

BOUNDING TRACER (FLUORESCEIN) CONCENTRATION ISOPLETHS¹

Well ID	Date Sample Collected	Days Until Peak Tracer Arrival ¹	Max Tracer Concentration (ug/L) ²	Well ID	Date Sample Collected	Days Until Peak Tracer Arrival	Max Tracer Concentration (ug/L)
MW-2	NA	-	ND	MW-53-122	NA	-	ND
MW-4	3/5/07	24.6	41.4	MW-53-181	NA	-	ND
MW-4A	NA	-	ND	MW-53-82	2/26/07	18.1	5.2
MW-5	3/5/07	24.6	43.1	MW-53-120	NA	-	ND
MW-4	2/28/07-5/8/07	18.8-88.6	13.8	MW-54-371	3/5/07	24.6	1.0
MW-30-69	3/12/07-4/8/07	31.6-59.6	5.690	MW-54-58	3/5/07	24.6	0.8
MW-30-84	4/8/07	80.1	187	MW-54-123	3/5/07	24.6	0.6
MW-31-49	2/8/07	0.1	1,600	MW-54-192	3/5/07	24.6	0.8
MW-31-43	2/23/07	15.0	12,700	MW-54-190	3/5/07	24.6	0.7
MW-31-85	2/13/07	5.1	7,810	MW-54-24	3/28/07	47.9	0.1
MW-32-92	2/8/07	1.1	48,000	MW-54-36	3/13/07	33.1	0.2
MW-32-92	2/8/07	0.2	24,300	MW-54-54	3/15/07	34.9	1.1
MW-32-146	2/10/07	2.3	15,300	MW-54-53	NA	-	ND
MW-32-186	2/13/07	5.0	4,160	MW-58-83	NA	-	ND
MW-32-187	2/28/07	18.0	821	MW-57-11	3/7/07	28.6	14.4
MW-33-49	3/5/07	24.6	6.6	MW-57-20	NA	-	ND
MW-34	3/28/07	45.8	0.1	MW-57-45	NA	-	ND
MW-35	4/8/07	16.8	0.1	MW-58-26	3/23/07	42.8	0.8
MW-36-24	4/23/07	73.8	0.002	MW-58-65	5/10/07	80.8	0.38
MW-36-52	4/10/07	80.9	0.054	MW-58-26	5/10/07	81.8	0.38
MW-37-22	4/10/07	80.9	48.8	MW-58-88	NA	-	ND
MW-33-92	3/23/07	42.8	1.3	MW-58-26	5/16/07	96.8	0.11
MW-37-40	NA	-	ND	MW-53-53	NA	-	ND
MW-37-87	3/23/07	42.8	0.1	MW-58-72	NA	-	ND
MW-38	3/27/07	46.8	0.051	MW-58-135	NA	-	ND
MW-39-87	NA	-	ND	MW-60-154	NA	-	ND
MW-39-84	NA	-	ND	MW-62-178	NA	-	ND
MW-39-100	NA	-	ND	MW-62-18	5/8/07	87.1	0.1
MW-39-124	NA	-	ND	MW-62-37	5/8/07	96.8	0.11
MW-39-163	NA	-	ND	MW-62-53	NA	-	ND
MW-39-195	NA	-	ND	MW-62-71	NA	-	ND
MW-40-24	NA	-	ND	MW-62-95	NA	-	ND
MW-40-46	NA	-	ND	MW-62-138	NA	-	ND
MW-40-51	NA	-	ND	MW-62-182	NA	-	ND
MW-40-100	NA	-	ND	MW-62-18	NA	-	ND
MW-40-127	NA	-	ND	MW-62-25	NA	-	ND
MW-40-150	NA	-	ND	MW-62-50	NA	-	ND
MW-41-13	NA	-	ND	MW-63-53	NA	-	ND
MW-41-40	NA	-	ND	MW-63-152	NA	-	ND
MW-41-83	NA	-	ND	MW-63-121	NA	-	ND
MW-42-48	2/15/07	6.8	1.9	MW-63-163	NA	-	ND
MW-42-78	3/7/07	27.8	1.7	MW-63-174	NA	-	ND
MW-44-67	NA	-	ND	MW-66-48	NA	-	ND
MW-44-104	NA	-	ND	MW-66-80	NA	-	ND
MW-44-3	NA	-	ND	MW-66-21	NA	-	ND
MW-45-87	NA	-	ND	MW-66-36	7/30/07	171.8	0.08
MW-46	NA	-	ND	MW-66(165)	NA	-	ND
MW-47-56	NA	-	ND	MW-66(115)	NA	-	ND
MW-47-80	NA	-	ND	MW-66(135)	NA	-	ND
MW-48-23	NA	-	ND	MW-66(190)	NA	-	ND
MW-48-37	NA	-	ND	MW-107	NA	-	ND
MW-48-26	5/8/07	88.6	12.3	MW-108	3/9/07	28.6	0.8
MW-49-42	NA	-	ND	MW-111	3/29/07	48.6	19.1
MW-50-65	NA	-	ND	MW-11(97)	2/23/07	14.6	256.0
MW-50-42	NA	-	ND	MW-1(110)	2/11/07	2.6	985.0
MW-50-86	NA	-	ND	MW-1(118)	2/23/07	14.8	264.0
MW-51-40	NA	-	ND	MW-1(140)	2/14/07	5.8	754.0
MW-51-79	NA	-	ND	CSS	4/18/07	66.6	1.7
MW-51-102	NA	-	ND	HR-1	3/12/07	31.6	0.17
MW-51-135	NA	-	ND	U1-CSS	3/7/07	28.6	23.3
MW-51-163	NA	-	ND	U1-NC2	3/14/07	33.6	4.2
MW-51-198	NA	-	ND	U1-S95	3/10/07	29.6	1.2
MW-52-11	NA	-	ND	U2-C1	3/29/07	48.6	0.8
MW-52-18	NA	-	ND	U3-3	3/27/07	48.6	0.07
MW-52-48	5/24/07	105.0	0.52	U3-4D	4/25/07	75.6	0.06
MW-52-84	NA	-	ND	U3-C1	3/5/07	24.6	0.3

1) Tracer injected on 2/8/2007 at approximately 10:30 AM.
 2) Shaded cells indicate sample collected via charcoal packets. Concentrations are expressed as ug/L.
 3) NA: Not Applicable.
 4) ND: Not Detected. Water sample detection limit is 0.002 ug/L. Carbon sample eluant detection limit is 0.025 ug/L.
 5) Numbers in parenthesis indicate sample collection depths in an open borehole.
 6) Peak tracer sample from MW-54-153 was collected from a packered sampling interval no longer in place. Other MW-54 samples listed were extracted from former packered sample zones reasonably equivalent to those currently in place.



LEGEND

Probable Legacy Release Locations

- Terminated Connection To Storm Drain
- Footing / Storm Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Trench
- Unit 1 West Fuel Pool
- Unit 2 Fuel Pool

Depth-Specific Data

Water sample concentration of Fluorescein (ug/L) for each screened interval.
 Carbon sampler concentration of Fluorescein (ug/day) for each screened interval.

Multiple Screened Intervals w/ Depth

- Screened in Soil
- Screened in Bedrock

Time elapsed until peak tracer arrival for each sampled interval. Groundwater elevation at time of low river tide for each screened interval, 6/1/2007.

Concentration Data¹

Bar Graphs; Bounding Fluorescein, ug/L

- Not Measured
- Not Detected (ND)
- 0.5 ND - < 1
- 1 - 5
- 5 - 25
- 25 - 50
- 50 - 500
- 500 - 5,000
- 5,000 - 50,000

Bar Graphs; Bounding Fluorescein, ug/day

- Not Measured
- Not Detected (ND)
- 0.5 ND - < 1
- 2 1 - 5
- 7 5 - 10
- 12 10 - 15
- 18 15 - 25

Isopleths; Fluorescein Peak, ug/L

- 5 - 50
- 50 - 500
- 500 - 5,000
- 5,000 - 50,000
- > 50,000

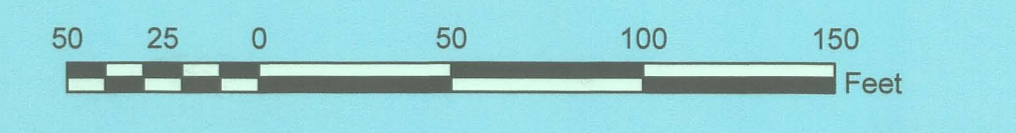
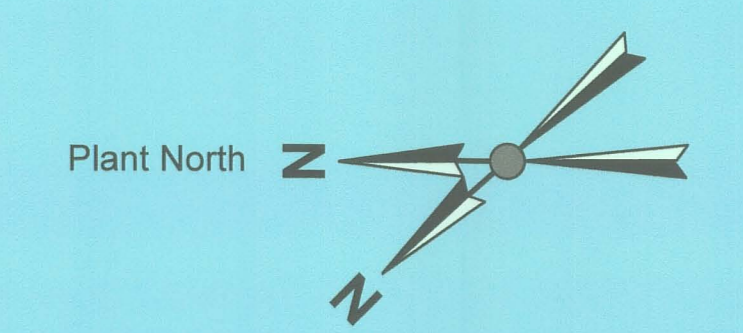
Groundwater Elevation Contours

- Ambient "Waterable" Contours 6/1/2007 (10' Interval)
- Contours Other Than 10' Interval

Note: Groundwater contours developed from limited data available on 6/1/2007. Actual elevations may vary from conditions shown and the actual distribution of piezometric heads is likely more complex than indicated.

Data Notes:
 1. Boundary tracer plume represents upper bound concentration measured over both depth and time (available results for sample dates through 8/21/2007). As such, these data are an overstatement of tracer concentrations actually existing on-site at any time.

General Notes:
 1. Base map was developed from an unfiled electronic file provided by Badey & Watson Surveying and Engineering, P.C., Dated 2/3/05; CAD file name: "GZA.dwg".
 2. Additional legend on Figure 1.3.



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**INDIAN POINT ENERGY CENTER
 BUCHANAN, NEW YORK**

**BOUNDING TRACER (FLUORESCEIN)
 CONCENTRATION ISOPLETHS¹
 IN GROUNDWATER**

Proj. Mgr.: MJB
 Designed By: MJB
 Reviewed By: MJB
 Operator: GASEMD

Dwg. Date: 1-04-2008
 Job No.: 41.0017869.10

Figure No.: **7.2**

HUDSON RIVER

D-13