

Appendix D
2018 Facility Monitoring
Groundwater Results

AGS Research Areas

Analytical Results

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: AGS Research Areas

	054-07 depth : 35 4/14/2018 pCi/l				054-07 depth : 35 10/24/2018 pCi/l				054-08 depth : 48 12/3/2018 pCi/l				054-124 depth : 32 4/14/2018 pCi/l				054-124 depth : 32 10/24/2018 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	1800		302	345	21800		333	2140	-113	U	384	203	-22.5	U	311	170	93.2	U	332	194

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: AGS Research Areas

	054-125 depth : 32 11/12/2018 pCi/l				054-126 depth : 35 4/14/2018 pCi/l				054-126 depth : 35 10/24/2018 pCi/l				054-127 depth : 30 11/29/2018 pCi/l				054-128 depth : 30 11/27/2018 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-45	U	390	212	34.2	U	307	174	-60.8	U	330	177	45	U	391	222	4.5	U	391	218

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: AGS Research Areas

	054-129 depth : 28 11/12/2018 pCi/l				054-130 depth : 30 11/12/2018 pCi/l				054-168 depth : 25 11/27/2018 pCi/l				054-169 depth : 25 11/27/2018 pCi/l				054-184 depth : 32 4/14/2018 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	94.6	U	396	229	18	U	399	223	-45	U	393	213	-113	U	404	210	1320		316	307

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: AGS Research Areas

	054-184 depth : 32 10/24/2018 pCi/l				054-185 depth : 32 4/14/2018 pCi/l				054-185 depth : 32 10/24/2018 pCi/l				054-191 depth : 28 12/1/2018 pCi/l				054-62 depth : 26 12/1/2018 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	35500		333	3330	227	U	310	196	26000		336	2500	90.1	U	369	215	-168	U	384	197

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: AGS Research Areas

	054-63 depth : 49 11/30/2018 pCi/l				054-64 depth : 50 11/30/2018 pCi/l				054-65 depth : 25 4/14/2018 pCi/l				054-65 depth : 25 10/24/2018 pCi/l				054-66 depth : 26 11/12/2018 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	266	U	376	234	378		372	243	-71.6	U	306	162	-27.9	U	330	181	9.01	U	396	220

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: AGS Research Areas

	054-67 depth : 25 11/12/2018 pCi/l				054-68 depth : 25 11/12/2018 pCi/l				054-69 depth : 25 11/12/2018 pCi/l				055-14 depth : 25 11/29/2018 pCi/l				055-15 depth : 26 11/30/2018 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-104	U	399	209	-150	U	385	198	180	U	401	241	-64	U	418	221	171	U	368	222

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: AGS Research Areas

	055-16 depth : 25 11/30/2018 pCi/l				055-29 depth : 52 11/30/2018 pCi/l				055-30 depth : 28 11/30/2018 pCi/l				055-31 depth : 50 10/31/2018 pCi/l				055-32 depth : 48 11/30/2018 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-76.6	U	366	199	-76.6	U	381	205	-58.6	U	371	202	52.7	U	350	197	-9.01	U	371	207

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: AGS Research Areas

	064-03 depth : 48 11/30/2018 pCi/l				064-51 depth : 46 12/3/2018 pCi/l				064-53 depth : 40 11/30/2018 pCi/l				064-54 depth : 40 11/30/2018 pCi/l				064-55 depth : 33 11/29/2018 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-90.1	U	374	201	-90.1	U	384	205	58.6	U	366	211	45	U	371	212	-195	U	399	199

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: AGS Research Areas

	064-56 depth : 30 11/29/2018 pCi/l				064-80 depth : 30 11/29/2018 pCi/l				064-95 depth : 32 4/14/2018 pCi/l				064-95 depth : 32 10/24/2018 pCi/l				065-120 depth : 30 12/1/2018 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-99.5	U	399	210	266	U	407	253	36	U	315	178	-4.05	U	332	184	-31.5	U	382	210

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: AGS Research Areas

	065-121 depth : 26 10/30/2018 pCi/l				065-122 depth : 29 10/30/2018 pCi/l				065-123 depth : 26 10/31/2018 pCi/l				065-124 depth : 26 10/31/2018 pCi/l				065-125 depth : 26 10/31/2018 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-98.2	U	342	174	4490		334	629	75.2	U	351	200	194	U	342	210	104	U	348	202

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: AGS Research Areas

	065-126 depth : 26 11/3/2018 pCi/l				065-192 depth : 52 12/1/2018 pCi/l				065-193 depth : 55 10/30/2018 pCi/l				065-194 depth : 50 10/31/2018 pCi/l				065-195 depth : 50 10/31/2018 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-27	U	347	186	-113	U	371	198	76.6	U	344	198	149	U	344	206	65.3	U	350	198

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: AGS Research Areas

	065-321 depth : 32 10/30/2018 pCi/l				065-322 depth : 32 10/30/2018 pCi/l				065-323 depth : 30 10/30/2018 pCi/l				065-324 depth : 28 10/30/2018 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	108	U	360	208	716		353	274	7420		348	903	6650		347	834

**Motor Pool Area
Analytical Results**

2018 Groundwater Data: Volatile Organic Compounds
 Brookhaven National Laboratory
 Project: Motor Pool Area

Analyte	102-05 depth : 57 10/9/2018 ug/L		102-06 depth : 56 10/9/2018 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U
Benzene	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U
Chloroform	2.3		0.57	
cis-1,2-Dichloroethylene	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U
Cymene	0.5	U	0.5	U
DBCP	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U
EDB	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U
m/p xylene	1	U	1	U
Methyl bromide	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U
Styrene	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U
Toluene	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U
Xylene (total)	3	U	3	U
524.2 TVOC	2.3		0.57	

**Major Petroleum Facility
Analytical Results**

2018 Groundwater Data: Volatile Organic Compounds

Brookhaven National Laboratory

Project: Major Petroleum Facility

Analyte	076-16 depth : 35 4/24/2018 ug/L		076-16 depth : 35 10/23/2018 ug/L		076-17 depth : 35 4/24/2018 ug/L		076-17 depth : 35 10/23/2018 ug/L	
1,1,1-Trichloroethane	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	5	U	5	U	5	U	5	U
1,1-Dichloroethane	5	U	5	U	5	U	5	U
1,1-Dichloroethylene	5	U	5	U	5	U	5	U
1,2-Dichloroethane	5	U	5	U	5	U	5	U
1,2-Dichloropropane	5	U	5	U	5	U	5	U
2-Hexanone	10	U	10	U	10	U	10	U
Acetone	10	U	10	U	10	U	10	U
Benzene	5	U	5	U	5	U	5	U
Bromodichloromethane	5	U	5	U	5	U	5	U
Bromoform	5	U	5	U	5	U	5	U
Carbon disulfide	5	U	5	U	5	U	5	U
Carbon tetrachloride	5	U	5	U	5	U	5	U
Chlorobenzene	5	U	5	U	5	U	5	U
Chloroethane	10	U	10	U	10	U	10	U
Chloroform	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	5	U	5	U	5	U	5	U
Dibromochloromethane	5	U	5	U	5	U	5	U
Ethene, 1,2-dichloro-, (E)-	5	U	5	U	5	U	5	U
Ethylbenzene	5	U	5	U	5	U	5	U
m-Dichlorobenzene	5	U	5	U	5	U	5	U
Methyl bromide	10	U	10	U	10	U	10	U
Methyl chloride	10	U	10	U	10	U	10	U
Methyl ethyl ketone	10	U	10	U	10	U	10	U
Methyl isobutyl ketone (MIBK)	10	U	10	U	10	U	10	U
Methyl tert-butyl ether	10	U	10	U	10	U	10	U
Methylene chloride	5	U	5	U	5	U	5	U
o-Dichlorobenzene	9.6	U	5	U	5	U	5	U
p-Dichlorobenzene	5	U	5	U	9.7	U	10	U
Tetrachloroethylene	5	U	5	U	5	U	5	U
Toluene	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	5	U	5	U	5	U	5	U
Trichloroethylene	5	U	5	U	5	U	5	U
Trichlorofluoromethane	5	U	5	U	5	U	5	U
Vinyl chloride	10	U	10	U	10	U	10	U

2018 Groundwater Data: Volatile Organic Compounds

Brookhaven National Laboratory

Project: Major Petroleum Facility

Analyte	076-18 depth : 30 4/24/2018 ug/L		076-18 depth : 30 10/23/2018 ug/L		076-19 depth : 30 4/24/2018 ug/L		076-19 depth : 30 10/23/2018 ug/L	
1,1,1-Trichloroethane	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	5	U	5	U	5	U	5	U
1,1-Dichloroethane	5	U	5	U	5	U	5	U
1,1-Dichloroethylene	5	U	5	U	5	U	5	U
1,2-Dichloroethane	5	U	5	U	5	U	5	U
1,2-Dichloropropane	5	U	5	U	5	U	5	U
2-Hexanone	10	U	10	U	10	U	10	U
Acetone	10	U	10	U	10	U	10	U
Benzene	5	U	5	U	5	U	5	U
Bromodichloromethane	5	U	5	U	5	U	5	U
Bromoform	5	U	5	U	5	U	5	U
Carbon disulfide	5	U	5	U	5	U	5	U
Carbon tetrachloride	5	U	5	U	5	U	5	U
Chlorobenzene	5	U	5	U	5	U	5	U
Chloroethane	10	U	10	U	10	U	10	U
Chloroform	0.74	J	3	J	5	U	5	U
cis-1,3-Dichloropropene	5	U	5	U	5	U	5	U
Dibromochloromethane	5	U	5	U	5	U	5	U
Ethene, 1,2-dichloro-, (E)-	5	U	5	U	5	U	5	U
Ethylbenzene	5	U	5	U	5	U	5	U
m-Dichlorobenzene	5	U	5	U	5	U	5	U
Methyl bromide	10	U	10	U	10	U	10	U
Methyl chloride	10	U	10	U	10	U	10	U
Methyl ethyl ketone	10	U	10	U	10	U	10	U
Methyl isobutyl ketone (MIBK)	10	U	10	U	10	U	10	U
Methyl tert-butyl ether	10	U	10	U	10	U	10	U
Methylene chloride	5	U	5	U	5	U	5	U
o-Dichlorobenzene	5	U	10	U	10	U	10	U
p-Dichlorobenzene	5	U	5	U	10	U	5	U
Tetrachloroethylene	5	U	5	U	5	U	5	U
Toluene	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	5	U	5	U	5	U	5	U
Trichloroethylene	5	U	5	U	5	U	5	U
Trichlorofluoromethane	5	U	5	U	5	U	5	U
Vinyl chloride	10	U	10	U	10	U	10	U

2018 Groundwater Data: Volatile Organic Compounds

Brookhaven National Laboratory

Project: Major Petroleum Facility

Analyte	076-25 depth : 42 4/24/2018 ug/L		076-25 depth : 42 10/23/2018 ug/L		076-378 depth : 34 4/24/2018 ug/L		076-378 depth : 34 10/23/2018 ug/L	
	1,1,1-Trichloroethane	5	U	5	U	5	U	5
1,1,2,2-Tetrachloroethane	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	5	U	5	U	5	U	5	U
1,1-Dichloroethane	5	U	5	U	5	U	5	U
1,1-Dichloroethylene	5	U	5	U	5	U	5	U
1,2-Dichloroethane	5	U	5	U	5	U	5	U
1,2-Dichloropropane	5	U	5	U	5	U	5	U
2-Hexanone	10	U	10	U	10	U	10	U
Acetone	10	U	10	U	10	U	10	U
Benzene	5	U	5	U	5	U	5	U
Bromodichloromethane	5	U	5	U	5	U	5	U
Bromoform	5	U	5	U	5	U	5	U
Carbon disulfide	5	U	5	U	5	U	5	U
Carbon tetrachloride	5	U	5	U	5	U	5	U
Chlorobenzene	5	U	5	U	5	U	5	U
Chloroethane	10	U	10	U	10	U	10	U
Chloroform	0.25	J	0.41	J	5	U	5	U
cis-1,3-Dichloropropene	5	U	5	U	5	U	5	U
Dibromochloromethane	5	U	5	U	5	U	5	U
Ethene, 1,2-dichloro-, (E)-	5	U	5	U	5	U	5	U
Ethylbenzene	5	U	5	U	5	U	5	U
m-Dichlorobenzene	5	U	10	U	5	U	10	U
Methyl bromide	10	U	10	U	10	U	10	U
Methyl chloride	10	U	10	U	10	U	10	U
Methyl ethyl ketone	10	U	10	U	10	U	10	U
Methyl isobutyl ketone (MIBK)	10	U	10	U	10	U	10	U
Methyl tert-butyl ether	10	U	10	U	10	U	10	U
Methylene chloride	5	U	5	U	5	U	5	U
o-Dichlorobenzene	9.6	U	5	U	5	U	10	U
p-Dichlorobenzene	9.6	U	5	U	9.8	U	5	U
Tetrachloroethylene	2.2	J	2.5	J	5	U	5	U
Toluene	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	5	U	5	U	5	U	5	U
Trichloroethylene	5	U	5	U	5	U	5	U
Trichlorofluoromethane	5	U	5	U	5	U	5	U
Vinyl chloride	10	U	10	U	10	U	10	U

2018 Groundwater Data: Volatile Organic Compounds

Brookhaven National Laboratory

Project: Major Petroleum Facility

Analyte	076-379 depth : 36 4/24/2018 ug/L		076-379 depth : 36 10/23/2018 ug/L		076-380 depth : 34 4/24/2018 ug/L		076-380 depth : 34 10/23/2018 ug/L	
	1,1,1-Trichloroethane	5	U	5	U	5	U	5
1,1,2,2-Tetrachloroethane	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	5	U	5	U	5	U	5	U
1,1-Dichloroethane	5	U	5	U	5	U	5	U
1,1-Dichloroethylene	5	U	5	U	5	U	5	U
1,2-Dichloroethane	5	U	5	U	5	U	5	U
1,2-Dichloropropane	5	U	5	U	5	U	5	U
2-Hexanone	10	U	10	U	10	U	10	U
Acetone	10	U	10	U	10	U	10	U
Benzene	5	U	5	U	5	U	5	U
Bromodichloromethane	5	U	5	U	5	U	5	U
Bromoform	5	U	5	U	5	U	5	U
Carbon disulfide	5	U	5	U	5	U	5	U
Carbon tetrachloride	5	U	5	U	5	U	5	U
Chlorobenzene	5	U	5	U	5	U	5	U
Chloroethane	10	U	10	U	10	U	10	U
Chloroform	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	5	U	5	U	5	U	5	U
Dibromochloromethane	5	U	5	U	5	U	5	U
Ethene, 1,2-dichloro-, (E)-	5	U	5	U	5	U	5	U
Ethylbenzene	5	U	5	U	5	U	5	U
m-Dichlorobenzene	9.5	U	5	U	9.6	U	5	U
Methyl bromide	10	U	10	U	10	U	10	U
Methyl chloride	10	U	10	U	10	U	10	U
Methyl ethyl ketone	10	U	10	U	10	U	10	U
Methyl isobutyl ketone (MIBK)	10	U	10	U	10	U	10	U
Methyl tert-butyl ether	10	U	10	U	10	U	10	U
Methylene chloride	5	U	5	U	5	U	5	U
o-Dichlorobenzene	5	U	10	U	5	U	10	U
p-Dichlorobenzene	9.5	U	10	U	5	U	10	U
Tetrachloroethylene	5	U	5	U	0.91	J	1.2	J
Toluene	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	5	U	5	U	5	U	5	U
Trichloroethylene	5	U	5	U	5	U	5	U
Trichlorofluoromethane	5	U	5	U	5	U	5	U
Vinyl chloride	10	U	10	U	10	U	10	U

2018 Groundwater Data: Semivolatile Organic Compounds

Brookhaven National Laboratory

Project: Major Petroleum Facility

Analyte	076-16 depth : 35 4/24/2018		076-16 depth : 35 10/23/2018		076-17 depth : 35 4/24/2018		076-17 depth : 35 10/23/2018		076-18 depth : 30 4/24/2018		076-18 depth : 30 10/23/2018	
	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
1,2,4-Trichlorobenzene	9.6	U	2	U	9.7	U	2	U	9.9	U	2	U
2,4,6-Trichlorophenol	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
2,4-Dichlorophenol	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
2,4-Dimethylphenol	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
2,4-Dinitrophenol	48	U	20	U	49	U	20	U	49	U	20	U
2,4-Dinitrotoluene	9.6	U	2	U	9.7	U	2	U	9.9	U	2	U
2,6-Dinitrotoluene	9.6	U	2	U	9.7	U	2	U	9.9	U	2	U
2-Chloronaphthalene	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
2-Chlorophenol	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
3,3'-Dichlorobenzidine	48	U	10	U	49	U	10	U	49	U	10	U
4,6-Dinitro-o-cresol	48	U	20	U	49	U	20	U	49	U	20	U
4-Bromophenyl phenyl ether	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
4-Chlorophenyl phenyl ether	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Acenaphthene	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Acenaphthylene	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Anthracene	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Benzo(a)anthracene	9.6	U	1	U	9.7	U	1	U	9.9	U	1	U
Benzo(a)pyrene	9.6	U	1	U	9.7	U	1	U	9.9	U	1	U
Benzo(b)fluoranthene	9.6	U	2	U	9.7	U	2	U	9.9	U	2	U
Benzo(ghi)perylene	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Benzo(k)fluoranthene	9.6	U	1	U	9.7	U	1	U	9.9	U	1	U
Bis(2-chloroethoxy)methane	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Bis(2-chloroethyl)ether	9.6	U	1	U	9.7	U	1	U	9.9	U	1	U
Bis(2-ethylhexyl)phthalate	9.6	U	2	U	9.7	U	2	U	9.9	U	2	U
bis-chloroisopropyl ether	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Butyl benzyl phthalate	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Chrysene	9.6	U	2	U	9.7	U	2	U	9.9	U	2	U
Di-n-butyl phthalate	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Di-n-octyl phthalate	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Dibenzo(a,h)anthracene	9.6	U	1	U	9.7	U	1	U	9.9	U	1	U
Diethyl phthalate	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Dimethyl phthalate	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Fluoranthene	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Fluorene	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Hexachlorobenzene	9.6	U	1	U	9.7	U	1	U	9.9	U	1	U
Hexachlorobutadiene	9.6	U	1	U	9.7	U	1	U	9.9	U	1	U
Hexachlorocyclopentadiene	48	U	10	U	49	U	10	U	49	U	10	U
Hexachloroethane	9.6	U	2	U	9.7	U	2	U	9.9	U	2	U
Indeno(1,2,3-cd)pyrene	9.6	U	2	U	9.7	U	2	U	9.9	U	2	U
Isophorone	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
m-Dichlorobenzene	5	U	5	U	5	U	5	U	5	U	5	U
N-Nitrosodimethylamine	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
N-Nitrosodiphenylamine	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
N-Nitrosodipropylamine	9.6	U	1	U	9.7	U	1	U	9.9	U	1	U
Naphthalene	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Nitrobenzene	9.6	U	1	U	9.7	U	1	U	9.9	U	1	U
o-Dichlorobenzene	9.6	U	5	U	5	U	5	U	5	U	10	U
o-Nitrophenol	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
p-Chloro-m-cresol	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
p-Dichlorobenzene	5	U	5	U	9.7	U	10	U	5	U	5	U
p-Nitrophenol	48	U	20	U	49	U	20	U	49	U	20	U
PCP	48	U	20	U	49	U	20	U	49	U	20	U
Phenanthrene	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Phenol	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U
Pyrene	9.6	U	10	U	9.7	U	10	U	9.9	U	10	U

2018 Groundwater Data: Semivolatile Organic Compounds
 Brookhaven National Laboratory
 Project: Major Petroleum Facility

Analyte	076-19 depth : 30 4/24/2018		076-19 depth : 30 10/23/2018		076-25 depth : 42 4/24/2018		076-25 depth : 42 10/23/2018		076-378 depth : 34 4/24/2018		076-378 depth : 34 10/23/2018	
	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
1,2,4-Trichlorobenzene	10	U	2	U	9.6	U	2	U	9.8	U	2	U
2,4,6-Trichlorophenol	10	U	10	U	9.6	U	10	U	9.8	U	10	U
2,4-Dichlorophenol	10	U	10	U	9.6	U	10	U	9.8	U	10	U
2,4-Dimethylphenol	10	U	10	U	9.6	U	10	U	9.8	U	10	U
2,4-Dinitrophenol	52	U	20	U	48	U	20	U	49	U	20	U
2,4-Dinitrotoluene	10	U	2	U	9.6	U	2	U	9.8	U	2	U
2,6-Dinitrotoluene	10	U	2	U	9.6	U	2	U	9.8	U	2	U
2-Chloronaphthalene	10	U	10	U	9.6	U	10	U	9.8	U	10	U
2-Chlorophenol	10	U	10	U	9.6	U	10	U	9.8	U	10	U
3,3'-Dichlorobenzidine	52	U	10	U	48	U	10	U	49	U	10	U
4,6-Dinitro-o-cresol	52	U	20	U	48	U	20	U	49	U	20	U
4-Bromophenyl phenyl ether	10	U	10	U	9.6	U	10	U	9.8	U	10	U
4-Chlorophenyl phenyl ether	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Acenaphthene	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Acenaphthylene	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Anthracene	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Benzo(a)anthracene	10	U	1	U	9.6	U	1	U	9.8	U	1	U
Benzo(a)pyrene	10	U	1	U	9.6	U	1	U	9.8	U	1	U
Benzo(b)fluoranthene	10	U	2	U	9.6	U	2	U	9.8	U	2	U
Benzo(ghi)perylene	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Benzo(k)fluoranthene	10	U	1	U	9.6	U	1	U	9.8	U	1	U
Bis(2-chloroethoxy)methane	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Bis(2-chloroethyl)ether	10	U	1	U	9.6	U	1	U	9.8	U	1	U
Bis(2-ethylhexyl)phthalate	10	U	2	U	9.6	U	2	U	9.8	U	2	U
bis-chloroisopropyl ether	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Butyl benzyl phthalate	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Chrysene	10	U	2	U	9.6	U	2	U	9.8	U	2	U
Di-n-butyl phthalate	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Di-n-octyl phthalate	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Dibenzo(a,h)anthracene	10	U	1	U	9.6	U	1	U	9.8	U	1	U
Diethyl phthalate	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Dimethyl phthalate	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Fluoranthene	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Fluorene	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Hexachlorobenzene	10	U	1	U	9.6	U	1	U	9.8	U	1	U
Hexachlorobutadiene	10	U	1	U	9.6	U	1	U	9.8	U	1	U
Hexachlorocyclopentadiene	52	U	10	U	48	U	10	U	49	U	10	U
Hexachloroethane	10	U	2	U	9.6	U	2	U	9.8	U	2	U
Indeno(1,2,3-cd)pyrene	10	U	2	U	9.6	U	2	U	9.8	U	2	U
Isophorone	10	U	10	U	9.6	U	10	U	9.8	U	10	U
m-Dichlorobenzene	5	U	5	U	5	U	10	U	5	U	10	U
N-Nitrosodimethylamine	10	U	10	U	9.6	U	10	U	9.8	U	10	U
N-Nitrosodiphenylamine	10	U	10	U	9.6	U	10	U	9.8	U	10	U
N-Nitrosodipropylamine	10	U	1	U	9.6	U	1	U	9.8	U	1	U
Naphthalene	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Nitrobenzene	10	U	1	U	9.6	U	1	U	9.8	U	1	U
o-Dichlorobenzene	10	U	10	U	9.6	U	5	U	5	U	10	U
o-Nitrophenol	10	U	10	U	9.6	U	10	U	9.8	U	10	U
p-Chloro-m-cresol	10	U	10	U	9.6	U	10	U	9.8	U	10	U
p-Dichlorobenzene	10	U	5	U	9.6	U	5	U	9.8	U	5	U
p-Nitrophenol	52	U	20	U	48	U	20	U	49	U	20	U
PCP	52	U	20	U	48	U	20	U	49	U	20	U
Phenanthrene	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Phenol	10	U	10	U	9.6	U	10	U	9.8	U	10	U
Pyrene	10	U	10	U	9.6	U	10	U	9.8	U	10	U

2018 Groundwater Data: Semivolatile Organic Compounds
 Brookhaven National Laboratory
 Project: Major Petroleum Facility

Analyte	076-379 depth : 36 4/24/2018		076-379 depth : 36 10/23/2018		076-380 depth : 34 4/24/2018		076-380 depth : 34 10/23/2018	
	ug/L		ug/L		ug/L		ug/L	
1,2,4-Trichlorobenzene	9.5	U	2	U	9.6	U	2	U
2,4,6-Trichlorophenol	9.5	U	10	U	9.6	U	10	U
2,4-Dichlorophenol	9.5	U	10	U	9.6	U	10	U
2,4-Dimethylphenol	9.5	U	10	U	9.6	U	10	U
2,4-Dinitrophenol	47	U	20	U	48	U	20	U
2,4-Dinitrotoluene	9.5	U	2	U	9.6	U	2	U
2,6-Dinitrotoluene	9.5	U	2	U	9.6	U	2	U
2-Chloronaphthalene	9.5	U	10	U	9.6	U	10	U
2-Chlorophenol	9.5	U	10	U	9.6	U	10	U
3,3'-Dichlorobenzidine	47	U	10	U	48	U	10	U
4,6-Dinitro-o-cresol	47	U	20	U	48	U	20	U
4-Bromophenyl phenyl ether	9.5	U	10	U	9.6	U	10	U
4-Chlorophenyl phenyl ether	9.5	U	10	U	9.6	U	10	U
Acenaphthene	9.5	U	10	U	9.6	U	10	U
Acenaphthylene	9.5	U	10	U	9.6	U	10	U
Anthracene	9.5	U	10	U	9.6	U	10	U
Benzo(a)anthracene	9.5	U	1	U	9.6	U	1	U
Benzo(a)pyrene	9.5	U	1	U	9.6	U	1	U
Benzo(b)fluoranthene	9.5	U	2	U	9.6	U	2	U
Benzo(ghi)perylene	9.5	U	10	U	9.6	U	10	U
Benzo(k)fluoranthene	9.5	U	1	U	9.6	U	1	U
Bis(2-chloroethoxy)methane	9.5	U	10	U	9.6	U	10	U
Bis(2-chloroethyl)ether	9.5	U	1	U	9.6	U	1	U
Bis(2-ethylhexyl)phthalate	9.5	U	2	U	9.6	U	2	U
bis-chloroisopropyl ether	9.5	U	10	U	9.6	U	10	U
Butyl benzyl phthalate	9.5	U	10	U	9.6	U	10	U
Chrysene	9.5	U	2	U	9.6	U	2	U
Di-n-butyl phthalate	9.5	U	10	U	9.6	U	10	U
Di-n-octyl phthalate	9.5	U	10	U	9.6	U	10	U
Dibenzo(a,h)anthracene	9.5	U	1	U	9.6	U	1	U
Diethyl phthalate	9.5	U	10	U	9.6	U	10	U
Dimethyl phthalate	9.5	U	10	U	9.6	U	10	U
Fluoranthene	9.5	U	10	U	9.6	U	10	U
Fluorene	9.5	U	10	U	9.6	U	10	U
Hexachlorobenzene	9.5	U	1	U	9.6	U	1	U
Hexachlorobutadiene	9.5	U	1	U	9.6	U	1	U
Hexachlorocyclopentadiene	47	U	10	U	48	U	10	U
Hexachloroethane	9.5	U	2	U	9.6	U	2	U
Indeno(1,2,3-cd)pyrene	9.5	U	2	U	9.6	U	2	U
Isophorone	9.5	U	10	U	9.6	U	10	U
m-Dichlorobenzene	9.5	U	5	U	9.6	U	5	U
N-Nitrosodimethylamine	9.5	U	10	U	9.6	U	10	U
N-Nitrosodiphenylamine	9.5	U	10	U	9.6	U	10	U
N-Nitrosodipropylamine	9.5	U	1	U	9.6	U	1	U
Naphthalene	9.5	U	10	U	9.6	U	10	U
Nitrobenzene	9.5	U	1	U	9.6	U	1	U
o-Dichlorobenzene	5	U	10	U	5	U	10	U
o-Nitrophenol	9.5	U	10	U	9.6	U	10	U
p-Chloro-m-cresol	9.5	U	10	U	9.6	U	10	U
p-Dichlorobenzene	9.5	U	10	U	5	U	10	U
p-Nitrophenol	47	U	20	U	48	U	20	U
PCP	47	U	20	U	48	U	20	U
Phenanthrene	9.5	U	10	U	9.6	U	10	U
Phenol	9.5	U	10	U	9.6	U	10	U
Pyrene	9.5	U	10	U	9.6	U	10	U

RHIC Facility
Analytical Results

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: RHIC Facility

Analyte	025-03 depth : 46 2/22/2018 pCi/l				025-03 depth : 46 8/22/2018 pCi/l				025-03 depth : 46 2/13/2019 pCi/l				025-04 depth : 46 2/22/2018 pCi/l				025-04 depth : 46 8/22/2018 pCi/l			
	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-119	U	382	205	113	U	397	230	-50	U	363	195	-120	U	358	193	-69.5	U	408	224

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: RHIC Facility

Analyte	025-04 depth : 46 2/13/2019 pCi/l				025-05 depth : 12 2/22/2018 pCi/l				025-05 depth : 12 8/23/2018 pCi/l				025-05 depth : 12 2/28/2019 pCi/l				025-06 depth : 12 2/22/2018 pCi/l			
	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-65.3	U	345	185	65.2	U	372	213	43.7	U	386	219	-67.1	U	322	176	36.2	U	369	209

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: RHIC Facility

Analyte	025-06 depth : 12 8/23/2018 pCi/l				025-06 depth : 12 2/28/2019 pCi/l				025-07 depth : 13 2/22/2018 pCi/l				025-07 depth : 13 8/22/2018 pCi/l				025-07 depth : 13 2/28/2019 pCi/l			
	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	43.9	U	408	231	-68.5	U	351	188	-69.7	U	363	199	177	U	387	229	58.1	U	366	208

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: RHIC Facility

Analyte	025-08 depth : 12 2/22/2018 pCi/l				025-08 depth : 12 8/22/2018 pCi/l				025-08 depth : 12 1/10/2019 pCi/l				034-05 depth : 42 2/22/2018 pCi/l				034-05 depth : 42 8/22/2018 pCi/l			
	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-7.23	U	369	206	-23.8	U	388	216	-10.5	U	340	190	-42.5	U	371	205	-48.7	U	403	222

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: RHIC Facility

<i>Analyte</i>	034-05 depth : 42 2/13/2019 pCi/l				034-06 depth : 42 2/22/2018 pCi/l				034-06 depth : 42 8/22/2018 pCi/l				034-06 depth : 42 2/13/2019 pCi/l				043-01 depth : 41 2/22/2018 pCi/l			
	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-103	U	347	182	-30.4	U	384	213	180	U	389	230	22.1	U	322	186	88	U	377	217

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: RHIC Facility

Analyte	043-01 depth : 41 8/22/2018 pCi/l				043-01 depth : 41 2/28/2019 pCi/l				043-02 depth : 64 2/22/2018 pCi/l				043-02 depth : 64 8/22/2018 pCi/l				043-02 depth : 64 2/28/2019 pCi/l			
	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-105	U	406	220	-8.56	U	330	186	-32.5	U	377	209	-163	U	372	197	17.6	U	322	186

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: RHIC Facility

Analyte	044-13 depth : 38 2/22/2018 pCi/l				044-13 depth : 38 8/22/2018 pCi/l				044-13 depth : 38 1/10/2019 pCi/l				044-14 depth : 59 2/22/2018 pCi/l				044-14 depth : 59 8/22/2018 pCi/l			
	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	35.4	U	387	219	-21.5	U	406	226	-119	U	345	185	-39.7	U	428	237	38.1	U	410	232

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: RHIC Facility

Analyte	044-14 depth : 59 2/28/2019 pCi/l				044-29 depth : 35 2/22/2018 pCi/l				044-29 depth : 35 2/28/2019 pCi/l			
	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	80.6	U	327	194	19.3	U	386	217	26.6	U	378	210

Service Station
Analytical Results

This page intentionally left blank

**Sewage Treatment Plant and Peconic River
Analytical Results**

2018 Groundwater Data: Metals
 Brookhaven National Laboratory
 Project: Sewage Treatment Plant and Peconic River

Analyte	039-115 depth : 12 11/9/2018 ug/L		039-87 depth : 12 11/9/2018 ug/L		039-88 depth : 24 11/9/2018 ug/L		039-89 depth : 22 11/9/2018 ug/L		048-08 depth : 18 11/9/2018 ug/L		048-09 depth : 18 11/9/2018 ug/L		048-10 depth : 18 11/9/2018 ug/L	
Aluminum	25	B	420		57		100		100		130		370	
Antimony	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Arsenic	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Barium	21		75		89		140		22		60		14	B
Beryllium	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Cadmium	2	U	2.1		2	U	0.22	B	2	U	2	U	2	U
Calcium	28000		10000		15000		11000		8300		4100		510	
Chromium	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Cobalt	5	U	1.4	B	5.5		2	B	5	U	5	U	5	U
Copper	8.2	B	3.3	B	4.5	B	10	U	10	U	10	U	10	U
Iron	57		190		120		200		75		50		68	
Lead	3	U	3	U	3	U	3	U	3	U	3	U	3	U
Magnesium	9000		2100		6900		6900		2200		1400		380	
Manganese	4	U	33		41		45		75		26		45	
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Nickel	10	U	5.3	B	10	U	10	U	10	U	10	U	10	U
Potassium	6000		930	B	6300		2900		550	B	970	B	370	B
Selenium	5	U	5	U	5	U	2.3	B	5	U	5	U	5	U
Silver	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Sodium	63000		2800		79000		73000		26000		18000		4000	
Thallium	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Vanadium	7.1		5	U	5	U	5	U	5	U	5	U	5	U
Zinc	20	U	140		20	U	20	U	20	U	20	U	20	U

This page intentionally left blank

Waste Management Facility
Analytical Results

2018 Groundwater Data: Volatile Organic Compounds
 Brookhaven National Laboratory
 Project: Waste Management Facility

Analyte	066-222 depth : 48 2/28/2018 ug/L		066-222 depth : 48 8/15/2018 ug/L		066-223 depth : 48 2/28/2018 ug/L		066-223 depth : 48 8/15/2018 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U
524.2 TVOC	0		0		0		0	

2018 Groundwater Data: Metals
 Brookhaven National Laboratory
 Project: Waste Management Facility

Analyte	055-03 depth : 50 8/15/2018 ug/L		055-10 depth : 94 8/15/2018 ug/L		066-220 depth : 46 8/15/2018 ug/L		066-221 depth : 47 8/15/2018 ug/L		066-222 depth : 48 8/15/2018 ug/L		066-223 depth : 48 8/15/2018 ug/L	
Aluminum	110		24	B	43	B	24	B	50	U	84	
Antimony	5	U	5	U	5	U	5	U	5	U	5	U
Arsenic	5	U	5	U	5	U	5	U	5	U	5	U
Barium	55		31		83		76		51		35	
Beryllium	2	U	2	U	2	U	2	U	2	U	2	U
Cadmium	2	U	2	U	0.24	B	2	U	2	U	2	U
Calcium	4800		8200		16000		20000		14000		12000	
Chromium	10	U	10	U	4.4	B	10	U	10	U	10	U
Cobalt	5	U	5	U	5	U	5	U	5	U	5	U
Copper	10	U	10	U	10	U	10	U	10	U	10	U
Iron	200		38	B	50		26	B	50	U	93	
Lead	3	U	3	U	3	U	3	U	3	U	3	U
Magnesium	1300		3000		2400		2700		2900		3000	
Manganese	12		4	U	15		12		4	U	3.9	B
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Nickel	10	U	2.2	B	2.1	B	10	U	10	U	10	U
Potassium	1000	B	1600	B	1600	B	1700	B	2100		1700	B
Selenium	5	U	5	U	5	U	5	U	5	U	5	U
Silver	2	U	2	U	2	U	2	U	2	U	2	U
Sodium	120000		41000		77000		93000		55000		28000	
Thallium	5	U	5	U	5	U	5	U	5	U	5	U
Vanadium	5	U	5	U	5	U	5	U	5	U	5	U
Zinc	20	U	20	U	20	U	20	U	20	U	20	U

2018 Groundwater Data: General Chemistry
 Brookhaven National Laboratory
 Project: Waste Management Facility

Analyte	055-03 depth : 50 8/15/2018 ug/L		055-10 depth : 94 8/15/2018 ug/L		066-220 depth : 46 8/15/2018 ug/L		066-221 depth : 47 8/15/2018 ug/L		066-222 depth : 48 8/15/2018 ug/L		066-223 depth : 48 8/15/2018 ug/L	
	Chloride	140		48		97		120		72		39
Sulfate	3.1		12		17		26		17		8.7	

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: Waste Management Facility

Analyte	055-03 depth : 50 2/28/2018 pCi/l				055-03 depth : 50 8/15/2018 pCi/l				055-10 depth : 94 2/28/2018 pCi/l				055-10 depth : 94 8/15/2018 pCi/l				066-220 depth : 46 2/28/2018 pCi/l			
	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Americium-241	-0.433	U	22.5	13.5	-0.793	U	15.8	11.6	-1.94	U	14.9	11	-4.33	U DL	26.8	15.9	-2.03	U	14.6	10.7
Beryllium-7	15.7	U	53.4	42.1	22.5	U DL	65.5	52	22.5	U	53.1	42	29.8	U DL	69.1	57.6	-15.8	U DL	72.6	57.1
Cesium-134	2.15	U DL	11.3	4.7	-6.13	U DL	15.1	9.1	-4	U DL	13.3	7.93	2.99	U DL	17.5	7.89	10.9	J-N2	8.97	6.77
Cesium-137	0.535	U	7.49	6.21	2.32	U	8.95	7.21	0.644	U	9.05	6.81	-0.903	U	10	7.84	-3.63	U	10.5	10.9
Co-60	2.25	U	6.72	5.82	-5.57	U	16.3	13.8	2.87	U	9.12	7.54	2.05	U	9.45	7.2	9.38	J-N2	8.65	8.16
Cobalt-57	-2.23	U DL	5.8	3.5	0.182	U DL	7.03	3.41	0	U DL	6.55	1.5	2.36	U DL	6.65	4.24	0.644	U DL	6.26	3.36
Europium-152	32.1	U DL	91.6	54.8	15.7	U DL	105	9.57	33.8	U DL	104	52.3	26.6	U	75.3	23.3	30.3	U DL	86.5	47.6
Europium-154	-37.9	U DL	72.4	61.3	-42.2	U DL	98.2	87.6	13.4	U DL	76.4	21.1	3.98	U DL	91.6	7.11	1.88	U DL	91.5	4.43
Europium-155	6.39	U	25	12.9	5.27	U	24.8	10.6	5.95	U	23	13.7	-0.635	U	36.6	21.6	-8.03	U	29.1	17.4
Gross Alpha	1.96	U DL	2.97	1.91	1.18	U DL	2.12	1.31	1.45		1.44	1.01	-0.184	U	1.3	0.59	-0.076	U	1.89	0.96
Gross Beta	2.33		1.56	1.1	0.597	U	0.927	0.588	1.83		0.916	0.696	1.46		0.805	0.607	2.4		0.96	0.772
Manganese-54	-2.35	U DL	11.6	6.85	0.446	U DL	11.7	6.53	-4.78	U DL	12.1	5.04	-4.33	U DL	16.7	9.84	-5.3	U DL	16.6	6.68
Sodium-22	-2.52	U DL	9.39	5.49	-3.73	U DL	13.9	8.08	-2.8	U DL	12.3	7	-3.16	U DL	14.9	8.57	8.18	J-N2	7.51	5.67
Strontium-90					0.256		0.227	0.151					0.049	U	0.236	0.136				
Tritium	-264	U	414	206	-178	U	326	163	-178	U	417	217	-168	U	316	160	-135	U	412	219
Zinc-65	0	U DL	26.9	4.14	0	U DL	28.9	1.96	6.29	U DL	31.7	18.3	6.11	U DL	23.8	13.7	8.86	U DL	27.5	16.2

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: Waste Management Facility

Analyte	066-220 depth : 46 8/15/2018 pCi/l				066-221 depth : 47 2/28/2018 pCi/l				066-221 depth : 47 8/15/2018 pCi/l				066-222 depth : 48 2/28/2018 pCi/l				066-222 depth : 48 8/15/2018 pCi/l			
	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Americium-241	-4.88	U	15.6	11.1	-6.57	U DL	29.2	17.5	-1.15	U	14.4	10.5	1.93	U	12	7.43	3.3	U	14.4	10.1
Beryllium-7	-15.4	U DL	61.4	49.1	-21.4	U DL	76.5	63.2	-18	U DL	75.8	60	-32.1	U DL	70	59.7	-27.3	U DL	67.3	54.3
Cesium-134	0.21	U DL	15.8	0.331	3.1	U DL	11.1	6.05	9.09	U DL	14.2	11.9	-2.37	U DL	12.4	7.34	1.71	U DL	14.7	2.12
Cesium-137	3.71	U	8.43	7.08	3.07	U	8.43	7.1	2.69	U	8.95	7.25	0.177	U	8.73	7.33	3.09	U	7.93	6.56
Co-60	0.348	U	8.98	7.8	-0.683	U	11	8.91	1.56	U	11.2	0.996	1.2	U	8.65	4.58	9.21	J-N2	3.4	4.22
Cobalt-57	3.42	U DL	7.09	3.78	2.62	U DL	7.29	4.39	-0.572	U DL	5.33	3.11	-0.361	U DL	6.25	3.69	3.29	U DL	6.6	5.22
Europium-152	17.2	U DL	105	26.3	10.7	U DL	119	28.6	25.8	U	70.2	37.2	-33.1	U DL	105	62.4	-48.4	U DL	133	80
Europium-154	20	U	52.7	28.4	41.6	U DL	91.6	17.5	31.1	U DL	67.3	53.3	-49.6	U DL	77.8	57.5	-31.1	U DL	85.4	73.7
Europium-155	6.11	U	21.2	15.8	-11.2	U	37.8	22.7	-0.722	U	21.4	20.4	6.5	U	28.6	13.8	5.95	U	27.3	16.3
Gross Alpha	1.18	U	1.51	1.02	0.253	U	1.8	0.979	0.315	U	1.93	1.02	0.391	U	1.61	0.9	-0.479	U	1.53	0.574
Gross Beta	2.2		0.989	0.779	1.59		0.975	0.7	2.65		0.971	0.812	1.76		0.915	0.689	1.85		0.881	0.68
Manganese-54	2.32	U DL	8.28	4.86	2.78	U DL	16.1	9.35	0	U DL	11.7	3.9	-2.09	U DL	10.4	6.11	1.28	U DL	13.7	7.93
Sodium-22	3.18	U	6.3	3.89	-8.92	U DL	16.2	10	2.24	U DL	12.3	6.9	-0.629	U DL	9.39	8.64	3.54	U DL	8.35	5.02
Strontium-90	0.433		0.188	0.152					0.296		0.193	0.139					0.279		0.224	0.154
Tritium	-22.5	U	321	176	-188	U	419	216	-62.2	U	328	175	-149	U	414	218	-81.5	U	319	169
Zinc-65	0	U DL	29.4	9.92	0	U DL	33.8	2.76	6.27	U DL	22.7	13.1	-8.96	U DL	26.2	15.6	-13.9	U DL	36.4	21.9

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: Waste Management Facility

<i>Analyte</i>	066-223 depth : 48 2/28/2018 pCi/l				066-223 depth : 48 8/15/2018 pCi/l			
	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Americium-241	-5.03	U	15.4	10.9	-0.667	U	14.9	10.3
Beryllium-7	-31.6	U DL	66.3	45.9	-30.3	U DL	74.1	60.1
Cesium-134	0.085	U DL	12.4	0.165	0.522	U DL	16.6	1.16
Cesium-137	0.725	U	6.4	5.1	-4.22	U	11.6	10.7
Co-60	2.68	U	6.55	5.78	0.842	U	11.2	1.95
Cobalt-57	2.63	U DL	6	5.27	4.68		4	3.26
Europium-152	26.1	U	82.8	42.3	-41.9	U DL	146	86.7
Europium-154	11	U	52.7	28.5	-19.9	U DL	76.2	64.6
Europium-155	12.3	U	16.1	12.4	5.27	U	26.6	12.6
Gross Alpha	0.329	U	1.12	0.633	0.048	U	1.08	0.524
Gross Beta	1.31		0.788	0.581	1.34		0.803	0.594
Manganese-54	3.6	U DL	10.3	6.21	1.89	U DL	12.4	7.2
Sodium-22	-1.64	U DL	9.41	5.36	2.8	U DL	7.94	4.67
Strontium-90					0.289		0.209	0.146
Tritium	-135	U	408	217	-142	U	317	163
Zinc-65	2.71	U DL	24.9	14.3	-11.4	U DL	36.7	21.9

NSLS II
Analytical Results

2018 Groundwater Data: Volatile Organic Compounds
 Brookhaven National Laboratory
 Project: NSLS II

Analyte	076-18 depth : 30 4/24/2018		076-18 depth : 30 10/23/2018		076-19 depth : 30 4/24/2018		076-19 depth : 30 10/23/2018	
	ug/L		ug/L		ug/L		ug/L	
1,1,1-Trichloroethane	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	5	U	5	U	5	U	5	U
1,1-Dichloroethane	5	U	5	U	5	U	5	U
1,1-Dichloroethylene	5	U	5	U	5	U	5	U
1,2-Dichloroethane	5	U	5	U	5	U	5	U
1,2-Dichloropropane	5	U	5	U	5	U	5	U
2-Hexanone	10	U	10	U	10	U	10	U
Acetone	10	U	10	U	10	U	10	U
Benzene	5	U	5	U	5	U	5	U
Bromodichloromethane	5	U	5	U	5	U	5	U
Bromoform	5	U	5	U	5	U	5	U
Carbon disulfide	5	U	5	U	5	U	5	U
Carbon tetrachloride	5	U	5	U	5	U	5	U
Chlorobenzene	5	U	5	U	5	U	5	U
Chloroethane	10	U	10	U	10	U	10	U
Chloroform	0.74	J	3	J	5	U	5	U
cis-1,3-Dichloropropene	5	U	5	U	5	U	5	U
Dibromochloromethane	5	U	5	U	5	U	5	U
Ethene, 1,2-dichloro-, (E)-	5	U	5	U	5	U	5	U
Ethylbenzene	5	U	5	U	5	U	5	U
m-Dichlorobenzene	5	U	5	U	5	U	5	U
Methyl bromide	10	U	10	U	10	U	10	U
Methyl chloride	10	U	10	U	10	U	10	U
Methyl ethyl ketone	10	U	10	U	10	U	10	U
Methyl isobutyl ketone (MIBK)	10	U	10	U	10	U	10	U
Methyl tert-butyl ether	10	U	10	U	10	U	10	U
Methylene chloride	5	U	5	U	5	U	5	U
o-Dichlorobenzene	5	U	10	U	10	U	10	U
p-Dichlorobenzene	5	U	5	U	10	U	5	U
Tetrachloroethylene	5	U	5	U	5	U	5	U
Toluene	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	5	U	5	U	5	U	5	U
Trichloroethylene	5	U	5	U	5	U	5	U
Trichlorofluoromethane	5	U	5	U	5	U	5	U
Vinyl chloride	10	U	10	U	10	U	10	U

2018 Groundwater Data: Semivolatile Organic Compounds
 Brookhaven National Laboratory
 Project: NSLS II

Analyte	076-18 depth : 30 4/24/2018 ug/L		076-18 depth : 30 10/23/2018 ug/L		076-19 depth : 30 4/24/2018 ug/L		076-19 depth : 30 10/23/2018 ug/L	
1,2,4-Trichlorobenzene	9.9	U	2	U	10	U	2	U
2,4,6-Trichlorophenol	9.9	U	10	U	10	U	10	U
2,4-Dichlorophenol	9.9	U	10	U	10	U	10	U
2,4-Dimethylphenol	9.9	U	10	U	10	U	10	U
2,4-Dinitrophenol	49	U	20	U	52	U	20	U
2,4-Dinitrotoluene	9.9	U	2	U	10	U	2	U
2,6-Dinitrotoluene	9.9	U	2	U	10	U	2	U
2-Chloronaphthalene	9.9	U	10	U	10	U	10	U
2-Chlorophenol	9.9	U	10	U	10	U	10	U
3,3'-Dichlorobenzidine	49	U	10	U	52	U	10	U
4,6-Dinitro-o-cresol	49	U	20	U	52	U	20	U
4-Bromophenyl phenyl ether	9.9	U	10	U	10	U	10	U
4-Chlorophenyl phenyl ether	9.9	U	10	U	10	U	10	U
Acenaphthene	9.9	U	10	U	10	U	10	U
Acenaphthylene	9.9	U	10	U	10	U	10	U
Anthracene	9.9	U	10	U	10	U	10	U
Benzo(a)anthracene	9.9	U	1	U	10	U	1	U
Benzo(a)pyrene	9.9	U	1	U	10	U	1	U
Benzo(b)fluoranthene	9.9	U	2	U	10	U	2	U
Benzo(ghi)perylene	9.9	U	10	U	10	U	10	U
Benzo(k)fluoranthene	9.9	U	1	U	10	U	1	U
Bis(2-chloroethoxy)methane	9.9	U	10	U	10	U	10	U
Bis(2-chloroethyl)ether	9.9	U	1	U	10	U	1	U
Bis(2-ethylhexyl)phthalate	9.9	U	2	U	10	U	2	U
bis-chloroisopropyl ether	9.9	U	10	U	10	U	10	U
Butyl benzyl phthalate	9.9	U	10	U	10	U	10	U
Chrysene	9.9	U	2	U	10	U	2	U
Di-n-butyl phthalate	9.9	U	10	U	10	U	10	U
Di-n-octyl phthalate	9.9	U	10	U	10	U	10	U
Dibenzo(a,h)anthracene	9.9	U	1	U	10	U	1	U
Diethyl phthalate	9.9	U	10	U	10	U	10	U
Dimethyl phthalate	9.9	U	10	U	10	U	10	U
Fluoranthene	9.9	U	10	U	10	U	10	U
Fluorene	9.9	U	10	U	10	U	10	U
Hexachlorobenzene	9.9	U	1	U	10	U	1	U
Hexachlorobutadiene	9.9	U	1	U	10	U	1	U
Hexachlorocyclopentadiene	49	U	10	U	52	U	10	U
Hexachloroethane	9.9	U	2	U	10	U	2	U
Indeno(1,2,3-cd)pyrene	9.9	U	2	U	10	U	2	U
Isophorone	9.9	U	10	U	10	U	10	U
m-Dichlorobenzene	5	U	5	U	5	U	5	U
N-Nitrosodimethylamine	9.9	U	10	U	10	U	10	U
N-Nitrosodiphenylamine	9.9	U	10	U	10	U	10	U
N-Nitrosodipropylamine	9.9	U	1	U	10	U	1	U
Naphthalene	9.9	U	10	U	10	U	10	U
Nitrobenzene	9.9	U	1	U	10	U	1	U
o-Dichlorobenzene	5	U	10	U	10	U	10	U
o-Nitrophenol	9.9	U	10	U	10	U	10	U
p-Chloro-m-cresol	9.9	U	10	U	10	U	10	U
p-Dichlorobenzene	5	U	5	U	10	U	5	U
p-Nitrophenol	49	U	20	U	52	U	20	U
PCP	49	U	20	U	52	U	20	U
Phenanthrene	9.9	U	10	U	10	U	10	U
Phenol	9.9	U	10	U	10	U	10	U
Pyrene	9.9	U	10	U	10	U	10	U

2018 Groundwater Data: Radionuclides
 Brookhaven National Laboratory
 Project: NSLS II

Analyte	076-18 depth : 30 10/23/2018 pCi/l				076-19 depth : 30 10/23/2018 pCi/l				086-123 depth : 34 12/18/2018 pCi/l				086-124 depth : 47 12/18/2018 pCi/l				086-125 depth : 37 12/18/2018 pCi/l				086-126 depth : 36 12/18/2018 pCi/l			
	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	71.2	U	339	193	93.2	U	343	197	-91.8	U	449	249	-252	U	461	246	-293	U	452	238	-0.436	U	456	258