

**Table 2-2  
2013 Remediation Well Pumpage Report**

2013 BNL Groundwater Status Report

	Operable Unit 1			HFBR-Tritium Remediation Project				
	Groundwater Withdrawal (1,000 gallons per month)							
	BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	115-27 EW-1 -90 to -130 150 to 190	115-43 EW-2 -40 to -80 100 to 140	RA V  Monthly Total	105-040 EW-9 -61 to -81 130 to 150	105-039 EW-10 -60 to -80 130 to 150	105-041 EW-11 -60 to -80 130 to 150	096-119 EW-16 -14 to -54 80 to 120
January	0	0	0	0	0	1,786	3,928	5,714
February	10000	12854	22,854	0	0	1,613	3,306	4,919
March	0	0	0	0	0	1,786	3,571	5,357
April	5848	6953	12,800	0	0	907	1,771	2,678
May	0	0	0	0	0	1,250	2,723	3,973
June	1459	2065	3,524	0	0	0	0	0
July	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0
September	3	1103	1,106	0	0	0	0	0
October	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0
Annual Average (K gal/month)	1,368	1,818	3,186	0	0	608	1,267	1,887

Notes:

Source: BNL Facilities and Operations Directorate.

ft. msl = Elevation in feet referenced to mean sea level.

HFBR = High Flux Beam Reactor

Elevations rounded to nearest foot

Table 2-2, cont.  
2013 Remediation Well Pumpage Report

2013 BNL Groundwater Status Report

Operable Unit III - Pump and Treat								
MIDDLE ROAD SYSTEM - Groundwater Withdrawal (1,000 gallons per month)								
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	113-23 RW-1 -17 to -57 90 to 130	113-24 RW-2 -99 to -129 170 to 200	113-25 RW-3 -159 to -199 228 to 268	113-26 RW-4 -98 to -128 150 to 180	113-27 RW-5 -91 to -121 150 to 180	106-66 RW-6 -124 to -154 188 to 218	RW-7	MIDDLE ROAD  Monthly Total
January	4578	6956	2776	0	2096	2949	0	19,356
February	4300	7351	2413	0	2235	3100	0	19,398
March	4349	10913	2895	0	3333	4630	0	26,120
April	4464	11500	3875	1	3663	4737	0	28,240
May	5078	8915	4154	0	249	325	0	18,720
June	5552	12331	6419	0	0	0	0	24,301
July	5274	11602	3474	2	1	1	0	20,355
August	4907	11160	3014	0	0	0	0	19,081
September	5058	11506	4072	0	0	0	0	20,636
October	2524	5053	2039	0	1	0	0	9,617
November	921	50	82	1	0	0	0	1,055
December	4204	5085	3865	0	0	0	4000	17,155
Annual  Average (K gal/month)	4,270	8,542	3,259	0	955	1,299		18,669

Notes:

Source: BNL Facilities and Operations Directorate.

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 2-2, cont.  
2013 Remediation Well Pumpage Report

2013 BNL Groundwater Status Report

Operable Unit III - Pump and Treat								
SOUTH BOUNDARY SYSTEM - Groundwater Withdrawal (1,000 gallons per month)								
BNL Well No.	121-017	121-016	121-015	122-014	122-013	122-012	121-46	SOUTH BOUNDARY
Extraction Well	EW-3	EW-4	EW-5	EW-6	EW-7	EW-8	EW-17	
Screen Int. elevation (ft. msl)	-79 to -119	-88 to -108 -118 to -128	-91 to -131	-105 to -145	-115 to -155	-131 to -151 -171 to -191		
depth (feet)	150 to 190	160 to 180 190 to 200	160 to 200	160 to 200	170 to 210	190 to 210 230 to 250	207 to 237	Monthly Total
January	3181.78	3186.64	2654.21	0	1.14	0.47	4670.37	13,695
February	3386.32	3409.06	3398.52	0	0.01	0	5281.5	15,475
March	5171.46	5096.14	4977.07	0	0.01	0.01	7928.27	23,173
April	4805.71	5215.02	5044.26	0	1.37	0.58	8206.54	23,273
May	3230.77	5268.72	5222.79	0	0	0.01	9374	23,096
June	5627.02	5915.62	5678.44	0	0	0	8794.86	26,016
July	5656.02	5557.86	5346.37	0	0.36	0.39	9200.26	25,761
August	4828.69	5206.59	4677.28	0	0.01	0	8482.15	23,195
September	5263.76	5340.96	5060.44	0	0.08	0.01	8750.28	24,416
October	5862.38	5800.08	5420.82	0	1.19	0.59	9588.05	26,673
November	8328.23	5321.91	4806.27	0	0	0.01	8837.75	27,294
December	7925.29	5019.78	3713.93	0	0.01	0	7818.73	24,478
Annual								
Average (K gal/month)	5,280	5,037	4,672	0	0	0.174164384	8,094.47	23,045

Notes:

Source: BNL Facilities and Operations Directorate.

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 2-2, cont.  
2013 Remediation Well Pumpage Report

2013 BNL Groundwater Status Report

Operable Unit III - Pump and Treat								
OFFSITE INDUSTRIAL PARK SYSTEM - Groundwater Withdrawal (1,000 gallons per month)								
BNL Well No.	000-231	000-233	000-235	000-237	000-239	000-241	000-243	OFFSITE INDUSTRIAL PARK
Extraction Well	UVB-1	UVB-2	UVB-3	UVB-4	UVB-5	UVB-6	UVB-7	
Screen Int.								
Influent elevation (ft. msl)	-137 to -157	-115.5 to -135.5	-123 to -143	-98 to -118	-109 to -129	-110 to -130	-123 to -143	
depth (feet)	220 to 240	195 to 215	194 to 214	170 to 190	180 to 200	190 to 210	205 to 225	
Effluent elevation (ft. msl)	-82 to -102	-60.5 to -80.5	-68 to -88	-53 to -73	-54 to -74	-58 to -78	-68 to -88	Monthly
depth (feet)	165 to 185	140 to 160	139 to 159	125 to 145	125 to 145	140 to 160	150 to 170	Total
January	0	0	1286	2917	2,662	3005	4	9,870
February	0	0	1252	1817	1,663	1916	635	6,648
March	0	0	1689	2447	2,241	2612	4	8,989
April	0	0	1750	2728	2,494	2894	7	9,866
May	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0
Annual Average (K gal/month)	0	0	498	826	755	869	50	737

Notes:

Source: BNL Facilities and Operations Directorate.

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 2-2, cont.  
2013 Remediation Well Pumpage Report

2013 BNL Groundwater Status Report

Operable Unit III - Pump and Treat					
BUILDING 96 SYSTEM - Groundwater Withdrawal and ReInjection (1,000 gallons per month)					
BNL Well No.	095-151	095-153	095-155	095-157	BUILDING
Extraction Well	RTW-1	RTW-2	RTW-3	RTW-4	96
Screen Int.					
Influent					
elevation (ft. msl)	+34 to +24	+26 to +16	+26 to +16	+23 to +13	
depth (feet)	48 to 58	48 to 58	48 to 58	48 to 58	
Effluent					
elevation (ft. msl)	+57 to +47	+49 to +39	+49 to +39	+46 to +36	Monthly
depth (feet)	25 to 35	25 to 35	25 to 35	25 to 35	Total
January	481	691	1340	0	2,512
February	87	217	718	0	1,022
March	1,091	1,116	1372	0	3,580
April	1,079	914	1319	0	3,312
May	1,171	594	1421	0	3,186
June	1,434	1,262	1401	0	4,097
July	1,340	1,340	1340	0	4,021
August	1,443	1,555	1435	0	4,433
September	1,155	1,358	1298	0	3,811
October	1,422	1,362	1422	0	4,206
November	1,313	1,443	1484	244	4,483
December	760	681	1286	0	2,726
Annual					
Average (K gal/month)	1,071	1,049	1,324	20	3,464

Notes:

Source: EM Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Annual average based on actual pumping durations

\*Well RTW-4 put in stand-by mode in October 2012

Table 2-2, cont.  
2013 Remediation Well Pumpage Report

2013 BNL Groundwater Status Report

Operable Unit III - Pump and Treat			
WESTERN SOUTH BOUNDARY System (1,000 gallons per month)			
BNL Well No.	126-12	127-05	
Extraction Well	WSB-1	WSB-2	
Screen Int. elevation (ft. msl)	-60 to -80	-80 to -100	Monthly
depth (feet)	140 to 160	150 to 170	Total
January	7555	6364	13,919
February	5053	432	5,485
March	9102	17	9,119
April	6654	6056	12,710
May	7390	4622	12,012
June	8521	966	9,487
July	7541	6929	14,470
August	8589	471	9,060
September	5450	5	5,455
October	7736	6794	14,530
November	9070	506	9,576
December	7732	0	7,732
Annual Average (K gal/month)	7,533	2,764	10,296

Notes:

Source: BNL Facilities and Operations Directorate.

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

**Table 2-2, cont.**  
**2013 Remediation Well Pumpage Report**

2013 BNL Groundwater Status Report

Operable Unit III - Pump and Treat				
Chem Holes Strontium-90 remediation System (1,000 gallons per month)				
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	106-92 SR-90 EW-1  +40.5 to +25.5 23.5 to 38.5	SR-90 EW-2   35 to 45	SR-90 EW-3   35 to 45	Monthly    Total
January	209	379	251	839
February	49	298	45	392
March	99	158	81	338
April	10	413	0	423
May	290	488	245	1,023
June	85	437	57	579
July	270	89	180	539
August	29	433	19	481
September	243	443	212	898
October	0	0	0	0
November	151	262	130	543
December	8	0	0	8
Annual Average (K gal/month)	121	283	102	505

Notes:

Differences in averages due to rounding

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

**Table 2-2, cont.**  
**2013 Remediation Well Pumpage Report**

2013 BNL Groundwater Status Report

Operable Unit III - Pump and Treat					
LIPA SYSTEM - Groundwater Withdrawal (1,000 gallons per month)					
BNL Well No.	000-453	000-455	000-457	000-461	LIPA
Extraction Well	EW-1L	EW-2L	EW-3L	EW-4L	
Screen Int.					
elevation (ft. msl)	-111 to -131	-115 to -135	-104 to -124	-192 to -212	Monthly
depth (feet)	217 to 237	224 to 244	216 to 236	304 to 324	Total
January	0	2	0	2482	2,484
February	1	1	1	1763	1,766
March	0	0	0	4899	4,899
April	2	2	2	1469	1,475
May	0	0	0	7287	7,287
June	0	0	0	6796	6,796
July	0	0	0	6786	6,786
August	0	1	1	3700	3,702
September	0	0	0	6742	6,742
October	1	0	1	6588	6,590
November	0	1	1	4514	4,516
December	0.65	0.78	0.39	5469	5,471
Annual Average (K gal/month)*	0	1	1	4,900	4,876

Notes:

Source: BNL Facilities and Operations Directorate.

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

\* Annual average is based on actual pumping timeframe

Table 2-2, cont.  
2013 Remediation Well Pumpage Report

2013 BNL Groundwater Status Report

Operable Unit III - Pump and Treat							
AIRPORT SYSTEM - Groundwater Withdrawal (1,000 gallons per month)							
BNL Well No.	800-109	800-110	800-111	800-112	800-113	800-132	Airport
Extraction Well	RTW-1A	RTW-2A	RTW-3A	RTW-4A	RTW-5A	RTW-6A	
Screen Int.							
Influent							
elevation (ft. msl)	-108 to -128	-109 to -129	-130 to -150	-184 to -204	-133 to -153		Monthly
depth (feet)	188 to 208	188 to 208	210 to 230	268 to 288	220 to 240	165 to 185	Total
Effluent							
elevation (ft. msl)	+25 to -15	+24 to -16	+25 to -15	+24 to -16	+22 to -18		Monthly
depth (feet)	55 to 95	55 to 95	55 to 95	60 to 100	65 to 105		Total
January	2419.2	864	381.61	3769.44	329.01	3628.8	11,392
February	2894.4	864	1028.64	4949.53	1025.94	4363.2	15,126
March	3585.6	864	1014.19	6228.07	1020.83	5400	18,113
April	3369.6	864	1149.92	5619.98	1169.81	5011.2	17,185
May	3542.4	864	1051.19	6132.11	1046.86	5356.8	17,993
June	3715.2	864	1149.82	6420.66	1172.77	5572.8	18,895
July	3456	846	1111.78	6029.98	1130.79	5227.2	17,802
August	3542.4	846	1386.27	5241.74	1397.12	5313.6	17,727
September	3542.4	846	1164.49	5961.89	1158.78	5270.4	17,944
October	3844.8	846	1241.25	5521.66	1232.07	5788.8	18,475
November	3024	475.2	640.33	4287.25	535.61	4492.8	13,455
December	3542.4	0	9.84	5587.9	8.19	5356.8	14,505
Annual							
Average (K gal/month)*	3,377	753	943	5,483	934	5,065	16,551

Notes:

Source: BNL Facilities and Operations Directorate.

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

RTW-1A and RTW-2A flow estimated. Both wells share a common flow meter, individual well pumpage estimated at 50% of actual flow meter reading.

\* Annual average is based on actual pumping timeframe

Table 2-2, cont.  
2013 Remediation Well Pumpage Report

2013 BNL Groundwater Status Report

Operable Unit III - Pump and Treat			
*INDUSTRIAL PARK EAST- Groundwater Withdrawal (1,000 gallons per month)			
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	EWI-1   -166 to -186 235 to 255	EWI-2   -225 to -245 295 to 315	INDUSTRIAL PARK EAST Monthly Total
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Annual Average (K gal/month)	0	0	0

Notes:

Source: BNL Facilities and Operations Directorate.

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

\*System in stand-by mode

**Table 2-2, cont.**  
**2013 Remediation Well Pumpage Report**

2013 BNL Groundwater Status Report

<b>Operable Unit III - Pump and Treat</b>			
<b>NORTH STREET - Groundwater Withdrawal (1,000 gallons per month)</b>			
BNL Well No.	000-471	000-473	NORTH STREET
Extraction Well	NS-1	NS-2	
Screen Int. elevation (ft. msl)	-64 to -104	-96 to -126	Monthly
depth (feet)	165 to 205	190 to 220	Total
January	200	4687	4,887
February	620	505	1,125
March	248	10508	10,756
April	8359	6853	15,212
May	286	7165	7,451
June	5360	5217	10,577
July	0	8760	8,760
August	1288	1495	2,783
September	3	0	3
October	7	7	14
November	0	0	0
December	0	0	0
Annual Average (K gal/month)	1,348	3,801	5,131

Notes:

Source: BNL Facilities and Operations Directorate.

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

**Table 2-2, cont.**  
**2013 Remediation Well Pumpage Report**

2013 BNL Groundwater Status Report

<b>Operable Unit III - Pump and Treat</b>			
<b>NORTH STREET EAST- Groundwater Withdrawal (1,000 gallons per month)</b>			
BNL Well No.	000-487	000-488	NORTH
Extraction Well	NSE-1	NSE-2	STREET
Screen Int.			EAST
elevation (ft. msl)	-71 to -101	-71 to -101	Monthly
depth (feet)	161 to 191	152 to 182	Total
January	8226	0	8,226
February	6265	0	6,265
March	8942	4	8,946
April	8124	0	8,124
May	7984	4	7,988
June	9597	4	9,601
July	9000	0	9,000
August	9033	0	9,033
September	9183	0	9,183
October	8994	0	8,994
November	9861	0	9,861
December	8565	0	8,565
Annual Average (K gal/month)	8,661	1	9,151

Notes:

Source: BNL Facilities and Operations Directorate.

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 2-2, cont.  
2013 Remediation Well Pumpage Report

2013 BNL Groundwater Status Report

Operable Unit III - Pump and Treat										
BGRR/WCF Strontium-90 - Groundwater Withdrawal (1,000 gallons per month)										
BNL Well No.	065-368	065-369	075-676	075-677	075-678					BGRR
Extraction Well	SR-1	SR-2	SR-3	SR-4	SR-5	SR-6	SR-7	SR-8	SR-9	
Screen Int.										
elevation (ft. msl)	51.5-31.5	51.5-31.5	50-30	46-6	46-6					Monthly
depth (feet)	33-53	33.5-53.5	51-71	35-75	35-75	85-105	82-102	77-97	67-87	Total
January	242	146	248.45	128.62	162.83	234.99	179.34	308.41	263.18	928
February	0	96	226.13	36.17	9.3	139.64	150.2	241.48	224.56	368
March	254	240	186.34	116.47	219.3	112.7	310.09	293.83	175.3	1,017
April	21	85	78.91	0.08	0.14	96.52	101.63	122.89	57.18	184
May	102	134	156.95	115.62	215.02	158.72	180.61	313.12	180.86	724
June	169.79	215.89	259.34	47.95	95.69	209.77	316.88	530.26	342.97	789
July	96.99	159.35	176.28	105.02	193.69	166.11	119.53	228.71	95.74	731
August	103.8	314.55	364.59	21.04	16.07	372.14	388.24	402.68	309.07	820
September	67.33	153.3	171.09	174.66	112.37	158.17	198.22	197.5	164.45	679
October	92.37	134.45	186.28	1.68	0.82	162.38	246.63	222.06	181.26	416
November	189.05	0	240.4	307.3	265.3	282.67	258.29	417.4	312.61	1,002
December	254.9	147.53	210.96	0.09	0.18	181.02	182.68	288.78	338.77	614
Annual Average (K gal/month)	134	153	209	88	108	190	220	298	220	689

Notes:

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 2-2, cont.  
2013 Remediation Well Pumpage Report

2013 BNL Groundwater Status Report

Operable Unit VI - Pump and Treat			
EDB SYSTEM- Groundwater Withdrawal (1,000 gallons per month)			
BNL Well No.	000-503	000-504	OU VI EDB
Extraction Well	EW-1	EW-2	
Screen Int. elevation (ft. msl)	-41 to -61	-45 to -65	Monthly
depth (feet)	115 to 135	115 to 135	Total
January	582	586	1,168
February	0	4977	4,977
March	6719	8412	15,131
April	6870	7701	14,571
May	6,733	8,259	14,992
June	6,458	7,317	13,775
July	7,018	9,260	16,278
August	7,298	8,452	15,750
September	7,129	8,090	15,219
October	7,177	8,718	15,895
November	7,802	9,172	16,974
December	6,939	6,504	13,443
Annual Average (K gal/month)	5,929	7,298	13,181

Notes:

Source: BNL Facilities and Operations Directorate.

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Flow per well estimated, average combined flow 155 gallons per minute

**Table 2-2, cont.**  
**2013 Remediation Well Pumpage Report**

2013 BNL Groundwater Status Report

<b>Operable Unit III - Pump and Treat</b>		
<b>BUILDING 452 FREON SYSTEM- Groundwater Withdrawal (1,000 gallons per month)</b>		
BNL Well No.	085-839	Building 452 Freon
Extraction Well	EW-18	
Screen Int.		
elevation (ft. msl)		Monthly
depth (feet)	55-65	Total
January	3228	3228
February	1568	1568
March	3067	3067
April	3143	3143
May	349	349
June	1081	1081
July	3074	3074
August	3376	3376
September	2921	2921
October	3538	3538
November	3400	3400
December	2507	2507
Annual Average (K gal/month)	2,612	2,604

Notes:

Source: BNL Facilities and Operations Directorate.

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot