/2016	0.91	0.5	UG/L	
Tetrachloroethylene	9/12/2016	0.75	0.5	UG/L	
Trichloroethylene	9/12/2016	1.5	0.5	UG/L	
1,1,1-Trichloroethane	10/3/2016	0.36	0.5	UG/L	J
1,1-Dichloroethylene	10/3/2016	0.41	0.5	UG/L	J
524.2 TVOC	10/3/2016	6.01	0	UG/L	
Carbon tetrachloride	10/3/2016	2	0.5	UG/L	
Chloroform	10/3/2016	1	0.5	UG/L	
Tetrachloroethylene	10/3/2016	0.54	0.5	UG/L	
Trichloroethylene	10/3/2016	1.7	0.5	UG/L	
1,1,1-Trichloroethane	10/17/2016	0.18	0.5	UG/L	J

Table F-37
Carbon influent VOC Data
OU III LIPA/Airport System

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Site ID : 800-122 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1-Dichloroethylene	10/17/2016	0.16	0.5	UG/L	J
524.2 TVOC	10/17/2016	5.51	0	UG/L	
Carbon tetrachloride	10/17/2016	2.2	0.5	UG/L	
Chloroform	10/17/2016	0.88	0.5	UG/L	
Tetrachloroethylene	10/17/2016	0.69	0.5	UG/L	
Trichloroethylene	10/17/2016	1.4	0.5	UG/L	
1,1,1-Trichloroethane	11/2/2016	0.26	0.5	UG/L	J
1,1,2,2-Tetrachloroethane	11/2/2016	0.13	0.5	UG/L	J
1,1-Dichloroethylene	11/2/2016	0.27	0.5	UG/L	J
524.2 TVOC	11/2/2016	5.6	0	UG/L	
Carbon tetrachloride	11/2/2016	1.9	0.5	UG/L	
Chloroform	11/2/2016	0.88	0.5	UG/L	
Tetrachloroethylene	11/2/2016	0.56	0.5	UG/L	
Trichloroethylene	11/2/2016	1.6	0.5	UG/L	
1,1,1-Trichloroethane	11/14/2016	0.21	0.5	UG/L	J
1,1-Dichloroethylene	11/14/2016	0.22	0.5	UG/L	J
524.2 TVOC	11/14/2016	5.7	0	UG/L	
Carbon tetrachloride	11/14/2016	2.1	0.5	UG/L	
Chloroform	11/14/2016	0.96	0.5	UG/L	
Tetrachloroethylene	11/14/2016	0.61	0.5	UG/L	
Trichloroethylene	11/14/2016	1.6	0.5	UG/L	
1,1,1-Trichloroethane	12/1/2016	0.17	0.5	UG/L	J
1,1-Dichloroethylene	12/1/2016	0.16	0.5	UG/L	J
524.2 TVOC	12/1/2016	5.25	0	UG/L	
Carbon tetrachloride	12/1/2016	2	0.5	UG/L	
Chloroform	12/1/2016	0.87	0.5	UG/L	
Tetrachloroethylene	12/1/2016	0.65	0.5	UG/L	
Trichloroethylene	12/1/2016	1.4	0.5	UG/L	
1,1,1-Trichloroethane	12/13/2016	0.2	0.5	UG/L	J
1,1-Dichloroethylene	12/13/2016	0.19	0.5	UG/L	J
524.2 TVOC	12/13/2016	5.82	0	UG/L	
Carbon tetrachloride	12/13/2016	2.2	0.5	UG/L	
Chloroform	12/13/2016	0.93	0.5	UG/L	
Tetrachloroethylene	12/13/2016	0.7	0.5	UG/L	
Trichloroethylene	12/13/2016	1.6	0.5	UG/L	

Table F-38
Carbon Effluent VOC Data
OU III LIPA/Airport System

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Site ID : 800-124 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
524.2 TVOC	1/5/2016	0.2	0	UG/L	
Methyl chloride	1/5/2016	0.2	0.5	UG/L	J
524.2 TVOC	1/20/2016	0	0	UG/L	
524.2 TVOC	2/1/2016	0	0	UG/L	
524.2 TVOC	3/2/2016	0	0	UG/L	
524.2 TVOC	3/14/2016	0.21	0	UG/L	
Chloroform	3/14/2016	0.21	0.5	UG/L	J
524.2 TVOC	4/11/2016	0	0	UG/L	
524.2 TVOC	4/25/2016	0	0	UG/L	
524.2 TVOC	5/2/2016	0	0	UG/L	
524.2 TVOC	5/16/2016	0	0	UG/L	
524.2 TVOC	6/1/2016	0.21	0	UG/L	
Chloroform	6/1/2016	0.21	0.5	UG/L	J
524.2 TVOC	6/13/2016	0.35	0	UG/L	
Chloroform	6/13/2016	0.35	0.5	UG/L	J
524.2 TVOC	7/6/2016	0	0	UG/L	
524.2 TVOC	7/18/2016	0	0	UG/L	
524.2 TVOC	8/2/2016	0	0	UG/L	
524.2 TVOC	8/15/2016	0	0	UG/L	
524.2 TVOC	9/1/2016	0.13	0	UG/L	
Chloroform	9/1/2016	0.13	0.5	UG/L	J
524.2 TVOC	9/12/2016	0.29	0	UG/L	
Chloroform	9/12/2016	0.29	0.5	UG/L	J
524.2 TVOC	10/3/2016	0	0	UG/L	
524.2 TVOC	10/17/2016	0	0	UG/L	
524.2 TVOC	11/2/2016	0	0	UG/L	
524.2 TVOC	11/14/2016	0	0	UG/L	
524.2 TVOC	12/1/2016	0.31	0	UG/L	
Chloroform	12/1/2016	0.31	0.5	UG/L	J
524.2 TVOC	12/13/2016	0.5	0	UG/L	
Chloroform	12/13/2016	0.5	0.5	UG/L	

BGRR/WCF Sr-90 System

Table F-39
Extraction Well Data
OU III BGRR/WCF Sr-90 System

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Site ID : 065-368 (SR-1)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
Strontium-90	1/7/2016	6.26	0.778	0.781	PCI/L	0		W
Strontium-90	2/18/2016	9.63	0.778	1.01	PCI/L	0		W
Strontium-90	3/3/2016	7.8	0.678	0.949	PCI/L	0		W
Strontium-90	4/11/2016	13.5	0.465	1.08	PCI/L	0		W
Strontium-90	4/11/2016	13.5	0.465	1.08	PCI/L	0		W
Strontium-90	10/26/2016	30	0.682	1.73	PCI/L	0		W
Strontium-90	10/27/2016	27.6	1.48	2.39	PCI/L	0		W

Site ID : 065-369 (SR-2)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
Strontium-90	1/7/2016	22.1	0.782	1.04	PCI/L	0		W
Strontium-90	2/18/2016	20.3	0.786	1.49	PCI/L	0		W
Strontium-90	3/3/2016	20.1	0.786	1.47	PCI/L	0		W
Strontium-90	4/11/2016	21.3	0.541	1.35	PCI/L	0		W
Strontium-90	4/11/2016	21.3	0.541	1.35	PCI/L	0		W
Strontium-90	5/4/2016	18.4	0.738	1.47	PCI/L	0		W
Strontium-90	6/7/2016	24	0.611	1.64	PCI/L	0		W
Strontium-90	8/3/2016	25.9	0.68	1.62	PCI/L	0		W
Strontium-90	9/20/2016	28.2	0.706	1.84	PCI/L	0		W
Strontium-90	10/4/2016	20.5	0.715	1.4	PCI/L	0		W
Strontium-90	11/17/2016	29	0.503	1.68	PCI/L	0		W
Strontium-90	12/8/2016	11.1	0.491	0.658	PCI/L	0		W

Site ID : 075-676 (SR-3)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
Strontium-90	1/7/2016	5.34	0.78	0.644	PCI/L	0		W
Strontium-90	2/18/2016	4.01	0.743	0.759	PCI/L	0		W
Strontium-90	3/3/2016	4.5	0.731	0.829	PCI/L	0		W
Strontium-90	4/11/2016	4.71	0.527	0.654	PCI/L	0		W
Strontium-90	4/11/2016	4.71	0.527	0.654	PCI/L	0		W
Strontium-90	5/4/2016	3.72	0.767	0.75	PCI/L	0		W
Strontium-90	6/7/2016	4.39	0.628	0.78	PCI/L	0		W
Strontium-90	7/18/2016	3.12	0.62	0.623	PCI/L	0		W
Strontium-90	8/3/2016	2.41	0.687	0.603	PCI/L	0		W
Strontium-90	9/20/2016	1.65	0.696	0.577	PCI/L	0		W
Strontium-90	11/17/2016	0.863	0.675	0.468	PCI/L	0		W
Strontium-90	12/8/2016	0.559	0.493	0.323	PCI/L	0	J	W

Site ID : 075-677 (SR-4)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
Strontium-90	3/3/2016	1.4	0.562	0.474	PCI/L	0		W
Strontium-90	5/4/2016	1.36	0.677	0.524	PCI/L	0		W
Strontium-90	7/18/2016	0.9	0.602	0.43	PCI/L	0		W
Strontium-90	10/4/2016	0.959	0.735	0.508	PCI/L	0		W

Table F-39
Extraction Well Data
OU III BGRR/WCF Sr-90 System

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Site ID : 075-678 (SR-5)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
Strontium-90	3/3/2016	1.42	0.8	0.587	PCI/L	0		W
Strontium-90	5/4/2016	3.56	0.779	0.678	PCI/L	0		W
Strontium-90	7/18/2016	1.11	0.533	0.426	PCI/L	0		W
Strontium-90	10/4/2016	2.65	0.785	0.68	PCI/L	0		W

Site ID : 065-403 (SR-6)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
Strontium-90	1/7/2016	8.4	0.774	0.746	PCI/L	0		W
Strontium-90	3/30/2016	6.78	0.597	0.794	PCI/L	0		W
Strontium-90	5/4/2016	9.39	0.68	1.1	PCI/L	0		W
Strontium-90	7/18/2016	5.76	0.612	0.779	PCI/L	0		W
Strontium-90	9/20/2016	5.01	0.734	0.831	PCI/L	0		W
Strontium-90	10/4/2016	4.46	0.693	0.819	PCI/L	0		W
Strontium-90	11/17/2016	4.72	0.653	0.75	PCI/L	0		W

Site ID : 075-702 (SR-7)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
Strontium-90	1/7/2016	3.98	0.777	0.608	PCI/L	0		W
Strontium-90	2/18/2016	3.48	0.759	0.722	PCI/L	0		W
Strontium-90	3/30/2016	3.28	0.59	0.613	PCI/L	0		W
Strontium-90	4/11/2016	3.81	0.626	0.655	PCI/L	0		W
Strontium-90	4/11/2016	3.81	0.626	0.655	PCI/L	0		W
Strontium-90	5/4/2016	4.24	0.768	0.741	PCI/L	0		W
Strontium-90	6/7/2016	3.51	0.751	0.683	PCI/L	0		W
Strontium-90	7/18/2016	3.56	0.596	0.621	PCI/L	0		W
Strontium-90	8/3/2016	3.52	0.771	0.626	PCI/L	0		W
Strontium-90	9/20/2016	3.66	0.704	0.725	PCI/L	0		W
Strontium-90	10/4/2016	2.32	0.774	0.649	PCI/L	0		W
Strontium-90	11/17/2016	4.88	0.681	0.794	PCI/L	0		W
Strontium-90	12/8/2016	2.43	0.497	0.466	PCI/L	0		W

Site ID : 075-703 (SR-8)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
Strontium-90	1/7/2016	10.3	0.434	0.623	PCI/L	0		W
Strontium-90	2/18/2016	9.89	0.793	1.1	PCI/L	0		W
Strontium-90	3/29/2016	10.5	0.759	1.13	PCI/L	0		W
Strontium-90	4/11/2016	9.15	0.493	0.916	PCI/L	0		W
Strontium-90	4/11/2016	9.15	0.493	0.916	PCI/L	0		W
Strontium-90	5/4/2016	6.32	0.762	0.917	PCI/L	0		W
Strontium-90	6/7/2016	7.91	0.539	0.952	PCI/L	0		W
Strontium-90	7/18/2016	8.32	0.65	0.917	PCI/L	0		W
Strontium-90	8/3/2016	7.36	0.775	0.871	PCI/L	0		W
Strontium-90	9/20/2016	7.05	0.714	0.954	PCI/L	0		W
Strontium-90	10/4/2016	5.81	0.762	0.895	PCI/L	0		W
Strontium-90	11/17/2016	5.49	0.847	0.837	PCI/L	0		W
Strontium-90	12/8/2016	7.73	0.492	0.549	PCI/L	0		W

Table F-39
Extraction Well Data
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Site ID : 075-704 (SR-9)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
Strontium-90	1/7/2016	9.19	0.777	0.725	PCI/L	0		W
Strontium-90	2/18/2016	10.9	0.79	1.14	PCI/L	0		W
Strontium-90	3/3/2016	10.9	0.784	1.16	PCI/L	0		W
Strontium-90	4/11/2016	9.91	0.486	0.935	PCI/L	0		W
Strontium-90	4/11/2016	9.91	0.486	0.935	PCI/L	0		W
Strontium-90	5/4/2016	6.13	0.786	0.879	PCI/L	0		W
Strontium-90	6/7/2016	11.5	0.678	1.29	PCI/L	0		W
Strontium-90	7/18/2016	13.2	0.785	1.26	PCI/L	0		W
Strontium-90	8/3/2016	11.6	0.776	0.921	PCI/L	0		W
Strontium-90	9/20/2016	15.4	0.739	1.34	PCI/L	0		W
Strontium-90	10/4/2016	12.8	0.641	1.27	PCI/L	0		W
Strontium-90	11/17/2016	13.7	0.449	1.15	PCI/L	0		W
Strontium-90	12/8/2016	10.7	0.483	0.756	PCI/L	0		W

Table F-40
System Influent Data
OU III BGRR/WCF Sr-90 System

2016 BNL Groundwater Status Report

Site ID: 066-216 (Influent)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
1,1,1-Trichloroethane	1/7/2016	0.61	0.5	0	UG/L	0	
1,1-Dichloroethane	1/7/2016	0.2	0.5	0	UG/L	0	J
524.2 TVOC	1/7/2016	1.59	0	0	UG/L	0	
Chloroform	1/7/2016	0.31	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	1/7/2016	0.31	0.5	0	UG/L	0	J
Methyl tert-butyl ether	1/7/2016	0.16	0.5	0	UG/L	0	J
Strontium-90	1/7/2016	7.05	0.775	0.822	PCI/L	0	
Tritium	1/7/2016	437	160	137	PCI/L	0	
Strontium-90	2/9/2016	46.7	0.585	1.9	PCI/L	0	
1,1,1-Trichloroethane	2/18/2016	0.69	1	0	UG/L	0	J
624 TVOC	2/18/2016	1.38	0	0	UG/L	0	
Chloroform	2/18/2016	0.34	1	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	2/18/2016	0.35	1	0	UG/L	0	J
Strontium-90	2/18/2016	8.25	0.767	0.905	PCI/L	0	
Tritium	2/18/2016	318	251	173	PCI/L	0	
1,1,1-Trichloroethane	3/3/2016	0.54	1	0	UG/L	0	J
624 TVOC	3/3/2016	0.54	0	0	UG/L	0	
Strontium-90	3/3/2016	7.91	0.716	1.04	PCI/L	0	
Tritium	3/3/2016	339	232	146	PCI/L	0	
1,1,1-Trichloroethane	3/29/2016	0.53	1	0	UG/L	0	J
624 TVOC	3/29/2016	0.53	0	0	UG/L	0	
Strontium-90	3/29/2016	8.37	0.59	0.887	PCI/L	0	
Tritium	3/29/2016	415	202	131	PCI/L	0	
1,1,1-Trichloroethane	4/11/2016	0.51	1	0	UG/L	0	J
1,1,1-Trichloroethane	4/11/2016	0.51	1	0	UG/L	0	J
624 TVOC	4/11/2016	0.51	0	0	UG/L	0	
624 TVOC	4/11/2016	0.51	0	0	UG/L	0	
Strontium-90	4/11/2016	8.21	0.477	0.846	PCI/L	0	
Strontium-90	4/11/2016	8.21	0.477	0.846	PCI/L	0	
Tritium	4/11/2016	352	248	156	PCI/L	0	
Tritium	4/11/2016	352	248	156	PCI/L	0	
1,1,1-Trichloroethane	4/25/2016	0.57	1	0	UG/L	0	J
624 TVOC	4/25/2016	0.9	0	0	UG/L	0	
Ethene, 1,2-dichloro-, (E)-	4/25/2016	0.33	1	0	UG/L	0	J
Strontium-90	4/25/2016	5.77	0.714	0.771	PCI/L	0	
Tritium	4/25/2016	282	218	136	PCI/L	0	J
1,1,1-Trichloroethane	5/4/2016	0.47	1	0	UG/L	0	J
624 TVOC	5/4/2016	0.78	0	0	UG/L	0	
Chloroform	5/4/2016	0.31	1	0	UG/L	0	J
Strontium-90	5/4/2016	7.8	0.709	0.998	PCI/L	0	
Tritium	5/4/2016	491	174	143	PCI/L	0	
1,1,1-Trichloroethane	5/17/2016	0.53	1	0	UG/L	0	J
624 TVOC	5/17/2016	0.86	0	0	UG/L	0	
Chloroform	5/17/2016	0.33	1	0	UG/L	0	J
Strontium-90	5/17/2016	7.08	0.601	0.776	PCI/L	0	
Tritium	5/17/2016	723	393	262	PCI/L	0	
1,1,1-Trichloroethane	6/7/2016	0.55	1	0	UG/L	0	J
624 TVOC	6/7/2016	0.55	0	0	UG/L	0	
Strontium-90	6/7/2016	10.1	0.702	1.1	PCI/L	0	
1,1,1-Trichloroethane	6/21/2016	0.71	1	0	UG/L	0	J
624 TVOC	6/21/2016	1.03	0	0	UG/L	0	
Ethene, 1,2-dichloro-, (E)-	6/21/2016	0.32	1	0	UG/L	0	J
Strontium-90	6/21/2016	8.87	0.793	1.1	PCI/L	0	

Table F-40
System Influent Data
OU III BGRR/WCF Sr-90 System

2016 BNL Groundwater Status Report

Site ID: 066-216 (Influent)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
1,1,1-Trichloroethane	7/18/2016	0.45	1	0	UG/L	0	J
624 TVOC	7/18/2016	0.45	0	0	UG/L	0	
Strontium-90	7/18/2016	8.62	0.554	0.946	PCI/L	0	
Tritium	7/18/2016	547	213	142	PCI/L	0	
1,1,1-Trichloroethane	7/25/2016	0.6	1	0	UG/L	0	J
624 TVOC	7/25/2016	0.92	0	0	UG/L	0	
Ethene, 1,2-dichloro-, (E)-	7/25/2016	0.32	1	0	UG/L	0	J
Strontium-90	7/25/2016	6.37	0.67	0.809	PCI/L	0	
Tritium	7/25/2016	558	417	267	PCI/L	0	
1,1,1-Trichloroethane	8/3/2016	0.43	1	0	UG/L	0	J
624 TVOC	8/3/2016	0.43	0	0	UG/L	0	
Strontium-90	8/3/2016	7.46	0.836	0.959	PCI/L	0	
1,1,1-Trichloroethane	8/16/2016	0.47	0.5	0	UG/L	0	J
524.2 TVOC	8/16/2016	2.93	0	0	UG/L	0	
Chloroform	8/16/2016	0.24	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	8/16/2016	1.99	0.5	0	UG/L	0	
Methyl tert-butyl ether	8/16/2016	0.23	0.5	0	UG/L	0	J
Strontium-90	8/16/2016	7.45	0.469	0.786	PCI/L	0	
1,1,1-Trichloroethane	9/20/2016	0.66	0.5	0	UG/L	0	
1,1-Dichloroethane	9/20/2016	0.21	0.5	0	UG/L	0	J
524.2 TVOC	9/20/2016	2.12	0	0	UG/L	0	
Ethene, 1,2-dichloro-, (E)-	9/20/2016	1	0.5	0	UG/L	0	
Methyl tert-butyl ether	9/20/2016	0.25	0.5	0	UG/L	0	J
Strontium-90	9/20/2016	9.83	0.717	1.1	PCI/L	0	
Tritium	9/20/2016	975	385	273	PCI/L	0	
1,1,1-Trichloroethane	10/4/2016	0.57	0.5	0	UG/L	0	
1,1-Dichloroethane	10/4/2016	0.18	0.5	0	UG/L	0	J
524.2 TVOC	10/4/2016	1.94	0	0	UG/L	0	
Chloroform	10/4/2016	0.3	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	10/4/2016	0.71	0.5	0	UG/L	0	
Methyl tert-butyl ether	10/4/2016	0.18	0.5	0	UG/L	0	J
Strontium-90	10/4/2016	7.86	0.761	0.993	PCI/L	0	
1,1,1-Trichloroethane	10/26/2016	0.33	0.5	0	UG/L	0	J
524.2 TVOC	10/26/2016	27.03	0	0	UG/L	0	
cis-1,2-Dichloroethylene	10/26/2016	0.7	0.5	0	UG/L	0	
Ethene, 1,2-dichloro-, (E)-	10/26/2016	26	0.5	0	UG/L	0	
Strontium-90	10/26/2016	16.4	0.764	1.18	PCI/L	0	
Tritium	10/26/2016	1130	368	287	PCI/L	0	
1,1,1-Trichloroethane	11/17/2016	0.54	0.5	0	UG/L	0	
524.2 TVOC	11/17/2016	1.43	0	0	UG/L	0	
Chloroform	11/17/2016	0.19	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	11/17/2016	0.45	0.5	0	UG/L	0	J
Methyl tert-butyl ether	11/17/2016	0.25	0.5	0	UG/L	0	J
Strontium-90	11/17/2016	9.41	0.341	0.414	PCI/L	0	
Tritium	11/17/2016	951	376	268	PCI/L	0	
1,1,1-Trichloroethane	11/29/2016	0.52	0.5	0	UG/L	0	
1,1-Dichloroethane	11/29/2016	0.18	0.5	0	UG/L	0	J
524.2 TVOC	11/29/2016	1.42	0	0	UG/L	0	
Chloroform	11/29/2016	0.19	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	11/29/2016	0.33	0.5	0	UG/L	0	J
Methyl tert-butyl ether	11/29/2016	0.2	0.5	0	UG/L	0	J
Strontium-90	11/29/2016	7.51	0.979	1.06	PCI/L	0	
Tritium	11/29/2016	781	380	248	PCI/L	0	

Table F-40
System Influent Data
OU III BGRR/WCF Sr-90 System

2016 BNL Groundwater Status Report

Site ID: 066-216 (Influent)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
1,1,1-Trichloroethane	12/8/2016	0.45	0.5	0	UG/L	0	J
524.2 TVOC	12/8/2016	1.28	0	0	UG/L	0	
Chloroform	12/8/2016	0.22	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	12/8/2016	0.4	0.5	0	UG/L	0	J
Methyl tert-butyl ether	12/8/2016	0.21	0.5	0	UG/L	0	J
Strontium-90	12/8/2016	9.65	0.395	0.878	PCI/L	0	
1,1,1-Trichloroethane	12/19/2016	0.45	0.5	0	UG/L	0	J
524.2 TVOC	12/19/2016	1.25	0	0	UG/L	0	
Chloroform	12/19/2016	0.2	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	12/19/2016	0.43	0.5	0	UG/L	0	J
Methyl tert-butyl ether	12/19/2016	0.17	0.5	0	UG/L	0	J
Strontium-90	12/19/2016	8.99	0.341	0.767	PCI/L	0	
Tritium	12/19/2016	676	463	305	PCI/L	0	

J = Estimated Value below the method detection limit of 0.50 UG/L

B = Compound was found in both the sample and associated laboratory blank.

Table F-41
System Effluent Data
OU III BGRR/WCF Sr-90 System

2016 BNL Groundwater Status Report

Site ID: 066-219 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
524.2 TVOC	1/7/2016	0	0	0	UG/L	0	
1,1,1-Trichloroethane	2/18/2016	0.53	1	0	UG/L	0	J
624 TVOC	2/18/2016	0.53	0	0	UG/L	0	
1,1,1-Trichloroethane	3/3/2016	0.39	1	0	UG/L	0	J
624 TVOC	3/3/2016	0.39	0	0	UG/L	0	
624 TVOC	3/29/2016	0	0	0	UG/L	0	
624 TVOC	4/11/2016	0	0	0	UG/L	0	
624 TVOC	4/11/2016	0	0	0	UG/L	0	
624 TVOC	4/25/2016	0.3	0	0	UG/L	0	
Chloroform	4/25/2016	0.3	1	0	UG/L	0	J
624 TVOC	5/4/2016	0	0	0	UG/L	0	
624 TVOC	5/17/2016	0.33	0	0	UG/L	0	
Chloroform	5/17/2016	0.33	1	0	UG/L	0	J
624 TVOC	6/7/2016	0	0	0	UG/L	0	
624 TVOC	6/21/2016	0.42	0	0	UG/L	0	
Chloroform	6/21/2016	0.42	1	0	UG/L	0	J
624 TVOC	7/18/2016	0.31	0	0	UG/L	0	
Chloroform	7/18/2016	0.31	1	0	UG/L	0	J
Strontium-90	7/18/2016	1.58	0.785	0.613	PCI/L	0	
1,1,1-Trichloroethane	7/25/2016	0.52	1	0	UG/L	0	J
624 TVOC	7/25/2016	0.87	0	0	UG/L	0	
Chloroform	7/25/2016	0.35	1	0	UG/L	0	J
Strontium-90	7/25/2016	1.64	0.614	0.488	PCI/L	0	
1,1,1-Trichloroethane	8/3/2016	0.36	1	0	UG/L	0	J
624 TVOC	8/3/2016	0.68	0	0	UG/L	0	
Chloroform	8/3/2016	0.32	1	0	UG/L	0	J
Strontium-90	8/3/2016	1.18	0.757	0.535	PCI/L	0	
1,1,1-Trichloroethane	8/16/2016	0.78	0.5	0	UG/L	0	
1,1-Dichloroethane	8/16/2016	0.23	0.5	0	UG/L	0	J
524.2 TVOC	8/16/2016	2.17	0	0	UG/L	0	
Chloroform	8/16/2016	0.34	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	8/16/2016	0.6	0.5	0	UG/L	0	
Methyl tert-butyl ether	8/16/2016	0.22	0.5	0	UG/L	0	J
Strontium-90	8/16/2016	1.57	0.562	0.482	PCI/L	0	
1,1,1-Trichloroethane	9/20/2016	0.63	0.5	0	UG/L	0	
1,1-Dichloroethane	9/20/2016	0.2	0.5	0	UG/L	0	J
524.2 TVOC	9/20/2016	2.32	0	0	UG/L	0	
Chloroform	9/20/2016	0.18	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	9/20/2016	1.06	0.5	0	UG/L	0	
Methyl tert-butyl ether	9/20/2016	0.25	0.5	0	UG/L	0	J
Strontium-90	9/20/2016	1.49	0.793	0.589	PCI/L	0	
1,1,1-Trichloroethane	10/4/2016	0.7	0.5	0	UG/L	0	
1,1-Dichloroethane	10/4/2016	0.27	0.5	0	UG/L	0	J
524.2 TVOC	10/4/2016	1.99	0	0	UG/L	0	
Chloroform	10/4/2016	0.31	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	10/4/2016	0.41	0.5	0	UG/L	0	J
Methyl tert-butyl ether	10/4/2016	0.3	0.5	0	UG/L	0	J
1,1,1-Trichloroethane	10/26/2016	0.61	0.5	0	UG/L	0	
1,1-Dichloroethane	10/26/2016	0.26	0.5	0	UG/L	0	J
524.2 TVOC	10/26/2016	1.96	0	0	UG/L	0	
Chloroform	10/26/2016	0.36	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	10/26/2016	0.51	0.5	0	UG/L	0	
Methyl tert-butyl ether	10/26/2016	0.22	0.5	0	UG/L	0	J
1,1,1-Trichloroethane	11/17/2016	0.64	0.5	0	UG/L	0	
524.2 TVOC	11/17/2016	1.58	0	0	UG/L	0	
Chloroform	11/17/2016	0.25	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	11/17/2016	0.44	0.5	0	UG/L	0	J
Methyl tert-butyl ether	11/17/2016	0.25	0.5	0	UG/L	0	J

Table F-41
System Effluent Data
OU III BGRR/WCF Sr-90 System

2016 BNL Groundwater Status Report

Site ID: 066-219 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
Strontium-90	11/17/2016	0.392	0.255	0.163	PCI/L	0	J
1,1,1-Trichloroethane	11/29/2016	0.53	0.5	0	UG/L	0	
1,1-Dichloroethane	11/29/2016	0.18	0.5	0	UG/L	0	J
524.2 TVOC	11/29/2016	1.58	0	0	UG/L	0	
Chloroform	11/29/2016	0.21	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	11/29/2016	0.44	0.5	0	UG/L	0	J
Methyl tert-butyl ether	11/29/2016	0.22	0.5	0	UG/L	0	J
Strontium-90	11/29/2016	1.88	0.771	0.579	PCI/L	0	
1,1,1-Trichloroethane	12/8/2016	0.63	0.5	0	UG/L	0	
1,1-Dichloroethane	12/8/2016	0.21	0.5	0	UG/L	0	J
524.2 TVOC	12/8/2016	1.83	0	0	UG/L	0	
Chloroform	12/8/2016	0.25	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	12/8/2016	0.51	0.5	0	UG/L	0	
Methyl tert-butyl ether	12/8/2016	0.23	0.5	0	UG/L	0	J
1,1,1-Trichloroethane	12/19/2016	0.57	0.5	0	UG/L	0	
1,1-Dichloroethane	12/19/2016	0.2	0.5	0	UG/L	0	J
524.2 TVOC	12/19/2016	1.76	0	0	UG/L	0	
Chloroform	12/19/2016	0.21	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	12/19/2016	0.6	0.5	0	UG/L	0	
Methyl tert-butyl ether	12/19/2016	0.18	0.5	0	UG/L	0	J

J = Estimated Value below the method detection limit of 0.50 UG/L

B = Compound was found in both the sample and associated laboratory blank.

Table F-39
OU III BGRR/WCF Sr-90 System
Cumulative Mass Removal

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Sample date	Influent		picoCuries pumped	milliCuries pumped	Cumulative mCi
	Concentration (pCi/L)	Liters Pumped			
6/20/05	79.00	18927	1495238	0.00	0.16
7/13/05	349.00	769968	268718798	0.27	0.43
7/21/05	251.00	212755	53401576	0.05	0.48
7/27/05	223.00	322086	71825077	0.07	0.56
8/3/05	376.00	970829	365031863	0.37	0.92
8/11/05	436.00	1167095	508853618	0.51	1.43
8/17/05	401.00	325905	130687917	0.13	1.56
8/24/05	285.00	1029515	293411679	0.29	1.85
9/1/05	175.00	1342269	234897105	0.23	2.09
9/28/05	245.00	2176949	533352428	0.53	2.62
10/6/05	273.00	983420	268473579	0.27	2.89
10/13/05	373.00	1026013	382702907	0.38	3.27
10/19/05	315.00	537881	169432363	0.17	3.44
10/25/05	271.00	657772	178256234	0.18	3.62
11/8/05	278.00	565056	157085565	0.16	3.78
11/18/05	266.00	1057530	281303112	0.28	4.06
11/22/05	254.00	373794	94943745	0.09	4.15
1/13/06	386.00	639364	246794359	0.25	4.40
1/20/06	317.00	860992	272934437	0.27	4.67
1/25/06	304.00	585895	178111983	0.18	4.85
2/1/06	243.00	822120	199775043	0.20	5.05
2/10/06	184.00	1068451	196595059	0.20	5.25
2/15/06	191.00	559862	106933719	0.11	5.36
2/23/06	150.00	1016811	152521623	0.15	5.51
3/3/06	174.00	838669	145928465	0.15	5.65
3/8/06	71.60	339468	24305920	0.02	5.68
3/14/06	63.40	570091	36143743	0.04	5.72
3/21/06	52.00	806490	41937457	0.04	5.76
3/29/06	164.00	541480	88802793	0.09	5.85
4/18/06	130.00	973892	126605937	0.13	5.97
4/25/06	155.00	887433	137552117	0.14	6.11
5/3/06	187.00	1220932	228314206	0.23	6.34
5/9/06	140.00	629158	88082142	0.09	6.43
5/16/06	158.00	1046462	165340988	0.17	6.59
5/24/06	114.00	999894	113987895	0.11	6.71
6/7/06	104.00	1837568	191107030	0.19	6.90
6/14/06	96.40	778133	75012025	0.08	6.97
6/22/06	108.00	1062902	114793415	0.11	7.09
6/28/06	105.00	1023992	107519133	0.11	7.19
7/6/06	90.10	1200449	108160429	0.11	7.30
7/12/06	99.70	775256	77293035	0.08	7.38

Table F-39
OU III BGRR/WCF Sr-90 System
Cumulative Mass Removal

2014 BNL Groundwater Status Report

Sample date	Influent		picoCuries pumped	milliCuries pumped	Cumulative mCi
	Concentration (pCi/L)	Liters Pumped			
7/19/06	91.90	936746	86086918	0.09	7.47
7/26/06	91.40	1036090	94698619	0.09	7.56
8/2/06	98.30	875721	86083370	0.09	7.65
8/8/06	90.80	690838	62728059	0.06	7.71
8/16/06	93.50	1097232	102591182	0.10	7.81
8/23/06	97.80	958409	93732448	0.09	7.91
8/30/06	84.80	938487	79583686	0.08	7.99
9/6/06	89.20	960401	85667735	0.09	8.07
10/4/06	101.00	1152268	116379068	0.12	8.19
10/11/06	102.00	948477	96744610	0.10	8.28
10/18/06	96.10	951406	91430162	0.09	8.38
11/9/06	127.00	818546	103955354	0.10	8.48
11/15/06	97.20	817649	79475478	0.08	8.56
11/29/06	167.00	1090199	182063166	0.18	8.74
12/5/06	125.00	643384	80422966	0.08	8.82
12/14/06	150.00	1125176	168776371	0.17	8.99
12/20/06	139.00	939191	130547542	0.13	9.12
12/27/06	148.00	941129	139287104	0.14	9.26
1/10/07	112.00	1883114	210908731	0.21	9.47
1/17/07	122.00	941557	114869934	0.11	9.59
1/24/07	137.00	941557	128993286	0.13	9.71
1/31/07	121.00	941557	113928377	0.11	9.83
2/7/07	103.00	879162	90553675	0.09	9.92
2/14/07	122.00	879162	107257751	0.11	10.03
3/2/07	47.20	1758293	82991453	0.08	10.11
3/8/07	50.60	22712	1149251	0.00	10.11
4/11/07	40.70	2882970	117336864	0.12	10.23
4/19/07	40.70	678346	27608674	0.03	10.26
4/25/07	41.10	508759	20910009	0.02	10.28
5/3/07	44.50	678346	30186388	0.03	10.31
5/8/07	38.90	413197	16073349	0.02	10.32
5/16/07	264.00	661115	174534254	0.17	10.50
5/24/07	415.00	663204	275229721	0.28	10.77
6/1/07	504.00	578475	291551539	0.29	11.06
6/12/07	451.00	506587	228470520	0.23	11.29
6/21/07	426.00	414480	176568429	0.18	11.47
6/27/07	426.00	276320	117712286	0.12	11.59
7/3/07	445.00	145360	64685117	0.06	11.65
9/6/07	391.00	143770	56214047	0.06	11.71
9/26/07	401.00	479233	192172487	0.19	11.90
10/18/07	308.00	1703057	524541485	0.52	12.42
11/8/07	363.00	1939077	703885022	0.70	13.13

Table F-39
OU III BGRR/WCF Sr-90 System
Cumulative Mass Removal

2014 BNL Groundwater Status Report

Sample date	Influent		picoCuries pumped	milliCuries pumped	Cumulative mCi
	Concentration (pCi/L)	Liters Pumped			
11/20/07	321.00	1399088	449107313	0.45	13.58
12/6/07	209.00	1877564	392410929	0.39	13.97
12/20/07	114.00	1792392	204332744	0.20	14.17
1/4/08	137.00	1051966	144119334	0.14	14.32
1/15/08	127.00	824463	104706762	0.10	14.42
2/21/08	41.10	2095282	86116099	0.09	14.51
3/12/08	65.20	1196966	78042192	0.08	14.59
3/25/08	74.40	946069	70387537	0.07	14.66
4/9/08	61.30	1012219	62049032	0.06	14.72
4/22/08	65.90	939918	61940580	0.06	14.78
5/8/08	85.70	1474796	126390055	0.13	14.91
5/19/08	95.40	1232530	117583370	0.12	15.03
6/4/08	60.10	1685265	101284447	0.10	15.13
6/19/08	44.90	1697757	76229298	0.08	15.20
7/2/08	61.20	1130173	69166560	0.07	15.27
7/29/08	52.50	2502006	131355304	0.13	15.40
8/28/08	105.00	654119	68682512	0.07	15.47
9/12/08	59.70	1526278	91118799	0.09	15.56
9/23/08	55.90	1199218	67036312	0.07	15.63
10/10/08	73.40	2316672	170043726	0.17	15.80
10/22/08	53.20	1499023	79748027	0.08	15.88
11/5/08	43.40	1831534	79488560	0.08	15.96
11/19/08	44.60	18301860	816262973	0.82	16.78
12/2/08	35.10	1651045	57951687	0.06	16.83
12/17/08	25.60	1589873	40700748	0.04	16.87
1/13/09	33.10	3444725	114020389	0.11	16.99
1/27/09	36.60	1854852	67887575	0.07	17.06
2/10/09	32.60	1665581	54297947	0.05	17.11
3/25/09	53.90	3198673	172408473	0.17	17.28
4/1/09	50.90	715443	36416040	0.04	17.32
4/15/09	39.70	1788607	71007701	0.07	17.39
5/4/09	29.30	2265569	66381171	0.07	17.46
5/21/09	28.70	2104310	60393709	0.06	17.52
6/3/09	31.50	1485396	46789961	0.05	17.56
6/18/09	35.30	2225822	78571521	0.08	17.64
7/16/09	44.40	3040443	134995658	0.13	17.78
7/28/09	30.10	944839	28439647	0.03	17.81
8/10/09	20.80	792665	16487437	0.02	17.82
10/22/09	52.10	2639416	137513586	0.14	17.96
10/30/09	28.70	554184	15905089	0.02	17.98
11/10/09	51.00	921116	46976896	0.05	18.02
12/8/09	49.10	2540011	124714556	0.12	18.15

Table F-39
OU III BGRR/WCF Sr-90 System
Cumulative Mass Removal

2014 BNL Groundwater Status Report

Sample date	Influent		picoCuries		Cumulative mCi
	Concentration (pCi/L)	Liters Pumped	pumped	milliCuries pumped	
12/30/09	40.30	2109708	85021249	0.09	18.23
1/6/2010	38.30	522387	20007416	0.02	18.25
1/27/2010	37.60	1828354	68746107	0.07	18.32
2/4/2010	32.50	696516	22636763	0.02	18.34
2/17/2010	30.00	2066835	62005045	0.06	18.41
3/3/2010	33.70	2066835	69652334	0.07	18.48
3/17/2010	31.70	1960843	62158733	0.06	18.54
4/1/2010	29.60	1820783	53895179	0.05	18.59
4/14/2010	25.30	1640329	41500316	0.04	18.63
5/4/2010	30.10	2398346	72190217	0.07	18.71
5/19/2010	28.70	1423050	40841531	0.04	18.75
6/15/2010	27.70	2122412	58790820	0.06	18.81
8/17/2010	90.20	2176574	196326969	0.20	19.00
8/24/2010	25.70	529958	13619912	0.01	19.01
9/1/2010	51.70	529958	27398811	0.03	19.04
9/13/2010	44.20	766137	33863258	0.03	19.08
10/6/2010	24.30	2182184	53027069	0.05	19.13
10/19/2010	35.30	1233408	43539313	0.04	19.17
11/4/2010	28.50	1306739	37242070	0.04	19.21
11/15/2010	53.60	723487	38778894	0.04	19.25
12/2/2010	44.50	1127973	50194808	0.05	19.30
12/16/2010	37.00	989802	36622671	0.04	19.34
1/7/2011	30.50	1533470	46770845	0.05	18.65
1/19/2011	31.80	808564	25712334	0.03	18.67
3/3/2011	24.90	1667474	41520100	0.04	18.72
3/24/2011	25.50	1486531	37906546	0.04	18.75
5/2/2011	59.60	2949105	175766632	0.18	18.93
5/27/2011	95.80	822759	78820337	0.08	19.01
6/13/2011	61.00	3134272	191190577	0.19	19.20
7/6/2011	51.00	5005514	255281233	0.26	19.45
7/19/2011	48.70	2288872	111468064	0.11	19.57
8/9/2011	49.70	3873203	192498193	0.19	19.76
8/26/2011	38.70	3719546	143946416	0.14	19.90
9/2/2011	40.70	1174485	47801522	0.05	19.95
9/29/2011	88.10	1086758	95743350	0.10	20.05
10/5/2011	39.40	1202625	47383438	0.05	20.09
10/25/2011	136.00	3981496	541483474	0.54	20.63
11/10/2011	63.90	2951561	188604766	0.19	20.82
11/15/2011	68.80	978094	67292842	0.07	20.89
12/14/2011	43.30	5010814	216968244	0.22	21.11
12/20/2011	60.80	889943	54108519	0.05	21.16
1/4/2012	33.9	2113657	71652959	0.07	21.23

Table F-39
OU III BGRR/WCF Sr-90 System
Cumulative Mass Removal

2014 BNL Groundwater Status Report

Sample date	Influent		picoCuries pumped	milliCuries pumped	Cumulative mCi
	Concentration (pCi/L)	Liters Pumped			
1/25/2012	48.5	2530998	122753415	0.12	21.36
2/13/2012	21	3823395	80291287	0.08	21.44
2/22/2012	43.4	2146328	93150656	0.09	21.53
3/2/2012	27.6	2369539	65399279	0.07	21.59
3/14/2012	24.1	4201035	101244940	0.10	21.70
4/6/2012	22.1	7633245	168694715	0.17	21.86
4/16/2012	23.3	2802454	65297176	0.07	21.93
5/2/2012	16.8	4699566	78952709	0.08	22.01
5/15/2012	16.2	5044849	81726547	0.08	22.09
6/6/2012	22.9	7302968	167237964	0.17	22.26
6/19/2012	24.5	3210976	78668901	0.08	22.34
6/25/2012	24.5	1481989	36308724	0.04	22.37
7/24/2012	20.3	1473097	29903865	0.03	22.40
7/30/2012	14	304786	4267007	0.00	22.41
8/8/2012	23.6	324031	7647138	0.01	22.41
8/20/2012	29.3	486047	14241173	0.01	22.43
9/6/2012	21.2	1331844	28235096	0.03	22.46
9/18/2012	16.3	1853610	30213846	0.03	22.49
10/1/2012	17.5	3688907	64555864	0.06	22.55
10/16/2012	17.3	3611283	62475193	0.06	22.61
11/20/2012	20.6	5960737	122791173	0.12	22.74
11/30/2012	15.2	1174727	17855848	0.02	22.75
12/5/2012	20.2	1455548	29402062	0.03	22.78
12/18/2012	17.3	3784424	65470532	0.07	22.85
1/3/2013	14.2	4338990	61613664	0.06	22.90
1/15/2013	13.6	3008948	40921695	0.04	22.94
2/5/2013	16	4497069	71953107	0.07	23.02
2/20/2013	26	2207652	57398956	0.06	23.07
3/11/2013	15.4	3819443	58819417	0.06	23.13
3/21/2013	13.2	2642028	34874772	0.03	23.17
4/3/2013	19	2542956	48316171	0.05	23.22
4/15/2013	15.2	852445	12957156	0.01	23.23
5/7/2013	14.7	2396980	35235599	0.04	23.26
5/28/2013	13.6	3992568	54298931	0.05	23.32
6/4/2013	13.7	1484570	20338614	0.02	23.34
6/17/2013	22.2	3589059	79677103	0.08	23.42
7/2/2013	13.4	3917542	52495057	0.05	23.47
7/19/2013	14.6	2784575	40654801	0.04	23.51
8/6/2013	17.5	3481167	60920421	0.06	23.57
8/20/2013	18.1	3918560	70925934	0.07	23.64
9/4/2013	15.7	3504103	55014413	0.06	23.70
9/17/2013	11.5	2291677	26354285	0.03	23.72

Table F-39
OU III BGRR/WCF Sr-90 System
Cumulative Mass Removal

2014 BNL Groundwater Status Report

Sample date	Influent		picoCuries		Cumulative mCi
	Concentration (pCi/L)	Liters Pumped	pumped	milliCuries pumped	
10/3/2013	19.9	2756374	54851845	0.05	23.78
10/22/2013	24	2944017	70656407	0.07	23.85
11/6/2013	13.6	3115367	42368997	0.04	23.89
11/19/2013	12.4	3728472	46233048	0.05	23.94
12/2/2013	10.7	3559900	38090927	0.04	23.98
12/16/2013	14.2	2835273	40260883	0.04	24.02
1/8/2014	14.1	5479989	77267848	0.08	24.09
1/23/2014	11.7	4579118	53575681	0.05	24.15
2/4/2014	16.3	3282558	53505690	0.05	24.20
4/8/2014	30.1	6922761	208375109	0.21	24.41
4/21/2014	19	3055963	58063296	0.06	24.47
5/7/2014	21.7	3390215	73567661	0.07	24.54
5/19/2014	20.7	2184940	45228252	0.05	24.59
6/5/2014	19.5	3321453	64768330	0.06	24.65
6/17/2014	15.8	3164619	50000987	0.05	24.70
7/1/2014	13.1	3955774	51820643	0.05	24.75
7/16/2014	15	2292067	34381003	0.03	24.79
8/5/2014	16.6	3259065	54100486	0.05	24.84
8/18/2014	10.5	2911580	30571588	0.03	24.87
9/9/2014	9.85	3230429	31819724	0.03	24.90
9/30/2014	9.85	1362445	13420087	0.01	24.92
11/6/2014	16.5	1801303	29721505	0.03	24.95
11/18/2014	13.4	3580076	47973017	0.05	25.00
12/2/2014	14.4	3894515	56081015	0.06	25.05
12/16/2014	14.4	4559366	65654867	0.07	25.12
1/21/2015	13.7	1596460	21871496	0.02	25.21
2/12/2015	18.3	3092167	56586649	0.06	25.26
2/25/2015	16.5	2196849	36248002	0.04	25.30
3/10/2015	13.7	3132943	42921320	0.04	25.34
3/23/2015	10.7	3413771	36527354	0.04	25.38
4/1/2015	11.8	2331144	27507495	0.03	25.41
4/14/2015	13.4	2994696	40128927	0.04	25.45
5/6/2015	10.3	5287554	54461807	0.05	25.50
5/27/2015	6.3	5606210	35375185	0.04	25.54
6/10/2015	18.7	2365413	44233223	0.04	25.58
6/22/2015	13.0	1557485	20247305	0.02	25.60
7/10/2015	13.6	2885998	39249572	0.04	25.64
7/22/2015	10.2	2216737	22610719	0.02	25.66
8/5/2015	14.8	2654331	39284095	0.04	25.70
8/18/2015	12.7	2578623	32748506	0.03	25.73
9/2/2015	10.2	3132807	31954629	0.03	25.77
9/23/2015	8.8	5818935	50915681	0.05	25.82

Table F-39
OU III BGRR/WCF Sr-90 System
Cumulative Mass Removal

2014 BNL Groundwater Status Report

Sample date	Influent		picoCuries		Cumulative mCi
	Concentration (pCi/L)	Liters Pumped	pumped	milliCuries pumped	
10/1/2015	9.5	2171691	20631062	0.02	25.84
10/20/2015	9.9	4433035	43665397	0.04	25.88
11/5/2015	7.2	3516065	25456308	0.03	25.91
11/23/2015	12.6	3418454	43072520	0.04	25.95
12/2/2015	8.4	1722347	14536611	0.01	25.97
12/15/2015	10.1	2697659	27246352	0.03	25.99
1/7/2016	7.1	4288429	30233422	0.03	26.02
2/9/2016	46.7	5255859	245448606	0.25	26.27
2/18/2016	8.3	1330690	10978189	0.01	26.28
3/3/2016	7.9	2167977	17148700	0.02	26.30
3/29/2016	8.4	4693684	39286131	0.04	26.34
4/11/2016	8.2	3033228	24902800	0.02	26.36
4/25/2016	5.8	3266553	18848011	0.02	26.38
5/4/2016	7.8	2305217	17980695	0.02	26.40
5/17/2016	7.1	3700422	26198986	0.03	26.42
6/7/2016	10.1	5455119	55096703	0.06	26.48
6/21/2016	8.9	2940099	26078679	0.03	26.50
7/18/2016	8.6	6430945	55434748	0.06	26.56
7/25/2016	6.4	1774722	11304980	0.01	26.57
8/3/2016	7.5	2125285	15854629	0.02	26.59
8/16/2016	7.5	2617745	19502198	0.02	26.61
9/20/2016	9.8	4832078	47499328	0.05	26.65
10/4/2016	7.86	1326688	10427771	0.01	26.66
10/26/2016	16.4	2425586	39779609	0.04	26.70
11/17/2016	9.41	4014887	37780089	0.04	26.74
11/29/2016	7.51	2444907	18361249	0.02	26.76
12/8/2016	9.65	2449245	23635211	0.02	26.78
12/19/2016	8.99	2807420	25238709	0.03	26.81

OU III Chemical/Animal Holes Sr-90 System

Table F-43
Extraction Well Data
OU III Chemical/Animal Holes Sr-90 System

2016 BNL Groundwater Status Report

Site ID : 106-92 (EW-1)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
Strontium-90	1/5/2016	4.28	0.495	0.62	PCI/L	0	
Strontium-90	4/15/2016	7.98	0.349	0.68	PCI/L	0	
Strontium-90	7/11/2016	3.04	0.371	0.471	PCI/L	0	
Strontium-90	11/1/2016	0.967	0.784	0.518	PCI/L	0	
Strontium-90	11/14/2016	3.29	0.54	0.439	PCI/L	0	

Site ID : 106-123 (EW-2)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
Strontium-90	1/5/2016	1.94	0.683	0.521	PCI/L	0	
Strontium-90	4/15/2016	1.05	0.701	0.494	PCI/L	0	
Strontium-90	7/11/2016	2.95	0.372	0.461	PCI/L	0	
Strontium-90	11/1/2016	5.26	0.772	0.816	PCI/L	0	
Strontium-90	11/14/2016	0.617	0.293	0.19	PCI/L	0	J

Site ID : 106-124 (EW-3)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
Strontium-90	4/15/2016	0.785	0.702	0.479	PCI/L	0	J
Strontium-90	7/11/2016	1.38	0.634	0.51	PCI/L	0	
Strontium-90	11/1/2016	2.26	0.78	0.541	PCI/L	0	
Strontium-90	11/14/2016	1.09	0.271	0.197	PCI/L	0	

Table F-44
System Influent Data
OU III Chemical/Animal Holes Sr-90 System

2016 BNL Groundwater Status Report

Site ID: 106-106 (Influent)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
Strontium-90	1/5/2016	2.25	0.765	0.627	PCI/L	0	
Strontium-90	2/17/2016	4.45	0.777	0.72	PCI/L	0	
Strontium-90	3/2/2016	4.34	0.711	0.745	PCI/L	0	
Strontium-90	3/15/2016	3.81	0.734	0.683	PCI/L	0	
Strontium-90	4/15/2016	1.64	0.389	0.372	PCI/L	0	
Strontium-90	4/25/2016	7	0.821	0.892	PCI/L	0	
Strontium-90	5/4/2016	5.15	0.609	0.828	PCI/L	0	
Strontium-90	5/17/2016	3.15	0.588	0.581	PCI/L	0	
Strontium-90	6/8/2016	2.92	0.747	0.633	PCI/L	0	
Strontium-90	6/21/2016	1.9	0.787	0.599	PCI/L	0	
Strontium-90	7/11/2016	3.26	0.676	0.665	PCI/L	0	
Strontium-90	7/25/2016	2.55	0.623	0.576	PCI/L	0	
Strontium-90	9/1/2016	1.66	0.561	0.384	PCI/L	0	
Strontium-90	9/12/2016	1.83	0.678	0.574	PCI/L	0	
Strontium-90	11/1/2016	1.36	0.758	0.533	PCI/L	0	
Strontium-90	11/14/2016	0.904	0.795	0.508	PCI/L	0	
Strontium-90	12/1/2016	1.78	0.546	0.466	PCI/L	0	
Strontium-90	12/15/2016	1.67	0.376	0.386	PCI/L	0	

J = Estimated Value below the method detection limit of 0.50 UG/L

B = Compound was found in both the sample and associated laboratory blank.

Table F-45
System Effluent Data
OU III Chemical/Animal Holes Sr-90 System

2016 BNL Groundwater Status Report

Site ID: 106-118 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
Strontium-90	11/1/2016	1.17	0.799	0.554	PCI/L	0	
Strontium-90	11/14/2016	0.786	0.261	0.18	PCI/L	0	J
Strontium-90	12/1/2016	1.88	0.694	0.458	PCI/L	0	

Table F-46
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

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Sample Date	Influent Concentration (pCi/L)	Millicuries pumped	Cumulative mCi
December 31, 2003	31.7	0.884	
January 2, 2004	35.7	0.002	0.887
January 5, 2004	31.8	0.003	0.890
January 7, 2004	37.8	0.000	0.890
January 9, 2004	31.7	0.002	0.892
January 12, 2004	35.9	0.002	0.894
January 14, 2004	38.2	0.002	0.897
January 16, 2004	34.5	0.002	0.899
January 21, 2004	35.3	0.006	0.905
January 23, 2004	32.4	0.002	0.907
January 26, 2004	34.3	0.003	0.910
January 28, 2004	34.7	0.002	0.913
January 30, 2004	33.8	0.002	0.915
February 2, 2004	34.4	0.003	0.918
February 4, 2004	33.2	0.002	0.920
February 6, 2004	37.4	0.002	0.923
February 9, 2004	39.5	0.004	0.927
February 11, 2004	35.6	0.002	0.929
February 13, 2004	41.2	0.003	0.932
February 18, 2004	37.1	0.004	0.936
February 20, 2004	32.1	0.002	0.938
February 23, 2004	46.1	0.001	0.939
February 25, 2004	35.2	0.002	0.941
February 27, 2004	34.6	0.002	0.944
March 1, 2004	36.8	0.004	0.947
March 3, 2004	35.0	0.002	0.950
March 5, 2004	36.7	0.002	0.952
March 8, 2004	40.7	0.004	0.956
March 10, 2004	38.4	0.003	0.958
March 12, 2004	34.9	0.002	0.961
March 15, 2004	36.8	0.004	0.964
April 2, 2004	66.7	0.004	0.969
April 5, 2004	57.1	0.006	0.974
May 21, 2004	169.0	0.006	0.980
May 25, 2004	82.8	0.011	0.991
May 28, 2004	78.6	0.008	0.998
June 2, 2004	66.5	0.011	1.009
June 8, 2004	52.9	0.010	1.020
June 11, 2004	56.6	0.006	1.025
June 15, 2004	51.4	0.007	1.032
June 18, 2004	62.8	0.006	1.038
June 22, 2004	51.8	0.007	1.045
June 25, 2004	67.6	0.007	1.052
June 29, 2004	61.5	0.008	1.060
July 2, 2004	68.5	0.007	1.066
July 7, 2004	93.1	0.015	1.082
July 9, 2004	73.9	0.005	1.086
July 13, 2004	71.1	0.009	1.096
July 16, 2004	64.4	0.006	1.102
October 15, 2004	124.0	0.024	1.126
January 12, 2005	181.0	0.086	1.213
January 14, 2005	136.0	0.004	1.217
January 18, 2005	185.0	0.012	1.229
January 21, 2005	157.0	0.005	1.234
January 31, 2005	278.0	0.045	1.280
May 26, 2005	566.0	0.296	1.576

Table F-46
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

2016 BNL Groundwater Status Report

Sample Date	Influent		Cumulative mCi
	Concentration (pCi/L)	Millicuries pumped	
June 1, 2005	496.0	0.097	1.673
June 7, 2005	277.0	0.054	1.728
June 15, 2005	204.0	0.053	1.781
June 22, 2005	162.0	0.037	1.818
June 28, 2005	119.0	0.023	1.841
July 7, 2005	102	0.030	1.871
July 13, 2005	73.9	0.002	1.873
July 26, 2005	56.3	0.013	1.886
August 3, 2005	80.7	0.021	1.907
August 11, 2005	68.3	0.020	1.927
August 17, 2005	57.5	0.014	1.941
August 24, 2005	55.7	0.013	1.954
September 1, 2005	50.8	0.013	1.967
September 8, 2005	50	0.011	1.979
September 15, 2005	50.6	0.013	1.992
September 20, 2005	46.4	0.007	1.999
September 27, 2005	42.7	0.010	2.009
October 6, 2005	44.1	0.013	2.022
October 13, 2005	43.9	0.010	2.032
October 19, 2005	37	0.007	2.039
October 25, 2005	37.2	0.007	2.046
November 1, 2005	33	0.003	2.050
November 8, 2005	31.8	0.007	2.057
November 18, 2005	33.6	0.007	2.064
November 22, 2005	37.8	0.006	2.070
December 1, 2005	32.2	0.012	2.081
February 9, 2006	36	0.000	2.081
February 15, 2006	40	0.008	2.089
February 23, 2006	32.2	0.008	2.098
February 28, 2006	27.1	0.003	2.101
March 8, 2006	31.4	0.008	2.109
March 14, 2006	33.6	0.007	2.116
March 21, 2006	36.9	0.008	2.124
March 29, 2006	31.1	0.009	2.133
April 4, 2006	26.3	0.003	2.137
April 10, 2006	24.1	0.004	2.140
April 18, 2006	23	0.005	2.145
April 25, 2006	28.7	0.005	2.150
May 1, 2006	31.7	0.005	2.154
May 9, 2006	34.3	0.009	2.163
May 16, 2006	24.9	0.006	2.169
May 24, 2006	22.7	0.006	2.174
May 31, 2006	26.3	0.006	2.180
June 7, 2006	26.7	0.005	2.185
June 14, 2006	24.6	0.005	2.190
June 22, 2006	27.7	0.006	2.196
June 28, 2006	26.2	0.004	2.200
July 6, 2006	16	0.003	2.203
July 12, 2006	23.9	0.005	2.208
August 8, 2006	22	0.010	2.218
August 16, 2006	21.7	0.006	2.224
August 23, 2006	25.6	0.007	2.231
August 30, 2006	25.9	0.003	2.234
September 6, 2006	27.6	0.008	2.241
September 12, 2006	24.3	0.006	2.247
September 19, 2006	19	0.005	2.252

Table F-46
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

2016 BNL Groundwater Status Report

Sample Date	Influent Concentration (pCi/L)	Millicuries pumped	Cumulative mCi
September 28, 2006	21.6	0.007	2.260
October 4, 2006	24.1	0.007	2.266
October 11, 2006	20.9	0.005	2.271
October 18, 2006	20.1	0.006	2.277
October 25, 2006	21.6	0.006	2.283
November 1, 2006	18.5	0.004	2.287
November 9, 2006	19.9	0.006	2.293
November 20, 2006	22.8	0.004	2.297
November 29, 2006	26.1	0.010	2.307
December 5, 2006	18.1	0.004	2.311
December 14, 2006	20.4	0.006	2.318
December 20, 2006	20.4	0.004	2.322
December 27, 2006	22.6	0.006	2.328
January 3, 2007	22.8	0.006	2.333
January 10, 2007	17.2	0.005	2.338
January 17, 2007	20.7	0.006	2.345
January 24, 2007	19.4	0.006	2.350
January 31, 2007	14.5	0.004	2.355
February 7, 2007	18.2	0.005	2.359
February 14, 2007	17.1	0.004	2.363
February 27, 2007	17.3	0.008	2.371
March 2, 2007	18.5	0.002	2.373
March 15, 2007	18.5	0.009	2.382
March 28, 2007	6.26	0.003	2.385
April 5, 2007	16.6	0.004	2.389
April 11, 2007	17.6	0.003	2.392
April 19, 2007	18.7	0.005	2.397
April 25, 2007	18.1	0.003	2.400
May 3, 2007	17.3	0.004	2.404
May 8, 2007	16.9	0.002	2.407
May 16, 2007	18	0.004	2.411
May 24, 2007	17.4	0.004	2.415
May 30, 2007	18.4	0.003	2.418
June 12, 2007	22.9	0.002	2.419
June 21, 2007	22.7	0.001	2.421
July 27, 2007	26.6	0.007	2.427
August 14, 2007	28.8	0.008	2.435
September 6, 2007	31.6	0.012	2.446
September 25, 2007	32.5	0.012	2.459
October 4, 2007	32.2	0.008	2.467
October 10, 2007	29.1	0.005	2.471
October 17, 2007	26.8	0.005	2.476
November 15, 2007	78.7	0.040	2.516
November 20, 2007	66.4	0.003	2.519
November 30, 2007	62	0.005	2.524
December 4, 2007	47	0.013	2.537
December 13, 2007	40.1	0.026	2.563
December 20, 2007	36.7	0.018	2.581
December 26, 2007	41.2	0.018	2.599
January 4, 2008	38.5	0.030	2.629
January 15, 2008	36.8	0.035	2.664
January 23, 2008	32.7	0.023	2.687
January 31, 2008	35.9	0.025	2.712
February 6, 2008	30.3	0.012	2.724
February 12, 2008	51.4	0.021	2.745
February 20, 2008	30.8	0.016	2.761

Table F-46
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

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Sample Date	Influent Concentration (pCi/L)	Millicuries pumped	Cumulative mCi
February 27, 2008	34.1	0.015	2.776
March 5, 2008	34.9	0.015	2.791
March 11, 2008	28.5	0.012	2.804
March 17, 2008	28.9	0.012	2.816
March 25, 2008	27.9	0.016	2.832
April 2, 2008	32.5	0.017	2.850
April 9, 2008	33.4	0.018	2.867
April 14, 2008	28.3	0.013	2.880
April 21, 2008	39.1	0.021	2.901
April 25, 2008	26.2	0.008	2.909
May 6, 2008	19.8	0.013	2.922
May 12, 2008	18.4	0.005	2.927
May 19, 2008	18.2	0.006	2.932
May 29, 2008	19.3	0.008	2.941
June 4, 2008	21.5	0.008	2.949
June 9, 2008	23.7	0.009	2.958
June 16, 2008	23.3	0.012	2.970
June 23, 2008	15	0.008	2.978
July 1, 2008	18.2	0.006	2.984
July 16, 2008	15.8	0.009	2.993
July 22, 2008	20.5	0.005	2.998
July 28, 2008	17.3	0.004	3.002
August 11, 2008	33.4	0.033	3.035
August 22, 2008	23.5	0.018	3.053
August 28, 2008	23.7	0.010	3.063
September 3, 2008	21.8	0.006	3.070
September 9, 2008	18.5	0.005	3.075
September 17, 2008	15.2	0.006	3.081
September 22, 2008	13	0.003	3.084
September 29, 2008	12.1	0.004	3.088
October 7, 2008	43.2	0.028	3.116
October 13, 2008	41.4	0.018	3.133
October 22, 2008	22.4	0.014	3.148
October 27, 2008	23.3	0.008	3.156
November 5, 2008	26.6	0.016	3.172
November 13, 2008	15.5	0.008	3.180
November 18, 2008	16.5	0.005	3.186
November 24, 2008	14.3	0.006	3.191
December 2, 2008	13.2	0.013	3.205
December 9, 2008	28.2	0.021	3.225
December 19, 2008	40.9	0.043	3.269
December 26, 2008	51.2	0.038	3.307
December 31, 2008	45.8	0.024	3.331
January 8, 2009	25.1	0.008	3.339
January 16, 2009	15.6	0.005	3.343
January 21, 2009	15.1	0.003	3.346
February 4, 2009	30.2	0.016	3.363
February 9, 2009	28.8	0.006	3.369
February 19, 2009	22.7	0.010	3.378
February 23, 2009	22.7	0.004	3.382
March 4, 2009	26.4	0.012	3.394
March 10, 2009	15.9	0.006	3.400
March 16, 2009	14.8	0.005	3.405
March 24, 2009	12.6	0.006	3.411
April 1, 2009	10.6	0.003	3.414
April 7, 2009	25	0.014	3.428

Table F-46
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

2016 BNL Groundwater Status Report

Sample Date	Influent Concentration (pCi/L)	Millicuries pumped	Cumulative mCi
April 14, 2009	23.1	0.013	3.442
April 20, 2009	16.8	0.008	3.450
April 27, 2009	18.3	0.010	3.460
May 7, 2009	13.4	0.011	3.471
May 11, 2009	20.8	0.007	3.478
May 21, 2009	18.7	0.016	3.494
May 27, 2009	17.4	0.009	3.502
June 3, 2009	14.6	0.008	3.511
June 8, 2009	17.1	0.006	3.517
June 18, 2009	17.8	0.013	3.531
June 24, 2009	15.3	0.007	3.538
July 6, 2009	13.2	0.010	3.547
July 15, 2009	8.56	0.005	3.552
July 23, 2009	11.3	0.006	3.558
July 28, 2009	9.81	0.003	3.561
August 4, 2009	11.3	0.005	3.566
August 10, 2009	20.1	0.009	3.576
August 18, 2009	21.7	0.013	3.589
August 25, 2009	20.2	0.011	3.600
September 2, 2009	17.5	0.010	3.609
September 8, 2009	13	0.005	3.615
September 16, 2009	8.47	0.005	3.619
September 21, 2009	11.3	0.004	3.623
October 1, 2009	9.66	0.007	3.630
October 8, 2009	21.4	0.014	3.644
October 12, 2009	22.2	0.008	3.652
October 19, 2009	19.7	0.013	3.665
November 4, 2009	15.6	0.018	3.683
December 16, 2009	49.8	0.088	3.771
December 29, 2009	33.7	0.022	3.793
January 6, 2010	14	0.005	3.798
January 20, 2010	10.2	0.009	3.806
February 2, 2010	12.1	0.009	3.815
February 17, 2010	23	0.037	3.852
March 2, 2010	20.9	0.027	3.878
March 15, 2010	9.19	0.009	3.887
April 1, 2010	5.95	0.007	3.894
April 13, 2010	17.1	0.016	3.910
May 4, 2010	14	0.022	3.932
May 17, 2010	6.42	0.005	3.938
June 3, 2010	9.53	0.011	3.949
June 15, 2010	18.7	0.021	3.970
July 1, 2010	13.6	0.021	3.991
July 14, 2010	13	0.014	4.005
August 4, 2010	8.33	0.014	4.019
August 16, 2010	6.06	0.005	4.024
September 1, 2010	5.98	0.006	4.030
September 13, 2010	11.5	0.007	4.038
October 6, 2010	7.36	0.009	4.047
October 19, 2010	6.14	0.005	4.051
November 4, 2010	16.1	0.015	4.066
November 15, 2010	13.7	0.009	4.075
December 1, 2010	20.3	0.020	4.095
December 14, 2010	14.3	0.005	4.100
January 6, 2011	6.68	0.006	4.106
January 19, 2011	22.3	0.024	4.130

Table F-46
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

2016 BNL Groundwater Status Report

Sample Date	Influent Concentration (pCi/L)	Millicuries pumped	Cumulative mCi
February 7, 2011	16.6	0.022	4.152
February 14, 2011	6.3	0.000	4.152
March 1, 2011	8.38	0.008	4.160
March 14, 2011	15.4	0.010	4.170
April 5, 2011	9.49	0.018	4.188
April 18, 2011	7.28	0.005	4.193
May 5, 2011	15.8	0.017	4.210
May 19, 2011	19.5	0.027	4.237
June 2, 2011	15.6	0.021	4.257
June 13, 2011	8.3	0.006	4.264
July 6, 2011	13	0.021	4.285
July 18, 2011	15.5	0.015	4.300
August 3, 2011	10.7	0.012	4.312
August 15, 2011	7.14	0.006	4.318
September 8, 2011	19.8	0.030	4.348
September 27, 2011	13.2	0.014	4.362
October 4, 2011	15.8	0.006	4.368
October 17, 2011	9.82	0.006	4.374
November 2, 2011	12.1	0.011	4.385
November 15, 2011	14.2	0.018	4.403
December 6, 2011	12.2	0.022	4.424
December 13, 2011	6.71	0.002	4.427
January 4, 2012	12.3	0.017	4.444
January 18, 2012	12.6	0.021	4.465
February 1, 2012	8.51	0.010	4.476
February 14, 2012	6.34	0.003	4.480
March 1, 2012	4.41	0.002	4.483
March 13, 2012	14.5	0.004	4.485
April 3, 2012	12.1	0.003	4.489
April 16, 2012	5.06	0.006	4.492
May 2, 2012	7.55	0.011	4.499
May 16, 2012	8.4	0.012	4.510
June 5, 2012	8.27	0.002	4.523
June 19, 2012	3.55	0.010	4.525
July 11, 2012	7.16	0.009	4.535
July 24, 2012	8.15	0.002	4.545
August 1, 2012	4.13	0.002	4.547
August 13, 2012	3.39	0.009	4.550
September 5, 2012	6.13	0.010	4.559
September 17, 2012	8.43	0.005	4.569
October 4, 2012	4.51	0.002	4.575
October 16, 2012	2.59	0.002	4.577
November 5, 2012	4.04	0.006	4.584
November 19, 2012	5.41	0.007	4.592
December 4, 2012	5.37	0.007	4.600
December 18, 2012	2.52	0.002	4.602
January 2, 2013	1.33	0.001	4.601
January 15, 2013	4.94	0.007	4.608
January 22, 2013	4.43	0.003	4.611
February 4, 2013	4.24	0.005	4.615
February 20, 2013	1.98	0.001	4.617
March 5, 2013	4.98	0.003	4.619

Table F-46
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

2016 BNL Groundwater Status Report

Sample Date	Influent Concentration (pCi/L)	Millicuries pumped	Cumulative mCi
March 27, 2013	7.58	0.007	4.626
April 2, 2013	6.54	0.002	4.628
April 15, 2013	2.06	0.001	4.629
May 1, 2013	2.69	0.002	4.632
May 14, 2013	5.95	0.010	4.642
June 3, 2013	4.11	0.009	4.651
June 17, 2013	1.09	0.001	4.652
July 2, 2013	3.07	0.003	4.655
July 15, 2013	11.8	0.010	4.665
August 5, 2013	3.8	0.005	4.670
August 20, 2013	1.62	0.001	4.672
September 4, 2013	2.21	0.002	4.674
September 16, 2013	4.73	0.006	4.681
November 18, 2013	8.5	0.025	4.705
November 25, 2013	7.3	0.003	4.709
January 10, 2014	7.57	0.003	4.711
January 31, 2014	7.88	0.006	4.718
March 4, 2014	6.84	0.003	4.721
March 18, 2014	5.5	0.008	4.729
May 6, 2014	4.61	0.010	4.738
May 19, 2014	5.13	0.008	4.746
July 8, 2014	4.23	0.008	4.755
July 24, 2014	3.59	0.002	4.757
September 3, 2014	5.03	0.003	4.759
September 17, 2014	4.12	0.005	4.764
December 2, 2014	5.93	0.011	4.775
December 23, 2014	5.08	0.010	4.785
March 6, 2015	6.05	0.008	4.818
March 23, 2015	2.61	0.006	4.824
June 2, 2015	8.83	0.002	4.826
June 30, 2015	4.33	0.015	4.840
September 2, 2015	6.79	0.002	4.842
September 16, 2015	3.46	0.006	4.848
November 23, 2015	5.07	0.021	4.869
December 1, 2015	5.22	0.002	4.872
December 15, 2015	2.45	0.004	4.876
January 5, 2016	2.25	0.005	4.881
February 17, 2016	4.45	0.004	4.885
March 2, 2016	4.34	0.003	4.887
March 15, 2016	3.81	0.006	4.893
April 15, 2016	1.64	0.003	4.897
April 25, 2016	7	0.000	4.897
May 4, 2016	5.15	0.001	4.897
May 17, 2016	3.15	0.002	4.899
June 8, 2016	2.92	0.004	4.903
June 21, 2016	1.9	0.003	4.906
July 11, 2016	3.26	0.004	4.909
July 25, 2016	2.55	0.001	4.911
September 1, 2016	1.66	0.000	4.911
September 12, 2016	1.83	0.001	4.912
November 1, 2016	1.36	0.003	4.915
November 14, 2016	0.904	0.000	4.916
December 1, 2016	1.78	0.001	4.917
December 15, 2016	1.67	0.00001	4.917

OU VI EDB Pump and Treat System

Table F-47
Extraction Well VOC Data
OU VI EDB Pump and Treat System

2016 BNL Groundwater Status Report

Site ID: 000-503 (EW-1)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
524.2 TVOC	1/4/2016	0.98	0	UG/L	0	
Chloroform	1/4/2016	0.98	0.5	UG/L	0	
EDB	1/4/2016	0.024	0.0212	UG/L	0	
624 TVOC	4/4/2016	1.02	0	UG/L	0	
Chloroform	4/4/2016	1.02	1	UG/L	0	
EDB	4/4/2016	0.0291	0.0195	UG/L	0	
624 TVOC	7/7/2016	1.28	0	UG/L	0	
Chloroform	7/7/2016	1.28	1	UG/L	0	
524.2 TVOC	10/3/2016	1.27	0	UG/L	0	
Chloroform	10/3/2016	1.27	0.5	UG/L	0	
EDB	10/3/2016	0.0199	0.0198	UG/L	0	

Site ID : 000-504 (EW-2)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
524.2 TVOC	1/4/2016	1.13	0	UG/L	0	
Chloroform	1/4/2016	0.95	0.5	UG/L	0	
EDB	1/4/2016	0.0331	0.0207	UG/L	0	
Methylene chloride	1/4/2016	0.18	0.5	UG/L	0	BJ
624 TVOC	4/4/2016	0.93	0	UG/L	0	
Chloroform	4/4/2016	0.93	1	UG/L	0	J
EDB	4/4/2016	0.0344	0.0191	UG/L	0	
624 TVOC	7/6/2016	0.93	0	UG/L	0	
Chloroform	7/6/2016	0.93	1	UG/L	0	J
EDB	7/6/2016	0.0269	0.0193	UG/L	0	
524.2 TVOC	10/3/2016	1.14	0	UG/L	0	
Chloroform	10/3/2016	1.14	0.5	UG/L	0	
EDB	10/3/2016	0.0328	0.0199	UG/L	0	

J = Estimated Value below the method detection limit of 0.50 UG/L

B = Compound was found in both the sample and associated laboratory blank.

Table F-48
System Influent VOC Data
OU VI EDB Pump and Treat System

2016 BNL Groundwater Status Report

Site ID: 000-512 (Combined Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
524.2 TVOC	1/4/2016	0.92	0	UG/L	0	
Chloroform	1/4/2016	0.92	0.5	UG/L	0	
EDB	1/4/2016	0.029	0.0209	UG/L	0	
624 TVOC	2/1/2016	0.96	0	UG/L	0	
Chloroform	2/1/2016	0.96	1	UG/L	0	J
EDB	2/1/2016	0.0347	0.021	UG/L	0	
624 TVOC	3/2/2016	0.97	0	UG/L	0	
Chloroform	3/2/2016	0.97	1	UG/L	0	J
EDB	3/2/2016	0.0256	0.0205	UG/L	0	
624 TVOC	4/4/2016	0.95	0	UG/L	0	
Chloroform	4/4/2016	0.95	1	UG/L	0	J
EDB	4/4/2016	0.0291	0.0194	UG/L	0	
624 TVOC	5/2/2016	1.02	0	UG/L	0	
Chloroform	5/2/2016	1.02	1	UG/L	0	
EDB	5/2/2016	0.026	0.0202	UG/L	0	
624 TVOC	6/1/2016	0.91	0	UG/L	0	
Chloroform	6/1/2016	0.91	1	UG/L	0	J
EDB	6/1/2016	0.0154	0.0203	UG/L	0	JP
624 TVOC	7/6/2016	0.93	0	UG/L	0	
Chloroform	7/6/2016	0.93	1	UG/L	0	J
EDB	7/6/2016	0.0284	0.0193	UG/L	0	
624 TVOC	8/2/2016	0.91	0	UG/L	0	
Chloroform	8/2/2016	0.91	1	UG/L	0	J
EDB	8/2/2016	0.0235	0.0198	UG/L	0	
524.2 TVOC	9/1/2016	0.99	0	UG/L	0	
Chloroform	9/1/2016	0.99	0.5	UG/L	0	
EDB	9/1/2016	0.0328	0.0194	UG/L	0	
524.2 TVOC	10/3/2016	1.14	0	UG/L	0	
Chloroform	10/3/2016	1.14	0.5	UG/L	0	
EDB	10/3/2016	0.0284	0.0199	UG/L	0	
524.2 TVOC	11/1/2016	1.07	0	UG/L	0	
Chloroform	11/1/2016	1.07	0.5	UG/L	0	
EDB	11/1/2016	0.0254	0.0199	UG/L	0	
524.2 TVOC	11/7/2016	1.09	0	UG/L	0	
Chloroform	11/7/2016	1.09	0.5	UG/L	0	
EDB	11/7/2016	0.023	0.02	UG/L	0	
524.2 TVOC	12/6/2016	0.99	0	UG/L	0	
Chloroform	12/6/2016	0.99	0.5	UG/L	0	
EDB	12/6/2016	0.0226	0.0201	UG/L	0	

J - Estimated value.

B = Compound was found in both the sample and associated laboratory blank.

Table F-49
System Effluent VOC Data
OU VI EDB Pumps and Treat System

2016 BNL Groundwater Status Report

Site ID: 000-510 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
524.2 TVOC	1/4/2016	0.23	0	UG/L	0	
Methylene chloride	1/4/2016	0.23	0.5	UG/L	0	BJ
624 TVOC	2/1/2016	0	0	UG/L	0	
624 TVOC	3/2/2016	0.34	0	UG/L	0	
Chloroform	3/2/2016	0.34	1	UG/L	0	J
624 TVOC	4/4/2016	0	0	UG/L	0	
624 TVOC	5/2/2016	0.33	0	UG/L	0	
Chloroform	5/2/2016	0.33	1	UG/L	0	J
624 TVOC	6/1/2016	0.73	0	UG/L	0	
Chloroform	6/1/2016	0.73	1	UG/L	0	J
624 TVOC	7/6/2016	0	0	UG/L	0	
624 TVOC	8/2/2016	0	0	UG/L	0	
524.2 TVOC	9/1/2016	0.56	0	UG/L	0	
Chloroform	9/1/2016	0.56	0.5	UG/L	0	
524.2 TVOC	10/3/2016	0.31	0	UG/L	0	
Chloroform	10/3/2016	0.31	0.5	UG/L	0	J
524.2 TVOC	11/1/2016	0	0	UG/L	0	
524.2 TVOC	11/7/2016	0	0	UG/L	0	
524.2 TVOC	12/6/2016	0.33	0	UG/L	0	
Chloroform	12/6/2016	0.33	0.5	UG/L	0	J

J = Estimated Value below the method detection limit of 0.50 UG/L

B = Compound was found in both the sample and associated laboratory blank.

OU III HFBR Tritium

Table F-50
Extraction Wells VOC Data and Tritium Data
OU III Tritium Pump and Recharge System

2016 BNL Groundwater Status Report

Site ID : 096-119 (EW-16)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
1,1-Dichloroethylene	1/22/2016	0.081	0.5	0	UG/L	100	J
524.2 TVOC	1/22/2016	0.321	0	0	UG/L	100	
Chloroform	1/22/2016	0.24	0.5	0	UG/L	100	J
Tritium	1/22/2016	633	347	266	PCI/L	100	
524.2 TVOC	4/20/2016	0.25	0	0	UG/L	100	
Chloroform	4/20/2016	0.25	0.5	0	UG/L	100	J
524.2 TVOC	7/26/2016	0.3	0	0	UG/L	100	
Chloroform	7/26/2016	0.3	0.5	0	UG/L	100	J
Tritium	7/26/2016	775	277	247	PCI/L	100	
524.2 TVOC	10/25/2016	0.3	0	0	UG/L	100	
Chloroform	10/25/2016	0.3	0.5	0	UG/L	100	J
Tritium	10/25/2016	489	317	231	PCI/L	100	

Site ID : 105-39 (EW-10)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
1,1,1-Trichloroethane	1/22/2016	0.12	0.5	0	UG/L	140	J
524.2 TVOC	1/22/2016	0.6	0	0	UG/L	140	
Chloroform	1/22/2016	0.19	0.5	0	UG/L	140	J
Tetrachloroethylene	1/22/2016	0.29	0.5	0	UG/L	140	J
1,1,1-Trichloroethane	4/20/2016	0.075	0.5	0	UG/L	140	J
1,2,3-Trichlorobenzene	4/20/2016	0.2	0.5	0	UG/L	140	J
1,2,4-Trichlorobenzene	4/20/2016	0.14	0.5	0	UG/L	140	J
524.2 TVOC	4/20/2016	0.995	0	0	UG/L	140	
Chloroform	4/20/2016	0.23	0.5	0	UG/L	140	J
Tetrachloroethylene	4/20/2016	0.35	0.5	0	UG/L	140	J
524.2 TVOC	7/26/2016	0.52	0	0	UG/L	140	
Chloroform	7/26/2016	0.21	0.5	0	UG/L	140	J
Tetrachloroethylene	7/26/2016	0.31	0.5	0	UG/L	140	J
524.2 TVOC	10/25/2016	0.52	0	0	UG/L	140	
Chloroform	10/25/2016	0.21	0.5	0	UG/L	140	J
Tetrachloroethylene	10/25/2016	0.31	0.5	0	UG/L	140	J

Table F-50
Extraction Wells VOC Data and Tritium Data
OU III Tritium Pump and Recharge System

2016 BNL Groundwater Status Report

Site ID : 105-40 (EW-9)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
1,1,1-Trichloroethane	1/22/2016	0.071	0.5	0	UG/L	140	J
1,2,3-Trichlorobenzene	1/22/2016	0.26	0.5	0	UG/L	140	J
524.2 TVOC	1/22/2016	1.451	0	0	UG/L	140	
Chloroform	1/22/2016	0.13	0.5	0	UG/L	140	J
Tetrachloroethylene	1/22/2016	0.99	0.5	0	UG/L	140	
1,1,1-Trichloroethane	4/20/2016	0.1	0.5	0	UG/L	140	J
1,1-Dichloroethylene	4/20/2016	0.09	0.5	0	UG/L	140	J
1,2,3-Trichlorobenzene	4/20/2016	0.3	0.5	0	UG/L	140	J
1,2,4-Trichlorobenzene	4/20/2016	0.11	0.5	0	UG/L	140	J
524.2 TVOC	4/20/2016	2.162	0	0	UG/L	140	
Chloroform	4/20/2016	0.18	0.5	0	UG/L	140	J
Methyl chloride	4/20/2016	0.082	0.5	0	UG/L	140	J
Tetrachloroethylene	4/20/2016	1.3	0.5	0	UG/L	140	
524.2 TVOC	7/26/2016	0.64	0	0	UG/L	140	
Chloroform	7/26/2016	0.43	0.5	0	UG/L	140	J
Tetrachloroethylene	7/26/2016	0.21	0.5	0	UG/L	140	J
1,2,3-Trichlorobenzene	10/25/2016	0.24	0.5	0	UG/L	140	J
1,2,4-Trichlorobenzene	10/25/2016	0.15	0.5	0	UG/L	140	J
524.2 TVOC	10/25/2016	1.96	0	0	UG/L	140	
Chloroform	10/25/2016	0.17	0.5	0	UG/L	140	J
Tetrachloroethylene	10/25/2016	1.4	0.5	0	UG/L	140	

Site ID : 105-41 (EW-11)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
524.2 TVOC	1/22/2016	0.51	0	0	UG/L	140	
Chloroform	1/22/2016	0.31	0.5	0	UG/L	140	J
Tetrachloroethylene	1/22/2016	0.2	0.5	0	UG/L	140	J
1,2,3-Trichlorobenzene	4/20/2016	0.11	0.5	0	UG/L	140	J
524.2 TVOC	4/20/2016	0.82	0	0	UG/L	140	
Chloroform	4/20/2016	0.45	0.5	0	UG/L	140	J
Tetrachloroethylene	4/20/2016	0.26	0.5	0	UG/L	140	J
1,2,3-Trichlorobenzene	7/26/2016	0.28	0.5	0	UG/L	140	J
1,2,4-Trichlorobenzene	7/26/2016	0.16	0.5	0	UG/L	140	J
524.2 TVOC	7/26/2016	2.01	0	0	UG/L	140	
Chloroform	7/26/2016	0.17	0.5	0	UG/L	140	J
Tetrachloroethylene	7/26/2016	1.4	0.5	0	UG/L	140	
524.2 TVOC	10/25/2016	0.27	0	0	UG/L	140	
Chloroform	10/25/2016	0.27	0.5	0	UG/L	140	J
Tritium	10/25/2016	471	317	230	PCI/L	140	