

Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

MAY 0 2 2007

10 CFR 50.36a(a)(2)

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555-0001

Gentlemen:

In the Matter of the Tennessee Valley Authority Docket No. 50-390

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT - 2006

In accordance with the requirements of the WBN Unit 1 Technical Specifications, Section 5.9.2, "Annual Radiological Environmental Operating Report," and the WBN Offsite Dose Calculation Manual (ODCM), Administrative Control Section 5.1, the 2006 Annual Radiological Environmental Monitoring Program (REMP) results and Data Supplement for WBN are enclosed. The REMP implements 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The report, which is prepared by TVA's Environmental Radiological Monitoring and Instrumentation in Muscle Shoals, Alabama, describes and summarizes the results of radioactivity measurements made in the vicinity of WBN and laboratory analyses of samples collected in the area. The results of the analysis indicate that exposure to members of the general public, which may have been attributable to the operation of WBN, is negligible. The radioactivity measured was primarily the result of fallout or natural background.

There are no regulatory commitments in this letter. If you should have any questions, please contact me at (423) 365-1824.

Sincerely.

J. D. Smith Manager, Site Licensing and Industry Affairs (Acting)

Enclosure cc: See page 2 U.S. Nuclear Regulatory Commission Page 2

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JDS:JLB Enclosure cc (Enclosure):

NRC Resident Inspector Watts Bar Nuclear Plant 1260 Nuclear Plant Road Spring City, Tennessee 37381

U.S. Nuclear Regulatory Commission Region II Sam Nunn Atlanta Federal Center 61 Forsyth St., SW, Suite 23T85 Atlanta, Georgia 30303

Annual Radiological Environmental Operating Report

Watts Bar Nuclear Plant Data Supplement 2006

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT WATTS BAR NUCLEAR PLANT DATA SUPPLEMENT

2006

TENNESSEE VALLEY AUTHORITY

April 2007

RADIOLOGICAL ENVIRONMENTAL MONITORING DATA WATTS BAR NUCLEAR PLANT

2006

This supplement to the Watts Bar Nuclear Plant Annual Radiological Environmental Operating Report (AREOR) presents the results of individual sample analyses and radiation measurements. The results are ordered by sample type then by sample location and analysis type. If no gamma activity was detected in a sample, the notation 'NO ACTIVITY DETECTED' is entered. The sample locations are described in Appendix A to the AREOR.

These tables include all results, whether above or below the Lower Limit of Detection. Negative values are an artifact of counting statistics and do not imply a negative activity.

The uncertainty reported for specific analyses such as gross beta, Sr-89 and 90 and tritium is the one sigma counting error. For gamma analyses, the uncertainty reported is the one-sigma error calculated by the gamma spectral analysis software.

GROSS BETA 	<u>Station</u> 2116	<u>Location</u> RM-2 DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
.0217 .0024 01/10/06 620143 .0178 .0020 01/17/06 620233 .0155 .0018 01/24/06 620370 .0207 .0023 01/31/06 620651 .0217 .0024 02/07/06 620353 .0217 .0024 02/07/06 620655 .0171 .0019 02/14/06 620375 .0253 .0027 02/23/06 621065 .0240 .0026 02/28/06 62105 .0240 .0026 .0223 03/07/06 621316 .0205 .0023 03/14/06 621316 .0205 .0022 .04/24/06 621896 .0106 .0013 03/28/06 621896 .0202 .0022 .04/11/06 621896 .0202 .0022 .04/11/06 621896 .0202 .0022 .04/11/06 622121 .0202 .0022 .04/11/06 622329 .0202 .0022				GROSS E	BETA				
A 1178 A 0020 O1/17/06 A 62033 A 11755 A 0018 O1/24/06 A 20370 A 2027 A 0023 O1/31/06 A 20361 A 2027 A 0024 O2/07/06 A 20265 A 0017 A 0019 O2/14/06 A 20265 A 0027 O2/21/06 A 2046 A 2047 A 0026 O2/28/06 A 2046 A 204 A 0026 O2/28/06 A 2140 A 204 A 0026 O2/28/06 A 2140 A 2140 A 204 A 204						.0224	.0025	01/03/06	620042
 0.0155 0.018 0.1/24/06 620370 0.023 0.1/31/06 620661 0.0217 0.024 0.2/07/06 620895 0.0210 0.0253 0.027 0.2/21/06 620895 0.0240 0.026 0.2/28/06 621064 0.0273 0.029 0.3/07/06 621205 0.023 0.3/14/06 621316 0.188 0.021 0.3/28/06 621477 0.100 0.013 0.3/28/06 621759 0.022 0.4/11/06 621896 0.229 0.022 0.4/11/06 621896 0.202 0.4/11/06 621896 0.202 0.022 0.4/11/06 622189 0.202 0.022 0.4/11/06 622189 0.202 0.022 0.4/11/06 622189 0.202 0.022 0.4/11/06 622329 0.022 0.4/11/06 622329 0.022 0.4/11/06 622329 0.022 0.4/11/06 622329 0.202 0.012 0.4/25/06 622329 0.203 0.4/25/06 622329 0.204 0.016 0.012 0.5/09/06 622329 0.203 0.4/25/06 622321 0.106 0.017 0.024 0.6/00/66 623062 0.211 0.6/20/06 623161 0.244 0.027 0.6/13/06 623161 0.244 0.021 0.6/20/06						.0217	.0024	01/10/06	620143
.0207 .0023 01/31/06 620561 .0217 .0024 02/07/06 620665 .0171 .0019 02/14/06 620775 .0253 .0027 02/21/06 621064 .0240 .0026 02/28/06 621064 .0273 .0029 03/07/06 621205 .0205 .0023 03/14/06 621876 .0108 .0021 03/28/06 621896 .0109 .0013 03/28/06 621896 .0100 .0013 03/28/06 621896 .0229 .0025 04/14/06 621896 .0200 .0022 .04/40/06 621896 .0200 .0022 .04/25/06 622329 .0200 .0022 .05/02/06 622329 .0200 .0022 .05/02/06 622451 .0132 .0016 .05/16/06 622322 .0209 .0022 .05/23/06 622329 .0202 .05/23/06 622322						.0178	.0020	01/17/06	620233
.0217 .0024 02/07/06 620665 .0171 .0019 02/14/06 620775 .0253 .0027 02/21/06 620895 .0240 .0026 02/28/06 621064 .0273 .0029 03/07/06 621205 .0205 .0023 03/14/06 621316 .0188 .0021 03/21/06 621896 .0195 .0022 04/04/06 621896 .0229 .0022 04/11/06 621896 .0229 .0022 04/11/06 621896 .0200 .0022 04/18/06 622121 .0209 .0023 04/25/06 622392 .0200 .0022 .004/18/06 6221818 .0160 .0168 .05/02/06 622474 .0160 .0018 .05/16/06 622761 .0196 .0022 .05/23/06 622932 .0239 .0026 .05/23/06 623922 .0239 .0026 .05/30/06						.0155	.0018	01/24/06	620370
.0171 .0019 02/14/06 620775 .0253 .0027 02/21/06 620895 .0240 .0026 02/28/06 621064 .0273 .0029 03/07/06 621205 .0205 .0023 03/14/06 621316 .0188 .0021 03/21/06 621759 .0100 .0013 03/28/06 621896 .0229 .0025 04/11/06 621896 .0209 .0022 04/04/06 621896 .0200 .0022 04/11/06 622121 .0200 .0022 05/02/06 622474 .0160 .0018 05/09/06 622618 .0132 .0016 05/16/06 62232 .0239 .0022 05/23/06 622932 .0239 .0026 05/30/06 622062 .0239 .0026 05/30/06 622062 .0239 .0026 05/30/06 622062 .0239 .0026 05/30/06 622062 .0244 .0027 06/13/06 62302		•				.0207	.0023	01/31/06	620561
.0253 .0027 .02/21/06 .620895 .0240 .0026 .02/28/06 .621064 .0273 .0029 .03/07/06 .621205 .0205 .0023 .03/14/06 .621316 .0188 .0021 .03/21/06 .621475 .0100 .0013 .03/28/06 .621759 .0105 .0022 .04/04/06 .621896 .0299 .0025 .04/11/06 .621896 .0209 .0022 .04/04/06 .621896 .0202 .0022 .04/11/06 .621896 .0202 .0022 .04/11/06 .621989 .0202 .0022 .04/11/06 .621989 .0202 .0022 .04/11/06 .622121 .0200 .0022 .05/02/06 .622474 .0160 .0018 .05/09/06 .62218 .0132 .0016 .05/16/06 .622032 .0239 .0026 .05/23/06 .622932 .0239 .0026						.0217	.0024	02/07/06	620665
.0240 .0026 .02/28/06 .621064 .0273 .0029 .03/07/06 .621205 .0205 .0023 .03/14/06 .621316 .0188 .0021 .03/21/06 .621759 .0195 .0022 .04/04/06 .621896 .0229 .0025 .04/1/06 .621989 .0202 .0022 .04/1/06 .621989 .0202 .0022 .04/1/06 .621989 .0202 .0022 .04/1/06 .621989 .0202 .0022 .04/1/06 .621989 .0202 .0022 .04/1/06 .621989 .0202 .0022 .04/1/06 .621989 .0202 .0022 .05/02/06 .622121 .0200 .0022 .05/02/06 .622189 .0200 .0022 .05/02/06 .622189 .0160 .0018 .05/09/06 .622161 .0132 .0016 .05/3/06 .622032 .0239 .0026						.0171	.0019	02/14/06	620775
						.0253	.0027	02/21/06	620895
N .0205 .0023 03/14/06 621316 .0188 .0021 03/21/06 621477 .0100 .0013 03/28/06 621759 .0195 .0022 04/04/06 621896 .0229 .0025 04/11/06 621989 .0202 .0022 04/25/06 622121 .0209 .0023 04/25/06 622329 .0200 .0022 05/02/06 622474 .0160 .0018 05/09/06 622618 .0132 .0016 05/16/06 622932 .0239 .0026 05/30/06 622932 .0239 .0026 05/30/06 623062 .0217 .0024 .06/06/06 623161 .0244 .0027 .06/13/06 62302 .0189 .0021 .06/20/06 623459		•				.0240	.0026	02/28/06	621064
1.0203 1.0223 03/14/00 0213/16 1.0188 .0021 03/21/06 621477 1.0100 .0013 03/28/06 621759 1.0195 .0022 04/04/06 621886 1.0202 .0025 04/11/06 621989 1.0202 .0022 04/11/06 622121 1.0202 .0022 04/25/06 622329 1.0200 .0022 05/02/06 622474 1.0160 .0018 05/09/06 622618 1.0132 .0016 05/16/06 622761 1.0196 .0022 05/23/06 622932 1.0239 .0026 05/30/06 622362 1.0239 .0026 05/30/06 622932 1.0239 .0026 05/30/06 622362 1.0239 .0026 05/30/06 623062 1.0217 .0024 06/06/06 623161 1.0244 .0027 06/13/06 62302 1.0189 .0021 06/20/06 623459	1					.0273	.0029	03/07/06	621205
.0100.0013.03/28/06.621759.0195.0022.04/04/06.621896.0229.0025.04/11/06.621989.0202.0022.04/18/06.622121.0209.0023.04/25/06.622329.0200.0022.05/02/06.622474.0160.0018.05/09/06.622618.0132.0016.05/16/06.622761.0196.0022.05/23/06.622932.0239.0026.05/30/06.623062.0217.0024.06/06/06.623161.0244.0027.06/13/06.62302.0189.0021.06/20/06.623459	19					.0205	.0023	03/14/06	621316
.0195.002204/04/06621896.0229.002504/11/06621989.0202.002204/18/06622121.0209.002304/25/06622329.0200.002205/02/06622474.0160.001805/09/06622618.0132.001605/16/06622932.0239.002605/30/06622932.0239.002605/30/06623062.0217.002406/06/06623161.0244.002706/13/0662302.0189.002106/20/06623459						.0188	.0021	03/21/06	621477
.0229 .0025 04/11/06 621989 .0202 .0022 04/18/06 622121 .0209 .0023 04/25/06 622329 .0200 .0022 05/02/06 622474 .0160 .0018 05/09/06 622618 .0132 .0016 05/16/06 622932 .0196 .0022 05/23/06 622932 .0239 .0026 05/30/06 623062 .0217 .0024 06/06/06 623161 .0244 .0027 06/13/06 623302 .0189 .0021 06/20/06 623459						.0100	.0013	03/28/06	621759
.0202.002204/18/06622121.0209.002304/25/06622329.0200.002205/02/06622474.0160.001805/09/06622618.0132.001605/16/06622761.0196.002205/23/06622932.0239.002605/30/06623062.0217.002406/06/06623161.0244.002706/13/06623302.0189.002106/20/06623459						.0195	.0022	04/04/06	621896
.0209.002304/25/06622329.0200.002205/02/06622474.0160.001805/09/06622618.0132.001605/16/06622761.0196.002205/23/06622932.0239.002605/30/06623062.0217.002406/06/06623161.0244.002706/13/06623302.0189.002106/20/06623459						.0229	.0025	04/11/06	621989
.0200.002205/02/06622474.0160.001805/09/06622618.0132.001605/16/06622761.0196.002205/23/06622932.0239.002605/30/06623062.0217.002406/06/06623161.0244.002706/13/06623302.0189.002106/20/06623459						.0202	.0022	04/18/06	622121
.0160 .0018 05/09/06 622618 .0132 .0016 05/16/06 622761 .0196 .0022 05/23/06 622932 .0239 .0026 05/30/06 623062 .0217 .0024 06/06/06 623161 .0244 .0027 06/13/06 623302 .0189 .0021 06/20/06 623459						.0209	.0023	04/25/06	622329
.0132.001605/16/06622761.0196.002205/23/06622932.0239.002605/30/06623062.0217.002406/06/06623161.0244.002706/13/06623302.0189.002106/20/06623459	,					.0200	.0022	05/02/06	622474
.0196.002205/23/06622932.0239.002605/30/06623062.0217.002406/06/06623161.0244.002706/13/06623302.0189.002106/20/06623459					·	.0160	.0018	05/09/06	622618
.0239.002605/30/06623062.0217.002406/06/06623161.0244.002706/13/06623302.0189.002106/20/06623459						.0132	.0016	05/16/06	622761
.0217.002406/06/06623161.0244.002706/13/06623302.0189.002106/20/06623459						.0196	.0022	05/23/06	622932
.0244 .0027 06/13/06 623302 .0189 .0021 06/20/06 623459						.0239	.0026	05/30/06	623062
.0189 .0021 06/20/06 623459						.0217	.0024	06/06/06	623161
			× .			.0244	.0027	06/13/06	623302
.0204 .0023 06/27/06 623595						.0189	.0021	06/20/06	623459
						.0204	.0023	06/27/06	623595

Table 1 RADIOACTIVITY IN AIR FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 2116	Location RM-2 DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
2110	RM-2 DATION TH	13.0 MILLS 5W	GROSS E	BETA				
					.0295	.0032	07/04/06	623718
					.0232	.0025	07/11/06	623857
					.0247	.0027	07/18/06	624018
					.0276	.0030	07/25/06	624167
					.0230	.0025	08/01/06	624294
					.0267	.0029	08/08/06	624437
					.0165	.0019	08/15/06	624591
					.0272	.0029	08/22/06	624696
					.0230	.0025	08/29/06	624815
1					.0167	.0019	09/05/06	624953
μ.					.0363	.0038	09/12/06	625110
					.0243	.0026	09/19/06	625226
		4			.0177	.0020	09/26/06	625346
					.0282	.0030	10/03/06	625481
					.0252	.0027	10/10/06	625625
					.0241	.0027	10/16/06	625738
					.0154	.0017	10/24/06	625892
					.0228	.0025	10/31/06	626070
					.0276	.0030	11/06/06	626250
					.0210	.0023	11/14/06	626355
					.0272	.0030	11/20/06	626491
		,			.0247	.0027	11/28/06	626616
					.0286	.0031	12/05/06	626789
					.0384	.0041	12/12/06	626888
					.0332	.0036	12/18/06	626991
					.0300	.0032	12/26/06	627154

Table 1 RADIOACTIVITY IN AIR FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

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<u>Station</u> 2116	Location RM-2 DAYTON TN	Description 15.0 MILES SW	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				AC-228				
					.0033	.0017	02/21/06	620977
				BE-7 .				
					.0882	.0075	01/24/06	620452
					.1217	.0110	02/21/06	620977
					.1452	.0101	03/21/06	621560
					.1442	.0127	04/18/06	622203
					.1200	.0090	05/16/06	622843
					.1658	.0123	06/13/06	623385
					.1318	.0113	07/11/06	623939
					.1237	.0104	08/08/06	624519
4-					.0880	.0083	09/05/06	625036
					.1093	.0091	10/03/06	625563
					.1031	.0094	10/31/06	626168
					.1068	.0104	11/28/06	626698
					.1335	.0107	12/26/06	627237
				BI-214				
					.0083	.0014	01/24/06	620452
					.0078	.0015	02/21/06	620977
					.0094	.0014	03/21/06	621560
					.0109	.0019	04/18/06	622203
				•	.0049	.0016	05/16/06	622843
					.0023	.0010	06/13/06	623385
					.0046	.0014	07/11/06	623939
					.0056	.0010	08/08/06	624519
					.0155	.0021	09/05/06	625036
					.0279	.0024	10/03/06	625563
						··		

<u>Station</u> 2116	<u>Location</u> RM-2 DAYTON TN	Description 15.0 MILES SW	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
2110			GAMMA	SCAN (GELI)	,			
				BI-214	0000	0016	10/21/06	626168
					.0099	.0016	10/31/06	626698
					.0075	.0014	11/28/06	
				14.40	·0207	.0022	12/26/06	627237
				K-40	.0178	.0064	01/24/06	620452
					.0207	.0082	02/21/06	620977
					.0116	.0062	03/21/06	621560
					.0092	.0063	05/16/06	622843
								623385
	,				.0154	.0066 .0059	06/13/06 08/08/06	624519
ູ່ ເ _ບ ັ					.0109			625563
ĩ				DD 040	.0143	.0067	10/03/06	020000
				PB-212	.0001	.0004	04/18/06	622203
				PB-214	.0001	.0004	04/10/00	022203
				PD-214	.0086	.0014	01/24/06	620452
					.0101	.0017	02/21/06	620977
					.0108	.0012	03/21/06	621560
					.0119	.0020	04/18/06	622203
					.0056	.0013	05/16/06	622843
					.0005	.0007	06/13/06	623385
					.0069	.0012	07/11/06	623939
				,	.0072	.0013	08/08/06	624519
			κ.		.0165	.0019	09/05/06	625036
	,				.0286	.0013	10/03/06	625563
					.0106	.0021	10/31/06	626168
					.0076	.0014	11/28/06	626698
					.0070	.0015	11/20/00	020000

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<u>Station</u>	Location	Description	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
2116	RM-2 DAYTON TN	15.0 MILES SW	GAMMA	SCAN (GELI)				
				PB-214				007007
					.0196	.0017	12/26/06	627237
3101	LM1	0.5 MILES SSW	00000					
			GROSS	BETA				
					.0241	.0026	01/03/06	620066
					.0195	.0022	01/10/06	620160
					.0175	.0020	01/17/06	620263
					.0154	.0018	01/24/06	620401
					.0188	.0021	01/31/06	620584
					.0214	.0023	02/07/06	620682
<u>6</u> -					· .0171	.0019	02/14/06	620805
1					.0239	.0026	02/21/06	620926
					.0206	.0023	02/28/06	621087
					.0285	.0032	03/07/06	621222
					.0202	.0023	03/14/06	621347
					.0223	.0024	03/21/06	621509
					.0102	.0013	03/28/06	621783
					.0182	.0021	04/04/06	621913
					.0192	.0021	04/11/06	622019
					.0225	.0025	04/18/06	622152
					.0205	.0023	04/25/06	622352
					.0192	.0021	05/02/06	622507
					.0146	.0017	05/09/06	622647
					.0124	.0015	05/16/06	622792
					.0171	.0019	05/23/06	622956
					.0225	.0025	05/30/06	623079

<u>Station</u> 3101	<u>Location</u> LM1	Description 0.5 MILES SSW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS I	BETA				
					.0182	.0020	06/06/06	623190
					.0216	.0024	06/13/06	623334
					.0186	.0021	06/20/06	623482
					.0230	.0029	06/27/06	623612
					.0302	.0032	07/04/06	623758
					.0190	.0021	07/11/06	623888
					.0222	.0024	07/18/06	624041
					.0257	.0028	07/25/06	624184
					.0218	.0024	08/01/06	624325
-7-					.0208	.0023	08/08/06	624468
1					.0150	.0017	08/15/06	624615
				٠	.0234	.0025	08/22/06	624713
					.0275	.0029	08/29/06	624846
					.0138	.0016	09/05/06	624985
					.0346	.0037	09/12/06	625135
					.0223	.0024	09/19/06	625243
					.0148	.0017	09/26/06	625376
	,				.0259	.0031	10/03/06	625512
					.0201	.0023	10/10/06	625649
					.0262	.0029	10/16/06	625755
					.0178	.0020	10/24/06	625922
					.0194	.0021	10/31/06	626111
					.0257	.0028	11/06/06	626273
					.0180	.0020	11/14/06	626372
•					.0212	.0024	11/20/06	626521
					.0226	.0024	11/28/06	626647

Table 1 RADIOACTIVITY IN AIR FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3101	<u>Location</u> LM1	Description 0.5 MILES SSW	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GROSS I	BETA				
					.0213	.0023	12/05/06	626813
					.0310	.0033	12/12/06	626905
					.0301	.0032	12/18/06	627021
					.0289	.0031	12/26/06	627186
			GAMMA	SCAN (GELI)	.0200	.0051	12/20/00	027100
				AC-228				
					.0026	.0011	09/05/06	625043
				BE-7				020010
				•	.0821	.0061	01/24/06	620459
,				·	.1079	.0097	02/21/06	620984
- <mark>8</mark> -				,	.1276	.0137	03/21/06	621567
					.1440	.0117	04/18/06	622210
					.1221	.0107	05/16/06	622850
					.1355	.0099	06/13/06	623392
					.1404	.0100	07/11/06	623946
					.1180	.0084	08/08/06	624526
					.1050	.0102	09/05/06	625043
					.0988	.0114	10/03/06	625570
					.0972	.0088	10/31/06	626175
					.0937	.0089	11/28/06	626705
					.0957	.0075	12/26/06	627244
				BI-214				
					.0011	.0008	02/21/06	620984
					.0144	.0019	03/21/06	621567
					.0012	.0010	04/18/06	622210
					.0049	.0012	05/16/06	622850
					•			

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<u>Station</u> 3101	Location	Description 0.5 MILES SSW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				BI-214				
					.0041	.0013	06/13/06	623392
					.0019	.0009	07/11/06	623946
					.0027	.0009	08/08/06	624526
					.0056	.0010	09/05/06	625043
					.0259	.0030	10/03/06	625570
					.0278	.0023	10/31/06	626175
					.0034	.0009	11/28/06	626705
					.0073	.0015	12/26/06	627244
				K-40				
-9-					.0336	.0097	01/24/06	620459
Ψ					.0105	.0057	04/18/06	622210
					.0308	.0090	05/16/06	622850
					.0110	.0063	07/11/06	623946
					.0033	.0070	08/08/06	624526
					.0099	.0058	09/05/06	625043
					.0094	.0067	10/31/06	626175
					.0164	.0066	11/28/06	626705
					.0181	.0065	12/26/06	627244
				PB-212	•			
					.0011	.0004	01/24/06	620459
					.0007	.0007	02/21/06	620984
					.0011	.0007	03/21/06	621567
					.0012	.0006	05/16/06	622850
					.0007	.0007	08/08/06	624526
					.0008	.0005	11/28/06	626705
				PB-214				

GAMMA SCAN (GELI) PB-214 .0001 .0011 01/24/06 620459 .0011 .0008 02/21/06 62084 .0116 .0016 03/21/06 621567 .0027 .0009 04/18/06 622210 .0055 .0016 05/16/06 622850 .0050 .0011 06/13/06 623946 .0003 .0006 07/11/06 623946 .0013 .0007 08/08/06 624526 .0049 .0013 09/05/06 625570 .0223 .0016 10/31/06 626705 .0223 .0016 10/31/06 626705 .0213 .0010 11/228/06 627244 TL-208 TL-208 TL-208 .0009 .0004 01/24/06 620459 .0009 .0004 01/24/06 620459 .0009 .0004 01/24/06 620459 .0004 .0003 08/08/06 624526 .0004 .0004 .0004 .0004 .0004 .0004 .0004 .0004 .0004 .0004 .0004 .0004 .0004 .0004 .0004 .0004 .0004 .0004 .0	
10011 0.008 02/21/06 620984 0.0116 0.016 0.3/21/06 621567 0.0027 0.009 0.4/18/06 622210 0.055 0.016 0.5/16/06 622850 0.003 0.006 0.7/11/06 623946 0.0013 0.007 0.8/08/06 624526 0.0049 0.013 0.905/06 62543 0.0273 0.024 10/03/06 625570 0.0232 0.016 10/31/06 625570 0.0232 0.016 10/31/06 626175 0.013 0.010 11/28/06 626705 0.0072 0.007 12/26/06 627244 TL-208 TL-208 10009 0.0004 01/24/06 620459 0.004 0.003 08/08/06 624526 0.004 0.003 08/08/06 024526 0.004 0.003 08/0	
1000 0007 0009 04/18/06 62250 0005 0016 05/16/06 62392 0003 0006 07/11/06 623946 0013 0007 08/08/06 623946 0013 0007 08/08/06 625043 0013 0007 08/08/06 625043 0273 0024 10/03/06 625043 0273 0024 10/03/06 625075 0013 0010 11/28/06 626705 0072 0009 12/26/06 627244 TL-208 TL-208 1 0009 0004 01/24/06 620459 0004 0003 08/08/06 624526 0049 0003 08/08/06 624526 0049 0003 08/08/06 624526 0049 0003 08/08/06 624526 0049 0003 0004 01/24/06 620459 004 0003 0004 01/24/06 620459 004 0003 08/08/06 624526 004 000 000 001 000 000 000 00 00 00 00 00	<u>;9</u>
10027 .0009 04/18/06 622210 .0055 .0016 05/16/06 622850 .0050 .0011 06/13/06 623392 .0003 .0006 07/11/06 623946 .0013 .0007 08/08/06 624526 .0049 .0013 09/05/06 625043 .0273 .0024 10/03/06 625570 .0232 .0016 10/31/06 626175 .0013 .0010 11/28/06 626705 .0072 .0009 12/26/06 627244 TL-208 .0009 .0004 01/24/06 620459 .0004 .0003 08/08/06 624526	34
	57
	0
1-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	50
LM2 0.5 MILES N GROSS BETA 10 10 10 10 10 10 10 10 10 10	92
LM2 0.5 MILES N 3102 LM2 0.5 MILES N B C S BETA 0.0049 0.0013 09/05/06 625043 0.0273 0.024 10/03/06 625570 0.0232 0.016 10/31/06 626175 0.013 0.010 11/28/06 626705 0.004 01/24/06 620459 0.004 01/24/06 620459 0.003 08/08/06 624526	6
9 .0273 .0024 10/03/06 625570 .0232 .0016 10/31/06 626175 .0013 .0010 11/28/06 626705 .0072 .0009 12/26/06 627244 TL-208 3102 LM2 0.5 MILES N GROSS BETA	26
9 .0232 .0016 10/31/06 626175 .0013 .0010 11/28/06 626705 .0072 .0009 12/26/06 627244 TL-208 3102 LM2 0.5 MILES N GROSS BETA	3
.0013 .0010 11/28/06 626705 .0072 .0009 12/26/06 627244 TL-208 .0009 .0004 01/24/06 620459 .0004 .0003 08/08/06 624526 3102 LM2 0.5 MILES N GROSS BETA .0004 .0003 08/08/06 624526	′0
.0013 .0010 11/28/06 626705 .0072 .0009 12/26/06 627244 TL-208 .0009 .0004 01/24/06 620459 .0004 .0003 08/08/06 624526 3102 LM2 0.5 MILES N GROSS BETA	
TL-208 .0072 .0009 12/26/06 627244 .0012 .0004 01/24/06 620459 .0004 .0003 08/08/06 624526 .0004 .0003 08/08/06 624526 .0004 .0003 08/08/06 624526	
TL-208 .0009 .0004 01/24/06 620459 .0004 .0003 08/08/06 624526 3102 LM2 0.5 MILES N GROSS BETA	
3102 LM2 0.5 MILES N GROSS BETA .0004 .0003 08/08/06 624526	
3102 LM2 0.5 MILES N GROSS BETA	9
GROSS BETA	:6
.0215 .0024 .01/03/06 .620069	
	9
.0200 .0022 01/10/06 620162	2
.0150 .0017 01/17/06 620266	6
.0130 .0016 01/24/06 620404	4
.0175 .0020 01/31/06 620587	7
.0214 .0024 02/07/06 620684	4
.0170 .0019 02/14/06 620808	8

<u>Station</u> 3102	<u>Location</u> LM2	Description 0.5 MILES N	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS E	BETA				
		:			.0262	.0028	02/21/06	620929
					.0203	.0023	02/28/06	621090
					.0249	.0027	03/07/06	621224
					.0190	.0021	03/14/06	621350
					.0198	.0022	03/21/06	621512
					.0088	.0012	03/28/06	621786
					.0200	.0022	04/04/06	621915
					.0202	.0022	04/11/06	622022
					.0200	.0022	04/18/06	622155
ا مسبر					.0197	.0022	04/25/06	622355
11 11 1					.0176	.0020	05/02/06	622509
					.0156	.0018	05/09/06	622650
					.0117	.0014	05/16/06	622795
					.0187	.0021	05/23/06	622959
					.0241	.0026	05/30/06	623081
					.0207	.0023	06/06/06	623193
		•			.0233	.0025	06/13/06	623337
					.0199	.0022	06/20/06	623485
					.0206	.0023	06/27/06	623614
					.0329	.0035	07/04/06	623762
					.0194	.0022	07/11/06	623891
					.0264	.0030	07/18/06	624044
					.0254	.0028	07/25/06	624186
					.0232	.0025	08/01/06	624328
					.0241	.0027	08/08/06	624471
					.0183	.0021	08/15/06	624618

Table 1 RADIOACTIVITY IN AIR FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3102	<u>Location</u> LM2	Description 0.5 MILES N	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
			GROSS I	BETA				
					.0248	.0027	08/22/06	624715
	·				.0261	.0028	08/29/06	624849
					.0160	.0018	09/05/06	624988
					.0331	.0035	09/12/06	625138
					.0223	.0024	09/19/06	625245
					.0169	.0019	09/26/06	625379
					.0234	.0026	10/03/06	625515
					.0232	.0025	10/10/06	625652
					.0238	.0027	10/16/06	625757
, 					.0205	.0022	10/24/06	625925
-12-					.0203	.0023	10/31/06	626114
					.0249	.0028	11/06/06	626276
			,		.0186	.0021	11/14/06	626374
					.0208	.0024	11/20/06	626524
					.0222	.0024	11/28/06	626650
					.0248	.0027	12/05/06	626816
					.0276	.0031	12/12/06	626907
					.0301	.0033	12/18/06	627024
					.0300	.0032	12/26/06	627189
			GAMMA S	SCAN (GELI)				
				AC-228	.0048	.0016	06/13/06	623393
					.0048			
				BE-7	.0023	.0014	08/08/06	624527
					.0737	.0076	01/24/06	620460
				r	.1085	.0094	02/21/06	620985
							02/2 1/00	020000

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Table 1 RADIOACTIVITY IN AIR FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3102	<u>Location</u> LM2	Description 0.5 MILES N	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCÁN (GELI) BE-7				
					.1190	.0118	03/21/06	621568
					.1279	.0115	04/18/06	622211
					.1122	.0109	05/16/06	622851
	•				.1655	.0113	06/13/06	623393
					.1265	.0137	07/11/06	623947
					.1397	.0118	08/08/06	624527
					.0941	.0093	09/05/06	625044
					.0936	.0096	10/03/06	625571
					.0913	.0092	10/31/06	626176
<u>'</u>					.0929	.0098	11/28/06	626706
13-					.0961	.0101	12/26/06	627245
				BI-214				
					.0124	.0016	01/24/06	620460
					.0068	.0015	02/21/06	620985
					.0142	.0026	03/21/06	621568
					.0090	.0015	04/18/06	622211
					.0071	.0013	05/16/06	622851
					.0089	.0015	06/13/06	623393
					.0095	.0019	07/11/06	623947
					.0040	.0011	08/08/06	624527
					.0151	.0020	09/05/06	625044
					.0163	.0020	10/03/06	625571
					.0459	.0035	10/31/06	626176
					.0522	.0036	11/28/06	626706
					.0155	.0022	12/26/06	627245

<u>Station</u> 3102	Location LM2	Description 0.5 MILES N	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				K-40				
					.0146	.0075	02/21/06	620985
					.0109	.0064	05/16/06	622851
					.0259	.0086	06/13/06	623393
					.0304	.0077	09/05/06	625044
					.0084	.0088	10/03/06	625571
					.0419	.0086	12/26/06	627245
				PB-212				
					.0016	.0007	09/05/06	625044
					.0017	.0007	12/26/06	627245
<u></u>				PB-214				
14-					.0160	.0015	01/24/06	620460
					.0065	.0011	02/21/06	620985
					.0166	.0026	03/21/06	621568
					.0112	.0016	04/18/06	622211
					.0092	.0014	05/16/06	622851
					.0065	.0018	06/13/06	623393
					.0103	.0017	07/11/06	623947
					.0034	.0015	08/08/06	624527
		~			.0168	.0019	09/05/06	625044
					.0171	.0018	10/03/06	625571
					.0501	.0037	10/31/06	626176
					.0493	.0036	11/28/06	626706
					.0165	.0022	12/26/06	627245
				TL-208				
					.0007	.0004	03/21/06	621568
					.0014	.0005	09/05/06	625044

<u>Station</u> 3102	<u>Location</u> LM2	Description 0.5 MILES N	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
5102		0.5 MILES N	GAMMA	SCAN (GELI) TL-208				
					.0014	.0004	12/26/06	627245
3106	PM2 SPRING CITY	7.0 MILES NW						
	/		GROSS	BETA				
					0024	0005	04/02/02	000070
			,		.0231	.0025	01/03/06	620073
					.0192	.0022	01/10/06	620165
					.0176	.0020	01/17/06	620270
					.0152	.0018	01/24/06	620408
					.0182	.0021	01/31/06	620591
<u> </u>					.0244	.0027	02/07/06	620687
- 15-					.0201	.0022	02/14/06	620812
					.0259	.0028	02/21/06	620933
					.0227	.0025	02/28/06	621094
					.0232	.0025	03/07/06	621227
					.0199	.0022	03/14/06	621354
					.0229	.0025	03/21/06	621516
					.0095	.0012	03/28/06	621790
					.0211	.0023	04/04/06	621918
					.0220	.0024	04/11/06	622026
					.0206	.0023	04/18/06	622159
					.0213	.0024	04/25/06	622359
					.0169	.0019	05/02/06	622512
					.0151	.0018	05/09/06	622654
					.0131	.0016	05/16/06	622799
					.0176	.0010	05/23/06	622963
					.0256	.0020	05/30/06	623084
					.0250	.0020	03/30/00	023004
						·		

Table 1 RADIOACTIVITY IN AIR FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GROSS E	BETA				
					.0202	.0022	06/06/06	623197
					.0218	.0024	06/13/06	623341
					.0224	.0025	06/20/06	623489
					.0221	.0024	06/27/06	623617
					.0306	.0033	07/04/06	623767
					.0193	.0022	07/11/06	623895
					.0220	.0024	07/18/06	624048
					.0274	.0029	07/25/06	624189
			-		.0238	.0026	08/01/06	624332
-16-					.0244	.0027	08/08/06	624475
<u>6</u>					.0174	.0020	08/15/06	624622
					.0277	.0030	08/22/06	624718
					.0289	.0031	08/29/06	624853
					.0164	.0019	09/05/06	624992
					.0320	.0034	09/12/06	625142
					.0247	.0027	09/19/06	625248
					.0166	.0019	09/26/06	625383
					.0215	.0024	10/03/06	625519
					.0221	.0024	10/10/06	625656
					.0254	.0028	10/16/06	625760
					.0193	.0021	10/24/06	625929
					.0231	.0025	10/31/06	626118
			-		.0236	.0026	11/06/06	626280
					.0197	.0022	11/14/06	626377
					.0228	.0025	11/20/06	626528
					.0242	.0026	11/28/06	626654

Table 1 RADIOACTIVITY IN AIR FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	<u>Analysis</u>	Nuclide	Activity	<u>Error</u>	Date Collected	Lab Number
			GROSS E	BETA				
					.0238	.0026	12/05/06	626820
					.0298	.0032	12/12/06	626910
					.0296	.0032	12/18/06	627028
					.0299	.0032	12/26/06	627193
			GAMMA S	SCAN (GELI)				021100
			•	BE-7				
					.0843	.0081	01/24/06	620461
					.1106	.0099	02/21/06	620986
					.1182	.0096	03/21/06	621569
ا دز					.1341	.0094	04/18/06	622212
-17-					.1231	.0102	05/16/06	622852
					.1475	.0084	06/13/06	623394
					.1356	.0082	07/11/06	623948
					.1223	.0122	08/08/06	624528
				· .	.0747	.0075	09/05/06	625045
					.0908	.0096	10/03/06	625572
					.1094	.0103	10/31/06	626177
					.0969	.0097	11/28/06	626707
					.0916	.0081	12/26/06	627246
				BI-214				
					.0050	.0012	01/24/06	620461
					.0034	.0008	02/21/06	620986
					.0071	.0015	03/21/06	621569
					.0026	.0009	04/18/06	622212
					.0091	.0016	05/16/06	622852
					.0040	.0011	06/13/06	623394
					•			

<u>Station</u> 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
			GAMMA S	SCAN (GEL!)				
				BI-214				
					.0038	.0012	07/11/06	623948
		,			.0056	.0014	08/08/06	624528
					.0092	.0013	09/05/06	625045
					.0140	.0018	10/03/06	625572
					.0226	.0023	10/31/06	626177
					.0167	.0019	11/28/06	626707
					.0110	.0016	12/26/06	627246
				K-40				
					.0137	.0062	01/24/06	620461
-18-					.0026	.0083	02/21/06	620986
$\dot{\circ}$.0070	.0094	03/21/06	621569
					.0031	.0054	06/13/06	623394
					.0094	.0061	07/11/06	623948
					.0044	.0077	09/05/06	625045
					.0002	.0042	10/03/06	625572
					.0113	.0065	10/31/06	626177
					.0177	.0071	11/28/06	626707
		,		PB-212				
				. 1	.0004	.0006	02/21/06	620986
					.0012	.0008	08/08/06	624528
					.0009	.0006	12/26/06	627246
				PB-214				
					.0062	.0013	01/24/06	620461
					.0022	.0009	02/21/06	620986
					.0069	.0012	03/21/06	621569
					.0054	.0010	04/18/06	622212

<u>Station</u> 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
		,		PB-214				
					.0136	.0019	05/16/06	622852
					.0068	.0012	06/13/06	623394
					.0046	.0008	07/11/06	623948
					.0044	.0014	08/08/06	624528
					.0102	.0013	09/05/06	625045
		·			.0158	.0018	10/03/06	625572
					.0229	.0017	10/31/06	626177
					.0186	.0020	11/28/06	626707
					.0115	.0012	12/26/06	627246
-19-				TL-208				
Ŷ					.0003	.0004	04/18/06	622212
0407	DI				.0004	.0006	12/26/06	627246
3107	PM3	10.4 MILES NNE	00000					
			GROSS E	BEIA				
					.0230	.0025	01/03/06	620076
					.0204	.0023	01/10/06	620167
					.0150	.0017	01/17/06	620273
					.0158	.0018	01/24/06	620411
					.0174	.0020	01/31/06	620594
					.0222	.0024	02/07/06	620689
					.0187	.0021	02/14/06	620815
					.0224	.0025	02/21/06	620936
					.0204	.0023	02/28/06	621097
					.0251	.0027	03/07/06	621229
					.0195	.0022	03/14/06	621357

<u>Station</u> 3107	Location PM3	Description 10.4 MILES NNE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS I	BETA				
					.0213	.0023	03/21/06	621519
					.0100	.0013	03/28/06	621793
					.0203	.0023	04/04/06	621920
					.0197	.0022	04/11/06	622029
					.0198	.0022	04/18/06	622162
					.0212	.0023	04/25/06	622362
					.0171	.0019	05/02/06	622514
					.0176	.0020	05/09/06	622657
					.0126	.0015	05/16/06	622802
-20-					.0186	.0021	05/23/06	622966
o.					.0250	.0027	05/30/06	623086
					.0190	.0021	06/06/06	623200
					.0211	.0023	06/13/06	623344
					.0213	.0024	06/20/06	623492
					.0186	.0022	06/27/06	623619
					.0303	.0032	07/04/06	623772
					.0200	.0022	07/11/06	623898
					.0245	.0027	07/18/06	624051
	,				.0256	.0028	07/25/06	624191
					.0216	.0024	08/01/06	624335
					.0213	.0024	08/08/06	624478
					.0174	.0020	08/15/06	624625
					.0259	.0028	08/22/06	624720
					.0257	.0028	08/29/06	624856
					.0132	.0016	09/05/06	624995
					.0357	.0038	09/12/06	625145

Table 1 **ŔADIOACTIVITY IN AIR FILTER** WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3107	Location PM3	Description 10.4 MILES NNE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS E	BETA				
					.0217	.0024	09/19/06	625250
					.0152	.0018	09/26/06	625386
					.0232	.0028	10/03/06	625522
		r			.0173	.0020	10/24/06	625932
					.0258	.0028	10/31/06	626121
					.0260	.0028	11/06/06	626283
					.0185	.0021	11/14/06	626379
					.0191	.0022	11/20/06	626531
					.0207	.0023	11/28/06	626657
-21-			•		.0254	.0028	12/05/06	626823
1.					.0317	.0034	12/12/06	626912
					.0327	.0035	12/18/06	627031
					.0287	.0031	12/26/06	627196
			GAMMA S	SCAN (GELI)				
				AC-228				
					.0043	.0022	01/24/06	620462
					.0044	.0019	02/21/06	620987
					.0051	.0017	12/26/06	627247
				BE-7				
					.0636	.0075	01/24/06	620462
					.1297	.0099	02/21/06	620987
					.1333	.0120	03/21/06	621570
					.1591	.0120	04/18/06	622213
					.1276	.0084	05/16/06	622853
	·				.1801	.0145	06/13/06	623395
					.1360	.0108	07/11/06	623949

Table 1 RADIOACTIVITY IN AIR FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3107	Location PM3	Description 10.4 MILES NNE	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
		•	GAMMA	SCAN (GELI) BE-7				
					.1200	.0086	08/08/06	624529
					.0853	.0083	09/05/06	625046
					.1097	.0112	10/03/06	625573
		· •			.0924	.0143	10/31/06	626178
					.1006	.0068	11/28/06	626708
					.0988	.0094	12/26/06	627247
				BI-214				
					.0074	.0012	01/24/06	620462
					.0126	.0015	02/21/06	620987
-22-					.0051	.0013	03/21/06	621570
2-					.0066	.0011	04/18/06	622213
					.0062	.0011	05/16/06	622853
					.0076	.0012	06/13/06	623395
					.0087	.0017	07/11/06	623949
					.0105	.0016	08/08/06	624529
					.0090	.0015	09/05/06	625046
					.0318	.0027	10/03/06	625573
					.0253	.0030	10/31/06	626178
					.0095	.0014	11/28/06	626708
					.0077	.0016	12/26/06	627247
				K-40				
					.0046	.0087	01/24/06	620462
					.0263	.0088	02/21/06	620987
					.0042	.0067	03/21/06	621570
					.0343	.0097	04/18/06	622213
					.0008	.0051	05/16/06	622853

<u>Station</u> 3107	<u>Location</u> PM3	Description 10.4 MILES NNE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
			•	K-40				
					.0172	.0071	06/13/06	623395
					.0045	.0079	07/11/06	623949
					.0165	.0100	10/03/06	625573
					.0264	.0076	12/26/06	627247
				PB-212				
					.0015	.0007	04/18/06	622213
					.0001	.0007	08/08/06	624529
					.0028	.0008	10/03/06	625573
					.0011	.0011	10/31/06	626178
-23-					.0007	.0007	11/28/06	626708
$\dot{\varphi}$				PB-214				
					.0074	.0011	01/24/06	620462
					.0133	.0016	02/21/06	620987
		•			.0049	.0010	03/21/06	621570
					.0038	.0012	04/18/06	622213
					.0076	.0011	05/16/06	622853
					.0067	.0014	06/13/06	623395
					.0122	.0018	07/11/06	623949
					.0074	.0019	08/08/06	624529
					.0090	.0012	09/05/06	625046
					.0350	.0026	10/03/06	625573
					.0225	.0025	10/31/06	626178
					.0079	.0011	11/28/06	626708
					.0074	.0018	12/26/06	627247
				TL-208				
					.0006	.0003	04/18/06	622213

Table 1RADIOACTIVITY IN AIR FILTERWATTS BAR NUCLEAR PLANTPCI/M3 - 0.037 BQ/M301/03/2006- 12/29/2006

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<u>Station</u> 3107	<u>Location</u> PM3	Description 10.4 MILES NNE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) TL-208				
					.0006	.0006	07/11/06	623949
					.0019	.0007	10/03/06	625573
	7				.0011	.0005	12/26/06	627247
3108	PM4	7.6 MILES NE/ENE				10000	12/20/00	021241
			GROSS E	BETA			•	
					.0223	.0024	01/04/06	620078
	Λ.				.0191	.0021	01/10/06	620169
	~				.0140	.0016	01/18/06	620275
.1					.0144	.0017	01/25/06	620414
.24-					.0187	.0021	02/01/06	620596
1			-		.0173	.0019	02/08/06	620691
					.0190	.0013	02/15/06	620817
					.0203	.0022	02/22/06	620939
	,				.0213	.0022	03/01/06	621099
					.0219	.0024	03/07/06	621231
					.0186	.0021	03/15/06	621359
					.0174	.0019	03/22/06	621522
					.0102	.0013	03/29/06	621795
					.0174	.0020	04/04/06	621922
					.0206	.0023	04/11/06	622031
					.0207	.0022	04/19/06	622165
					.0202	.0022	04/26/06	622364
					.0153	.0017	05/03/06	622516
					.0163	.0018	05/10/06	622659
					.0119	.0014	05/17/06	622805
							00/11/00	022000

<u>Station</u> 3108	Location PM4	Description 7.6 MILES NE/ENE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS E	BETA				
					.0187	.0021	05/24/06	622968
					.0250	.0027	05/31/06	623088
					.0185	.0021	06/07/06	623202
					.0206	.0023	06/14/06	623347
					.0209	.0023	06/21/06	623494
					.0183	.0020	06/28/06	623621
					.0303	.0032	07/05/06	623775
					.0214	.0023	07/12/06	623901
					.0204	.0022	07/19/06	624053
-25-					.0225	.0025	07/26/06	624193
Sr L					.0208	.0023	08/02/06	624337
			•		.0226	.0025	08/09/06	624481
					.0146	.0017	08/16/06	624627
					.0259	.0028	08/23/06	624722
					.0260	.0028	08/30/06	624858
					.0159	.0018	09/06/06	624998
					.0367	.0038	09/13/06	625147
					.0211	.0023	09/20/06	625252
					.0148	.0017	09/27/06	625388
					.0229	.0025	10/04/06	625525
					.0218	.0024	10/11/06	625661
					.0245	.0027	10/16/06	625764
					.0185	.0020	10/24/06	625934
	•	,			.0232	.0025	11/01/06	626124
					.0251	.0028	11/07/06	626285
					.0177	.0020	11/15/06	626381
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<u>Station</u> 3108	Location PM4		Description 7.6 MILES NE/ENE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			, ,	GROSS E	BETA				
						.0189	.0022	11/20/06	626533
						.0207	.0022	11/29/06	626660
						.0227	.0025	12/06/06	626825
						.0284	.0030	12/13/06	626914
						.0295	.0032	12/19/06	627033
						.0275	.0029	12/27/06	627199
				GAMMA S	SCAN (GELI)				
					BE-7				
						.0812	.0076	01/25/06	620463
-26-						.1008	.0098	02/22/06	620988
6		2				.1191	.0100	03/22/06	621571
		ŕ				.1317	.0107	04/19/06	622214
						.1129	.0090	05/17/06	622854
						.1438	.0104	06/14/06	623396
						.1307	.0097	07/12/06	623950
						.1363	.0102	08/09/06	624530
						.0881	.0089	09/06/06	625047
						.0845	.0056	10/04/06	625574
						.0993	.0107	11/01/06	626179
						.0961	.0088	11/29/06	626709
						.0989	.0078	12/27/06	627248
					BI-214				
						.0090	.0013	01/25/06	620463
			l.			.0122	.0019	02/22/06	620988
						.0046	.0010	03/22/06	621571
						.0049	.0010	04/19/06	622214

<u>Station</u> 3108	<u>Location</u> PM4	Description 7.6 MILES NE/ENE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				BI-214				
					.0043	.0009	05/17/06	622854
					.0024	.0009	06/14/06	623396
					.0072	.0013	07/12/06	623950
					.0023	.0011	08/09/06	624530
					.0117	.0019	09/06/06	625047
					.0192	.0018	10/04/06	625574
					.0127	.0016	11/01/06	626179
					.0131	.0017	11/29/06	626709
					.0138	.0022	12/27/06	627248
-27-				K-40				
7-				•	.0291	.0090	01/25/06	620463
					.0045	.0079	03/22/06	621571
		· .			.0049	.0054	04/19/06	622214
					.0099	.0074	05/17/06	622854
					.0216	.0072	07/12/06	623950
					.0130	.0068	08/09/06	624530
					.0036	.0046	10/04/06	625574
					.0298	.0088	11/01/06	626179
					.0234	.0091	11/29/06	626709
					.0153	.0079	12/27/06	627248
				PB-212				
					.0013	.0005	01/25/06	620463
					.0002	.0006	03/22/06	621571
					.0004	.0007	06/14/06	623396
					.0012	.0007	07/12/06	623950
					.0025	.0006	08/09/06	624530

Table 1 RADIOACTIVITY IN AIR FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3108	<u>Location</u> PM4	Description 7.6 MILES NE/ENE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				PB-212				
					.0013	.0009	09/06/06	625047
					.0013	.0006	11/01/06	626179
					.0008	.0007	11/29/06	626709
				PB-214				
					.0082	.0013	01/25/06	620463
					.0117	.0010	02/22/06	620988
					.0059	.0010	03/22/06	621571
					.0059	.0009	04/19/06	622214
					.0052	.0013	05/17/06	622854
-28-					.0018	.0010	06/14/06	623396
° coo					.0053	.0013	07/12/06	623950
					.0021	.0010	08/09/06	624530
					.0114	.0017	09/06/06	625047
					.0207	.0013	10/04/06	625574
					.0133	.0018	11/01/06	626179
					.0110	.0018	11/29/06	626709
					.0129	.0014	12/27/06	627248
				TL-208				
					.0009	.0003	01/25/06	620463
					.0004	.0005	03/22/06	621571
					.0004	.0004	05/17/06	622854
					.0008	.0004	06/14/06	623396
					.0011	.0004	07/12/06	623950
					.0005	.0003	11/01/06	626179
					.0011	.0004	11/29/06	626709

<u>Station</u> 3109	Location PM5 DECATUR	Description 8.0 MILES S	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
			GROSS E	BETA				
					.0218	.0024	01/04/06	620080
					.0172	.0019	01/11/06	620171
					.0140	.0016	01/18/06	620277
					.0149	.0017	01/25/06	620417
	,				.0176	.0020	02/01/06	620598
					.0201	.0022	02/08/06	620693
					.0191	.0021	02/15/06	620819
					.0228	.0025	02/22/06	620942
					.0215	.0024	03/01/06	621101
-29-					.0206	.0023	03/08/06	621233
9-					.0207	.0023	03/15/06	621361
					.0184	.0020	03/22/06	621525
					.0084	.0011	03/29/06	621797
					.0189	.0021	04/05/06	621924
					.0187	.0021	04/11/06	622033
					.0214	.0023	04/19/06	622168
					.0196	.0022	04/26/06	622366
					.0159	.0018	05/03/06	622518
					.0161	.0018	05/10/06	622661
					.0132	.0016	05/17/06	622808
					.0192	.0022	05/24/06	622970
					.0248	.0027	05/31/06	623090
					.0216	.0024	06/07/06	623204
					.0259	.0028	06/14/06	623350
					.0230	.0025	06/21/06	623496
					.0222	.0024	06/28/06	623623

<u>Station</u> 3109	Location PM5 DECATUR	Description 8.0 MILES S	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GROSS E	BETA				
					.0329	.0035	07/05/06	623778
					.0195	.0022	07/12/06	623904
					.0215	.0024	07/19/06	624055
					.0271	.0029	07/26/06	624195
					.0228	.0025	08/02/06	624339
					.0202	.0022	08/09/06	624484
					.0186	.0021	08/16/06	624629
					.0254	.0027	08/23/06	624724
					.0240	.0026	08/30/06	624860
-30-					.0162	.0018	09/06/06	625001
					.0377	.0040	09/13/06	625149
					.0233	.0025	09/20/06	625254
					.0169	.0019	09/27/06	625390
					.0264	.0029	10/04/06	625528
					.0206	.0023	10/11/06	625663
					.0246	.0027	10/17/06	625766
			·		.0168	.0019	10/25/06	625936
					.0219	.0024	11/01/06	626127
					.0263	.0029	11/07/06	626287
					.0203	.0022	11/15/06	626383
					.0217	.0025	11/20/06	626535
					.0270	.0029	11/29/06	626663
					.0233	.0025	12/06/06	626827
					.0292	.0031	12/13/06	626916
					.0311	.0034	12/19/06	627035
		•			.0274	.0029	12/27/06	627202

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<u>Station</u> 3109	<u>Location</u> PM5 DECATUR	Description 8.0 MILES S	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				AC-228				
					.0046	.0012	06/14/06	623397
				BE-7	0040			
					.0646	.0066	01/25/06	620464
					.1179	.0117	02/22/06	620989
					.1177	.0106	03/22/06	621572 ,
					.1393	.0093	04/19/06	622215
					.1203	.0115	05/17/06	622855
					.1406	.0105	06/14/06	623397
					.1296	.0108	07/12/06	623951
51-					.1186	.0089	08/09/06	624531
<u> </u>					.0991	.0075	09/06/06	625048
					.0904	.0108	10/04/06	625575
					.0874	.0114	11/01/06	626180
	•				.0838	.0062	11/29/06	626710
					.0955	.0091	12/27/06	627249
				BI-214				
					.0034	.0010	01/25/06	620464
					.0024	.0010	02/22/06	620989
					.0036	.0011	03/22/06	621572
					.0038	.0012	04/19/06	622215
					.0073	.0013	05/17/06	622855
					.0067	.0013	06/14/06	623397
					.0020	.0009	07/12/06	623951
					.0025	.0010	08/09/06	624531
					.0042	.0009	09/06/06	625048
					.0395	.0030	10/04/06	625575
							,	

GAMMA SCAN (GELI) BI-214 .0116 .0017 11/01/06 626180 .0064 .0012 11/29/06 626710 .0074 .0032 12/27/06 62049 .0075 .0048 01/25/06 620464 .0192 .0091 03/22/06 621572 .0192 .0091 03/22/06 622455 .0104 .0085 04/19/06 622255 .0304 .0085 05/17/06 623951 .0116 .0062 09/06/06 623951 .0116 .0062 09/06/06 623951 .0116 .0062 09/06/06 623951 .0116 .0062 09/06/06 623851 .0116 .0062 09/06/06 623851 .0117 .0017 .0017 65/17/06 623851 .0116 .0062 .09/06/06 6235951 .0017 .0017 .0017 .011/05 623397 .0017 .0018 .0009 01/25/06 <td< th=""><th><u>Station</u> 3109</th><th>Location PM5 DECATUR</th><th>Description 8.0 MILES S</th><th><u>Analysis</u></th><th><u>Nuclide</u></th><th>Activity</th><th>Error</th><th>Date Collected</th><th>Lab Number</th></td<>	<u>Station</u> 3109	Location PM5 DECATUR	Description 8.0 MILES S	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
.0116 .0017 11/01/06 626180 .0064 .0012 11/29/06 625710 .0274 .0322 12/27/06 627249 .0055 .0048 01/25/06 620464 .0192 .0091 03/22/06 621572 .0149 .0085 04/19/06 622215 .0304 .0085 05/17/06 622855 .0212 .0778 06/14/06 623972 .0016 .0062 09/06/06 623951 .0116 .0062 09/06/06 623951 .0137 .0066 11/01/06 622855 .0131 .0007 05/17/06 622855 .0131 .0007 05/17/06 622855 .0131 .0007 05/17/06 622855 .0014 .0009 01/106 622855 .0015 .0017 .0016 622915 .0014 .0007 02/2/06 620898 .0015 .0016 .0017 62/2				GAMMA S	• •				
.0064 .0012 11/29/06 626710 .0274 .0032 12/27/06 627249 .640 .0055 .0048 01/25/06 620464 .0192 .0091 03/22/06 621572 .0149 .0085 04/19/06 622215 .0304 .0085 05/17/06 622855 .012 .0078 06/14/06 623971 .0116 .0062 09/06/06 625245 .0137 .0066 11/01/06 622855 .0131 .0006 11/01/06 622855 .0131 .0006 03/22/06 621572 .014 .0007 05/17/06 622855 .013 .0007 05/17/06 622855 .014 .0009 01/16 621572 .013 .0007 05/17/06 622855 .014 .0007 02/22/06 621572 .014 .0007 .01/25/06 621572 .0014 .0007 .02/22/06					BI-214				
No.0274 N.032 12/27/06 627249 K.40 .0055 .0048 0/12/5/06 620464 0.192 0.091 0.3/2/06 621572 .0149 .0085 0/19/06 622355 .0212 .0078 06/14/06 623951 .0010 .0062 09/06/06 625048 .0116 .0062 09/06/06 625048 .0116 .0062 09/06/06 625048 .0116 .0062 09/06/06 625048 .0013 .0007 05/17/06 622855 .0013 .0007 05/17/06 622855 .0013 .0009 00/14/06 622855 .0013 .0007 05/17/06 622855 .0013 .0007 02/2/06 620499 .0011 .0008 .002/2/06 621572 .0013 .0007 02/2/06 620459 .0014 .0007 02/2/06 621572 .0046 .0010									
K-40 0055 .0048 01/25/06 620464 .0192 .0091 03/22/06 621572 .0304 .0085 .04/19/06 622215 .0304 .0085 .05/17/06 622855 .0212 .0078 .06/14/06 623397 .0009 .0053 .07/12/06 623951 .0116 .0062 .09/06/06 622648 .0137 .0066 11/01/06 626180 PB-212 .0010 .0006 03/22/06 621572 .0013 .0007 05/17/06 622855 .0014 .0009 .06/14/06 623937 .0014 .0009 .06/14/06 623851 .0014 .0009 0/6/14/06 622855 .0014 .0009 0/125/06 62068 .0011 .0008 .03/22/06 621572 .0020 .0007 0/25/06 621572 .0014 .0009 0/14/06 6222155 .0046								11/29/06	626710
						.0274	.0032	12/27/06	627249
.0192 .0091 03/22/06 621572 .0149 .0085 04/19/06 622215 .0304 .0085 05/17/06 622857 .0212 .0078 06/14/06 623951 .0116 .0062 09/06/06 625048 .0137 .0066 11/01/06 626180 .0137 .0066 11/01/06 622855 .0013 .0007 05/17/06 622855 .0014 .0009 06/14/06 623951 .0014 .0009 06/14/06 623951 .0014 .0009 06/14/06 622855 .0014 .0009 06/14/06 622857 .0014 .0009 01/25/06 620889 .0011 .0007 02/22/06 620899 .0011 .0008 .03/22/06 622157 .0046 .0010 .04/19/06 622215 .0058 .0011 .05/17/06 622855 .0046 .0011 .05/17/06					K-40				
.0149 .0085 .04/19/06 .62215 .0304 .0085 .05/17/06 .622855 .0212 .0078 .06/14/06 .62397 .0009 .0053 .07/12/06 .623951 .0116 .0062 .09/06/06 .62610 .0117 .006 .01/10/06 .62187 .0137 .006 .03/22/06 .621572 .0013 .0007 .05/17/06 .622855 .0013 .0007 .05/17/06 .6228397 .013 .0007 .05/17/06 .622855 .0013 .0007 .05/17/06 .6228397 .011 .0006 .03/22/06 .621572 .0013 .0007 .05/17/06 .6228397 .0014 .0007 .02/22/06 .620898 .0011 .0008 .03/22/06 .621572 .0046 .0010 .04/19/06 .622215 .0058 .0011 .05/17/06 .622855 .0058 .0011 .05/17/06 .622855 .0056 .0011 .06/14/06	•								
									621572
بنی .0212 .0078 .06/14/06 .623397 .0009 .0053 .07/12/06 .623951 .0116 .0062 .09/06/06 .625048 .0137 .0066 .11/01/06 .626180 PB-212 .0010 .0006 .03/22/06 .621572 .0013 .0007 .05/17/06 .622855 .0014 .0009 .06/14/06 .623397 PB-214 .0038 .0009 .01/25/06 .620464 .0020 .0007 .02/22/06 .62089 .0011 .0008 .03/22/06 .621572 .0046 .0011 .0016 .622855 .0046 .0011 .05/17/06 .622855 .0046 .0011 .05/17/06 .622855 .0046 .0011 .05/17/06 .622855 .0046 .0011 .05/17/06 .622855 .0046 .0011 .05/17/06 .623397 .0020 .0009 .08/09/06 .624531							.0085	04/19/06	622215
 							.0085	05/17/06	622855
N .0116 .0062 09/06/06 625048 .0137 .0066 11/01/06 626180 PB-212 .0010 .0006 03/22/06 621572 .0013 .0007 05/17/06 622855 .0014 .0009 06/14/06 623397 PB-214 .0038 .0009 01/25/06 620464 .0020 .0007 02/22/06 620899 .0011 .0008 03/22/06 621572 .0046 .0010 04/19/06 622855 .0046 .0011 05/17/06 622855 .0046 .0011 05/17/06 622855 .0046 .0011 05/17/06 622855 .0046 .0011 05/17/06 622855 .0046 .0011 06/14/06 623397 .0020 .0009 08/09/06 624531						.0212	.0078	06/14/06	623397
PB-212 .0137 .0066 11/01/06 626180 PB-212 .0010 .0006 03/22/06 621572 .0013 .0007 05/17/06 622855 .0014 .0009 06/14/06 623997 PB-214 .0038 .0009 01/25/06 620464 .0020 .0007 02/22/06 620899 .0011 .0008 03/22/06 621572 .0046 .0010 04/19/06 622855 .0058 .0011 05/17/06 622855 .0046 .0011 05/17/06 622855 .0046 .0011 05/17/06 622855 .0046 .0011 05/17/06 622855 .0046 .0011 06/14/06 62397 .0004 .0007 07/12/06 623951 .0020 .0009 08/09/06 624531	ώ					.0009	.0053	07/12/06	623951
PB-212 .0010 .0006 03/22/06 621572 .0013 .0007 05/17/06 622855 .0014 .0009 06/14/06 623397 PB-214 .0038 .0009 01/25/06 620464 .0020 .0007 02/22/06 620989 .0011 .0008 03/22/06 621572 .0011 .0008 03/22/06 621572 .0011 .0008 03/22/06 622157 .0046 .0010 04/19/06 622215 .0058 .0011 05/17/06 622855 .0046 .0011 06/14/06 623397 .0046 .0011 06/14/06 623397 .0004 .0007 07/12/06 623951 .0020 .0009 08/09/06 624531	2-					.0116	.0062	09/06/06	625048
.0010 .0006 03/22/06 621572 .0013 .0007 05/17/06 622855 .0014 .0009 06/14/06 623397 PB-214 PB-214 .0020 .0007 02/22/06 620989 .0011 .0008 03/22/06 620989 .0011 .0008 03/22/06 621572 .0046 .0010 04/19/06 622815 .0058 .0011 05/17/06 622855 .0046 .0011 06/14/06 623397 .0046 .0011 06/14/06 623397 .0046 .0011 06/14/06 62397 .0004 .0007 07/12/06 623951 .0020 .0009 08/09/06 624531						.0137	.0066	11/01/06	626180
.0013 .0007 05/17/06 622855 .0014 .0009 06/14/06 623397 PB-214 .0038 .0009 01/25/06 620464 .0020 .0007 02/22/06 620989 .0011 .0008 03/22/06 621572 .0046 .0010 04/19/06 622855 .0058 .0011 05/17/06 622855 .0046 .0011 06/14/06 623397 .0046 .0011 06/14/06 623397 .0046 .0011 06/14/06 623397 .0046 .0011 06/14/06 623397 .0046 .0011 06/14/06 623397 .0004 .0007 07/12/06 623951 .0020 .0009 08/09/06 624531					PB-212				
.0014 .0009 06/14/06 623397 PB-214 .0038 .0009 01/25/06 620464 .0020 .0007 02/22/06 620989 .0011 .0008 03/22/06 621572 .0046 .0010 04/19/06 622215 .0058 .0011 05/17/06 622855 .0046 .0011 06/14/06 623397 .0046 .0011 06/14/06 623397 .0046 .0011 06/14/06 623397 .0046 .0011 06/14/06 623397 .0004 .0007 07/12/06 623951 .0020 .0009 08/09/06 624531							.0006	03/22/06	621572
PB-214 .0038 .0009 01/25/06 620464 .0020 .0007 02/22/06 620989 .0011 .0008 03/22/06 621572 .0046 .0010 04/19/06 622215 .0058 .0011 05/17/06 622855 .0046 .0011 06/14/06 623397 .0004 .0007 07/12/06 623951 .0020 .0009 08/09/06 624531						.0013	.0007	05/17/06	622855
.0038.000901/25/06620464.0020.000702/22/06620989.0011.000803/22/06621572.0046.001004/19/06622215.0058.001105/17/06622855.0046.001106/14/06623397.0004.000707/12/06623951.0020.000908/09/06624531						.0014	.0009	06/14/06	623397
.0020.000702/22/06620989.0011.000803/22/06621572.0046.001004/19/06622215.0058.001105/17/06622855.0046.001106/14/0662397.0004.000707/12/06623951.0020.000908/09/06624531					PB-214				
.0011.000803/22/06621572.0046.001004/19/06622215.0058.001105/17/06622855.0046.001106/14/06623971.0004.000707/12/06623951.0020.000908/09/06624531							.0009	01/25/06	620464
.0046.001004/19/06622215.0058.001105/17/06622855.0046.001106/14/06623397.0004.000707/12/06623951.0020.000908/09/06624531							.0007	02/22/06	620989
.0058.001105/17/06622855.0046.001106/14/06623957.0004.000707/12/06623951.0020.000908/09/06624531						.0011	.0008	03/22/06	621572
.0046 .0011 06/14/06 623397 .0004 .0007 07/12/06 623951 .0020 .0009 08/09/06 624531						.0046	.0010	04/19/06	622215
.0004 .0007 07/12/06 623951 .0020 .0009 08/09/06 624531		•				.0058	.0011	05/17/06	622855
.0020 .0009 08/09/06 624531						.0046	.0011	06/14/06	623397
						.0004	.0007	07/12/06	623951
.0048 .0009 09/06/06 625048						.0020	.0009	08/09/06	624531
						.0048	.0009	09/06/06	625048

<u>Station</u> 3109	Location PM5 DECATUR	Description 8.0 MILES S	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) PB-214				·
					.0432	.0039	10/04/06	625575
					.0134	.0018	11/01/06	626180
					.0071	.0016	11/29/06	626710
					.0266	.0023	12/27/06	627249
				TL-208				
					.0011	.0004	03/22/06	621572
					.0010	.0005	06/14/06	623397
3203	LM3	1.9 MILES NNE						
			GROSS E	BETA				
-33-		· .			.0234	0007	04/02/00	
$\tilde{\rho}$.0234	.0027	01/03/06	620092
						.0021	01/10/06	620173
					.0165	.0019	01/17/06	620283
					.0153	.0018	01/24/06	620423
					.0181	.0020	01/31/06	620610
					.0203	.0022	02/07/06	620695
					.0189	.0021	02/14/06	620825
					.0256	.0028	02/21/06	620948
					.0225	.0025	02/28/06	621113
					.0228	.0025	03/07/06	621235
					.0192	.0021	03/14/06	621367
					.0190	.0021	03/21/06	621531
					.0103	.0013	03/28/06	621809
	· · · · · · · · · · · · · · · · · · ·				.0193	.0021	04/04/06	621926
					.0200	.0022	04/11/06	622040
					.0195	.0022	04/18/06	622174

Table 1 RADIOACTIVITY IN AIR FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3203	Location LM3	Description 1.9 MILES NNE	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GROSS E	BETA				
					.0192	.0021	04/25/06	622378
					.0193	.0022	05/02/06	622524
					.0154	.0018	05/09/06	622668
					.0130	.0015	05/16/06	622814
				-	.0191	.0021	05/23/06	622982
					.0256	.0028	05/30/06	. 623092
					.0189	.0021	06/06/06	623211
					.0254	.0027	06/13/06	623356
					.0191	.0021	06/20/06	623508
-34-					.0184	.0021	06/27/06	623625
42					.0298	.0032	07/04/06	623786
					.0178	.0020	07/11/06	623910
					.0223	.0024	07/18/06	624068
					.0230	.0025	07/25/06	624197
					.0219	.0024	08/01/06	624345
					.0221	.0024	08/08/06	624490
					.0171	.0019	08/15/06	624641
					.0248	.0027	08/22/06	624726
					.0261	.0028	08/29/06	624866
					.0133	.0016	09/05/06	625007
					.0356	.0038	09/12/06	625161
				·	.0232	.0025	09/19/06	625256
					.0161	.0018	09/26/06	625396
					.0248	.0027	10/03/06	625534
					.0229	.0025	10/10/06	625675
					.0265	.0029	10/16/06	625768

<u>Station</u> 3203	<u>Location</u> LM3	Description 1.9 MILES NNE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS I	BETA				
					.0177	.0020	10/24/06	625942
					.0235	.0026	10/31/06	626136
					.0234	.0026	11/06/06	626299
					.0172	.0019	11/14/06	626385
					.0201	.0023	11/20/06	626541
					.0234	.0025	11/28/06	626669
					.0251	.0027	12/05/06	626839
	· · · ·				.0304	.0032	12/12/06	626918
					.0292	.0032	12/18/06	627040
-35-					.0307	.0032	12/26/06	627208
S.	•		GAMMA S	SCAN (GELI)				
*			•	AC-228				
					.0020	.0012	03/21/06	621573
					.0031	.0015	06/13/06	623398
				BE-7				
					.0801	.0086	01/24/06	620465
					.1139	.0092	02/21/06	620990
					.1269	.0088	03/21/06	621573
					.1353	.0119	04/18/06	622216
					.1233	.0092	05/16/06	622856
					.1544	.0109	06/13/06	623398
					.1250	.0123	07/11/06	623952
					.1075	.0081	08/08/06	624532
					.0851	.0076	09/05/06	625049
					.0986	.0073	10/03/06	625576
					.1048	.0100	10/31/06	626181

GAMMA SCAN (GEL)) BE-7 .0903 .0101 11/28/06 6257151 .0939 .0074 12/26/06 627250 BI-214 .0198 .0024 01/24/06 620465 .0056 .0013 02/21/06 622960 .0031 0011 0.012 03/21/06 622965 .0011 .0010 05/16/06 622856 .0011 0.010 05/16/06 623982 .0011 .0010 05/16/06 623952 .00076 .0013 07/11/06 623952 .0025 .0009 08/08/06 625376 .0254 .0030 10/03/06 6259161 .0172 .0015 09/05/06 625049 .0274 .0030 10/03/06 625767 .0274 .0030 10/03/06 625767 .0172 .0103 02/106 622716 .0172 .0030 10/03/06 625767 .0174 .0040 11/28/06 622161 .0174 .0040 11/28/06 622161 .0174	<u>Station</u> 3203	Location LM3	Description 1.9 MILES NNE	Analysis	Nuclide	Activity	Error	Date Collected	Lab Number
N993 0.0101 11/28/06 62711 N939 0.024 01/24/06 627250 BI-214 0198 0.024 01/24/06 620465 0.056 0.013 02/21/06 620990 0.0045 0.0101 04/18/06 622256 0.0045 0.010 04/18/06 622256 0.0045 0.010 04/18/06 622256 0.0045 0.010 04/18/06 622356 0.0046 0.010 04/18/06 622356 0.0076 0.013 0711/106 623952 0.0076 0.013 0711/106 623952 0.0077 0.015 09/05/06 625049 0.0274 0.0301 10/31/06 62611 0.0274 0.0301 11/28/06 62711 0.0274 0.0301 11/28/06 627153 0.0274 0.0301 11/28/06 62711 0.0274 0.0301 11/28/06 62711 0.017 0.018 <td></td> <td></td> <td></td> <td>GAMMA</td> <td></td> <td></td> <td></td> <td></td> <td></td>				GAMMA					
.0939 .0074 12/26/06 627250 BI-214 .0198 .0024 .01/24/06 620465 .0056 .0013 .02/2 .02/21/06 620990 .0031 .0012 .03/21/06 .622856 .0045 .0010 .04/18/06 .622856 .0014 .0010 .06/16/06 .623882 .0076 .0013 .07/11/06 .623952 .0077 .0015 .090506 .625451 .0077 .0015 .090506 .625761 .0172 .0013 .07/11/06 .625761 .0077 .0015 .090506 .625649 .0077 .0015 .090506 .625761 .0172 .0018 .12/26/06 .622916 .0172 .0018 .0268 .0029 .62750 .0119 .0088 .04/18/06 .622216 .0119 .0088 .04/18/06 .622216 .0119 .0089 .02/18/06 .622549					BE-7	,			
BI-214 .0198 .0024 01/24/06 620465 .0056 .0013 02/21/06 621953 .0031 .0012 03/2106 62216 .0031 .0012 03/2106 62256 .0045 .0010 04/18/06 622856 .0045 .0010 06/13/06 623982 .0064 .0010 06/13/06 623982 .0076 .0013 07/11/06 623952 .0025 .0009 08/08/06 624532 .0077 .0015 09/05/06 62549 .0077 .0015 09/05/06 62549 .0074 .0030 10/03/06 625576 .0224 .0030 10/03/06 625576 .0274 .0030 10/03/06 625671 .0274 .0030 10/03/06 625671 .0274 .0030 10/03/06 625676 .0274 .0030 10/03/06 625676 .0073 .0072 10/03/06 62256 .0016 .0077 09/05/06 625576 .0017 .0015 02576 .0018 .0059 05/16/06 622856 .0016 .0077 09/05/06 62256 .0016 .0077 09/05/06 62256 .0017 09/05/06 62256 .0018 .0059 05/16/06 62256 .0018 .0059 05/16/06 62256 .0016 .0077 09/05/06 62256 .0016 .0077 09/05/06 625576 .0016 .0077 09/05/06 625576 .0017 .003/06 625576 .0018 .0059 05/16/06 62256 .0016 .0077 09/05/06 625576 .0016 .0072 09/05/0									626711
						.0939	.0074	12/26/06	627250
					BI-214				
.0031 .0012 03/21/06 621573 .0045 .0010 04/18/06 622216 .0011 .0010 05/16/06 622852 .0064 .0013 07/1/06 623952 .0076 .0013 07/1/106 622952 .0025 .0009 08/08/06 624532 .0077 .0015 09/05/06 625049 .0077 .0015 09/05/06 626711 .0172 .0018 10/2/06 626711 .0172 .0018 12/26/06 62750 K-40 .0112 .0089 02/21/06 622166 .0018 .00290 62/06 62216 .0018 .0059 .05/16/06 622216 .0018 .0059 .05/16/06 622566 .0016 .0077 .09/05/06 625049 .0018 .0059 .05/16/06 622566 .0016 .0077 .09/05/06 625049 .0013 .0072 .									
-3.3 -3.4								02/21/06	620990
0.0011 0.010 05/16/06 622856 0.0064 0.010 06/13/06 623398 0.0076 0.013 07/11/06 623952 0.0025 0.009 08/08/06 624532 0.0777 0.015 09/05/06 625649 0.0274 0.030 10/03/06 625761 0.0172 0.018 10/28/06 626711 0.0172 0.018 12/26/06 627250 K-40 K-40 F-40 NOTE R-40 R-40 R-40 R-40 R-40 R-212 R-212 R-212 R-212 R-212 R-212									
.0064 .0010 06/13/06 623398 .0076 .0013 07/11/06 623952 .0025 .0009 08/08/06 624532 .0077 .0015 09/05/06 625049 .0268 .0020 10/03/06 625576 .0274 .0030 10/31/06 626181 .0417 .0040 11/28/06 626711 .0172 .0018 12/26/06 627250 K-40 .0119 .0089 02/21/06 620990 .0119 .0088 04/18/06 622216 .0010 .0077 10/03/06 625576 .0102 .0078 .0079 05/16/06 622216 .0018 .0059 05/16/06 622216 .0010 .0077 10/03/06 625576 .0103 .0077 09/05/06 622049 .0106 .0077 09/05/06 625049 .0112 .0052 12/26/06 625576 .0112 .0052 12/26/06 625576 .0112 .0052 12/26/								04/18/06	622216
							.0010	05/16/06	622856
 0.0025 0.009 0.808/06 624532 0.077 0.015 0.905/06 62564 0.0274 0.030 10/3/06 626181 0.017 0.040 11/28/06 626711 0.0172 0.018 12/26/06 622990 0.018 0.0274 0.018 0.016 62291 6.0106 0.0077 0.905/06 622990 6.016 0.0077 0.905/06 622990 6.018 0.0089 0.221/06 622216 0.018 0.0077 0.905/06 622856 0.016 0.0077 0.905/06 625049 0.012 0.052 12/26/06 625576 0.012 0.052 12/26/06 625576 0.010 0.006 0.1/24/06 620455 							.0010	06/13/06	623398
.0077 .0015 09/05/06 625049 .0268 .0020 10/03/06 625576 .0274 .0030 10/31/06 626181 .0417 .0040 11/28/06 626711 .0172 .0018 12/26/06 622750 K-40 .0218 .0089 02/21/06 620990 .0119 .0088 04/18/06 622216 .0016 .0077 09/05/06 622856 .0106 .0077 09/05/06 625576 .0112 .0052 12/26/06 625576 .0112 .0052 12/26/06 625576 .0112 .0052 12/26/06 625576 .0112 .0052 12/26/06 625250 PB-212 .0010 .0006 01/24/06 620465	ង					.0076	.0013	07/11/06	623952
.0268 .0020 10/03/06 625576 .0274 .0030 10/31/06 626181 .0417 .0040 11/28/06 626711 .0172 .0018 12/26/06 627250 K-40 .0218 .0089 02/21/06 620990 .0119 .0088 04/18/06 622216 .0018 .0059 05/16/06 622856 .0106 .0077 09/05/06 625576 .0112 .0052 12/26/06 627250 PB-212 .0010 .0006 01/24/06 620465	5					.0025	.0009	08/08/06	624532
.0274 .0030 10/31/06 626181 .0417 .0040 11/28/06 626711 .0172 .0018 12/26/06 620990 .019 .0089 02/21/06 620990 .019 .0088 04/18/06 622216 .0018 .0059 05/16/06 622856 .0010 .0077 09/05/06 625049 .0073 .0072 10/03/06 62576 .0112 .0052 12/26/06 627250 PB-212 .0010 .0006 01/24/06 620465						.0077	.0015	09/05/06	625049
.0417 .0040 11/28/06 626711 .0172 .0018 12/26/06 622990 .0218 .0089 02/21/06 620990 .0119 .0088 04/18/06 622216 .0018 .0059 05/16/06 622856 .0016 .0077 09/05/06 625049 .0073 .0072 10/03/06 625576 .0112 .0052 12/26/06 627250 PB-212 .0010 .0006 01/24/06 620465						.0268	.0020	10/03/06	625576
.0172 .0018 12/26/06 627250 K-40 .0218 .0089 02/21/06 620990 .0119 .0088 04/18/06 622216 .0018 .0059 05/16/06 622856 .0106 .0077 09/05/06 625049 .0012 .0052 10/03/06 625576 .0112 .0052 12/26/06 627250						.0274	.0030	10/31/06	626181 [·]
K-40 .0218 .0089 02/21/06 620990 .0119 .0088 04/18/06 622216 .0018 .0059 05/16/06 622856 .0106 .0077 09/05/06 625049 .0073 .0072 10/03/06 625576 .0112 .0052 12/26/06 627250 PB-212 .0010 .0006 01/24/06 620465						.0417	.0040	11/28/06	626711
K-40 .0218 .0089 02/21/06 620990 .0119 .0088 04/18/06 622216 .0018 .0059 05/16/06 622856 .0106 .0077 09/05/06 625049 .0073 .0072 10/03/06 625576 .0112 .0052 12/26/06 627250 PB-212 .0010 .0006 01/24/06 620465						.0172	.0018	12/26/06	627250
.0119 .0088 04/18/06 622216 .0018 .0059 05/16/06 622856 .0106 .0077 09/05/06 625049 .0013 .0072 10/03/06 625576 .0112 .0052 12/26/06 627250 PB-212 .0010 .0006 01/24/06 620465					K-40				
.0018 .0059 05/16/06 622856 .0106 .0077 09/05/06 625049 .0073 .0072 10/03/06 625576 .0112 .0052 12/26/06 627250 PB-212 .0010 .0006 01/24/06 620465						.0218	.0089	02/21/06	620990
.0106 .0077 09/05/06 625049 .0073 .0072 10/03/06 625576 .0112 .0052 12/26/06 627250 PB-212 .0010 .0006 01/24/06 620465						.0119	.0088	04/18/06	622216
.0073 .0072 10/03/06 625576 .0112 .0052 12/26/06 627250 PB-212 .0010 .0006 01/24/06 620465						.0018	.0059	05/16/06	622856
.0112 .0052 12/26/06 627250 PB-212 .0010 .0006 01/24/06 620465						.0106	.0077	09/05/06	625049
PB-212 .0010 .0006 01/24/06 620465						.0073	.0072	10/03/06	625576
PB-212 .0010 .0006 01/24/06 620465						.0112	.0052	12/26/06	627250
					PB-212				
.0020 .0007 11/28/06 626711		•				.0010	.0006	01/24/06	620465
		Ň				.0020	.0007	11/28/06	626711

<u>Station</u> 3203	<u>Location</u> LM3	Description 1.9 MILES NNE	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) PB-214				
				10-214	.0213	.0022	01/24/06	620465
					.0042	.0010	02/21/06	620990
					.0034	.0010	03/21/06	621573
					.0054	.0011	04/18/06	622216
					.0041	.0009	06/13/06	623398
					.0093	.0023	07/11/06	623952
					.0029	.0012	08/08/06	624532
					.0087	.0010	09/05/06	625049
					.0273	.0022	10/03/06	625576
ц					.0249	.0032	10/31/06	626181
-37-					.0349	.0024	11/28/06	626711
-					.0169	.0015	12/26/06	627250
				TL-208				011100
					.0006	.0005	02/21/06	620990
					.0002	.0003	09/05/06	625049
3204	LM-4 WB	0.9 MILES SE			,			
			GROSS B	BETA				
					.0237	.0026	01/03/06	620095
					.0171	.0019	01/10/06	620175
		•			.0152	.0018	01/17/06	620286
					.0158	.0018	01/25/06	620426
					.0187	.0021	01/31/06	620613
					.0205	.0023	02/07/06	620697
					.0196	.0022	02/14/06	620828
					.0253	.0022	02/22/06	620951
							· · · · · · · ·	

<u>Station</u> 3204	<u>Location</u> LM-4 WB	Description 0.9 MILES SE	<u>Analysis</u>	<u>Nuclide</u>	·	Activity	Error	Date Collected	Lab Number
			GROSS I	BETA					
						.0216	.0024	02/28/06	621116
						.0243	.0026	03/07/06	621237
						.0196	.0022	03/14/06	621370
						.0173	.0019	03/22/06	621534
						.0093	.0012	03/28/06	621812
						.0185	.0021	04/04/06	621928
						.0220	.0024	04/11/06	622043
						.0228	.0025	04/19/06	622177
				•		.0214	.0024	04/25/06	622381
-38-						.0166	.0019	05/03/06	622526
°						.0166	.0019	05/09/06	622671
						.0123	.0015	05/16/06	622817
						.0175	.0020	05/23/06	622985
						.0271	.0029	05/31/06	623094
						.0182	.0021	06/06/06	623214
						.0222	.0024	06/14/06	623359
						.0211	.0024	06/20/06	623511
						.0218	.0024	06/28/06	623627
						.0316	.0034	07/04/06	623790
		•				.0187	.0021	07/12/06	623913
						.0227	.0025	07/18/06	624071
						.0262	.0028	07/26/06	624199
						.0215	.0024	08/02/06	624348
						.0208	.0023	08/09/06	624493
						.0166	.0019	08/16/06	624644
						.0284	.0031	08/23/06	624728

<u>Station</u> 3204	<u>Location</u> LM-4 WB	Description 0.9 MILES SE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS I	BETA				
					.0249	.0027	08/29/06	624869
					.0356	.0038	09/12/06	625164
					.0213	.0023	09/20/06	625258
					.0159	.0019	09/26/06	625399
					.0247	.0027	10/04/06	625537
	•				.0223	.0025	10/10/06	625678
					.0258	.0028	10/16/06	625770
					.0173	.0019	10/24/06	625945
					.0183	.0021	10/31/06	626139
ង					.0261	.0029	11/06/06	626302
-39-					.0178	.0020	11/14/06	626387
`					.0214	.0024	11/20/06	626544
					.0271	.0030	12/06/06	626842
					.0278	.0030	12/12/06	626920
			,		.0308	.0033	12/19/06	627043
					.0274	.0029	12/27/06	627211
			GAMMA	SCAN (GELI) AC-228				
				·	.0029	.0016	01/25/06	620466
					.0028	.0014	04/19/06	622217
					.0034	.0014	10/31/06	626182
				BE-7				
					.0856	.0094	01/25/06	620466
					.1128	.0077	02/22/06	620991
					.1288	.0103	03/22/06	621574
					.1704	.0130	04/19/06	622217

<u>Station</u> 3204	<u>Location</u> LM-4 WB	Description 0.9 MILES SE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				BE-7				
					.1107	.0082	05/16/06	622857
					.1491	.0126	06/14/06	623399
					.1527	.0118	07/12/06	623953
					.1431	.0095	08/09/06	624533
					.0879	.0108	09/06/06	625050
			• • •		.0914	.0084	10/04/06	625577
					.1082	.0076	10/31/06	626182
					.0723	.0095	11/29/06	626712
					.0994	.0085	12/27/06	627251
-40-				BI-214				
					.0103	.0015	01/25/06	620466
					.0030	.0011	02/22/06	620991
					.0047	.0013	03/22/06	621574
					.0059	.0012	04/19/06	622217
					.0057	.0012	05/16/06	622857
					.0047	.0016	06/14/06	623399
					.0062	.0013	07/12/06	623953
					.0042	.0011	08/09/06	624533
					.0068	.0019	09/06/06	625050
					.0355	.0033	10/04/06	625577
					.0244	.0024	10/31/06	626182
					.0097	.0017	11/29/06	626712
					.0184	.0022	12/27/06	627251
				K-40				
					.0072	.0057	02/22/06	620991
					.0056	.0063	03/22/06	621574

<u>Station</u> 3204	<u>Location</u> LM-4 WB	Description 0.9 MILES SE	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
	· •			K-40	.0269	.0084	04/40/06	000047
					.0209		04/19/06	622217
	· ·				.0039	.0087	05/16/06	622857
					.0100	.0052	08/09/06	624533
						.0096`	10/04/06	625577
					.0155	.0064	10/31/06	626182
		,			.0100	.0101	11/29/06	626712
					.0158	.0062	12/27/06	627251
				PB-212	.0002	.0005	05/16/06	000057
,					.0002	.0005		622857
-41-				PB-214	.0007	.0000	10/04/06	625577
I				F D-214	.0090	.0016	01/25/06	620466
					.0049	.0013	02/22/06	620991
					.0058	.0009	03/22/06	621574
		,			.0047	.0010	04/19/06	622217
					.0055	.0012	05/16/06	622857
					.0022	.0012	06/14/06	623399
					.0100	.0010	07/12/06	
					.0049	.0009	08/09/06	623953 624522
					.0092	.0009		624533
					.0319	.0015	09/06/06	625050
					.0224		10/04/06	625577
						.0020	10/31/06	626182
					.0086	.0017	11/29/06	626712
				TI 000	.0168	.0017	12/27/06	627251
				TL-208	.0008	0004	014000	000047
					.0008	.0004	04/19/06	622217

<u>Station</u> 3204	Location LM-4 WB	Description 0.9 MILES SE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) TL-208				
					.0003	.0005	05/16/06	622857
					.0003	.0004	10/04/06	625577
3205	RM-3 WB	15 MILES NNW						
			GROSS	BETA				
					.0215	.0024	01/03/06	620098
					.0191	.0021	01/10/06	620177
					.0157	.0018	01/17/06	620289
					.0134	.0016	01/24/06	620429
Ł					.0169	.0019	01/31/06	620616
-42-					.0178	.0020	02/07/06	620699
					.0173	.0020	02/14/06	620831
					.0226	.0025	02/21/06	620954
					.0197	.0022	02/28/06	621119
					.0220	.0024	03/07/06	621239
					.0178	.0020	03/14/06	621373
					.0197	.0022	03/21/06	621537
					.0085	.0011	03/28/06	621815
					.0179	.0020	04/04/06	621930
•					.0197	.0022	04/11/06	622046
					.0197	.0022	04/18/06	622180
					.0200	.0022	04/25/06	622384
					.0186	.0021	05/02/06	622528
					.0140	.0016	05/09/06	622674
					.0121	.0015	05/16/06	622820
					.0163	.0019	05/23/06	622988

Table 1 RADIOACTIVITY IN AIR FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3205	<u>Location</u> RM-3 WB	Description 15 MILES NNW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GROSS I	BETA				
					.0242	.0026	05/30/06	623096
					.0206	.0023	06/06/06	623217
					.0213	.0024	06/13/06	623362
					.0184	.0021	06/20/06	623514
					.0190	.0021	06/27/06	623629
					.0272	.0029	07/04/06	623794
					.0184	.0021	07/11/06	623916
					.0220	.0024	07/18/06	624074
					.0254	.0028	07/25/06	624201
4					.0191	.0021	08/01/06	624351
-43-					.0222	.0024	08/08/06	624496
					.0163	.0019	08/15/06	624647
					.0223	.0024	08/22/06	624730
					.0234	.0026	08/29/06	624872
					.0165	.0019	09/05/06	625013
					.0339	.0036	09/12/06	625167
					.0222	.0024	09/19/06	625260
					.0139	.0016	09/26/06	625402
					.0239	.0026	10/03/06	625540
					.0206	.0023	10/10/06	625681
					.0203	.0023	10/16/06	625772
					.0179	.0020	10/24/06	625948
					.0213	.0024	10/31/06	626142
					.0218	.0024	11/06/06	626305
					.0186	.0021	11/14/06	626389
					.0214	.0024	11/20/06	626547
								· ·

Table 1 RADIOACTIVITY IN AIR FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3205	Location RM-3 WB	Description 15 MILES NNW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS E	BETA				
					.0202	.0022	11/28/06	626675
					.0212	.0023	12/05/06	626845
					.0281	.0030	12/12/06	626922
					.0306	.0033	12/18/06	627046
					.0249	.0027	12/26/06	627214
			GAMMA	SCAN (GELI)				
	2			AC-228				
					.0026	.0017	07/11/06	623954
					.0052	.0022	10/03/06	625578
Ł				BE-7				
44-					.0800	.0056	01/24/06	620467
					.1155	.0132	02/21/06	620992
					.1316	.0110	03/21/06	621575
					.1546	.0131	04/18/06	622218
					.1079	.0095	05/16/06	622858
					.1638	.0120	06/13/06	623400
					.1268	.0083	07/11/06	623954
					.1266	.0094	08/08/06	624534
					.0908	.0071	09/05/06	625051
					.0968	.0082	10/03/06	625578
					.1035	.0083	10/31/06	626183
					.1002	.0102	11/28/06	626713
					.1000	.0117	12/26/06	627252
				BI-214				
					.0067	.0013	01/24/06	620467
					.0147	.0024	02/21/06	620992

<u>Station</u> 3205	Location RM-3 WB	Description 15 MILES NNW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) BI-214				
				DI-214	.0050	0040	00/04/00	00/575
					.0050	.0012	03/21/06	621575
						.0012	04/18/06	622218
					.0014	.0011	05/16/06	622858
					.0057	.0011	06/13/06	623400
					.0077	.0011	07/11/06	623954
					.0025	.0010	08/08/06	624534
					.0111	.0020	09/05/06	625051
					.0224	.0022	10/03/06	625578
					.0181	.0019	10/31/06	626183
-45-					.0100	.0015	11/28/06	626713
? 1					.0275	.0030	12/26/06	627252
				K-40				
					.0125	.0078	01/24/06	620467
					.0184	.0076	03/21/06	621575
					.0034	.0050	04/18/06	622218
	•				.0249	.0096	05/16/06	622858
					.0120	.0068	06/13/06	623400
					.0068	.0078	07/11/06	623954
				•	.0022	.0069	08/08/06	624534
					.0101	.0068	10/03/06	625578
					.0064	.0050	10/31/06	626183
					.0182	.0075	11/28/06	626713
				PB-212				
					.0014	.0009	02/21/06	620992
					.0008	.0004	05/16/06	622858
					.0006	.0008	08/08/06	624534

.0011 .007 11/28/06 626713 PB-214 .0085 .0010 01/24/06 620467 .0150 .0017 02/21/06 620992 .0076 .0014 03/21/06 621575 .0032 .0014 04/18/06 622218 .0018 .0010 05/16/06 622858	
.0022 .0005 10/03/06 625578 .0011 .0007 11/28/06 626713 PB-214 .0085 .0010 01/24/06 620467 .0150 .0017 02/21/06 620992 .0076 .0014 03/21/06 621575 .0032 .0014 04/18/06 622218 .0018 .0010 05/16/06 622858	
.0011 .0007 11/28/06 626713 PB-214 .0085 .0010 01/24/06 620467 .0150 .0017 02/21/06 620992 .0076 .0014 03/21/06 621575 .0032 .0014 04/18/06 622218 .0018 .0010 05/16/06 622858	
PB-214 .0085 .0010 01/24/06 620467 .0150 .0017 02/21/06 620992 .0076 .0014 03/21/06 621575 .0032 .0014 04/18/06 622218 .0018 .0010 05/16/06 622858)/03/06 625578
.0085.001001/24/06620467.0150.001702/21/06620992.0076.001403/21/06621575.0032.001404/18/06622218.0018.001005/16/06622858	/28/06 626713
.0150.001702/21/06620992.0076.001403/21/06621575.0032.001404/18/06622218.0018.001005/16/06622858	
.0076.001403/21/06621575.0032.001404/18/06622218.0018.001005/16/06622858	/24/06 620467
.0032 .0014 04/18/06 622218 .0018 .0010 05/16/06 622858	/21/06 620992
.0018 .0010 05/16/06 622858	/21/06 621575
N	/18/06 622218
0043 0009 06/13/06 623400	/16/06 622858
	623400
.0108 .0014 07/11/06 623954	/11/06 623954
00014 07/17/06 623954 0012 .0015 08/08/06 624534	/08/06 624534
.0082 .0012 09/05/06 625051	
.0230 .0021 10/03/06 625578	
.0193 .0018 10/31/06 626183	
.0088 .0013 11/28/06 626713	
.0288 .0028 12/26/06 627252	

<u>Station</u> 2116	<u>Location</u> RM-2 DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				BI-214				
					.0164	.0073	01/24/06	620372
					.0305	.0118	01/31/06	620564
					.0403	.0108	02/07/06	620667
		·	,		.0109	.0065	03/14/06	621319
					.0036	.0062	07/25/06	624169
					.0128	.0067	08/01/06	624297
					.0183	.0064	08/22/06	624698
					.0199	.0094	09/12/06	625113
					.0194	.0091	10/03/06	625483
-47-					.0337	.0064	10/10/06	625628
7-					.0171	.0074	10/24/06	625895
					.0351	.0092	11/06/06	626253
					.0213	.0105	11/14/06	626357
					.0215	.0090	11/28/06	626618
					.0667	.0161	12/05/06	626792
					.0223	.0085	12/12/06	626890
					.0345	.0155	12/18/06	626994
					.0157	.0072	12/26/06	627156
				K-40				
					.1927	.0397	01/24/06	620372
					.2338	.0657	07/04/06	623721
					.1813	.0444	07/25/06	624169
					.3169	.0875	08/01/06	624297
					.2000	.0461	10/03/06	625483
					.3543	.0739	10/10/06	625628
					.2232	.0631	11/28/06	626618

Table 2 RADIOACTIVITY IN CHARCOAL FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 2116	Location RM-2 DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				K-40				
					.2222	.0558	12/05/06	626792
					.2983	.0768	12/18/06	626994
				NO ACTIVITY				
					.0000	.0000	01/03/06	620045
					.0000	.0000	02/14/06	620778
					.0000	.0000	03/07/06	621207
					.0000	.0000	03/28/06	621762
					.0000	.0000	04/18/06	622123
					.0000	.0000	04/25/06	622332
-48-					.0000	.0000	05/02/06	622476
8					.0000	.0000	05/09/06	- 622621
					.0000	.0000	05/16/06	622763
					.0000	.0000	06/13/06	623304
					.0000	.0000	06/20/06	623462
					.0000	.0000	06/27/06	623597
					.0000	.0000	07/11/06	623859
					.0000	.0000	08/29/06	624818
				PB-212				
					.0068	.0046	03/21/06	621479
					.0052	.0054	05/30/06	623064
					.0009	.0042	07/18/06	624021
					.0089	.0042	08/01/06	624297
				PB-214				
					.0250	.0069	01/10/06	620145
					.0023	.0054	01/17/06	620236
					.0244	.0086	01/24/06	620372

<u>Station</u> 2116	Location RM-2 DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) PB-214				
					.0528	.0112	01/31/06	620564
					.0186	.0050	02/07/06	620667
					.0076	.0059	02/21/06	620897
					.0188	.0087	02/28/06	621067
					.0074	.0037	03/21/06	621479
					.0247	.0082	04/04/06	621898
					.0149	.0075	04/11/06	621992
					.0189	.0082	05/23/06	622935
					.0134	.0071	06/06/06	623164
-49-					.0221	.0082	07/25/06	624169
Ŷ					.0135	.0079	08/01/06	624297
					.0046	.0051	08/08/06	624439
					.0207	.0097	08/15/06	624594
					.0071	.0060	08/22/06	624698
					.0215	.0086	09/05/06	624955
					.0354	.0118	09/12/06	625113
					.0185	.0078	09/19/06	625228
					.0333	.0111	09/26/06	625349
					.0212	.0071	10/03/06	625483
					.0442	.0100	10/10/06	625628
					.0226	.0098	10/16/06	625740
					.0244	.0135	10/24/06	625895
					.0226	.0058	10/31/06	626072
					.0438	.0097	11/06/06	626253
	,				.0209	.0076	11/14/06	626357
					.0405	.0106	11/20/06	626494

<u>Station</u> 2116	Location RM-2 DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) PB-214				
					.0282	.0079	11/28/06	626618
				-	.0609	.0098	12/05/06	626792
					.0442	.0121	12/12/06	626890
					.0595	.0140	12/18/06	626994
3101	LM1 .	0.5 MILES SSW			.0212	.0077	12/26/06	627156
			GAMMA	SCAN (GELI)				
				BI-214				
					.0160	.0066	01/10/06	620161
					.0249	.0089	01/31/06	620586
-50-					.0281	.0089	02/07/06	620683
•					.0155	.0071	06/06/06	623192
					.0084	.0101	06/27/06	623613
					.0116	.0064	08/08/06	624469 ´
					.0147	.0083	08/29/06	624848
					.0088	.0055	09/05/06	624986
					.0172	.0062	09/19/06	625244
		:			.0327	.0080	09/26/06	625378
		·			.0409	.0181	10/03/06	625513
					.0371	.0138	10/10/06	625651
					.0247	.0088	10/16/06	625756
					.0368	.0103	10/31/06	626112
					.0532	.0102	11/06/06	626275
					.0152	.0063	11/14/06	626373
					.0367	.0148	11/20/06	626523
					.0212	.0061	11/28/06	626648

Table 2 RADIOACTIVITY IN CHARCOAL FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

.

<u>Station</u> 3101	<u>Location</u> LM1	Description 0.5 MILES SSW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)		•		
				BI-214				
					.0289	.0100	12/18/06	627023
				K-40				
					.2142	.0495	01/10/06	620161
					.4124	.0633	05/09/06	622649
					.2683	.0565	05/16/06	622793
					.2479	.0422	08/29/06	624848
					.1932	.0481	09/05/06	624986
					.2383	.0535	09/19/06	625244
	•				.3477	.0881	10/03/06	625513
-51-					.2946	.0813	10/10/06	625651
<u> </u>					.2480	.0480	10/31/06	626112
					.2310	.0485	11/06/06	626275
					.3250	.0654	12/12/06	626906
				NO ACTIVITY DETECTED				
					.0000	.0000	01/03/06	620068
					.0000	.0000	01/24/06	620402
		·			.0000	.0000	02/28/06	621089
		-			.0000	.0000	03/07/06	621223
					.0000	.0000	03/21/06	621510
					.0000	.0000	03/28/06	621785
					.0000	.0000	04/04/06	621914
					.0000	.0000	04/18/06	622153
		-			.0000	.0000	05/23/06	622958
					.0000	.0000	05/30/06	623080
					.0000	.0000	06/13/06	623335
					.0000	.0000	06/20/06	623484

<u>Station</u> 3101	<u>Location</u> LM1	Description 0.5 MILES SSW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				NO ACTIVITY [
					.0000	.0000	07/04/06	623760
					.0000	.0000	07/18/06	624043
					.0000	.0000	07/25/06	624185
					.0000	.0000	08/01/06	624327
					.0000	.0000	08/15/06	624617
					.0000	.0000	10/24/06	625924
					.0000	.0000	12/26/06	627187
				PB-212				
					.0015	.0036	02/21/06	620927
-52-					.0030	.0034	04/11/06	622021
2-					.0046	.0044	05/02/06	622508
					.0089	.0037	07/11/06	623889
				PB-214				
			÷		.0075	.0065	01/10/06	620161
					.0079	.0045	01/17/06	620265
					.0526	.0083	01/31/06	620586
					.0121	.0060	02/07/06	620683
					.0208	.0091	02/14/06	620807
					.0264	.0080	02/21/06	620927
					.0259	.0079	03/14/06	621349
					.0166	.0060	04/11/06	622021
					.0158	.0066	04/25/06	622354
					.0199	.0083	06/06/06	623192
					.0105	.0092	06/27/06	623613
					.0104	.0043	08/08/06	624469
					.0240	.0074	08/22/06	624714

<u>Station</u> 3101	Location LM1	Description 0.5 MILES SSW	Analysis	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				PB-214				
			•.		.0073	.0052	09/05/06	624986
					.0358	.0097	09/12/06	625137
					.0252	.0078	09/19/06	625244
					.0371	.0086	09/26/06	625378
					.0268	.0097	10/10/06	625651
					.0171	.0064	10/16/06	625756
					.0220	.0080	10/31/06	626112
					.0483	.0164	11/06/06	626275
					.0201	.0067	11/14/06	626373
ί					.0404	.0108	11/20/06	626523
-53-					.0175	.0066	11/28/06	626648
					.0271	.0079	12/05/06	626815
					.0304	.0089	12/12/06	626906
					.0355	.0111	12/18/06	627023
3102	LM2	0.5 MILES N						
			GAMMA	SCAN (GELI)				
				BI-214				
					.0276	.0091	01/10/06	620164
					.0323	.0116	01/24/06	620406
					.0371	.0139	01/31/06	620590
					.0361	.0118	02/07/06	620686
					.0142	.0067	02/21/06	620931
					.0205	.0072	02/28/06	621093
					.0286	.0118	04/04/06	621917
					.0048	.0063	06/13/06	623339
					.0209	.0088	07/18/06	624047
•								

<u>Station</u> 3102	<u>Location</u> LM2	Description 0.5 MILES N	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				BI-214				
•					.0144	.0088	09/12/06	625141
					.0269	.0094	09/19/06	625247
					.0271	.0097	10/10/06	625655
				, ,	.0194	.0070	10/31/06	626116
					.0528	.0106	11/06/06	626279
					.0284	.0079	11/14/06	626376
					.0517	.0116	11/20/06	626527
					.0108	.0063	11/28/06	626652
					.0331	.0082	12/05/06	626819
-54-					.0427	.0120	12/18/06	627027
4				K-40				
					.2063	.0448	01/10/06	620164
					.2341	.0576	01/24/06	620406
		•			.2432	.0569	02/21/06	620931
					.2808	.0629	02/28/06	621093
		·			.2807	.0690	07/18/06	624047
					.3000	.0645	09/05/06	624990
					.3064	.0669	09/12/06	625141
					.2746	.0590	09/19/06	625247
					.2113	.0454	11/14/06	626376
					.3043	.0880	11/20/06	626527
					.2236	.0654	11/28/06	626652
					.2915	.0753	12/05/06	626819
					.2129	.0563	12/26/06	627191
				NO ACTIVITY DETECTED				
					.0000	.0000	01/03/06	620072

<u>Station</u> 3102	<u>Location</u> LM2	Description 0.5 MILES N	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number	
			GAMMA	SCAN (GELI)					
				NO ACTIVITY					
					.0000	.0000	03/07/06	621226	
					, 0000	.0000	03/21/06	621514	
					.0000	.0000	03/28/06	621789	
					.0000	.0000	04/11/06	622025	
					.0000	.0000	04/18/06	622157	
					.0000	.0000	04/25/06	622358	
	•	. •			.0000	.0000	05/02/06	622511	
					.0000	.0000	05/09/06	622653	
					.0000	.0000	05/30/06	623083	
-55-					.0000	.0000	06/20/06	623488	
UT I					.0000	.0000	06/27/06	623616	
					.0000	.0000	07/04/06	623765	
					.0000	.0000	07/25/06	624188	
					.0000	.0000	08/01/06	624331	
					.0000	.0000	08/08/06	624473	
					.0000	.0000	08/22/06	624717	
					.0000	.0000	10/16/06	625759	
					.0000	.0000	12/12/06	626909	
				PB-212					
					.0151	.0042	09/12/06	625141	
					.0026	.0046	09/19/06	625247	
					.0085	.0038	12/26/06	627191	
				PB-214					
					.0064	.0047	01/10/06	620164	
					.0229	.0074	01/17/06	620269	
					.0428	.0120	01/31/06	620590	

<u>Station</u> 3102	Location LM2	Description 0.5 MILES N	<u>Analysis</u>	<u>Nuclide</u>		Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI PB-214)		·		
						.0348	.0109	02/07/06	620686
						.0193	.0059	02/14/06	620811
						.0215	.0076	03/14/06	621353
						.0308	.0064	04/04/06	621917
						.0117	.0053	05/16/06	622797
		•				.0148	.0066	05/23/06	622962
						.0178	.0051	06/06/06	623196
						.0036	.0039	07/11/06	623893
						.0427	.0128	07/18/06	624047
-56-						.0138	.0066	08/15/06	624621
5						.0165	.0048	08/29/06	624852
						.0259	.0078	09/05/06	624990
						.0200	.0057	09/12/06	625141
						.0265	.0074	09/19/06	625247
						.0461	.0117	09/26/06	625382
						.0229	.0075	10/03/06	625517
						.0396	.0098	10/10/06	625655
						.0273	.0066	10/24/06	625928
						.0329	.0096	10/31/06	626116
						.0525	.0083	11/06/06	626279
						.0163	.0065	11/14/06	626376
						.0419	.0138	11/20/06	626527
						.0328	.0113	11/28/06	626652
						.0474	.0105	12/05/06	626819
						.0601	.0132	12/18/06	627027
						.0229	.0068	12/26/06	627191

<u>Station</u> 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				BI-214	0400	0406	02/20/00	004700
					.0499	.0106	03/28/06	621792
		•			.0127	.0057	06/13/06	623342
					.0421	.0081	06/20/06	623491
					.0210	.0105	07/18/06	624050
					.0140	.0070	08/15/06	624624
					.0206	.0082	09/19/06	625249
					.0464	.0093	09/26/06	625385
					.0307	.0086	10/03/06	625520
					.0278	.0101	10/10/06	625658
-57-					.0768	.0119	11/06/06	626282
7-					.0717	.0132	11/20/06	626530
					.0478	.0112	12/05/06	626822
					.0294	.0127	12/12/06	626911
					.0377	.0153	12/18/06	627030
				K-40				
					.2964	.0820	02/14/06	620814
					.2853	.0719	03/28/06	621792
					.2680	.0481	08/08/06	624476
					.2716	.0648	09/26/06	625385
					.3490	.0744	10/10/06	625658
					.3169	.0633	11/06/06	626282
					.2887	.0493	12/05/06	626822
				,	.1940	.0450	12/12/06	626911
				NO ACTIVITY DETECTED				
					.0000	.0000	01/03/06	620075
					.0000	.0000	01/10/06	620166

Table 2 RADIOACTIVITY IN CHARCOAL FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
•			GAMMA S	SCAN (GELI)				
				NO ACTIVIT	TY DETECTED			
					.0000	.0000	01/17/06	620272
					.0000	.0000	02/07/06	620688
					.0000	.0000	02/21/06	620934
					.0000	.0000	02/28/06	621096
					.0000	.0000	03/07/06	621228
					.0000	.0000	03/21/06	621517
					.0000	.0000	04/04/06	621919
	-1				.0000	.0000	04/11/06	622028
					.0000	.0000	04/18/06	622160
-58					.0000	.0000	04/25/06	622361
$\tilde{\mathbf{o}}$.0000	.0000	05/09/06	622656
					.0000	.0000	05/16/06	622800
					.0000	.0000	05/23/06	622965
					.0000	.0000	05/30/06	623085
					.0000	.0000	06/27/06	623618
					.0000	.0000	07/04/06	623769
					.0000	.0000	07/11/06	623896
					.0000	.0000	07/25/06	624190
					.0000	.0000	08/01/06	624334
					.0000	.0000	08/29/06	624855
					.0000	.0000	09/12/06	625144
					.0000	.0000	11/28/06	626655
				PB-212				
					.0021	.0057	01/24/06	620409
					.0021	.0032	06/13/06	623342
					.0050	.0032	09/05/06	624993

<u>Station</u> 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				PB-212				
					.0023	.0039	10/31/06	626119
	-				.0018	.0094	12/18/06	627030
				PB-214				
					.0256	.0096	01/31/06	620593
•					.0244	.0070	03/14/06	621356
					.0327	.0108	03/28/06	621792
					.0124	.0064	05/02/06	622513
					.0121	.0055	06/06/06	623199
					.0133	.0074	06/13/06	623342
Ϋ́					.0352	.0137	07/18/06	624050
-59-					.0222	.0067	08/08/06	624476
					.0263	.0100	08/22/06	624719
					.0157	.0058	09/05/06	624993
					.0265	.0073	09/19/06	625249
					.0476	.0115	09/26/06	625385
					.0254	.0063	10/03/06	625520
					.0374	.0083	10/10/06	625658
					.0229	.0095	10/16/06	625761
					.0151	.0076	10/24/06	625931
					.0201	.0076	10/31/06	626119
					.1080	.0177	11/06/06	626282
					.0248	.0068	11/14/06	626378
					.0658	.0110	11/20/06	626530
					.0501	.0091	12/05/06	626822
					.0199	.0094	12/12/06	626911
					.0490	.0091	12/18/06	627030

<u>Station</u> 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	<u>Analysis</u>	Nuclide	Activity	<u>Error</u>	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				PB-214				
3107	PM3	10.4 MILES NNE			.0131	.0065	12/26/06	627194
5107		10.4 MILES ININE	GAMMA	SCAN (GELI)				
				BI-214				
					.0253	.0080	01/03/06	620077
					.0660	.0119	01/31/06	620595
					.0242	.0073	02/14/06	620816
					.0447	.0084	03/07/06	621230
					.0282	.0087	03/14/06	621358
· 1					.0067	.0054	04/04/06	621921
-60-		•			.0299	.0094	05/09/06	622658
ŗ					.0128	.0073	05/30/06	623087
					.0156	.0066	06/06/06	623201
					.0232	.0093	06/20/06	623493
					.0136	.0089	06/27/06	623620
					.0297	.0087	09/19/06	625251
					.0331	.0102	10/24/06	625933
					.0472	.0107	11/06/06	626284
					.0301	.0111	11/20/06	626532
					.0343	.0080	12/05/06	626824
					.0201	.0068	12/26/06	627197
				K-40	,			
					.1860	.0585	01/03/06	620077
		4			.1785	.0517	02/14/06	620816
1	•				.2040	.0662	03/07/06	621230
					.2045	.0688	04/04/06	621921

<u>Station</u> 3107	<u>Location</u> PM3	Description 10.4 MILES NNE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				K-40				
			<i>.</i> ø		.1275	.0476	05/30/06	623087
			1		.4751	.0803	06/20/06	623493
						.0563	06/27/06	623620
		1 A.			.3926	.0768	08/15/06	624626
					.2268	.0559	10/24/06	625933
					.4063	.0660	10/31/06	626122
					.3627	.0679	11/14/06	626380
					.2605	.0622	12/05/06	626824
				NO ACTIVITY				
-61-					.0000	.0000	01/10/06	620168
1					.0000	.0000	01/17/06	620274
	•				.0000	.0000	01/24/06	620412
÷					.0000	.0000	02/07/06	620690
	×**,				.0000	.0000	02/21/06	620937
					.0000	.0000	02/28/06	621098
					.0000	.0000	03/21/06	621520
					.0000	.0000	04/11/06	622030
					.0000	.0000	04/18/06	622163
					.0000	.0000	05/16/06	622803
					.0000	.0000	06/13/06	623345
					.0000	.0000	07/04/06	623773
					.0000	.0000	07/11/06	623899
					.0000	.0000	07/25/06	624192 ·
					.0000	.0000	08/08/06	624479
					.0000	.0000	08/22/06	624721
					.0000	.0000	08/29/06	624857

<u>Station</u> 3107	<u>Location</u> PM3	Description 10.4 MILES NNE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GEL	!)			
				NO ACTIV	ITY DETECTED			
		·			.0000	.0000	09/05/06	624996
					.0000	.0000	09/26/06	625387
					.0000	.0000	10/03/06	625523
					.0000	.0000	12/12/06	626913
				PB-212				
					.0012	.0047	03/28/06	621794
					.0003	.0041	07/18/06	624052
				PB-214				
					.0189	.0082	01/03/06	620077
6					.0985	.0147	01/31/06	620595
-62-					.0112	.0050	02/14/06	620816
					.0324	.0072	03/07/06	621230
					.0428	.0099	03/14/06	621358 ·
					.0194	.0056	03/28/06	621794
					.0064	.0050	04/25/06	622363
					.0029	.0044	05/02/06	622515
					.0165	.0072	05/09/06	622658
					.0200	.0070	05/23/06	622967
					.0131	.0056	06/06/06	623201
					.0309	.0094	06/20/06	623493
					.0121	.0084	08/01/06	624336
		·			.0200	.0093	08/15/06	624626
					.0174	.0067	09/12/06	625146
					.0274	.0104	09/19/06	625251
					.0242	.0079	10/24/06	625933
					.0383	.0156	10/31/06	626122

<u>Station</u> 3107	<u>Location</u> PM3	Description 10.4 MILES NNE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				PB-214				
					.0524	.0100	11/06/06	626284
					.0233	.0075	11/14/06	626380
					.0473	.0090	11/20/06	626532
					.0198	.0077	11/28/06	626658
					.0451	.0145	12/05/06	626824
		•			.0259	.0071	12/18/06	627032
3108	PM4	7.6 MILES NE/ENE	,					
			GAMMA S	SCAN (GELI)				
				BI-214	0077	0110	04/04/00	000070
-63-					.0377	.0112	01/04/06	620079
မှ					.0879	.0141	02/01/06	620597
					.0807	.0133	02/08/06	620692
					.0326	.0110	02/15/06	620818
					.0162	.0071	02/22/06	620940
					.0271	.0075	03/07/06	621232
					.0522	.0106	03/15/06	621360
					.0113	.0063	04/11/06	622032
					.0245	.0089	06/28/06	623622
					.0113	.0063	07/05/06	623776
					.0153	.0081	07/19/06	624054
					.0315	.0106	09/27/06	625389
					.0171	.0079	10/04/06	625526
					.0393	.0093	10/11/06	625662
					.0313	.0094	10/16/06	625765
					.0440	.0100	10/24/06	625935
					.0382	.0113	11/07/06	626286

<u>Station</u> 3108	<u>Location</u> PM4	Description 7.6 MILES NE/ENE	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				BI-214				
					.0148	.0065	11/15/06	626382
					.0805	.0147	11/20/06	626534
					.0404	.0113	12/06/06	626826
					.0131	.0067	12/27/06	627200
				K-40				
					.3012	.0478	02/22/06	620940
					.2071	.0475	06/28/06	623622
					.2282	.0563	10/24/06	625935
•					.2890	.0610	11/07/06	626286
-64-				,	.2408	.0511	11/15/06	626382
1					.2551	.0564	12/19/06	627034
				NO ACTIVITY DETECTED				
					.0000	.0000	01/10/06	620170
					.0000	.0000	03/22/06	621523
		·			.0000	.0000	04/04/06	621923
					.0000	.0000	04/19/06	622166
					.0000	.0000	05/03/06	622517
					.0000	.0000	05/10/06	622660
					.0000	.0000	05/17/06	622806
					.0000	.0000	05/31/06	623089
					.0000	.0000	06/07/06	623203
					.0000	.0000	06/14/06	623348
					.0000	.0000	07/12/06	623902
					.0000	.0000	07/26/06	624194
					.0000	.0000	08/02/06	624338
					.0000	.0000	08/09/06	624482

<u>Station</u> 3108	Location PM4	Description 7.6 MILES NE/ENE	<u>Analysis</u>		Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				NO ACTIVITY [
					.0000	.0000	08/16/06	624628
					.0000	.0000	08/23/06	624723
					.0000	.0000	09/06/06	624999
					.0000	.0000	12/13/06	626915
				PB-212				
					.0021	.0036	02/15/06	620818
					.0089	.0054	03/07/06	621232
					.0061	.0050	11/01/06	626125
				PB-214				
-65					.0435	.0080	01/04/06	620079
Cr -					.0262	.0081	01/18/06	620276
					.0219	.0065	01/25/06	620415
					.0864	.0150	02/01/06	620597
					.0668	.0127	02/08/06	620692
					.0156	.0058	02/15/06	620818
		•			.0232	.0089	03/01/06	621100
					.0706	.0118	03/15/06	621360
					.0388	.0092	03/29/06	621796
					.0053	.0048	04/26/06	622365
•					.0109	.0070	05/24/06	622969
					.0145	.0075	06/21/06	623495
					.0279	.0054	07/19/06	624054
					.0241	.0076	08/30/06	624859
	· · · ·				.0306	.0072	09/13/06	625148
					.0317	.0089	09/20/06	625253
					.0353	.0098	09/27/06	625389
								020000

<u>Station</u> 3108	Location PM4	Description 7.6 MILES NE/ENE	<u>Analysis Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
			GAMMA SCAN (GELI) PB-214				
				.0080	.0056	10/04/06	625526
				.0862	.0167	10/11/06	625662
•				.0206	.0089	10/16/06	625765
				.0544	.0103	10/24/06	625935
				.0372	.0107	11/07/06	626286
				.0850	.0125	11/20/06	626534
				.0380	.0081	11/29/06	626661
				.0583	.0109	12/06/06	626826
				.0544	.0125	12/19/06	627034
6 3109		· ·		.0227	.0070	12/27/06	627200
ዮ 3109	PM5 DECATUR	8.0 MILES S					•
			GAMMA SCAN (GELI) BI-214				
				.0156	.0087	01/18/06	620279
				.0384	.0113	02/01/06	620600
				.0861	.0132	02/08/06	620694
				.0507	.0119	03/08/06	621234
				.0148	.0076	03/15/06	621363
				.0391	.0085	03/22/06	621526
		~		.0189	.0093	04/05/06	621925
				.0077	.0055	04/26/06	622368
				.0119	.0069	06/07/06	623206
				.0216	.0095	06/21/06	623498
				.0241	.0079	07/26/06	624196
				.0172	.0068	08/02/06	624341
				.0133	.0059	08/23/06	624725

<u>Station</u> 3109	Location PM5 DECATUR	Description 8.0 MILES S	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				BI-214				
					.0160	.0101	09/13/06	625151
					.0268	.0063	09/20/06	625255
					.0236	.0080	09/27/06	625392
					.0174	.0083	10/04/06	625529
					.0833	.0122	10/11/06	625665
					.0368	.0096	11/07/06	626289
					.0216	.0085	11/15/06	626384
					.0716	.0138	11/20/06	626537
					.0114	.0070	11/29/06	626664
6					.0524	.0089	12/06/06	626829
-67-				K-40				
					.1626	.0482	03/22/06	621526
					.2030	.0334	04/05/06	621925
					.1730	.0487	04/26/06	622368
					.2106	.0618	06/07/06	623206
					.1926	.0463	06/21/06	623498
					.2990	.0488	08/30/06	624862
					.2476	.0508	10/04/06	625529
					.2102	.0476	10/11/06	625665
					.2657	.0612	11/15/06	626384
					.3484	.0770	11/20/06	626537
					.2008	.0479	11/29/06	626664
					.3606	.0737	12/06/06	626829
				NO ACTIVITY DET	ECTED			
					.0000	.0000	01/25/06	620418
					.0000	.0000	02/22/06	620943

<u>Station</u> 3109	Location PM5 DECATUR	Description 8.0 MILES S	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				NO ACTIVIT	Y DETECTED			
					.0000	.0000	04/11/06	622035
					.0000	.0000	04/19/06	622169
					.0000	.0000	05/03/06	622519
					.0000	.0000	05/10/06	622663
					.0000	.0000	05/24/06	622972
					.0000	.0000	05/31/06	623091
					.0000	.0000	06/28/06	623624
					.0000	.0000	07/05/06	623780
					.0000	.0000	08/09/06	624485
-68-					.0000	.0000	09/06/06	625002
$\tilde{\mathbf{v}}$.0000	.0000	10/17/06	625767
					.0000	.0000	11/01/06	626128
					.0000	.0000	12/13/06	626917
					.0000	.0000	12/19/06	627037
				PB-212				
					.0065	.0045	02/15/06	620821
					.0105	.0051	07/26/06	624196
				PB-214		•		
					.0086	.0046	01/04/06	620082
					.0178	.0075	01/11/06	620172
					.0164	.0059	01/18/06	620279
					.0545	.0105	02/01/06	620600
					.0770	.0133	02/08/06	620694
					.0361	.0070	03/01/06	621103
					.0475	.0135	03/08/06	621234
					.0332	.0094	03/15/06	621363

Tennessee Valley Authority Table 2 RADIOACTIVITY IN CHARCOAL FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3109	<u>Location</u> PM5 DECATUR	Description 8.0 MILES S	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) PB-214	•			
					.0433	.0086	03/22/06	621526
					.0366	.0072	03/29/06	621799
					.0408	.0097	04/05/06	621925
					.0398	.0096	05/17/06	622809
					.0324	.0102	06/14/06	623351
				6	.0210	.0061	06/21/06	623498
					.0283	.0089	07/12/06	623905
					.0275	.0098	07/19/06	624057
					.0184	.0089	07/26/06	624196
-69-					.0126	.0048	08/16/06	624631
9-					.0197	.0064	08/23/06	624725
					.0125	.0060	08/30/06	624862
					.0194	.0080	09/13/06	625151
					.0233	.0103	09/20/06	625255
					.0237	.0095	09/27/06	625392
					.0236	.0081	10/04/06	625529
					.0942	.0126	10/11/06	625665
					.0450	.0126	10/25/06	625938
					.0367	.0109	11/07/06	626289
					.0155	.0066	11/15/06	626384
					.0567	.0146	11/20/06	626537
					.0278	.0087	11/29/06	626664
					.0526	.0101	12/06/06	626829
					.0197	.0093	12/27/06	627203
				TL-208				
					.0086	.0027	12/06/06	626829

<u>Station</u> 3203	<u>Location</u> LM3	Description 1.9 MILES NNE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
	-			BI-214	0400			
					.0123	.0091	01/24/06	620424
					.0301	.0100	01/31/06	620612
					.0255	.0108	03/14/06	621369
					.0263	.0102	05/09/06	622670
					.0281	.0061	06/20/06	623510
					.0296	.0092	07/18/06	624070
					.0144	.0062	08/01/06	624347
					.0074	.0081	08/08/06	624491
					.0301	.0086	08/15/06	624643
-70-					.0316	.0062	09/26/06	625398
0					.0483	.0108	10/10/06	625677
	,				.0407	.0099	10/24/06	625944
					.0120	.0064	10/31/06	626137
					.0250	.0066	11/14/06	626386
					.0441	.0128	11/20/06	626543
					.0209	.0085	12/18/06	627042
				K-40				
					.1721	.0361	02/28/06	621115
					.1693	.0399	03/14/06	621369
					.2200	.0537	05/09/06	622670
					.2947	.0624	06/13/06	623357
					.1535	.0563	06/20/06	623510
					.2514	.0490	07/18/06	624070
					.4422	.0689	08/01/06	624347
					.3835	.0629	10/10/06	625677
					.2846	.0479	10/24/06	625944

Table 2 RADIOACTIVITY IN CHARCOAL FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3203	Location LM3	Description 1.9 MILES NNE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				K-40				
					.2227	.0702	10/31/06	626137
				NO ACTIVITY [
					.0000	.0000	01/03/06	620094
					.0000	.0000	01/10/06	620174
					.0000	.0000	02/14/06	620827
					.0000	.0000	03/07/06	621236
					.0000	.0000	04/04/06	621927
					.0000	.0000	04/11/06	622042
					.0000	.0000	04/18/06	622175
-71-					.0000	.0000	04/25/06	622380 [^]
 -					.0000	.0000	05/02/06	622525
					.0000	.0000	05/16/06	622815
					.0000	.0000	06/06/06	623213
					.0000	.0000	06/27/06	623626
					.0000	.0000	07/11/06	623911
					.0000	.0000	07/25/06	624198
					.0000	.0000	08/29/06	624868
					.0000	.0000	09/12/06	625163
					.0000	.0000	10/03/06	625535
					.0000	.0000	10/16/06	625769
				PB-212				
					.0038	.0045	01/17/06	620285
					.0055	.0034	02/21/06	620949
					.0078	.0038	05/23/06	622984
					.0097	.0039	06/13/06	623357
					.0074	.0044	07/04/06	623788
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<u>Station</u> 3203	Location LM3	Description 1.9 MILES NNE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				PB-212				
					.0038	.0030	11/14/06	626386
					.0087	.0079	12/05/06	626841
				PB-214				
					.0257	.0076	01/17/06	620285
					.0294	.0096	01/31/06	620612
					.0095	.0058	02/07/06	620696
					.0276	.0067	03/14/06	621369
•					.0174	.0080	03/21/06	621532
					.0166	.0067	03/28/06	621811
-7					.0132	.0055	05/09/06	622670
.72-					.0352	.0125	05/23/06	622984
					.0196	.0078	05/30/06	623093
					.0163	.0088	06/13/06	623357
					.0425	.0132	07/18/06	624070
					.0253	.0065	08/08/06	624491
					.0144	.0048	08/22/06	624727
					.0138	.0057	09/05/06	625008
					.0204	.0089	09/19/06	625257
					.0400	.0095	09/26/06	625398
					.0359	.0085	10/10/06	625677
					.0678	.0099	10/24/06	625944
					.0301	.0074	10/31/06	626137
					.0295	.0151	11/06/06	626301
					.0262	.0081	11/14/06	626386
					.0819	.0158	11/20/06	626543
					.0250	.0069	11/28/06	626670
				,			11/20/00	020010

<u>Station</u> 3203	<u>Location</u> LM3	Description 1.9 MILES NNE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) PB-214				
					.0530	.0133	12/05/06	626841
				٠	.0382	.0091	12/12/06	626919
					.0293	.0108	12/18/06	627042
					.0301	.0110	12/26/06	627209
3204	LM-4 WB	0.9 MILES SE						
			GAMMA	SCAN (GELI)				
				BI-214				
					.0418	.0093	01/31/06	620615
					.0148	.0081	02/07/06	620698
-7-					.0174	.0077	07/26/06	624200
-73-					.0383	.0091	10/10/06	625680
					.0383	.0101	10/16/06	625771
					.0329	.0080	10/24/06	625947
					.0280	.0120	11/20/06	626546
					.0533	.0175	12/06/06	626844
					.0302	.0107	12/12/06	626921
		~			.0320	.0078	12/27/06	627212
				K-40				
					.2042	.0579	01/03/06	620097
					.2516	.0543	01/10/06	620176
					.1929	.0529	01/31/06	620615
				-	.3109	.0724	02/07/06	620698
					.2968	.0585	05/31/06	623095
					.2643	.0546	08/02/06	624350
					.3256	.0756	10/10/06	625680
					.3877	.0677	11/06/06	626304

<u>Station</u> 3204	<u>Location</u> LM-4 WB	Description 0.9 MILES SE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				K-40				
					.4380	.0700	11/20/06	626546
					.4354	.0876	12/12/06	626921
				NO ACTIVITY DI			N N	
					.0000	.0000	01/17/06	620288
					.0000	.0000	01/25/06	620427
					.0000	.0000	02/14/06	620830
					.0000	.0000	02/22/06	620952
	·				.0000	.0000	03/22/06	621535
					.0000	.0000	03/28/06	621814
-7					.0000	.0000	04/04/06	621929
-74-					.0000	.0000	04/19/06	622178
					.0000	.0000	04/25/06	622383
					.0000	.0000	05/03/06	622527
					.0000	.0000	05/09/06	622673
					.0000	.0000	05/16/06	622818
					.0000	.0000	06/06/06	623216
					.0000	.0000	06/14/06	623360
					.0000	.0000	06/20/06	623513
					.0000	.0000	06/28/06	623628
					.0000	.0000	07/04/06	623792
					.0000	.0000	07/18/06	624073
					.0000	.0000	08/09/06	624494
					.0000	.0000	08/23/06	624729
					.0000	.0000	10/31/06	626140
					.0000	.0000	12/19/06	627045
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Table 2 RADIOACTIVITY IN CHARCOAL FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3204	<u>Location</u> LM-4 WB	Description 0.9 MILES SE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				PB-212				
					.0044	.0038	03/14/06	621372
	· .			,	.0022	.0036	08/16/06	624646
					.0026	.0047	08/29/06	624871
				PB-214				
					.0107	.0063	01/10/06	620176
					.0443	.0111	01/31/06	620615
					.0328	.0100	02/07/06	620698
					.0257	.0080	02/28/06	621118
					.0101	.0064	03/07/06	621238
5					.0175	.0074	04/11/06	622045
-75-					.0068	.0045	05/23/06	622987
					.0149	.0070	07/12/06	623914
• .					.0072	.0067	09/12/06	625166
					.0372	.0106	09/20/06	625259
					.0396	.0099	09/26/06	625401
					.0133	.0082	10/04/06	625538
					.0543	.0112	10/10/06	625680
					.0132	.0062	10/16/06	625771
					.0293	.0058	10/24/06	625947
					.0438	.0085	11/06/06	626304
					.0283	.0085	11/14/06	626388
					.0415	.0120	11/20/06	626546
					.0632	.0115	12/06/06	626844
					.0483	.0117	12/12/06	626921

Table 2 RADIOACTIVITY IN CHARCOAL FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3205	<u>Location</u> RM-3 WB	Description 15 MILES NNW	Analysis	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				AC-228				
					.0419	.0109	07/25/06	624202
				BI-214				
					.0257	.0083	01/03/06	620100
					.0202	.0074	01/10/06	620178
					.0150	.0076	01/31/06	620618
					.0125	.0090	02/14/06	620833
					.0228	.0073	03/07/06	621240
					.0222	.0076	04/04/06	621931
					.0095	.0072	04/18/06	622181
-76-	•				.0143	.0078	05/30/06	623097
. <u>6</u>					.0295	.0101	06/27/06	623630
					.0102	.0075	07/25/06	624202
					.0175	.0090	08/08/06	624497
					.0116	.0083	08/22/06	624731
					.0282	.0074	09/19/06	625261
					.0304	.0093	09/26/06	625404
					.0301	.0100	10/10/06	625683
					.0445	.0109	10/24/06	625950
					.0187	.0077	10/31/06	626143
	· ·				.0342	.0124	11/06/06	626307
					.0220	.0087	11/14/06	626390
					.0370	.0143	11/20/06	626549
					.0413	.0143	12/05/06	626847
					.0193	.0069	12/26/06	627215
				K-40			· .	
	•				.2727	.0674	01/03/06	620100

Table 2 RADIOACTIVITY IN CHARCOAL FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3205	Location RM-3 WB	Description 15 MILES NNW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) K-40				
				11-40	.2572	.0620	01/10/06	620178
					.2945	.0662	01/31/06	620618
					.2664	.0607	02/14/06	620833
					.2211	.0471	05/30/06	623097
					.3793	.0525	07/25/06	624202
					.2888	.0596	.08/22/06	624731
		•			.4454	.0872	09/26/06	625404
					.3430	.0775	10/10/06	625683
					.1823	.0514	10/31/06	626143
5					.2312	.0572	11/06/06	626307
.77-					.2393	.0537	11/14/06	626390
					.3357	.0672	11/20/06	626549
					.1424	.0437	12/26/06	627215
				NO ACTIVITY I				
					.0000	.0000	01/17/06	620291
					.0000	.0000	01/24/06	620430
					.0000	.0000	02/07/06	620700
					.0000	.0000	02/21/06	620955
					.0000	.0000	03/21/06	621538
					.0000	.0000	04/25/06	622386
					.0000	.0000	05/02/06	622529
					.0000	.0000	05/16/06	622821
					.0000	.0000	05/23/06	622990
					.0000	.0000	06/06/06	623219
					.0000	.0000	06/13/06	623363
					.0000	.0000	07/04/06	623796

<u>Station</u> 3205	Location RM-3 WB	Description 15 MILES NNW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				NO ACTIVITY D	ETECTED			
					.0000	.0000	07/11/06	623917
					.0000	.0000	08/01/06	624353
			•		.0000	.0000	08/15/06	624649
					.0000	.0000	08/29/06	624874
					.0000	.0000	09/05/06	625014
					.0000	.0000	11/28/06	626676
					.0000	.0000	12/12/06	626923
	• • • • •				.0000	.0000	12/18/06	627048
			÷	PB-212				
-78-					.0082	.0070	09/12/06	625169
ŝ					.0123	.0076	10/31/06	626143
				PB-214				
					.0242	.0091	01/03/06	620100
					.0146	.0073	01/10/06	620178
					.0327	.0088	01/31/06	620618
					.0123	.0071	02/14/06	620833
					.0175	.0066	02/28/06	621121
					.0349	.0078	03/07/06	621240
					.0279	.0085	03/14/06	621375
					.0217	.0078	03/28/06	621817
					.0166	.0069	04/04/06	621931
					.0351	.0080	04/11/06	622048
					.0105	.0088	04/18/06	622181
					.0104	.0059	05/09/06	622676
					.0109	.0056	05/30/06	623097
					.0108	.0092	06/20/06	623516

<u>Station</u> 3205	<u>Location</u> RM-3 WB	<u>Description</u> 15 MILES NNW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) PB-214				·
· ·					.0118	.0044	07/18/06	624076
					.0107	.0074	07/25/06	624202
					.0266	.0103	09/19/06	625261
					.0384	.0078	09/26/06	625404
					.0315	.0079	10/03/06	625541
					.0223	.0066	10/10/06	625683
,					.0262	.0100	10/16/06	625773
					.0594	.0105	10/24/06	625950
					.0365	.0084	10/31/06	626143
-7					.0384	.0111	11/06/06	626307
79-					.0232	.0067	11/14/06	626390
					.0329	.0128	11/20/06	626549
					.0470	.0105	12/05/06	626847
					.0283	.0064	12/26/06	627215

<u>Station</u> 2116	Location RM-2 DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	Nuclide		<u>Activity</u>	Error	Date Collected	Lab Number
			TRITIUM						
					-	.1901	.4114	01/03/06	620044
					-	.6025	.4907	01/17/06	620235
						.1108	.3384	01/31/06	620563
					-	.0672	.3583	02/14/06	620777
					-	.2599	.3710	02/28/06	621066
						.7548	.4910	03/14/06	621318
					-	.6711	.3990	03/28/06	621761
						3.6649	.8212	04/11/06	621991
						.2365	1.0370	04/25/06	622331
-80-						.1375	1.0795	05/09/06	622620
<u>-</u>						.5572	1.2998	05/23/06	622934
						.2968	1.5066	06/06/06	623163
					-	.2047	1.2861	06/20/06	623461
					-	1.7893	1.4941	07/04/06	623720
						1.8143	1.4835	07/18/06	624020
					-	.3382	1.4570	08/01/06	624296
						.9668	1.5369	08/15/06	624593
					-	.4812	1.5964	08/29/06	624817
						.2142	1.4137	09/12/06	625112
					-	.3183	1.1629	09/26/06	625348
					-	2.4329	1.0791	10/10/06	625627
					-	.3564	.7910	10/24/06	625894
					-	.9479	.5944	11/06/06	626252
					-	.2677	.6418	11/20/06	626493
						.2002	.5439	12/05/06	626791
						.3210	.5110	12/18/06	626993

<u>Station</u> 3101	<u>Location</u> LM1	Description 0.5 MILES SSW	Analysis	Nuclide	Activity	Error	Date Collected	Lab Number
	•		TRITIUM					
					.0411	.3970	01/03/06	620067
					.0987	.4899	01/17/06	620264
					5933	.4499	01/31/06	620585
		·			.3014	.3866	02/14/06	620806
					.0161	.3703	02/28/06	621088
					.3038	.9555	03/14/06	621348
					.7406	.4354	03/28/06	621784
					4.7162	.9627	04/11/06	622020
					7799	.9694	04/25/06	622353
-81					2832	1.0554	05/09/06	622648
)1					4.0585	2.7607	05/23/06	622957
					2.7662	1.5898	06/06/06	623191
					1.7606	1.2605	06/20/06	623483
	· .				- 1.7007	1.4627	07/04/06	623759
					.8228	1.4880	07/18/06	624042
					1.4111	1.6396	08/01/06	624326
					2.3237	1.5822	08/15/06	624616
					- 2.0341	1.6547	08/29/06	624847
					1.7935	1.4401	09/12/06	625136
					2.2992	1.2089	09/26/06	625377
					2.1776	1.1830	10/10/06	625650
					7054	1.0408	10/24/06	625923
					.5934	.6426	11/06/06	626274
					1.6133	.9000	11/20/06	626522
					2.0327	.7527	12/05/06	626814
					.9437	.5604	12/18/06	627022

<u>Station</u> 3102	<u>Location</u> LM2	Description 0.5 MILES N	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			TRITIUM					
					0466	.3922	01/03/06	620071
					.4708	.4756	01/17/06	620268
					.1469	.4691	01/31/06	620589
					2415	.3617	02/14/06	620810
					.9011	.3870	02/28/06	621092
					.4179	.4958	03/14/06	621352
•					.1908	.4086	03/28/06	621788
					4.0470	.8642	04/11/06	622024
					.0457	1.0077	04/25/06	622357
-82-					.8830	1.1071	05/09/06	622652
10					1.4130	2.4529	05/23/06	622961
				,	1.3725	1.5308	06/06/06	623195
					1.0580	1.2640	06/20/06	623487
					.5677	1.4027	07/04/06	623764
					.7643	1.5092	07/18/06	624046
					2.6735	1.4940	08/01/06	624330
					1.9624	1.6116	08/29/06	624851
					.8331	1.3629	09/12/06	625140
					3.3013	1.2198	09/26/06	625381
					1.0326	1.0762	10/10/06	625654
					5352	.7896	10/24/06	625927
					1.2876	.5621	11/06/06	626278
		x			.2986	.6394	11/20/06	626526
					1.3929	.5594	12/05/06	626818
					.8677	.4760	12/18/06	627026

Table 3 RADIOACTIVITY IN ATMOSPHERIC MOISTURE WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	Analysis	Nuclide		Activity	Error	Date Collected	Lab Number
			TRITIUM						
					-	.0281	.3784	01/03/06	620074
						.2027	.4424	01/17/06	620271
					-	1.0001	.4269	01/31/06	620592
					-	.0665	.3290	02/14/06	620813
						.6276	.3680	02/28/06	621095
						.2114	.4730	03/14/06	621355
						.6183	.3926	03/28/06	621791
						1.1704	.6801	04/11/06	622027
					-	.6167	.9107	04/25/06	622360
-83					-	.2587	.9643	05/09/06	622655
$\dot{\omega}$.8229	2.2613	05/23/06	622964
						1.0901	1.3999	06/06/06	623198
					-	.3392	1.1561	06/20/06	623490
					-	.3709	1.3567	07/04/06	623768
						2.3060	1.3813	07/18/06	624049
					-	1.1668	1.3110	08/01/06	624333
					-	.1129	1.3368	08/15/06	624623
					-	.3008	1.4199	08/29/06	624854
						.8997	1.2419	09/12/06	625143
					-	.7965	1.0550	09/26/06	625384
					-	1.8010	.9621	10/10/06	625657
					-	.4001	.7094	10/24/06	625930
					-	.6707	.5283	11/06/06	626281
					-	.5287	.5889	11/20/06	626529
					-	.1721	.4305	12/18/06	627029

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Table 3 RADIOACTIVITY IN ATMOSPHERIC MOISTURE WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 01/03/2006 - 12/29/2006

<u>Station</u> 3109	Location PM5 DECATUR	Description 8.0 MILES S	<u>Analysis</u> TRITIUM	 Activity	Error	Date Collected	Lab Number
			THUI TOW				
				.8522	.4249	01/04/06	620081
				.1296	.4512	01/18/06	620278
				5631	.4366	02/01/06	620599
				1767	.3484	02/15/06	620820
				.0054	.3762	03/01/06	621102
				.3935	.5001	03/15/06	621362
				.9813	.4736	03/29/06	621798
				2.6318	.8781	04/11/06	622034
				- 1.2962	.9432	04/26/06	622367
-84-				- 1.1429	1.1282	05/10/06	622662
4				1.8657	2.4590	05/24/06	622971
				1.0344	1.7635	06/07/06	623205
				1.0075	1.3821	06/21/06	623497
				- 1.4958	1.4452	07/05/06	623779
				.4287	1.5087	07/19/06	624056
				1.6427	1.5521	08/02/06	624340
				2.2779	1.9688	08/16/06	624630
				8767	1.5970	08/30/06	624861
				6451	1.3680	09/13/06	625150
				.1342	1.1359	09/27/06	625391
				- 1.0367	1.1490	10/11/06	625664
				- 1.3190	.7729	10/25/06	625937
				2083	.6296	11/07/06	626288
				3987	.6599	11/20/06	626536
				.5258	.5154	12/06/06	626828
				.3164	.5037	12/19/06	627036

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<u>Station</u> 3203	<u>Location</u> LM3	Description 1.9 MILES NNE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			TRITIUM					
					.1396	.4123	01/03/06	620093
					.2164	.4723	01/17/06	620284
					.0947	.4427	01/31/06	620611
					0199	.3457	02/14/06	620826
					.4485	.3745	02/28/06	621114
					.2818	.4900	03/14/06	621368
					.4835	.4025	03/28/06	621810
				۰.	5.5973	.9694	04/11/06	622041
					.6819	.9251	04/25/06	622379
Å	`				- 1.3061	1.0747	05/09/06	622669
-85-					3.8881	2.5401	05/23/06	622983
		•			- 2.4313	1.4495	06/06/06	623212
					- 1.1624	1.1738	06/20/06	623509
					.1823	1.2406	07/04/06	623787
					2977	1.3829	07/18/06	624069
					2.4712	2.0001	08/01/06	624346
					.9736	1.5477	08/15/06	624642
					- 1.4182	1.5373	08/29/06	624867
					.5155	1.3468	09/12/06	625162
					.1902	1.1510	09/26/06	625397
					0771	1.1277	10/10/06	625676
					8306	.8141	10/24/06	625943
					1.3798	.6307	11/06/06	626300
					6538	.6221	11/20/06	626542
					.5529	.5420	12/05/06	626840
					.4299	.5001	12/18/06	627041

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<u>Station</u> 3204	Location LM-4 WB	<u>Description</u> 0.9 MILES SE	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
			TRITIUM					
					- ,2062	.4067	01/03/06	620096
					.3884	.4796	01/17/06	620287
					.0141	.4913	01/31/06	620614
					.1936	.3772	02/14/06	620829
					.2312	.3942	02/28/06	621117
					.1721	.4964	03/14/06	621371
					.4985	.4493	03/28/06	621813
					4.5900	.9004	04/11/06	622044
					4317	.9674	04/25/06	622382
-86-					3471	. 1.0250	05/09/06	622672
6					1.1496	2.3750	05/23/06	622986
					1663	1.3562	06/06/06	623215
					1.1909	1.1566	06/20/06	623512
					2391	1.2362	07/04/06	623791
					1.4400	1.2955	07/18/06	624072
					- 1.1395	1.3152	08/01/06	624349
					3.0083	1.4339	08/16/06	624645
					- 1.9777	1.4726	08/29/06	624870
					.3414	1.2764	09/12/06	625165
-					1.1202	1.1150	09/26/06	625400
					0455	.9954	10/10/06	625679
					- 1.3697	.7081	10/24/06	625946
					1281	.4306	11/06/06	626303
					.1545	.6746	11/20/06	626545
					1.1836	.5507	12/06/06	626843
					.1634	.5261	12/19/06	627044

<u>Station</u> 3205	<u>Location</u> RM-3 WB	Description 15 MILES NNW	<u>Analysis</u>	<u>Nuclide</u>		Activity	Error	Date Collected	Lab Number
			TRITIUM						
						.0058	.3928	01/03/06	620099
						.4076	.4564	01/17/06	620290
						.3162	.4229	01/31/06	620617
•					-	.5410	.3226	02/14/06	620832
						.2579	.3479	02/28/06	621120
						.4544	.4761	03/14/06	621374
						.1845	.3951	03/28/06	621816
						.4880	.6738	04/11/06	622047
					-	1.4493	.9153	04/25/06	622385
∞					-	.6739	1.1498	05/09/06	622675
.87-					-	.7191	.7215	05/23/06	622989
					-	1.1151	1.5451	06/06/06	623218
					-	1.7278	1.4716	06/20/06	623515
					-	3.1037	1.4380	07/04/06	623795
					-	1.2181	1.4416	07/18/06	624075
						1.5495	1.4202	08/01/06	624352
						.2962	1.5432	08/15/06	624648
					-	.8200	1.5918	08/29/06	624873
						.3251	1.3969	09/12/06	625168
					-	.2674	1.1241	09/26/06	625403
					-	.9422	1.0864	10/10/06	625682
					-	.7112	.7850	10/24/06	625949
						.1698	.5374	11/06/06	626306
					-	.2584	.6025	11/20/06	626548
					-	.1812	.5342	12/05/06	626846
						.3034	.4741	12/18/06	627047

Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2215	<u>Location</u> KYLE FARM	Description 11.6 MILES ENE	<u>Analysis</u>	<u>Nuclide</u>		<u>Activity</u>	Error	Date Collected	Lab Number
			IODINE-1	31	-				
						.0001	.0689	01/03/06	620050
						.0462	.0802	01/17/06	620247
					-	.0231	.0695	01/31/06	620568
					-	.0131	.0415	02/14/06	620789
					-	.0226	.0677	. 02/28/06	621071
						.0124	.0464	03/14/06	621331
						.0358	.0508	03/28/06	621767
						.0001	.0712	04/11/06	622003
					-	.0122	.0386	04/25/06	622336
-88-						.0643	.0776	05/09/06	622631
ş						.0074	.0474	05/23/06	622939
					-	.0176	.0414	06/06/06	623174
						.0749	.0781	06/20/06	623466
						.0657	.0685	07/04/06	623734
						.0133	.0497	07/18/06	624025
					-	.0208	.0623	08/01/06	624309
						.0586	.0611	08/15/06	624598
						.0523	.0546	08/29/06	624829
						.0077	.0495	09/12/06	625118
						.0076	.0489	09/26/06	625360
						.0324	.0542	10/10/06	625632
	· ·				· -	.0166	.0390	10/24/06	625906
						.0129	.0484	11/06/06	626257
						.0075	.0482	11/20/06	626504
					-	.0181	.0425	12/05/06	626797
						.0148	.0556	12/18/06	627005

Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2215	<u>Location</u> KYLE FARM	Description 11.6 MILES ENE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				AC-228				
					5.0178	4.0083	05/09/06	622631
					5.6096	4.3313	06/06/06	623174
					12.3182	5.5728	08/29/06	624829
					8.7665	4.7334	10/10/06	625632
					5.5323	4.3448	12/18/06	627005
				BI-214				
					2.2822	3.4034	01/17/06	620247
					9.0512	3.9634	01/31/06	620568
					.7622	4.1759	02/14/06	620789
-68-					4.5215	3.4678	02/28/06	621071
9-					26.4578	6.0114	03/14/06	621331
					9.6150	4.2408	03/28/06	621767
					1.9597	2.8221	05/23/06	622939
					.5254	2.9315	06/06/06	623174
					3.8990	3.1668	06/20/06	623466
					2.2633	2.5804	07/04/06	623734
					5.0603	3.6933	07/18/06	624025
					5.0657	3.7572	08/01/06	624309
					3.8395	2.9584	08/15/06	624598
					7.6469	5.1831	08/29/06	624829
					1.4582	3.2553	09/12/06	625118
					5.0742	3.7434	09/26/06	625360
					9.1079	3.0716	10/10/06	625632
					5.7145	3.4164	10/24/06	625906
					24.0970	4.6065	11/06/06	626257
					1.6943	3.6511	11/20/06	626504

Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006 .

					•			
<u>Station</u> 2215	<u>Location</u> KYLE FARM	Description 11.6 MILES ENE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				BI-214				
					1.3769	3.5833	12/05/06	626797
					18.7021	3.5388	12/18/06	627005
				K-40				
					1251.9326	96.7918	01/03/06	620050
					1199.3883	97.4223	01/17/06	620247
					1246.2640	121.9195	01/31/06	620568
					1284.8943	136.9058	02/14/06	620789
					1235.4635	101.0264	02/28/06	621071
			,		1287.0663	99.2028	03/14/06	621331
-06-					1179.9335	96.9888	03/28/06	621767
0-					1239.9328	86.8789	04/11/06	622003
					1408.5435	87.6390	04/25/06	622336
					1196.7774	89.7272	05/09/06	622631
					1188.3457	87.2098	05/23/06	622939
					1232.6718	86.7039	06/06/06	623174
					1413.5828	87.3573	06/20/06	623466
					1366.3286	98.8949	07/04/06	623734
					1203.6251	86.6532	07/18/06	624025
					1211.0621	86.5911	08/01/06	624309
					1314.1371	88.7496	08/15/06	624598
					1219.2970	88.2760	08/29/06	624829
					1236.8250	75.2220	09/12/06	625118
					1201.2854	88.8624	09/26/06	625360
					1243.6118	89.8260	10/10/06	625632
					1138.4620	96.1322	10/24/06	625906
					1275.6045	100.7492	11/06/06	626257

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Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2215	<u>Location</u> KYLE FARM	Description 11.6 MILES ENE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				K-40				
					1290.9007	82.4072	11/20/06	626504
					1172.4984	84.8700	12/05/06	626797
					1265.5527	88.7344	12/18/06	627005
				PB-212				
	· · ·				.9921	2.2237	02/14/06	620789
					2.4099	2.1732	06/20/06	623466
					1.1250	1.9639	09/26/06	625360
					5.3609	2.6836	10/24/06	625906
		·		PB-214				
-91					8.5846	4.3146	01/31/06	620568
<u> </u>					9.7264	6.4419	03/14/06	621331
					9.2650	3.7120	03/28/06	621767
					3.6931	2.7075	06/20/06	623466
					4.7460	4.0559	07/04/06	623734
					2.1062	3.2173	07/18/06	624025
					1.3940	3.8788	08/15/06	624598
					1.5485	2.6460	08/29/06	624829
					3.5828	3.8893	09/12/06	625118
					9.5307	3.0981	09/26/06	625360
					5.3673	4.2945	10/10/06	625632
	•				9.5610	4.0975	11/06/06	626257
					4.0554	3.1572	12/05/06	626797
					11.4555	3.3240	12/18/06	627005
				TL-208				
					2.9632	2.3929	10/24/06	625906
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Tennessee Valley Authority Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2215	<u>Location</u> KYLE FARM	Description 11.6 MILES ENE	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
2210		TT.O MILES ENE	SR 89				
				.7329	.8751	02/28/06	621071
				1.3711	.8346	06/06/06	623174
			· .	- 1.0897	.8068	08/15/06	624598
				.9954	.8269	12/18/06	627005
			SR 90	.0004	.0209	12/10/00	027003
				0496	.5291	02/28/06	621071
				1203	.5333	06/06/06	623174
				1.6378	.5092	08/15/06	624598
, ' _				0707	.5276	12/18/06	627005
.92 2263	E. HOUSLEY FARM	24.0 MILES SSW					
			IODINE-131				
				.0327	.0464	01/04/06	620065
				.0629	.0593	01/18/06	620262
				0123	.0389	02/01/06	620583
				.0481	.0834	02/15/06	620804
				.0696	.0656	03/01/06	621086
•				.0216	.0716	03/15/06	621346
				.0695	.0838	03/29/06	621782
				.0691	.0834	04/11/06	622018
				.0935	.0975	04/26/06	622351
				0114	.0360	05/10/06	622646
				.0410	.0711	05/24/06	622955
				.0485	.0841	06/07/06	623189
				.0262	.0871	06/21/06	623481
				0423	.0600	07/05/06	623757

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Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2263	Location E. HOUSLEY FARM	<u>Description</u> 24.0 MILES SSW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			IODINE-1	31				
					.0564	.0978	07/19/06	624040
					.0557	.0525	08/02/06	624324
					.0152	.0569	08/16/06	624614
					.0539	.0509	08/30/06	624845
					.0001	.0649	09/13/06	625133
					.0305	.0433	09/27/06	625375
					0224	.0672	10/11/06	625647
					.0411	.0713	10/25/06	625921
					0641	.0568	11/07/06	626272
-93-					.0662	.0798	11/21/06	626520
μ					0155	.0363	12/06/06	626812
					.0302	.0505	12/19/06	627020
			GAMMA S	SCAN (GELI)				
				AC-228				
					3.0202	4.6494	06/21/06	623481
					9.3297	5.3907	08/02/06	624324
					4.3890	4.3030	08/16/06	624614
					4.8662	3.6745	12/06/06	626812
	-			BI-214				
					4.6138	2:9525	01/04/06	620065
		۴			2.8046	2.2882	01/18/06	620262
					17.4098	4.7303	02/01/06	620583
					5.7756	4.9344	03/01/06	621086
					5.1581	3.0136	03/15/06	621346
					9.4320	4.1431	03/29/06	621782
					1.3248	2.3054	04/11/06	622018

Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

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<u>Station</u> 2263	Location E. HOUSLEY FARM	<u>Description</u> 24.0 MILES SSW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				BI-214				
					.2861	2.9604	05/10/06	622646
					2.4529	3.6038	05/24/06	622955
					4.2206	3.5397	06/07/06	623189
					.6929	3.4682	06/21/06	623481
					1.1969	3.6136	07/05/06	623757
					3.5750	2.8134	07/19/06	624040
					5.4999	4.1252	08/02/06	624324
					3.8634	3.2255	08/16/06	624614
					3.6918	3.6248	08/30/06	624845
-94-					5.0630	2.5011	09/27/06	625375
1					10.6675	4.4224	10/11/06	625647
					3.4598	2.4099	10/25/06	625921
					5.0536	3.0332	11/07/06	626272
					3.2630	2.6130	11/21/06	626520
					1.1968	3.0285	12/06/06	626812
					9.9871	3.8149	12/19/06	627020
				K-40				
					1362.3113	76.7805	01/04/06	620065
					1259.5822	88.9656	01/18/06	620262
					1299.9318	92.5792	02/01/06	620583
		,			1351.5760	90.5628	02/15/06	620804
					1380.7019	84.7128	03/01/06	621086
					1313.0238	88.0906	03/15/06	621346
					1396.4591	94.9167	03/29/06	621782
					1280.7476	82.4306	04/11/06	622018
					1185.4471	102.2268	04/26/06	622351

Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2263	Location E. HOUSLEY FARM	Description 24.0 MILES SSW	Analysis	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) K-40				
					1308.8717	91.4638	05/10/06	622646
					1295.5114	122.9907	05/24/06	622955
					1341.8616	88.7533	06/07/06	623189
					1393.7021	89.5317	06/21/06	623481
					1235.3110	97.8176	07/05/06	623757
					1265.1904	87.8980	07/19/06	624040
					1362.6120	83.6321	08/02/06	624324
					1526.8759	105.6977	08/16/06	624614
					1390.2548	87.2326	08/30/06	624845
-95-					1228.0546	104.3388	09/13/06	625133
Ś					1367.5230	81.8918	09/27/06	625375
					1198.7838	131.4325	10/11/06	625647
					1255.1494	83.2042	10/25/06	625921
					915.8376	345.0150	11/07/06	626272
					1350.4231	124.4636	11/21/06	626520
					1227.2284	112.7439	12/06/06	626812
					1252.8155	90.6864	12/19/06	627020
				PB-212				
					2.3125	2.1952	02/01/06	620583
					5.3464	2.8937	03/01/06	621086
•					3.9960	3.2846	06/07/06	623189
					2.1749	2.6200	10/11/06	625647
					2.3574	2.9617	11/07/06	626272
					3.3261	3.7171	12/19/06	627020
				PB-214				
					.8072	2.2907	01/04/06	620065

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Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2263	Location E. HOUSLEY FARM	Description 24.0 MILES SSW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				PB-214				
					.3011	2.7895	01/18/06	620262
					6.8123	3.0062	03/15/06	621346
					2.8392	2.3218	03/29/06	621782
					2.9792	2.1861	04/11/06	622018
					.0886	2.5608	04/26/06	622351
					11.5427	2.8747	06/21/06	623481
					4.2321	2.9011	07/19/06	624040
					5.1468	2.7800	08/02/06	624324
					.9844	2.1266	08/16/06	624614
-96-					.1936	2.2476	08/30/06	624845
5					6.3106	4.1994	09/27/06	625375
					7.1657	3.9779	10/11/06	625647
					.3617	2.9411	10/25/06	625921
					1.8711	2.5297	11/07/06	626272
					4.9065	2.4517	11/21/06	626520
					4.0060	4.2187	12/19/06	627020
				TL-208				
					.6964	1.4403	08/16/06	624614
	•		SR 89					
					7470			
					.7470	.7779	03/01/06	621086
					1.2784	1.2272	06/07/06	623189
				*	.4142	1.2069	08/16/06	624614
		*			1.1836	.8939	12/19/06	627020
			SR 90					•
					1413	.4763	03/01/06	621086

Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2263	Location E. HOUSLEY FARM	Description	<u>Analysis</u>	Nuclide	1	Activity	Error	Date Collected	Lab Number
2203		24.0 MILES SSW	SR 90						
		•	•			.1230	.7707	06/07/06	623189
						.7157	.7737	08/16/06	624614
						.1085	.5941	12/19/06	627020
3115	LAYMAN FARM	1.3 MILES SSW							
			IODINE-1	31					
						.0567	.0591	01/03/06	620083
					-	.0258	.0773	01/17/06	620280
					-	.0224	.0671	02/01/06	620601
						.0364	.0516	02/15/06	620822
-97-						.0070	.0451	03/01/06	621104
I					· _	.0105	.0331	03/15/06	621364
					-	.0115	.0364	03/29/06	621800
						.0316	.0527	04/12/06	622036
						.0108	.0405	04/26/06	622369
						.0086	.0552	05/09/06	622664
						.0570	.0538	05/24/06	622973
						.0616	.0581	06/07/06	623207
					-	.0116	.0367	06/21/06	623499
					-	.0124	.0392	07/05/06	623782
						.0556	.0524	07/19/06	624058
						.0512	.0534	08/02/06	624342
						.0304	.0509	08/16/06	624632
						.0512	.0534	08/30/06	624863
						.0377	.0655	09/13/06	625152
					-	.0158	.0372	09/27/06	625393

Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3115	<u>Location</u> LAYMAN FARM	Description 1.3 MILES SSW	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
			IODINE-131				
				.0464	.0804	10/11/06	625666
			· ·	.0365	.0517	10/25/06	625939
				.0376	.0534	11/06/06	626290
				.0335	.0475	11/20/06	626538
				.0395	.0685	12/06/06	626830
				.0649	.0783	12/19/06	627038
			GAMMA SCAN (GELI)				
			AC-228				
				2.1095	3.3076	01/03/06	620083
5 -				3.3293	3.7588	04/26/06	622369
-98-				4.1838	4.1014	05/09/06	622664
				5.2144	3.8836	08/02/06	624342
				9.0121	4.6247	08/30/06	624863
				4.3384	4.2050	09/27/06	625393
			BI-214				
				16.2206	4.2248	01/03/06	620083
				20.0608	4.3344	01/17/06	620280
				13.0748	3.9294	02/01/06	620601
				14.4428	3.6690	02/15/06	620822
				1.6213	3.9205	03/29/06	621800
	•			3.9816	2.9721	05/09/06	622664
				.0396	4.2766	06/07/06	623207
				.2359	2.3512	06/21/06	623499
				3.0568	2.6448	07/05/06	623782
				9.0102	2.9984	07/19/06	624058
				10.9592	2.9782	08/30/06	624863

Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3115	<u>Location</u> LAYMAN FARM	Description 1.3 MILES SSW	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) BI-214				
					18.8790	5.0019	09/27/06	625393
			`		28.2828	5.2676	10/11/06	625666
					53.9397	6.6894	10/25/06	625939
		,			16.7787	3.9501	11/06/06	626290
					8.6454	3.7092	11/20/06	626538
					5.4119	3.4540	12/06/06	626830
					7.4769	3.4791	12/19/06	627038
				K-40				
					1420.6055	102.3401	01/03/06	620083
-99-					1454.0203	101.4550	01/17/06	620280
-9					1334.9185	80.8587	02/01/06	620601
					1359.1245	89.9934	02/15/06	620822
					1334.3219	120.5661	03/01/06	621104
					1542.2338	107.8045	03/15/06	621364
					1510.4771	98.7592	03/29/06	621800
					1154.6209	95.5748	04/12/06	622036
					1299.1836	92.7310	04/26/06	622369
					1379.2818	94.8278	05/09/06	622664
					1387.9405	92.9009	05/24/06	622973
				·	1390.8160	86.5738	06/07/06	623207
					1328.5620	79.7492	06/21/06	623499
					1300.6881	95.9162	07/05/06	623782
					1399.9804	86.6086	07/19/06	624058
					1437.0291	102.5911	08/02/06	624342
					1329.6912	94.3379	08/16/06	624632
					1342.4326	82.9788	08/30/06	624863

Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3115	<u>Location</u> LAYMAN FARM	Description 1.3 MILES SSW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
•			GAMMA S	SCAN (GELI)				
				K-40				
					1445.8650	93.9575	09/13/06	625152
					1311.0352	95.2228	09/27/06	625393
					1352.7213	91.6427	10/11/06	625666
					1284.7632	112.5159	10/25/06	625939
					1412.7802	99.1020	11/06/06	626290
					1357.1098	90.4541	11/20/06	626538
					1482.8414	111.9633	12/06/06	626830
					1381.8679	79.1872	12/19/06	627038
				PB-212				
-1(2.4438	2.1027	01/17/06	620280
100-					3.0442	2.3601	07/19/06	624058
					4.3908	1.8021	09/13/06	625152
					4.1737	2.4611	11/06/06	626290
					.5597	1.9181	11/20/06	626538
				PB-214				
					11.7141	5.0862	01/03/06	620083
					9.8303	3.5030	01/17/06	620280
					7.1707	2.9453	02/01/06	620601
	-				6.0780	4.2690	02/15/06	620822
					3.1852	2.4633	03/01/06	621104
					2.1372	2.7279	06/07/06	623207
					.3031	1.9980	06/21/06	623499
					1.8585	2.2388	07/19/06	624058
					.2962	3.2928	08/30/06	624863
					12.2281	3.3156	09/27/06	625393
					14.2410	3.5735	10/11/06	625666

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Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3115	Location LAYMAN FARM	Description 1.3 MILES SSW	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) PB-214				
					36.6448	7.3182	10/25/06	625939
					13.7868	3.0227	11/06/06	626290
					10.4899	4.5839	11/20/06	626538
					4.6876	3.1362	12/06/06	626830
					4.5956	2.5388	12/19/06	627038
				TL-208				
					1.4820	1.2707	09/13/06	625152
					1.8554	.9876	11/06/06	626290
			SR 89					
-101-		•			4066	70.47	00/04/00	
Ĕ.					.4266	.7647	03/01/06	621104
					.5941	1.0354	06/07/06	623207
					.2919	.9409	08/16/06	624632
			SR 90		.6177	.8641	12/19/06	627038
			SK 90					
					.5652	.4706	03/01/06	621104
				·	.4701	.6760	06/07/06	623207
					.2932	.6093	08/16/06	624632
					.0265	.5719	12/19/06	627038
3116	MULLINS FARM	3.7 M. ESE						
			IODINE-1	31				
	· .				0211	.0632	01/04/06	620085
					0130	.0410	01/18/06	620281
					.0630	.0594	02/01/06	620603
					.0232	.0771	02/15/06	620823

Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

Station	Location	Description	Analysis	Nuclide		Activity	Error	Date Collected	Lab Number
3116	MULLINS FARM	3.7 M. ESE	IODINE-1	31					
						.0348	.0494	03/01/06	604406
						.0452	.0494 .0784		621106
					-	.0143	.0784	03/15/06	621365
					-	.0001		03/29/06	621802
						.0067	.0752	04/12/06	622037
							.0432	04/26/06	622371
					-	.0108	.0342	05/10/06	622665
						.0302	.0505	05/24/06	622975
					-	.0192	.0452	06/07/06	623208
					-	.0162	.0382	06/21/06	623501
-102-						.0001	.0891	07/05/06	623784
2-						.0079	.0505	07/19/06	624060
					•	.0109	.0344	08/02/06	624343
						.0405	.0703	08/16/06	624634
						.0408	.0707	08/30/06	624864
						.0001	.0651	09/13/06	625154
						.0409	.0579	09/27/06	625394
					-	.0136	.0430	10/11/06	625668
						.0208	.0689	10/25/06	625940
			GAMMA S	SCAN (GELI)					
				AC-228					
		,				7.2734	5.1654	05/10/06	622665
	-					3.5717	5.0093	05/24/06	622975
						9.3613	4.7379	07/19/06	624060
	•				1	5.9842	6.1195	08/16/06	624634
				BI-214					
					1:	5.8847	4.6902	01/04/06	620085

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Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3116	Location MULLINS FARM	Description 3.7 M. ESE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) BI-214				
					11.0562	3.6053	01/18/06	620281
					36.9978	6.7008	02/01/06	620603
					6.0936	4.2229	02/15/06	620823
					9.3055	3.8590	04/12/06	622037
					3.8223	2.5905	05/10/06	622665
					2.3481	3.0369	05/24/06	622975
					1.8880	3.8877	06/07/06	623208
					3.7978	3.5621	07/19/06	624060
					2.9590	2.4380	08/16/06	624634
-103					4.4928	3.1047	08/30/06	624864
3-					9.1840	4.8244	09/27/06	625394
					24.6025	4.6363	10/11/06	625668
	3				35.2032	5.9697	10/25/06	625940
	-			K-40				
					1451.8266	98.1600	01/04/06	620085
					1431.5588	92.2262	01/18/06	620281
					1346.5888	103.6605	02/01/06	620603
					1297.0938	102.4608	02/15/06	620823
					1266.1391	88.6474	03/01/06	621106
					1203.1531	106.1496	03/15/06	621365
					1286.8391	91.7068	03/29/06	621802
					1336.2530	104.1640	04/12/06	622037
					1343.4700	116.7213	04/26/06	622371
					1358.8765	93.5252	05/10/06	622665
					1306.6305	94.4800	05/24/06	622975
					1369.9434	89.8714	06/07/06	623208

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Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3116	<u>Location</u> MULLINS FARM	Description 3.7 M. ESE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) K-40				
				11-40	1292.6800	85.9368	06/21/06	623501
					1327.6471	95.4610	07/05/06	623784
					1399.1476	87.6677	07/19/06	624060
					1340.4730	85.2650	08/02/06	624343
					1395.2362	86.3407	08/16/06	624634
					1531.2665			
						103.9379	08/30/06	624864
					1409.4578	96.2023	09/13/06	625154
					1346.0311	109.1702	09/27/06	625394
1					1221.9426	104.1783	10/11/06	625668
104-					1406.1811	104.8099	10/25/06	625940
4				PB-212	0.0470			
					2.8470	1.7840	01/18/06	620281
					8.0156	2.3327	03/01/06	621106
					.4255	2.3860	04/12/06	622037
					1.3805	2.1194	05/24/06	622975
					2.8285	2.4990	06/07/06	623208
					7.3444	2.2918	08/16/06	624634
					.6871	3.6744	09/27/06	625394
				PB-214				
					6.4355	3.9651	01/04/06	620085
					3.6106	3.0021	01/18/06	620281
					25.3370	7.2374	02/01/06	620603
					10.1111	3.3117	02/15/06	620823
					1.4785	3.1370	03/15/06	621365
					2.0660	3.0297	03/29/06	621802
					2.0103	3.1910	06/07/06	623208

Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u>	Location	Description	Analysis	Nuclide	Activity	Error	Date Collected	Lab Number
3116	MULLINS FARM	3.7 M. ESE						
			GAMMA S	SCAN (GELI)				
••				PB-214	2 1 4 9 0	0.0006	00/40/00	004004
					3.1489	2.0236	08/16/06	624634
					13.9532	5.0834	09/27/06	625394
					22.9691	5.0364	10/11/06	625668
				TL 000	23.1269	5.1913	10/25/06	625940
				TL-208	1.5085	1 1244	01/10/06	600004
					.2480	1.1344 1.2090	01/18/06	620281
							05/24/06	622975
					1.7503	1.1183	06/07/06	623208
1		,	SR 89		1.4992	1.3932	08/30/06	624864
-105-			SK 09					
					3073	1.0375	03/01/06	621106
					.0806	.8743	06/07/06	623208
					1.1199	1.1773	08/16/06	624634
			SR 90					
					.3937	.6406	03/01/06	621106
					1.0347	.5875	06/07/06	623208
					.0654	.7445	08/16/06	624634
3119	NORTON FARM	4.1 MILES ESE			.0004	.7445	00/10/00	024034
			IODINE-1	31				
					.0113	.0422	01/04/06	620086
					0128	.0422		
					0128 .0114	.0407	01/18/06	620282
				·	.0305		02/01/06	620604
						.0510	02/15/06	620824
					.0314	.0524	03/01/06	621107

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Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3119	Location NORTON FARM	Description 4.1 MILES ESE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			IODINE-1	31				
					.0150	.0560	03/15/06	621366
					.0119	.0447	03/29/06	621803
					.0561	.0529	04/12/06	622038
					.0368	.0521	04/26/06	622372
					.0315	.0526	05/10/06	622667
					.0211	.0699	05/24/06	622976
					.0111	.0415	06/06/06	623209
					.0476	.0826	06/20/06	623502
					.0358	.0508	07/05/06	623785
-106-				-	0235	.0707	07/18/06	624061
) 6					.0423	.0734	08/02/06	624344
					.0686	.0647	08/16/06	624635
	`				.0112	.0420	08/30/06	624865
	,				.0393	.0682	09/13/06	625155
					.0564	.0588	09/27/06	625395
					.0375	.0531	10/11/06	625669
					.0299	.0500	10/25/06	625941
					.0076	.0489	11/06/06	626293
					0179	.0421	11/20/06	626540
					.0075	.0481	12/05/06	626833
					.0363	.0514	12/18/06	627039
			GAMMA S	SCAN (GELI) AC-228				
					1.4707	3.0473	01/18/06	620282
					10.1000	4.3597	02/01/06	620604
	•				5.2374	4.0503	03/29/06	621803

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Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3119	Location NORTON FARM	Description 4.1 MILES ESE	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) AC-228		,		
				AU-220	8.0540	4.4042	04/12/06	622038
					5.3373	3.5468	08/30/06	624865
					2.3671	4.2190	11/20/06	626540
				BI-214		112100	11/20/00	020040
					8.2125	2.7416	01/04/06	620086
					4.0373	3.0154	01/18/06	620282
					39.9395	5.3508	02/01/06	620604
					4.5758	3.6966	02/15/06	620824
					.0856	3.0727	03/15/06	621366
-107-					3.7219	3.3163	03/29/06	621803
07-					6.1502	3.4070	04/12/06	622038
•					1.6013	3.0666	05/10/06	622667
					5.6228	2.8354	05/24/06	622976
					.6048	2.9514	06/20/06	623502
	·.				.4756	2.2545	07/05/06	623785
					9.1627	4.6870	07/18/06	624061
					1.4360	2.7774	08/02/06	624344
					3.9108	2.9191	08/16/06	624635
					3.8005	3.7023	08/30/06	624865
			•		24.9098	4.6685	09/27/06	625395
					26.1791	4.6131	10/11/06	625669
					33.2781	5.3770	10/25/06	625941
					15.3661	4.4144	11/06/06	626293
					7.2901	2.8455	11/20/06	626540
					2.9051	3.2356	12/05/06	626833
					14.4659	5.1730	12/18/06	627039

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Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3119	<u>Location</u> NORTON FARM	Description 4.1 MILES ESE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) K-40				
					1303.8042	85.7789	01/04/06	620086
					1175.4988	83.4696	01/18/06	620282
					1365.8225	83.3611	02/01/06	620604
					1391.5154	101.8738	02/15/06	620824
					1498.2603	85.3579	03/01/06	621107
					1434.3838	95.5644	03/15/06	621366
					1357.4013	90.8546	03/29/06	621803
					1454.8612	126.2095	04/12/06	622038
					1237.1928	78.5250	04/26/06	622372
-108-					1363.7485	80.0370	05/10/06	622667
-8					1265.0854	80.4330	05/24/06	622976
					1306.0365	92.1767	06/06/06	623209
					1336.0218	88.5688	06/20/06	623502
	•				1220.3737	95.9524	07/05/06	623785
					1411.2470	102.1876	07/18/06	624061
					1311.1884	83.9303	08/02/06	624344
					1461.7011	95.7625	08/16/06	624635
					1397.3813	94.9148	08/30/06	624865
					1101.7775	119.9732	09/13/06	625155
					1281.5785	94.7377	09/27/06	625395
					1346.7588	89.7520	10/11/06	625669
					1251.7071	88.1826	10/25/06	625941
					1295.5545	96.5567	11/06/06	626293
					1272.2636	100.5771	11/20/06	626540
					1324.4164	97.357 9	12/05/06	626833
					1290.1067	89.9677	12/18/06	627039

Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3119	Location NORTON FARM	Description 4.1 MILES ESE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) PB-212	,			
					4.5411	1.9126	04/12/06	622038
					6.6094	3.0807	05/24/06	622976
					1.7599	2.8723	07/18/06	624061
					5.4136	2.8865	11/06/06	626293
					.9512	2.7555	11/20/06	626540
				PB-214				
					6.2529	2.9376	01/04/06	620086
					6.7816	3.8862	01/18/06	620282
					20.3914	3.1755	02/01/06	620604
-109-					.4749	2.9707	02/15/06	620824
-90					.7808	2.9575	03/01/06	621107
·					.8874	2.8277	03/15/06	621366
					5.8335	2.5906	04/12/06	622038
					1.7576	2.0858	05/10/06	622667
					2.2088	3.0597	05/24/06	622976
					1.5205	2.9274	08/02/06	624344
					.8981	3.3672	08/16/06	624635
					12.2060	2.9508	09/27/06	625395
					16.9287	3.1780	10/11/06	625669
					16.7149	3.0384	10/25/06	625941
					12.9265	3.9961	11/06/06	626293
					.3840	2.6314	11/20/06	626540
					3.7492	2.7600	12/05/06	626833
					3.1646	3.7797	12/18/06	627039
				TL-208				
					2.1969	1.5498	02/01/06	620604

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Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3119	Location NORTON FARM	Description 4.1 MILES ESE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
0110	NORTONTARM	4.1 MILES ESE	SR 89					
					.6426	1.0493	03/01/06	621107
					4647	.8076	06/06/06	623209
					2698	.9298	08/16/06	624635
					2454	.9857	12/18/06	627039
			SR 90	•				-
					.5860	.6497	03/01/06	621107
		•			.6635	.5339	06/06/06	623209
	、 、				.7316	.5579	08/16/06	624635
 					.7030	.6494	12/18/06	627039

Table 5 RADIOACTIVITY IN SOIL WATTS BAR NUCLEAR PLANT PCI/GM - 0.037 BQ/G (DRY WEIGHT) 01/03/2006 - 12/29/2006

<u>Station</u> 2116	<u>Location</u> RM-2 DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				AC-228				
					.7118	.0640	07/04/06	623724
					.7887	.0543	07/11/06	623771
				BE-7				
				,	.2291	.0286	07/04/06	623724
				BI-212				
					.5963	.0750	07/04/06	623724
					.9162	.0961	07/11/06	623771
				BI-214				
					.7304	.0391	07/04/06	623724
1 					.9482	.0524	07/11/06	623771
111-		,		CS-137		•		
1					.1361	.0113	07/04/06	623724
					.1284	.0114	07/11/06	623771
				K-40				
					2.7789	.2156	07/04/06	623724
					5.5724	.2859	07/11/06	623771
		·		PB-212				
					.6021	.0352	07/04/06	623724
					.8118	.0439	07/11/06	623771
•				PB-214				
					.8412	.0424	07/04/06	623724
					.9857	.0591	07/11/06	623771
				RA-224				
					.7575	.1813	07/04/06	623724
					.9155	.1570	07/11/06	623771
				RA-226				
	,				.7304	.0391	07/04/06	623724
					-			

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<u>Station</u> 2116	<u>Location</u> RM-2 DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
2110		13.0 MILES SW	GAMMA	SCAN (GELI) RA-226				Lab Number 623771 623724 623771 623724 623761 623761 623761 623761 623761 623761 623761 623761 623761 623761
				TL-208	.9482	.0524	07/11/06	623771
					.2145	.0144	07/04/06	623724
					.2971	.0177	07/11/06	623771
			SR 89					
					9460	.5960	07/04/06	623724
			SR 90					
<u>'</u> 3101	1 1 4 4				.0264	.0341	07/04/06	623724
-112-	LM1	0.5 MILES SSW	GAMMA	SCAN (GELI)				
				AC-228				
				BE-7	1.1467	.0911	07/11/06	623761
•				DE-1	.1170	.0332	07/11/06	623761
				BI-212	4 99 49			
				BI-214	1.3018	.1356	07/11/06	623761
					.8500	.0512	07/11/06	623761
				CS-137	.0942	.0105	07/44/06	000704
				K-40	.0542	.0105	07/11/06 ·	023701
					13.8485	.6798	07/11/06	623761
				PB-212	1.1018	.0607	07/11/06	623761
				PB-214				
					.8963	.0555	07/11/06	623761

<u>Station</u> 3101	Location LM1	Description 0.5 MILES SSW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				RA-224	1.5453	.2958	07/11/06	623761
				RA-226	.8500	.0512	07/11/06	623761
			۰.	TL-208	.3655	.0238	07/11/06	623761
			SR 89		.0000	.02.00	0771700	023701
,					0735	.7850	07/11/06	623761
<u>'</u>			SR 90					
- <u>1</u> 13- 3102	LM2	0.5 MILES N			.0588	.0715	07/11/06	623761
			GAMMA	SCAN (GELI) AC-228			· ·	
					1.1701	.0767	07/11/06	623766
				BI-212	1.2113	.1295	07/11/06	623766
				BI-214	.9520	.0516	07/11/06	623766
				CS-137	.3126	.0217	07/11/06	623766
				K-40				
				PB-212	14.0021	.6152	07/11/06	623766
				PB-214	1.0921	.0589	07/11/06	623766
				RA-226	1.0564	.0494	07/11/06	623766

<u>Station</u> 3102	Location LM2	Description 0.5 MILES N	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) RA-226				
				TL-208	.9520	.0516	07/11/06	623766
			SR 89		.3576	.0198	07/11/06	623766
					1470	.7370	07/11/06	623766
			SR 90				0111100	023700
3106	PM2 SPRING CITY	7.0 MILES NW			.0547	.0450	07/11/06	623766
3106 I 11 1 4-			GAMMA S	SCAN (GELI) AC-228				
				BI-212	.9440	.0629	07/11/06	623770
				BI-214	.8817	.0941	07/11/06	623770
				CS-137	.6062	.0296	07/11/06	623770
				K-40	.4882	.0271	07/11/06	623770
				PB-212	10.8665	.5681	07/11/06	623770
				PB-214	.8273	.0468	07/11/06	623770
				RA-226	.6569	.0364	07/11/06	623770
				TL-208	.6062	.0296	07/11/06	623770

<u>Station</u> 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) TL-208				
			SR 89		.2706	.0166	07/11/06	623770
			SR 90		1,1800	.8960	07/11/06	623770
			SK 90		.0647	0514	07/44/00	000770
3107	PM3	10.4 MILES NNE			.0047	.0514	07/11/06	623770
T,			GAMMA	SCAN (GELI) AC-228				
-115-				BE-7	.9260	.0639	07/11/06	623774
'		-		BI-212	.1804	.0380	07/11/0662377407/11/0662377407/11/06623774	
				BI-214	.9726	.0877	07/11/06	623774
	·				.8118	.0392	07/11/06	623774
				CS-137	.2058	.0178	07/11/06	623774
				K-40	4.1832	.2588	07/11/06	623774
				PB-212	.9271	.0511	07/11/06	623774
				PB-214	.8782	.0507	07/11/06	623774
		-		RA-224	1.0913	.1630	07/11/06	623774
				RA-226				

<u>Station</u> 3107	Location PM3	Description 10.4 MILES NNE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) RA-226				
				T I 000	.8118	.0392	07/11/06	623774
				TL-208	.2625	.1747	07/11/06	623774
			SR 89					
					.5480	.6240	07/11/06	623774
			SR 90					
					.0318	.0367	07/11/06	623774
3108	PM4	7.6 MILES NE/ENE	<u> </u>					
3108 116-			GAMMA	SCAN (GELI) AC-228				· ,
					1.2328	.0825	07/12/06	623777
				BI-212	1.2569	.1339	07/12/06	623777
				BI-214				
				CS-137	.9104 [.]	.0568	07/12/06	623777
				•	.0507	.0087	07/12/06	623777
				K-40	12.2215	.6536	07/12/06	623777
				PB-212				
-				PB-214	1.1671	.0743	07/12/06	623777
					.9627	.0544	07/12/06	623777
·				RA-226	.9104	.0568	07/12/06	623777
				TL-208			01112/00	020111

<u>Station</u> 3108	<u>Location</u> PM4	Description 7.6 MILES NE/ENE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
	· .		GAMMA	SCAN (GELI) TL-208				
			SR 89		.3967	.0265	07/12/06	623777
					.0706	.7110	07/12/06	623777
			SR 90					
3109	PM5 DECATUR	8.0 MILES S			.0284	.0560	07/12/06	623777
I			GAMMA S	SCAN (GELI) AC-228			·	
-117-				BE-7	1.4033	.0755	07/12/06	623781
1				BI-212	.2472	.0506	07/12/06	623781
				BI-212 BI-214	1.5563	.1274	07/12/06	623781
	, ,			CS-137	.9087	.0454	07/12/06	623781
				K-40	.0523	.0082	07/12/06	623781
					12.9503	.6569	07/12/06	623781
				PB-212	1.4731	.0699	07/12/06	623781
				PB-214	1.0333	.0519	07/12/06	623781
				RA-224	1.6140	.1875	07/12/06	623781
				RA-226				

<u>Station</u> 3109	Location PM5 DECATUR	Description 8.0 MILES S	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) RA-226				
	•			TL-208	.9087	.0454	07/12/06	623781
				TE-200 .	.4309	.0223	07/12/06	623781
	· .		SR 89					
			SR 90		2180	.7650	07/12/06	623781
			3N 90					
3203	LM3	1.9 MILES NNE			.0192	.0439	07/12/06	623781
3203 I 11 8-			GAMMA S	SCAN (GELI) AC-228				
					.8669	.0799	07/11/06	623789
				BI-212	.9821	.1719	07/11/06	623789
				BI-214	1.1199	.0574	07/11/06	623789
				CS-137	1.2626			
				K-40		.0612	07/11/06	623789
				PB-212	4.9155	.4449	07/11/06	623789
				PB-214	.8828	.0478	07/11/06	623789
					1.2243	.0622	07/11/06	623789
				RA-226	1.1199	.0574	07/11/06	623789
				TL-208	:			

								-
<u>Station</u> 3203	<u>Location</u> LM3	Description 1.9 MILES NNE	<u>Analysis</u>	Nuclide	Activity	<u>Error</u> ,	Date Collected	Lab Number
			GAMMA	SCAN (GELI) TL-208				
	· · ·		SR 89		.2901	.0181	07/11/06	623789
					1140	.5460	07/11/06	623789
			SR 90					
3204	LM-4 WB	0.9 MILES SE			.0232	.0328	07/11/06	623789
			GAMMA	SCAN (GELI) AC-228				
-119-					1.4365	.0997	07/12/06	623793
Ļ				BI-212	1.4565	.1758	07/12/06	623793
				BI-214	1.1089	.0641	07/12/06	623793
				CS-137			07/12/00	023793
				K-40	.0757	.0130	07/12/06	623793
					28.0277	1.3273	07/12/06	623793
				PB-212	1.3974	.0852	07/12/06	623793
				PB-214	1.1513	.0587	07/12/06	623793
				RA-226				
				TL-208	1.1089	.0641	07/12/06	623793
					.4870	.0368	07/12/06	623793

<u>Station</u> 3204	<u>Location</u> LM-4 WB	Description 0.9 MILES SE	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			SR 89					
					.3350	.7020	07/12/06	623793
			SR 90					
3205	RM-3 WB	15 MILES NNW			.0385	.0562	07/12/06	623793
5200		13 MILES INNW	GAMMA	SCAN (GELI) AC-228				
				BI-212	.5574	.0566	07/11/06	623797
<u>'</u>					.5542	.0982	07/11/06	623797
-120-				BI-214	.5496	.0351	07/11/06	623797
				CS-137	.5922	.0385	07/11/06	623797
				K-40	4.4272	.3992	07/11/06	623797
				PB-212	.3757	.0418	07/11/06	623797
				PB-214				
				RA-226	.5729	.0551	07/11/06	623797
				TL-208	.5496	.0351	07/11/06	623797
				12-200	.1810	.0155	07/11/06	623797
			SR 89					
					.1720	.5620	07/11/06	623797

<u>Station</u> 3205	<u>Location</u> RM-3 WB	Description 15 MILES NNW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			SR 90					
					.0143	.0491	07/11/06	623797

Table 6 RADIOACTIVITY IN APPLES WATTS BAR NUCLEAR PLANT PCI/KG - 0.037 BQ/KG (WET WT) 01/03/2006 - 12/29/2006

<u>Station</u> 2116	<u>Location</u> DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) BI-214				
				K-40	25.4094	9.2415	08/01/06	622462
				PB-214	1018.8206	114.1938	08/01/06	622462
3184	4.5 MILES N				17.7243	9.3552	08/01/06	622462
			GAMMA	SCAN (GELI) BI-214				
		2		K-40	5.7906	9.3588	08/01/06	622503
122-	· .			PB-214	1041.2817	118.8960	08/01/06	622503
					.7867	7.9437	08/01/06	622503

Table 7 RADIOACTIVITY IN CABBAGE WATTS BAR NUCLEAR PLANT PCI/KG - 0.037 BQ/KG (WET WT) 01/03/2006 - 12/29/2006

Location	Description	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
DATION IN	13.0 WILES SW	GAMMA	• •				
			K-40	49.9499	13.1468	08/01/06	622453
			PB-214	1665.1116	159.4846	08/01/06	622453
2.5 MILES NE				38.8512	9.2321	08/01/06	622453
		GAMMA	SCAN (GELI) BI-214				
			K-40	24.5079	10.4954	05/30/06	622504
			PB-214	1968.1374	151.5734	05/30/06	622504
				.0821	5.5698	05/30/06	622504
	DAYTON TN	DAYTON TN 15.0 MILES SW	DAYTON TN 15.0 MILES SW GAMMA	DAYTON TN 15.0 MILES SW GAMMA SCAN (GELI) BI-214 K-40 PB-214 2.5 MILES NE GAMMA SCAN (GELI) BI-214	DAYTON TN 15.0 MILES SW GAMMA SCAN (GELI) BI-214 49.9499 K-40 1665.1116 PB-214 38.8512 2.5 MILES NE GAMMA SCAN (GELI) BI-214 24.5079 K-40 1968.1374 PB-214	DAYTON TN 15.0 MILES SW GAMMA SCAN (GELI) BI-214 49.9499 13.1468 K-40 1665.1116 159.4846 PB-214 38.8512 9.2321 2.5 MILES NE GAMMA SCAN (GELI) BI-214 24.5079 10.4954 K-40 1968.1374 151.5734 PB-214	DAYTON TN 15.0 MILES SW GAMMA SCAN (GELI) BI-214 49.9499 13.1468 08/01/06 K-40 1665.1116 159.4846 08/01/06 PB-214 38.8512 9.2321 08/01/06 2.5 MILES NE GAMMA SCAN (GELI) BI-214 24.5079 10.4954 05/30/06 K-40 1968.1374 151.5734 05/30/06

Table 8 RADIOACTIVITY IN CORN WATTS BAR NUCLEAR PLANT PCI/KG - 0.037 BQ/KG (WET WT) 01/03/2006 - 12/29/2006

<u>Station</u> 2116	<u>Location</u> DAYTON TN	Description 15.0 MILES SW	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
2110		TO.0 MILLO OW	GAMMA SCAN (GELI) BI-214				
			K-40	16.8867	6.1683	07/25/06	622457
			PB-214	2130.1669	176.7557	07/25/06	622457
3119	NORTON FARM	4.1 MILES ESE		7.4456	5.9517	07/25/06	622457
			GAMMA SCAN (GELI) BI-214				
<u>.</u>			K-40	11.7243	6.9670	07/18/06	622500
124-		· ·	Р́В-214	2191.0111	156.4543	07/18/06	622500
				18.2757	6.0959	07/18/06	622500

Table 9 RADIOACTIVITY IN GREEN BEANS WATTS BAR NUCLEAR PLANT PCI/KG - 0.037 BQ/KG (WET WT) 01/03/2006 - 12/29/2006

<u>Station</u> 2116	Location DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
2110		15.0 MILES SW	GAMMA	SCAN (GELI) BI-214				
				K-40	25.2224	9.8197	07/11/06	622460
	· · · · · ·			PB-214	2796.2089	209.7769	07/11/06	622460
3173	2.5 MILES NE			10211	40.0211	12.0355	07/11/06	622460
			GAMMA	SCAN (GELI) BI-214				
ı				K-40	7.5371	6.1101	07/11/06	622501
125-				PB-214	1822.3306	201.2296	07/11/06	622501
					5.1603	5.4673	07/11/06	622501

Table 10RADIOACTIVITY IN POTATOESWATTS BAR NUCLEAR PLANTPCI/KG - 0.037 BQ/KG (WET WT)01/03/2006- 12/29/2006

Location	Description	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
DATION IN	13.0 WILLS SW	GAMMA					
			BI-214				
				9.4635	11.0876	07/11/06	622454
			K-40				
				3537.9281	227.9785	07/11/06	622454
			PB-212				
				8.0154	4.1533	07/11/06	622454
			PB-214				
				13.2011	7.1898	07/11/06	622454
	Location DAYTON TN		DAYTON TN 15.0 MILES SW	DAYTON TN 15.0 MILES SW GAMMA SCAN (GELI) BI-214 K-40 PB-212	DAYTON TN 15.0 MILES SW GAMMA SCAN (GELI) BI-214 9.4635 K-40 3537.9281 PB-212 8.0154 PB-214	DAYTON TN 15.0 MILES SW GAMMA SCAN (GELI) BI-214 9.4635 11.0876 K-40 3537.9281 227.9785 PB-212 8.0154 4.1533 PB-214	DAYTON TN 15.0 MILES SW GAMMA SCAN (GELI) BI-214 9.4635 11.0876 07/11/06 K-40 3537.9281 227.9785 07/11/06 PB-212 8.0154 4.1533 07/11/06

Table 11RADIOACTIVITY IN TOMATOESWATTS BAR NUCLEAR PLANTPCI/KG - 0.037 BQ/KG (WET WT)01/03/2006- 12/29/2006

<u>Station</u> 2116	<u>Location</u> DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
2110		10.0 MILLO OW	GAMMA	SCAN (GELI) BI-214				
				K-40	13.6861	7.9568	07/18/06	622461
				PB-214	1793.3513	148.8792	07/18/06	622461
3173	2.5 MILES NE				13.7462	8.1302	07/18/06	622461
			GAMMA	SCAN (GELI) BI-214				
		,		K-40	9.6080	6.6126	07/11/06	622502
·127-				PB-214	2768.7937	206.7388	07/11/06	622502
					.5869	5.7152	07/11/06	622502

Table 12 RADIOACTIVITY IN CONTIN. SURFACE WATER(Total) WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3133	<u>Location</u> TRM 529.3	Description	<u>Analysis</u>	Nuclide	Activity	<u>Error</u>	Date Collected	Lab Number
			GROSS E	BETA				
					1.9924	.6730	01/03/06	620087
					1.8184	.6618	01/31/06	620605
					2.4410	.6957	02/28/06	621108
					2.8263	.7141	03/28/06	621804
		i.			2.7532	.7067	04/25/06	622373
					2.8853	.7176	05/23/06	622977
					2.7481	.7294	06/20/06	623503
					2.7986	.7184	07/18/06	624063
					2.6400	.7126	08/15/06	624636
-128-					2.8397	.7293	09/12/06	625156
28-					3.2481	.7408	10/10/06	625670
					2.6895	.7142	11/06/06	626294
					2.4450	.6973	12/05/06	626834
			GAMMA S	SCAN (GELI) AC-228				
				10 220	3.8116	3.8871	01/31/06	620605
					11.5784	5.0511	02/28/06	621108
		•			.4083	3.8260	03/28/06	621804
					1.0945	3.2731	05/23/06	622977
					15.2693	4.8274	08/15/06	624636
					.8031	3.7847	11/06/06	626294
					4.7145	4.1940	12/05/06	626834
				BI-214				
	•				6.8755	2.7142	01/03/06	620087
					3.2686	3.2079	01/31/06	620605
					2.6618	2.9218	02/28/06	621108

<u>Station</u> 3133	<u>Location</u> TRM 529.3	Description	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				BI-214				
					1.1931	3.2818	03/28/06	621804
					4.9669	4.1186	04/25/06	622373
					1.7442	2.4069	05/23/06	622977
				,	5.9990	2.8888	07/18/06	624063
					3.7239	2.9437	08/15/06	624636
					4.8101	2.8985	09/12/06	625156
					55.0728	6.6155	10/10/06	625670
					14.0286	3.6303	11/06/06	626294
ı					9.0745	3.3404	12/05/06	626834
129-				K-40				
9-					4.3774	22.4090	01/03/06	620087
					5.5316	14.3171	02/28/06	621108
					20.9867	22.6968	03/28/06	621804
					53.1978	18.4286	04/25/06	622373
					37.8033	21.0162	06/20/06	623503
					17.8863	21.8703	07/18/06	624063
					52.3446	20.7579	08/15/06	624636
					51.4286	23.0341	09/12/06	625156
					19.2400	18.8352	10/10/06	625670
					4.9588	22.0672	11/06/06	626294
					1.1862	17.1549	12/05/06	626834
				PB-212				
					4.1060	2.2880	04/25/06	622373
					1.5007	2.3897	05/23/06	622977
					2.3871	1.9478	06/20/06	623503
					.0651	1.8462	07/18/06	624063

Table 12 RADIOACTIVITY IN CONTIN. SURFACE WATER(Total) WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

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<u>Station</u> 3133	Location TRM 529.3	Description	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	6CAN (GELI)				
				PB-212				
					7.6964	2.1748	08/15/06	624636
					6.5534	2.6159	09/12/06	625156
					.4378	1.7833	11/06/06	626294
				PB-214				
					6.7129	2.4432	01/03/06	620087
					4.0118	2.5308	01/31/06	620605
					1.4156	2.2653	03/28/06	621804
					2.9613	2.5882	04/25/06	622373
					2.0050	2.8121	05/23/06	622977
					4.5699	2.4732	06/20/06	623503
-130-					3.4062	3.4691	07/18/06	624063
					4.2903	3.1918	08/15/06	624636
					9.7727	3.3492	09/12/06	625156
					36.1775	4.6971	10/10/06	625670
					10.4789	3.2091	11/06/06	626294
					4.4656	3.0782	12/05/06	626834
				TL-208				
					.8332	1.3779	01/31/06	620605
					.4724	1.1734	03/28/06	621804
					1.9745	1.2039	08/15/06	624636
		·			2.8223	1.4177	09/12/06	625156
					.2632	1.1916	11/06/06	626294
			TRITIUM					
					110.3141	65.6854	01/03/06	620087
					107.4683	53.8646	01/31/06	620605

<u>Station</u> 3133	<u>Location</u> TRM 529.3	Description	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			TRITIUM					
					- 41.0615	64.6714	02/28/06	621108
					128.5509	89.3877	03/28/06	621804
					- 59.3351	66.6974	04/25/06	622373
					25.0726	81.0153	05/23/06	622977
					20.6611	84.1049	06/20/06	623503
					- 21.5436	83.1712	07/18/06	624063
					109.4130	82.3833	08/15/06	624636
					70.3574	82.9734	09/12/06	625156
					19.4204	81.0753	10/10/06	625670
					- 59.1877	82.9486	11/06/06	626294
131-					- 20.5398	81.3848	12/05/06	626834
3134	TRM 517:9							
			GROSS B	ETA				
					2.3533	.6974	01/03/06	620089
					2.2517	.6808	01/31/06	620607
					2.8270	.7147	02/28/06	⁻ 621110
					2.0857	.6878	03/28/06	621806
					2.3829	.6921	04/25/06	622375
					3.9856	.7949	05/23/06	622979
					2.5404	.7108	06/20/06	623505
					3.3251	.7683	07/18/06	624065
					2.4356	.7218	08/15/06	624638
					3.6798	.7682	09/12/06	625158
					3.5583	.7607	10/10/06	625672
					2.9981	.7454	11/06/06	626296

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<u>Station</u> 3134	Location TRM 517.9	Description	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS E	BETA			•	
					2.5431	.7116	12/05/06	626836
			GAMMA	SCAN (GELI)	210101		12/00/00	020000
				AC-228				
					13.5978	5.7291	01/03/06	620089
					8.8369	5.4759	01/31/06	620607
					7.3769	5.0441	02/28/06	621110
					4.9829	4.3398	04/25/06	622375
					15.1941	6.6622	05/23/06	622979
				· ·	10.3042	3.8271	07/18/06	624065
Ļ,					5.4900	3.8357	08/15/06	624638
132-				BI-214				
I					4.4790	3.1643	01/03/06	620089
					5.1193	2.4840	01/31/06	620607 .
					2.8529	2.6459	02/28/06	621110
					8.8591	4.1915	03/28/06	621806
		4			2.6942	2.8264	04/25/06	622375
					11.7267	2.4794	05/23/06	622979
					5.4428	3.4049	06/20/06	623505
	-				7.8935	4.7147	07/18/06	624065
					4.0831	2.7176	08/15/06	624638
					3.9921	3.5557	09/12/06	625158
					42.9658	5.1190	10/10/06	625672
					15.4167	3.3028	11/06/06	626296
					12.6252	4.0897	12/05/06	626836
				K-40				
					32.7140	19.2270	01/03/06	620089

<u>Station</u> 3134	Location TRM 517.9	Description	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				K-40				
					41.2099	18.6569	01/31/06	620607
					50.9467	23.2930	03/28/06	621806
					23.2283	19.8810	04/25/06	622375
					26.8516	18.9558	05/23/06	622979
					29.5080	17.8803	06/20/06	623505
					66.3825	18.8979	07/18/06	624065
					25.6158	15.8382	08/15/06	624638
					2.0106	13.1544	11/06/06	626296
				PB-212				
-133-					7.4365	2.9466	01/03/06	620089
μ					5.0993	1.9188	01/31/06	620607
					3.0013	1.9319	03/28/06	621806
					5.9535	2.7282	05/23/06	622979
-					5.8405	2.4716	06/20/06	623505
					.7461	1.7176	07/18/06	624065
					1.2346	2.5776	12/05/06	626836
				PB-214				
					1.9497	2.4949	01/03/06	620089
					2.8176	2.6596	01/31/06	620607
					1.8913	2.1857	02/28/06	621110
					5.8965	3.0541	03/28/06	621806
					6.5809	4.1655	05/23/06	622979
		·			5.9031	2.6132	06/20/06	623505
					4.8972	2.3509	07/18/06	624065
					4.6356	3.3922	09/12/06	625158
					29.5540	5.0435	10/10/06	625672

<u>Station</u> 3134	Location TRM 517.9	Description	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				PB-214				
					8.4869	3.3695	11/06/06	626296
					8.7582	4.8316	12/05/06	626836
				TL-208				
					2.0459	1.0242	01/03/06	620089
					3.1056	1.5914	01/31/06	620607
					.7836	1.2358	02/28/06	621110
					3.8822	1.2884	03/28/06	621806
					2.3104	1.1427	06/20/06	623505
					2.4703	1.2743	07/18/06	624065
<u></u>					4.2157	2.1563	10/10/06	625672
134-			TRITIUM					
				·	15.3127	65.3325	01/03/06	620089
					106.7996	54.6028	01/31/06	620607
					- 9.7417	65.1557	02/28/06	621110
					142.2102	89.6446	03/28/06	621806
					100.1766	69.8192	04/25/06	622375
					42.0338	81.2905	05/23/06	622979
					230.4518	88.1035	06/20/06	623505
					588.0648	97.0029	07/18/06	624065
					203.9411	84.2393	08/15/06	624638
					110.0276	83.6760	09/12/06	625158
					86.6453	82.2108	10/10/06	625672
					59.9567	84.7707	11/06/06	626296
					22.8221	82.0596	12/05/06	626836

<u>Station</u> 3135	Location TRM 523.1	Description	<u>Analysis</u>	Nuclide	Activity	<u>Error</u>	Date Collected	Lab Number
			GROSS I	BETA	,			
					2.1986	.6937	01/03/06	620090
					1.6430	.6698	01/31/06	620608
					2.7747	.7120	02/28/06	621111
					2.6639	.7069	03/28/06	621807
					2.2951	.6800	04/25/06 ⁻	622376
		· 、			2.7192	.7102	05/23/06	622980
		,			2.2371	.7060	06/20/06	623506
					3.4226	.7500	07/18/06	624066
					3.4817	.8170	08/15/06	624639
-135					3.5337	.7654	09/12/06	625159
Ŭ,					3.0880	.7343	10/10/06	625673
					2.1144	.6814	11/06/06	626297
					2.7772	.7131	12/05/06	626837
			GAMMA S	SCAN (GELI)				
				AC-228				
					6.2708	5.1581	03/28/06	621807
					6.2779	3.4092	04/25/06	622376
					3.4920	4.0316	06/20/06	623506
					4.2382	3.4172	08/15/06	624639
				<u>.</u>	1.6048	2.8216	10/10/06	625673
				BI-214				
					7.9875	3.2065	01/03/06	620090
					12.5916	3.2898	01/31/06	620608
					2.5025	2.4738	03/28/06	621807
					3.1198	3.0255	04/25/06	622376
					3.7873	3.3478	05/23/06	622980

Table 12 RADIOACTIVITY IN CONTIN. SURFACE WATER(Total) WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3135	Location TRM 523.1	Description	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				BI-214				
					5.3435	4.5447	06/20/06	623506
					4.5986	2.5288	08/15/06	624639
					25.3056	5.7220	09/12/06	625159
					19.0306	4.1422	10/10/06	625673
					27.4258	5.9885	11/06/06	626297
			-		.4697	2.1894	12/05/06	626837
				K-40				
					2.4530	16.2552	01/03/06	620090
					6.7006	13.7021	01/31/06	620608
-136-					9.9038	13.5144	03/28/06	621807
9					24.4839	18.3293	04/25/06	622376
					8.5211	16.0211	10/10/06	625673
		•		NO ACTIVITY				
					.0000	.0000	02/28/06	621111
					.0000	.0000	07/18/06	624066
				PB-214				
					1.2436	2.5346	01/03/06	620090
					6.2612	3.2034	01/31/06	620608
					.7783	2.0762	04/25/06	622376
					3.6962	3.0137	05/23/06	622980
					4.2936	3.0941	06/20/06	623506
					8.3837	3.4181	09/12/06	625159
					7.6473	2.3827	10/10/06	625673
					26.6633	5.0436	11/06/06	626297
					2.7937	2.5376	12/05/06	626837

<u>Station</u> 3135	Location TRM 523.1	Description	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) TL-208				
			TRITIUM	!	.6428	1.4208	12/05/06	626837
					65.8925	64.9757	01/03/06	620090
					82.3180	53.8296	01/31/06	620608
					- 54.2223	63.9174	02/28/06	621111
					95.6099	88.7883	03/28/06	621807
					113.6331	84.1438	04/25/06	622376
					19.9107	80.9336	05/23/06	622980
l Jennet					192.3074	87.2954	06/20/06	623506
137.					98.9414	85.2142	07/18/06	624066
·					203.9405	84.2390	08/15/06	624639
					172.1515	84.8575	09/12/06	625159
					- 47.8042	80.0667	10/10/06	625673
					72.2553	84.9802	11/06/06	626297
					88.2453	83.1742	12/05/06	626837

Table 13 RADIOACTIVITY IN CONTINUOUS PUBLIC WATER WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2116	<u>Location</u> DAYTON TN	Description TRM 503.8	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS	BETA				
					2.0510	.6767	01/17/06	620237
					3.3112	.7262	02/14/06	620779
					2.5299	.6946	03/14/06	621320
					1.9307	.6684	04/11/06	621993
					2.9140	.7139	05/09/06	622622
					2.8508	.7199	06/06/06	623165
					2.3791	.7192	07/04/06	623722
					2.9570	.7242	08/01/06	624298
					2.1697	.6996	08/29/06	624819
-138-					3.5324	.7650	09/26/06	625350
$^{\infty}$					2.6106	.7049	10/24/06	625896
					2.6091	.7045	11/20/06	626495
					2.1497	.6925	12/18/06	626995
			GAMMA S	SCAN (GELI)	N Contraction of the second se			
				AC-228				
					4.5231	3.3222	01/17/06	620237
					7.9420	4.6601	07/04/06	623722
					6.3055	4.3310	08/01/06	624298
					19.4990	6.2194	08/29/06	624819
					5.8863	4.4866	10/24/06	625896
				BI-214				,
					3.4961	3.3060	01/17/06	620237
					11.4471	3.8013	02/14/06	620779
					8.3492	3.2243	03/14/06	621320
					4.6474	3.0059	04/11/06	621993
					6.7453	3.0919	05/09/06	622622

Table 13 RADIOACTIVITY IN CONTINUOUS PUBLIC WATER WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2116	<u>Location</u> DAYTON TN	Description TRM 503.8	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) BI-214				
					14.6189	5.3743	06/06/06	623165
					2.6425	2.7395	07/04/06	623722
					10.0715	3.1586	08/01/06	624298
					24.4889	6.1094	08/29/06	624819
					21.4483	4.4203	09/26/06	625350
					27.5287	4.5692	10/24/06	625896
					14.6044	3.4042	11/20/06	626495
					8.7393	2.7734	12/18/06	626995
				K-40			· _ · · · · · · ·	
-139-					40.4418	17.3668	01/17/06	620237
39-					22.9789	25.8550	02/14/06	620779
•					46.8824	22.8974	04/11/06	621993
					63.0874	19.2285	06/06/06	623165
					15.5949	20.2978	07/04/06	623722
					3.4031	21.1520	08/01/06	624298
					15.4959	23.1947	08/29/06	624819
					34.1091	22.0471	09/26/06	625350
					18.2643	19.4712	10/24/06	625896
				PB-212				
					4.0281	1.9323	01/17/06	620237
					1.1903	2.4078	02/14/06	620779
					.0234	1.9766	03/14/06	621320
					6.2525	2.4311	04/11/06	621993
					2.9849	2.5021	05/09/06	622622
					5.1721	1.8979	06/06/06	623165
					.4101	1.8688	08/29/06	624819

Table 13 RADIOACTIVITY IN CONTINUOUS PUBLIC WATER WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2116	<u>Location</u> DAYTON TN	Description TRM 503.8	Analysis	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				PB-212				
					1.3412	2.4024		625350
					1.3787	1.5572	10/24/06	625896
					2.5481	2.8537	11/20/06	626495
				PB-214				
					.4626	2.4874	01/17/06	620237
					5.0326	2.6245	02/14/06	620779
					3.8461	2.5930	04/11/06	621993
	•				1.3995	2.4895	05/09/06	622622
					7.5720	3.3642	06/06/06	623165
-					2.2599	2.1733	08/01/06	624298
-140-			•		11.5823	4.5185	08/29/06	624819
					18.5709	5.8521	09/26/06	625350
					9.0416	2.4307	10/24/06	625896
					7.1462	2.5607	11/20/06	626495
					12.1334	5.0776	12/18/06	626995
				TL-208				
					1.7955	1.3547	06/06/06	623165
					1.9254	1.6593	07/04/06	623722
					3.4842	2.8664	10/24/06	625896
					1.3845	1.3845	11/20/06	626495
			TRITIUM					
							•	
					147.0178	66.1867	01/17/06	620237
					- 5.9556	64.5958	02/14/06	620779
					13.9219	64.9654	03/14/06	621320
					12.5796	81.9921	03/14/06	621376
	· .							

Table 13 RADIOACTIVITY IN CONTINUOUS PUBLIC WATER WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2116	<u>Location</u> DAYTON TN	Description TRM 503.8	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
			TRITIUM				
			· · ·	272.5896	92.1288	04/11/06	621993
				219.4753	85.2190	05/09/06	622622
	ĸ			33.2325	69.0160	06/06/06	623165
				- 99.9449	82.4831	06/06/06	623220
				816.7246	104.0559	07/04/06	623722
				151.2799	86.0411	08/01/06	624298
				202.9165	85.3846	08/29/06	624819
		•		394.4485	90.5520	08/29/06	624875
				179.5179	86.2960	09/26/06	625350
-141-				133.1914	85.7170	10/24/06	625896
1 -				- 22.2441	83.2938	11/20/06	626495
				108.2770	82.3956	12/18/06	626995
				- 5.3377	82.6805	12/18/06	627049
2140	CF INDUSTRIES	TRM 473.0					
			GROSS BETA				
				2.3007	.6687	01/18/06	620239
		,		1.5935	.6496	02/15/06	620781
				1.7108	.6580	03/15/06	621322
				2.4792	.6938	04/12/06	621996
				2.2234	.6865	05/10/06	622624
				2.3128	.6855	06/07/06	623167
				2.3164	.7153	07/05/06	623726
				1.9183	.6638	08/02/06	624300
				2.5416	.7116	08/30/06	624821
				2.7021	.7166	09/27/06	625352

Table 13 RADIOACTIVITY IN CONTINUOUS PUBLIC WATER WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2140	<u>Location</u> CF INDUSTRIES	Description TRM 473.0	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS I	BETA				
	•				2.4100	.6870	10/25/06	625898
					2.7799	.7136	11/21/06	626497
					1.9594	.6947	12/19/06	626997
			GAMMA	SCAN (GELI) AC-228			12/10/00	020001
					1.5476	3.1806	01/18/06	620239
					16.6452	5.7086	03/15/06	621322
,					5.3476	3.2315	08/02/06	624300
					9.3541	4.7753	09/27/06	625352
<u>.</u>				BI-214				
-142-					3.9571	2.6802	01/18/06	620239
1					14.7409	3.0215	02/15/06	620781
					8.3050	3.4127	03/15/06	621322
		•			1.8513	3.2537	04/12/06	621996
					9.0566	2.7902	05/10/06	622624
					2.4099	3.3146	06/07/06	623167
					7.6408	3.4960	07/05/06	623726
					4.7940	2.9284	08/02/06	624300
					16.0389	3.1896	08/30/06	624821
					17.3112	3.8783	09/27/06	625352
				/	32.2297	5.0284	10/25/06	625898
					42.9460	5.5293	11/21/06	626497
					19.8459	4.6368	12/19/06	626997
				K-40				
					3.8264	14.1726	01/18/06	620239
					87.1945	25.1894	02/15/06	620781

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Table 13 RADIOACTIVITY IN CONTINUOUS PUBLIC WATER WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2140	Location CF INDUSTRIES	Description TRM 473.0	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				K-40				
					37.4274	22.4535	03/15/06	621322
					66.2600	20.2919	05/10/06	622624
					35.4434	18.6844	07/05/06	623726
					64.8442	22.4943	08/02/06	624300
					49.3797	19.5884	08/30/06	624821
					38.7986	20.6933	09/27/06	625352
					29.7954	15.9121	10/25/06	625898
					51.8098	25.4369	11/21/06	626497
				PB-212				
-143-					3.2883	1.6112	02/15/06	620781
ц.					3.5112	1.6407	03/15/06	621322
	-			•	6.3357	2.4896	07/05/06	623726
					1.8782	1.4940	08/02/06	624300
					6.3995	1.8117	08/30/06	624821
					5.3745	2.4947	09/27/06	625352
					3.6269	2.1714	10/25/06	625898
					2.2117	1.8832	11/21/06	626497
				PB-214				
					14.0385	2.8442	02/15/06	620781
					4.3935	2.4719	03/15/06	621322
					3.7995	2.1425	05/10/06	622624
			•		6.6061	3.1655	07/05/06	623726
					4.4370	2.8733	08/02/06	624300
					7.6050	3.1122	08/30/06	624821
					8.6917	3.3458	09/27/06	625352
					20.5644	3.6551	10/25/06	625898

Table 13 RADIOACTIVITY IN CONTINUOUS PUBLIC WATER WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 2140	Location CF INDUSTRIES	<u>Description</u> TRM 473.0	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) PB-214				
					21.0610	3.2152	11/21/06	626497
					13.3705	3.0887	12/19/06	626997
				TL-208				
					2.6544	1.1766	02/15/06	620781
					1.6762	1.1385	03/15/06	621322
					1.5150	1.0763	05/10/06	622624
					3.0645	1.0951	07/05/06	623726
					3.1024	1.1757	09/27/06	625352
					2.7408	1.5940	10/25/06	625898
. 			TRITIUM					
.144-								
•					189.0468	72.2013	01/18/06	620239
					199.4335	67.2830	02/15/06	620781
					146.5225	66.9959	03/15/06	621322
					96.9223	83.3782	03/15/06	621377
					189.7409	72.1316	04/12/06	621996
					196.7577	86.1295	05/10/06	622624
					198.5895	72.6925	06/07/06	623167
					205.1186	87.4426	06/07/06	623221
`					440.8075	92.9525	07/05/06	623726
					472.0730	93.5736	08/02/06	624300
a.					329.5886	88.1849	08/30/06	624821
					363.7050	89.7886	08/30/06	624876
					219.4577	87.0928	09/27/06	625352
					150.4748	86.0281	10/25/06	625898
					168.7238	86.5710	11/21/06	626497

Table 13RADIOACTIVITY IN CONTINUOUS PUBLIC WATERWATTS BAR NUCLEAR PLANTPCI/L - 0.037 BQ/L01/03/2006 - 12/29/2006

Station		Description	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
2140	CF INDUSTRIES	TRM 473.0	TRITIUM				
		,	TTTTTOM				
				130.9718	82.8125	12/19/06	626997
	•		· · ·	5.3369	82.8317	12/19/06	627050
3133	TRM 529.3						
			GROSS BETA				
				1.9924	.6730	01/03/06	600087
				1.8184	.6618	01/31/06	620087 620605
				2.4410	.6957	02/28/06	621108
				2.8263	.7141	03/28/06	621804
1				2.7532	.7067	04/25/06	622373
-145-				2.8853	.7176	05/23/06	622977
Ŷ1				2.7481	.7294	06/20/06	623503
				2.7986	.7184	07/18/06	624063
				2.6400	.7126	08/15/06	624636
				2.8397	.7293	09/12/06	625156
				3.2481	.7408	10/10/06	625670
			· ·	2.6895	.7142	11/06/06	626294
				2.4450	.6973	12/05/06	626834
		. •	GAMMA SCAN (GELI)				
			AC-228				
				3.8116	3.8871	01/31/06	620605
				11.5784	5.0511	02/28/06	621108
				.4083	3.8260	03/28/06	621804
				1.0945	3.2731	05/23/06	622977
				15.2693	4.8274	08/15/06	624636
				.8031	3.7847	11/06/06	626294
				4.7145	4.1940	12/05/06	626834

Table 13 RADIOACTIVITY IN CONTINUOUS PUBLIC WATER WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

Station 3133	Location TRM 529.3	Description	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				BI-214				
					6.8755	2.7142	01/03/06	620087
					3.2686	3.2079	01/31/06	620605
	,				2.6618	2.9218	02/28/06	621108
					1.1931	3.2818	03/28/06	621804
					4.9669	4.1186	04/25/06	622373
					1.7442	2.4069	05/23/06	622977
					5.9990	2.8888	07/18/06	624063
				-	3.7239	2.9437	08/15/06	624636
				-	4.8101	2.8985	09/12/06	625156
-146-					55.0728	6.6155	10/10/06	625670
1 6-			-		14.0286	3.6303	11/06/06	626294
	-				9.0745	3.3404	12/05/06	626834
				K-40				
					4.3774	22.4090	01/03/06	620087
					5.5316	14.3171	02/28/06	621108
					20.9867	22.6968	03/28/06	621804
					53.1978	18.4286	04/25/06	622373
					37.8033	21.0162	06/20/06	623503
					17.8863	21.8703	07/18/06	624063
					52.3446	20.7579	08/15/06	624636
	•				51.4286	23.0341	09/12/06	625156
					19.2400	18.8352	10/10/06	625670
					4.9588	22.0672	11/06/06	626294
					1.1862	17.1549	12/05/06	626834
				PB-212				
					4.1060	2.2880	04/25/06	622373

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Table 13 RADIOACTIVITY IN CONTINUOUS PUBLIC WATER WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

140 15007 15007 15007 19478 06/20/06 19478 06/20/06 622977 19478 06/20/06 622973 19478 06/20/06 622973 19478 06/20/06 624636 65534 2.0159 09/12/06 62294 4378 1.7833 1.106/06 62087 4.0118 2.5308 01/31/06 62085 1.4156 2.6532 03/28/06 622977 1.4156 2.2653 03/28/06 622977 1.4156 2.2653 03/28/06 622977 1.4156 2.2653 03/28/06 622977 1.4156 2.2653 03/28/06 622977 1.4569 2.4732 06/20/06 622973 1.015/6 62297 1.4569 2.4732 06/20/06 62297 1.4569 1.4156 2.0500 2.8121 05/23/06 62297 1.4156 1.910/06 62297 1.010/06 62294 1.0100/06 62294 1.010/06 62294 1.010/06 625555 620 1.010 1.00	<u>Station</u> 3133	Location TRM 529.3	Description	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
1.5007 2.3897 05/23/06 622977 2.3871 1.9478 06/20/06 623503 0.651 1.8462 07/18/06 624063 7.6964 2.1748 08/15/06 624363 6.5534 2.6159 09/12/06 625156 6.373 1.106/06 626294 4.378 1.7833 11/06/06 620067 4.0118 2.5308 01/31/06 620067 1.4156 2.26513 03/28/06 621804 2.9613 2.5882 04/25/06 622977 4.5699 2.4732 06/20/06 622973 2.0050 2.8121 05/23/06 622977 4.5699 2.4732 06/20/06 622973 3.4062 3.4691 07/18/06 624636 9.7727 3.3492 09/12/06 625156 36.1775 4.6971 10/10/06 625670 10.4769 3.2091 11/06/06 626294 4.4656 3.0782 105/206 <td></td> <td></td> <td></td> <td>GAMMA</td> <td></td> <td></td> <td></td> <td></td> <td></td>				GAMMA					
19478 06/20/06 623503 .0651 1.8462 07/18/06 624636 .7.6964 2.1748 08/15/06 624636 .6.5534 2.6159 09/12/06 625156 .4378 1.7833 11/06/06 626294 PB-214 7 7 7 7 .40118 2.5308 01/31/06 620087 .40118 2.5308 01/31/06 622973 .20050 2.8121 05/20/06 622373 .20050 2.8121 05/20/06 622373 .20050 2.8121 05/20/06 622977 .45699 2.4732 06/20/06 622973 .20050 2.8121 05/20/06 622973 .20050 2.8121 05/20/06 622973 .20050 2.8121 05/20/06 622973 .20050 2.8121 05/20/06 622973 .20050 2.8121 05/20/06 622636 .20050 2.8123 3.1918 <td></td> <td>x .</td> <td></td> <td></td> <td>PB-212</td> <td></td> <td></td> <td></td> <td></td>		x .			PB-212				
-14- -14-								05/23/06	622977
147- 147-								06/20/06	623503
147- 147-							1.8462	07/18/06	624063
-147 -147							2.1748	08/15/06	624636
PB-214 6.7129 2.4432 01/03/06 620087 4.0118 2.5308 01/31/06 620605 1.4156 2.2653 03/28/06 621804 2.9613 2.5882 04/25/06 622977 4.5699 2.4732 06/20/06 622977 4.5699 2.4732 06/20/06 623503 3.4062 3.4691 07/18/06 624063 4.2903 3.1918 08/15/06 624636 9.7727 3.3492 09/12/06 625156 36.1775 4.6971 10/10/06 625670 10.4789 3.2091 11/06/06 626570 10.4789 3.2091 11/06/06 626570 626834 1.712 1.713 07/13/06 626055 62494 1.9745 1.203 04/15/06 624065 62494 1.9745 1.203 04/15/06 624065 62494 1.9745 1.203 04/15/06 624065 62494 1.9745 1.203 04/15/06 624065 62494 1.9745 1.203 04/15/06 624065 62494 1.9745 1.203 04/15/06 624065 62494 1.9745 1.203 04/15/06 624065 62494 1.9745 1.203 04/15/06 624636 62494 1.9745 1.203 04/15/06 624636 62494 1.9745 1.203 04/15/06 624636 62494 1.9745 1.203 04/15/06 624636 62494 1.9745 1.203 04/15/06 624636 62494 1.9745 1.203 04/15/06 624636 62494 1.9745 1.203 04/15/06 624636 62494 1.9745 1.203 04/15/06 624636 62494 1.974 1.974 04/12/06 625156 624636 62494 1.9745 1.203 04/15/06 624636 62494 1.9745 1.203 04/15/06 624636 62494 1.9745 1.203 04/15/06 624636 62494 1.974 1.9	,					6.5534	2.6159	09/12/06	625156
147 147 147 147 147 147 147 147	,					.4378	1.7833	11/06/06	626294
147- 147-			·		PB-214				
141 14156 2.2653 03/28/06 621804 2.9613 2.5882 04/25/06 622373 2.0050 2.8121 05/23/06 622977 4.5699 2.4732 06/20/06 623503 3.4062 3.4691 07/18/06 624063 4.2903 3.1918 08/15/06 624636 9.7727 3.3492 09/12/06 625156 36.1775 4.6971 10/10/06 622670 10.4789 3.2091 11/06/06 626294 4.4656 3.0782 12/05/06 626834 TL-208 TL-208 8.332 1.3779 01/31/06 620605 4.4724 1.1734 03/28/06 621804 1.9745 1.2039 08/15/06 624636 2.8223 1.4177 09/12/06 625156								01/03/06	620087
47 2.9613 2.5882 04/25/06 622373 2.0050 2.8121 05/23/06 622977 4.5699 2.4732 06/20/06 623503 3.4062 3.4691 07/18/06 624063 4.2903 3.1918 08/15/06 624636 9.7727 3.3492 09/12/06 625156 36.1775 4.6971 10/10/06 625670 10.4789 3.2091 11/06/06 626294 4.4656 3.0782 12/05/06 626834 TL-208 1.3779 01/31/06 620605 4.724 1.1734 03/28/06 621804 1.9745 1.2039 08/15/06 624636 2.8223 1.4177 09/12/06 625156							2.5308	01/31/06	620605
2.0050 2.8121 05/23/06 622977 4.5699 2.4732 06/20/06 623503 3.4062 3.4691 07/18/06 624063 4.2903 3.1918 08/15/06 624636 9.7727 3.3492 09/12/06 625156 36.1775 4.6971 10/10/06 626294 10.4789 3.2091 11/06/06 626294 4.4656 3.0782 12/05/06 626834 TL-208 1.3779 01/31/06 620605 .4724 1.1734 03/28/06 621804 1.9745 1.2039 08/15/06 624636 2.8223 1.4177 09/12/06 625156	-14						2.2653	03/28/06	621804
4.5699 2.4732 06/20/06 623503 3.4062 3.4691 07/18/06 624063 4.2903 3.1918 08/15/06 624636 9.7727 3.3492 09/12/06 625156 36.1775 4.6971 10/10/06 625670 10.4789 3.2091 11/06/06 626834 TL-208 TL-208	-77					2.9613	2.5882	04/25/06	622373
3.4062 3.4691 07/18/06 624063 4.2903 3.1918 08/15/06 624636 9.7727 3.3492 09/12/06 625156 36.1775 4.6971 10/10/06 625670 10.4789 3.2091 11/06/06 626294 4.4656 3.0782 12/05/06 626834 TL-208 TL-208 9 1.3779 01/31/06 620605 .4724 1.1734 03/28/06 621804 1.9745 1.2039 08/15/06 624636 2.8223 1.4177 09/12/06 625156 625156 625156						2.0050	2.8121	05/23/06	622977
4.2903 3.1918 08/15/06 624636 9.7727 3.3492 09/12/06 625156 36.1775 4.6971 10/10/06 625670 10.4789 3.2091 11/06/06 626294 4.4656 3.0782 12/05/06 626834 TL-208 .8332 1.3779 01/31/06 620605 .4724 1.1734 03/28/06 621804 1.9745 1.2039 08/15/06 624636 2.8223 1.4177 09/12/06 625156						4.5699	2.4732	06/20/06	623503
9.7727 3.3492 09/12/06 625156 36.1775 4.6971 10/10/06 625670 10.4789 3.2091 11/06/06 626294 4.4656 3.0782 12/05/06 626834 TL-208 1.3779 01/31/06 620605 .4724 1.1734 03/28/06 621804 1.9745 1.2039 08/15/06 624636 2.8223 1.4177 09/12/06 625156						3.4062	3.4691	07/18/06	624063
36.1775 4.6971 10/10/06 625670 10.4789 3.2091 11/06/06 626294 4.4656 3.0782 12/05/06 626834 TL-208 1.3779 01/31/06 620605 .4724 1.1734 03/28/06 621804 1.9745 1.2039 08/15/06 624636 2.8223 1.4177 09/12/06 625156						4.2903	3.1918	08/15/06	624636
10.4789 3.2091 11/06/06 626294 4.4656 3.0782 12/05/06 626834 TL-208 .8332 1.3779 01/31/06 620605 .4724 1.1734 03/28/06 621804 1.9745 1.2039 08/15/06 624636 2.8223 1.4177 09/12/06 625156						9.7727	3.3492	09/12/06	625156
4.4656 3.0782 12/05/06 626834 TL-208 .8332 1.3779 01/31/06 620605 .4724 1.1734 03/28/06 621804 1.9745 1.2039 08/15/06 624636 2.8223 1.4177 09/12/06 625156						36.1775	4.6971	10/10/06	625670
TL-208 .8332 1.3779 01/31/06 620605 .4724 1.1734 03/28/06 621804 1.9745 1.2039 08/15/06 624636 2.8223 1.4177 09/12/06 625156						10.4789	3.2091	11/06/06	626294
.83321.377901/31/06620605.47241.173403/28/066218041.97451.203908/15/066246362.82231.417709/12/06625156						4.4656	3.0782	12/05/06	- 626834
.47241.173403/28/066218041.97451.203908/15/066246362.82231.417709/12/06625156					TL-208				
1.97451.203908/15/066246362.82231.417709/12/06625156						.8332	1.3779	01/31/06	620605
2.8223 1.4177 09/12/06 625156							1.1734	03/28/06	621804
						1.9745	1.2039	08/15/06	624636
.2632 1.1916 11/06/06 626294						2.8223	1.4177	09/12/06	625156
						.2632	1.1916	11/06/06	626294

Table 13 RADIOACTIVITY IN CONTINUOUS PUBLIC WATER WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

Station	Location	Description	Analysis Nuclide	Activity	Error	Date Collected	Lab Number	
3133	TRM 529.3							
			TRITIUM					
				110.3141	65.6854	01/03/06	620087	
				107.4683	53.8646	01/31/06	620605	
				- 41.0615	64.6714	02/28/06	621108	
				128.5509	89.3877	03/28/06	621804	
				- 59.3351	66.6974	04/25/06	622373	
				25.0726	81.0153	05/23/06	622977	
				20.6611	84.1049	06/20/06	623503	
				- 21.5436	83.1712	07/18/06	624063	
				109.4130	82.3833	08/15/06	624636	
-148				70.3574	82.9734	09/12/06	625156	
ò				19.4204	81.0753	10/10/06	625670	
				- 59.1877	82.9486	11/06/06	626294	
				- 20.5398	81.3848	12/05/06	626834	

<u>Station</u> 3121	<u>Location</u> WBN WELL #1	Description 0.6 MILES S	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS	BETA				
•					2.0620	.8056	01/24/06	620421
					2.4704	.8346	02/21/06	620946
					3.0643	.8905	03/21/06	621529
					3.6332	.8769	04/18/06	622172
					3.5721	.8751	05/16/06	622812
					3.0049	.8569	06/13/06	623354
					3.8839	.9105	07/11/06	623908
					2.1844	.8167	08/08/06	624488
•					2.8741	.8196	09/05/06	625005
-149-					4.2320	.9776	10/03/06	625532
- 49					3.1863	.9256	10/31/06	626131
•					3.0193	.9519	11/28/06	626667
					1.5195	.6395	12/26/06	627206
			GAMMA	SCAN (GELI)	1.0100	.0000	12/20/00	021200
				AC-228				
					8.3390	5.6091	01/24/06	620421
					9.7699	4.6129	02/21/06	620946
					9.7348	5.0035	06/13/06	623354
					9.3586	4.3914	10/03/06	625532
				BI-214				
					17.0190	4.1248	01/24/06	620421
		°			4.0909	3.2126	02/21/06	620946
					15.3836	4.1562	03/21/06	621529
			•		12.5284	2.4487	04/18/06	622172
					12.0205	3.4544	05/16/06	622812
					4.6039	3.1882	06/13/06	623354

K40 63492 117313 4.092 08/08/06 62488 11.7313 4.092 09/05/06 625005 11.7313 4.092 09/05/06 625012 10.9037 4.9152 09/05/06 625121 4.9662 3.8692 10/31/06 626131 7.382 3.8704 11/28/06 626667 7.382 3.8704 11/28/06 626126 7.382 14.3814 03/21/06 621529 7.3125 14.3814 03/21/06 625052 65.310 22.0440 100306 625052 65.310 22.0440 100306 625052 65.310 22.0440 100306 625052 65.311 17.398 12/26/06 62505 65.311 17.398 12/26/06 62505 68.215 17.398 10/30/06 625532 96-214 13.3592 3.6006 11/24/06 622152 87666 2.8718 04/18/06 622172	<u>Station</u> 3121	<u>Location</u> WBN WELL #1	Description 0.6 MILES S	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
11.7313 4.092 08/08/06 624488 10.9037 4.9152 09/05/06 625005 14.4223 3.8694 10/03/06 625532 14.4223 3.8692 10/31/06 626131 7.3882 3.8704 11/28/06 626667 7.3882 3.8704 11/28/06 622096 6.3492 17.0198 02/21/06 62946 7.3125 14.3814 03/21/06 6221529 34.0180 15.8031 09/05/06 625005 65.3310 22.0440 10/03/06 625532 PB-212 1.3583 17.2988 12/26/06 6227206 PB-214 PB-214 PB-214 PB-214 PB-214 . .				GAMMA					
11.7313 4.0992 08/08/06 624488 10.9037 4.9152 09/05/06 625052 14.4223 3.5804 10/03/06 625532 4.9562 3.8692 10/31/06 626131 7.3882 3.8704 11/28/06 626667 1.1498 3.5122 12/26/06 627206 7.3125 14.3814 03/21/06 629488 7.3125 14.3814 03/21/06 622532 34.0180 15.8031 09/05/06 622505 65.3310 22.0440 10/03/06 625052 PB-212 6745 1.6817 04/18/06 622172 6745 1.6817 04/18/06 622172 9B-214 13.3592 3.6006 01/24/06 620421 8.7930 2.7411 03/21/06 622172 9.5345 3.1865 05/16/06 622172 9.5345 3.1865 05/16/06 622172 9.5345 3.1865 05/16/06 622172						7.1865	3.5141	07/11/06	623908
14.4223 3.5804 10//03/06 622532 4.9562 3.8692 10/31/06 62667 7.3882 3.8704 11/28/06 626667 7.3882 1.1498 3.5122 12/26/06 622692 6.3492 17.0198 02/21/06 620946 621529 7.3125 14.3814 03/21/06 621529 34.0180 15.8031 09/05/06 625005 65.3310 22.0440 10/03/06 625532 11.3583 17.3988 12/26/06 622172 6745 1.6817 04/18/06 622172 4.1878 2.2375 09/05/06 625005 3.4159 1.7080 10/03/06 625532 PB-214 13.3592 36006 01/24/06 622172 8.7666 2.8718 04/18/06 622172 9.5345 3.1865 05/16/06 622812 9.5345 3.1865 05/16/06 622812 9.5345 3.1865 05/16/06 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>11.7313</td><td>4.0092</td><td>08/08/06</td><td></td></t<>						11.7313	4.0092	08/08/06	
14.4223 3.5804 10/03/06 625532 4.9562 3.8692 10/31/06 626131 7.3882 3.8704 11/28/06 626667 1.1498 3.5122 12/26/06 627206 K-40 6.3492 17.0198 02/21/06 620946 7.3125 14.3814 03/21/06 625052 34.0180 15.8031 09/05/06 625005 65.3310 22.0440 10/03/06 625532 11.3583 17.3988 12/26/06 622172 PB-212 6745 1.6817 04/18/06 622172 4.1878 2.2375 09/05/06 625005 3.4159 1.7080 10/03/06 625532 PB-214 13.3592 36006 01/24/06 620421 8.7666 2.8718 04/18/06 622172 9.5345 3.1865 05/16/06 622812 9.5345 3.1865 05/16/06 622812 9.5345 3.1865 05/16/06						10.9037	4.9152	09/05/06	625005
4.9562 3.8692 10/31/06 626131 7.3882 3.8704 11/28/06 626667 1.1498 3.5122 12/26/06 620946 7.3125 14.3814 03/21/06 62505 3.40180 15.8031 09/05/06 625532 3.40180 15.8031 09/05/06 625532 65.3310 22.0440 10/03/06 625532 11.3583 17.3988 12/26/06 627206 PB-212 6745 1.6817 09/05/06 62505 6.745 1.6817 04/18/06 622172 4.1878 2.2375 09/05/06 62505 3.4159 1.7080 10/03/06 625532 PB-214 13.3592 3.6006 01/24/06 620421 8.7930 2.7411 03/21/06 622172 8.7930 2.7411 03/21/06 622172 8.7930 2.7411 03/21/06 622172 8.7930 2.7411 03/21/06 622172						14.4223	3.5804	10/03/06	
K-40 7.3882 3.8704 11/28/06 626667 K-40						4.9562	3,8692	10/31/06	
K-40 6.3492 17.0198 02/21/06 620946 7.3125 14.3814 03/21/06 621529 34.0180 15.8031 09/05/06 625005 65.3310 22.0440 10/03/06 625532 11.3583 17.3988 12/26/06 627206 PB-212 PB-214 PB-214 PB-214 . <td></td> <td></td> <td>•</td> <td></td> <td></td> <td>7.3882</td> <td>3.8704</td> <td>11/28/06</td> <td></td>			•			7.3882	3.8704	11/28/06	
K-40 6.3492 17.0198 02/21/06 620946 7.3125 14.3814 03/21/06 621529 34.0180 15.8031 09/05/06 625005 65.3310 22.0440 10/03/06 625532 11.3583 17.3988 12/26/06 625532 11.3583 17.3988 12/26/06 625055 66745 1.6817 04/18/06 622172 4.1878 2.2375 09/05/06 625035 9PB-214 13.3592 3.6006 01/24/06 6202172 8.7930 2.7411 03/21/06 621529 8.7666 2.8718 04/18/06 622172 9.5345 3.1865 05/16/06 622172 9.5345 3.1865 05/16/06 622172 9.5345 3.1865 05/16/06 622172 9.5345 3.1865 05/16/06 622172 9.5345 3.1865 05/16/06 622812 2.8424 5.6481 06/13/06 622354 6.0263 2.5076 08/08/06 6224488 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>1.1498</td><td>3.5122</td><td>12/26/06</td><td>627206</td></t<>						1.1498	3.5122	12/26/06	627206
$\frac{1}{50}$					K-40				
65.3310 22.0440 10/03/06 62532 11.3583 17.3988 12/26/06 627206 PB-212 .6745 1.6817 04/18/06 622172 4.1878 2.2375 09/05/06 625005 3.4159 1.7080 10/03/06 625532 PB-214 13.3592 3.6006 01/24/06 620421 8.7930 2.7411 03/21/06 621529 8.7666 2.8718 04/18/06 622172 9.5345 3.1865 05/16/06 622812 2.8424 5.6481 06/13/06 623354 6.0263 2.5076 08/08/06 624488 17.3064 3.9194 09/05/06 625005	r					6.3492	17.0198	02/21/06	620946
65.3310 22.0440 10/03/06 62532 11.3583 17.3988 12/26/06 627206 PB-212 .6745 1.6817 04/18/06 622172 4.1878 2.2375 09/05/06 625005 3.4159 1.7080 10/03/06 625532 PB-214 13.3592 3.6006 01/24/06 620421 8.7930 2.7411 03/21/06 621529 8.7666 2.8718 04/18/06 622172 9.5345 3.1865 05/16/06 622812 2.8424 5.6481 06/13/06 623354 6.0263 2.5076 08/08/06 624488 17.3064 3.9194 09/05/06 625005	j.						14.3814	03/21/06	621529
11.3583 17.3988 12/26/06 627206 PB-212 .6745 1.6817 04/18/06 622172 4.1878 2.2375 09/05/06 625005 3.4159 1.7080 10/03/06 625532 PB-214 13.3592 3.6006 01/24/06 620421 8.7930 2.7411 03/21/06 621529 8.7666 2.8718 04/18/06 622172 9.5345 3.1865 05/16/06 622812 2.8424 5.6481 06/13/06 623354 6.0263 2.5076 08/08/06 624488 17.3064 3.9194 09/05/06 625005	0-					34.0180	15.8031	09/05/06	625005
PB-212 .6745 1.6817 04/18/06 622172 4.1878 2.2375 09/05/06 625005 3.4159 1.7080 10/03/06 625532 PB-214 13.3592 3.6006 01/24/06 620421 8.7930 2.7411 03/21/06 621529 8.7666 2.8718 04/18/06 622172 9.5345 3.1865 05/16/06 622812 2.8424 5.6481 06/13/06 623354 6.0263 2.5076 08/08/06 624488 17.3064 3.9194 09/05/06 625005						65.3310	22.0440	10/03/06	625532
.6745 1.6817 04/18/06 622172 4.1878 2.2375 09/05/06 625005 3.4159 1.7080 10/03/06 625421 PB-214 13.3592 3.6006 01/24/06 620421 8.7930 2.7411 03/21/06 621529 8.7666 2.8718 04/18/06 622172 9.5345 3.1865 05/16/06 622812 2.8424 5.6481 06/13/06 623354 6.0263 2.5076 08/08/06 624488 17.3064 3.9194 09/05/06 625005						11.3583	17.3988	12/26/06	627206
4.1878 2.2375 09/05/06 625005 3.4159 1.7080 10/03/06 625532 PB-214 13.3592 3.6006 01/24/06 620421 8.7930 2.7411 03/21/06 621529 8.7666 2.8718 04/18/06 622172 9.5345 3.1865 05/16/06 622812 2.8424 5.6481 06/13/06 623354 6.0263 2.5076 08/08/06 624488 17.3064 3.9194 09/05/06 625005					PB-212				
3.4159 1.7080 10/03/06 625532 PB-214 13.3592 3.6006 01/24/06 620421 8.7930 2.7411 03/21/06 621529 8.7666 2.8718 04/18/06 622172 9.5345 3.1865 05/16/06 622812 2.8424 5.6481 06/13/06 623354 6.0263 2.5076 08/08/06 624488 17.3064 3.9194 09/05/06 625005								04/18/06	622172
PB-214 13.3592 3.6006 01/24/06 620421 8.7930 2.7411 03/21/06 621529 8.7666 2.8718 04/18/06 622172 9.5345 3.1865 05/16/06 622812 2.8424 5.6481 06/13/06 623354 6.0263 2.5076 08/08/06 624488 17.3064 3.9194 09/05/06 625005							2.2375	09/05/06	625005
13.35923.600601/24/066204218.79302.741103/21/066215298.76662.871804/18/066221729.53453.186505/16/066228122.84245.648106/13/066233546.02632.507608/08/0662448817.30643.919409/05/06625005						3.4159	1.7080	10/03/06	625532
8.79302.741103/21/066215298.76662.871804/18/066221729.53453.186505/16/066228122.84245.648106/13/066233546.02632.507608/08/0662448817.30643.919409/05/06625005					PB-214				
8.7666 2.8718 04/18/06 622172 9.5345 3.1865 05/16/06 622812 2.8424 5.6481 06/13/06 623354 6.0263 2.5076 08/08/06 624488 17.3064 3.9194 09/05/06 625005								01/24/06	620421
9.53453.186505/16/066228122.84245.648106/13/066233546.02632.507608/08/0662448817.30643.919409/05/06625005								03/21/06	621529
2.84245.648106/13/066233546.02632.507608/08/0662448817.30643.919409/05/06625005								04/18/06	622172
6.02632.507608/08/0662448817.30643.919409/05/06625005								05/16/06	622812
17.3064 3.9194 09/05/06 625005								06/13/06	623354
							2.5076	08/08/06	624488
9.4435 3.1700 10/03/06 625532							3.9194	09/05/06	625005
						9.4435	3.1700	10/03/06	625532

Table 14 RADIOACTIVITY IN CONTIN. WELL WATER(Total) WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3121	Location WBN WELL #1	Description 0.6 MILES S	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) PB-214				
				1 0-2 14	13.8151	4.2592	10/31/06	626131
					2.9633	3.5194	11/28/06	626667
					.5266	2.7723	12/26/06	627206
				TL-208	10200	2.1720	12/20/00	021200
		·			.5327	1.2119	02/21/06	620946
					.4640	1.2903	03/21/06	621529
					.6262	1.4100	05/16/06	622812
					3.9887	1.1779	09/05/06	625005
			TRITIUM					
<u></u>								
151-					105.5328	67.3989	01/24/06	620421
r					190.4849	67.0490	02/21/06	620946
		•			105.5581	67.5165	03/21/06	621529
					220.1771	85.4916	04/18/06	622172
					34.8671	81.9702	05/16/06	622812
					.0000	68.2961	06/13/06	623354
					116.8675	81.6290	07/11/06	623908
					251.8414	85.3487	08/08/06	624488
					149.8586	71.5967	09/05/06	625005
					124.2785	85.0971	10/03/06	625532
					227.0508	87.1079	10/31/06	626131
					139.7127	83.4272	11/28/06	626667
					144.3553	84.3922	12/26/06	627206
3125	WBN WELL #5	ONSITE N						
			GROSS E	BETA				
					1.9325	.6564	01/24/06	620422

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<u>Station</u> 3125	Location WBN WELL #5	Description ONSITE N	<u>Analysis</u>	Nuclide	Activity	<u>Error</u>	Date Collected	Lab Number
			GROSS I	BETA				
					2.4787	.7068	02/21/06	620947
					2.3227	.7019	03/21/06	621530
					1.5809	.6641	04/18/06	622173
					2.0263	.6689	05/16/06	622813
					3.1315	.7442	06/13/06	623355
					2.2099	.6971	07/11/06	623909
					2.4290	.7061	08/08/06	624489
					3.5290	.8158	09/05/06	625006
					2.7995	.7301	10/03/06	625533
-152-					2.3118	.6989	10/31/06	626132
52-					3.0406	.7446	11/28/06	626668
·					1.7358	.6864	12/26/06	627207
			GAMMA	SCAN (GELI) AC-228				
				10 220	3.1799	3.3730	02/21/06	620947
					6.7896	4.2902	05/16/06	622813
					4.1433	4.6384	08/08/06	624489
					1.2616	3.5215	09/05/06	625006
					7.9651	6.1643	12/26/06	627207
				BI-214				
	-				8.4497	3.6035	01/24/06	620422
					7.9499	2.5888	02/21/06	620947
					11.7524	5.1909	03/21/06	621530
					4.3266	3.5171	04/18/06	622173
					12.2782	3.3417	05/16/06	622813
					8.9154	2.7116	07/11/06	623909

<u>Station</u> 3125	<u>Location</u> WBN WELL #5	<u>Description</u> ONSITE N	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				BI-214				
					7.3479	4.4845	08/08/06	624489
					7.4849	3.8144	09/05/06	625006
					2.7439	2.7495	10/03/06	625533
					10.8628	3.6538	10/31/06	626132
					7.8281	4.2445	11/28/06	626668
					7.2876	3.3638	12/26/06	627207
				K-40				
					60.3134	24.5753	02/21/06	620947
					47.1063	18.4394	04/18/06	622173
-153-					79.6467	22.3604	05/16/06	622813
Ψ					22.0130	17.4593	06/13/06	623355
					28.3404	16.4758	07/11/06	623909
					5.7917	19.8674	08/08/06	624489
					92.8484	19.6427	12/26/06	627207
				PB-212			,	
					1.5767	2.1431	01/24/06	620422
					3.2712	1.9708	02/21/06	620947
					5.7427	2.8565	03/21/06	621530
					9.3874	2.4828	05/16/06	622813
					1.8761	2.5504	08/08/06	624489
					5.1168	3.1019	11/28/06	626668
					3.1422	1.8082	12/26/06	627207
				PB-214				•
					5.8560	2.2764	01/24/06	620422
					5.8804	3.5690	02/21/06	620947
					9.8411	3.2136	03/21/06	621530
								•

Station	Location	Description	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
3125	WBN WELL #5	ONSITE N						
			GAMMA S	SCAN (GELI)				
				PB-214	0.0000			
					9.9608	3.5721	05/16/06	622813
					4.1805	2.6016	07/11/06	623909
					3.6180	3.0106	08/08/06	624489
					3.1788	2.6791	09/05/06	625006
					3.1586	3.4302	10/03/06	625533
					5.4008	2.3420	10/31/06	626132
					6.4019	4.8018	11/28/06	626668
					6.5398	3.4613	12/26/06	627207
1				TL-208				
-154-					2.5213	.9482	02/21/06	620947
4					2.8851	1.6637	03/21/06	621530
					3.7826	1.7941	05/16/06	622813
					1.2983	1.4985	08/08/06	624489
					.2305	1.7413	10/03/06	625533
					1.0106	1.1201	11/28/06	626668
					3.8889	1.3846	12/26/06	627207
			TRITIUM					
					17.1386	65.4870	01/24/06	620422
			•		7298	63.9867	02/21/06	620947
					18.6754	65.9508	03/21/06	621530
					81.5472	82.8305	04/18/06	622173
					54.1553	82.2870	05/16/06	
					79.5159	69.8936	06/13/06	622813
					77.4149	80.9074		623355
					- 34.2743		07/11/06	623909
					- 34.2743	80.1060	08/08/06	624489

Table 14 RADIOACTIVITY IN CONTIN. WELL WATER(Total) WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3125	<u>Location</u> WBN WELL #5	Description ONSITE N	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
0.20		ONSITE N	TRITIUM				
				- 98.3448	67.3826	09/05/06	625006
				29.7352	83.4534	10/03/06	625533
				30.2735	83.4492	10/31/06	626132
				- 32.6505	80.4824	11/28/06	626668
				213.8314	85.8112	12/26/06	627207
3263	WBN MW-A	0.58 MILES SSE		210.0014	00.0112	12/20/00	027207
			GROSS BETA				
				2.4238	.7799	01/24/06	620432
L				1.1733	.7376	02/21/06	620957
-155-				1.1697	.7348	03/21/06	621540
1				1.8949	.7966	04/18/06	622183
				1.3793	.7521	05/16/06	622823
				2.5033	.8256	06/13/06	623365
				2.0159	.7752	07/11/06	623919
				1.4172	.7405	08/08/06	624499
		- -		1.5168	.7056	09/05/06	625016
				1.1923	.7487	10/03/06	625543
				2.6617	.8056	10/31/06	626148
				.7402	.7395	11/28/06	626678
				1.5990	.8021	12/26/06	627217
			GAMMA SCAN (GELI) AC-228		-		
			···	5.3325	5.1297	01/24/06	620432
				7.7450	5.7425	02/21/06	620957
				6.1249	4.2626	03/21/06	621540
				11.3339	5.3850	04/18/06	622183
						0 11 10/00	022100

AC-228 AC-228 BI-214 30.0073 4.0000 9.2601 3.00973 4.0000 0.1124/06 622035 21.8578 2.9103 0.3037 0.2/21/06 622133 2.15492 4.0543 0.516/06 622833 14.3039 3.9002 0.4/18/06 62283 2.09131 4.8638 0.6/13/06 62283 2.09131 4.8638 0.6/13/06 62385 0.1/11/06 623919 10.3093 2.6858 0.7/11/06 623919 10.3093 2.6858 0.7/11/06 623919 10.3093 2.6858 0.7/11/06 623919 10.3093 2.6858 0.7/11/06 623919 10.3093 2.6858 0.7/11/06 622913 10.3093 2.6858 0.7/11/06 622913 10.3096 624499 10.7060 3.6928 0.905/06 62543 10.3106 62263 10.309 1.128/06 62263 1.124/16 1.124/06 62263 1.124/06 1.124/06 62263 1.124/06 1.124/06 62263 1.124/06 1.	<u>Station</u> 3263	<u>Location</u> WBN MW-A	Description 0.58 MILES SSE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
5.4394 4.0203 05/16/06 622823 BI-214 30.0073 4.0000 01/24/06 620432 9.2801 3.0937 02/21/06 620957 21.8578 2.9103 03/21/06 622823 21.55492 4.0543 05/16/06 622823 20.9131 4.8838 06/13/06 622823 20.9131 4.8838 06/13/06 622823 20.9131 4.8838 06/13/06 622823 10.3093 2.6858 07/11/06 623919 10.3040 3.7632 06/08/06 624499 10.0304 3.6928 09/05/06 625016 18.2073 6.0537 10/03/06 625543 41.8718 5.2838 10/31/06 628432 5.8186 3.4089 11/28/06 629432 41.8718 5.2823 04/18/06 622823 2.3421 13.6958 04/18/06 622823 2.54488 15.8068 07/11/06 6292193				GAMMA S					
H-14 30.0073 4.000 01/24/06 620432 9.2801 3.0937 02/21/06 621640 14.3039 3.9002 04/18/06 622823 21.5492 4.0543 05/16/06 622823 21.5492 4.0543 05/16/06 622823 20.9131 4.8838 06/13/06 623195 10.3093 2.6658 07/11/06 623191 16.0340 3.7632 08/08/06 624499 16.0340 3.7632 08/08/06 62516 18.2073 6.0537 10/03/06 62518 34.18718 5.2383 10/31/06 62543 14.18718 5.2383 10/31/06 62543 14.18718 5.2383 10/31/06 62543 11.28418 3.5086 3.4089 11/28/06 626678 K-40 K-40 K-40 K-40 12.2411 17.4328 05/16/06 622823 25.4488 15.8968 07/11/06 62919 3.4726 13.6255 07/11/06 62919 69.4790 21.0551 08/08/06 622483 25.4488 15.8968 07/11/06 622183 12.2411 17.4328 05/16/06 622823 25.4488 15.8968 07/11/06 622183 12.2411 07.4328 05/16/06 622823 25.4488 15.8968 07/11/06 622183 25.4488 15.8968 07/11/06 623191 26.4499 0.21.051 08/08/06 624499 0.9520 14.4531 0.905/06 624499 0.9520 14.4531 0.905/06 62449 14.3926 2.0252 07/11/06 623919 14.3926 2.0252 07/11/06 623919					AC-228	5 4004	4 0000	054000	
					DI 044	5.4394	4.0203	05/16/06	622823
9.2801 3.0937 02/21/06 620957 21.8578 2.9103 03/21/06 621540 14.3039 3.9002 04/18/06 622283 21.5492 4.0543 05/16/06 622823 20.9131 4.8838 06/13/06 623919 16.0340 3.7632 08/08/06 624499 10.7080 3.6928 09/05/06 62516 18.2073 6.0537 10/03/06 625543 41.8718 5.2383 10/31/06 626148 5.8166 3.4089 11/28/06 620432 4.097 13.4727 02/21/06 620957 2.3421 13.6958 04/18/06 622833 12.2411 17.4306 622823 12.2411 17.4306 622823 69.4790 21.0651 08/08/06 624499 9.9520 14.4531 09/05/06 625016 8.810 14.4531 09/05/06 625016 9.9520 14.4531 09/05/06					DI-214	30.0073	4 0000	04/04/06	600400
1 1.8578 2.9103 0.3/21/06 621540 14.3039 3.9002 0.4/18/06 622183 21.5492 4.0543 0.5/18/06 622823 20.9131 4.8838 06/13/06 623919 10.3093 2.6858 07/11/06 623919 16.0340 3.7632 0.8/08/06 624499 10.7080 3.6928 0.9/05/06 625016 18.2073 6.0537 10/03/06 625543 41.8718 5.2383 10/31/06 626678 K-40									
14.3039 3.9002 04/18/06 622183 21.5492 4.0543 05/16/06 622823 20.9131 4.8838 06/13/06 623919 10.3093 2.6858 07/11/06 623919 16.0340 3.7632 08/08/06 6224499 10.7080 3.6928 09/05/06 625016 18.2073 6.0537 10/03/06 625643 41.8718 5.2383 10/31/06 626148 5.8186 3.4089 11/28/06 622057 2.3421 13.6285 01/24/06 620577 2.3421 13.6958 04/18/06 622823 12.2411 17.4328 05/16/06 622823 25.4488 15.8968 07/11/06 62319 69.4790 21.0651 08/08/06 624499 9.9520 14.4531 09/05/06 622823 69.4790 21.0651 08/08/06 62419 9.9520 14.4531 09/05/06 62516 9.9520 14.4531 09/05/06 62516 9.9520 14.4531									
+ + + + + + + + + + + + + +									
10.0093 2.6858 06/13/06 623365 10.3093 2.6858 07/11/06 623919 16.0340 3.7632 08/08/06 624499 10.7080 3.6928 09/05/06 625016 18.2073 6.0537 10/03/06 625543 11.8718 5.2383 10/31/06 626148 5.8186 3.4089 11/28/06 62618 5.8186 3.4089 11/28/06 62618 1.2411 17.4328 01/24/06 620432 4.097 13.4727 02/21/06 620957 2.3421 13.6958 01/124/06 622183 12.2411 17.4328 05/16/06 622183 12.2411 17.4328 05/16/06 622183 12.2411 17.4328 05/16/06 62283 12.2411 07.4328 05/16/06 62283 12.2413 09/05/06 624499 9.9520 14.4531 09/05/06 62618 12.2414 07.433 09/05/06 62618 12.2414 07.433 09/05/06 62618 12.2414 07.433 09/05/06 62618 13.2428 07.11/06 623919 14.4531 09/05/06 62618 14.4531 09/05/06 62639 14.4531 09									
10.3093 2.6858 07/11/06 623919 16.0340 3.7632 08/08/06 624499 10.7080 3.6928 09/05/06 625016 18.2073 6.0537 10//3/06 62543 41.8718 5.2383 10/31/06 626148 5.2383 10/31/06 626148 5.2383 10/31/06 626148 5.2383 10/31/06 620432 4.097 13.4727 02/21/06 620957 2.3421 13.6958 04/18/06 622183 12.2411 17.4328 05/16/06 622823 12.2411 17.4328 05/16/06 622823 25.4488 15.8968 07/11/06 623919 69.4790 21.0651 08/08/06 624499 9.9520 14.4531 09/05/06 625016 3.83510 17.4993 10/31/06 623919 4.3926 2.0252 07/11/06 623919									
160340 3.7632 08/08/06 624499 10.7080 3.6928 09/05/06 625016 18.2073 6.0537 10/03/06 62543 41.8718 5.2383 10/31/06 626148 5.8186 3.4089 11/28/06 626078 K-40 K-40 K-40 3.4726 01/24/06 620432 4.097 13.4727 02/21/06 620957 2.3421 13.6958 04/18/06 622823 25.4488 15.8968 07/11/06 623919 69.4790 21.0651 08/08/06 624499 9.9520 14.4531 09/05/06 625016 38.3510 17.4993 10/31/06 623148 PB-212 4.3926 2.0252 07/11/06 623919									
18.2073 6.0537 10/03/06 625543 41.8718 5.2383 10/31/06 626148 5.8186 3.4089 11/28/06 626678 K-40	,								
18.2073 6.0537 10/03/06 625543 41.8718 5.2383 10/31/06 626148 5.8186 3.4089 11/28/06 626678 K-40	і́н Сл						3.7632	08/08/06	624499
18.2073 6.0537 10/03/06 625543 41.8718 5.2383 10/31/06 626148 5.8186 3.4089 11/28/06 626678 K-40	ě.					10.7080	3.6928	09/05/06	625016
K-40 5.8186 3.4089 11/28/06 626678 K-40 3.4786 13.6285 01/24/06 620432 .4097 13.4727 02/21/06 620957 .2.3421 13.6958 04/18/06 622183 .12.2411 17.4328 05/16/06 622823 .25.4488 15.8968 07/11/06 623919 .69.4790 21.0651 08/08/06 624499 .9.9520 14.4531 09/05/06 625016 .83.3510 17.4993 10/31/06 626148 .78.221 4.3926 2.0252 07/11/06 623919						18.2073	6.0537	10/03/06	625543
K-40 3.4786 13.6285 01/24/06 620432 .4097 13.4727 02/21/06 620957 .2.3421 13.6958 04/18/06 622183 .12.2411 17.4328 05/16/06 622823 .25.4488 15.8968 07/11/06 623919 .69.4790 21.0651 08/08/06 624499 .9.9520 14.4531 09/05/06 625016 .38.3510 17.4993 10/31/06 626148 PB-212 4.3926 2.0252 07/11/06 623919						41.8718	5.2383	10/31/06	626148
3.478613.628501/24/06620432.409713.472702/21/066209572.342113.695804/18/0662218312.241117.432805/16/0662282325.448815.896807/11/0662391969.479021.065108/08/066244999.952014.453109/05/0662501638.351017.499310/31/06626148PB-2124.39262.025207/11/06623919						5.8186	3.4089	11/28/06	626678
.409713.472702/21/066209572.342113.695804/18/0662218312.241117.432805/16/0662282325.448815.896807/11/0662391969.479021.065108/08/066244999.952014.453109/05/0662501638.351017.499310/31/06626148PB-2124.39262.025207/11/06623919					K-40				
2.3421 13.6958 04/18/06 622183 12.2411 17.4328 05/16/06 622823 25.4488 15.8968 07/11/06 623919 69.4790 21.0651 08/08/06 624499 9.9520 14.4531 09/05/06 625016 38.3510 17.4993 10/31/06 626148 PB-212 4.3926 2.0252 07/11/06 623919						3.4786	13.6285	01/24/06	620432
12.2411 17.4328 05/16/06 622823 25.4488 15.8968 07/11/06 623919 69.4790 21.0651 08/08/06 624499 9.9520 14.4531 09/05/06 625016 38.3510 17.4993 10/31/06 626148 PB-212 4.3926 2.0252 07/11/06 623919						.4097	13.4727	02/21/06	620957
12.2411 17.4328 05/16/06 622823 25.4488 15.8968 07/11/06 623919 69.4790 21.0651 08/08/06 624499 9.9520 14.4531 09/05/06 625016 38.3510 17.4993 10/31/06 626148 PB-212 4.3926 2.0252 07/11/06 623919						2.3421	13.6958	04/18/06	622183
25.4488 15.8968 07/11/06 623919 69.4790 21.0651 08/08/06 624499 9.9520 14.4531 09/05/06 625016 38.3510 17.4993 10/31/06 626148 PB-212 4.3926 2.0252 07/11/06 623919			,			12.2411	17.4328	05/16/06	
69.4790 21.0651 08/08/06 624499 9.9520 14.4531 09/05/06 625016 38.3510 17.4993 10/31/06 626148 PB-212 4.3926 2.0252 07/11/06 623919						25.4488	15.8968	07/11/06	
9.9520 14.4531 09/05/06 625016 38.3510 17.4993 10/31/06 626148 PB-212 4.3926 2.0252 07/11/06 623919						69.4790			
38.3510 17.4993 10/31/06 626148 PB-212 4.3926 2.0252 07/11/06 623919									
PB-212 4.3926 2.0252 07/11/06 623919									
4.3926 2.0252 07/11/06 623919					PB-212	· - · ·			020110
			•			4.3926	2.0252	07/11/06	623919
						6.2608	1.9376	08/08/06	624499

Table 14 RADIOACTIVITY IN CONTIN. WELL WATER(Total) WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3263	<u>Location</u> WBN MW-A	Description 0.58 MILES SSE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				PB-212				
					3.7636	1.7854	10/03/06	625543
					4.7565	1.7364	10/31/06	626148
				PB-214				•
				•	35.3223	4.3888	01/24/06	620432
					9.9174	3.5853	02/21/06	620957
					17.2777	3.2270	03/21/06	621540
					13.9274	3.2849	04/18/06	622183
					16.9111	3.6552	05/16/06	622823
					9.2344	4.4739	06/13/06	623365
<u> </u>					8.8676	3.7047	07/11/06	623919
157-					14.0767	3.4730	08/08/06	624499
					7.3775	3.4784	09/05/06	625016
					15.7976	4.2331	10/03/06	625543
					27.8773	5.2361	10/31/06	626148
					9.5241	2.4218	11/28/06	626678
					8.2701	3.9111	12/26/06	627217
				TL-208	•			
					1.8165	.9880	07/11/06	623919
					3.6055	1.6270	10/31/06	626148
			TRITIUM					
					29.2821	66.7487	01/24/06	620432
					65.6843	64.9062	02/21/06	620957
				·	62.7490	66.5604	03/21/06	621540
					- 163.0937	79.4138	04/18/06	622183
					- 106.8264	79.9648	05/16/06	622823

<u>Station</u> 3263	<u>Location</u> WBN MW-A	Description 0.58 MILES SSE	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
			TRITIUM				
				4347.8209	251.9722	06/13/06	623365
				- 46.1514	78.9287	07/11/06	623919
				87.1756	82.0655	08/08/06	624499
				- 44.8237	68.1208	09/05/06	625016
				75.4819	84.2194	10/03/06	625543
				50.7079	83.7821	10/31/06	626148
				61.5040	81.9909	11/28/06	626678
				250.1123	86.5985	12/26/06	627217
3264	WBN MW-B	0.45 MILES SSE					
-158-			GROSS BETA				
-8-				0.0000	7007		
				3.6023	.7967	01/24/06	620433
				4.1454	.9326	02/21/06	620958
				9.6452	1.2369	03/21/06	621541
				5.4044	.9835	04/18/06	622184
				4.5641	.9523	05/16/06	622824
				4.5123	.9411	06/13/06	623366
				2.8806	.8542	07/11/06	623920
				3.5252	.8906	08/08/06	624500
				3.2330	.8886	10/03/06	625544
				2.2074	.8255	10/31/06	626149
				2.3327	.8501	11/28/06	626679
				2.5417	.8584	12/26/06	627218
			GAMMA SCAN (GELI) AC-228				
				12.5829	3.6761	01/24/06	620433
				24.3452	7.0311	06/13/06	623366

<u>Station</u> 3264	Location WBN MW-B	Description 0.45 MILES SSE	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				AC-228	· ·			
					1.8909	3.6536	07/11/06	623920
					5.3742	5.1249	11/28/06	626679
				BI-214				
					38.4854	4.9624	01/24/06	620433
					6.7911	4.9622	02/21/06	620958
					18.1689	3.8080	03/21/06	621541
					8.2674	3.2446	04/18/06	622184
					6.8556	4.6733	05/16/06	622824
					40.7008	4.7901	06/13/06	623366
<u></u>					2.2199	3.1191	07/11/06	623920
-159-					4.0482	3.7902	08/08/06	624500
r					7.4952	3.5447	10/03/06	625544
					44.6638	5.2917	10/31/06	626149
					7.5562	3.0297	11/28/06	626679
					2.0716	3.6853	12/26/06	627218
				K-40				
					77.2927	25.4316	01/24/06	620433
					4.0740	18.6509	03/21/06	621541
					21.5640	19.8995	04/18/06	622184
					337.4636	36.5061	06/13/06	623366
					3.3887	18.2541	07/11/06	623920
					3.2644	15.0812	08/08/06	624500
					42.5185	16.4945	10/03/06	625544
					24.3047	14.6360	12/26/06	627218
				PB-212				
					7.1301	2.7523	01/24/06	620433

<u>Station</u> 3264	<u>Location</u> WBN MW-B	Description 0.45 MILES SSE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) PB-212				
					1.7042	2.7244	03/21/06	621541
		• ·			9.4458	3.5241	06/13/06	623366
					.1830	2.6401	11/28/06	626679
				PB-214				
					40.5574	4.2812	01/24/06	620433
					4.3995	2.7802	02/21/06	620958
					9.8435	3.2484	03/21/06	621541
					7.9617	3.8538	04/18/06	622184
					31.5408	3.9627	06/13/06	623366
-10					.7891	4.5686	07/11/06	623920
160-					2.8395	3.6572	08/08/06	624500
•					11.0072	3.2765	10/03/06	625544
					31.5371	6.4474	10/31/06	626149
					6.5517	3.1387	12/26/06	627218
				TL-208	-			
					2.2608	.8601	01/24/06	620433
					·.1117	1.3203	03/21/06	621541
					4.4227	1.6526	06/13/06	623366
			TRITIUM					
		2			12590.0937	650.6867	01/24/06	620433
					10292.0102	535.6509	02/21/06	620958
				C	9889.5610	516.0191	03/21/06	621541
					9257.0610	495.3738	04/18/06	622184
					9836.9450	524.1516	05/16/06	622824
					9459.1250	504.4649	06/13/06	623366
					0100.1200	007.7070		020000

Table 14 RADIOACTIVITY IN CONTIN. WELL WATER(Total) WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3264	<u>Location</u> WBN MW-B	Description 0.45 MILES SSE	Analysis	Nuclide	Activity	Error	Date Collected	Lab Number
			TRITIUM					
					10260.5126	545.0197	07/11/06	623920
					11032.5734	583.5940	08/08/06	624500
					10125.2631	539.4441	10/03/06	625544
					8976.8216	482.3053	10/31/06	626149
					8869.4954	476.7351	11/28/06	626679
					9928.0752	529.8198	12/26/06	627218
3265	WBN MW-C	0.25 MILES ESE						021210
			GROSS E	BETA				
<u>1</u>					2.1913	.6693	01/24/06	620434
161-					3.0632	.7617	02/21/06	620959
Т.					12.1455	1.2780	03/21/06	621542
					6.1769	.9772	04/18/06	622185
					3.1846	.7919	05/16/06	622825
					4.1292	.8325	06/13/06	623367
					4.1948	.8460	07/11/06	623921
					3.9999	.8247	08/08/06	624501
					5.1688	.8992	09/05/06	625018
					3.9172	.8277	10/03/06	625545
					2.1310	.8205	10/31/06	626150
					1.8094	.7165	11/28/06	626680
					.7753	.6606	12/26/06	627219
			GAMMA S	SCAN (GELI) AC-228				
					3.4383	3.5950	01/24/06	620434
					10.1400	4.5802	04/18/06	622185
					10.3969	5.0143	06/13/06	623367
	·						00,10,00	020001

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<u>Station</u> 3265	<u>Location</u> WBN MW-C	-	Description 0.25 MILES ESE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
				GAMMA	SCAN (GELI)				
					AC-228				
						3.9280	4.6112	10/31/06	626150
	·				BI-214				
						16.9833	3.0592	01/24/06	620434
						.4583	2.4716	02/21/06	620959
						14.3542	3.8319	03/21/06	621542
						7.7546	2.6792	04/18/06	622185
						7.0277	3.6897	05/16/06	622825
						7.0847	3.0717	06/13/06	623367
						4.3593	3.4879	08/08/06	624501
-			,			2.1292	2.7932	09/05/06	625018
162-						12.5531	3.4475	10/03/06	625545
						30.3034	4.0977	10/31/06	626150
						3.0294	2.9480	11/28/06	626680
						10.0528	3.3245	12/26/06	627219
					K-40				
						11.4538	16.1429	02/21/06	620959
						65.2695	20.3132	03/21/06	621542
						51.3299	22.1134	04/18/06	622185
						83.4825	20.2792	06/13/06	623367
						1.7009	16.2405	08/08/06	624501
			•			83.7850	24.7610	10/03/06	625545
						34.1896	19.9199	10/31/06	626150
						28.9537	18.3374	11/28/06	626680
						18.1557	17.4762	12/26/06	627219
					PB-212				
					`	5.1164	1.9783 •	03/21/06	621542

<u>Station</u> 3265	<u>Location</u> WBN MW-C	Description 0.25 MILES ESE	Analysis	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA :	SCAN (GELI) PB-212				
					2.0351	2.1300	04/18/06	622185
					3.6395	2.6234	06/13/06	623367
					1.5848	1.6781	10/31/06	626150
					2.2258	2.0962	11/28/06	626680
	<i>.</i>			PB-214				
					5.7731	2.9085	01/24/06	620434
					.9177	2.0778	02/21/06	620959
					11.2371	3.5278	03/21/06	621542
					5.9570	2.7814	04/18/06	622185
-163-					7.2280	3.8627	05/16/06	622825
Ϋ́Υ					11.6542	3.3944	06/13/06	623367
					3.3110	3.7886	07/11/06	623921
					1.5803	2.7479	08/08/06	624501
					3.5527	3.4436	09/05/06	625018
					11.9822	2.8325	10/03/06	625545
					20.3219	4.3456	10/31/06	626150
					2.8900	3.5444	11/28/06	626680
					8.7745	2.4183	12/26/06	627219
				TL-208				
					2.1961	1.2217	03/21/06	621542
					3.6262	1.2137	06/13/06	623367
					.5614	1.1590	09/05/06	625018
			TRITIUM					
					7673.8685	406.2392	01/24/06	620434
					5659.0337	306.1606	02/21/06	620959

<u>Station</u> 3265	<u>Location</u> WBN MW-C	Description	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
3203		0.25 MILES ESE	TRITIUM				
				8406.0120	442.2258	03/21/06	621542
	•			7055.2332	386.6168	04/18/06	622185
				6161.7721	342.8082	05/16/06	622825
				6327.1437	349.0405	06/13/06	623367
				6340.5446	351.2285	07/11/06	623921
				5814.6556	325.7748	08/08/06	624501
				5940.7774	326.8600	09/05/06	625018
				4576.9666	267.0490	10/03/06	625545
				3613.1078	221.1338	10/31/06	626150
<u>_</u>				2908.8996	187.7394	11/28/06	626680
-164-	~			2453.2531	167.8742	12/26/06	627219
3266	WBN MW-D	0.40 MILES SSE					
			GROSS BETA				
				2.2629	.9831	05/16/06	622826
				2.4433	.8668	06/13/06	623368
				2.6424	.8518	07/11/06	623922
				2.3224	.8038	08/08/06	624502
				3.7344	.9153	09/05/06	625019
				3.7929	.8766	10/03/06	625546
				2.9766	.7768	10/31/06	626151
				3.6787	.9150	11/28/06	626681
				1.3805	.7866	12/26/06	627220
			GAMMA SCAN (GELI) AC-228				
				3.7182	3.4258	06/13/06	623368

Tennessee Valley Authority Table 14 RADIOACTIVITY IN CONTIN. WELL WATER(Total) WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L 01/03/2006 - 12/29/2006

<u>Station</u> 3266	<u>Location</u> WBN MW-D	Description 0.40 MILES SSE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
		`		BI-214				
					13.5936	3.6325	05/16/06	622826
					.2391	2.3584	06/13/06	623368
					.6583	2.7743	07/11/06	623922
					6.6213	1.4740	08/08/06	624502
					5.9339	2.8172	09/05/06	625019
					12.6942	4.1675	10/03/06	625546
					24.4157	4.3170	10/31/06	626151
					.1233	2.7943	11/28/06	626681
					4.0917	3.1092	12/26/06	627220
-1				K-40				
-165-					61.9935	21.3194	05/16/06	622826
					.2187	13.6031	06/13/06	623368
					10.0073	13.0623	07/11/06	623922
					6.6222	8.3281	08/08/06	624502
					19.8510	16.0456	09/05/06	625019
					67.2298	20.5300	10/31/06	626151
					10.7339	14.9931	11/28/06	626681
				PB-212				
					3.8812	2.2148	05/16/06	622826
					5.5445	1.8766	10/31/06	ູ626151
				PB-214				
					14.9071	2.4954	05/16/06	622826
					.9681	2.1489	06/13/06	623368
					3.3922	1.0112	08/08/06	624502
					⁻ 3.4907	2.7546	09/05/06	625019
					10.3603	3.0098	10/03/06	625546

<u>Station</u> 3266	<u>Location</u> WBN MW-D	Description 0.40 MILES SSE	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				PB-214				
					17.1834	3.7002	10/31/06	626151
				TL-208				
		,			1.9927	1.1266	05/16/06	622826
					.8260	.4508	08/08/06	624502
					2.9303	.9292	10/31/06	626151
			TRITIUM					
					8871.8834	476.2945	05/16/06	622826
		e.			5034.8770	285.4875	06/13/06	623368
<u>.</u>					3583.4283	218.1355	07/11/06	623922
-166-					3385.6896	209.2606	08/08/06	624502
Ĩ					2825.2263	176.4401	09/05/06	625019
					1973.9657	147.3900	10/03/06	625546
					1973.0650	147.2201	10/31/06	626151
					1766.9153	137.4697	11/28/06	626681
					2863.9451	186.3956	12/26/06	627220

<u>Station</u> 3115	<u>Location</u> LAYMAN FARM	Description 1.3 MILES SSW	Analysis	Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS E	BETA				
					1.4826	.6161	01/25/06	620420
					1.1993	.6259	02/22/06	620945
					1.0899	.6210	03/22/06	621528
					.9250	.6122	04/19/06	622171
					.6478	.5958	05/16/06	622811
					1.6855	.6483	06/14/06	623353
					1.3133	.6339	07/12/06	623907
					2.1287	.6716	08/09/06	624487
					2.1563	.6653	09/06/06	625004
-16					.9724	.6118	10/04/06	625531
167-					1.3607	.6340	10/31/06	626130
					1.5686	.6394	11/29/06	626666
					.2650	.5761	12/27/06	627205
			GAMMA S	SCAN (GELI)				
				AC-228				
					4.2213	3.5473	12/27/06	627205
				BI-214	044.0700			
					244.2793	14.7506	01/25/06	620420
					215.4515	16.6626	02/22/06	620945
					217.3792	13.7860	03/22/06	621528
					192.6091	11.8398	04/19/06	622171
	,				248.6177	16.3642	05/16/06	622811
					213.4841	14.2916	06/14/06	623353
					137.4584	10.9242	07/12/06	623907
					197.4029	13.7777	08/09/06	624487
					231.4918	14.2953	09/06/06	625004

<u>Station</u> 3115	<u>Location</u> LAYMAN FARM	Description 1.3 MILES SSW	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) BI-214				
				۰.	231.6905	15.6403	10/04/06	625531
					200.2927	14.5311	10/31/06	626130
					188.6648	11.0070	11/29/06	626666
					36.7473	5.2235	12/27/06	627205
				K-40	· .			
					38.4044	25.3933	03/22/06	621528
					32.4682	20.4011	04/19/06	622171
					43.0789	21.4339	06/14/06	623353
					27.0962	29.7287	09/06/06	625004
<u></u>					20.5787	20.5065	10/04/06	625531
-168-					65.8761	22.8764	11/29/06	626666
r					22.8421	15.8570	12/27/06	627205
				PB-212			-	
					.1855	2.1784	09/06/06	625004
					1.0368	2.3093	10/04/06	625531
					5.6947	1.7821	11/29/06	626666
				PB-214				
					239.2929	17.6987	01/25/06	620420
					199.0501	13.2252	02/22/06	620945
					221.5495	12.3749	03/22/06	621528
					194.9258	63.3486	04/19/06	622171
					244.1981	14.1275	05/16/06	622811
					205.3621	11.3549	06/14/06	623353
					130.1853	10.3058	07/12/06	623907
					183.1199	12.7658	08/09/06	624487
					227.3624	12.5177	09/06/06	625004
				,				

<u>Station</u> 3115	Location LAYMAN FARM	Description 1.3 MILES SSW	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
	·			PB-214	040.0000	44.0700	40/04/00	005504
					213.2608	14.2789	10/04/06	625531
					194.6108	13.8737	10/31/06	626130
					191.1661	11.9062	11/29/06	626666
					37.1759	4.3637	12/27/06	627205
				TL-208				
					2.2922	1.3106	06/14/06	623353
					2.4058	1.7630	09/06/06	625004
			TRITIUM					
					98.3493	66.6754	01/25/06	620420
-169-					- 53.2724	63.3675	02/22/06	620945
Ŷ					46.1850	65.7109	03/22/06	621528
					58.2858	81.4667	04/19/06	622171
					42.0769	81.3737	05/16/06	622811
					14.6662	68.5689	06/14/06	623353
					41.6385	67.7239	07/12/06	623907
`				٠	- 24.5849	80.2365	08/09/06	624487
					- 30.0784	83.8159	09/06/06	625004
					57.9395	83.9102	10/04/06	625531
	_				- 24.8433	81.7989	10/31/06	626130
					- 9.1107	62.6091	11/29/06	626666
					137.9314	86.6928	12/27/06	627205

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Table 16 RADIOACTIVITY IN COMMERCIAL FISH WATTS BAR NUCLEAR PLANT PCI/GM - 0.037 BQ/G (DRY WEIGHT) 01/03/2006 - 12/29/2006

<u>Station</u> 2160	<u>Location</u> CHICKAMAUGA RES	Description	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
2100	CHICKAMAUGA RES	TRM 471-530	GAMMA SCAN (GELI)				
			BI-214				
				.0753	.0278	05/10/06	622478
				.1421	.0151	11/02/06	626076
			CS-137				
				.0338	.0051	05/10/06	622478
			K-40				
				13.1485	.6265	05/10/06	622478
				10.2141	.5413	11/02/06	626076
			PB-214				
				.0505	.0121	05/10/06	622478
				.1057	.0128	11/02/06	626076
170 2161	WATTS BAR RES	TRM 530-602					
ſ			GAMMA SCAN (GELI)				
			BI-214	0.400		0.5 10.0 10.0	
		×.*		.0402	.0132	05/09/06	622481
				.2463	.0258	11/03/06	626079
			CS-137	4070	0400	05/00/00	000404
				.1076	.0102	05/09/06	622481
			K 40	.0535	.0076	11/03/06	626079
			K-40	11.6424	.6084	05/09/06	622481
			PB-214	14.3511	.7665	11/03/06	626079
			FD-214	.0397	.0099	05/09/06	622481
				.2166	.0261	11/03/06	626079
				.2100	.0201	11/05/00	020013

Table 16 RADIOACTIVITY IN COMMERCIAL FISH WATTS BAR NUCLEAR PLANT PCI/GM - 0.037 BQ/G (DRY WEIGHT) 01/03/2006 - 12/29/2006

<u>Station</u> 3261	Location DOWNSTREAM STATION 1	Description DOWNSTREAM	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				BI-214				
					.0875	.0122	05/09/06	622531
					.0596	.0109	10/31/06	626146
				CS-137				
					.0338	.0072	05/09/06	622531
				K-40				
					10.8064	5201	05/09/06	622531
					10.5301	.6114	10/31/06	626146
				PB-212				
					.0039	.0043	10/31/06	626146
1 ••••••				PB-214				
71					.0572	.0110	05/09/06	622531
ı					.0599	.0101	10/31/06	626146
				TL-208				
					.0054	.0028	05/09/06	622531
	,							

Table 17 RADIOACTIVITY IN GAME FISH WATTS BAR NUCLEAR PLANT PCI/GM - 0.037 BQ/G (DRY WEIGHT) 01/03/2006 - 12/29/2006

	<u>Station</u> 2160	Location CHICKAMAUGA RES	<u>Description</u> TRM 471-530	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number	
	2100	CHICKAMADGA NES	TRW 47 1-550	GAMMA	SCAN (GELI)					
				Cr (mini) (BI-214					
						.0409	.0130	05/10/06	622477	
						.0692	.0160	11/02/06	626075	
					CS-137					
						.0469	.0053	05/10/06	622477	
						.0190	.0049	11/02/06	626075	
					K-40					
						17.1434	.8337	05/10/06	622477	
						12.9278	.6524	11/02/06	626075	
					PB-214					
7						.0416	.0121	05/10/06	622477	
3	0404					.0750	.0111	11/02/06	626075	
	2161	WATTS BAR RES	TRM 530-602	~~~~						
				GAMMA	SCAN (GELI) BI-214	۰.				
						.0344	.0081	05/09/06	622480	
						.0885	.0139	11/03/06	626078	
					CS-137					
						.1007	.0121	05/09/06	622480	
						.0589	.0081	11/03/06	626078	
					K-40	40.0070				
						13.8270	.7351	05/09/06	622480	
					DD 040	12.9622	.6612	11/03/06	626078	
					PB-212	.0073	0000	05/00/00	000400	
					PB-214	.0073	.0082	05/09/06	622480	
					FD-214	.0272	.0107	05/09/06	622480	
						.0851	.0107	11/03/06	626078	
						.0001	.0124	11/03/00	020070	

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Table 17 RADIOACTIVITY IN GAME FISH WATTS BAR NUCLEAR PLANT PCI/GM - 0.037 BQ/G (DRY WEIGHT) 01/03/2006 - 12/29/2006

<u>Station</u> 3261	Location DOWNSTREAM STATION 1	Description DOWNSTREAM	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) BI-214				
				01214	.0961	.0202	05/09/06	622530
					.2372	.0242	10/31/06	626145
				CS-137				020110
					.0475	.0087	05/09/06	622530
					.0473	.0092	10/31/06	626145
				K-40				
					14.8968	.8222	05/09/06	622530
					13.0170	.6982	10/31/06	626145
				PB-214				
<u></u>					.1086	.0169	05/09/06	622530
-173-					.2055	.0277	10/31/06	626145

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Table 18 RADIOACTIVITY IN SHORELINE SEDIMENT WATTS BAR NUCLEAR PLANT PCI/GM - 0.037 BQ/G (DRY WEIGHT) 01/03/2006 - 12/29/2006

<u>Station</u> 3191	Location WATTS BAR RESORT	Description TRM 530	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				AC-228				
					.0686	.0216	05/02/06	622520
					.0660	.0119	10/31/06	626133
				BE-7				
					.6046	.0609	05/02/06	622520
					.1139	.0248	10/31/06	626133
				BI-214	1000	0.4.0.4		
					.1089	.0121	05/02/06	622520
				K 40	.1073	.0122	10/31/06	626133
		,		K-40	.3557	.0787	05/02/06	000500
-174-					.2677	.0787	10/31/06	622520
4				PB-212	.2017	.0012	10/31/00	626133
				F D-212	.0614	.0102	05/02/06	622520
					.0512	.0074	10/31/06	626133
				PB-214			10/0 1/00	020100
					.1228	.0105	05/02/06	622520
					.1103	.0093	10/31/06	626133
				RA-226				
					.1073	.0122	10/31/06	626133
				TL-208				
					.0283	.0046	05/02/06	622520
					.0200	.0035	10/31/06	626133
3193	COTTON PORT MARINA	TRM 513						
				CAN (GELI)				
				AC-228	1.4383	0027	05/02/06	600500
					1.3333	.0937	05/03/06	622522
					1.0000	.0897	11/01/06	626134
						•		

Table 18 RADIOACTIVITY IN SHORELINE SEDIMENT WATTS BAR NUCLEAR PLANT PCI/GM - 0.037 BQ/G (DRY WEIGHT) 01/03/2006 - 12/29/2006

<u>Station</u> 3193	Location COTTON PORT MARINA	Description TRM 513	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				BE-7				
		•			.2654	.0373	05/03/06	622522
					.1856	.0632	11/01/06	626134
				BI-212				
					1.5853	.1379	05/03/06	622522
					1.6185	.1353	11/01/06	626134
				BI-214				
					.5184	.0316	05/03/06	622522
					.6626	.0364	11/01/06	626134
				CS-137	0.070			
Ļ					.0253	.0071	05/03/06	622522
-175-					.0344	.0059	11/01/06	626134
;				K-40	00 5000	4 0 0 0 0	05/00/00	
					30.5389	1.3866	05/03/06	622522
					32.5647	1.4179	11/01/06	626134
				PB-212	1.3119	0550	05/00/00	000500
						.0550	05/03/06	622522
				PB-214	1.3491	.0591	11/01/06	626134
				PD-214	.5679	.0288	05/03/Ò6	622522
					.6980	.0200	11/01/06	626134
				RA-224	0000	.0337	11/01/00	020134
				101227	1.1975	.1250	05/03/06	622522
					1.3568	.1954	11/01/06	626134
				RA-226				020104
					.5184	.0316	05/03/06	622522
					.6626	.0364	11/01/06	626134
				TL-208				
					-			

Table 18 RADIOACTIVITY IN SHORELINE SEDIMENT WATTS BAR NUCLEAR PLANT PCI/GM - 0.037 BQ/G (DRY WEIGHT) 01/03/2006 - 12/29/2006

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<u>Station</u> 3193	Location COTTON PORT MARINA	Description TRM 513	Analysis Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA SCAN (GELI) TL-208				
				.4367	.0224	05/03/06	622522
				.4749	.0246	11/01/06	626134

Table 19 RADIOACTIVITY IN POND SEDIMENT WATTS BAR NUCLEAR PLANT PCI/GM - 0.037 BQ/G (DRY WEIGHT) 01/03/2006 - 12/29/2006

<u>Station</u> 3303	<u>Location</u> LV-3	Description LOW VOL WASTE	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
		POND	GAMMA	SCAN (GELI)				
				AC-228	.6311	.0549	10/12/06	622533
				BI-212	.6743	.0871	10/12/06	622533
				BI-214				
				CS-134	.5522	.0310	10/12/06	622533
				CS-137	.0640	.0055	10/12/06	622533
					.0904	.0110	10/12/06	622533
-177-				K-40	8.3974	.4411	10/12/06	622533
7-				PB-212				
				PB-214	.6163	.0457	10/12/06	622533
				TL-208	.5800	.0404	10/12/06	622533
0005				12 200	.2233	.0166	10/12/06	622533
3305	YP-5	YARD POND	GAMMA	SCAN (GELI)				
				AC-228	.8876	.0593	10/12/06	622534
				BE-7				
				BI-212	.3229	.0561	10/12/06	622534
				BI-214	.9444	.1121	10/12/06	622534
					.6601	.0374	10/12/06	622534
				CO-58				

Table 19 RADIOACTIVITY IN POND SEDIMENT WATTS BAR NUCLEAR PLANT PCI/GM - 0.037 BQ/G (DRY WEIGHT) 01/03/2006 - 12/29/2006

<u>Station</u> 3305	<u>Location</u> YP-5	Description YARD POND	Analysis	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
			GAMMA	SCAN (GELI) CO-58				
					.0293	.0051	10/12/06	622534
				CO-60	.0199	.0061	10/12/06	622534
				CS-134				
				CS-137	.0834	.0072	10/12/06	622534
					.1128	.0120	10/12/06	622534
				K-40	10.6999	.5016	10/12/06	622534
-178-				PB-212	.8538	.0462	10/12/06	622534
78-				PB-214				
				TL-208	.6983	.0427	10/12/06	622534
3313	YP-13				.2870	.0147	10/12/06	622534
5515	17-13	YARD POND	GAMMA S	SCAN (GELI) AC-228				
				BE-7	1.1834	.0838	10/12/06	622535
					.5666	.1009	10/12/06	622535
	1			BI-212	1.1954	.1636	10/12/06	622535
				BI-214				
				CO-60	.8349	.0760	10/12/06	622535
				CS-137	.0532	.0140	10/12/06	622535
				00 107				

Table 19RADIOACTIVITY IN POND SEDIMENTWATTS BAR NUCLEAR PLANTPCI/GM - 0.037 BQ/G (DRY WEIGHT)01/03/2006- 12/29/2006

<u>Station</u> 3313	Location YP-13	Description YARD POND	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA SCAN (GELI)				
			CS-137	.2078	.0170	10/12/06	622535
			K-40	16.2012	.9766	10/12/06	622535
			PB-212			10/12/00	022000
			PB-214	1.2088	.0614	10/12/06	622535
				.9899	.0651	10/12/06	622535
			TL-208	.4263	.0316	10/12/06	622535
3316	YP-16	YARD POND					
3316 3179-			GAMMA SCAN (GELI) AC-228				
				.8576	.0631	10/12/06	622536
			BE-7	.4594	.0644	10/12/06	622536
			BI-212	.8551	.1070	10/12/06	622536
			BI-214			10/12/00	022550
			CO-58	.7251	.0405	10/12/06	622536
				.3713	.0236	10/12/06	622536
			CO-60	.0815	.0099	10/12/06	622536
			CS-134	0670			
			CS-137	.0670	.0060	10/12/06	622536
			K-40	.0966	.0095	10/12/06	622536
.*			17-40				

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Table 19 RADIOACTIVITY IN POND SEDIMENT WATTS BAR NUCLEAR PLANT PCI/GM - 0.037 BQ/G (DRY WEIGHT) 01/03/2006 - 12/29/2006

	<u>Station</u> 3316	<u>Location</u> YP-16	Description YARD POND	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
				GAMMA	SCAN (GELI)				
					K-40	11.2451	.5664	10/12/06	622536
				•	PB-212	.9093	.0563	10/12/06	622536
					PB-214	.7552	.0427	10/12/06	622536
					RA-224	.7864	.1746	10/12/06	622536
					SB-125	.2065	.0257	10/12/06	622536
-180-		·			TL-208	.2804	.0176	10/12/06	622536
0	3317	YP-17	YARD POND	GAMMAS	SCAN (GELI)				
				0, 4111, ((AC-228				
						.7875	.0489	10/12/06	622537
					BE-7	.4102	.0453	10/12/06	622537
					BI-212	.8799	.0920	10/12/06	622537
					BI-214	.6386	.0420	10/12/06	622537
					CO-58	.4495	.0282	10/12/06	622537
					CO-60	.1337	.0142	10/12/06	622537
					CS-134	.0678	.0074	10/12/06	622537
					CS-137				· ·

Table 19 RADIOACTIVITY IN POND SEDIMENT WATTS BAR NUCLEAR PLANT PCI/GM - 0.037 BQ/G (DRY WEIGHT) 01/03/2006 - 12/29/2006

<u>Station</u> 3317	<u>Location</u> YP-17	<u>Description</u> YARD POND	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) CS-137				
				K-40	.0956	.0127	10/12/06	622537
				PB-212	9.7993	.4985	10/12/06	622537
				PB-214	.8634	.0449	10/12/06	622537
				RA-224	.6703	.0349	10/12/06	622537
				SB-125	.9493	.1418	10/12/06	622537
-181-				TL-208	.5635	.0298	10/12/06	622537
					.2559	.0147	10/12/06	622537

Annual Radiological Environmental Operating Report

Watts Bar Nuclear Plant 2006



ANNUAL ENVIRONMENTAL RADIOLOGICAL OPERATING REPORT WATTS BAR NUCLEAR PLANT 2006

TENNESSEE VALLEY AUTHORITY

April 2007

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EXECUTIVE SUMMARY

This report describes the radiological environmental monitoring program conducted by TVA in the vicinity of the Watts Bar Nuclear Plant (WBN) in 2006. The program includes the collection of samples from the environment and the determination of the concentrations of radioactive materials in the samples. Samples are taken from stations in the general area of the plant and from areas that should not be influenced by plant operations. Material sampled includes air, atmospheric moisture, water, milk, food crops, soil, fish, sediment, and direct radiation levels. Results from stations near the plant are compared with concentrations from control locations and with preoperational measurements to determine potential impacts of plant operations.

The majority of environmental radioactivity measured by the program was due to naturally occurring radioactive materials or radionuclides commonly found in the environment as a result of atmospheric fallout and the operation of other nuclear facilities in the area. Low levels of Cs-137 were measured in soil, fish, and shoreline sediment samples. The Cs-137 concentrations were consistent with the preoperational monitoring program results and with levels normally found in the environment as the result of past nuclear weapons testing. Trace levels of tritium were detected in a limited number of atmospheric moisture samples. Tritium at concentrations slightly above the analytical detection limit was detected in a limited number of water samples collected from Chickamauga Reservoir. These levels would not represent a significant - contribution to the radiation exposures to members of the public.

Tritium was detected in onsite ground water monitoring wells. The tritium was the result of onsite ground water contamination from previously identified and repaired leaks in plant systems. In addition, Co-58, Co-60, Cs-134, Cs-137, and Sb-125 were identified in sediment collected from the onsite Yard Holding Pond. The level of activity measured in these on site locations would not present a risk of exposure to the general public.

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INTRODUCTION

This report describes and summarizes the results of radioactivity measurements made in the vicinity of WBN and laboratory analyses of samples collected in the area. The measurements are made to comply with the requirements of 10 CFR 50, Appendix A, Criterion 64 and 10 CFR 50, Appendix I, Section IV.B.2, IV.B.3 and IV.C and to determine potential effects on public health and safety. This report satisfies the annual reporting requirements of WBN Technical Specification 5.9.2 and Offsite Dose Calculation Manual (ODCM) Administrative Control 5.1. In addition to reporting the data prescribed by specific requirements, other information is included to help correlate the significance of results measured by this monitoring program to the levels of environmental radiation resulting from naturally occurring radioactive materials.

Naturally Occurring and Background Radioactivity

Most materials in our world today contain trace amounts of naturally occurring radioactivity. Potassium-40 (K-40), with a half-life of 1.3 billion years, is one of the major types of radioactive materials found naturally in our environment. Approximately 0.01 percent of all potassium is radioactive potassium-40. Other examples of naturally occurring radioactive materials are beryllium (Be)-7, bismuth (Bi)-212 and 214, lead (Pb)-212 and 214, thallium (Tl)-208, actinium (Ac)-228, uranium (U)-238 and 235, thorium (Th)-234, radium (Ra)-226, radon (Ra)-222, carbon (C) -14, and hydrogen (H)-3 (generally called tritium). These naturally occurring radioactive materials are in the soil, our food, our drinking water, and our bodies. The radiation from these materials makes up a part of the low-level natural background radiation. The remainder of the natural background radiation comes from outer space.

It is possible to get an idea of the relative hazard of different types of radiation sources by evaluating the amount of radiation the U.S. population receives from each general type of radiation source. The information below is primarily adapted from References 2 and 3.

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Source	Millirem/Year Per Person		
Natural background dose equivalent	· · · · · · · · · · · · · · · · · · ·		
Cosmic	27		
Cosmogenic	1		
Terrestrial	28		
In the body	39		
Radon	200		
Total	295		
Release of radioactive material in			
natural gas, mining, ore processing, etc.	5		
Medical (effective dose equivalent)	53		
Nuclear weapons fallout	less than 1		
Nuclear energy	0.28		
Consumer products	0.03		
Total	355 (approximately)		

U.S. GENERAL POPULATION AVERAGE DOSE EQUIVALENT ESTIMATES

As can be seen from the data presented above, natural background radiation dose equivalent to the U.S. population normally exceeds that from nuclear plants by several hundred times. This indicates that nuclear plant operations normally result in a population radiation dose equivalent which is insignificant compared to that which results from natural background radiation. It should be noted that the use of radiation and radioactive materials for medical uses has resulted in a similar effective dose equivalent to the U.S. population as that caused by natural background cosmic and terrestrial radiation.

Electric Power Production

Nuclear power plants are similar in many respects to conventional coal burning (or other fossil fuel) electrical generating plants. The basic process behind electrical power production in both types of plants is that fuel is used to heat water to produce steam which provides the force to turn

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turbines and generators. In a nuclear power plant, the fuel is uranium and heat is produced in the reactor through the fission of the uranium. Nuclear plants include many complex systems to control the nuclear fission process and to safeguard against the possibility of reactor malfunction. The nuclear reactions produce radionuclides commonly referred to as fission and activation products. Very small amounts of these fission and activation products are released into the plant systems. This radioactive material can be transported throughout plant systems and some of it released to the environment.

Paths through which radioactivity from a nuclear power plant is routinely released are monitored. Liquid and gaseous effluent monitors record the radiation levels for each release. These monitors also provide alarm mechanisms to prompt termination of any release above limits.

Releases are monitored at the onsite points of release and through the radiological environmental monitoring program which measures the environmental radiation in areas around the plant. In this way, the release of radioactive materials from the plant is tightly controlled, and verification is provided that the public is not exposed to significant levels of radiation or radioactive materials as the result of plant operations.

The WBN ODCM, which describes the program required by the plant Technical Specifications, prescribes limits for the release of radioactive effluents, as well as limits for doses to the general public from the release of these effluents.

The dose to a member of the general public from radioactive materials released to unrestricted areas, as given in NRC guidelines and the ODCM, is limited as follows:

Liquid Effluents

Total body Any organ $\leq 3 \text{ mrem/year}$ $\leq 10 \text{ mrem/year}$

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Gaseous Effluents

Noble gases:

Gamma radiation Beta radiation ≤10 mrad/year ≤20 mrad/year

Particulates:

Any organ

 ≤ 15 mrem/year

The EPA limits for the total dose to the public in the vicinity of a nuclear power plant, established in the Environmental Dose Standard of 40 CFR 190, are as follows:

Total body Thyroid Any other organ ≤25 mrem/year≤75 mrem/year≤25 mrem/year

Appendix B to 10 CFR 20 presents annual average limits for the concentrations of radioactive materials released in gaseous and liquid effluents at the boundary of the unrestricted areas. Table 1 of this report presents the annual average concentration limits for the principal radionuclides associated with nuclear power plant effluents. The table also presents (1) the concentrations of radioactive materials in the environment which would require a special report to the NRC and (2) the detection limits for measured radionculides. It should be noted that the levels of radioactive materials measured in the environment are typically below or only slightly above the lower limit of detection.

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SITE/PLANT DESCRIPTION

The WBN site is located in Rhea county, Tennessee, on the west bank of the Tennessee River at Tennessee River Mile (TRM) 528. Figure 1 shows the site in relation to other TVA projects. The WBN site, containing approximately 1770 acres on Chickamauga Lake, is approximately 2 miles south of the Watts Bar Dam and approximately 31 miles north-northeast of TVA's Sequoyah Nuclear Plant (SQN) site. Also located within the reservation are the Watts Bar Dam and Hydro-Electric Plant, the Watts Bar Steam Plant (not in operation), the TVA Central Maintenance Facility, and the Watts Bar Resort Area.

Approximately 16,000 people live within 10 miles of the WBN site. More than 80 percent of these live between 5 and 10 miles from the site. Two small towns, Spring City and Decatur, are located in this area. Spring City, with a population of approximately 2,200, is northwest and north-northwest from the site, while Decatur, with about 1,400 people, is south and south-southwest from the plant. The remainder of the area within 10 miles of the site is sparsely populated, consisting primarily of small farms and individual residences.

The area between 10 and 50 miles from the site includes portions of the cities of Chattanooga and Knoxville. The largest urban concentration in this area is the city of Chattanooga, located to the southwest and south-southwest. The city of Chattanooga has a population of about 155,000, with approximately 80 percent located between 40 and 50 miles from the site and the remainder located beyond 50 miles. The city of Knoxville is located to the east-northeast, with not more than 10 percent of its 177,000 plus people living within 50 miles of the site. Three smaller urban areas of greater than 20,000 people are located between 30 and 40 miles from the site. Oak Ridge is approximately 40 miles to the northeast, the twin cities of Alcoa and Maryville are located 45 to 50 miles to the east-northeast, and Cleveland is located about 30 miles to the south.

Chickamauga Reservoir is one of a series of highly controlled multiple-use reservoirs whose primary uses are flood control, navigation, and the generation of electric power. Secondary

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uses include industrial and public water supply and waste disposal, commercial fishing, and recreation. Public access areas, boat docks, and residential subdivisions have been developed along the reservoir shoreline.

WBN consists of two pressurized water reactors. WBN Unit 1 received a low power operating license (NPF-20) on November 9, 1995, and achieved initial criticality in January 1996. The full power operating license (NPF-90) was received on February 7, 1996. Commercial operation was achieved May 25, 1996. WBN Unit 2 was deferred October 24, 2000, in accordance with the guidance in Generic Letter 87-15, "Policy Statement on Deferred Plants."

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Most of the radiation and radioactivity generated in a nuclear power reactor is contained within the reactor itself or one of the other plant systems. Plant effluent radiation monitors are designed to monitor radionuclides released to the environment. Environmental monitoring is a final verification that the systems are performing as planned. The monitoring program is designed to monitor the pathways between the plant and the people in the immediate vicinity of the plant. Sample types are chosen so that the potential for detection of radioactivity in the environment will be maximized. The Radiological Environmental Monitoring Program (REMP) for WBN is outlined in Appendix A.

There are two primary pathways by which radioactivity can move through the environment to humans: air and water (see Figure 2). The air pathway can be separated into two components: the direct (airborne) pathway and the indirect (ground or terrestrial) pathway. The direct airborne pathway consists of direct radiation and inhalation by humans. In the terrestrial pathway, radioactive materials may be deposited on the ground or on plants and subsequently ingested by animals and/or humans. Human exposure through the liquid pathway may result from drinking water, eating fish, or by direct exposure at the shoreline. The types of samples collected in this program are designed to monitor these pathways.

A number of factors were considered in determining the locations for collecting environmental samples. The locations for the atmospheric monitoring stations were determined from a critical pathway analysis based on weather patterns, dose projections, population distribution, and land use. Terrestrial sampling stations were selected after reviewing such things as the locations of dairy animals and gardens in conjunction with the air pathway analysis. Liquid pathway stations were selected based on dose projections, water use information, and availability of media such as fish and sediment. Table A-2 (Appendix A, Table 2: This notation system is used for all tables and figures given in the appendices.) lists the sampling stations and the types of samples collected from each. Modifications made in the WBN REMP in 2006 are described in Appendix B.

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Deviations occur in the monitoring program due to equipment problems with automatic sampling systems, sample unavailability or when analyses cannot be completed. Deviations to the sampling and analysis schedule during 2006 are described in Appendix C.

To determine the amount of radioactivity in the environment prior to the operation of WBN, a preoperational radiological environmental monitoring program was initiated in December 1976 and operated through December 31, 1995. Measurements of the same types of radioactive materials that are measured currently were assessed during the preoperational phase to establish normal background levels for various radionuclides in the environment. During the 1950s, 60s, and 70s, atmospheric nuclear weapons testing released radioactive material to the environment causing fluctuations in background radiation levels. Knowledge of preexisting radionuclide patterns in the environment permits a determination, through comparison and trending analyses, of the actual environmental impact of WBN operation.

The determination of environmental impact during the operating phase also considers the presence of control stations that have been established in the environment. Results of environmental samples taken at control stations (far from the plant) are compared with those from indicator stations (near the plant) to aid in the determination of the impacts from WBN operation.

The sample analysis is performed by TVA's Environmental Radiological Monitoring and Instrumentation (ERM&I) group located at the Western Area Radiological Laboratory (WARL) in Muscle Shoals, Alabama. Due to a lab equipment problem, the Sr-89,90 analyses of soil samples were performed by a contract laboratory. Analyses are conducted in accordance with written and approved procedures and are based on accepted methods. A summary of the analysis techniques and methodology is presented in Appendix D. Data tables summarizing the sample analysis results are presented in Appendix H. The Data Supplement to this report contains the results of all measurements made as a part of this program.

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The radiation detection devices and analysis methods used to determine the radionuclide content of samples collected in the environment are very sensitive to small amounts of radioactivity. The sensitivity of the measurement process is defined in terms of the lower limit of detection (LLD). A description of the nominal LLDs for the ERM&I laboratory is presented in Appendix E.

The ERM&I laboratory operates under a comprehensive quality assurance/quality control program to monitor laboratory performance throughout the year. The program is intended to detect any problems in the measurement process as soon as possible so they can be corrected. This program includes equipment checks to ensure that the radiation detection instruments are working properly and the analysis of quality control samples which are included alongside routine environmental samples. To provide for interlaboratory comparison program, the laboratory participates in an environmental cross-check program administered by Analytics, Incorporated. A complete description of the program is presented in Appendix F.

DIRECT RADIATION MONITORING

Direct radiation levels are measured at a number of stations around the plant site. These measurements include contributions from cosmic radiation, radioactivity in the ground, fallout from atmospheric nuclear weapons tests conducted in the past, and any radioactivity that may be present as a result of plant operations. Because of the relatively large variations in background radiation as compared to the small levels from the plant, contributions from the plant may be difficult to distinguish.

Direct radiation levels measured in the area around the WBN site in 2006 were consistent with levels from previous years and with levels measured at other locations in the region.

Measurement Techniques

Direct radiation measurements are made with thermoluminescent dosimeters (TLDs). The Panasonic Model UD-814 dosimeter is used for the measurement of direct radiation levels in the environment. This dosimeter contains four elements consisting of one lithium borate and three calcium sulfate phosphors. The calcium sulfate phosphors are shielded by approximately 1000 mg/cm^2 plastic and lead to compensate for the over-response of the detector to low energy radiation.

The TLDs are placed approximately one meter above the ground, with two or more TLDs at each station. Sixteen monitoring points are located around the plant near the site boundary; one location in each of the 16 compass sectors. An additional 16 monitoring points are located approximately 5 miles from the plant in each of the 16 sectors. Dosimeters are also placed at the perimeter and remote air monitoring sites and at additional locations out to approximately 32 miles from the site. The environmental TLD locations are listed in Table A-3. The TLDs are exchanged every 3 months and the accumulated exposure is read with a Panasonic Model UD-710A automatic reader interfaced with a computer system for data analysis.

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Since the calcium sulfate phosphor is much more sensitive than the lithium borate, the measured exposure is taken as the median of the results obtained from the calcium sulfate phosphors. The values are corrected for gamma response, system variations, and transit exposure, with individual gamma response calibrations for each element. The system meets or exceeds the performance specifications outlined in Regulatory Guide 4.13 for environmental applications of TLDs.

<u>Results</u>

Results are normalized to a standard quarter (91.25 days or 2190 hours). The monitoring locations are grouped according to the distance from the plant. The first group consists of locations within 1 mile of the plant. The second group lies between 1 and 2 miles, the third group between 2 and 4 miles, the fourth group between 4 and 6 miles, and the fifth group is made up of monitoring points more than 6 miles from the plant. Past data have shown that the average results from groups greater than 2 miles from the plant are essentially the same. Therefore, for purposes of this report, locations 2 miles or less from the plant are identified as "onsite" and all others are considered "offsite."

The quarterly gamma radiation levels determined from the TLDs deployed around WBN in 2006 are summarized in Table H-1. The results from all measurements at individual stations are presented in Table H-2. The exposures are measured in milliroentgens (mR). For purposes of this report, one milliroentgen, one millirem (mrem) and one millirad (mrad) are assumed to be numerically equivalent. The rounded average annual exposures are shown below. For comparison purposes, the average direct radiation measurements made in the preoperational monitoring program for the period of 1990 to 1995 are also shown.

Annual Average Direct Radiation Levels WBN <u>mR/Year</u>

	<u>2006</u>	Preoperational <u>Average</u>
Onsite Stations	62	65
Offsite Stations	59	57

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The data in Table H-1 indicate that the average quarterly radiation levels at the WBN onsite stations are approximately 0.8 mR/quarter higher than levels at the offsite stations. This difference is consistent with levels measured for the preoperation and construction phases of TVA nuclear power plant sites where the average levels onsite were generally 2-6 mR/quarter higher than levels offsite. The causes of these differences have not been isolated; however, it is postulated that the differences are probably attributable to combinations of influences such as natural variations in environmental radiation levels, earth-moving activities onsite, and the mass of concrete employed in the construction of the plant. Other undetermined influences may also play a part.

Figure H-1 compares plots of the data from the onsite or site boundary stations with those from the offsite stations over the period from 1990 through 2006. The results reported in 2006 are consistent with direct radiation levels reported in previous years. There is no indication that WBN activities increased the background radiation levels normally observed in the areas surrounding the plant.

ATMOSPHERIC MONITORING

The atmospheric monitoring network is divided into three groups identified as local, perimeter, and remote. Four local air monitoring stations are located on or adjacent to the plant site in the general directions of greatest wind frequency. Four perimeter air monitoring stations are located between 6 to 11 miles from the plant, and two remote air monitors are located out to 15 miles. The monitoring program and the locations of monitoring stations are identified in the tables and figures of Appendix A. The remote stations are used as control or baseline stations.

Results from the analysis of samples in the atmospheric pathway are presented in Tables H-3, H-4, and H-5. Radioactivity levels identified in this reporting period are consistent with background and preoperational program data. There is no indication of an increase in atmospheric radioactivity as a result of WBN.

Sample Collection and Analysis

Air particulates are collected by continuously sampling air at a flow rate of approximately 2 cubic feet per minute (cfm) through a 2-inch glass fiber filter. The sampling system consists of a pump, a magnehelic gauge for measuring the drop in pressure across the system, and a dry gas meter to measure the total volume of air sampled. This system is housed in a building approximately 2 feet by 3 feet by 4 feet. The filter is contained in a sampling head mounted on the outside of the monitor building. The filter is replaced weekly. Each filter is analyzed for gross beta activity about 3 days after collection to allow time for the radon daughters to decay. Every 4 weeks composites of the filters from each location are analyzed by gamma spectroscopy.

Gaseous radioiodine is sampled using a commercially available cartridge containing TEDAimpregnated charcoal. This system is designed to collect iodine in both the elemental form and as organic compounds. The cartridge is located in the same sampling head as the air particulate filter and is downstream of the particulate filter. The cartridge is changed at the same time as the particulate filter and samples the same volume of air. Each cartridge is analyzed for I-131 by gamma spectroscopy analysis.

Atmospheric moisture sampling is conducted by pulling air at a constant flow rate through a column loaded with approximately 400 grams of silica gel. Every two weeks, the column is exchanged on the sampler. The atmospheric moisture is removed from silica gel by heating and analyzed for tritium.

Rainwater is collected by use of a collection tray attached to the monitor building. The collection tray is protected from debris by a screen cover. As water drains from the tray, it is collected in one of two 5-gallon containers inside the monitor building. A 1-gallon sample is removed from the container every 4 weeks. Any excess water is discarded. Rainwater samples are held to be analyzed only if air particulate samples indicate the presence of elevated levels or if fallout is expected. For example, rainwater samples were analyzed during the period of fallout following the accident at Chernobyl in 1986. Since no plant-related air activity was detected in 2006, no rainwater samples from WBN were analyzed in this reporting period.

Results

The results from the analysis of air particulate samples are summarized in Table H-3. Gross beta activity in 2006 was consistent with levels reported in previous years. The average gross beta activity measured for air particulate samples was 0.021 pCi/m³. The annual averages of the gross beta activity in air particulate filters at these stations for the period 1977-2006 are presented in Figure H-2. Increased levels due to fallout from atmospheric nuclear weapons testing are evident in the years prior to 1981 and a small increase from the Chernobyl accident can be seen in 1986. These patterns are consistent with data from monitoring programs conducted by TVA at other nuclear power plant construction sites. Comparison with the same data for the preoperational period of 1990-1995 indicates that the annual average gross beta activity for air particulates as measured in the 2006 monitoring program was consistent with the preoperational data.

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Only natural radioactive materials were identified by the monthly gamma spectral analysis of the air particulate samples. As shown in Table H-4, I-131 was not detected in any charcoal cartridge samples collected in 2006.

The results for atmospheric moisture sampling are reported in Table H-5. Tritium was measured in a limited number of atmospheric moisture samples at levels slightly above the nominal LLD value at 3.0 pCi/cubic meter.

TERRESTRIAL MONITORING

Terrestrial monitoring is accomplished by collecting samples of environmental media that may transport radioactive material from the atmosphere to humans. For example, radioactive material may be deposited on a vegetable garden and be ingested along with the vegetables or it may be deposited on pasture grass where dairy cattle are grazing. When the cow ingests the radioactive material, some of it may be transferred to the milk and consumed by humans who drink the milk. Therefore, samples of milk, soil, and food crops are collected and analyzed to determine potential impacts from exposure through this pathway. The results from the analysis of these samples are shown in Tables H-6 through H-12.

A land use survey is conducted annually between April and October to identify the location of the nearest milk animal, the nearest residence, and the nearest garden of greater than 500 square feet producing fresh leafy vegetables in each of 16 meteorological sectors within a distance of 5 miles from the plant. This land use survey satisfies the requirements 10 CFR 50, Appendix I, Section IV.B.3. From data produced by the land use survey, radiation doses are projected for individuals living near the plant. Doses from air submersion are calculated for the nearest residence in each sector, while doses from drinking milk or eating foods produced near the plant are calculated for the areas with milk-producing animals and gardens, respectively. These dose projections are hypothetical extremes and do not represent actual doses to the general public. The results of the 2006 land use survey are presented in Appendix G.

Sample Collection and Analysis

Milk samples are collected every 2 weeks from three indicator dairies and from at least one control dairy. Milk samples are placed on ice for transport to the radioanalytical laboratory. A specific analysis for I-131 and a gamma spectral analysis are performed on each sample and once per quarter samples are analyzed for Sr-89 and Sr-90.

The monitoring program includes a provision for sampling of vegetation from locations where milk is being produced and when milk sampling cannot be conducted. There were no periods during 2006 when vegetation sampling was necessary.

Soil samples are collected annually from the air monitoring locations. The samples are collected with either a "cookie cutter" or an auger type sampler. After drying and grinding, the sample is analyzed by gamma spectroscopy. When the gamma analysis is complete, the sample is analyzed for Sr-89 and Sr-90.

Samples representative of food crops raised in the area near the plant are obtained from individual gardens, corner markets, or cooperatives. Types of foods may vary from year to year as a result of changes in the local vegetable gardens. In 2006, samples of apples, cabbage, corn, green beans, and tomatoes, were collected from local vegetable gardens and/or farms. Samples of the same food products grown in areas that would not be effected by the plant were collected as control samples. The edible portion of each sample is analyzed by gamma spectroscopy.

Results

The results from the analysis of milk samples are presented in Table H-6. All I-131 values were below the established nominal LLD of 0.4 pCi/liter. The results for the quarterly Sr-89, Sr-90 analysis were below the established LLD's for these analyses. The gamma isotopic analysis detected only naturally occurring radionuclides.

Consistent with most of the environment, Cs-137 was detected in all of the soil samples collected in 2006. The maximum concentration of Cs-137 was 1.26 pCi/g. The concentrations were . consistent with levels previously reported from fallout. All other radionuclides reported were naturally occurring isotopes. The results of the analysis of soil samples are summarized in Table H-7.

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A plot of the annual average Cs-137 concentrations in soil is presented in Figure H-3. Concentrations of Cs-137 in soil are steadily decreasing as a result of the cessation of weapons testing in the atmosphere, the 30 year half-life of Cs-137, and transport through the environment.

The radionuclides measured in food samples were naturally occurring. The results are reported in Tables H-8 through H-12.

LIQUID PATHWAY MONITORING

Potential exposures from the liquid pathway can occur from drinking water, ingestion of fish, or from direct radiation exposure from radioactive materials deposited in the shoreline sediment. The aquatic monitoring program includes the collection of samples of river (surface) water, groundwater, drinking water supplies, fish, and shoreline sediment. Indicator samples were collected downstream of the plant and control samples collected within the reservoir upstream of the plant or in the next upstream reservoir (Watts Bar Lake).

Results from the analysis of the liquid pathway samples are presented in Table H-13 through H-19. Radioactivity levels in surface and public water, fish, and shoreline sediment were consistent with background and/or fallout levels previously reported. Low levels of Cs-137 were measured in samples of shoreline sediment and fish. Low levels of tritium were detected in a limited number of water samples collected in Chickamauga Reservoir. Results for the sediment sampling conducted in the onsite Yard Holding Pond and ground water monitoring in onsite wells are discussed later in this section.

Sample Collection and Analysis

Samples of surface water are collected from the Tennessee River using automatic sampling systems from two downstream stations and one upstream station. A timer turns on the system at least once every 2 hours. The line is flushed and a sample collected into a composite container. A l-gallon sample is removed from the container at 4-week intervals and the remaining water is discarded. Each sample is analyzed for gamma-emitting radionculides, gross beta activity, and tritium.

Samples are also collected by an automatic sampling system at the first two downstream drinking water intakes. These samples are collected in the same manner as the surface water samples.

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These monthly samples are analyzed for gamma-emitting radionuclides, gross beta activity, and tritium. The samples collected by the automatic sampling device are taken directly from the river at the intake structure. Since the sample at this point is raw water, the upstream surface water sample is used as a control sample for drinking water.

Groundwater is sampled from one onsite well down gradient from the plant, one onsite well up gradient from the plant, and four additional onsite ground water monitoring wells located along underground discharge lines. The onsite wells are sampled with a continuous sampling system. A composite sample is collected from the onsite wells every four weeks and analyzed for gamma-emitting radionuclides, gross beta activity, and tritium content. In addition, a grab sample is collected every four weeks from a private well in an area unaffected by WBN. The grab sample is also analyzed for gross beta activity, gamma-emitting radionuclides, and for tritium.

Samples of commercial and game fish species are collected semiannually from each of two reservoirs: the reservoir on which the plant is located (Chickamauga Reservoir) and the upstream reservoir (Watts Bar Reservoir). The samples are collected using a combination of netting techniques and electrofishing. The ODCM specifies analysis of the edible portion of the fish. To comply with this requirement, filleted portions are taken from several fish of each species: The samples are analyzed by gamma spectroscopy.

Samples of shoreline sediment are collected from recreation areas in the vicinity of the plant. The samples are dried, ground, and analyzed by gamma spectroscopy.

Samples of sediment are also collected from the onsite Yard Holding Pond. A total of five samples were collected in 2006. The samples are dried, ground, and analyzed by gamma spectroscopy.

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<u>Results</u>

Gross beta activity was detectable above the nominal LLD in most of the surface water samples. The gross beta concentrations averaged 2.8 pCi/liter in downstream samples and 2.7 pCi/liter in upstream samples. These levels were consistent with results found during the preoperational monitoring program. Tritium at a concentration of 588 pCi/L was detected in one sample collected from the downstream collection location at TRM 517.9. The tritium was detected in the surface water during a period of unusually low river flow. A summary table of the results for surface water samples is shown in Table H-13.

No fission or activation products were identified by the gamma analysis of drinking water samples from either of two downstream monitoring locations. Average gross beta activity at downstream stations was 2.5 pCi/liter and the average for upstream station was 2.7 pCi/liter. Low levels of tritium were detected in a total of six samples collected from the two downstream public water sampling locations. The measurable tritium levels occurred during a period of usually low river flows. The highest tritium concentration detected was 817 pCi/L. This concentration is less than five percent of EPA safe drinking water limit of 20,000 pCi/L. The results are shown in Table H-14. Trend plots of the gross beta activity in surface water and drinking water samples from 1977 through 2006 are presented in Figure H-4.

The gamma isotopic analysis of ground water samples identified only naturally occurring radionuclides. Gross beta concentrations in samples from the onsite indicator locations averaged 3.6 pCi/liter. The average gross beta activity for samples from the control locations was 2.5 pCi/liter. Tritium was detected in samples from the onsite monitoring wells located near plant discharge lines. The tritium in onsite ground water was the result of previously identified leaks from plant systems. Repairs were made to resolve the leaks but the plume of contaminated ground water continues to move slowly across the site toward the river. The highest tritium concentration in samples from these monitoring locations was 12,600 pCi/L. There was no tritium detected in the onsite up gradient well or the offsite ground water monitoring location. The results are presented in Table H-15.

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Measurable levels of Cs-137 were identified in most of the fish samples. The maximum Cs-137 concentration was 0.11 pCi/g measured in commercial fish collected at the upstream control location. Other radioisotopes found in fish were naturally occurring, with the most notable being K-40. The results are summarized in Tables H-16 and H-17. Trend plots of the annual average Cs-137 concentrations measured in fish samples are presented in Figure H-5. The Cs-137 activities are consistent with preoperational results produced by fallout or effluents from other nuclear facilities.

Low levels of Cs-137 consistent with the concentrations present in the environment as the result of past nuclear weapons testing or other nuclear operations in the area were measured in samples of shoreline sediment. The results for the analysis of shoreline sediment is presented in Table H-18. Trend plots of the average concentration of Cs-137 in shoreline sediment are presented in Figure H-6.

Consistent with previous monitoring conducted for the onsite ponds, Cs-137 was detected in the sediment samples. The average of the Cs-137 levels measured in sediment from the onsite ponds was 0.12 pCi/gm. In addition, Co-58, Co-60, Cs-134, and Sb-125 were also detected in some of the samples collected from the Yard Holding Pond. The results for the analysis of pond sediment samples are provided in Table H-19. Since these radionuclides were present in relatively low concentrations and confined to the Yard Holding Pond located in the owner controlled area not open to the general public, the presence of these radionuclides would not represent any increased risk of exposure to the general public.

ASSESSMENT AND EVALUATION

Potential doses to the public are estimated from measured effluents using computer models. These models were developed by TVA and are based on guidance provided by the NRC in Regulatory Guide 1.109 for determining the potential dose to individuals and populations living in the vicinity of the plant. The results of the effluent dose calculations are reported in the Annual Radiological Effluent Release Report. The doses calculated are a representation of the dose to a "maximum exposed individual." Some of the factors used in these calculations (such as ingestion rates) are maximum expected values which will tend to overestimate the dose to the "hypothetical" person. The calculated maximum dose due to plant effluents are small fractions of the applicable regulatory limits. In reality, the expected dose to actual individuals is significantly lower.

Based on the very low concentrations of radionuclides actually present in the plant effluents, radioactivity levels measured in the environment as result of plant operations are expected to be negligible. The results for the radiological environmental monitoring conducted for the WBN 2006 operations confirm this expectation.

<u>Results</u>

As stated earlier in this report, the estimated increase in radiation dose equivalent to the general public resulting from the operation of WBN is insignificant when compared to the dose from natural background radiation. The results from each environmental sample are compared with the concentrations from the corresponding control stations and appropriate preoperational and background data to determine influences from the plant. During this report period, Cs-137 was detected in shoreline sediment, soil, and fish collected for the WBN program. The Cs-137 concentrations measured were consistent with levels measured during the preoperational monitoring program. The low levels of tritium measured in water samples from Chickamauga Reservoir represented concentrations that were a small fraction of the EPA drinking water limit.

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The levels of tritium detected in the onsite ground water monitoring wells and the radionuclides measured in samples of sediment from the Yard Holding Pond do not represent an increase risk of exposure to the public. These radionuclides were limited to the owner controlled area and would not present an exposure pathway for the general public.

Conclusions

It is concluded from the above analysis of environmental samples and from the trend plots presented in Appendix H, that exposure to members of the general public which may have been attributable to WBN is negligible. The radioactivity reported herein is primarily the result of fallout or natural background. Any activity which may be present in the environment as a result of plant operations does not represent a significant contribution to the exposure of Members of the Public.

REFERENCES

- 1. Merril Eisenbud, Environmental Radioactivity, Academic Press, Inc., New York, NY, 1987.
- 2. National Council on Radiation Protection and Measurements, Report No. 93, "Ionizing Radiation Exposure of the Population of the United States," September 1987.
- 3. United States Nuclear Regulatory Commission, Regulatory Guide 8.29, "Instruction Concerning Risks from Occupational Radiation Exposure," July 1981.

Table 1

<u>COMPARISON OF</u> <u>PROGRAM LOWER LIMITS OF DETECTION WITH THE REGULATORY LIMITS FOR</u> <u>MAXIMUM ANNUAL AVERAGE EFFLUENT CONCENTRATIONS</u> <u>RELEASED TO UNRESTRICTED AREAS</u> <u>AND REPORTING LEVELS</u>

	Concentrations in Water, pCi/Liter			Concentrations in Air, pCi/Cubic Meter			
	Effluent	Reporting	Lower limit	Effluent	Reporting	Lower limit	
	Concentration ¹	<u>Level²</u>	of Detection ³	Concentration ¹	Level ²	of Detection ³	
H-3	1,000,000	20,000	300	100,000		3.00	
Cr-51	500,000		45	30,000		0.02	
Mn-54	30,000	1,000	5	1,000		0.005	
Co-58	20,000	1,000	5	1,000		0.005	
Co-60	3,000	300	5	50		0.005	
Zn-65	5,000	300	10	400		0.005	
Sr-89	8,000		5	1,000		0.0011	
Sr-90	500		2	6		0.0004	
Nb-95	30,000	400	5	2,000		0.005	
Zr-95	20,000	400	10	400		0.005	
Ru-103	30,000		5	900		0.005	
Ru-106	3,000		40	20		0.02	
I-131	1,000	2	0.4	200	0.9	0.03	
Cs-134	900	30	5	200	10	0.005	
Cs-137	1,000	50	5	200	20	0.005	
Ce-144	3,000		30	40		0.01	
Ba-140	8,000	200	25	2,000		0.015	
La-140	9,000	200	10	2,000		0.01	

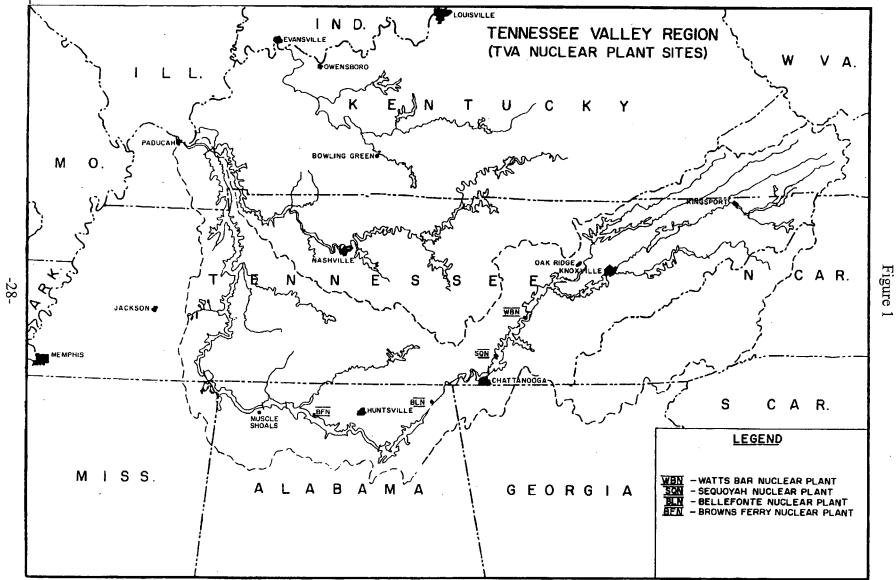
Note: $1 \text{ pCi} = 3.7 \text{ x} 10^{-2} \text{ Bq}$.

Note: For those reporting levels that are blank, no value is given in the reference.

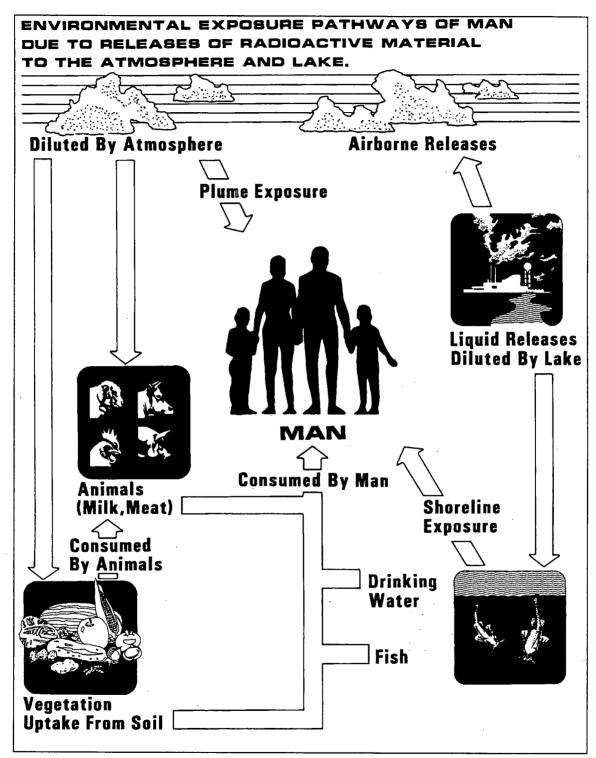
1 Source: Table 2 of Appendix B to 10 CFR 20.1001-20.2401

2 Source: WBN Offsite Dose Calculation Manual, Table 2.3-2

3 Source: Table E-1 of this report.







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APPENDIX A

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM AND SAMPLING LOCATIONS

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WATTS BAR NUCLEAR PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Exposure Pathway and/or Sample	Number of Samples and Locations ^b	Sampling and Collection Frequency	Type and Frequency of Analysis
1. AIRBORNE			
a. Particulates	4 samples from locations (in different sectors) at or near the site boundary (LM-1, 2, 3, and 4).	Continuous sampler operation with sample collection weekly (more (frequently if required by dust loading).	Analyze for gross beta radioactivity greater than or equal to 24 hours following filter change. Perform gamma isotopic analysis on each sample if gross beta is greater than 10 times yearly mean of control sample. Composite at least once per 31 days (by location) for gamma scan.
	4 samples from communities approximately 6-10 miles from the plant (PM-2, 3, 4, and 5).		
	2 samples from control locations greater than 10 miles from the plant (RM-2 and 3).		
b. Radioiodine	Samples from same locations as air particulates.	Continuous sampler operation with filter collection weekly.	I-131 at least once per 7 days. Analysis is performed by gamma spectroscopy.
c. Atmospheric Moisture	4 samples from locations (in different sectors) at or near the site boundary (LM-1, 2, 3, and 4)	Continuous sampler operation with sample collection biweekly.	Analyze each sample for tritium.
	2 samples from communities approximately 4-10 miles distance from the plant (PM-2, 5).		

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WATTS BAR NUCLEAR PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM^a

Exposure Pathway and/or Sample	Number of Samples and <u>Locations</u> ^b	Sampling and Collection Frequency	Type and Frequency of Analysis
c. Atmospheric Moisture (Cont.)	2 samples from control location greater than 10 miles from the plant (RM-2 and RM-3).		
d. Rainwater	Samples from same locations as air particulates.	Rainwater collected continuously with composite sample taken monthly.	Analyzed for gamma activity only if radioactivity in other media indicates the presence of increased levels of fallout.
e. Soil	Samples from same location as air particulates.	Once per year.	Gamma scan, Sr-89, Sr-90 once per year.
2. DIRECT	2 or more dosimeters (TLDs) placed At or near the site boundary in each of the 16 sectors.	At least once per 92 days.	Gamma dose at least once per 92 days.
	2 or more dosimeters placed at stations located approximately 5 miles from the plant in each of the 16 sectors.	·	
	2 or more dosimeters in at least 8 additional locations of special interest, including at least 2 control stations.		

WATTS BAR NUCLEAR PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM^a

Exposure Pathway and/or Sample	Number of Samples and Locations ^b	Sampling and Collection Frequency	Type and Frequency of Analysis
3. WATERBORNE			
a. Surface	2 samples downstream from plant discharge (TRM 517.9 and TRM 523.1).	Collected by automatic sequential- type sampler ^c with composite samples collected over a period of approximately 31 days.	Gross beta, gamma scan, and tritium analysis of each sample.
	1 sample at a control location upstream from the plant discharge (TRM 529.3).		
b. Ground	Five sampling locations from groundwater monitoring wells adjacent to the plant (Wells No. 1, A, B, C, and D).	Collected by automatic sequential- type sampler with composite samples collected over a period of approximately 31 days.	Gross beta, gamma scan, and tritium analysis of each sample.
	1 sample from ground water source up gradient (Well No. 5).	Same as Well No. 1.	Gross beta, gamma scan, and tritium analysis of each sample.
	l sample from ground water source up gradient (Farm L).	Grab sample at least once per 31 days.	Gross beta, gamma scan, and tritium analysis of each sample.
c. Drinking	1 sample at the first two potable surface water supplies, downstream from the plant (TRM 503.8 and TRM 473.0).	Collected by automatic sequential- type sampler ^c with composite sample collected monthly.	Gross beta, gamma scan, and tritium analysis of each sample.

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WATTS BAR NUCLEAR PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM^a

Exposure Pathway and/or Sample	Number of Samples and Locations ^b	Sampling and Collection Frequency	Type and Frequency <u>of Analysis</u>
c. Drinking (Con't)	1 sample at a control location TRM 529.3^{d} .		
d. Sediment from Shoreline	1 sample downstream from plant Discharge (TRM 513.0).	At least once per 184 days.	Gamma scan of each sample.
	1 sample from a control location upstream from plant discharge (TRM 530.2).		
e. Pond Sediment	1 sample from at least three locations in the Yard Holding Pond.	At least once per year.	Gamma scan of each sample.
5. INGESTION			• •
a. Milk	1 sample from milk producing animals in each of 1-3 areas indicated by the cow census were doses are calculated to be highest.	Every 2 weeks.	I-131 and gamma analysis on each sample. Sr-89 and Sr-90 once per quarter.
	1 or more samples from control locations.		
b. Fish	One sample of commercially important species and one sample of recreationally important species. One sample of each species from Chickamauga and Watts Bar Reservoirs.	At least once per 184 days.	Gamma scan on edible portions.

WATTS BAR NUCLEAR PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Exposure Pathway and/or Sample	Number of Samples and <u>Locations^b</u>	Sampling and <u>Collection Frequency</u>	Type and Frequency of Analysis
c. Vegetation ^e (Pasturage and grass)	Samples from farms producing milk but not providing a milk sample.	At least once per 31 day.	I-131 analysis and gamma scan of each sample.
d. Food Products	l sample each of principal food products grown at private gardens and/or farms in the immediate vicinity of the plant.	Annually at time of harvest. The types of foods available for sampling will vary. Following is a list of typical foods which may be available: Cabbage, Lettuce and/or Greens Corn Green Beans Potatoes Tomatoes	Gamma scan on edible portion.

a. The sampling program outlined in this table is that which was in effect at the end of 2006.

b. Sample locations are shown on Figures A-1, A-2, A-3.

c. Samples shall be collected by collecting an aliquot at intervals not exceeding 2 hours.

d. The samples collected at TRMs 503.8 and 473.0 are taken from the raw water supply, therefore, the upstream surface water sample will be considered the control sample for drinking water.

e. Vegetation sampling is applicable only for farms that meet the criteria for milk sampling and when milk sampling cannot be performed.

Map Location Number ^a	<u>Station</u>	Sector	Approximate Distance (Miles)	Indicator (I) or <u>Control</u> (C)	Samples <u>Collected^b</u>
2	PM-2	NW	7.0	Ι	AP,CF,R,SAM
3	PM-3	NNE	10.4	Î	AP,CF,R,S
4	PM-4	NE/ENE°	7.6	Ĩ	AP,CF,R,S
5	PM-5	S	8.0	Î	AP,CF,R,S,AM
6	RM-2	SW	15.0	Ċ	AP,CF,R,S,AM
7	RM-3	NNW	15.0	Č	AP,CF,R,S,AM
8	LM-1	SSW	0.5	Ī	AP,CF,R,SAM
9	LM-2	NNE	0.4	Ī	AP,CF,R,SAM
10	LM-3	NNE	1.9	Ī	AP,CF,R,S,AM
11	LM-4	SE	0.9	Ī	AP,CF,R,S,AM
12	Farm L	SSW	1.3	I^d	M,W
15	Farm K	ENE	11.6	С	M
18	Well #1	S	0.6	Ι	W
20	Farm N	ESE	4.1	Ι	М
22	Farm EH	SSW	24.0	С	М
23	Well #5	Ν	0.5	С	W
25	TRM 517.9		9.9°	Ι	SW
26	TRM 523.1		4.7°	Ι	SW
27	TRM 529.3	·	1.5°	С	SW,PW ^f
31	TRM 473.0		54.8 ^e	Ι	PW
	(C. F. Industries)				
32	JTRM 513.0		14.8 ^e	Ι	SS
33	TRM 530.2		2.4 ^e	С	SS
35	TRM 503.8 (Dayton)		24.0 ^e	Ι	PW
38	Chickamauga Reservoir			I	F
39	Watts Bar Reservoir			С	F
81	Yard Pond	SSE/S/SSW	Onsite	I	PS .
82	Well A	SSE	0.6	Ī	W
83	Well B	SSE	0.5	I	W
84	Well C	ESE	0.3	Ī	W
85	Well D	SSE	0.4	I	W

Table A-2 WATTS BAR NUCLEAR PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SAMPLING LOCATIONS

a. See Figures A-1, A-2, and A-3

b. Sample codes:

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SS = Shoreline sediment SW = Surface water

W = Well water

c. Station located on the boundary between these two sectors.

d. A control for well water.

e. Distance from the plant discharge (TRM 527.8)

f. The surface water sample is also used as a control for public water.

Table A-3 WATTS BAR NUCLEAR PLANT THERMOLUMINESCENT DOSIMETER (TLD) LOCATIONS

Maria				
Map ^a Location			Approximate	Onsite (On) ^b
Number	Station	Sector	Distance	or Officiate (Officiate
2	NW-3	Sector NW	<u>(miles)</u> 7.0	Offsite (Off)
2 3	NNE-3	NNE		Off
4	ENE-3	NE/ENE	10.4 7.6	Off
5	S-3	S	7.8	Off
6	SW-3	sw	15.0	Off
0 7	NNW-4	NNW	15.0	Off Off
10	NNE-1A	NNE	1.9	
10	SE-1A	SE	0.9	On
12	SSW-2	SSW	1.3	On On
12	W-2	W	4.8	
14	E-3	e vv		Off
40	N-1	L N	15.0	Off
40	N-1 N-2	N	4.7	On
				Off
42 43	NNE-1	NNE	1.2	On
43 44	NNE-2	NNE	4.1	Off
44	NE-1 NE-2	NE	0.9	On
		NE	2.9	Off
46	NE-3	NE	6.1	Off
47	ENE-1	ENE	0.7	On
48	ENE-2	ENE	5.8	Off
49	E-1	E	1.3	On
50	E-2	E	5.0	Off
51	ESE-1	ESE	1.2	On
52	ESE-2	ESE	4.4	Off
54	SE-2	SE	5.3	Off
55	SSE-1A	SSE	0.6	On
56	SSE-2	SSE	5.8	Off
57	S-1	S	0.7	On
58	S-2	S	4.8	Off
59	SSW-1	SSW	0.8	On
60	SSW-3	SSW	5.0	Off
62	SW-1	SS	0.8	On
63	SW-2	SW	5.3	Off
64	WSW-1	WSW	0.9	On
65	WSW-2	WSW	3.9	Off
66	W-1	W	0.9	On
67 68	WNW-1	WNW	0.9	On
68	WNW-2	WNW	4.9	Off
69 70	NW-1	NW	1.1	On
70	NW-2	NW	4.7	Off
71	NNW-1	NNW	1.0	On
72	NNW-2	NNW	4.5	Off
73	NNW-3	NNW	7.0	Off
74	ENE-2A	ENE	3.5	Off
75 76	SE-2A	SE	3.1	Off
76	S-2A	S	2.0	Off
77	W-2A	W	3.2	Off
78	NW-2A	NW	3.0	Off .
79	SSE-1	SE	0.5	On

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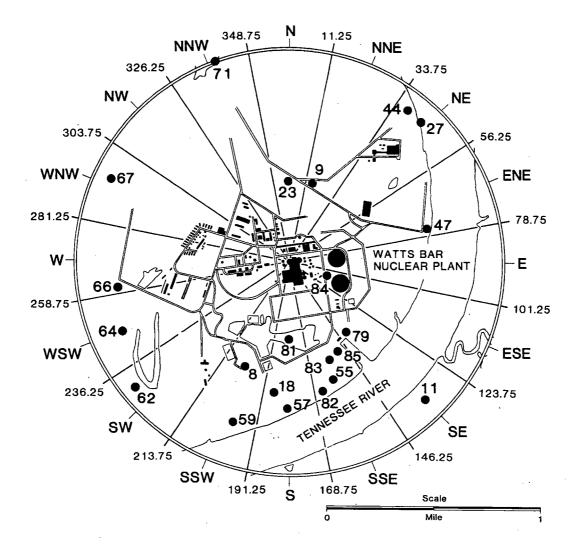
a. See Figures A-1, A-2, and A-3.
b. TLDs designated "onsite" are located 2 miles or less from the plant; "offsite" are located more than 2 miles from the plant.

Figure A-1

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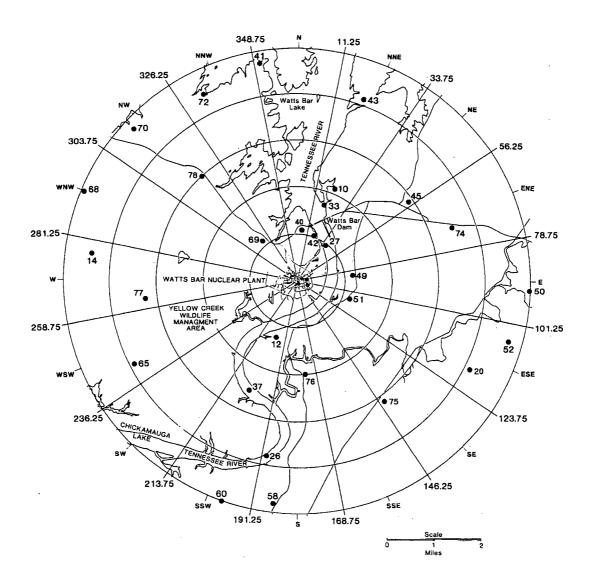
Radiological Environmental Sampling Locations

Within 1 Mile of the Plant



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Radiological Environmental Sampling Locations



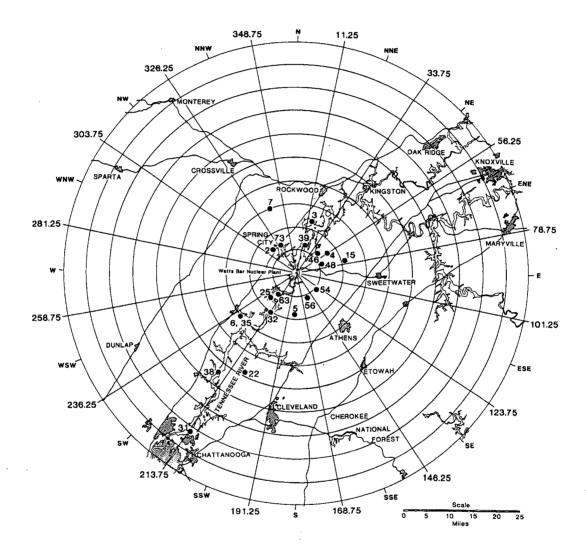
From 1 to 5 Miles From The Plant

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Figure A-3

Radiological Environmental Sampling Locations

Greater Than 5 Miles From the Plant



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APPENDIX B

2006 PROGRAM MODIFICATIONS

Appendix B

Radiological Environmental Monitoring Program Modification

Late in 2006, the dairy farm located 3.8 miles ESE went out of business. Currently there is no replacement sampling location within the five-mile radius.

APPENDIX C

PROGRAM DEVIATIONS

Appendix C

Program Deviations

Problems with sampling equipment resulted in sample unavailability or inadequate sample volumes for four sets of air particulate filter and charcoal cartridge samples during 2006. Milk sampling could not be performed for the last four sampling periods at one of the dairy farm locations. Table C-1 provides additional details on the missed samples resulting from these equipment problems.

			· · ·
<u>Date</u> 09/06/06	<u>Station</u> LM-4	Location 0.9 miles SE	<u>Remarks</u> The total sample volume for air filter and charcoal cartridge samples was not adequate due to a failure of the sampling pump. The problem was a broken drive belt on the sampler motor. The belt was replaced and the system returned to normal operation for the next sampling cycle. The missed samples were documented with PER 110334.
10/10/06 & 10/16/06	PM-3	10.4 miles NNE	The total sample volume for air filter and charcoal cartridge samples was not adequate due to a problem with the sampling pump. The problem was a failed drive motor. A replacement motor had to be ordered delaying repairs into the next sampling cycle. The missed samples were documented with PER 112930.
11/08/06	Farm Mu	3.8 miles ESE	The dairy farm at this location went out of business. The last sample was collected from this location on 10/25/06.
11/29/06	LM-4	0.9 miles SE	The total sample volume for air filter and charcoal cartridge samples was not adequate due to a failure of the sampling pump. The problem was a failure of the drive motor The motor was replaced and the system returned to normal operation for the next sampling cycle. The missed samples were documented with PER 115659.

Table C-1
Radiological Environmental Monitoring Program Deviations
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APPENDIX D

ANALYTICAL PROCEDURES

Appendix D

Analytical Procedures

Analyses of environmental samples are performed by the radioanalytical laboratory located at the Western Area Radiological Laboratory facility in Muscle Shoals, Alabama. Analysis procedures are based on accepted methods. A summary of the analysis techniques and methodology follows.

The gross beta measurements are made with an automatic low background counting system. Normal counting times are 50 minutes. Water samples are prepared by evaporating 500 ml of samples to near dryness, transferring to a stainless steel planchet, and completing the evaporation process. Air particulate filters are counted directly in a shallow planchet.

The specific analysis of I-131 in milk is performed by first isolating and purifying the iodine by radiochemical separation and then counting the final precipitate on a beta-gamma coincidence counting system. The normal count time is 50 minutes. With the beta-gamma coincidence counting system, background counts are virtually eliminated and extremely low levels of activity can be detected.

After a radiochemical separation, samples analyzed for Sr-89, 90 are counted on a low background beta counting system. The sample is counted a second time after a 7-day ingrowth period. From the two counts the Sr-89 and Sr-90 concentrations can be determined.

Water samples are analyzed for tritium content by first distilling a portion of the sample and then counting by liquid scintillation. A commercially available scintillation cocktail is used.

Gamma analyses are performed in various counting geometries depending on the sample type and volume. All gamma counts are obtained with germanium type detectors interfaced with a high resolution gamma spectroscopy system. Spectral data reduction is performed by the computer program HYPERMET.

The charcoal cartridges used to sample gaseous radioiodine are analyzed by gamma spectroscopy using a high resolution gamma spectroscopy system with germanium detectors.

Atmospheric moisture samples are collected on silica gel from a metered air flow. The moisture is released from the silica gel by heating and a portion of the distillate is counted by liquid scintillation for tritium using commercially available scintillation cocktail.

The necessary efficiency values, weight-efficiency curves, and geometry tables are established and maintained on each detector and counting system. A series of daily and periodic quality control checks are performed to monitor counting instrumentation. System logbooks and control charts are used to document the results of the quality control checks.

APPENDIX E

NOMINAL LOWER LIMITS OF DETECTION (LLD)

Appendix E

Nominal Lower Limits of Detection

A number of factors influence the LLD, including sample size, count time, counting efficiency, chemical processes, radioactive decay factors, and interfering isotopes encountered in the sample. The most probable values for these factors have been evaluated for the various analyses performed in the environmental monitoring program. The nominal LLDs calculated from these values, in accordance with the methodology prescribed in the ODCM, are presented in Table E-1. The maximum values for the lower limits of detection specified in the ODCM are shown in Table E-2.

The nominal LLDs are also presented in the data tables. For analyses for which nominal LLDs have not been established, an LLD of zero is assumed in determining if a measured activity is greater than the LLD.

TABLE E-1

Nominal LLD Values A. Radiochemical Procedures

	Air Filters (<u>pCi/m³)</u>	Water (<u>pCi/L)</u>	Milk (<u>pCi/L)</u>	Wet Vegetation (<u>pCi/Kg wet)</u>	Sediment and Soil (<u>pCi/g dry)</u>
Gross Beta	0.002	1.9			
Tritium	3.0	300	1		
Iodine-131		0.4	0.4	6.0	
Strontium-89	0.0011	5.0	3.5	31.0	1.6
Strontium-90	0.0004	2.0	2.0	12.0	0.4

Table E-1 Nominal LLD Values B. Gamma Analyses

	Particulate Filter pCi/m3	Charcoal Filter <u>pCi/m3</u>	Water and Milk <u>pCi/L</u>	Vegetation and Grain <u>pCi/g, dry</u>	Wet Vegetation <u>pCi/kg, wet</u>	Soil and Sediment pCi/g, dry	Fish <u>pCi/g, dry</u>	Clam Flesh <u>pCi/g, dry</u>	Foods Tomatoes Potatoes, etc. <u>pCi/kg, wet</u>
Ce-141	.005	.02	10	.07	35	.10	.07	.35	20
Ce-144	.01	.07	30	.15	115	.20	.15	.85	60
Cr-51	.02	0.15	45	.30	200	.35	.30	2.40	95
I-131	.005	0.03	10	.20	60	.25	.20	1.70	20
Ru-103	.005	0.02	5	.03	25	.03	.03	.25	25
Ru-106	.02	0.12	40	.15	190	.20	.15	1.25	90
Cs-134	.005	0.02	5	.03	30	.03	.03	.14	10
Cs-137	.005	0.02	5	.03	25	.03	.03	.15	10
Zr-95	.005	0.03	10	.05	45	.05	.05	.45	45
Nb-95	.005	0.02	5	.25	30	.04	.25	.25	10
Co-58	.005	0.02	5	03	20	.03	03	.25	10
Mn-54	.005	0.02	5	.03	20	.03	.03	.20	10
Zn-65	.005	0.03	10	.05	45	.05	.05	.40	45
Co-60	.005	0.02	5	.03	20	.03	.03	.20	10
K-40	.04	0.30	100	.40	400	.75	.40	3.50	250
Ba-140	.015	0.07	25	.30	130	.30	.30	2.40	50
La-140	.01	0.04	10	.20	50	.20	.20	1.40	25
Fe-59	.005	0.04	10	.08	40	.05	.08	.45	25
Be-7	.02	0.15	45	.25	200	.25	.25	1.90	90
Pb-212	.005	0.03	15	.04	40	.10	.04	.30	40
Pb-214	.005	0.07	20	.50	80	.15	.50	.10	80
Bi-214	.005	0.05	20	.10	55	.15	.10	.50	40
Bi-212	.02	0.20	50	.25	250	.45	.25	2.00	130
T1-208	.002	0.02	10	.03	30	.06	.03	.25	30
Ra-224						.75			
Ra-226						.15			
Ac-228	.01	0.07	20	.10	70	.25	.10	.75	50

Table E-2

<u>Analysis</u>	Water <u>pCi/L</u>	Airborne Particulate or Gases <u>pCi/m³</u>	Fish <u>pCi/kg, wet</u>	Milk <u>pCi/L</u>	Food Products <u>pCi/kg, wet</u>	Sediment pCi/kg, dry
gross beta	4	1 x 10 ⁻²	N.A.	N.A.	N.A.	N.A.
H-3	2000 ^ª	N.A.	N.A.	N.A.	N.A.	N.A.
Mn-54	15	N.A.	130	N.A.	N.A.	N.A.
Fe-59	. 30	N.A.	260	N.A.	N.A.	N.A.
Co-58,60	15	N.A.	130	N.A.	N.A.	N.A.
Zn-65	30	N.A.	260	N.A.	N.A.	N.A.
Zr-95	30	N.A.	N.A.	N.A.	N.A.	N.A.
Nb-95	15	N.A.	N.A.	N.A.	N.A.	N.A.
I-131	1 ^b	7 x 10 ⁻²	N.A.	1	60	N.A.
Cs-134	15	5 x10 ⁻²	130	15	60	150
Cs-137	. 18	6 x 10 ⁻²	150	18	80	180
Ba-140	60	N.A.	N.A.	60	N.A.	N.A.
La-140	15	N.A.	N.A.	15	N.A.	N.A.

Maximum Values for the Lower Limits of Detection (LLD) Specified by the WBN Offsite Dose Calculation Manual

a. If no drinking water pathway exists, a value of 3000 pCi/liter may be used.

b. If no drinking water pathway exists, a value of 15 pCi/liter may be used.

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APPENDIX F

3

QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

Appendix F

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Quality Assurance/Quality Control Program

A thorough quality assurance program is employed by the laboratory to ensure that the environmental monitoring data are reliable. This program includes the use of written, approved procedures in performing the work, a complete training and qualification process, internal self assessments of program performance, audits by various external organizations, and a laboratory quality control program.

The quality control program employed by the radioanalytical laboratory is designed to ensure that the sampling and analysis process is working as intended. The program includes equipment checks and the analysis of quality control samples along with routine samples.

Radiation detection devices can be tested in a number of ways. There are two primary tests which are performed on all devices. In the first type, the device is operated without a sample on the detector to determine the background count rate. The background counts are usually low values and are due to machine noise, cosmic rays, trace amounts of radioactivity in the materials used to construct the detector, or terrestrial sources. Charts of background counts are kept and monitored to ensure that no unusually high or low values are encountered.

In the second test, the device is operated with a known amount of radioactivity present. The number of counts registered from such a radioactive standard should be very reproducible. These reproducibility checks are also monitored to ensure that they are neither higher nor lower than expected. When counts from either test fall outside the expected range, the device is inspected for malfunction or contamination. It is not placed into service until it is operating properly.

In addition to these two general checks, other quality control checks are performed on the variety of detectors used in the laboratory. The exact nature of these checks depends on the type of device and the method it uses to detect radiation or store the information obtained.

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Quality control samples of a variety of types are used by the laboratory to verify the performance of different portions of the analytical process. These quality control samples may be blanks, replicate samples, blind samples, or cross-checks.

Blanks are samples which contain no measurable radioactivity or no activity of the type being measured. Such samples are analyzed to determine whether there is any contamination of equipment or commercial laboratory chemicals, cross-contamination in the chemical process, or interference from isotopes other than the one being measured.

Duplicate samples are generated at random by the sample computer program which schedules the collection of the routine samples. For example, if the routine program calls for four milk samples every week, on a random basis each farm might provide an additional sample several times a year. These duplicate samples are analyzed along with other routine samples. They provide information about the variability of radioactive content in the various sample media.

If enough sample is available for a particular analysis, the laboratory personnel can split it into two portions. Such a sample can provide information about the variability of the analytical process since two identical portions of material are analyzed side by side.

Analytical knowns are another category of quality control sample. A known amount of radioactivity is added to a sample medium. Whenever possible, the analytical knowns contain the same amount of radioactivity each time they are run. In this way, the lab staff has immediate knowledge of the quality of the measurement process. A portion of these samples are also blanks.

Blind spikes are samples containing radioactivity which are introduced into the analysis process disguised as ordinary environmental samples. The lab staff does not know the samples contain radioactivity. Since the bulk of the ordinary workload of the environmental

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laboratory contains no measurable activity or only naturally occurring radioisotopes, blind spikes can be used to test the detection capability of the laboratory or they can be used to test the data review process. If an analysis routinely generates numerous zeroes for a particular isotope, the presence of a positive result will be brought to the attention of the laboratory supervisor in the daily review process. Blind spikes test this process since they contain radioactivity at levels high enough to be detected. Furthermore, the activity can be put into such samples at the extreme limit of detection (near the LLD) to determine whether or not the laboratory can find any unusual radioactivity whatsoever.

Another category of quality control samples is internal cross-checks. These samples have a known amount of radioactivity added and are presented to the lab staff labeled as cross-check samples. This means that the quality control staff knows the radioactive content or "right answer" but the personnel performing the analyses do not. They are aware they are being tested. Such samples test the best performance of the laboratory by determining if the staff can find the "right answer". These samples provide information about the accuracy of the measurement process. Further information is available about the variability of the process if multiple analyses are requested on the same sample. Like blind spikes or analytical knowns, these samples can also be spiked with low levels of activity to test detection limits. During 2006, all analysis results for internal cross-check samples were within agreement limits when compared to the known value.

To provide for interlaboratory comparison program cross-check samples, the laboratory participated in an environmental level cross-check program available through Analytics Incorporated. The results of TVA's participation in this program are presented in Table F-1.

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Quality control data are routinely collected, examined, and reported to laboratory supervisory personnel. They are checked for trends, problem areas, or other indications that a portion of the analytical process needs correction or improvement. The end result is a measurement process that provides reliable and verifiable data and is sensitive enough to measure the presence of radioactivity far below the levels which could be harmful to humans.

Table F-1

Results For 2006 External Cross Checks

	Results						
Test Period	Sample Type / Analysis	Known	TVA	Agreement			
First Quarter	Water (pCi/L)						
-	Gross Beta	153	177	1.15			
First Quarter	Milk (pCi/Liter)						
	¹³¹ I	76.7	74.7 ^(a)	0.97			
	⁸⁹ Sr	. 99	113	1.14			
	⁹⁰ Sr	10.8	11.8	1.09			
First Quarter	Water (pCi/L)						
	¹³¹ I	67.4	70.3	1.04			
	¹⁴¹ Ce	86.8	87.5	1.01			
	^{s1} Cr	234	244	1.04			
	¹³⁴ Cs	101	96.2	0.95			
	¹³⁷ Cs	74.3	74	1.00			
	⁵⁸ Co	87.5	89.3	1.02			
	⁵⁴ Mn	78.1	80.6	1.03			
	⁵⁹ Fe	72.4	76.1	1.05			
	⁶⁵ Zn	148	146	0.97			
	⁶⁰ Co	107	108	1.01			
First Quarter	Water (pCi/L)						
	Η ^ε	4210	4630	1.10			
Third Quarter							
Inira Quarter	Water (pCi/L) ³ H	11000	11121	1.01			
Third Quarter	Sand (pCi/gram)						
rind Quarter	¹⁴¹ Ce	0.121	0.125	1.02			
	⁵¹ Cr			1.03			
	¹³⁴ Cs	0.398	0.387	0.97			
	¹³⁷ Cs	0.120	0.139	1.16			
	58 Co	0.247	0.235	0.95			
	54Mn	0.154	0.155	1.00			
	⁵⁹ Fe	0.159	0.172	1.08			
	⁶⁵ Zn	0.062	0.053	0.86			
	⁶⁰ c	0.204	0.198	0.97			
	⁶⁰ Co	0.189	0.189	1.00			
Third Quarter	Air Filter (pCi/filter)						
	Gross Beta	86.0	81.4	0.95			
Third Quarter	Air Filter (pCi/filter)						
	¹⁴¹ Ce	79.1	74.8	0.95			
	⁵¹ Cr	259	260.9	1.01			
	¹³⁴ Cs	78.2	66	0.84			
• • • •	¹³⁷ Cs	161	152	0.94			
	⁵⁸ Co	101	96.9	0.96			
	⁵⁴ Mn	104	108.4	1.05			
	⁵⁹ Fe	40.2	35.4	0.88			
	⁶⁵ Zn	133	135	1.01			
	⁶⁰ Co	123	117.8	0.96			

(a) Activity was originally calculated using incorrect sample volume. The value reported here is the result of calculation with correct volume.

APPENDIX G

LAND USE SURVEY

Appendix G

Land Use Survey

A land use survey was conducted in accordance with the provisions of ODCM Control 1.3.2 to identify the location of the nearest milk animal, the nearest residence, and the nearest garden of greater than 500 square feet producing fresh leafy vegetables in each of 16 meteorological sectors within a distance of 5 miles from the plant.

The land use survey was conducted between April 1 and October 1 using appropriate techniques such as door-to-door survey, mail survey, telephone survey, aerial survey, or information from local agricultural authorities or other reliable sources.

From the data of the surveys, relative radiation doses were projected for individuals near the plant. Doses from air submersion were calculated for the nearest resident in each sector, while doses from drinking milk or eating foods produced near the plant were calculated for the areas with milk producing animals and gardens, respectively. These doses were calculated using design basis source terms and historical meteorological data. They also assume that the effluent releases are equivalent to the design basis source terms. The calculated doses are relative in nature and do not reflect actual exposures received by individuals living near WBN.

In response to the 2006 WBN land use survey, annual doses were calculated for air submersion, vegetable ingestion, and milk ingestion. There were no changes in the location of the nearest resident in 2006.

Doses calculated for ingestion of home grown foods changed in six sectors compared to the results calculated in 2005 due to changes in the locations of the nearest garden.

For milk ingestion, projected doses were consistent with those calculated for 2005. Except for the farm where the owner does not want to participate in the program (Farm Ho), milk samples are being collected from the three farms where the calculated doses are highest. One of the farms providing a milk sample is between Farm Ho and the plant.

The results of the 2006 land use survey and resulting relative projected annual dose calculations documented that there were no significant changes in land use of unrestricted areas. No required changes in the sampling locations for the radiological environmental monitoring program were identified as result of the land use survey.

Tables G-1, G-2, and G-3 compare results of the relative projected annual dose calculations for 2005 and 2006.

Table G-1

Watts Bar Nuclear Plant Relative Projected Annual Air Submersion Dose to the Nearest Residence Within 5 Miles of Plant^a

mrem/year

	200)5	2006		
Sector	Approximate Distance (Miles)	Annual Dose	Approximate Distance (Miles)	Annual Dose	
N	1.3	0.24	1.3	0.24	
NNE	2.3	0.20	2.3	0.20	
NE	2.1	0.19	2.1	0.19	
ÉNE	1.5	0.31	1.5	0.31	
E	2.0	0.18	2.0	0.18	
ESE	2.8	0.12	2.8	0.12	
SE	0.9	0.76	0.9	0.76	
SSE	1.0	0.38	1.0	0.38	
S	1.0	0.37	1.0	0.37	
SSW	1.2	0.29	1.2	0.29	
SW	2.7	0.09	2.7	0.09	
WSW	1.3	0.38	1.3	0.38	
W	1.8	0.07	1.8	0.07	
WNS	1.0	0.17	1.0	0.17	
NW	1.3	0.09	1.3	0.09	
NNW	2.7	0.03	2.7	0.03	

a. Assumes the effluent releases are equivalent to design basis source terms.

Table G-2

Watts Bar Nuclear Plant Relative Projected Annual Ingestion Dose to Child's Bone Organ from Ingestion of Home-Grown Foods Nearest Garden Within 5 Miles of Plant^a

mrem/year

	<u>20</u>	05	2006		
	Approximate		Approximate		
Sector	Distance (Miles)	Annual Dose	Distance (Miles)	Annual Dose	
Ν	4.8	0.50	4.8	0.50	
NNE	3.8	1.68	3.8	1.68	
NE	2.4	3.36	2.4	3.36	
ENE	3.1	1.93	3.1	1.93	
Е	3.4	1.63	3.1	2.00	
ESE	3.8	1.57	3.8	1.57	
SE	2.9	2.17	2.9	2.17	
SSE	3.1	1.40	4.6	0.59	
S	1.4	5.11	1.4	5.11	
SSW	b		b	í.	
SW	b	•	b		
WSW	1.1	7.87	2.9	1.73	
W	2.1	1.20	3.2	0.59	
WNW	3.6	0.26	3.7	0.23	
NW	1.3	1.97	2.0	0.76	
NNW	2.9	0.62	2.9	0.62	

a. Assumes the effluent releases are equivalent to design basis source terms.b. Garden not identified within 5 miles of the plant in this sector.

Table G-3

Watts Bar Nuclear Plant Relative Projected Annual Dose to Receptor Thyroid from Ingestion of Milk^a (Nearest Milk-Producing Animal Within 5 Miles of Plant)

mrem/year

		Approximate Distance	Annua	<u>al Dose</u>	X/Q
Location	Sector	Miles	<u>2005</u>	<u>2006</u>	s/m^3
Cows					
Farm Mu ^b	ESE	3.7	0.08	0.08	1.14 E-6
Farm N ^b	ESE	4.1	0.04	0.04	9.44 E-7
Farm L ^b	SSW	1.3	0.27	0.27	2.36 E-6
Farm Ho ^c	SSW	1.5	0.33	0.33	1.43 E-6

a. Assumes the plant is operating and effluent releases are equivalent to design basis source terms.

b. Milk being sampled at these locations.

c. Owner unwilling to provide samples or information. The dose calculated assumes consumption of the milk by an adult and a feeding factor equivalent to 33 percent. If milk from this location were to be consumed by teens, children or infants, the estimated doses would be 0.52, 1.07 and 2.53 mrem/year, respectively.

APPENDIX H

1

DATA TABLES AND FIGURES

Table H - 1

DIRECT RADIATION LEVELS

Average External Gamma Radiation Levels at Various Distances from Watts Bar Nuclear Plant for Each Quarter - 2006 mR / Quarter (a)

Distance					per annum			
miles		Average External Gamma Radiation Levels (b)						
	1st qtr	2nd qtr	3rd qtr	4th qtr				
0 - 1	15.8 ± 2.0	15.8 ± 2.1	16.5 ± 2.0	16.0 ± 2.0	64			
1 - 2	14.6 ± 1.6	14.6 ± 1.5	15.2 ± 1.5	14.7 ± 1.2	59			
2 - 4	14.5 ± 1.1	14.1 ± 1.0	15.0 ± 1.2	14.8 ± 1.2	58			
4 - 6	14.9 ± 1.6	14.9 ± 1.6	15.5 ± 1.8	15.2 ± 1.6	60			
> 6	13.9 ± 1.8	13.6 ± 1.8	14.3 ± 1.9	14.0 ± 1.9	56			
Average 0 - 2 miles (onsite)	i 15.3 ± 2.0	15.3 ± 2.0	16.0 ± 2.0	15.5 ± 1.9	62			
Average > 2 miles (offsite)	14.5 ± 1.6	14.4 ± 1.7	15.1 ± 1.8	14.7 ± 1.7	59			

(a) Field periods normalized to one standard quarter (2190 hours)

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(b) Average of the individual measurements in the set \pm 1 standard deviation of the set

TABLE H-2

DIRECT RADIATION LEVELS

Individual Stations at Watts Bar Nuclear Plant

				Envi	ironmental F	Radiation Le	vels	
				L	mR / c	uarter		
Мар	TLD		Approx	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Annual
Location	Station	Direction,	Distance,	Dec - Feb	Mar - May	Jun - Aug	Sep - Nov	Exposure
<u>Number</u>	Number	<u>degrees</u>	<u>miles</u>	<u>2005-6</u>	<u>2006</u>	<u>2006</u>	<u>2006</u>	mR/year
40	N-1	. 10	1.2	17.1	16.8	17.1	16.6	67.6
41	N-2	350	4.7	16.2	16.4	17.0	16.3	65.9
42	NNE-1	21	1.2	16.6	16.5	17.4	16.1	66.6
10	NNE-1A	22	1.9	13.1	13.2	13.9	13.7	53.9
43	NNE-2	20	4.1	13.9	13.7	14.3	14.3	56.2
3	NNE-3	17	10.4	13.4	13.3	14.0	13.6	54.4
44	NE-1	39	.9	16.9	17.1	17.4	16.9	68.3
45	NE-2	54	2.9	15.5	15.0	15.6	15.5	61.6
46	NE-3	47	6.1	12.2	12.1	12.8	12.5	49.7
47	ENE-1	74	.7	15.3	15.2	16.4	15.8	62.7
48	ENE-2	69	5.8	13.8	13.6	14.4	14.3	56.1
74	ENE-2A	69	3.5	12.7	12.2	12.7	12.7	50.2
· 4	ENE-3	56	7.6	13.7	13.8	14.3	14.1	55.9
49	E-1	85	1.3	13.9	14.5	14.9	14.6	57.8
50	E-2	92	5.0	15.6	15.3	15.9	15.5	62.3
15	E-3	90	15.0	17.7	17.2	17.8	17.8	70.4
51	ESE-1	109	1.2	12.4	12.6	13.0	12.9	50.9
52	ESE-2	106	4.4	17.5	17.2	17.3	17.4	69.4
11	SE-1A	138	.9	14.8	13.9	15.2	15.2	59.1
54	SE-2	128	5.3	13.7	13.1	13.4	13.7	53.9
75	SE-2A	144	3.1	14.3	14.1	15.0	14.6	58.0
79	SSE-1	146	.6	15.2	15.5	16.3	15.8	62.8
55	SSE-1A	161	.6	13.2	13.9	14.2	13.7	55.0
56	SSE-2	156	5.8	15.9	15.4	16.1	16.1	63.5

TABLE H - 2 continued

DIRECT RADIATION LEVELS

Individual Stations at Watts Bar Nuclear Plant

				Envi	ronmental F	Radiation Le	evels	1
			÷.,		mR / o	uarter		
Map	TLD		Approx	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Annual
Location	Station	Direction,	Distance,	Dec - Feb	Mar - May	Jun - Aug	Sep - Nov	Exposure
<u>Number</u>	<u>Number</u>	<u>degrees</u>	<u>miles</u>	<u>2005-6</u>	<u>2006</u>	<u>2006</u>	<u>2006</u>	<u>mR/year</u>
57	S-1	182 .	.7	14.6	14.9	15.2	14.7	59.5
58	S-2	185	4.8	12.2	12.3	12.5	12.3	49.3
76	S-2A	177	2.0	15.9	15.1	16.7	16.5	64.2
5	S-3	185	6.2	12.7	12.5	12.8	13.0	50.9
59	SSW-1	199	.8	18.4	18.1	18.9	18.6	74.0
12	SSW-2	200	1.3	13.9	13.5	14.3	14.0	55.6
60	SSW-3	199	5.0	12.9	13.1	.13.5	13.2	52.6
62	SW-1	226	.8	17.0	17.1	18.2	17.1	69.5
63	SW-2	220	5.3	14.6	14.1	14.8	14.4	57.9
6	SW-3	225	15.0	13.5	13.8	14.4	14.0	55.7
64	WSW-1	255	.9	14.1	13.9	14.6	14.0	56.6
65	WSW-2	247	4.0	16.3	16.8	17.8	16.9	67.8
66	W-1	270	.9	15.0	15.3	16.1	15.2	61.6
14	W-2	277	4.8	12.8	13.4	13.7	13.4	53.3
77	W-2A	268	3.2	14.9	14.9	15.7	15.0	60.4
67	WNW-1	294	.9	20.5	21.0	21.4	20.8	83.6
68	WNW-2	292	4.9	16.8	17.1	18.1	17.3	69.3
69	NW-1	320	1.1	15.0	15.0	15.8	15.3	61.0
70	NW-2	313	4.7	16.1	16.3	17.4	16.5	66.3
78	NW-2A	321	3.0	13.9	13.6	14.6	14.3	5 6.4
2	NW-3	317	7.0	16.5	16.3	17.5	16.5	66.7
71	NNW-1	340	1.0	14.1	13.5	14.7	13.9	56.2
72	NNW-2	333	4.5	15.3	15.9	16.4	15.9	63.5
73	NNW-3	329	7.0	12.1	11.2	12.3	11.7	47.2
7	NNW-4	337	15.0	13.1	12.5	13.1	12.7	51.3

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Tennessee Valley Authority

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN AIR FILTER PCI/M3 - 0.037 BQ/M3

Name of Facility: WATTS BAR NUCLEAR PLANT Docket Number: 50-390,391 Location of Facility: RHEA TENNESSEE Reporting Period: 2006 Type and Lower Limit Indicator Locations Location with Highest Annual Mean Total Number of Detection Mean (F) Name Mean (F) of Analysis Performed (LLD) See Note 1 Range See Note 2 Range See Note 2 **Distance and Direction**

Control Locations Number of Mean (F) Range See Note 2

Nonroutine Reported Measurements

Performed	See Note 1	See Note 2		See Note 2	See Note 2	Measuremen
GROSS BETA	516					
	2.00E-03	2.14E-02 (412 / 412) 8.41E-03 - 3.77E-02	PM2 SPRING CITY 7.0 MILES NW	2.21E-02 (52 / 52) 9.48E-03 - 3.20E-02	2.15E-02 (104 / 104) 8.47E-03 - 3.84E-02	
ŚGAMMA SCAN (GELI)	130					
AC-228	1.00E-02	104 VALUES < LLD	LM3 1.9 MILES NNE	13 VALUES < LLD	26 VALUES < LLD	
BE-7	2.00E-02	1.12E-01 (104 / 104) 6.36E-02 - 1.80E-01	PM3 10.4 MILES NNE	1.18E-01 (13 / 13) 6.36E-02 - 1.80E-01	1.18E-01 (26 / 26) 8.00E-02 - 1.66E-01	
BI-214	5.00E-03	1.44E-02 (71 / 104) 5.00E-03 - 5.22E-02	LM3 1.9 MILES NNE	1.78E-02 (9 / 13) 5.60E-03 - 4.17E-02	1.26E-02 (20 / 26) 5.00E-03 - 2.79E-02	T_{c}
K-40	4.00E-02	4.19E-02 (1 / 104) 4.19E-02 - 4.19E-02	LM2 0.5 MILES N	4.19E-02 (1 / 13) 4.19E-02 - 4.19E-02	26 VALUES < LLD	Table H-3
PB-212	5.00E-03	104 VALUES < LLD	LM3 1.9 MILES NNE	13 VALUES < LLD	26 VALUES < LLD	I-3
PB-214	5.00E-03	1.44E-02 (72 / 104) 5.00E-03 - 5.01E-02	PM5 DECATUR 6.2 MILES S	1.92E-02 (5 / 13) 5.80E-03 - 4.32E-02	1.30E-02 (21 / 26) 5.60E-03 - 2.88E-02	
TL-208	2.00E-03	104 VALUES < LLD	LM3 1.9 MILES NNE	13 VALUES < LLD	26 VALUES < LLD	

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Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).



RADIOACTIVITY IN CHARCOAL FILTER PCI/M3 - 0.037 BQ/M3

Name of Facility: Location of Facility: I	WATTS BAR NUCLE	AR PLANT INESSEE		Docket Nu Reporting F		
Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GAMMA SCAN (GELI)	516					
BI-214	5.00E-02	6.69E-02 (16 / 412) 5.07E-02 - 8.79E-02	PM4 7.6 MILES NE/ENE	7.53E-02 (4 / 52) 5.22E-02 - 8.79E-02	6.67E-02 (1 / 104) 6.67E-02 - 6.67E-02	
I-131	3.00E-02	SEE NOTE 3				
K-40	3.00E-01	3.65E-01 (22 / 412) 3.00E-01 - 4.75E-01	LM3 1.9 MILES NNE	4.13E-01 (2 / 52) 3.84E-01 - 4.42E-01	3.62E-01 (6 / 104) 3.17E-01 - 4.45E-01	
PB-212	3.00E-02	412 VALUES < LLD	LM3 1.9 MILES NNE	52 VALUES < LLD	104 VALUES < LLD	
PB-214	7.00E-02	8.75E-02 (9 / 412) 7.06E-02 - 1.08E-01	PM2 SPRING CITY 7.0 MILES NW	1.08E-01 (1 / 52) 1.08E-01 - 1.08E-01	104 VALUES < LLD	Table
TL-208	2.00E-02	412 VALUES < LLD	PM5 DECATUR 6.2 MILES S	52 VALUES < LLD	104 VALUES < LLD	ен-

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

Note: 3. The analysis of Charcoal Filters was performed by Gamma Spectroscopy. No I-131 was detected. The LLD for I-131 by Gamma Spectroscopy was 0.03 pCi/cubic meter.

TVA

3.66E+00 - 3.66E+00

3.89E+00 - 5.60E+00

RADIOACTIVITY IN ATMOSPHERIC MOISTURE PCI/M3 - 0.037 BQ/M3

Name of Facility:	WATTS BAR NUCLE	AR PLANT	Docket Number: 50-390,391			
Location of Facility: RHEA TENNESSEE				Reportir		
Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
TRITIUM	206					
	3.00E+00	4.15E+00 (8 / 154)	LM3	4.74E+00 (2/26)	3.66E+00 (1 / 52)	

1.9 MILES NNE

Table H-5

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

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Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

tection (LLD) as c

3.01E+00 - 5.60E+00



Number of Nonroutine Reported Measurements

Docket Number: 50-390,391

RADIOACTIVITY IN MILK PCI/L - 0.037 BQ/L

Location of Facility:	RHEA TEN	INESSEE	Reporting Period: 2006			
Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	I
IODINE-131	126		· .			
	4.00E-01	74 VALUES < LLD			52 VALUES < LLD	
GAMMA SCAN (GELI)	126					
AC-228	2.00E+01	74 VALUES < LLD	LAYMAN FARM 1.3 MILES SSW	26 VALUES < LLD	52 VALUES < LLD	
BI-214	2.00E+01	3.23E+01 (10 / 74) 2.01E+01 - 5.39E+01	LAYMAN FARM 1.3 MILES SSW	3.41E+01 (3 / 26) 2.01E+01 - 5.39E+01	2.53E+01 (2 / 52) 2.41E+01 - 2.65E+01	
K-40	1.00E+02	1.35E+03 (74 / 74) 1.10E+03 - 1.54E+03	LAYMAN FARM 1.3 MILES SSW	1.37E+03 (26 / 26) 1.15E+03 - 1.54E+03	1.27E+03 (52 / 52) 9.16E+02 - 1.53E+03	
PB-212	1.50E+01	74 VALUES < LLD	LAYMAN FARM 1.3 MILES SSW	26 VALUES < LLD	52 VALUES < LLD	
PB-214	2.00E+01	2.57E+01 (5 / 74) 2.04E+01 - 3.66E+01	LAYMAN FARM 1.3 MILES SSW	3.66E+01 (1 / 26) 3.66E+01 - 3.66E+01	52 VALUES < LLD	
TL-208	1.00E+01	74 VALUES < LLD	LAYMAN FARM 1.3 MILES SSW	26 VALUES < LLD	52 VALUES < LLD	
SR 89	19					
	3.50E+00	11 VALUES < LLD	,		8 VALUES < LLD	
SR 90	19					
	2.00E+00	11 VALUES < LLD		· ·	8 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Name of Facility: WATTS BAR NUCLEAR PLANT

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

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RADIOACTIVITY IN SOIL PCI/GM - 0.037 BQ/G (DRY WEIGHT)

Docket Number: 50-390,391 Reporting Period: 2006

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Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GAMMA SCAN (GELI)	11					
AC-228	2.50E-01	1.14E+00 (8 / 8) 8.67E-01 - 1.44E+00	LM-4 WB 0.9 MILES SE	1.44E+00 (1 / 1) 1.44E+00 - 1.44E+00	6.86E-01 (3 / 3) 5.57E-01 - 7.89E-01	
BE-7	2.50E-01	8 VALUES < LLD	PM5 DECATUR 6.2 MILES S	1 VALUES < LLD	3 VALUES < LLD	
BI-212	4.50E-01	1.20E+00 (8 / 8) 8.82E-01 - 1.56E+00	PM5 DECATUR 6.2 MILES S	1.56E+00 (1 / 1) 1.56E+00 - 1.56E+00	6.89E-01 (3 / 3) 5.54E-01 - 9.16E-01	
BI-214	1.50E-01	9.08E-01 (8 / 8) 6.06E-01 - 1.12E+00	LM3 1.9 MILES NNE	1.12E+00 (1 / 1) 1.12E+00 - 1.12E+00	7.43E-01 (3 / 3) 5.50E-01 - 9.48E-01	
CS-137	3.00E-02	3.18E-01 (8 / 8) 5.07E-02 - 1.26E+00	LM3 1.9 MILES NNE	1.26E+00 (1 / 1) 1.26E+00 - 1.26E+00	2.86E-01 (3 / 3) 1.28E-01 - 5.92E-01	Table
K-40	7.50E-01	1.26E+01 (8 / 8) 4.18E+00 - 2.80E+01	LM-4 WB 0.9 MILES SE	2.80E+01 (1 / 1) 2.80E+01 - 2.80E+01	4.26E+00 (3 / 3) 2.78E+00 - 5.57E+00	le H-7
PB-212	1.00E-01	1.11E+00 (8 / 8) 8.27E-01 - 1.47E+00	PM5 DECATUR 6.2 MILES S	1.47E+00 (1 / 1) 1.47E+00 - 1.47E+00	5.97E-01 (3 / 3) 3.76E-01 - 8.12E-01	L L
PB-214	1.50E-01	9.82E-01 (8 / 8) 6.57E-01 - 1.22E+00	LM3 1.9 MILES NNE	1.22E+00 (1 / 1) 1.22E+00 - 1.22E+00	8.00E-01 (3 / 3) 5.73E-01 - 9.86E-01	
RA-224	7.50E-01	1.42E+00 (3 / 8) 1.09E+00 - 1.61E+00	PM5 DECATUR 6.2 MILES S	1.61E+00 (1 / 1) 1.61E+00 - 1.61E+00	8.37E-01 (2 / 3) 7.58E-01 - 9.16E-01	
RA-226	1.50E-01	9.08E-01 (8 / 8) 6.06E-01 - 1.12E+00	LM3 1.9 MILES NNE	1.12E+00 (1 / 1) 1.12E+00 - 1.12E+00	7.43E-01 (3 / 3) 5.50E-01 - 9.48E-01	
TL-208	6.00E-02	3.58E-01 (8 / 8) 2.63E-01 - 4.87E-01	LM-4 WB 0.9 MILES SE	4.87E-01 (1 / 1) 4.87E-01 - 4.87E-01	2.31E-01 (3 / 3) 1.81E-01 - 2.97E-01	
SR 89	10					
	1.60E+00	8 VALUES < LLD			2 VALUES < LLD	
SR 90	10 .					
	4.00E-01	8 VALUES < LLD			2 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Name of Facility: WATTS BAR NUCLEAR PLANT

TENNESSEE

Location of Facility: RHEA

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).



RADIOACTIVITY IN APPLES PCI/KG - 0.037 BQ/KG (WET WT)

WATTS BAR NUCLEA	AR PLANT		Docket Number: 50-390,391					
Location of Facility: RHEA TENNESSEE			Reporting Period: 2006					
Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements			
2								
4.00E+01	1 VALUES < LLD	4.5 MILES N	1 VALUES < LLD	1 VALUES < LLD				
2.50E+02	1.04E+03 (1 / 1) 1.04E+03 - 1.04E+03	4.5 MILES N	1.04E+03 (1 / 1) 1.04E+03 - 1.04E+03	1.02E+03 (1 / 1) 1.02E+03 - 1.02E+03				
8.00E+01	1 VALUES < LLD	4.5 MILES N	1 VALUES < LLD	1 VALUES < LLD				
	RHEA TEN Lower Limit of Detection (LLD) See Note 1 2 4.00E+01 2.50E+02	Lower Limit of Detection (LLD)Indicator Locations Mean (F) Range See Note 1224.00E+011 VALUES < LLD	RHEA TENNESSEE Lower Limit of Detection (LLD) Indicator Locations 	RHEA TENNESSEE Reporting F Lower Limit of Detection (LLD) See Note 1 Indicator Locations Mean (F) Range See Note 2 Location with Highest Name Distance and Direction Annual Mean Mean (F) Range See Note 2 2 4.00E+01 1 VALUES < LLD	RHEATENNESSEEReporting Period: 2006Lower Limit of Detection (LLD) See Note 1Indicator Locations Mean (F) Range See Note 2Location with Highest Name Distance and DirectionAnnual Mean Mean (F) Range See Note 2Control Locations Mean (F) Range See Note 22 4.00E+011 VALUES < LLD			

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

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Tennessee Valley Authority

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN CABBAGE PCI/KG - 0.037 BQ/KG (WET WT)

Docket Number: 50-390,391 Reporting Period: 2006

Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GAMMA SCAN (GELI)	2					
BI-214	4.00E+01	1 VALUES < LLD	2.5 MILES NE	1 VALUES < LLD	4.99E+01 (1 / 1) 4.99E+01 - 4.99E+01	
K-40	2.50E+02	1.97E+03 (1 / 1) 1.97E+03 - 1.97E+03	2.5 MILES NE	1.97E+03 (1 / 1) 1.97E+03 - 1.97E+03	1.67E+03 (1 / 1) 1.67E+03 - 1.67E+03	
PB-214	8.00E+01	1 VALUES < LLD	2.5 MILES NE	1 VALUES < LLD	1 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Name of Facility: WATTS BAR NUCLEAR PLANT

TENNESSEE

Location of Facility: RHEA

.

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

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Western Area Radiological Laboratory



RADIOACTIVITY IN CORN PCI/KG - 0.037 BQ/KG (WET WT)

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA TENNESSEE			Docket Number: 50-390,391 Reporting Period: 2006				
Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements	
GAMMA SCAN (GELI)	2						
BI-214	4.00E+01	1 VALUES < LLD	NORTON FARM 4.1 MILES ESE	1 VALUES < LLD	1 VALUES < LLD		
K-40	2.50E+02	2.19E+03 (1 / 1) 2.19E+03 - 2.19E+03	NORTON FARM 4.1 MILES ESE	2.19E+03 (1 / 1) 2.19E+03 - 2.19E+03	2.13E+03 (1 / 1) 2.13E+03 - 2.13E+03		
PB-214	8.00E+01	1 VALUES < LLD	NORTON FARM 4.1 MILES ESE	1 VALUES < LLD	1 VALUES < LLD		

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

Western Area Radiological Laboratory

RADIOACTIVITY IN GREEN BEANS PCI/KG - 0.037 BQ/KG (WET WT)

Docket Number: 50-390.391 Reporting Period: 2006

Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GAMMA SCAN (GELI)	2					
BI-214	4.00E+01	1 VALUES < LLD	2.5 MILES NE	1 VALUES < LLD	1 VALUES < LLD	
K-40	2.50E+02	1.82E+03 (1 / 1) 1.82E+03 - 1.82E+03	2.5 MILES NE	1.82E+03 (1 / 1) 1.82E+03 - 1.82E+03	2.80E+03 (1 / 1) 2.80E+03 - 2.80E+03	
PB-214	8.00E+01	1 VALUES < LLD	2.5 MILES NE	1 VALUES < LLD	1 VALUES < LLD	

Name of Facility: WATTS BAR NUCLEAR PLANT

TENNESSEE

Location of Facility: RHEA

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

Western Area Radiological Laboratory



RADIOACTIVITY IN TOMATOES PCI/KG - 0.037 BQ/KG (WET WT)

Docket Number: 50-390,391 Reporting Period: 2006

Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GAMMA SCAN (GELI) BI-214	2 4.00E+01	1 VALUES < LLD	2.5 MILES NE	1 VALUES < LLD	1 VALUES < LLD	
K-40	2.50E+02	2.77E+03 (1 / 1) 2.77E+03 - 2.77E+03	2.5 MILES NE	2.77E+03 (1 / 1) 2.77E+03 - 2.77E+03	1.79E+03 (1 / 1) 1.79E+03 - 1.79E+03	
PB-214	8.00E+01	1 VALUES < LLD	2.5 MILES NE	1 VALUES < LLD	1 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

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Name of Facility: WATTS BAR NUCLEAR PLANT

TENNESSEE

Location of Facility: RHEA

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

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Western Area Radiological Laboratory



Docket Number: 50-390,391

RADIOACTIVITY IN SURFACE WATER(Total) PCI/L - 0.037 BQ/L

Location of Facility: RHEA TENNESSEE			Reporting Period: 2006				
Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements	
GROSS BETA	39						
	1.90E+00	2.81E+00 (25 / 26) 2.09E+00 - 3.99E+00	TRM 517.9	2.84E+00 (13 / 13) 2.09E+00 - 3.99E+00	2.69E+00 (12 / 13) 1.99E+00 - 3.25E+00		
GAMMA SCAN (GELI)	39						
AC-228	2.00E+01	26 VALUES < LLD	TRM 517.9	13 VALUES < LLD	13 VALUES < LLD		
BI-214	2.00E+01	3.19E+01 (3 / 26) 2.53E+01 - 4.30E+01	TRM 517.9	4.30E+01 (1 / 13) 4.30E+01 - 4.30E+01	5.51E+01 (1 / 13) 5.51E+01 - 5.51E+01		
K-40	1.00E+02	26 VALUES < LLD	TRM 517.9	13 VALUES < LLD	13 VALUES < LLD	Table	
PB-212	1.50E+01	26 VALUES < LLD	TRM 517.9	13 VALUES < LLD	13 VALUES < LLD	ble H-	
PB-214	2.00E+01	2.81E+01 (2 / 26) 2.67E+01 - 2.96E+01	TRM 517.9	2.96E+01 (1 / 13) 2.96E+01 - 2.96E+01	3.62E+01 (1 / 13) 3.62E+01 - 3.62E+01	[-13	
TL-208	1.00E+01	26 VALUES < LLD	TRM 517.9	13 VALUES < LLD	13 VALUES < LLD		
TRITIUM	39						
	3.00E+02	5.88E+02 (1 / 26) 5.88E+02 - 5.88E+02	TRM 517.9	5.88E+02 (1 / 13) 5.88E+02 - 5.88E+02	13 VALUES < LLD		

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Name of Facility: WATTS BAR NUCLEAR PLANT

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).



RADIOACTIVITY IN PUBLIC WATER(Total) PCI/L - 0.037 BQ/L

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA TENNESSEE				Docket Nu Reporting F		
Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GROSS BETA	39					
	1.90E+00	2.50E+00 (24 / 26) 1.92E+00 - 3.53E+00	RM-2 DAYTON TN 17.8 MILES NNE	2.62E+00 (13 / 13) 1.93E+00 - 3.53E+00	2.69E+00 (12 / 13) 1.99E+00 - 3.25E+00	
GAMMA SCAN (GELI)	39					
AC-228	2.00E+01	26 VALUES < LLD	RM-2 DAYTON TN 17.8 MILES NNE	13 VALUES < LLD	13 VALUES < LLD	
BI-214	2.00E+01	2.97E+01 (5 / 26) 2.14E+01 - 4.29E+01	CF INDUSTRIES TRM 473.0	3.76E+01 (2 / 13) 3.22E+01 - 4.29E+01	5.51E+01 (1 / 13) 5.51E+01 - 5.51E+01	
K-40	1.00E+02	26 VALUES < LLD	RM-2 DAYTON TN 17.8 MILES NNE	13 VALUES < LLD	13 VALUES < LLD	Tal
PB-212	1.50E+01	26 VALUES < LLD	RM-2 DAYTON TN 17.8 MILES NNE	13 VALUES < LLD	13 VALUES < LLD	Table H-14
PB-214	2.00E+01	2.08E+01 (2 / 26) 2.06E+01 - 2.11E+01	CF INDUSTRIES TRM 473.0	2.08E+01 (2 / 13) 2.06E+01 - 2.11E+01	3.62E+01 (1 / 13) 3.62E+01 - 3.62E+01	-14
TL-208	1.00E+01	26 VALUES < LLD	RM-2 DAYTON TN 17.8 MILES NNE	13 VALUES < LLD	13 VALUES < LLD	
TRITIUM	47					
	3.00E+02	4.70E+02 (6 / 34) .3.30E+02 - 8.17E+02	RM-2 DAYTON TN 17.8 MILES NNE	6.06E+02 (2 / 17) 3.94E+02 - 8.17E+02	13 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

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Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).



RADIOACTIVITY IN WELL WATER(Total) PCI/L - 0.037 BQ/L

Name of Facility:	WATTS BAR NUCLE RHEA TEN	AR PLANT INESSEE		Docket Number: 50-390,391 Reporting Period: 2006				
Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements		
GROSS BETA	86 1.90E+00	3.61E+00 (47 / 60) 2.02E+00 - 1.21E+01	WBN MW-C 0.25 MILES ESE)	4.57E+00 (11 / 13) 2.13E+00 - 1.21E+01	2.50E+00 (13 / 26) 1.93E+00 - 3.53E+00			
GAMMA SCAN (GELI)	86							
AC-228	2.00E+01	2.43E+01 (1 / 60) 2.43E+01 - 2.43E+01	WBN MW-B 0.45 MILES SSE)	2.43E+01 (1 / 12) 2.43E+01 - 2.43E+01	26 VALUES < LLD			
BI-214	2.00E+01	3.15E+01 (10 / 60) 2.09E+01 - 4.47E+01	WBN MW-B 0.45 MILES SSE)	4.13E+01 (3 / 12) 3.85E+01 - 4.47E+01	1.97E+02 (13 / 26) 3.67E+01 - 2.49E+02			
K-40	1.00E+02	3.37E+02 (1 / 60) 3.37E+02 - 3.37E+02	WBN MW-B 0.45 MILES SSE)	3.37E+02 (1 / 12) 3.37E+02 - 3.37E+02	26 VALUES < LLD	Tat		
PB-212	1.50E+01	60 VALUES < LLD	WBN MW-A 0.58 MILES SSE)	13 VALUES < LLD	26 VALUES < LLD	Table H-15		
PB-214	2.00E+01	3.12E+01 (6 / 60) 2.03E+01 - 4.06E+01	WBN MW-B 0.45 MILES SSE)	3.45E+01 (3 / 12) 3.15E+01 - 4.06E+01	1.91E+02 (13 / 26) 3.72E+01 - 2.44E+02	-15		
TL-208	1.00E+01	60 VALUES < LLD	WBN MW-A 0.58 MILES SSE)	13 VALUES < LLD	26 VALUES < LLD			
TRITIUM	86				·.	-		
	3.00E+02	6.57E+03 (35 / 60) 1.77E+03 - 1.26E+04	WBN MW-B 0.45 MILES SSE)	1.00E+04 (12 / 12) 8.87E+03 - 1.26E+04	26 VALUES < LLD			

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

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RADIOACTIVITY IN COMMERCIAL FISH PCI/GM - 0.037 BQ/G (DRY WEIGHT)

Name of Facility:	WATTS BAR NUCLE	AR PLANT		Docket Number: 50-390,391			
Location of Facility:	RHEA TEN	NESSEE		Reporting I	Period: 2006		
Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements	
GAMMA SCAN (GELI)	6						
BI-214	1.00E-01	1.42E-01 (1 / 4) 1.42E-01 - 1.42E-01	CHICKAMAUGA RES TRM 471-530	1.42E-01 (1 / 2) 1.42E-01 - 1.42E-01	2.46E-01 (1 / 2) 2.46E-01 - 2.46E-01		
CS-137	3.00E-02	3.38E-02 (2 / 4) 3.38E-02 - 3.38E-02	DOWNSTREAM STATION 1 DOWNSTREAM	3.38E-02 (1 / 2) 3.38E-02 - 3.38E-02	8.06E-02 (2 / 2) 5.35E-02 - 1.08E-01		
K-40	4.00E-01	1.12E+01 (4 / 4) 1.02E+01 - 1.31E+01	CHICKAMAUGA RES TRM 471-530	1.17E+01 (2 / 2) 1.02E+01 - 1.31E+01	1.30E+01 (2 / 2) 1.16E+01 - 1.44E+01		
PB-212	4.00E-02	4 VALUES < LLD	DOWNSTREAM STATION 1 DOWNSTREAM	2 VALUES < LLD	2 VALUES < LLD		
PB-214	5.00E-01	4 VALUES < LLD	DOWNSTREAM STATION 1 DOWNSTREAM	2 VALUES < LLD	2 VALUES < LLD	Table	
TL-208	3.00E-02	4 VALUES < LLD	DOWNSTREAM STATION 1 DOWNSTREAM	2 VALUES < LLD	2 VALUES < LLD	9 H-1	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

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RADIOACTIVITY IN GAME FISH PCI/GM - 0.037 BQ/G (DRY WEIGHT)

Name of Facility: WATTS BAR NUCLEAR PLANT				Docket Number: 50-390,391				
Location of Facility: RHEA TENNESSEE			Reporting Period: 2006					
Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements		
GAMMA SCAN (GELI)	6							
BI-214	1.00E-01	2.37E-01 (1 / 4) 2.37E-01 - 2.37E-01	DOWNSTREAM STATION 1 DOWNSTREAM	2.37E-01 (1 / 2) 2.37E-01 - 2.37E-01	2 VALUES < LLD			
CS-137	3.00E-02	4.72E-02 (3 / 4) 4.69E-02 - 4.75E-02	DOWNSTREAM STATION 1 DOWNSTREAM	4.74E-02 (2 / 2) 4.73E-02 - 4.75E-02	7.98E-02 (2 / 2) 5.89E-02 - 1.01E-01			
K-40	4.00E-01	1.45E+01 (4 / 4) 1.29E+01 - 1.71E+01	CHICKAMAUGA RES TRM 471-530	1.50E+01 (2 / 2) 1.29E+01 - 1.71E+01	1.34E+01 (2 / 2) 1.30E+01 - 1.38E+01			
PB-214	5.00E-01	4 VALUES < LLD	DOWNSTREAM STATION 1 DOWNSTREAM	2 VALUES < LLD	2 VALUES < LLD	, 		

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

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Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

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RADIOACTIVITY IN SHORELINE SEDIMENT PCI/GM - 0.037 BQ/G (DRY WEIGHT)

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA TENNESSEE				Docket Number: 50-390,391 Reporting Period: 2006				
Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements		
GAMMA SCAN (GELI)	4							
AC-228	2.50E-01	1.39E+00 (2 / 2) 1.33E+00 - 1.44E+00	COTTON PORT MARINA TRM 513	1.39E+00 (2 / 2) 1.33E+00 - 1.44E+00	2 VALUES < LLD			
BE-7	2.50E-01	2.65E-01 (1 / 2) 2.65E-01 - 2.65E-01	COTTON PORT MARINA TRM 513	2.65E-01 (1 / 2) 2.65E-01 - 2.65E-01	6.05E-01 (1 / 2) 6.05E-01 - 6.05E-01			
BI-212	4.50E-01	1.60E+00 (2 / 2) 1.59E+00 - 1.62E+00	COTTON PORT MARINA TRM 513	1.60E+00 (2 / 2) 1.59E+00 - 1.62E+00	2 VALUES < LLD			
BI-214	1.50E-01	5.91E-01 (2 / 2) 5.18E-01 - 6.63E-01	COTTON PORT MARINA TRM 513	5.91E-01 (2 / 2) 5.18E-01 - 6.63E-01	2 VALUES < LLD			
CS-137	3.00E-02	3.44E-02 (1 / 2) 3.44E-02 - 3.44E-02	COTTON PORT MARINA TRM 513	3.44E-02 (1 / 2) 3.44E-02 - 3.44E-02	2 VALUES < LLD	Table		
K-40	7.50E-01	3.16E+01 (2 / 2) 3.05E+01 - 3.26E+01	COTTON PORT MARINA TRM 513	3.16E+01 (2 / 2) 3.05E+01 - 3.26E+01	2 VALUES < LLD	H-1		
PB-212	1.00E-01	1.33E+00 (2 / 2) 1.31E+00 - 1.35E+00	COTTON PORT MARINA TRM 513	1.33E+00 (2 / 2) 1.31E+00 - 1.35E+00	2 VALUES < LLD	[∞]		
PB-214	1.50E-01	6.33E-01 (2 / 2) 5.68E-01 - 6.98E-01	COTTON PORT MARINA TRM 513	6.33E-01 (2 / 2) 5.68E-01 ~ 6.98E-01	2 VALUES < LLD			
RA-224	7.50E-01	1.28E+00 (2 / 2) 1.20E+00 - 1.36E+00	COTTON PORT MARINA TRM 513	1.28E+00 (2 / 2) 1.20E+00 - 1.36E+00	2 VALUES < LLD			
RA-226	1.50E-01	5.91E-01 (2 / 2) 5.18E-01 - 6.63E-01	COTTON PORT MARINA TRM 513	5.91E-01 (2 / 2) 5.18E-01 - 6.63E-01	2 VALUES < LLD			
TL-208	6.00E-02	4.56E-01 (2 / 2) 4.37E-01 - 4.75E-01	COTTON PORT MARINA TRM 513	4.56E-01 (2 / 2) 4.37E-01 - 4.75E-01	2 VALUES < LLD	• •		

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).



Number of Nonroutine Reported Measurements

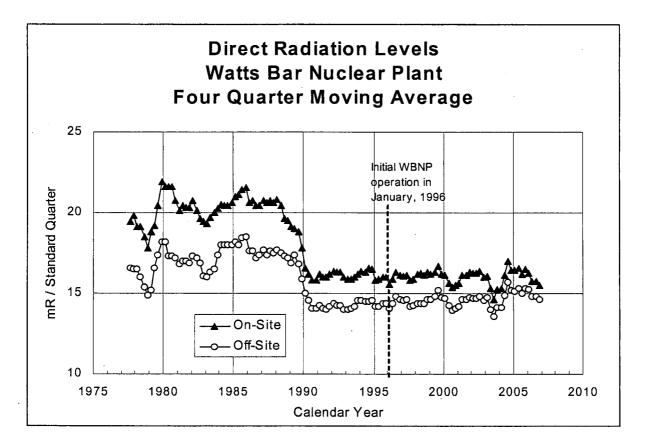
RADIOACTIVITY IN POND SEDIMENT PCI/GM - 0.037 BQ/G (DRY WEIGHT)

Name of Facility: V Location of Facility: R	VATTS BAR NUCLEA	AR PLANT NESSEE		Docket Nur Reporting P	nber: 50-390,391 eriod: 2006
Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2
GAMMA SCAN (GELI)					
AC-228	2.50E-01	8.69E-01 (5 / 5) 6.31E-01 - 1.18E+00	YP-13 YARD POND	1.18E+00 (1 / 1) 1.18E+00 - 1.18E+00	VALUES < LLD
BE-7	2.50E-01	4.40E-01 (4 / 5) 3.23E-01 - 5.67E-01	YP-13 YARD POND	5.67E-01 (1 / 1) 5.67E-01 - 5.67E-01	VALUES < LLD
BI-212	4.50E-01	9.10E-01 (5 / 5) 6.74E-01 - 1.20E+00	YP-13 YARD POND	1.20E+00 (1 / 1) 1.20E+00 - 1.20E+00	VALUES < LLD
BI-214	1.50E-01	6.82E-01 (5 / 5) 5.52E-01 - 8.35E-01	YP-13 YARD POND	8.35E-01 (1 / 1) 8.35E-01 - 8.35E-01	VALUES < LLD
CO-58	3.00E-02	4.10E-01 (2 / 5) 3.71E-01 - 4.50E-01	YP-17 YARD POND	4.50E-01 (1 / 1) 4.50E-01 - 4.50E-01	VALUES < LLD
CO-60	3.00E-02	8.95E-02 (3 / 5) 5.32E-02 - 1.34E-01	YP-17 YARD POND	1.34E-01 (1 / 1) 1.34E-01 - 1.34E-01	VALUES < LLD
CS-134	3.00E-02	7.06E-02 (4 / 5) 6.40E-02 - 8.34E-02	YP-5 YARD POND	8.34E-02 (1 / 1) 8.34E-02 - 8.34E-02	VALUES < LLD
CS-137	3.00E-02	1.21E-01 (5 / 5) 9.04E-02 - 2.08E-01	YP-13 YARD POND	2.08E-01 (1 / 1) 2.08E-01 - 2.08E-01	VALUES < LLD
K-40	7.50E-01	1.13E+01 (5 / 5) 8.40E+00 - 1.62E+01	YP-13 YARD POND	1.62E+01 (1 / 1) 1.62E+01 - 1.62E+01	VALUES < LLD
PB-212	1.00E-01	8.90E-01 (5 / 5) 6.16E-01 - 1.21E+00	YP-13 YARD POND	1.21E+00 (1 / 1) 1.21E+00 - 1.21E+00	VALUES < LLD
PB-214	1.50E-01	7.39E-01 (5 / 5) 5.80E-01 - 9.90E-01	YP-13 YARD POND	9.90E-01 (1 / 1) 9.90E-01 - 9.90E-01	VALUES < LLD
RA-224	7.50E-01	8.68E-01 (2 / 5) 7.86E-01 - 9.49E-01	YP-17 YARD POND	9.49E-01 (1 / 1) 9.49E-01 - 9.49E-01	VALUES < LLD
SB-125	-1.00E+00	3.85E-01 (2 / 5) 2.07E-01 - 5.64E-01	YP-17 YARD POND	5.64E-01 (1 / 1) 5.64E-01 - 5.64E-01	VALUES < LLD
TL-208	6.00E-02	2.95E-01 (5 / 5) 2.23E-01 - 4.26E-01	YP-13 YARD POND	4.26E-01 (1 / 1) 4.26E-01 - 4.26E-01	VALUES < LLD

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

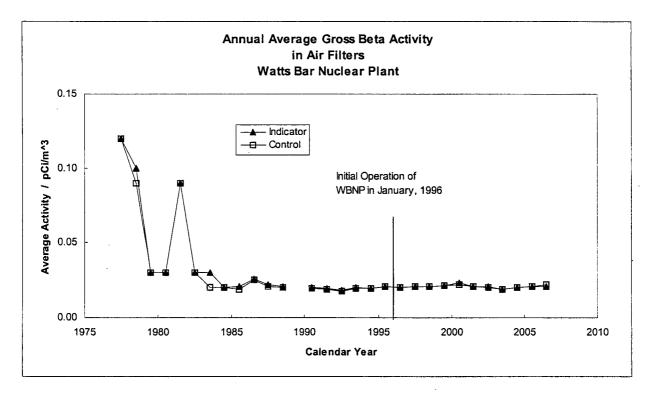
Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

Direct Radiation

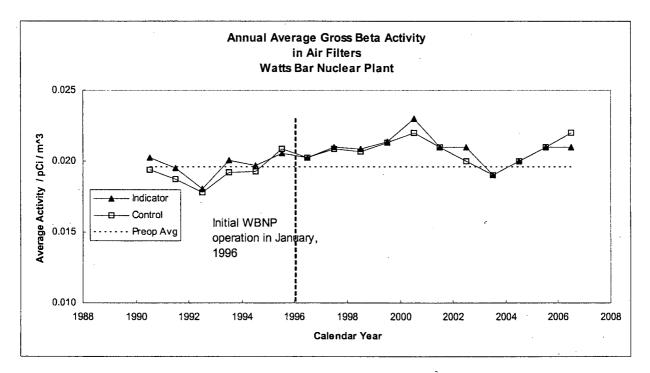


Thermoluminescent dosimeters are processed quarterly. This chart shows trends in the average measurement for all dosimeters grouped as "on-site" or "off-site". The data from preoperational phase, prior to 1996, show the same trend of "on-site" measurements higher than "off-site" measurements that is observed in current data indicating that the slightly higher "on-site" direct radiation levels are not related to plant operations.

Radioactivity in Air Filters

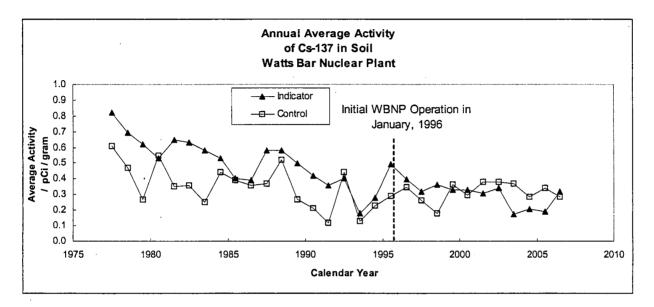


To more clearly show trends developed since the end of atmospheric weapons testing, the data beginning with the resumption of the monitoring program in 1990 is shown in greater detail.

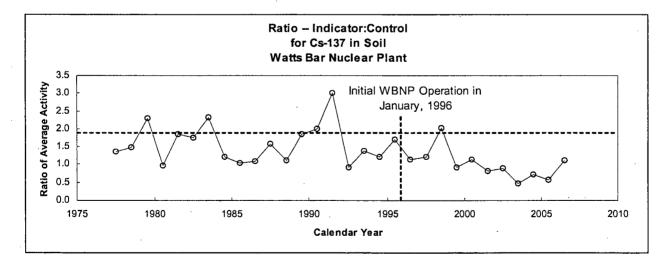


Cs-137 in Soil

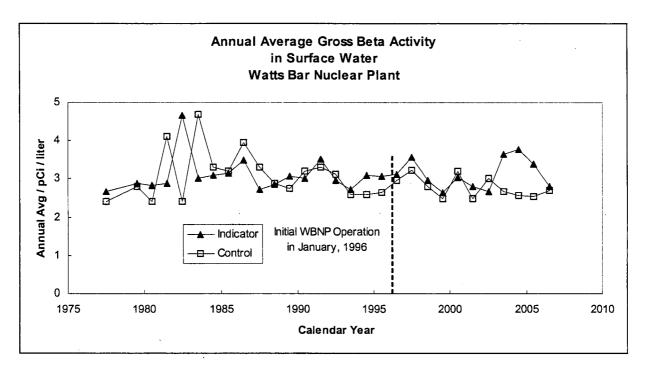
Cesium-137 was produced by past nuclear weapons testing and is present in almost every environmental sample exposed to the atmosphere. The "control" and "indicator" locations have generally trended downward with year-to-year variation, since the beginning of the monitoring program from the Watts Bar site.

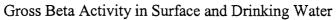


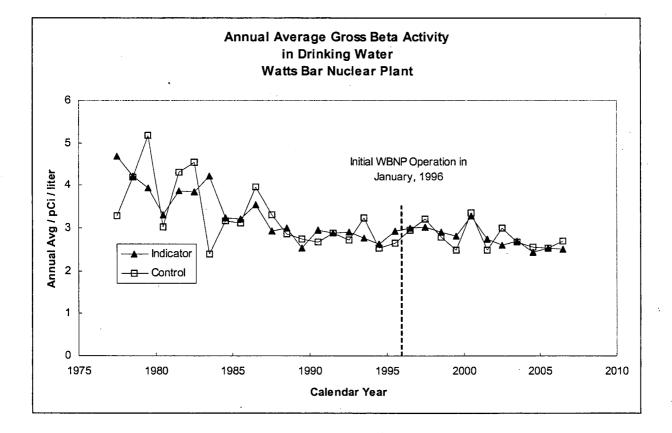
In almost every year, the "indicator" locations have shown greater activity of Cs-137 than the "control" locations. This trend, with its preoperational average is shown below.





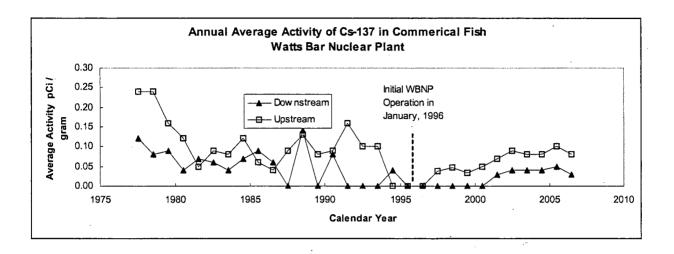


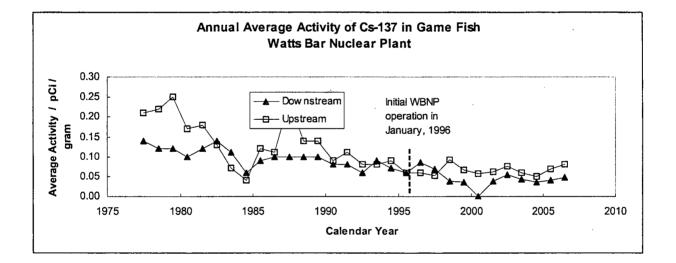






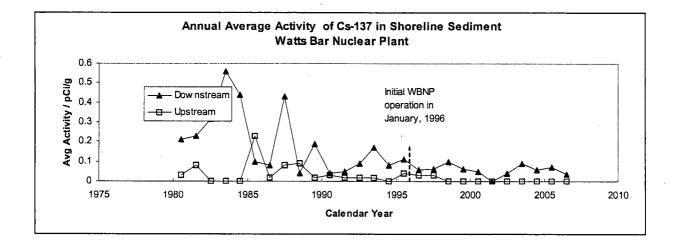
Radioactivity in Fish





Radioactivity in Shoreline Sediment

The Cs-137 present in the shoreline sediments of the Tennessee River system was produced both by testing of nuclear weapons and by related nuclear operations in the upper reaches of the Tennessee River watershed. The amounts of Cs-137 have declined significantly during the course of monitoring for the Watts Bar site, so much so that not all samples contain detectable levels.



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