Oyster Creek Generating Station
Route 9 South
PO Box 388
Forked River, NJ 08731

www.exeloncorp.com

Exelon Nuclear

NEI 07-07

RA-10-040

September 24, 2010

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555 - 0001

Oyster Creek Nuclear Generating Station
Renewed Facility Operating License No. DPR-16
NRC Docket No. 50-219

Subject: Revised Annual Radiological Groundwater Protection Program Report for 2009

Enclosed with this cover letter is a revised copy of the 2009 Annual Radiological Groundwater Protection Program Report that was submitted under cover letter RA-10-003 on April 30, 2010. Revision bars have been used to indicate where changes were made to the April report.

If any further information or assistance is needed, please contact Calvin Taylor at 609-971-4031.

Sincerely,

Michael J. Massaro

Michael J. Massaro
Vice President – Oyster Creek Nuclear Generating Station

Enclosure: Annual Radiological Groundwater Protection Program Report for 2009 (Revised July 2010)

cc: Administrator, USNRC Region I
USNRC Senior Project Manager, Oyster Creek
USNRC Senior Resident Inspector, Oyster Creek
Ed Everett, American Nuclear Insurers
File No. 10040

A001
NRR

Docket No: 50-219

OYSTER CREEK GENERATING STATION
UNIT 1

Annual Radiological
Groundwater Protection Program Report

1 January Through 31 December 2009

Prepared By

Teledyne Brown Engineering
Environmental Services

Exelon SM
Nuclear

Oyster Creek Generating Station
Forked River, NJ 08731

April 2010
Revised July 2010

.Table of Contents

I. Summary and Conclusions 1

II. Introduction 3
- A. Objectives of the RGPP 4
- B. Implementation of the Objectives 5
- C. Program Description 5
- D. Characteristics of Tritium (H-3) 6

III. Program Description 7
- A. Sample Analysis 7
- B. Data Interpretation 7
- C. Background Analysis 8

IV. Results and Discussion 10
- A. Program Exceptions 10
- B. Groundwater Results 11
- C. Surface Water Results 12
- D. Summary of Results – Inter-laboratory Comparison Program 12
- E. Leaks, Spills, and Releases 12
- F. Trends 14
- G. Investigations 16
- H. Actions Taken 16

V. References 17

Appendices

Appendix A Location Designation

Tables

Table A-1: Radiological Groundwater Protection Program – Sampling Locations, Oyster Creek Generating Station, 2009

Figures

Figure A-1: Sampling Locations – Kirkwood Formation Wells, Oyster Creek Generating Station, 2009

Figure A-2: Sampling Locations – Cohansey Formation Wells, Oyster Creek Generating Station, 2009

Figure A-3: Sampling Locations – Cape May Formation Wells and Surface Water, Oyster Creek Generating Station, 2009

Appendix B Data Tables

Tables

Table B-I.1: Concentrations of Tritium and Strontium in Groundwater Samples Collected in the Vicinity of Oyster Creek Generating Station, 2009.

Table B-I.2: Concentrations of Gamma Emitters in Groundwater Samples Collected in the Vicinity of Oyster Creek Generating Station, 2009.

Table B-II.1: Concentrations of Tritium and Strontium in Surface Water Samples Collected in the Vicinity of Oyster Creek Generating Station, 2009.

Table B-II.2: Concentrations of Gamma Emitters in Surface Water Samples Collected in the Vicinity of Oyster Creek Generating Station, 2009.

I. Summary and Conclusions

This report on the Radiological Groundwater Protection Program (RGPP) conducted for the Oyster Creek Generating Station (OCGS) by Exelon Generation Company LLC (Exelon) covers the period 01 January 2009 through 31 December 2009.

In 2006, Exelon instituted a comprehensive program to evaluate the impact of station operations on groundwater and surface water in the vicinity of the Oyster Creek Generating Station. This evaluation involved numerous station personnel and contractor support personnel.

This report covers groundwater and surface water samples collected from the environment, both on and off station property in 2009. More than two thousand analyses were performed on more than one thousand samples from 36 locations.

There were three inadvertent releases of contaminated water into the groundwater during 2009.

On February 9, 2009, less than 1 gallon of condensation from the B Isocondenser vent leaked onto the ground. The tritium in the condensed water was 21,900 pCi/l (0.0000000829 Ci). The contaminated soil was placed in drums for disposal. No doses were calculated since the spill was contained and soil disposed.

On April 13, 2009, in preparation for work inside the Emergency Service Water (ESW) vault, water was found inside the vault. As part of standard practices for water removal, the water was pumped into drums and sampled for gamma emitters, tritium, and pH. Sample analysis identified tritium levels at 102,000 pCi/l. Investigation determined that the release of tritiated water was caused by leaks in the 8-inch and 10-inch carbon steel Condensate System lines. The root cause investigation determined that the piping leaks developed due to a corrosion mechanism known as anodic dissolution. Poor application of pipe coating left the buried pipes susceptible to this corrosion.

On August 24, 2009, an eight to ten gallon per minute leak was discovered in the condenser bay. The leak was coming from the turbine building west wall penetration housing the Condensate Transfer CH-5 line, the six-inch Condensate Transfer Main Header. Two through-wall holes of 1/16" and 1/4" were found in the pipe within the wall penetration. A tritium concentration of 10,800,000 pCi/l was detected. The root cause investigation determined the cause to be galvanic corrosion.

Gamma-emitting radionuclides attributable to licensed plant operations were not

detected in any of the groundwater or surface water samples.

In the case of tritium, Exelon specified that its laboratories achieve a lower limit of detection 100 times lower than the drinking water limit specified by the United States Environmental Protection Agency (USEPA) (200 pCi/l versus 20,000 pCi/l).

Tritium was detected in groundwater samples. Tritium concentrations varied from < 200 to 4,160,000 pCi/l. The highest concentrations were close to the source of the underground leaks. The flow of the tritium was in the direction of the intake and discharge canals. The flow is not likely to impact offsite groundwater.

No detectable tritium (greater than the LLD) was found in surface water samples collected from onsite and offsite monitoring locations; however, an anomalous indication of tritium at a low concentration level (less than the federal drinking water limit) was present in an onsite sample of surface water collected from the intake structure. This location was re-sampled and tritium was not detected in the confirmatory sample or in more than 200 previous or subsequent samples from this same location.

Strontium-90 was not detected in any groundwater or surface water sample during 2009.

In assessing all the data gathered for this report, it was concluded that the operation of the Oyster Creek Generating Station had no adverse radiological impact on the environment beyond the site boundaries.

II. Introduction

The Oyster Creek Nuclear Generating Station consists of a single boiling water reactor (BWR) and turbine generator capable of producing 650 megawatts of electricity. The Station operates under Nuclear Regulatory Commission (NRC) renewed facility operating license number DPR-16. Brackish water from Barnegat Bay is supplied by the circulating water system. The circulating water system is designed to supply a continuous flow of water from Barnegat Bay through the plant to remove the waste heat released by the power cycle in the Main Condenser. The circulating water system comprised of the intake canal from Barnegat Bay to the plant, the Main Condenser Circulating Water System, the dilution plant, and the discharge canal to Barnegat Bay. The dilution plant portion of the system minimizes the adverse effects of hot discharge water on aquatic life in the discharge canal and Barnegat Bay to meet the conditions of the Oyster Creek New Jersey Pollutant Discharge Elimination system (NJPDES) Permit No. NJ005550. Approximately 1 million gallons per minute of water are withdrawn from the intake canal for dilution and station use and returned to the discharge canal.

The Station is located in the Atlantic Coastal Plain physiographic province. Topography in the region of the Station is a slightly undulating coastal plain having low relief. The land surface gradually rises from sea Level at Barnegat Bay, which is located east of the Station, to approximately 50 feet above mean sea level (AMSL) 2 miles inland. This region of the coastal plain has numerous tidal marshes and is incised by easterly flowing streams and creeks. Elevations at the Station property west of Route 9 range from approximately 0 to 15 feet AMSL immediately adjacent to the intake and discharge canals to slightly more than 30 feet AMSL in the northwest portion of the Station property. The 132-acre developed portion of the Site located within the "horseshoe" formed by the intake and discharge canals west of Route 9 has an approximate average elevation of 20 feet AMSL. In the immediate vicinity of the intake and discharge canals, the Station property slopes steeply down to the canal. The average elevation of the surface water level in the intake and discharge canals is approximately 1-foot AMSL. The remaining 637-acre portion of the Station located east of Route 9 is primarily vegetated and undeveloped. The ground surface is relatively level except for the steep slopes at areas adjacent to the intake and discharge canals.

The three shallowest stratigraphic units in the vicinity of the Oyster Creek area in descending order are the Cape May Formation, the Cohansey Formation, and the Kirkwood Formation. Some of the Station structures are constructed to depths of approximately 50 feet below ground surface (bgs). Excavations were completed from grade, through the fill, Cape May Formation, Upper Clay, and into the Cohansey Formation during construction. Consequently, the bottoms of some

some Station structures are completed within the Cohansey Formation and some structures breach the Upper Clay.

The Cape May Formation regionally has an average thickness of 40 feet and at OCGS, the Cape May is described as a light gray to tan, medium- to fine-grained sand, with trace to some silt and occasional coarse sand. It is generally poorly compacted. The Cape May Formation varies from 0 to 21 feet in thickness based on historical boring logs. The variation principally is due to the varying amount of material excavated and replaced by fill during Station construction. When present, the thickness of the Cape May generally ranges from 15 to 20 feet thick. The base of the Cape May generally is defined by the presence of a dark clay unit referred to as the Upper Clay unit. The Upper Clay is a stiff to hard, gray, plastic organic clay containing inclusions (also described as lenses or partings) of dense fine sand with trace to some organic silt. The deposits of fine sand within the Upper Clay layer have high relative densities and occur as lenses or inclusions.

The Cohansey Formation is primarily composed a light-colored, fine- to very coarse-grained quartzose sand with lenses of silt and clay. Although most borings at the Station do not penetrate the entire Cohansey Formation, this formation appears to be approximately 60 to 80 feet thick at OCGS. A clay sequence, referred to at the Station as the "Lower Clay", marks the base of the Cohansey, which generally is present to approximately 90 to 100 feet bgs. The lower clay is a dense gray medium- to fine-grained sand containing trace to some organic silt and layers or inclusions of very stiff to hard gray organic clay. The thickness of the lower clay is estimated to be approximately 10 to 20 feet in the vicinity of OCGS.

The Cohansey Formation is underlain by the Kirkwood Formation which consists of several stratigraphic units. The Kirkwood Formation is described as a medium- to fine-grained sand with trace silt. The thickness of this formation beneath the Station is unknown. The south domestic supply well terminates in the Kirkwood at a depth of 310 feet bgs. The Kirkwood thickness in Ocean County ranges from approximately 300 to 400 feet.

This report covers those analyses performed by Teledyne Brown Engineering (TBE) and Environmental Inc. (Midwest Labs) on samples collected in 2009.

A. Objectives of the RGPP

The long-term objectives of the RGPP are as follows:

1. Identify suitable locations to monitor and evaluate potential impacts from station operations before significant radiological impact to the environment and potential drinking water sources.

2. Understand the local hydrogeologic regime in the vicinity of the station and maintain up-to-date knowledge of flow patterns on the surface and shallow subsurface.

3. Perform routine water sampling and radiological analysis of water from selected locations.

4. Report new leaks, spills, or other detections with potential radiological significance to stakeholders in a timely manner.

5. Regularly assess analytical results to identify adverse trends.

6. Take necessary corrective actions to protect groundwater resources.

B. Implementation of the Objectives

The objectives identified have been implemented at the Oyster Creek Generating Station as discussed below:

1. Exelon and its consultant identified monitoring locations as described in the Phase 1 study. Phase 1 studies were conducted by Connestoga Rovers and Associates (CRA) and the results and conclusions were made available to state and federal regulators as well as the public in station specific reports.

2. The Oyster Creek Generating Station report describes the local hydrogeologic regime. Periodically, the groundwater flow patterns are updated based on ongoing measurements.

3. The Oyster Creek Generating Station will continue to perform routine sampling and radiological analysis of water from selected locations.

4. The Oyster Creek Generating Station has implemented procedures to identify and report new leaks, spills, or other detections with potential radiological significance in a timely manner.

5. The Oyster Creek Generating Station staff and independent consultants, including a hydrogeologist, assess analytical results on an ongoing basis to identify adverse trends.

C. Program Description

Samples for the OCGS site were collected for Exelon by on-site personnel

and Normandeau Associates, Inc. This section describes the general collection methods used to obtain environmental samples for the OCGS RGPP in 2009. Sample locations can be found in Table A–1, Appendix A.

1. Sample Collection

Samples of water are collected, managed, transported and analyzed in accordance with approved procedures following EPA methods. Both groundwater and surface water are collected. Sample locations, sample collection frequencies and analytical frequencies are controlled in accordance with approved station procedures. Contractor and/or station personnel are trained in the collection, preservation management, and shipment of samples, as well as in documentation of sampling events.

2. Sample Analysis

Analytical laboratories are subject to internal quality assurance programs and industry cross-check programs, as well as nuclear industry audits. Station personnel review and evaluate all analytical data deliverables as data are received.

Analytical data results are reviewed by both station personnel and independent consultants, including a hydrogeologist, for adverse trends or changes to hydrogeologic conditions.

D. Characteristics of Tritium (H-3)

Tritium (chemical symbol H-3) is a radioactive isotope of hydrogen. The most common form of tritium is tritium oxide, which is also called "tritiated water." The chemical properties of tritium are essentially those of ordinary hydrogen.

Tritiated water behaves the same as ordinary water in both the environment and the body. Tritium can be taken into the body by drinking water, breathing air, eating food, or absorption through the skin. Once tritium enters the body, it disperses quickly and is uniformly distributed throughout the body. Tritium is excreted primarily through urine with a clearance rate characterized by an effective biological half-life of about 14 days. Approximately one month after ingestion, essentially all tritium is cleared.

Tritium is produced naturally in the upper atmosphere when cosmic rays strike air molecules. Tritium is also produced during nuclear weapons explosions, as a by-product in reactors producing electricity, and in special

production reactors. Also, tritium was released into the atmosphere from Chernobyl in 1986. Like normal water, tritiated water is colorless and odorless. Tritiated water behaves chemically and physically like non-tritiated water in the subsurface, and therefore tritiated water will travel at the same velocity as the average groundwater velocity.

Tritium has a half-life of approximately 12.3 years. It decays spontaneously to helium-3 (He-3). This radioactive decay releases a beta particle (18.6 keV low-energy electron). The radioactive decay of tritium is the source of the health risk from exposure to tritium. Tritium is one of the least dangerous radionuclides because it emits very weak radiation and leaves the body relatively quickly. Since tritium is almost always found as water, it goes directly into soft tissues and organs. The associated dose to these tissues is generally uniform and is dependent on the water content of the specific tissue.

III. Program Description

A. Sample Analysis

This section describes the general analytical methodologies used by TBE to analyze the environmental samples for radioactivity for the Oyster Creek Generating Station RGPP in 2009. The sampling frequencies are increased if activity is detected, (see Table A–1, Appendix A for specific frequencies at each sampling point).

In order to achieve the stated objectives, the current program includes the following analyses:

1. Biennial concentrations of gamma emitters in groundwater and surface water.

2. Biennial concentrations of strontium-90 in groundwater and surface water.

3. Semi-annual concentrations of tritium in groundwater and surface water.

B. Data Interpretation

The radiological data collected prior to Oyster Creek Generating Station becoming operational, as well as background data from publicly available databases, were used as a baseline with which these operational data were compared. For the purpose of this report, Oyster Creek Generating

Station was considered operational at initial criticality. Several factors were important in the interpretation of the data:

1. Lower Limit of Detection and Minimum Detectable Concentration

   The lower limit of detection (LLD) is defined as the smallest concentration of radioactive material in a sample that would yield a net count (above background) that would be detected with only a 5% probability of falsely concluding that a blank observation represents a "real" signal. The LLD is intended as a before the fact estimate of a system (including instrumentation, procedure and sample type) and not as an after the fact criterion for the presence of activity. All analyses were designed to achieve the required OCGS detection capabilities for environmental sample analysis.

   The minimum detectable concentration (MDC) is defined above with the exception that the measurement is an after the fact estimate of the presence of activity.

2. Laboratory Measurements Uncertainty

   The estimated uncertainty in measurement of tritium in environmental samples is frequently on the order of 50% of the measurement value.

   Statistically, the exact value of a measurement is expressed as a range with a stated level of confidence. The convention is to report results with a 95% level of confidence. The uncertainty comes from calibration standards, sample volume or weight measurements, sampling uncertainty and other factors. Exelon reports the uncertainty of a measurement created by statistical process (counting error) as well as all sources of error (Total Propagated Uncertainty or TPU). Each result has two values calculated. Exelon reports the TPU by following the result with plus or minus (±) the estimated sample standard deviation, as TPU, that is obtained by propagating all sources of analytical uncertainty in measurements.

   Analytical uncertainties are reported at the 95% confidence level in this report for reporting consistency with the AREOR.

C. Background Analysis

1. Background Concentrations of Tritium

The purpose of the following discussion is to summarize background measurements of tritium in various media performed by others. Additional detail may be found by consulting references.

a. Tritium Production

Tritium is created in the environment from naturally occurring processes both cosmic and subterranean, as well as from anthropogenic (i.e., man-made) sources. In the upper atmosphere, "cosmogenic" tritium is produced from the bombardment of stable nuclides and combines with oxygen to form tritiated water, which will then enter the hydrologic cycle. Below ground, "lithogenic" tritium is produced by the bombardment of natural lithium present in crystalline rocks by neutrons produced by the radioactive decay of naturally abundant uranium and thorium. Lithogenic production of tritium is usually negligible compared to other sources due to the limited abundance of lithium in rock. The lithogenic tritium is introduced directly to groundwater.

A major anthropogenic source of tritium and strontium-90 comes from the former atmospheric testing of thermonuclear weapons. Levels of tritium in precipitation increased significantly during the 1950s and peaked in 1963 with the signing of the limited test ban treaty. The Canadian heavy water nuclear power reactors, other commercial power reactors, nuclear research and weapons production continue to influence tritium concentrations in the environment. Also, tritium was released into the atmosphere from Chernobyl in 1986.

b. Precipitation Data

Precipitation samples are routinely collected at stations around the world for the analysis of tritium and other radionuclides. One publicly available database that provides tritium concentrations in precipitation is the USEPA's RadNet database. RadNet provides tritium precipitation concentration data for samples collected at stations throughout the U.S. from 1978 up to and including 1996. Tritium concentrations in precipitation in New Jersey from 1978 through 1996 have ranged from 600 pCi/l in 1979 to since 0 pCi/l in 1996, with an average of 185 pCi/l. Tritium concentrations in wells may still be above the 200 pCi/l detection limit from the external causes described above. Water from previous years and

Water from previous years and decades is naturally captured in groundwater, so some well water sources today are affected by the surface water from the 1960s that was elevated in tritium.

c. Surface Water Data

Tritium concentrations are routinely measured in surface water bodies, including Oyster Creek and the Delaware River. New Jersey surface water data between 1978 and 1998 averaged 185 pCi/l.

The USEPA RadNet surface water data typically has a reported 'Combined Standard Uncertainty' of 2 standard deviations. This corresponds to a ± 36 to ±100 pCi/l confidence bound on each given reported measurement so that the typical surface water background data provided by RadNet may be subject to measurement uncertainty of up to 100 pCi/l.

The radio-analytical laboratory counts tritium results to an Exelon specified LLD of 200 pCi/l with a typical uncertainty of ±100 pCi/l. Therefore, sample results reported by TBE near this LLD can not be distinguished from natural background concentrations in surface water.

IV. Results and Discussion

A. Program Exceptions

1. Sample Anomalies

Sample Type	Location Code	Collection Date	Analysis	Reason
Groundwater	W-53	09/02/09	Tritium	The re-analysis result confirms with historical data.
Groundwater	W-51	12/29/09	Tritium	The re-analysis result confirms with the original result.
Surface Water	SW-1	6/24/10	Tritium	Sample location was re-sampled at < LLD.

2. Missed Samples

Sample Type	Location Code	Collection Date	Analysis
Groundwater	North Domestic Well*	Spring	Tritium
Groundwater	W-2, W-20	Fall	Tritium

*It is suspected that the sample was collected but mislabeled as South Domestic Well due to two collection dates of 03/11/09 listed for South Domestic Well.

3. LLDs Not Met

Required LLDs for Surface and Ground Water

Isotope	H-3	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
pCi/liter	3000	15	15	30	15	30	15	30	15	15	18	60	15

Indicated LLDs for shorter lived radionuclides were not met due to a time lag between taking the samples and shipping the samples.

Sample results reported as > 10,000 pCi/liter were not quantified, due to required LLD not being met.

B. Groundwater Results

Samples were collected from on-site locations in accordance with the station radiological groundwater protection program. As reported in CRA's 2006 Hydrogeologic Investigation Report, groundwater flow in the vicinity of the Torus Water Storage Tank and the Condensate Storage Tank is towards the intake and discharge canals.

Tritium

Samples from 32 locations were analyzed for tritium activity (Table B–I.1, Appendix B). Tritium was detected in 265 of 436 samples. The values ranged from < 200 to 4,160,000 pCi/l.

Strontium

Strontium-90 was not detected in any location sampled in 2009. (Table B-I.1, Appendix B)

Gamma Emitters

No gamma emitting nuclides, other than naturally occurring potassium-40, were detected in any of the samples analyzed during 2009. (Table B–I.2, Appendix B)

C. Surface Water Results

Samples were collected from on-site locations in accordance with the station radiological groundwater protection program. Analytical results and anomalies are discussed below.

Tritium

Samples from four locations were analyzed for tritium activity (Table B–II.1, Appendix B). No detectable tritium (greater than the LLD) was found in any surface water samples collected from onsite and offsite monitoring locations, however, an anomalous indication of tritium at a low concentration level (less than the federal drinking water limit) was present in an onsite sample of surface water collected from the intake structure. This location was re-sampled and tritium was not detected in the confirmatory sample or any other samples from this same location. The sample was not collected for either the REMP or the RGPP monitoring programs, and therefore is not included in the tabular results.

Strontium

Strontium-90 was not detected in any location sampled in 2009. (Table B-II.1, Appendix B)

Gamma Emitters

No gamma emitting nuclides, other than naturally occurring potassium-40, were detected in any of the samples analyzed. (Table B–II.2, Appendix B)

D. Summary of Results – Inter-Laboratory Comparison Program

Inter-Laboratory Comparison Program results for TBE and Environmental Inc. (Midwest Labs) are presented in the 2009 Oyster Creek AREOR.

E. Leaks, Spills, and Releases

The OCGS records inadvertent releases of radioactive liquids in accordance with 10 CFR 50.75(g). As part of the hydrogeologic investigation associated with Exelon's fleet wide assessment in 2006, a third party environmental engineering firm was contracted to evaluate historic releases, if any, and determine if a potential pathway to the environment existed. Those releases that were determined to have potentially impacted groundwater were subsequently investigated as part of the fleet wide assessment. The 2006 hydrogeologic investigation determined that there were no radiological impacts to groundwater at the Oyster Creek Generating Station.

There were three abnormal releases during 2009 resulting in an estimated total exposure of < 0.001 mRem to the most limiting member of the public.

On February 9, 2009 less than 1 gallon of condensation from the B Isocondenser vent leaked onto the ground. The tritium in the condensed water was 21,900 pCi/l (0.0000000829 Ci). The contaminated soil was placed in drums for disposal. No doses were calculated since the spill was contained and soil disposed. The leak was secured.

On April 13, 2009, in preparation for work inside the Emergency Service Water (ESW) vault, water was found inside the vault. As part of standard practices for water removal, the water was pumped into drums and sampled for gamma emitters, tritium, and pH. Sample analysis identified tritium levels at 102,000 pCi/l. Investigation determined that the release of tritiated water was caused by leaks in the 8-inch and 10-inch carbon steel Condensate System lines. The root cause investigation determined that the piping leaks developed due to a corrosion mechanism known as anodic dissolution. Poor application of pipe coating left the buried pipes susceptible to this corrosion. All leaks were repaired.

A total of 6.39 Ci of tritium was calculated to have been released from this leak. This number was arrived at by using the calculated volume released (187,476 gallons), the maximum tritium concentration of the Condensate Storage Tank (CST) from that time period (9,000,000 pCi/l), and the typical value of canal dilution flow from the ODCM of 1,000,000 gpm. The maximum dose calculated from this release was 0.0000293 mRem for both total body and organ dose.

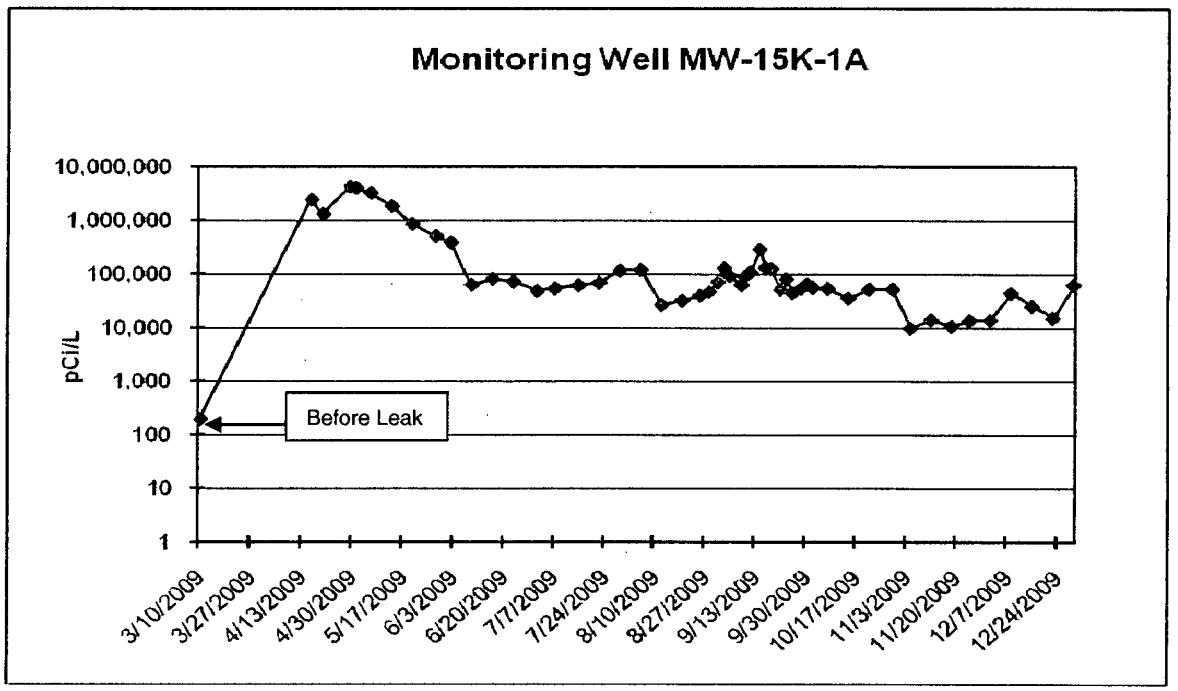
On August 24, 2009 an eight to ten gallon per minute leak was discovered in the condenser bay. The leak was coming from the turbine building west wall penetration housing the Condensate Transfer CH-5 line, the six-inch Condensate Transfer Main Header. Two through-wall holes of 1/16" and 1/4" were found in the pipe within the wall penetration. A tritium concentration of 10,100,000 pCi/l was detected. The root cause investigation determined the cause to be galvanic corrosion. The leak was repaired.

A total of 2.04 Ci of tritium was calculated to have been released from this leak to the discharge canal over a 7 day period. This number was arrived at by using the conservatively estimated released volume (50,000 gallons) and the maximum tritium concentration of the CST from that time period (10,800,000 pCi/l), using the canal dilution flow from the ODCM of 1,000,000 gpm. The maximum dose calculated from this release was 0.00000936 mRem for both total body and organ dose.

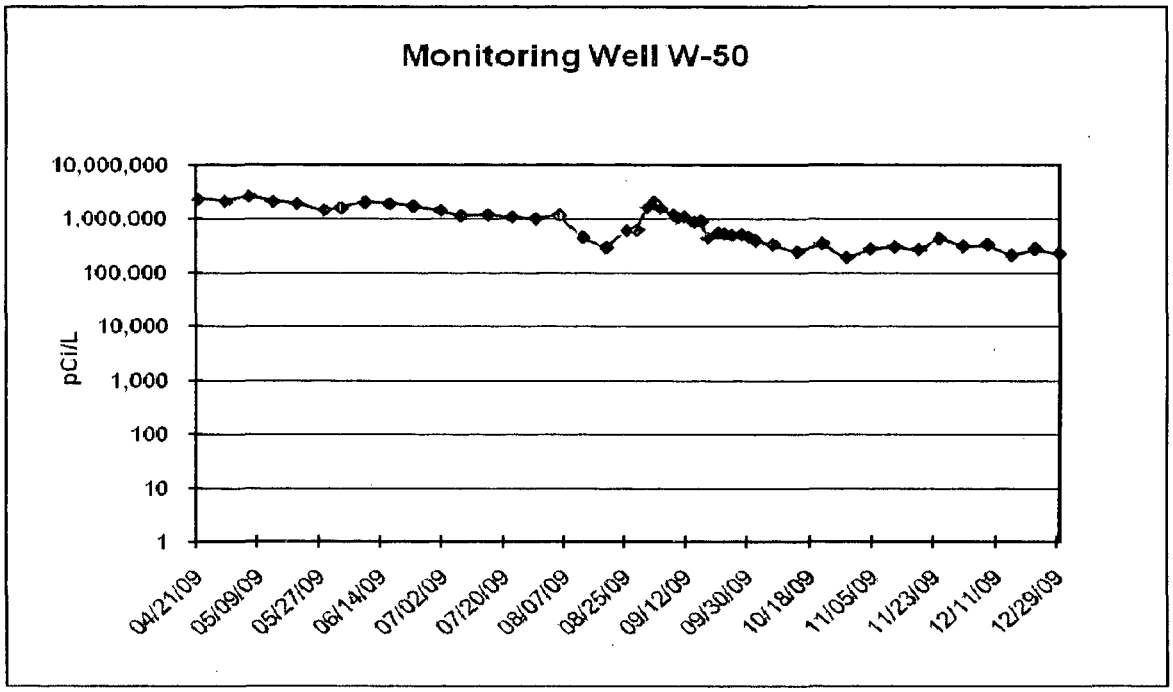
F. Trends

The two leaks both occurred on the west side of the turbine building. The close proximity of the leaks allows the same wells to monitor the tritium plume. An independent hydrogeologist has determined that the flow of the tritium plume is toward the intake and discharge canals, and not into the deeper aquifers. The flow is not likely to impact offsite groundwater.

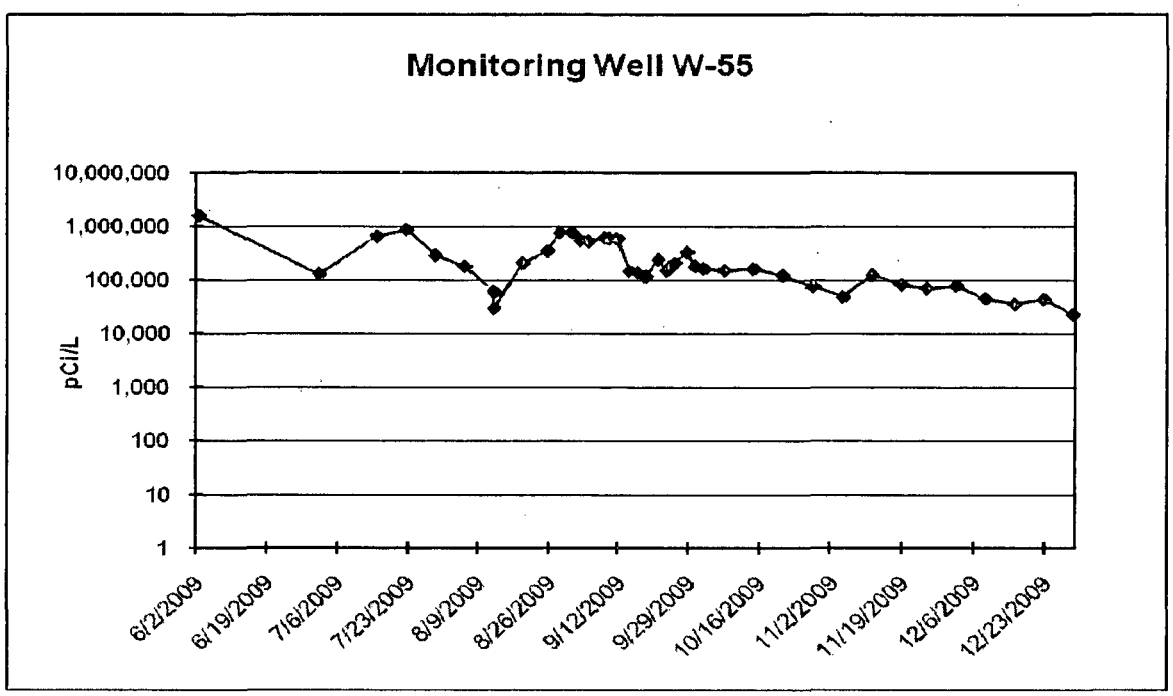
The wells closest to the leaks have the highest tritium concentrations.



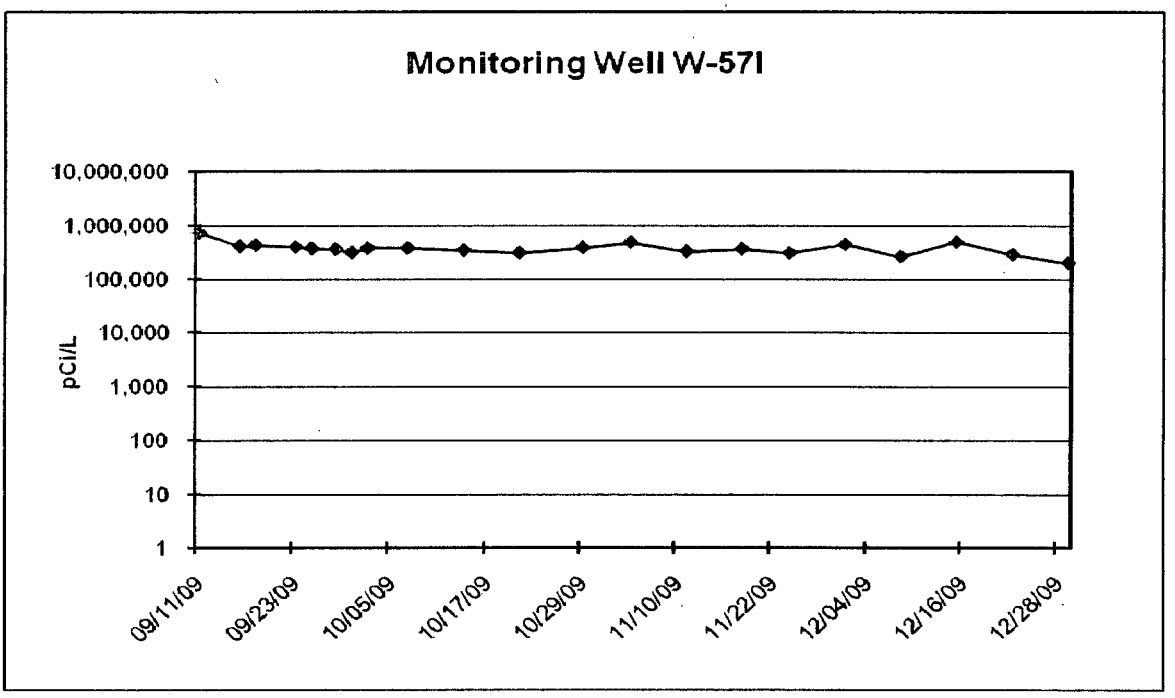
Min – 9,810 pCi/L
Max – 4,160,000 pCi/L
Mean – 413,819 pCi/L



Min – 186,000 pCi/L
Max – 2,650,000 pCi/L
Mean – 957,604 pCi/L



Min – 22,900 pCi/L
Max – 1,550,000 pCi/L
Mean – 283,912 pCi/L



Min – 200,000 pCi/L
Max – 738,000 pCi/L
Mean – 380,476 pCi/L

G. Investigations

Conestoga Rovers and Associates performed an independent assessment of the tritium plume. The results of their assessment can be found in References 2 and 3.

I. Actions Taken

1. Compensatory Actions

The compensatory actions taken during 2009 were to add 8 additional monitoring wells to better characterize and monitor the tritium plume.

2. Installation of Monitoring Wells

The following wells were installed in 2009 to better delineate the high levels of tritium found in well MW-15K-1A. Wells W-56I and W-57I were installed to characterize migration of tritium from the Cape May Formation to the Cohansey Formation.

Well Number	Formation	Well Installation Date
W-50	Cape May	04/21/09
W-51	Cape May	04/22/09
W-52	Cape May	04/23/09
W-53	Cape May	04/24/09
W-54	Cape May	04/24/09
W-55	Cape May	05/26/09
W-56I	Cohansey	09/14/09
W-57I	Cohansey	09/03/09

3. Actions to Recover/Reverse Plumes

   Oyster Creek Generating Station is currently addressing the tritium in groundwater through the process of Monitored Natural Attenuation. As a result of this process tritium concentrations continue to decline to less than detectable through decay, dilution and dispersion. Oyster Creek will continue to evaluate alternative remediation strategies as additional information becomes available or in response to changing conditions.

V. References

1. Conestoga Rovers and Associates, Hydrogeologic Investigation Report, Fleetwide Assessment, Oyster Creek Generating Station, Forked River, New Jersey, Ref. No. 045136(18), September 2006

2. Conestoga Rovers and Associates, Site Investigation Report, Oyster Creek Generating Station, Forked River, New Jersey, Ref. No. 055875 (4), August 2009
3. Conestoga Rovers and Associates, Remedial Investigation Workplan, Oyster Creek Generating Station, Forked River, New Jersey, Ref. No. 055875 (5), October 2009

APPENDIX A

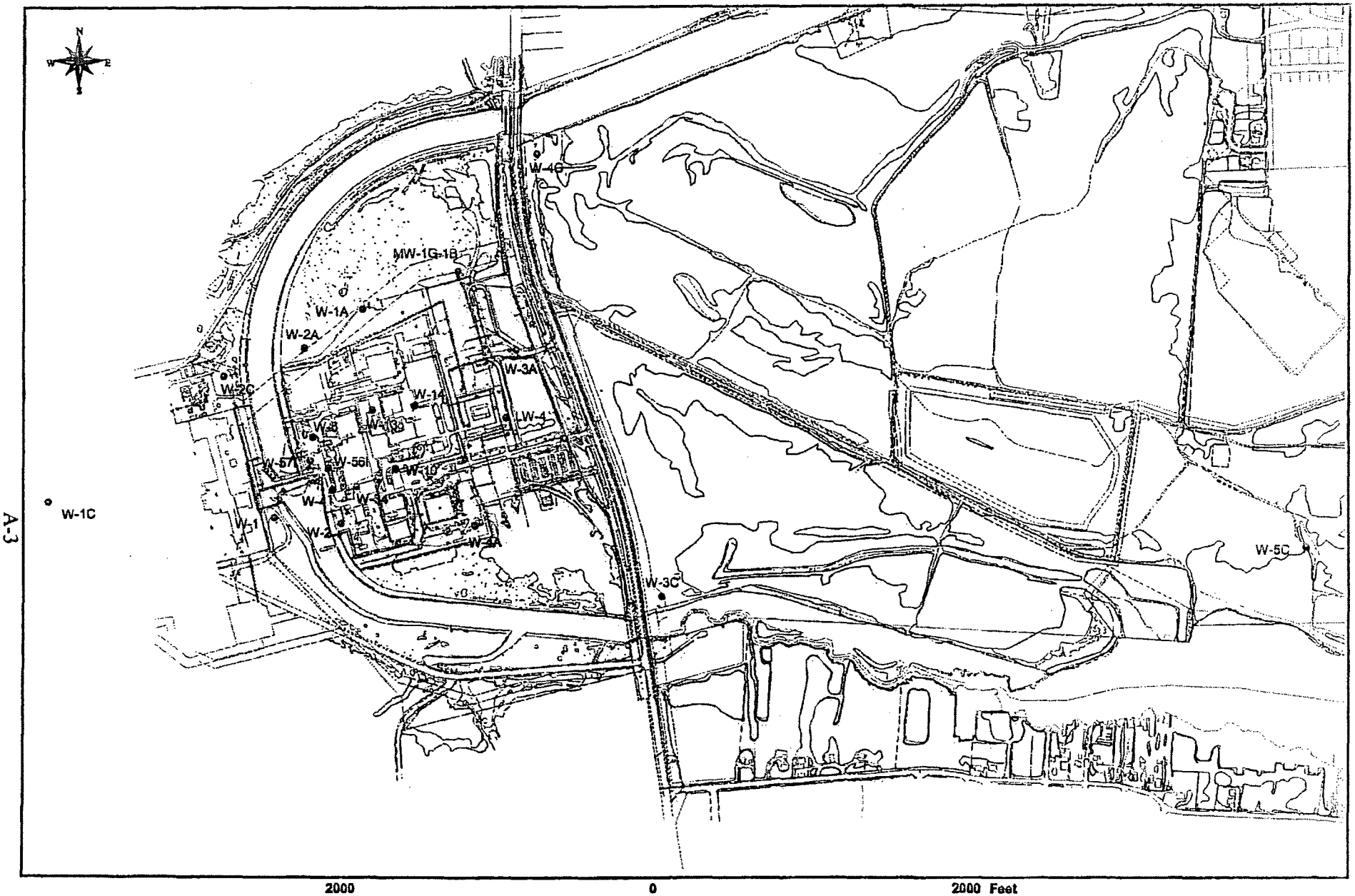
LOCATION DESIGNATION

2000 0 2000 Feet

- Kirkwood Formation Tritium Sample Location
- Kirkwood Formation Groundwater Elevation Monitoring Location

2009 RGPP Sampling and Monitoring Locations
Kirkwood Formation Well
Exelon Corporation
Oyster Creek Generating Station

Figure A-1



2000 0 2000 Feet

- Cohansey Formation Tritium Sample Location
- Cohansey Formation Groundwater Elevation Monitoring Location

2009 RGPP Sampling and Monitoring Locations
Cohansey Formation Well
Exelon Corporation
Oyster Creek Generating Station

Figure A-2

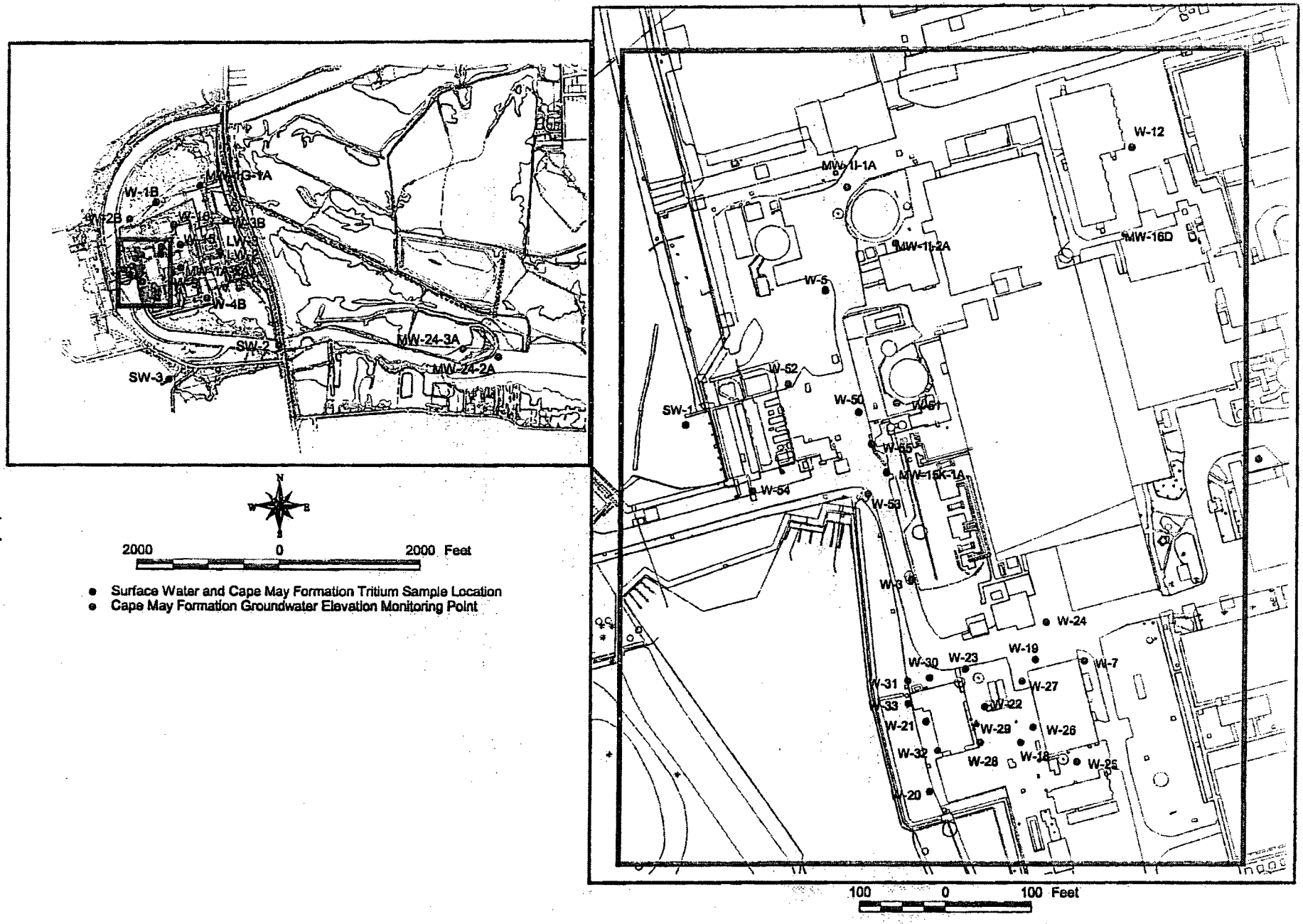


Figure A-3

2009 RGPP Sampling and Monitoring Locations
Cape May Formation Well
Exelon Corporation
Oyster Creek Generating Station

TABLE A-1: Radiological Groundwater Protection Program - Sampling Locations, Oyster Creek Generating Station, 2009

Sample No.	Type	Collection and Analysis Frequency	Required Analysis
LW-3	Well	S B B	Tritium Gamma Sr-90
LW-4	Well	S B B	Tritium Gamma Sr-90
MW-1I-1A	Well	M*, S M*, B B	Tritium Gamma Sr-90
MW-1I-2A	Well	M*, S M*, B B	Tritium Gamma Sr-90
MW-2	Well	S B B	Tritium Gamma Sr-90
MW-2A	Well	S B B	Tritium Gamma Sr-90
MW-15K-1A	Well	W*, S W*, B B	Tritium Gamma Sr-90
MW-16	Well	S B B	Tritium Gamma Sr-90
MW-16D	Well	S B B	Tritium Gamma Sr-90
MW-20	Well	S B B	Tritium Gamma Sr-90
North Domestic Well	Well	S B B	Tritium Gamma Sr-90
South Domestic Well	Well	S B B	Tritium Gamma Sr-90
W-1A	Well	S B B	Tritium Gamma Sr-90
W-3	Well	M*, S M*, B B	Tritium Gamma Sr-90
W-4	Well	M*, S M*, B B	Tritium Gamma Sr-90

TABLE A-1: Radiological Groundwater Protection Program - Sampling Locations, Oyster Creek Generating Station, 2009

Sample No.	Type	Collection and Analysis Frequency	Required Analysis
W-4K	Well	M* M*	Tritium Gamma
W-5	Well	M*, S M*, B B	Tritium Gamma Sr-90
W-6	Well	M*, S M*, B B	Tritium Gamma Sr-90
W-7	Well	S B B	Tritium Gamma Sr-90
W-9	Well	S B B	Tritium Gamma Sr-90
W-12	Well	S B B	Tritium Gamma Sr-90
W-13	Well	S B B	Tritium Gamma Sr-90
W-14	Well	S B B	Tritium Gamma Sr-90
W-15	Well	S B B	Tritium Gamma Sr-90
W-50	Well	W* W*	Tritium Gamma
W-51	Well	W* W*	Tritium Gamma
W-52	Well	W* W*	Tritium Gamma
W-53	Well	W* W*	Tritium Gamma
W-54	Well	W* W*	Tritium Gamma
W-55	Well	W* W*	Tritium Gamma
W-56I	Well	W* W*	Tritium Gamma
W-57I	Well	W* W*	Tritium Gamma

TABLE A-1: Radiological Groundwater Protection Program - Sampling Locations, Oyster Creek Generating Station, 2009

Sample No.	Type	Collection and Analysis Frequency	Required Analysis
SW-1	Surface Water	D*, S D*, B B	Tritium Gamma Sr-90
SW-2	Surface Water	D*, S D*, B B	Tritium Gamma Sr-90
SW-3	Surface Water	S B B	Tritium Gamma Sr-90
Main Condenser Discharge	Surface Water	D* D*	Tritium Gamma

* Frequency after April identification of tritium leak

D = Daily
W = Weekly
M = Monthly
S = Semi-annual
B = Biennial

Note that only sample points that are part of the program are listed in this table.

APPENDIX B

DATA TABLES

TABLE B-I.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
LW-3	03/12/09	< 192	
LW-3	10/02/09	< 176	< 1.0
LW-4	03/12/09	< 189	
LW-4	10/02/09	< 174	< 0.8
MW-15K-1A	03/10/09	< 192	
MW-15K-1A	04/16/09	2390000 ± 160000	
MW-15K-1A	04/20/09	1290000 ± 23600	
MW-15K-1A	04/29/09	4160000 ± 339000	
MW-15K-1A	05/01/09	3940000 ± 331000	
MW-15K-1A	05/06/09	3170000 ± 294000	
MW-15K-1A	05/13/09	1790000 ± 171000	
MW-15K-1A	05/20/09	837000 ± 19700	
MW-15K-1A	05/28/09	500000 ± 15400	
MW-15K-1A	06/02/09	377000 ± 13500	
MW-15K-1A	06/09/09	62400 ± 6100	
MW-15K-1A	06/16/09	80000 ± 6760	
MW-15K-1A	06/23/09	71100 ± 6420	
MW-15K-1A	07/01/09	47700 ± 4800	
MW-15K-1A	07/07/09	53200 ± 5780	
MW-15K-1A	07/15/09	61500 ± 6750	
MW-15K-1A	07/22/09	67800 ± 7360	
MW-15K-1A	07/29/09	115000 ± 12000	
MW-15K-1A	08/05/09	118000 ± 12400	
MW-15K-1A	08/12/09	26300 ± 2610	
MW-15K-1A	08/19/09	31800 ± 3210	
MW-15K-1A	08/25/09	40000 ± 4030	
MW-15K-1A	08/28/09	46400 ± 4660	
MW-15K-1A	08/31/09	70400 ± 4040	
MW-15K-1A	09/02/09	128000 ± 13000	
MW-15K-1A	09/04/09	90400 ± 11200	
MW-15K-1A	09/08/09	61800 ± 9630	
MW-15K-1A	09/09/09	88100 ± 11000	
MW-15K-1A	09/11/09	108000 ± 12300	
MW-15K-1A	09/14/09	284000 ± 16800	
MW-15K-1A	09/16/09	131000 ± 13500	
MW-15K-1A	09/18/09	123000 ± 7960	
MW-15K-1A	09/21/09	50800 ± 5130	
MW-15K-1A	09/23/09	78500 ± 9190	
MW-15K-1A	09/25/09	43600 ± 4240	
MW-15K-1A	09/28/09	53600 ± 5690	
MW-15K-1A	09/30/09	63900 ± 8420	
MW-15K-1A	10/02/09	55000 ± 5740	
MW-15K-1A	10/07/09	52900 ± 5670	
MW-15K-1A	10/14/09	35000 ± 4880	
MW-15K-1A	10/21/09	51700 ± 4640	
MW-15K-1A	10/29/09	51400 ± 7640	
MW-15K-1A	11/04/09	9810 ± 5160	
MW-15K-1A	11/11/09	14200 ± 5520	

TABLE B-I.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE		H-3	SR-90
MW-15K-1A	11/18/09		10600 ± 5300	
MW-15K-1A	11/24/09		13700 ± 5510	
MW-15K-1A	12/01/09		13900 ± 5530	
MW-15K-1A	12/08/09		43900 ± 7540	
MW-15K-1A	12/15/09		25000 ± 2550	
MW-15K-1A	12/22/09		15100 ± 1550	
MW-15K-1A	12/29/09		62100 ± 6060	
MW-16	03/10/09		< 178	
MW-16	10/01/09		< 188	< 0.9
MW-16D	03/10/09		< 186	
MW-16D	09/30/09		< 177	< 0.8
MW-1I-1A	03/10/09		< 192	
MW-1I-1A	04/16/09		< 196	
MW-1I-1A	04/20/09		< 190	
MW-1I-1A	05/27/09		< 177	
MW-1I-1A	06/30/09		280 ± 123	
MW-1I-1A	07/29/09		< 152	
MW-1I-1A	08/26/09		< 183	
MW-1I-1A	09/30/09		< 177	
MW-1I-1A	09/30/09		< 172	
MW-1I-1A	10/01/09		< 178	< 0.6
MW-1I-1A	10/29/09		< 178	
MW-1I-1A	11/24/09		< 155	
MW-1I-1A	12/30/09		< 171	
MW-1I-2A	03/10/09		< 194	
MW-1I-2A	04/20/09		< 192	
MW-1I-2A	05/27/09		< 199	
MW-1I-2A	06/30/09		< 166	
MW-1I-2A	07/29/09		< 159	
MW-1I-2A	08/26/09		< 168	
MW-1I-2A	10/01/09		< 174	< 0.7
MW-1I-2A	10/29/09		< 183	
MW-1I-2A	11/24/09		< 160	
MW-1I-2A	12/30/09		< 169	
MW-2	03/10/09		< 192	
MW-2	03/10/09		< 185	
MW-2	03/10/09	EIML QC	< 149	
MW-20	03/10/09		< 189	
MW-20	03/10/09		< 181	
MW-20	03/10/09	EIML QC	< 149	
MW-2A	03/10/09		< 186	
MW-2A	09/30/09		< 176	< 0.7
W-50	04/21/09		2350000 ± 32100	
W-50	04/29/09		2140000 ± 31600	
W-50	05/06/09		2650000 ± 234000	
W-50	05/13/09		2090000 ± 31300	
W-50	05/20/09		1880000 ± 29600	
W-50	05/28/09		1420000 ± 25800	
W-50	06/02/09		1600000 ± 27400	

TABLE B-I.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
W-50	06/09/09	2040000 ± 30700	
W-50	06/16/09	1890000 ± 29700	
W-50	06/23/09	1700000 ± 28200	
W-50	07/01/09	1420000 ± 25600	
W-50	07/07/09	1120000 ± 22900	
W-50	07/15/09	1180000 ± 117000	
W-50	07/22/09	1060000 ± 106000	
W-50	07/29/09	998000 ± 99700	
W-50	08/05/09	1180000 ± 117000	
W-50	08/12/09	443000 ± 9790	
W-50	08/19/09	287000 ± 7930	
W-50	08/25/09	608000 ± 11500	
W-50	08/28/09	621000 ± 11600	
W-50	08/31/09	1650000 ± 44800	
W-50	09/02/09	2070000 ± 49300	
W-50	09/04/09	1550000 ± 42600	
W-50	09/08/09	1170000 ± 37200	
W-50	09/09/09	1030000 ± 34900	
W-50	09/11/09	1080000 ± 32200	
W-50	09/14/09	839000 ± 28200	
W-50	09/16/09	910000 ± 33600	
W-50	09/18/09	431000 ± 14300	
W-50	09/21/09	539000 ± 26200	
W-50	09/23/09	512000 ± 25300	
W-50	09/25/09	486000 ± 24800	
W-50	09/28/09	499000 ± 21600	
W-50	09/30/09	445000 ± 14400	
W-50	10/02/09	387000 ± 13500	
W-50	10/07/09	322000 ± 12400	
W-50	10/14/09	241000 ± 10800	
W-50	10/21/09	345000 ± 18500	
W-50	10/28/09	186000 ± 13500	
W-50	11/04/09	273000 ± 16100	
W-50	11/11/09	299000 ± 17000	
W-50	11/18/09	264000 ± 15900	
W-50	11/24/09	431000 ± 42400	
W-50	12/01/09	300000 ± 17000	
W-50	12/08/09	328000 ± 17700	
W-50	12/15/09	204000 ± 9970	
W-50	12/22/09	277000 ± 11500	
W-50	12/29/09	220000 ± 10300	
NORTH DOMESTIC WELL	10/02/09	< 175	< 0.8
SOUTH DOMESTIC WELL	03/11/09	< 193	
SOUTH DOMESTIC WELL	03/11/09	< 183	
SOUTH DOMESTIC WELL	04/17/09	< 182	

TABLE B-I.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE		H-3	SR-90
SOUTH DOMESTIC WELL	10/02/09		< 175	< 0.8
W-12	03/10/09		< 182	
W-12	09/30/09		< 185	< 0.6
W-12	09/30/09		< 188	< 0.6
W-13	03/10/09		< 177	
W-13	09/30/09		< 188	< 0.8
W-14	03/11/09		< 186	
W-14	10/01/09		< 184	< 0.7
W-15	03/11/09		< 183	
W-15	03/11/09		< 174	
W-15	03/11/09	EIML QC	< 149	
W-15	10/01/09		< 191	< 0.7
W-1A	03/10/09		< 190	
W-1A	09/30/09		< 177	< 0.8
W-3	03/10/09		< 191	
W-3	04/17/09		< 187	
W-3	04/20/09		< 196	
W-3	05/27/09		< 177	
W-3	06/30/09		< 164	
W-3	07/29/09		< 157	
W-3	08/26/09		< 187	
W-3	09/30/09		< 175	
W-3	10/01/09		< 177	< 0.6
W-3	10/29/09		< 171	
W-3	11/24/09		< 154	
W-3	12/30/09		< 170	
W-4	03/10/09		< 187	
W-4	04/17/09		< 191	
W-4	04/20/09		< 193	
W-4	05/27/09		< 181	
W-4	06/30/09		< 167	
W-4	07/29/09		< 157	
W-4	08/26/09		< 184	
W-4	09/30/09		< 176	
W-4	10/01/09		< 179	< 0.9
W-4	10/29/09		< 170	
W-4	11/24/09		< 156	
W-4	12/30/09		< 170	
W-4K	05/27/09		< 177	
W-4K	06/30/09		< 164	
W-4K	07/29/09		< 161	
W-4K	08/27/09		< 179	
W-4K	09/30/09		< 177	
W-4K	10/01/09	EIML QC	< 154	

TABLE B-I.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
W-4K	10/28/09	< 167	
W-4K	11/24/09	< 172	
W-5	03/11/09	< 184	
W-5	04/16/09	< 165	
W-5	04/20/09	< 193	
W-5	05/27/09	< 178	
W-5	06/30/09	< 158	
W-5	07/29/09	< 161	
W-5	08/26/09	< 181	
W-5	09/30/09	< 172	
W-5	10/01/09	< 177	< 0.7
W-5	10/29/09	< 157	
W-5	11/24/09	< 159	
W-5	12/30/09	< 168	
W-51	04/22/09	2300000 ± 236000	< 5.8
W-51	04/29/09	1770000 ± 28800	
W-51	05/06/09	2170000 ± 31800	
W-51	05/13/09	2530000 ± 225000	
W-51	05/20/09	2020000 ± 30800	
W-51	05/27/09	2030000 ± 31100	
W-51	06/02/09	1780000 ± 28700	
W-51	06/09/09	1570000 ± 27200	
W-51	06/16/09	1570000 ± 27200	
W-51	06/23/09	721000 ± 18500	
W-51	07/01/09	767000 ± 19200	
W-51	07/07/09	982000 ± 21700	
W-51	07/15/09	1620000 ± 158000	
W-51	07/22/09	DRY	
W-51	07/29/09	1830000 ± 180000	
W-51	08/05/09	1470000 ± 144000	
W-51	08/12/09	456000 ± 9910	
W-51	08/20/09	109000 ± 4960	
W-51	08/26/09	164000 ± 6010	
W-51	08/28/09	129000 ± 5360	
W-51	08/31/09	215000 ± 16900	
W-51	09/02/09	210000 ± 16300	
W-51	09/04/09	195000 ± 15800	
W-51	09/08/09	201000 ± 16000	
W-51	09/09/09	217000 ± 16500	
W-51	09/11/09	272000 ± 18700	
W-51	09/16/09	131000 ± 5660	
W-51	09/18/09	144000 ± 6180	
W-51	09/23/09	676000 ± 27400	
W-51	09/25/09	657000 ± 26600	

TABLE B-I.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE		H-3	SR-90
W-51	09/28/09		609000 ± 24700	
W-51	10/02/09		588000 ± 23800	
W-51	10/07/09		708000 ± 67200	
W-51	10/14/09		DRY	
W-51	10/21/09		DRY	
W-51	10/28/09		DRY	
W-51	11/04/09		DRY	
W-51	11/11/09		DRY	
W-51	11/18/09		DRY	
W-51	11/25/09		DRY	
W-51	12/02/09		DRY	
W-51	12/09/09		DRY	
W-51	12/16/09		DRY	
W-51	12/23/09		DRY	
W-51	12/29/09	Original	4860 ± 531	
W-51	12/29/09	Re-analysis	3010 ± 338	
W-52	05/06/09		< 172	
W-52	05/13/09		161 ± 97	
W-52	05/20/09		< 179	
W-52	05/27/09		< 179	
W-52	06/02/09		< 164	
W-52	06/09/09		< 161	
W-52	06/16/09		< 195	
W-52	06/23/09		< 170	
W-52	06/30/09		< 169	
W-52	07/07/09		< 167	
W-52	07/15/09		< 159	
W-52	07/22/09		< 159	
W-52	07/29/09		< 196	
W-52	08/05/09		< 158	
W-52	08/12/09		< 191	
W-52	08/19/09		< 193	
W-52	08/25/09		< 179	
W-52	09/02/09		372 ± 116	
W-52	09/09/09		169 ± 103	
W-52	09/16/09		< 170	
W-52	09/23/09		< 150	
W-52	09/30/09		< 173	
W-52	10/07/09		< 180	
W-52	10/14/09		< 164	
W-52	10/21/09		< 168	
W-52	10/28/09		< 181	
W-52	11/04/09		< 182	

TABLE B-I.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE		H-3	SR-90
W-52	11/11/09		< 180	
W-52	11/18/09		< 171	
W-52	11/24/09		< 159	
W-52	12/01/09		< 161	
W-52	12/08/09		< 158	
W-52	12/15/09		< 164	
W-52	12/22/09		< 164	
W-52	12/29/09		< 161	
W-53	04/24/09		1300 ± 192	
W-53	04/29/09		6300 ± 677	
W-53	05/01/09		8320 ± 879	
W-53	05/06/09		7270 ± 766	
W-53	05/13/09		2240 ± 269	
W-53	05/20/09		1440 ± 205	
W-53	05/27/09		1390 ± 194	
W-53	06/02/09		1040 ± 160	
W-53	06/09/09		< 163	
W-53	06/16/09		< 197	
W-53	06/23/09		< 159	
W-53	06/30/09		< 159	
W-53	07/07/09		< 163	
W-53	07/15/09		183 ± 117	
W-53	07/22/09		192 ± 115	
W-53	07/29/09		< 191	
W-53	08/05/09		174 ± 111	
W-53	08/12/09		< 184	
W-53	08/19/09		< 178	
W-53	08/25/09		< 183	
W-53	09/02/09	Original	93800 ± 6340	
W-53	09/02/09	Re-analysis	< 179	
W-53	09/09/09		194 ± 107	
W-53	09/16/09		< 152	
W-53	09/23/09		< 149	
W-53	09/30/09		< 151	
W-53	10/07/09		< 167	
W-53	10/14/09		< 168	
W-53	10/21/09		< 164	
W-53	10/28/09		< 180	
W-53	11/04/09		< 184	
W-53	11/11/09		< 179	
W-53	11/18/09		< 170	
W-53	11/24/09		< 157	
W-53	12/01/09		< 158	
W-53	12/08/09		< 161	

TABLE B-I.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
W-53	12/15/09	< 164	
W-53	12/22/09	< 164	
W-53	12/29/09	< 163	
W-54	04/24/09	5230 ± 2000	
W-54	05/01/09	455 ± 130	
W-54	05/06/09	6990 ± 744	
W-54	05/13/09	4150 ± 458	
W-54	05/20/09	2400 ± 288	
W-54	05/28/09	4720 ± 515	
W-54	06/02/09	7830 ± 820	
W-54	06/09/09	5820 ± 629	
W-54	06/16/09	2580 ± 304	
W-54	06/23/09	4920 ± 535	
W-54	06/30/09	3350 ± 375	
W-54	07/07/09	4180 ± 462	
W-54	07/15/09	7840 ± 827	
W-54	07/22/09	4770 ± 518	
W-54	07/29/09	4070 ± 452	
W-54	08/05/09	2650 ± 315	
W-54	08/12/09	1010 ± 268	
W-54	08/19/09	3300 ± 374	
W-54	08/25/09	1870 ± 237	
W-54	09/02/09	2430 ± 296	
W-54	09/09/09	2610 ± 315	
W-54	09/16/09	711 ± 138	
W-54	09/23/09	1130 ± 174	
W-54	09/30/09	762 ± 151	
W-54	10/07/09	1070 ± 165	
W-54	10/14/09	1550 ± 210	
W-54	10/21/09	545 ± 128	
W-54	10/28/09	264 ± 124	
W-54	11/04/09	277 ± 124	
W-54	11/11/09	2210 ± 278	
W-54	11/18/09	1030 ± 163	
W-54	11/24/09	3490 ± 830	
W-54	12/01/09	9520 ± 1000	
W-54	12/08/09	1080 ± 169	
W-54	12/15/09	381 ± 119	
W-54	12/22/09	776 ± 140	
W-54	12/29/09	205 ± 109	
W-55	06/02/09	1550000 ± 26900	
W-55	07/01/09	128000 ± 8220	
W-55	07/15/09	645000 ± 60800	

TABLE B-I.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
W-55	07/22/09	837000 ± 83600	
W-55	07/29/09	283000 ± 28800	
W-55	08/05/09	175000 ± 18000	
W-55 (Bottom of Well)	08/12/09	61400 ± 3790	
W-55 (Middle of Well)	08/12/09	57000 ± 3660	
W-55 (Top of Well)	08/12/09	30000 ± 2750	
W-55	08/19/09	207000 ± 6730	
W-55	08/25/09	348000 ± 8690	
W-55	08/28/09	759000 ± 12800	
W-55	08/31/09	744000 ± 30700	
W-55	09/02/09	544000 ± 25700	
W-55	09/04/09	514000 ± 24800	
W-55	09/08/09	603000 ± 26900	
W-55	09/09/09	587000 ± 26600	
W-55	09/11/09	575000 ± 26900	
W-55	09/14/09	146000 ± 8600	
W-55	09/16/09	137000 ± 13700	
W-55	09/18/09	116000 ± 7730	
W-55	09/21/09	236000 ± 17600	
W-55	09/23/09	147000 ± 12200	
W-55	09/25/09	207000 ± 16500	
W-55	09/28/09	327000 ± 17700	
W-55	09/30/09	177000 ± 9360	
W-55	10/02/09	160000 ± 8970	
W-55	10/07/09	150000 ± 8750	
W-55	10/14/09	161000 ± 9010	
W-55	10/21/09	121000 ± 11200	
W-55	10/28/09	74500 ± 9180	
W-55	11/04/09	48000 ± 7790	
W-55	11/11/09	124000 ± 11300	
W-55	11/18/09	82300 ± 8160	
W-55	11/24/09	69800 ± 9030	
W-55	12/01/09	78000 ± 9380	
W-55	12/08/09	45000 ± 4550	
W-55	12/15/09	35800 ± 3620	
W-55	12/22/09	43800 ± 5340	
W-55	12/29/09	22900 ± 2330	
W-56I	09/16/09	472000 ± 24400	
W-56I	09/18/09	485000 ± 15100	
W-56I	09/23/09	611000 ± 27800	
W-56I	09/25/09	482000 ± 24700	
W-56I	09/28/09	458000 ± 20700	
W-56I	09/30/09	493000 ± 15200	

TABLE B-I.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
W-56I	10/02/09	514000 ± 15500	
W-56I	10/07/09	508000 ± 15500	
W-56I	10/14/09	608000 ± 24000	
W-56I	10/21/09	753000 ± 26700	
W-56I	10/29/09	955000 ± 29600	
W-56I	11/04/09	1290000 ± 121000	
W-56I	11/11/09	1040000 ± 31100	
W-56I	11/18/09	1010000 ± 94500	
W-56I	11/24/09	1150000 ± 108000	
W-56I	12/01/09	1030000 ± 30700	
W-56I	12/08/09	1080000 ± 31400	
W-56I	12/15/09	1150000 ± 22800	
W-56I	12/22/09	962000 ± 20800	
W-56I	12/29/09	993000 ± 21100	
W-57I	09/11/09	738000 ± 29700	
W-57I	09/16/09	408000 ± 22700	
W-57I	09/18/09	431000 ± 14200	
W-57I	09/23/09	398000 ± 22500	
W-57I	09/25/09	372000 ± 21800	
W-57I	09/28/09	360000 ± 18600	
W-57I	09/30/09	313000 ± 12300	
W-57I	10/02/09	380000 ± 13400	
W-57I	10/07/09	380000 ± 13500	
W-57I	10/14/09	344000 ± 18100	
W-57I	10/21/09	307000 ± 17400	
W-57I	10/29/09	384000 ± 19000	
W-57I	11/04/09	490000 ± 43000	
W-57I	11/11/09	326000 ± 17900	
W-57I	11/18/09	367000 ± 18600	
W-57I	11/24/09	305000 ± 17100	
W-57I	12/01/09	444000 ± 20400	
W-57I	12/08/09	263000 ± 16000	
W-57I	12/15/09	495000 ± 15100	
W-57I	12/22/09	285000 ± 11700	
W-57I	12/29/09	200000 ± 9940	
W-6	03/11/09	< 191	
W-6	04/16/09	< 187	
W-6	04/20/09	< 191	
W-6	05/27/09	< 178	
W-6	06/30/09	< 152	
W-6	07/29/09	< 158	
W-6	08/26/09	< 176	
W-6	09/30/09	< 178	

TABLE B-I.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
W-6	10/01/09	< 189	< 0.9
W-6	10/01/09	< 188	< 0.5
W-6	10/29/09	< 172	
W-6	11/24/09	< 159	
W-6	12/30/09	< 167	
W-7	03/11/09	< 187	
W-7	09/30/09	< 181	< 0.7
W-9	03/10/09	< 186	
W-9	09/30/09	< 186	< 0.8

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
LW-3	10/02/09	< 4	< 5	< 8	< 5	< 8	< 4	< 7	< 7	< 4	< 4	< 22	< 7
LW-4	10/02/09	< 4	< 4	< 9	< 5	< 9	< 5	< 9	< 8	< 4	< 4	< 20	< 8
MW-15K-1A	04/29/09	< 2	< 4	< 15	< 2	< 5	< 5	< 8	**< 9890**	< 2	< 2	**< 1370**	**< 430**
MW-15K-1A	05/01/09	< 2	< 4	< 12	< 2	< 4	< 4	< 7	**< 27800**	< 2	< 2	**< 1060**	**< 329**
MW-15K-1A	05/06/09	< 1	< 2	< 8	< 1	< 3	< 3	< 5	**< 1020**	< 1	< 1	**< 281**	**< 95**
MW-15K-1A	05/13/09	< 1	< 1	< 3	< 1	< 1	< 1	< 2	**< 263**	< 1	< 1	**< 95**	**< 29**
MW-15K-1A	05/20/09	< 2	< 4	< 15	< 2	< 5	< 5	< 8	**>10000**	< 2	< 2	**< 826**	**< 286**
MW-15K-1A	05/28/09	< 2	< 3	< 10	< 2	< 3	< 4	< 6	**>10000**	< 2	< 2	**< 452**	**< 152**
MW-15K-1A	06/02/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**>10000**	< 1	< 1	**< 275**	**< 81**
MW-15K-1A	06/09/09	< 2	< 3	< 11	< 2	< 4	< 3	< 6	**< 987**	< 2	< 2	**< 323**	**< 123**
MW-15K-1A	06/16/09	< 2	< 3	< 8	< 1	< 4	< 3	< 5	**< 533**	< 2	< 2	**< 210**	**< 70**
MW-15K-1A	06/23/09	< 2	< 4	< 10	< 2	< 5	< 4	< 7	**< 582**	< 2	< 2	**< 258**	**< 86**
MW-15K-1A	07/01/09	< 2	< 3	< 9	< 2	< 5	< 4	< 6	**< 336**	< 2	< 2	**< 169**	**< 51**
MW-15K-1A	07/07/09	< 3	< 5	< 14	< 3	< 7	< 5	< 9	**< 351**	< 3	< 3	**< 209**	**< 62**
MW-15K-1A	07/15/09	< 2	< 3	< 10	< 2	< 4	< 4	< 7	**< 2380**	< 2	< 2	**< 532**	**< 177**
MW-15K-1A	07/22/09	< 2	< 4	< 12	< 3	< 4	< 4	< 8	**< 1520**	< 2	< 2	**< 403**	**< 142**
MW-15K-1A	07/29/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**>10000**	< 1	< 1	< 58	< 15
MW-15K-1A	08/05/09	< 2	< 2	< 5	< 2	< 3	< 2	< 4	**>10000**	< 1	< 1	**< 65**	< 14
MW-15K-1A	08/12/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**>10000**	< 1	< 1	< 42	< 14
MW-15K-1A	08/19/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	< 49	< 13
MW-15K-1A	08/25/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	< 32	< 10
MW-15K-1A	08/28/09	< 2	< 2	< 4	< 2	< 3	< 2	< 4	**>10000**	< 1	< 2	< 39	< 8
MW-15K-1A	08/31/09	< 1	< 2	< 3	< 1	< 3	< 2	< 3	**>10000**	< 1	< 2	< 28	< 8
MW-15K-1A	09/02/09	< 1	< 2	< 5	< 1	< 2	< 2	< 4	**< 474**	< 1	< 1	**< 171**	**< 51**
MW-15K-1A	09/04/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 379**	< 1	< 1	**< 140**	**< 38**
MW-15K-1A	09/08/09	< 2	< 3	< 8	< 1	< 4	< 3	< 5	**< 547**	< 1	< 1	**< 224**	**< 82**
MW-15K-1A	09/09/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 425**	< 1	< 1	**< 180**	**< 49**
MW-15K-1A	09/11/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 2010**	< 1	< 1	**< 388**	**< 116**
MW-15K-1A	09/14/09	< 1	< 2	< 6	< 1	< 2	< 2	< 3	**< 1680**	< 1	< 1	**< 348**	**< 72**
MW-15K-1A	09/16/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 235**	< 1	< 1	**< 123**	**< 37**
MW-15K-1A	09/18/09	< 2	< 4	< 14	< 1	< 3	< 5	< 7	**< 33100**	< 1	< 1	**< 2900**	**< 756**
MW-15K-1A	09/21/09	< 1	< 2	< 6	< 2	< 3	< 3	< 5	**< 244**	< 1	< 1	**< 113**	**< 35**
MW-15K-1A	09/23/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 664**	< 1	< 1	**< 187**	**< 54**
MW-15K-1A	09/25/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 125**	< 1	< 1	**< 74**	**< 25**

BOLDED VALUES INDICATE THE LLD WAS NOT MET

IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-15K-1A	09/28/09	< 1	< 3	< 9	< 1	< 2	< 3	< 6	**< 73600**	< 1	< 1	**< 3670**	**< 1200**
MW-15K-1A	09/30/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**< 344**	< 1	< 1	**< 116**	**< 35**
MW-15K-1A	10/02/09	< 1	< 3	< 10	< 1	< 3	< 4	< 5	**< 8700**	< 1	< 1	**< 1070**	**< 339**
MW-15K-1A	10/07/09	< 1	< 2	< 8	< 1	< 2	< 2	< 4	**< 4910**	< 1	< 1	**< 630**	**< 218**
MW-15K-1A	10/14/09	< 1	< 2	< 8	< 1	< 3	< 3	< 5	**< 3770**	< 1	< 1	**< 709**	**< 191**
MW-15K-1A	10/21/09	< 1	< 1	< 2	< 1	< 1	< 1	< 2	**< 57**	< 1	< 1	< 38	< 10
MW-15K-1A	10/29/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 74**	< 1	< 1	< 48	< 15
MW-15K-1A	11/04/09	< 1	< 2	< 6	< 1	< 2	< 2	< 4	**< 3470**	< 1	< 1	**< 565**	**< 193**
MW-15K-1A	11/11/09	< 1	< 3	< 9	< 1	< 3	< 3	< 6	**< 2640**	< 1	< 1	**< 555**	**< 169**
MW-15K-1A	11/18/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 1120**	< 1	< 1	**< 288**	**< 87**
MW-15K-1A	11/24/09	< 2	< 2	< 5	< 1	< 3	< 2	< 4	**< 1020**	< 1	< 1	**< 287**	**< 88**
MW-15K-1A	12/01/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 446**	< 1	< 1	**< 163**	**< 63**
MW-15K-1A	12/08/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 225**	< 1	< 1	**< 121**	**< 28**
MW-15K-1A	12/15/09	< 1	< 1	< 4	< 1	< 2	< 2	< 2	**< 259**	< 1	< 1	**< 103**	**< 29**
MW-15K-1A	12/22/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 188**	< 1	< 1	**< 88**	**< 25**
MW-15K-1A	12/29/09	< 1	< 2	< 5	< 2	< 3	< 2	< 3	**< 135**	< 1	< 1	**< 82**	**< 22**
MW-16	10/01/09	< 3	< 3	< 7	< 4	< 7	< 3	< 6	< 6	< 3	< 3	< 15	< 5
MW-16D	09/30/09	< 4	< 4	< 8	< 4	< 7	< 5	< 8	< 11	< 4	< 5	< 28	< 6
MW-1I-1A	05/27/09	< 4	< 5	< 13	< 5	< 8	< 5	< 8	**< 22**	< 4	< 4	< 39	< 15
MW-1I-1A	06/30/09	< 2	< 3	< 9	< 2	< 4	< 3	< 6	**< 304**	< 2	< 2	**< 156**	**< 56**
MW-1I-1A	07/29/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 34**	< 1	< 1	< 39	< 13
MW-1I-1A	08/26/09	< 2	< 2	< 5	< 1	< 3	< 2	< 4	**>10000**	< 1	< 1	< 42	< 13
MW-1I-1A	09/30/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 73**	< 1	< 1	< 48	**< 16**
MW-1I-1A	09/30/09	< 1	< 2	< 4	< 1	< 3	< 2	< 4	**< 94**	< 1	< 1	**< 73**	**< 21**
MW-1I-1A	10/01/09	< 6	< 5	< 12	< 5	< 11	< 6	< 10	< 14	< 5	< 5	**< 32**	< 8
MW-1I-1A	10/29/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 124**	< 1	< 1	**< 81**	**< 28**
MW-1I-1A	11/24/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 170**	< 1	< 1	**< 93**	**< 28**
MW-1I-1A	12/30/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 130**	< 1	< 1	**< 73**	**< 23**
MW-1I-2A	05/27/09	< 4	< 5	< 10	< 4	< 8	< 4	< 7	< 13	< 3	< 4	< 32	< 10
MW-1I-2A	06/30/09	< 2	< 2	< 7	< 2	< 3	< 3	< 5	**< 273**	< 1	< 2	**< 137**	**< 46**
MW-1I-2A	07/29/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 42**	< 1	< 1	< 43	< 13

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-I.2 **CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-1I-2A	08/26/09	< 2	< 2	< 3	< 1	< 2	< 2	< 4	**>10000**	< 1	< 1	< 36	< 15
MW-1I-2A	10/01/09	< 5	< 5	< 10	< 6	< 8	< 5	< 10	< 11	< 4	< 5	< 30	< 10
MW-1I-2A	10/29/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 112**	< 1	< 1	**< 71**	**< 22**
MW-1I-2A	11/24/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 141**	< 1	< 1	**< 82**	**< 19**
MW-1I-2A	12/30/09	< 1	< 2	< 5	< 2	< 3	< 2	< 4	**< 191**	< 1	< 1	**< 100**	**< 26**
MW-2A	09/30/09	< 4	< 5	< 10	< 4	< 8	< 5	< 8	< 9	< 4	< 5	< 26	< 8
MW-50	04/29/09	< 2	< 5	< 19	< 2	< 5	< 5	< 10	**>10000**	< 2	< 2	**< 2430**	**< 872**
MW-50	05/06/09	< 2	< 4	< 14	< 2	< 5	< 5	< 8	**< 5460**	< 2	< 2	**< 963**	**< 307**
MW-50	05/13/09	< 2	< 4	< 14	< 2	< 5	< 5	< 7	**>10000**	< 2	< 2	**< 1110**	**< 342**
MW-50	05/20/09	< 2	< 3	< 12	< 2	< 4	< 4	< 7	**>10000**	< 1	< 2	**< 642**	**< 226**
MW-50	05/28/09	< 1	< 2	< 7	< 1	< 3	< 2	< 4	**>10000**	< 1	< 1	**< 342**	**< 108**
MW-50	06/02/09	< 2	< 3	< 9	< 1	< 3	< 3	< 5	**>10000**	< 1	< 1	**< 348**	**< 102**
MW-50	06/09/09	< 1	< 2	< 6	< 2	< 3	< 2	< 4	**>10000**	< 1	< 1	**< 184**	**< 65**
MW-50	06/16/09	< 2	< 3	< 10	< 2	< 5	< 4	< 6	**< 581**	< 2	< 2	**< 241**	**< 87**
MW-50	06/23/09	< 1	< 2	< 7	< 1	< 3	< 3	< 4	**< 392**	< 1	< 1	**< 165**	**< 53**
MW-50	07/01/09	< 2	< 3	< 8	< 2	< 4	< 3	< 5	**< 270**	< 2	< 2	**< 137**	**< 50**
MW-50	07/07/09	< 3	< 4	< 10	< 3	< 6	< 4	< 7	**< 256**	< 2	< 3	**< 156**	**< 48**
MW-50	07/15/09	< 2	< 4	< 14	< 2	< 5	< 5	< 8	**< 2580**	< 2	< 2	**< 659**	**< 178**
MW-50	07/22/09	< 2	< 3	< 8	< 1	< 3	< 3	< 6	**< 1290**	< 1	< 2	**< 292**	**< 97**
MW-50	07/29/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**>10000**	< 1	< 1	< 45	< 15
MW-50	08/05/09	< 2	< 2	< 5	< 2	< 4	< 3	< 5	**>10000**	< 1	< 2	**< 67**	**< 24**
MW-50	08/12/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	< 50	< 15
MW-50	08/19/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	< 44	< 14
MW-50	08/25/09	< 2	< 2	< 5	< 2	< 3	< 2	< 3	**>10000**	< 1	< 2	< 42	< 14
MW-50	08/28/09	< 2	< 2	< 5	< 1	< 4	< 2	< 4	**>10000**	< 2	< 2	< 41	< 11
MW-50	08/31/09	< 1	< 2	< 6	< 1	< 2	< 2	< 4	**< 1050**	< 1	< 1	**< 241**	**< 77**
MW-50	09/02/09	< 1	< 2	< 6	< 1	< 2	< 2	< 4	**< 542**	< 1	< 1	**< 201**	**< 57**
MW-50	09/04/09	< 1	< 2	< 7	< 1	< 3	< 2	< 4	**< 537**	< 1	< 1	**< 175**	**< 57**
MW-50	09/08/09	< 2	< 2	< 5	< 1	< 2	< 2	< 4	**< 506**	< 1	< 1	**< 192**	**< 50**
MW-50	09/09/09	< 2	< 3	< 9	< 2	< 4	< 3	< 6	**< 643**	< 2	< 2	**< 237**	**< 73**

BOLDED VALUES INDICATE THE LLD WAS NOT MET

IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-50	09/11/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 1810**	< 1	< 1	**< 387**	**< 115**
MW-50	09/14/09	< 1	< 2	< 6	< 1	< 2	< 2	< 4	**< 1720**	< 1	< 1	**< 352**	**< 113**
MW-50	09/16/09	< 2	< 2	< 7	< 2	< 3	< 3	< 4	**< 332**	< 1	< 1	**< 160**	**< 47**
MW-50	09/18/09	< 1	< 3	< 13	< 2	< 3	< 4	< 7	**< 26500**	< 1	< 1	**< 2210**	**< 704**
MW-50	09/21/09	< 1	< 2	< 5	< 1	< 2	< 2	< 4	**< 168**	< 1	< 1	**< 91**	**< 25**
MW-50	09/23/09	< 1	< 2	< 4	< 1	< 3	< 2	< 4	**< 150**	< 1	< 1	**< 96**	**< 23**
MW-50	09/25/09	< 1	< 2	< 3	< 1	< 2	< 2	< 3	**< 134**	< 1	< 1	**< 75**	**< 20**
MW-50	09/28/09	< 2	< 4	< 13	< 1	< 3	< 5	< 9	**>10000**	< 1	< 1	**< 5750**	**< 1570**
MW-50	09/30/09	< 1	< 3	< 10	< 1	< 3	< 4	< 6	**< 11400**	< 1	< 1	**< 1380**	**< 368**
MW-50	10/02/09	< 1	< 3	< 10	< 1	< 3	< 3	< 6	**< 9400**	< 1	< 1	**< 1200**	**< 358**
MW-50	10/07/09	< 1	< 2	< 7	< 1	< 2	< 3	< 5	**< 6360**	< 1	< 1	**< 733**	**< 276**
MW-50	10/14/09	< 1	< 2	< 6	< 1	< 2	< 3	< 4	**< 3160**	< 1	< 1	**< 505**	**< 199**
MW-50	10/21/09	< 1	< 1	< 3	< 1	< 1	< 1	< 2	**< 63**	< 1	< 1	< 41	< 11
MW-50	10/28/09	< 1	< 2	< 4	< 2	< 3	< 2	< 3	**< 58**	< 1	< 1	< 42	**< 16**
MW-50	11/04/09	< 1	< 2	< 8	< 1	< 3	< 3	< 6	**< 3980**	< 1	< 1	**< 668**	**< 191**
MW-50	11/11/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 17**	< 1	< 1	< 21	< 4
MW-50	11/18/09	< 1	< 3	< 8	< 1	< 3	< 2	< 4	**< 1330**	< 1	< 1	**< 392**	**< 86**
MW-50	11/24/09	< 1	< 3	< 7	< 2	< 3	< 3	< 4	**< 1110**	< 1	< 1	**< 297**	**< 84**
MW-50	12/01/09	< 2	< 3	< 8	< 1	< 3	< 3	< 5	**< 485**	< 1	< 1	**< 188**	**< 47**
MW-50	12/08/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 152**	< 1	< 1	**< 89**	**< 19**
MW-50	12/15/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 218**	< 1	< 1	**< 89**	**< 27**
MW-50	12/22/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 192**	< 1	< 1	**< 97**	**< 25**
MW-50	12/29/09	< 1	< 1	< 4	< 1	< 2	< 2	< 2	**< 77**	< 1	< 1	< 56	< 14
MW-6	05/27/09	< 4	< 6	< 10	< 4	< 10	< 6	< 10	**< 27**	< 5	< 5	< 39	< 14
MW-6	06/30/09	< 2	< 3	< 9	< 2	< 4	< 3	< 6	**< 320**	< 2	< 2	**< 153**	**< 55**
MW-6	07/29/09	< 2	< 2	< 5	< 1	< 3	< 2	< 4	**< 46**	< 1	< 2	< 43	< 14
MW-6	08/26/09	< 1	< 2	< 4	< 2	< 3	< 2	< 3	**>10000**	< 1	< 1	< 42	< 11
MW-6	09/30/09	< 1	< 2	< 3	< 1	< 2	< 1	< 3	**< 86**	< 1	< 1	< 50	**< 17**
MW-6	10/01/09	< 4	< 4	< 7	< 4	< 7	< 4	< 8	< 7	< 3	< 4	< 18	< 7
MW-6	10/01/09	< 5	< 6	< 11	< 7	< 10	< 5	< 10	< 11	< 5	< 5	< 29	< 9

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MW-6	10/29/09	< 2	< 3	< 8	< 1	< 3	< 3	< 5	**< 1020**	< 1	< 2	**< 311**	**< 85**
MW-6	11/24/09	< 1	< 2	< 4	< 1	< 2	< 2	< 4	**< 177**	< 1	< 1	**< 84**	**< 27**
MW-6	12/30/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 122**	< 1	< 1	**< 68**	**< 23**
MW-7	09/30/09	< 5	< 4	< 12	< 6	< 12	< 4	< 10	< 9	< 5	< 5	< 26	< 8
MW-9	09/30/09	< 4	< 4	< 9	< 4	< 8	< 4	< 8	< 8	< 4	< 4	< 21	< 6
NORTH DOMESTIC WELL	10/02/09	< 3	< 3	< 6	< 4	< 7	< 4	< 6	< 6	< 3	< 4	< 16	< 5
SOUTH DOMESTIC WELL	10/02/09	< 5	< 5	< 10	< 6	< 11	< 6	< 8	< 12	< 6	< 6	< 26	< 11
W-12	09/30/09	< 5	< 5	< 9	< 4	< 11	< 7	< 9	< 12	< 5	< 5	< 27	< 7
W-12	09/30/09	< 6	< 5	< 10	< 6	< 12	< 6	< 10	< 12	< 6	< 7	< 35	< 10
W-13	09/30/09	< 4	< 4	< 9	< 4	< 9	< 5	< 8	< 10	< 4	< 4	< 24	< 9
W-14	10/01/09	< 6	< 6	< 13	< 5	< 12	< 7	< 10	< 11	< 5	< 6	< 35	< 9
W-15	10/01/09	< 5	< 5	< 10	< 5	< 11	< 5	< 9	< 10	< 5	< 5	< 27	< 9
W-1A	09/30/09	< 4	< 4	< 9	< 4	< 8	< 4	< 9	< 10	< 4	< 4	< 24	< 7
W-3	05/27/09	< 3	< 3	< 8	< 3	< 5	< 4	< 8	**< 18**	< 3	< 3	< 35	< 8
W-3	06/30/09	< 2	< 3	< 8	< 2	< 4	< 4	< 5	**< 315**	< 2	< 2	**< 154**	**< 53**
W-3	07/29/09	< 2	< 2	< 6	< 3	< 4	< 2	< 4	**< 30**	< 2	< 2	< 39	< 13
W-3	08/26/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**>10000**	< 1	< 1	< 38	< 13
W-3	09/30/09	< 1	< 2	< 4	< 1	< 3	< 2	< 4	**< 99**	< 1	< 1	**< 68**	**< 19**
W-3	10/01/09	< 5	< 5	< 11	< 4	< 9	< 6	< 10	< 14	< 5	< 6	< 27	< 10
W-3	10/29/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 795**	< 1	< 1	**< 245**	**< 67**
W-3	11/24/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 159**	< 1	< 1	**< 84**	**< 27**
W-3	12/30/09	< 1	< 2	< 4	< 1	< 3	< 2	< 4	**< 158**	< 1	< 1	**< 95**	**< 22**
W-4	05/27/09	< 5	< 5	< 11	< 5	< 10	< 6	< 9	**< 24**	< 4	< 5	< 41	< 13
W-4	06/30/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 233**	< 1	< 1	**< 114**	**< 37**
W-4	07/29/09	< 2	< 3	< 6	< 2	< 4	< 2	< 4	**< 28**	< 2	< 2	< 37	< 14
W-4	08/26/09	< 1	< 1	< 4	< 1	< 3	< 2	< 3	**>10000**	< 1	< 1	< 37	< 11
W-4	09/30/09	< 1	< 2	< 5	< 2	< 3	< 2	< 4	**< 108**	< 1	< 1	**< 71**	**< 22**
W-4	10/01/09	< 6	< 6	< 12	< 6	< 12	< 7	< 9	< 14	< 6	< 6	< 38	< 8
W-4	10/29/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 659**	< 1	< 1	**< 191**	**< 42**
W-4	11/24/09	< 1	< 1	< 3	< 1	< 2	< 2	< 2	**< 127**	< 1	< 1	**< 71**	**< 17**

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
W-4	12/30/09	< 2	< 2	< 6	< 2	< 4	< 3	< 4	**< 197**	< 1	< 2	**< 109**	**< 38**
W-4K	05/27/09	< 3	< 4	< 8	< 3	< 8	< 4	< 7	< 18	< 3	< 4	< 31	< 11
W-4K	06/30/09	< 2	< 3	< 8	< 2	< 4	< 3	< 6	< 316	< 2	< 2	**< 156**	**< 49**
W-4K	07/29/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	< 36	< 1	< 1	< 37	< 10
W-4K	08/27/09	< 1	< 2	< 4	< 2	< 3	< 2	< 3	**>10000**	< 1	< 1	< 38	< 13
W-4K	09/30/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 73	< 1	< 1	< 47	< 12
W-4K	10/28/09	< 4	< 6	< 17	< 2	< 6	< 7	< 13	< 6340	< 3	< 3	**< 1250**	**< 277**
W-4K	11/24/09	< 1	< 2	< 3	< 1	< 2	< 2	< 3	< 85	< 1	< 1	< 54	< 10
W-5	05/27/09	< 2	< 3	< 5	< 1	< 5	< 3	< 6	< 11	< 2	< 2	< 25	< 8
W-5	06/30/09	< 2	< 3	< 9	< 2	< 4	< 3	< 6	**< 310**	< 2	< 2	**< 162**	**< 54**
W-5	07/29/09	< 2	< 2	< 5	< 2	< 3	< 2	< 4	**< 28**	< 2	< 2	< 32	< 10
W-5	08/26/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**>10000**	< 1	< 1	< 31	< 15
W-5	09/30/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 81**	< 1	< 1	< 53	**< 20**
W-5	10/01/09	< 5	< 5	< 12	< 5	< 12	< 6	< 10	< 15	< 5	< 5	< 31	< 9
W-5	10/29/09	< 2	< 3	< 10	< 2	< 3	< 4	< 6	**< 6310**	< 1	< 1	**< 962**	**< 244**
W-5	11/24/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 186**	< 1	< 1	**< 99**	**< 24**
W-5	12/30/09	< 1	< 1	< 3	< 1	< 2	< 2	< 2	**< 105**	< 1	< 1	**< 61**	**< 23**
W-51	04/22/09	< 11	< 15	< 40	< 9	< 23	< 17	< 30	**< 1300**	< 10	< 11	**< 728**	**< 243**
W-51	04/29/09	< 2	< 5	< 18	< 2	< 5	< 5	< 9	**>10000**	< 2	< 2	**< 2200**	**< 789**
W-51	05/06/09	< 2	< 3	< 13	< 1	< 3	< 4	< 7	**>10000**	< 1	< 1	**< 1270**	**< 431**
W-51	05/13/09	< 2	< 3	< 10	< 2	< 4	< 4	< 6	**< 746**	< 2	< 2	**< 257**	**< 80**
W-51	05/20/09	< 2	< 4	< 15	< 2	< 5	< 5	< 8	**>10000**	< 2	< 2	**< 839**	**< 292**
W-51	05/27/09	< 2	< 4	< 13	< 2	< 4	< 4	< 8	**< 6500**	< 2	< 2	**< 1000**	**< 304**
W-51	06/02/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	**< 232**	**< 74**
W-51	06/09/09	< 1	< 2	< 6	< 1	< 2	< 2	< 4	**>10000**	< 1	< 1	**< 191**	**< 75**
W-51	06/16/09	< 2	< 3	< 8	< 1	< 3	< 3	< 5	**< 458**	< 1	< 1	**< 188**	**< 67**
W-51	06/23/09	< 2	< 2	< 7	< 2	< 4	< 3	< 5	**< 356**	< 1	< 1	**< 154**	**< 55**
W-51	07/01/09	< 2	< 3	< 10	< 2	< 5	< 3	< 6	**< 279**	< 2	< 2	**< 152**	**< 60**
W-51	07/07/09	< 3	< 5	< 14	< 3	< 8	< 5	< 9	**< 337**	< 3	< 3	**< 198**	**< 65**
W-51	07/15/09	< 1	< 1	< 4	< 1	< 1	< 2	< 3	**>10000**	< 1	< 1	**< 181**	**< 53**

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
W-51	07/29/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**>10000**	< 1	< 1	< 59	< 14
W-51	08/05/09	< 1	< 1	< 3	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	< 38	< 9
W-51	08/12/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**>10000**	< 1	< 1	< 43	< 14
W-51	08/20/09	< 1	< 1	< 3	< 1	< 3	< 2	< 3	**>10000**	< 1	< 1	< 36	< 7
W-51	08/26/09	< 2	< 2	< 6	< 2	< 3	< 2	< 4	**>10000**	< 1	< 2	< 43	< 14
W-51	08/28/09	< 2	< 2	< 4	< 2	< 3	< 2	< 3	**>10000**	< 1	< 1	< 35	< 11
W-51	08/31/09	< 1	< 3	< 8	< 1	< 2	< 3	< 5	**< 1180**	< 1	< 1	**< 323**	**< 94**
W-51	09/02/09	< 2	< 2	< 8	< 2	< 3	< 3	< 4	**< 514**	< 1	< 1	**< 195**	**< 79**
W-51	09/04/09	< 2	< 3	< 9	< 2	< 4	< 4	< 6	**< 943**	< 2	< 2	**< 309**	**< 83**
W-51	09/08/09	< 2	< 3	< 7	< 2	< 3	< 3	< 6	**< 568**	< 2	< 2	**< 217**	**< 88**
W-51	09/09/09	< 2	< 2	< 7	< 2	< 4	< 3	< 5	**< 502**	< 2	< 2	**< 210**	**< 58**
W-51	09/11/09	< 1	< 2	< 8	< 1	< 2	< 3	< 4	**< 4060**	< 1	< 1	**< 602**	**< 208**
W-51	09/16/09	< 3	< 18	< 142	< 3	< 8	< 23	< 41	**>10000**	< 2	< 2	**>10000**	**>10000**
W-51	09/18/09	< 3	< 21	< 148	< 2	< 8	< 26	< 43	**>10000**	< 3	< 2	**>10000**	**>10000**
W-51	09/23/09	< 3	< 16	< 122	< 2	< 7	< 21	< 35	**>10000**	< 2	< 2	**>10000**	**>10000**
W-51	09/25/09	< 3	< 14	< 103	< 2	< 6	< 18	< 32	**>10000**	< 2	< 2	**>10000**	**>10000**
W-51	09/28/09	< 3	< 17	< 118	< 2	< 8	< 22	< 38	**>10000**	< 2	< 2	**>10000**	**>10000**
W-51	10/02/09	< 4	< 20	< 125	< 2	< 9	< 26	< 45	**>10000**	< 4	< 3	**>10000**	**>10000**
W-51	10/07/09	< 2	< 10	< 67	< 2	< 4	< 13	< 21	**>10000**	< 1	< 1	**>10000**	**>10000**
W-51	10/14/09	DRY											
W-51	10/21/09	DRY											
W-51	10/28/09	DRY											
W-51	11/04/09	DRY											
W-51	11/11/09	DRY											
W-51	11/18/09	DRY											
W-51	11/25/09	DRY											
W-51	12/02/09	DRY											
W-51	12/09/09	DRY											
W-51	12/16/09	DRY											
W-51	12/23/09	DRY											

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
W-51	12/29/09	< 2	< 4	< 7	< 2	< 5	< 3	< 6	**< 248**	< 2	< 3	**< 138**	**< 37**
W-52	05/06/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 26**	< 1	< 1	< 28	< 9
W-52	05/13/09	< 2	< 3	< 8	< 2	< 4	< 3	< 5	**< 662**	< 1	< 1	**< 226**	**< 80**
W-52	05/20/09	< 4	< 4	< 10	< 3	< 8	< 4	< 7	**< 26**	< 4	< 3	< 45	< 14
W-52	05/27/09	< 4	< 4	< 11	< 5	< 9	< 5	< 9	**< 24**	< 4	< 5	< 49	< 13
W-52	06/02/09	< 2	< 3	< 11	< 2	< 4	< 4	< 6	**>10000**	< 2	< 2	**< 385**	**< 131**
W-52	06/09/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	**< 148**	**< 52**
W-52	06/16/09	< 2	< 3	< 8	< 1	< 4	< 3	< 5	**< 517**	< 2	< 2	**< 199**	**< 69**
W-52	06/23/09	< 1	< 2	< 7	< 1	< 3	< 3	< 5	**< 406**	< 1	< 1	**< 166**	**< 57**
W-52	06/30/09	< 2	< 3	< 8	< 2	< 3	< 3	< 5	**< 270**	< 2	< 2	**< 134**	**< 45**
W-52	07/07/09	< 3	< 5	< 13	< 3	< 7	< 5	< 9	**< 322**	< 3	< 3	**< 200**	**< 64**
W-52	07/15/09	< 1	< 2	< 4	< 2	< 2	< 2	< 3	**< 67**	< 1	< 1	< 58	< 13
W-52	07/22/09	< 1	< 1	< 3	< 1	< 2	< 2	< 3	**< 45**	< 1	< 1	< 34	< 11
W-52	07/29/09	< 2	< 3	< 7	< 2	< 4	< 3	< 5	**< 40**	< 2	< 2	< 46	< 14
W-52	08/05/09	< 3	< 3	< 8	< 2	< 5	< 4	< 6	**< 33**	< 2	< 3	< 47	< 13
W-52	08/12/09	< 2	< 2	< 6	< 2	< 4	< 3	< 4	**>10000**	< 2	< 2	< 53	< 15
W-52	08/19/09	< 1	< 1	< 3	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	< 33	< 12
W-52	08/25/09	< 2	< 2	< 4	< 1	< 3	< 2	< 3	**>10000**	< 1	< 2	< 44	< 12
W-52	09/02/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 413**	< 1	< 1	**< 143**	**< 38**
W-52	09/09/09	< 2	< 3	< 7	< 2	< 4	< 3	< 6	**< 572**	< 2	< 2	**< 239**	**< 82**
W-52	09/16/09	< 1	< 2	< 6	< 1	< 3	< 3	< 4	**< 941**	< 1	< 1	**< 235**	**< 78**
W-52	09/23/09	< 1	< 2	< 4	< 1	< 2	< 2	< 4	**< 447**	< 1	< 1	**< 148**	**< 44**
W-52	09/30/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 94**	< 1	< 1	**< 63**	**< 19**
W-52	10/07/09	< 1	< 1	< 5	< 1	< 2	< 2	< 3	**< 1380**	< 1	< 1	**< 289**	**< 86**
W-52	10/14/09	< 1	< 2	< 5	< 1	< 2	< 2	< 4	**< 1120**	< 1	< 1	**< 280**	**< 77**
W-52	10/21/09	< 1	< 3	< 8	< 2	< 4	< 3	< 5	**< 714**	< 1	< 1	**< 220**	**< 57**
W-52	10/28/09	< 1	< 2	< 6	< 2	< 3	< 2	< 4	**< 177**	< 1	< 1	**< 93**	**< 32**
W-52	11/04/09	< 2	< 2	< 5	< 1	< 3	< 2	< 4	**< 83**	< 1	< 1	**< 63**	**< 20**
W-52	11/11/09	< 2	< 2	< 6	< 2	< 4	< 2	< 4	**< 56**	< 1	< 2	< 50	< 15
W-52	11/18/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 137**	< 1	< 1	**< 82**	**< 25**

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
W-52	11/24/09	< 2	< 2	< 6	< 1	< 4	< 3	< 4	**< 681**	< 1	< 2	**< 269**	**< 51**
W-52	12/01/09	< 2	< 3	< 8	< 2	< 3	< 3	< 5	**< 458**	< 2	< 2	**< 181**	**< 50**
W-52	12/08/09	< 1	< 2	< 6	< 2	< 3	< 2	< 4	**< 195**	< 1	< 1	**< 107**	**< 33**
W-52	12/15/09	< 1	< 2	< 6	< 2	< 3	< 2	< 4	**< 370**	< 1	< 2	**< 163**	**< 38**
W-52	12/22/09	< 1	< 2	< 4	< 1	< 3	< 2	< 4	**< 191**	< 1	< 1	**< 105**	**< 29**
W-52	12/29/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 99**	< 1	< 1	**< 74**	**< 18**
W-53	04/29/09	< 2	< 4	< 13	< 2	< 4	< 4	< 7	**< 23500**	< 2	< 2	**< 1070**	**< 363**
W-53	05/01/09	< 2	< 4	< 16	< 2	< 5	< 5	< 9	**< 7470**	< 2	< 2	**< 1230**	**< 359**
W-53	05/06/09	< 2	< 4	< 16	< 2	< 5	< 5	< 9	**>10000**	< 2	< 2	**< 1600**	**< 565**
W-53	05/13/09	< 2	< 3	< 10	< 2	< 4	< 4	< 7	**< 838**	< 2	< 2	**< 282**	**< 91**
W-53	05/20/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**< 19**	< 2	< 2	< 28	< 9
W-53	05/27/09	< 2	< 4	< 12	< 2	< 4	< 4	< 7	**>10000**	< 2	< 2	**< 552**	**< 164**
W-53	06/02/09	< 2	< 3	< 11	< 2	< 4	< 4	< 7	**>10000**	< 2	< 2	**< 409**	**< 136**
W-53	06/09/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**>10000**	< 1	< 1	**< 173**	**< 57**
W-53	06/16/09	< 2	< 2	< 7	< 1	< 3	< 3	< 5	**< 464**	< 1	< 1	**< 188**	**< 57**
W-53	06/23/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 361**	< 1	< 1	**< 147**	**< 46**
W-53	06/30/09	< 2	< 3	< 8	< 2	< 4	< 3	< 6	**< 323**	< 2	< 2	**< 153**	**< 51**
W-53	07/07/09	< 3	< 5	< 13	< 3	< 6	< 5	< 8	**< 319**	< 3	< 3	**< 192**	**< 57**
W-53	07/15/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 69**	< 1	< 1	< 48	< 15
W-53	07/22/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 52**	< 1	< 1	< 43	< 15
W-53	07/29/09	< 2	< 2	< 5	< 2	< 5	< 3	< 5	**< 36**	< 2	< 2	< 39	< 12
W-53	08/05/09	< 2	< 3	< 7	< 2	< 5	< 3	< 5	**< 37**	< 2	< 2	< 46	< 14
W-53	08/12/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**>10000**	< 1	< 1	< 44	< 14
W-53	08/19/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	< 46	< 15
W-53	08/25/09	< 1	< 2	< 5	< 2	< 3	< 2	< 4	**>10000**	< 1	< 2	< 46	< 13
W-53	09/02/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 542**	< 1	< 1	**< 186**	**< 58**
W-53	09/09/09	< 2	< 2	< 6	< 1	< 4	< 3	< 5	**< 530**	< 1	< 1	**< 200**	**< 62**
W-53	09/16/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 714**	< 1	< 1	**< 185**	**< 59**
W-53	09/23/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 373**	< 1	< 1	**< 123**	**< 33**
W-53	09/30/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 217**	< 1	< 1	**< 89**	**< 28**

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
W-53	10/07/09	< 1	< 2	< 7	< 1	< 2	< 2	< 4	**< 1850**	< 1	< 1	**< 402**	**< 137**
W-53	10/14/09	< 1	< 2	< 6	< 1	< 2	< 2	< 4	**< 1100**	< 1	< 1	**< 309**	**< 75**
W-53	10/21/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 590**	< 1	< 1	**< 179**	**< 65**
W-53	10/28/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 130**	< 1	< 1	**< 73**	**< 21**
W-53	11/04/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 68**	< 1	< 1	< 57	**< 17**
W-53	11/11/09	< 2	< 2	< 6	< 2	< 3	< 3	< 3	**< 61**	< 1	< 2	< 54	**< 20**
W-53	11/18/09	< 2	< 2	< 6	< 1	< 3	< 2	< 4	**< 182**	< 1	< 2	**< 102**	**< 31**
W-53	11/24/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 134**	< 1	< 1	**< 85**	**< 28**
W-53	12/01/09	< 1	< 2	< 6	< 1	< 3	< 2	< 3	**< 269**	< 1	< 1	**< 128**	**< 30**
W-53	12/08/09	< 1	< 1	< 5	< 1	< 2	< 2	< 3	**< 150**	< 1	< 1	**< 84**	**< 23**
W-53	12/15/09	< 1	< 3	< 6	< 1	< 3	< 3	< 5	**< 316**	< 1	< 1	**< 163**	**< 42**
W-53	12/22/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 191**	< 1	< 1	**< 99**	**< 28**
W-53	12/29/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 85**	< 1	< 1	< 56	**< 19**
W-54	05/01/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 38**	< 1	< 1	< 32	< 10
W-54	05/06/09	< 2	< 4	< 13	< 2	< 5	< 4	< 7	**< 4030**	< 2	< 2	**< 870**	**< 239**
W-54	05/13/09	< 2	< 3	< 10	< 2	< 4	< 3	< 6	**< 717**	< 2	< 2	**< 256**	**< 80**
W-54	05/20/09	< 2	< 4	< 14	< 2	< 5	< 5	< 8	**>10000**	< 2	< 2	**< 871**	**< 276**
W-54	05/28/09	< 2	< 4	< 11	< 2	< 4	< 4	< 7	**>10000**	< 2	< 2	**< 513**	**< 165**
W-54	06/02/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	**< 206**	**< 62**
W-54	06/09/09	< 2	< 3	< 11	< 2	< 4	< 4	< 6	**< 1020**	< 2	< 2	**< 319**	**< 94**
W-54	06/16/09	< 2	< 4	< 11	< 2	< 5	< 4	< 7	**< 1420**	< 2	< 2	**< 446**	**< 141**
W-54	06/23/09	< 2	< 2	< 7	< 1	< 3	< 3	< 5	**< 441**	< 1	< 1	**< 168**	**< 53**
W-54	06/30/09	< 2	< 3	< 8	< 2	< 4	< 4	< 6	**< 323**	< 2	< 2	**< 162**	**< 52**
W-54	07/07/09	< 3	< 5	< 13	< 3	< 7	< 5	< 9	**< 366**	< 3	< 3	**< 205**	**< 74**
W-54	07/15/09	< 2	< 3	< 9	< 2	< 3	< 3	< 6	**< 2220**	< 1	< 2	**< 506**	**< 120**
W-54	07/22/09	< 3	< 5	< 14	< 3	< 6	< 5	< 9	**< 1800**	< 2	< 2	**< 570**	**< 143**
W-54	07/29/09	< 2	< 3	< 9	< 2	< 4	< 4	< 6	**< 812**	< 2	< 2	**< 282**	**< 99**
W-54	08/05/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**>10000**	< 2	< 2	**< 69**	**< 21**
W-54	08/12/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**>10000**	< 1	< 1	< 52	< 14
W-54	08/19/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**>10000**	< 1	< 1	< 34	< 14

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
W-54	08/25/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	< 38	< 9
W-54	09/02/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 502**	< 1	< 1	**< 174**	**< 53**
W-54	09/09/09	< 2	< 3	< 8	< 1	< 4	< 3	< 5	**< 558**	< 1	< 2	**< 204**	**< 50**
W-54	09/16/09	< 2	< 3	< 7	< 2	< 3	< 3	< 5	**< 370**	< 1	< 2	**< 163**	**< 54**
W-54	09/23/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 127**	< 1	< 1	**< 74**	**< 19**
W-54	09/30/09	< 2	< 3	< 8	< 2	< 3	< 3	< 6	**< 1490**	< 1	< 1	**< 339**	**< 142**
W-54	10/07/09	< 1	< 2	< 6	< 1	< 2	< 3	< 4	**< 1810**	< 1	< 1	**< 367**	**< 141**
W-54	10/14/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 860**	< 1	< 1	**< 208**	**< 65**
W-54	10/21/09	< 1	< 2	< 6	< 1	< 2	< 2	< 4	**< 660**	< 1	< 1	**< 208**	**< 60**
W-54	10/28/09	< 1	< 2	< 4	< 1	< 3	< 2	< 4	**< 157**	< 1	< 1	**< 93**	**< 22**
W-54	11/04/09	< 2	< 2	< 6	< 2	< 4	< 3	< 3	**< 108**	< 2	< 2	**< 82**	**< 24**
W-54	11/11/09	< 1	< 3	< 8	< 1	< 3	< 2	< 5	**< 1780**	< 1	< 1	**< 400**	**< 106**
W-54	11/18/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 2030**	< 1	< 1	**< 344**	**< 94**
W-54	11/24/09	< 1	< 2	< 6	< 1	< 2	< 3	< 4	**< 1040**	< 1	< 2	**< 274**	**< 87**
W-54	12/01/09	< 1	< 3	< 7	< 1	< 3	< 3	< 4	**< 518**	< 1	< 2	**< 191**	**< 46**
W-54	12/08/09	< 2	< 2	< 7	< 1	< 4	< 2	< 5	**< 679**	< 1	< 2	**< 220**	**< 60**
W-54	12/15/09	< 1	< 2	< 7	< 1	< 3	< 2	< 4	**< 353**	< 1	< 2	**< 141**	**< 46**
W-54	12/22/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 145**	< 1	< 1	**< 73**	**< 24**
W-54	12/29/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 65**	< 1	< 1	< 41	< 11
W-55	06/02/09	< 2	< 3	< 11	< 2	< 4	< 4	< 7	**>10000**	< 2	< 2	**< 421**	**< 127**
W-55	07/01/09	< 2	< 2	< 7	< 2	< 3	< 3	< 5	**< 259**	< 2	< 2	**< 128**	**< 41**
W-55	07/15/09	< 2	< 3	< 11	< 2	< 4	< 4	< 6	**< 2240**	< 2	< 2	**< 577**	**< 180**
W-55	07/22/09	< 3	< 4	< 13	< 2	< 5	< 5	< 9	**< 1660**	< 2	< 2	**< 489**	**< 169**
W-55	07/29/09	< 2	< 3	< 9	< 2	< 4	< 4	< 6	**< 891**	< 2	< 2	**< 304**	**< 97**
W-55	08/05/09	< 2	< 2	< 5	< 2	< 3	< 2	< 4	**>10000**	< 1	< 2	< 55	**< 21**
W-55 (Bottom of Well)	08/12/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**>10000**	< 1	< 1	< 50	< 14
W-55 (Middle of Well)	08/12/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**>10000**	< 1	< 1	< 48	< 15
W-55 (Top of Well)	08/12/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**>10000**	< 1	< 1	< 50	< 14
W-55	08/19/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	< 41	< 14
W-55	08/25/09	< 2	< 2	< 6	< 1	< 3	< 2	< 4	**>10000**	< 2	< 2	< 47	< 13

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
W-55	08/28/09	< 2	< 2	< 5	< 1	< 3	< 2	< 3	**>10000**	< 1	< 2	< 41	< 14
W-55	08/31/09	< 2	< 3	< 9	< 1	< 4	< 4	< 6	**< 1550**	< 2	< 2	**< 403**	**< 133**
W-55	09/02/09	< 1	< 2	< 6	< 1	< 2	< 2	< 4	**< 518**	< 1	< 1	**< 195**	**< 61**
W-55	09/04/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 427**	< 1	< 1	**< 163**	**< 52**
W-55	09/08/09	< 2	< 3	< 10	< 2	< 4	< 3	< 6	**< 597**	< 1	< 2	**< 244**	**< 64**
W-55	09/09/09	< 2	< 2	< 7	< 2	< 4	< 3	< 5	**< 609**	< 1	< 2	**< 219**	**< 76**
W-55	09/11/09	< 1	< 2	< 6	< 1	< 2	< 2	< 4	**< 2060**	< 1	< 1	**< 377**	**< 147**
W-55	09/14/09	< 1	< 3	< 12	< 1	< 3	< 4	< 6	**< 36700**	< 1	< 1	**< 2750**	**< 566**
W-55	09/16/09	< 1	< 2	< 7	< 1	< 4	< 3	< 5	**< 328**	< 1	< 1	**< 158**	**< 50**
W-55	09/18/09	< 1	< 2	< 9	< 1	< 2	< 3	< 5	**< 22100**	< 1	< 1	**< 1530**	**< 488**
W-55	09/21/09	< 2	< 2	< 6	< 2	< 3	< 3	< 4	**< 254**	< 1	< 2	**< 130**	**< 36**
W-55	09/23/09	< 1	< 2	< 5	< 1	< 2	< 2	< 4	**< 865**	< 1	< 1	**< 230**	**< 62**
W-55	09/25/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 124**	< 1	< 1	**< 70**	**< 20**
W-55	09/28/09	< 2	< 4	< 16	< 2	< 4	< 4	< 8	**>10000**	< 1	< 1	**< 5530**	**< 1700**
W-55	09/30/09	< 2	< 3	< 13	< 1	< 3	< 3	< 7	**< 12000**	< 1	< 1	**< 1410**	**< 340**
W-55	10/02/09	< 1	< 2	< 9	< 1	< 2	< 3	< 4	**< 7360**	< 1	< 1	**< 914**	**< 280**
W-55	10/07/09	< 1	< 2	< 8	< 1	< 2	< 3	< 4	**< 4850**	< 1	< 1	**< 687**	**< 233**
W-55	10/14/09	< 1	< 2	< 7	< 1	< 3	< 3	< 5	**< 4250**	< 1	< 1	**< 697**	**< 224**
W-55	10/21/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 54**	< 1	< 1	< 34	< 12
W-55	10/28/09	< 1	< 3	< 10	< 1	< 3	< 3	< 5	**< 7960**	< 1	< 1	**< 998**	**< 316**
W-55	11/04/09	< 1	< 3	< 9	< 1	< 3	< 3	< 5	**< 4230**	< 1	< 1	**< 687**	**< 196**
W-55	11/11/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 17**	< 1	< 1	< 20	< 6
W-55	11/18/09	< 1	< 2	< 7	< 1	< 2	< 3	< 5	**< 1520**	< 1	< 1	**< 415**	**< 119**
W-55	11/24/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 302**	< 1	< 2	**< 134**	**< 39**
W-55	12/01/09	< 1	< 2	< 7	< 1	< 3	< 2	< 4	**< 432**	< 1	< 2	**< 161**	**< 56**
W-55	12/08/09	< 1	< 2	< 5	< 2	< 3	< 2	< 4	**< 181**	< 1	< 1	**< 104**	**< 31**
W-55	12/15/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 316**	< 1	< 1	**< 127**	**< 35**
W-55	12/22/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 180**	< 1	< 1	**< 96**	**< 34**
W-55	12/29/09	< 2	< 2	< 5	< 1	< 3	< 2	< 4	**< 128**	< 1	< 1	**< 79**	**< 25**
W-56I	09/16/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 323**	< 1	< 1	**< 125**	**< 48**

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
W-56I	09/18/09	< 1	< 3	< 10	< 1	< 3	< 3	< 6	**< 23500**	< 1	< 1	**< 1920**	**< 522**
W-56I	09/23/09	< 1	< 2	< 5	< 1	< 2	< 2	< 4	**< 158**	< 1	< 1	**< 89**	**< 23**
W-56I	09/25/09	< 1	< 2	< 4	< 1	< 2	< 2	< 2	**< 118**	< 1	< 1	**< 69**	**< 16**
W-56I	09/28/09	< 2	< 5	< 17	< 1	< 4	< 4	< 8	**>10000**	< 1	< 1	**< 6070**	**< 1970**
W-56I	09/30/09	< 1	< 3	< 10	< 1	< 3	< 4	< 6	**< 10700**	< 1	< 1	**< 1180**	**< 270**
W-56I	10/02/09	< 1	< 2	< 7	< 1	< 2	< 2	< 3	**< 6390**	< 1	< 1	**< 764**	**< 256**
W-56I	10/07/09	< 2	< 3	< 11	< 1	< 3	< 4	< 6	**< 8180**	< 1	< 1	**< 1090**	**< 331**
W-56I	10/14/09	< 1	< 1	< 2	< 1	< 1	< 1	< 2	**< 83**	< 1	< 1	< 45	< 15
W-56I	10/21/09	< 1	< 2	< 4	< 1	< 2	< 2	< 4	**< 131**	< 1	< 1	**< 75**	**< 18**
W-56I	10/29/09	< 1	< 3	< 8	< 1	< 3	< 3	< 5	**< 6890**	< 1	< 1	**< 926**	**< 350**
W-56I	11/04/09	< 2	< 3	< 9	< 1	< 3	< 3	< 5	**< 4970**	< 1	< 2	**< 801**	**< 196**
W-56I	11/11/09	< 1	< 1	< 2	< 1	< 2	< 1	< 2	**< 17**	< 1	< 1	< 21	< 5
W-56I	11/18/09	< 2	< 3	< 8	< 1	< 3	< 3	< 5	**< 1640**	< 1	< 1	**< 415**	**< 120**
W-56I	11/24/09	< 1	< 2	< 6	< 1	< 2	< 2	< 4	**< 826**	< 1	< 1	**< 258**	**< 64**
W-56I	12/01/09	< 1	< 2	< 6	< 1	< 2	< 2	< 5	**< 405**	< 1	< 1	**< 151**	**< 59**
W-56I	12/08/09	< 2	< 2	< 6	< 1	< 3	< 2	< 4	**< 261**	< 1	< 1	**< 119**	**< 40**
W-56I	12/15/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 217**	< 1	< 1	**< 86**	**< 26**
W-56I	12/22/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 150**	< 1	< 1	**< 73**	**< 20**
W-56I	12/29/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 122**	< 1	< 1	**< 77**	**< 24**
W-57I	09/11/09	< 1	< 2	< 8	< 1	< 2	< 3	< 5	**< 2570**	< 1	< 1	**< 494**	**< 143**
W-57I	09/16/09	< 2	< 2	< 6	< 1	< 3	< 3	< 5	**< 332**	< 1	< 1	**< 142**	**< 42**
W-57I	09/18/09	< 2	< 4	< 14	< 1	< 3	< 5	< 7	**< 34900**	< 1	< 2	**< 2940**	**< 795**
W-57I	09/23/09	< 1	< 2	< 6	< 1	< 2	< 2	< 3	**< 168**	< 1	< 1	**< 80**	**< 27**
W-57I	09/25/09	< 2	< 2	< 5	< 1	< 3	< 3	< 4	**< 198**	< 1	< 2	**< 120**	**< 29**
W-57I	09/28/09	< 1	< 4	< 14	< 1	< 3	< 5	< 7	**>10000**	< 1	< 1	**< 5780**	**< 1660**
W-57I	09/30/09	< 1	< 2	< 8	< 1	< 3	< 3	< 4	**< 9730**	< 1	< 1	**< 1140**	**< 304**
W-57I	10/02/09	< 1	< 3	< 10	< 1	< 3	< 4	< 5	**< 9760**	< 1	< 2	**< 1130**	**< 331**
W-57I	10/07/09	< 1	< 3	< 13	< 1	< 3	< 4	< 6	**< 7910**	< 1	< 2	**< 1210**	**< 348**
W-57I	10/14/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**< 123**	< 1	< 1	**< 68**	**< 22**
W-57I	10/21/09	< 1	< 1	< 2	< 1	< 1	< 1	< 2	**< 52**	< 1	< 1	< 34	< 10

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-I.2

CONCENTRATIONS OF GAMMA EMITTERS IN GROUNDWATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
W-57I	10/29/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 48**	< 1	< 1	< 34	< 10
W-57I	11/04/09	< 2	< 3	< 10	< 2	< 3	< 3	< 6	**< 5500**	< 1	< 1	**< 867**	**< 202**
W-57I	11/11/09	< 1	< 1	< 2	< 1	< 2	< 1	< 2	**< 17**	< 1	< 1	< 21	< 6
W-57I	11/18/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 1090**	< 1	< 1	**< 287**	**< 71**
W-57I	11/24/09	< 1	< 3	< 7	< 1	< 3	< 2	< 5	**< 893**	< 1	< 1	**< 246**	**< 83**
W-57I	12/01/09	< 1	< 1	< 5	< 1	< 2	< 2	< 3	**< 331**	< 1	< 1	**< 134**	**< 48**
W-57I	12/08/09	< 1	< 2	< 5	< 1	< 2	< 2	< 4	**< 208**	< 1	< 1	**< 111**	**< 29**
W-57I	12/15/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 325**	< 1	< 1	**< 132**	**< 42**
W-57I	12/22/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 175**	< 1	< 1	**< 93**	**< 26**
W-57I	12/29/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 78**	< 1	< 1	< 49	< 14

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
MCD	04/16/09	< 190	
MCD	04/28/09	< 153	
MCD	04/29/09	< 157	
MCD	05/05/09	< 198	
MCD	05/12/09	< 181	
MCD	05/19/09	< 182	
MCD	05/26/09	< 175	
MCD	06/02/09	< 166	
MCD	06/08/09	< 158	
MCD	06/13/09	< 181	
MCD	06/15/09	< 179	
MCD	06/22/09	< 158	
MCD	06/26/09	< 181	
MCD	06/27/09	< 180	
MCD	06/28/09	< 178	
MCD	06/29/09	< 181	
MCD	06/30/09	< 171	
MCD	07/01/09	< 183	
MCD	07/02/09	< 185	
MCD	07/03/09	< 185	
MCD	07/04/09	< 116	
MCD	07/05/09	< 117	
MCD	07/06/09	< 111	
MCD	07/07/09	< 108	
MCD	07/08/09	< 118	
MCD	07/09/09	< 114	
MCD	07/10/09	< 117	
MCD	07/11/09	< 167	
MCD	07/12/09	< 175	
MCD	07/13/09	< 165	
MCD	07/14/09	< 166	
MCD	07/15/09	< 168	
MCD	07/16/09	< 167	
MCD	07/17/09	< 176	
MCD	07/18/09	< 181	
MCD	07/19/09	< 182	
MCD	07/20/09	< 179	
MCD	07/21/09	< 135	
MCD	07/22/09	< 164	
MCD	07/23/09	< 162	
MCD	07/24/09	< 162	
MCD	07/25/09	< 165	
MCD	07/26/09	< 125	
MCD	07/27/09	< 127	
MCD	07/28/09	< 159	
MCD	07/29/09	< 169	
MCD	07/30/09	< 178	
MCD	07/31/09	< 173	
MCD	08/01/09	< 194	
MCD	08/02/09	< 153	
MCD	08/03/09	< 149	

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
MCD	08/04/09	< 183	
MCD	08/05/09	< 168	
MCD	08/06/09	< 159	
MCD	08/07/09	< 160	
MCD	08/08/09	< 168	
MCD	08/09/09	< 151	
MCD	08/10/09	< 162	
MCD	08/11/09	< 162	
MCD	08/12/09	< 154	
MCD	08/13/09	< 154	
MCD	08/14/09	< 187	
MCD	08/15/09	< 188	
MCD	08/16/09	< 185	
MCD	08/17/09	< 165	
MCD	08/18/09	< 163	
MCD	08/19/09	< 167	
MCD	08/20/09	< 195	
MCD	08/21/09	< 195	
MCD	08/22/09	< 182	
MCD	08/23/09	< 180	
MCD	08/24/09	< 166	
MCD	08/25/09	< 176	
MCD	08/26/09	< 174	
MCD	08/27/09	< 175	
MCD	08/28/09	< 178	
MCD	08/29/09	< 177	
MCD	08/30/09	< 193	
MCD	08/31/09	< 177	
MCD	09/01/09	< 170	
MCD	09/02/09	< 172	
MCD	09/03/09	< 164	
MCD	09/04/09	< 192	
MCD	09/05/09	< 192	
MCD	09/06/09	< 190	
MCD	09/07/09	< 178	
MCD	09/08/09	< 191	
MCD	09/09/09	< 174	
MCD	09/10/09	< 173	
MCD	09/11/09	< 184	
MCD	09/12/09	< 170	
MCD	09/13/09	< 194	
MCD	09/14/09	< 190	
MCD	09/15/09	< 196	
MCD	09/16/09	< 165	
MCD	09/17/09	< 175	
MCD	09/18/09	< 163	
MCD	09/19/09	< 131	
MCD	09/20/09	< 140	
MCD	09/21/09	< 130	
MCD	09/22/09	< 140	

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
MCD	09/23/09	< 138	
MCD	09/24/09	< 136	
MCD	09/25/09	< 130	
MCD	09/26/09	< 140	
MCD	09/27/09	< 171	
MCD	09/28/09	< 172	
MCD	09/29/09	< 172	
MCD	09/30/09	< 169	
MCD	10/01/09	< 150	
MCD	10/02/09	< 142	
MCD	10/03/09	< 150	
MCD	10/04/09	< 143	
MCD	10/05/09	< 151	
MCD	10/06/09	< 164	
MCD	10/07/09	< 171	
MCD	10/08/09	< 171	
MCD	10/09/09	< 177	
MCD	10/10/09	< 183	
MCD	10/11/09	< 181	
MCD	10/12/09	< 179	
MCD	10/13/09	< 173	
MCD	10/14/09	< 176	
MCD	10/15/09	< 168	
MCD	10/16/09	< 173	
MCD	10/16/09	< 167	
MCD	10/17/09	< 166	
MCD	10/17/09	< 165	
MCD	10/18/09	< 163	
MCD	10/18/09	< 185	
MCD	10/19/09	< 166	
MCD	10/20/09	< 169	
MCD	10/21/09	< 162	
MCD	10/22/09	< 169	
MCD	10/23/09	< 169	
MCD	10/24/09	< 168	
MCD	10/25/09	< 178	
MCD	10/26/09	< 184	
MCD	10/27/09	< 182	
MCD	10/28/09	< 162	
MCD	10/29/09	< 161	
MCD	10/30/09	< 158	
MCD	10/31/09	< 181	
MCD	11/01/09	< 181	
MCD	11/02/09	< 182	
MCD	11/03/09	< 160	
MCD	11/04/09	< 162	
MCD	11/05/09	< 183	

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
MCD	11/06/09	< 182	
MCD	11/07/09	< 177	
MCD	11/08/09	< 187	
MCD	11/09/09	< 180	
MCD	11/10/09	< 176	
MCD	11/11/09	< 178	
MCD	11/12/09	< 172	
MCD	11/13/09	< 172	
MCD	11/14/09	< 174	
MCD	11/15/09	< 167	
MCD	11/16/09	< 156	
MCD	11/17/09	< 167	
MCD	11/18/09	< 160	
MCD	11/19/09	< 164	
MCD	11/20/09	< 164	
MCD	11/21/09	< 169	
MCD	11/22/09	< 168	
MCD	11/23/09	< 168	
MCD	11/24/09	< 164	
MCD	11/25/09	< 164	
MCD	11/26/09	< 172	
MCD	11/27/09	< 193	
MCD	11/28/09	< 190	
MCD	11/29/09	< 192	
MCD	11/30/09	< 161	
MCD	12/01/09	< 161	
MCD	12/02/09	< 193	
MCD	12/03/09	< 187	
MCD	12/04/09	< 187	
MCD	12/05/09	< 185	
MCD	12/06/09	< 164	
MCD	12/07/09	< 166	
MCD	12/08/09	< 166	
MCD	12/09/09	< 158	
MCD	12/10/09	< 156	
MCD	12/11/09	< 158	
MCD	12/12/09	< 161	
MCD	12/13/09	< 129	
MCD	12/14/09	< 163	
MCD	12/15/09	< 162	
MCD	12/16/09	< 169	
MCD	12/17/09	< 168	
MCD	12/18/09	< 177	
MCD	12/18/09	< 165	
MCD	12/19/09	< 166	

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
MCD	12/20/09	< 164	
MCD	12/21/09	< 164	
MCD	12/22/09	< 165	
MCD	12/23/09	< 165	
MCD	12/24/09	< 165	
MCD	12/25/09	< 166	
MCD	12/26/09	< 169	
MCD	12/27/09	< 172	
MCD	12/28/09	< 169	
MCD	12/29/09	< 176	
MCD	12/30/09	< 166	
MCD	12/31/09	< 167	
SW-1	04/28/09	< 149	
SW-1	04/29/09	< 156	
SW-1	05/05/09	< 199	
SW-1	05/12/09	< 179	
SW-1	05/19/09	< 179	
SW-1	05/26/09	< 178	
SW-1	06/02/09	< 168	
SW-1	06/08/09	< 162	
SW-1	06/15/09	< 158	
SW-1	06/22/09	< 158	
SW-1	06/26/09	< 181	
SW-1	06/27/09	< 168	
SW-1	06/28/09	< 181	
SW-1	06/29/09	< 178	
SW-1	06/30/09	< 168	
SW-1	07/01/09	< 179	
SW-1	07/02/09	< 178	
SW-1	07/03/09	< 186	
SW-1	07/04/09	< 118	
SW-1	07/05/09	< 200	
SW-1	07/06/09	< 116	
SW-1	07/07/09	< 117	
SW-1	07/08/09	< 110	
SW-1	07/09/09	< 120	
SW-1	07/10/09	< 114	
SW-1	07/11/09	< 179	
SW-1	07/12/09	< 180	
SW-1	07/13/09	< 169	
SW-1	07/14/09	< 161	
SW-1	07/15/09	< 163	
SW-1	07/16/09	< 166	
SW-1	07/17/09	< 168	
SW-1	07/18/09	< 178	

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
SW-1	07/19/09	< 180	
SW-1	07/20/09	< 179	
SW-1	07/21/09	< 133	
SW-1	07/22/09	< 148	
SW-1	07/23/09	< 154	
SW-1	07/24/09	< 160	
SW-1	07/25/09	< 159	
SW-1	07/26/09	< 169	
SW-1	07/27/09	< 126	
SW-1	07/28/09	< 161	
SW-1	07/29/09	< 161	
SW-1	07/30/09	< 181	
SW-1	07/31/09	< 181	
SW-1	08/01/09	< 181	
SW-1	08/02/09	< 161	
SW-1	08/03/09	< 161	
SW-1	08/04/09	< 157	
SW-1	08/05/09	< 166	
SW-1	08/06/09	< 167	
SW-1	08/07/09	< 162	
SW-1	08/08/09	< 169	
SW-1	08/09/09	< 174	
SW-1	08/10/09	< 161	
SW-1	08/11/09	< 163	
SW-1	08/12/09	< 165	
SW-1	08/13/09	< 159	
SW-1	08/14/09	< 189	
SW-1	08/15/09	< 187	
SW-1	08/16/09	< 178	
SW-1	08/17/09	< 172	
SW-1	08/18/09	< 163	
SW-1	08/19/09	< 164	
SW-1	08/20/09	< 191	
SW-1	08/21/09	< 192	
SW-1	08/22/09	< 183	
SW-1	08/23/09	< 166	
SW-1	08/24/09	< 167	
SW-1	08/25/09	< 178	
SW-1	08/26/09	< 194	
SW-1	08/27/09	< 183	
SW-1	08/28/09	< 171	
SW-1	08/29/09	< 189	
SW-1	08/30/09	< 192	
SW-1	08/31/09	< 192	
SW-1	09/01/09	< 169	

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
SW-1	09/02/09	< 168	
SW-1	09/03/09	< 169	
SW-1	09/04/09	< 190	
SW-1	09/05/09	< 192	
SW-1	09/06/09	< 182	
SW-1	09/07/09	< 193	
SW-1	09/08/09	< 175	
SW-1	09/09/09	< 171	
SW-1	09/10/09	< 154	
SW-1	09/11/09	< 178	
SW-1	09/12/09	< 160	
SW-1	09/13/09	< 190	
SW-1	09/14/09	< 185	
SW-1	09/15/09	< 194	
SW-1	09/16/09	< 164	
SW-1	09/17/09	< 166	
SW-1	09/18/09	< 166	
SW-1	09/19/09	< 127	
SW-1	09/20/09	< 183	
SW-1	09/21/09	< 138	
SW-1	09/22/09	< 128	
SW-1	09/23/09	< 141	
SW-1	09/24/09	< 136	
SW-1	09/25/09	< 124	
SW-1	09/26/09	< 126	
SW-1	09/27/09	< 128	
SW-1	09/28/09	< 174	
SW-1	09/29/09	< 167	
SW-1	09/30/09	< 168	
SW-1	10/01/09	< 166	
SW-1	10/02/09	< 146	
SW-1	10/03/09	< 142	
SW-1	10/04/09	< 148	
SW-1	10/05/09	< 151	
SW-1	10/06/09	< 147	
SW-1	10/07/09	< 170	
SW-1	10/08/09	< 172	
SW-1	10/09/09	< 168	
SW-1	10/10/09	< 169	
SW-1	10/11/09	< 181	
SW-1	10/12/09	< 180	
SW-1	10/13/09	< 177	
SW-1	10/14/09	< 171	
SW-1	10/15/09	< 173	
SW-1	10/16/09	< 166	

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
SW-1	10/16/09	< 165	
SW-1	10/17/09	< 168	
SW-1	10/17/09	< 164	
SW-1	10/18/09	< 168	
SW-1	10/18/09	< 164	
SW-1	10/19/09	< 169	
SW-1	10/20/09	< 170	
SW-1	10/21/09	< 167	
SW-1	10/22/09	< 180	
SW-1	10/23/09	< 168	
SW-1	10/24/09	< 168	
SW-1	10/25/09	< 180	
SW-1	10/26/09	< 181	
SW-1	10/27/09	< 179	
SW-1	10/28/09	< 161	
SW-1	10/29/09	< 165	
SW-1	10/30/09	< 159	
SW-1	10/31/09	< 178	
SW-1	11/01/09	< 182	
SW-1	11/02/09	< 179	
SW-1	11/03/09	< 163	
SW-1	11/04/09	< 162	
SW-1	11/05/09	< 188	
SW-1	11/06/09	< 178	
SW-1	11/07/09	< 182	
SW-1	11/08/09	< 181	
SW-1	11/09/09	< 180	
SW-1	11/10/09	< 181	
SW-1	11/11/09	< 180	
SW-1	11/12/09	< 170	
SW-1	11/13/09	< 170	
SW-1	11/14/09	< 171	
SW-1	11/15/09	< 164	
SW-1	11/16/09	< 154	
SW-1	11/17/09	< 166	
SW-1	11/18/09	< 163	
SW-1	11/19/09	< 165	
SW-1	11/20/09	< 161	
SW-1	11/21/09	< 169	
SW-1	11/22/09	< 169	
SW-1	11/23/09	< 169	
SW-1	11/24/09	< 165	
SW-1	11/25/09	< 162	
SW-1	11/26/09	< 182	
SW-1	11/27/09	< 184	

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
SW-1	11/28/09	< 187	
SW-1	11/29/09	< 186	
SW-1	11/30/09	< 165	
SW-1	12/01/09	< 159	
SW-1	12/02/09	< 188	
SW-1	12/03/09	< 187	
SW-1	12/04/09	< 192	
SW-1	12/05/09	< 185	
SW-1	12/06/09	< 172	
SW-1	12/07/09	< 169	
SW-1	12/08/09	< 164	
SW-1	12/09/09	< 193	
SW-1	12/10/09	< 161	
SW-1	12/11/09	< 162	
SW-1	12/12/09	< 159	
SW-1	12/13/09	< 154	
SW-1	12/14/09	< 164	
SW-1	12/15/09	< 160	
SW-1	12/16/09	< 168	
SW-1	12/17/09	< 170	
SW-1	12/18/09	< 177	
SW-1	12/18/09	< 166	
SW-1	12/19/09	< 168	
SW-1	12/20/09	< 163	
SW-1	12/21/09	< 167	
SW-1	12/22/09	< 162	
SW-1	12/23/09	< 162	
SW-1	12/24/09	< 157	
SW-1	12/25/09	< 157	
SW-1	12/26/09	< 157	
SW-1	12/27/09	< 173	
SW-1	12/28/09	< 172	
SW-1	12/29/09	< 173	
SW-1	12/30/09	< 171	
SW-1	12/31/09	< 171	
SW-1	03/11/09	< 181	
SW-1	10/02/09	< 176	< 0.3
SW-2	03/09/09	< 191	
SW-2	04/27/09	< 154	
SW-2	04/28/09	< 156	
SW-2	04/29/09	< 151	
SW-2	05/05/09	< 197	
SW-2	05/12/09	< 180	
SW-2	05/19/09	< 179	
SW-2	05/26/09	< 182	

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
SW-2	06/02/09	< 168	
SW-2	06/08/09	< 156	
SW-2	06/13/09	< 182	
SW-2	06/15/09	< 181	
SW-2	06/22/09	< 158	
SW-2	06/26/09	< 184	
SW-2	06/27/09	< 178	
SW-2	06/28/09	< 177	
SW-2	06/29/09	< 172	
SW-2	06/30/09	< 179	
SW-2	07/01/09	< 179	
SW-2	07/02/09	< 182	
SW-2	07/03/09	< 187	
SW-2	07/04/09	< 118	
SW-2	07/05/09	< 115	
SW-2	07/06/09	< 115	
SW-2	07/07/09	< 112	
SW-2	07/08/09	< 125	
SW-2	07/09/09	< 121	
SW-2	07/10/09	< 110	
SW-2	07/11/09	< 176	
SW-2	07/12/09	< 173	
SW-2	07/13/09	< 165	
SW-2	07/14/09	< 160	
SW-2	07/15/09	< 168	
SW-2	07/16/09	< 170	
SW-2	07/17/09	< 181	
SW-2	07/18/09	< 178	
SW-2	07/19/09	< 183	
SW-2	07/20/09	< 134	
SW-2	07/21/09	< 130	
SW-2	07/22/09	< 165	
SW-2	07/23/09	< 160	
SW-2	07/24/09	< 161	
SW-2	07/25/09	< 161	
SW-2	07/26/09	< 168	
SW-2	07/27/09	< 123	
SW-2	07/28/09	< 159	
SW-2	07/29/09	< 165	
SW-2	07/30/09	< 171	
SW-2	07/31/09	< 179	
SW-2	08/01/09	< 198	
SW-2	08/02/09	< 164	
SW-2	08/03/09	< 164	
SW-2	08/04/09	< 181	

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
SW-2	08/05/09	< 171	
SW-2	08/06/09	< 174	
SW-2	08/07/09	< 170	
SW-2	08/08/09	< 168	
SW-2	08/09/09	< 169	
SW-2	08/10/09	< 161	
SW-2	08/11/09	< 162	
SW-2	08/12/09	< 156	
SW-2	08/13/09	< 159	
SW-2	08/14/09	< 182	
SW-2	08/15/09	< 185	
SW-2	08/16/09	< 186	
SW-2	08/17/09	< 171	
SW-2	08/18/09	< 168	
SW-2	08/19/09	< 167	
SW-2	08/20/09	< 194	
SW-2	08/21/09	< 193	
SW-2	08/22/09	< 180	
SW-2	08/23/09	< 174	
SW-2	08/24/09	< 159	
SW-2	08/25/09	< 177	
SW-2	08/26/09	< 182	
SW-2	08/27/09	< 170	
SW-2	08/28/09	< 183	
SW-2	08/29/09	< 192	
SW-2	08/30/09	< 182	
SW-2	08/31/09	< 195	
SW-2	09/01/09	< 175	
SW-2	09/02/09	< 170	
SW-2	09/03/09	< 167	
SW-2	09/04/09	< 194	
SW-2	09/05/09	< 187	
SW-2	09/06/09	< 193	
SW-2	09/07/09	< 180	
SW-2	09/08/09	< 178	
SW-2	09/09/09	< 176	
SW-2	09/10/09	< 169	
SW-2	09/11/09	< 169	
SW-2	09/12/09	< 169	
SW-2	09/13/09	< 193	
SW-2	09/14/09	< 194	
SW-2	09/15/09	< 192	
SW-2	09/16/09	< 162	
SW-2	09/17/09	< 173	
SW-2	09/18/09	< 164	

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE		H-3	SR-90
SW-2	09/19/09		< 145	
SW-2	09/20/09		< 129	
SW-2	09/21/09		< 131	
SW-2	09/22/09		< 194	
SW-2	09/23/09		< 136	
SW-2	09/24/09		< 137	
SW-2	09/25/09		< 142	
SW-2	09/26/09		< 181	
SW-2	09/27/09		< 177	
SW-2	09/28/09		< 163	
SW-2	09/29/09		< 168	< 0.4
SW-2	09/29/09		< 167	< 0.4
SW-2	09/29/09		< 165	
SW-2	09/29/09	EIML QC	< 154	
SW-2	09/30/09		< 167	
SW-2	10/01/09		< 172	
SW-2	10/02/09		< 181	
SW-2	10/03/09		< 149	
SW-2	10/04/09		< 144	
SW-2	10/05/09		< 147	
SW-2	10/06/09		< 145	
SW-2	10/07/09		< 171	
SW-2	10/08/09		< 168	
SW-2	10/09/09		< 178	
SW-2	10/10/09		< 180	
SW-2	10/11/09		< 179	
SW-2	10/12/09		< 176	
SW-2	10/13/09		< 171	
SW-2	10/14/09		< 172	
SW-2	10/15/09		< 172	
SW-2	10/16/09		< 169	
SW-2	10/16/09		< 163	
SW-2	10/17/09		< 168	
SW-2	10/17/09		< 161	
SW-2	10/18/09		< 168	
SW-2	10/18/09		< 169	
SW-2	10/19/09		< 169	
SW-2	10/20/09		< 172	
SW-2	10/21/09		< 161	
SW-2	10/22/09		< 178	
SW-2	10/23/09		< 189	
SW-2	10/23/09		< 189	
SW-2	10/24/09		< 168	
SW-2	10/25/09		< 179	
SW-2	10/26/09		< 181	
SW-2	10/27/09		< 179	

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
SW-2	10/28/09	< 162	
SW-2	10/29/09	< 165	
SW-2	10/30/09	< 154	
SW-2	10/31/09	< 177	
SW-2	11/01/09	< 182	
SW-2	11/02/09	< 183	
SW-2	11/03/09	< 167	
SW-2	11/04/09	< 161	
SW-2	11/05/09	< 190	
SW-2	11/06/09	< 186	
SW-2	11/07/09	< 181	
SW-2	11/08/09	< 182	
SW-2	11/09/09	< 178	
SW-2	11/10/09	< 181	
SW-2	11/11/09	< 179	
SW-2	11/12/09	< 174	
SW-2	11/13/09	< 173	
SW-2	11/14/09	< 169	
SW-2	11/15/09	< 164	
SW-2	11/16/09	< 157	
SW-2	11/17/09	< 169	
SW-2	11/18/09	< 162	
SW-2	11/19/09	< 165	
SW-2	11/20/09	< 162	
SW-2	11/21/09	< 169	
SW-2	11/22/09	< 170	
SW-2	11/23/09	< 168	
SW-2	11/24/09	< 163	
SW-2	11/25/09	< 163	
SW-2	11/26/09	< 190	
SW-2	11/27/09	< 187	
SW-2	11/28/09	< 192	
SW-2	11/29/09	< 188	
SW-2	11/30/09	< 158	
SW-2	12/01/09	< 161	
SW-2	12/02/09	< 186	
SW-2	12/03/09	< 191	
SW-2	12/04/09	< 183	
SW-2	12/05/09	< 186	
SW-2	12/06/09	< 162	
SW-2	12/07/09	< 161	
SW-2	12/08/09	< 164	
SW-2	12/09/09	< 187	
SW-2	12/10/09	< 158	
SW-2	12/11/09	< 158	

TABLE B-II.1 **CONCENTRATIONS OF TRITIUM AND STRONTIUM IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION DATE	H-3	SR-90
SW-2	12/12/09	< 156	
SW-2	12/13/09	< 169	
SW-2	12/14/09	< 171	
SW-2	12/15/09	< 163	
SW-2	12/16/09	< 165	
SW-2	12/17/09	< 168	
SW-2	12/18/09	< 169	
SW-2	12/18/09	< 181	
SW-2	12/19/09	< 169	
SW-2	12/20/09	< 164	
SW-2	12/21/09	< 163	
SW-2	12/22/09	< 161	
SW-2	12/23/09	< 162	
SW-2	12/24/09	< 166	
SW-2	12/25/09	< 166	
SW-2	12/26/09	< 174	
SW-2	12/27/09	< 171	
SW-2	12/28/09	< 171	
SW-2	12/29/09	< 170	
SW-2	12/30/09	< 167	
SW-2	12/31/09	< 167	
SW-3	03/10/09	< 186	
SW-3	09/29/09	< 176	< 0.6

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MCD	05/05/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 31**	< 1	< 1	< 33	< 11
MCD	05/12/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 37**	< 1	< 2	< 39	< 13
MCD	05/19/09	< 3	< 4	< 9	< 4	< 6	< 4	< 6	**< 23**	< 3	< 3	< 39	< 14
MCD	05/26/09	< 5	< 5	< 12	< 2	< 11	< 6	< 9	**< 18**	< 5	< 5	< 34	< 12
MCD	06/02/09	< 5	< 5	< 11	< 5	< 13	< 7	< 8	< 10	< 6	< 5	< 27	< 8
MCD	06/08/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 26**	< 1	< 1	< 29	< 9
MCD	06/15/09	< 2	< 2	< 5	< 2	< 3	< 2	< 3	**< 17**	< 1	< 2	< 23	< 7
MCD	06/22/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 11	< 2	< 2	< 19	< 6
MCD	06/26/09	< 4	< 4	< 8	< 4	< 7	< 4	< 6	< 15	< 3	< 3	< 29	< 10
MCD	06/27/09	< 3	< 3	< 6	< 2	< 5	< 3	< 5	**< 34**	< 2	< 3	< 39	< 13
MCD	06/28/09	< 2	< 3	< 6	< 2	< 5	< 3	< 5	**< 25**	< 2	< 2	< 36	< 11
MCD	06/29/09	< 3	< 3	< 8	< 3	< 6	< 3	< 6	**< 31**	< 3	< 3	< 43	< 13
MCD	06/30/09	< 3	< 4	< 10	< 3	< 7	< 4	< 7	**< 34**	< 3	< 3	< 48	< 14
MCD	07/01/09	< 3	< 3	< 7	< 3	< 6	< 3	< 6	**< 25**	< 2	< 3	< 40	< 15
MCD	07/02/09	< 3	< 3	< 8	< 3	< 6	< 4	< 6	**< 38**	< 3	< 3	< 49	< 14
MCD	07/03/09	< 3	< 3	< 7	< 3	< 5	< 3	< 5	**< 29**	< 2	< 3	< 41	< 15
MCD	07/04/09	< 3	< 3	< 8	< 2	< 5	< 3	< 5	**< 30**	< 2	< 2	< 42	< 11
MCD	07/05/09	< 2	< 3	< 7	< 3	< 5	< 3	< 5	**< 25**	< 2	< 2	< 36	< 11
MCD	07/06/09	< 2	< 3	< 7	< 3	< 5	< 3	< 5	**< 29**	< 2	< 3	< 37	< 15
MCD	07/07/09	< 3	< 3	< 9	< 3	< 6	< 4	< 6	**< 32**	< 3	< 3	< 45	< 12
MCD	07/08/09	< 3	< 3	< 8	< 3	< 6	< 4	< 6	**< 35**	< 3	< 3	< 47	< 15
MCD	07/09/09	< 3	< 3	< 7	< 3	< 6	< 3	< 6	**< 22**	< 2	< 3	< 35	< 13
MCD	07/10/09	< 2	< 3	< 6	< 2	< 5	< 3	< 5	**< 18**	< 2	< 2	< 29	< 8
MCD	07/11/09	< 2	< 3	< 7	< 2	< 5	< 3	< 5	**< 32**	< 2	< 3	< 42	< 14
MCD	07/12/09	< 3	< 3	< 8	< 3	< 6	< 4	< 6	**< 36**	< 2	< 3	< 52	< 15
MCD	07/13/09	< 3	< 3	< 7	< 3	< 6	< 3	< 5	**< 21**	< 2	< 3	< 33	< 13
MCD	07/14/09	< 3	< 3	< 7	< 3	< 5	< 3	< 6	**< 21**	< 2	< 3	< 33	< 10
MCD	07/15/09	< 3	< 3	< 7	< 3	< 7	< 4	< 6	**< 22**	< 3	< 3	< 37	< 11
MCD	07/16/09	< 3	< 3	< 8	< 3	< 6	< 4	< 6	**< 21**	< 3	< 3	< 39	< 11
MCD	07/17/09	< 2	< 3	< 7	< 3	< 6	< 3	< 5	**< 18**	< 2	< 3	< 30	< 10
MCD	07/18/09	< 3	< 3	< 7	< 3	< 6	< 3	< 6	**< 17**	< 3	< 3	< 31	< 9
MCD	07/19/09	< 3	< 3	< 7	< 3	< 5	< 3	< 5	**< 23**	< 2	< 3	< 35	< 11
MCD	07/20/09	< 2	< 3	< 7	< 3	< 5	< 3	< 6	**< 21**	< 2	< 3	< 34	< 10
MCD	07/21/09	< 2	< 3	< 7	< 2	< 5	< 3	< 5	**< 23**	< 2	< 2	< 34	< 11

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MCD	07/22/09	< 3	< 4	< 9	< 3	< 6	< 4	< 7	**< 24**	< 3	< 3	< 39	< 13
MCD	07/23/09	< 3	< 4	< 8	< 3	< 7	< 4	< 6	**< 26**	< 3	< 3	< 40	< 12
MCD	07/24/09	< 2	< 3	< 6	< 2	< 5	< 3	< 5	**< 19**	< 2	< 2	< 29	< 9
MCD	07/25/09	< 2	< 3	< 6	< 2	< 5	< 3	< 4	< 12	< 2	< 2	< 22	< 7
MCD	07/26/09	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 11	< 2	< 2	< 22	< 8
MCD	07/27/09	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 10	< 2	< 2	< 21	< 7
MCD	07/28/09	< 3	< 2	< 6	< 2	< 5	< 3	< 5	< 9	< 2	< 3	< 19	< 5
MCD	07/29/09	< 3	< 3	< 8	< 4	< 7	< 4	< 6	< 11	< 3	< 3	< 25	< 8
MCD	07/30/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**>10000**	< 1	< 1	< 38	< 11
MCD	07/31/09	< 1	< 1	< 3	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	< 55	< 15
MCD	08/01/09	< 1	< 2	< 4	< 1	< 3	< 1	< 3	**>10000**	< 1	< 1	< 52	< 15
MCD	08/02/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 68**	< 1	< 1	< 50	< 13
MCD	08/03/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 64**	< 1	< 1	< 50	< 14
MCD	08/04/09	< 1	< 1	< 2	< 1	< 2	< 1	< 2	**< 37**	< 1	< 1	< 28	< 8
MCD	08/05/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**< 35**	< 1	< 2	< 39	< 14
MCD	08/06/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 33**	< 1	< 1	< 37	< 11
MCD	08/07/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 20**	< 1	< 1	< 22	< 7
MCD	08/08/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 40**	< 1	< 1	< 41	< 8
MCD	08/09/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 34**	< 1	< 2	< 38	< 10
MCD	08/10/09	< 2	< 2	< 5	< 2	< 3	< 2	< 4	**< 35**	< 1	< 2	< 35	< 11
MCD	08/11/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 26**	< 1	< 2	< 31	< 9
MCD	08/12/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 31**	< 1	< 1	< 32	< 11
MCD	08/13/09	< 2	< 3	< 6	< 2	< 4	< 3	< 4	**< 35**	< 2	< 2	< 47	< 13
MCD	08/14/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**< 45**	< 1	< 2	< 48	< 13
MCD	08/15/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**< 47**	< 2	< 2	< 46	< 15
MCD	08/16/09	< 2	< 2	< 6	< 2	< 4	< 3	< 5	**< 52**	< 2	< 2	< 52	< 12
MCD	08/17/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**< 43**	< 2	< 2	< 46	< 14
MCD	08/18/09	< 2	< 2	< 6	< 2	< 4	< 2	< 4	**< 46**	< 2	< 2	< 46	< 13
MCD	08/19/09	< 2	< 2	< 4	< 2	< 3	< 2	< 4	**< 34**	< 1	< 1	< 38	< 10
MCD	08/20/09	< 2	< 2	< 6	< 1	< 3	< 3	< 4	**< 152**	< 1	< 2	**< 99**	**< 24**
MCD	08/21/09	< 2	< 4	< 8	< 2	< 5	< 4	< 7	**< 241**	< 2	< 2	**< 137**	**< 41**

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MCD	08/22/09	< 2	< 3	< 9	< 2	< 5	< 3	< 5	**< 195**	< 2	< 2	**< 140**	**< 42**
MCD	08/23/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 104**	< 1	< 1	**< 67**	**< 19**
MCD	08/24/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 116**	< 1	< 1	**< 70**	**< 22**
MCD	08/25/09	< 2	< 3	< 7	< 2	< 4	< 3	< 5	**< 138**	< 2	< 2	**< 94**	**< 34**
MCD	08/26/09	< 1	< 1	< 3	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	< 37	< 14
MCD	08/27/09	< 1	< 2	< 4	< 1	< 3	< 2	< 4	**>10000**	< 1	< 2	< 50	< 13
MCD	08/28/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**>10000**	< 1	< 1	< 41	< 11
MCD	08/29/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 52**	< 1	< 1	< 43	< 12
MCD	08/30/09	< 2	< 2	< 7	< 2	< 3	< 2	< 4	**< 83**	< 1	< 2	< 56	**< 18**
MCD	08/31/09	< 2	< 2	< 7	< 2	< 3	< 2	< 4	**< 75**	< 1	< 2	< 53	**< 17**
MCD	09/01/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 56**	< 1	< 1	< 44	< 12
MCD	09/02/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 44**	< 1	< 1	< 31	< 10
MCD	09/03/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 56**	< 1	< 1	< 45	< 12
MCD	09/04/09	< 2	< 2	< 5	< 1	< 3	< 2	< 4	**< 33**	< 1	< 1	< 37	< 12
MCD	09/05/09	< 2	< 2	< 5	< 2	< 3	< 2	< 4	**< 37**	< 2	< 2	< 38	< 11
MCD	09/06/09	< 2	< 2	< 5	< 2	< 4	< 3	< 4	**< 39**	< 2	< 2	< 40	< 13
MCD	09/07/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 25**	< 1	< 1	< 25	< 7
MCD	09/08/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 29**	< 1	< 1	< 28	< 8
MCD	09/09/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 20**	< 1	< 1	< 19	< 6
MCD	09/10/09	< 2	< 3	< 7	< 3	< 5	< 3	< 5	**< 31**	< 2	< 2	< 41	< 13
MCD	09/11/09	< 2	< 3	< 7	< 2	< 5	< 3	< 5	**< 28**	< 2	< 2	< 37	< 11
MCD	09/12/09	< 3	< 3	< 8	< 3	< 6	< 3	< 6	**< 30**	< 2	< 3	< 42	< 14
MCD	09/13/09	< 3	< 4	< 8	< 3	< 6	< 4	< 6	**< 26**	< 3	< 3	< 38	< 12
MCD	09/14/09	< 3	< 4	< 8	< 3	< 6	< 4	< 6	**< 24**	< 3	< 3	< 38	< 12
MCD	09/15/09	< 3	< 3	< 8	< 3	< 6	< 4	< 6	**< 24**	< 3	< 3	< 40	< 11
MCD	09/16/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**< 56**	< 1	< 1	< 52	< 13
MCD	09/17/09	< 1	< 1	< 4	< 1	< 3	< 2	< 3	**< 39**	< 1	< 1	< 35	< 12
MCD	09/18/09	< 1	< 2	< 3	< 1	< 2	< 2	< 3	**< 38**	< 1	< 1	< 34	< 10
MCD	09/19/09	< 2	< 2	< 5	< 1	< 3	< 2	< 3	**< 37**	< 2	< 2	< 44	< 8
MCD	09/20/09	< 1	< 1	< 3	< 1	< 2	< 2	< 3	**< 26**	< 1	< 1	< 27	< 8
MCD	09/21/09	< 2	< 2	< 4	< 1	< 3	< 2	< 3	**< 31**	< 1	< 2	< 34	< 9

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MCD	09/22/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 23**	< 1	< 1	< 27	< 9
MCD	09/23/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 25**	< 1	< 1	< 25	< 8
MCD	09/24/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 17**	< 1	< 1	< 18	< 5
MCD	09/25/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 18**	< 1	< 1	< 18	< 6
MCD	09/26/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 21**	< 1	< 1	< 29	< 8
MCD	09/27/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 16**	< 1	< 1	< 22	< 7
MCD	09/28/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 143**	< 1	< 1	**< 62**	**< 24**
MCD	09/29/09	< 1	< 2	< 5	< 2	< 2	< 2	< 3	**< 246**	< 1	< 1	**< 98**	**< 32**
MCD	09/30/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 250**	< 1	< 1	**< 134**	**< 36**
MCD	10/01/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 162**	< 1	< 1	**< 64**	**< 22**
MCD	10/02/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 229**	< 1	< 1	**< 95**	**< 30**
MCD	10/03/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**< 226**	< 1	< 1	**< 93**	**< 23**
MCD	10/04/09	< 1	< 1	< 4	< 1	< 2	< 2	< 2	**< 514**	< 1	< 1	**< 157**	**< 47**
MCD	10/05/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 797**	< 1	< 1	**< 228**	**< 59**
MCD	10/06/09	< 1	< 2	< 5	< 1	< 2	< 2	< 4	**< 662**	< 1	< 1	**< 190**	**< 63**
MCD	10/07/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 47**	< 1	< 1	< 43	< 14
MCD	10/08/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 56**	< 1	< 1	< 46	< 13
MCD	10/09/09	< 1	< 2	< 5	< 2	< 3	< 2	< 4	**< 66**	< 1	< 2	< 53	**< 16**
MCD	10/10/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 175**	< 1	< 1	**< 86**	**< 28**
MCD	10/11/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 141**	< 1	< 1	**< 74**	**< 20**
MCD	10/12/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 119**	< 1	< 1	< 60	**< 18**
MCD	10/13/09	< 1	< 2	< 5	< 2	< 4	< 2	< 4	**< 48**	< 1	< 2	< 48	< 15
MCD	10/14/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 37**	< 1	< 1	< 34	< 12
MCD	10/15/09	< 1	< 2	< 4	< 2	< 3	< 2	< 3	**< 32**	< 1	< 1	< 35	< 9
MCD	10/16/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 50**	< 1	< 1	< 37	< 11
MCD	10/16/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 396**	< 1	< 1	**< 121**	**< 45**
MCD	10/17/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 47**	< 1	< 1	< 34	< 10
MCD	10/17/09	< 1	< 2	< 6	< 1	< 3	< 2	< 3	**< 629**	< 1	< 1	**< 202**	**< 61**
MCD	10/18/09	< 1	< 1	< 3	< 1	< 1	< 1	< 2	**< 44**	< 1	< 1	< 32	< 10
MCD	10/18/09	< 1	< 2	< 7	< 1	< 3	< 2	< 4	**< 564**	< 1	< 1	**< 179**	**< 48**
MCD	10/19/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 83**	< 1	< 1	< 56	< 15

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MCD	10/20/09	< 1	< 1	< 3	< 1	< 2	< 2	< 3	**< 75**	< 1	< 1	< 49	**< 18**
MCD	10/21/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 71**	< 1	< 1	< 48	< 13
MCD	10/22/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 48**	< 1	< 1	< 34	< 10
MCD	10/23/09	< 1	< 1	< 2	< 1	< 2	< 1	< 2	**< 39**	< 1	< 1	< 31	< 8
MCD	10/24/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 57**	< 1	< 1	< 46	< 12
MCD	10/25/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 374**	< 1	< 1	**< 127**	**< 34**
MCD	10/26/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 323**	< 1	< 1	**< 131**	**< 39**
MCD	10/27/09	< 1	< 1	< 5	< 1	< 2	< 2	< 3	**< 318**	< 1	< 1	**< 122**	**< 32**
MCD	10/28/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 67**	< 1	< 1	< 49	< 12
MCD	10/29/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 61**	< 1	< 1	< 51	< 12
MCD	10/30/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**< 78**	< 1	< 1	< 54	**< 20**
MCD	10/31/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 151**	< 1	< 1	**< 78**	**< 22**
MCD	11/01/09	< 1	< 1	< 3	< 1	< 1	< 1	< 2	**< 114**	< 1	< 1	< 58	**< 17**
MCD	11/02/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 129**	< 1	< 1	**< 74**	**< 26**
MCD	11/03/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 107**	< 1	< 1	< 55	**< 18**
MCD	11/04/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 79**	< 1	< 1	< 50	**< 19**
MCD	11/05/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 71**	< 1	< 1	< 50	< 12
MCD	11/06/09	< 1	< 2	< 3	< 1	< 3	< 2	< 2	**< 40**	< 1	< 1	< 37	< 9
MCD	11/07/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 44**	< 1	< 1	< 39	< 8
MCD	11/08/09	< 2	< 2	< 4	< 2	< 3	< 2	< 4	**< 67**	< 1	< 1	< 59	**< 16**
MCD	11/09/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 79**	< 1	< 1	< 48	< 15
MCD	11/10/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**< 68**	< 1	< 1	< 50	**< 16**
MCD	11/11/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 74**	< 1	< 1	< 46	< 14
MCD	11/12/09	< 2	< 2	< 4	< 2	< 2	< 2	< 3	**< 55**	< 1	< 2	< 44	< 11
MCD	11/13/09	< 1	< 1	< 3	< 1	< 2	< 2	< 3	**< 29**	< 1	< 1	< 30	< 9
MCD	11/14/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 102**	< 1	< 1	< 57	**< 19**
MCD	11/15/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 79**	< 1	< 1	< 50	< 13
MCD	11/16/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 68**	< 1	< 1	< 44	< 14
MCD	11/17/09	< 1	< 2	< 4	< 1	< 2	< 2	< 2	**< 102**	< 1	< 1	**< 64**	**< 16**
MCD	11/18/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 159**	< 1	< 1	**< 79**	**< 27**
MCD	11/19/09	< 1	< 1	< 4	< 1	< 2	< 2	< 2	**< 131**	< 1	< 1	**< 72**	**< 20**

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MCD	11/20/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 191**	< 1	< 1	**< 87**	**< 26**
MCD	11/21/09	< 1	< 1	< 4	< 1	< 3	< 2	< 3	**< 75**	< 1	< 1	< 57	**< 17**
MCD	11/22/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 74**	< 1	< 1	< 56	< 14
MCD	11/23/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 72**	< 1	< 1	< 55	**< 20**
MCD	11/24/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 35**	< 1	< 1	< 32	< 10
MCD	11/25/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 40**	< 1	< 1	< 39	< 12
MCD	11/26/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 186**	< 1	< 1	**< 88**	**< 26**
MCD	11/27/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 160**	< 1	< 1	**< 85**	**< 26**
MCD	11/28/09	< 1	< 2	< 6	< 1	< 3	< 2	< 3	**< 290**	< 1	< 1	**< 130**	**< 40**
MCD	11/29/09	< 1	< 2	< 6	< 2	< 3	< 2	< 4	**< 369**	< 1	< 1	**< 137**	**< 35**
MCD	11/30/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 993**	< 1	< 1	**< 259**	**< 84**
MCD	12/01/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 877**	< 1	< 1	**< 245**	**< 70**
MCD	12/02/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 137**	< 1	< 1	**< 71**	**< 22**
MCD	12/03/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**< 138**	< 1	< 1	**< 72**	**< 20**
MCD	12/04/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 55**	< 1	< 1	< 39	< 14
MCD	12/05/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 53**	< 1	< 1	< 38	< 12
MCD	12/06/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 13	< 1	< 1	< 17	< 6
MCD	12/07/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 15	< 1	< 1	< 18	< 6
MCD	12/08/09	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 16	< 5
MCD	12/09/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 161**	< 1	< 1	**< 94**	**< 23**
MCD	12/10/09	< 1	< 2	< 5	< 2	< 3	< 2	< 3	**< 141**	< 1	< 1	**< 80**	**< 21**
MCD	12/11/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 111**	< 1	< 1	**< 69**	**< 16**
MCD	12/12/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 109**	< 1	< 1	**< 64**	**< 18**
MCD	12/13/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 175**	< 1	< 1	**< 85**	**< 28**
MCD	12/14/09	< 1	< 1	< 4	< 1	< 3	< 2	< 3	**< 133**	< 1	< 1	**< 70**	**< 23**
MCD	12/15/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 94**	< 1	< 1	< 50	**< 16**
MCD	12/16/09	< 1	< 2	< 3	< 1	< 2	< 2	< 2	**< 135**	< 1	< 1	**< 73**	**< 25**
MCD	12/17/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 98**	< 1	< 1	**< 66**	**< 22**
MCD	12/18/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 129**	< 1	< 1	**< 78**	**< 22**
MCD	12/18/09	< 3	< 3	< 8	< 3	< 7	< 4	< 6	**< 18**	< 3	< 3	< 32	< 11
MCD	12/19/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 114**	< 1	< 1	**< 67**	**< 22**

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
MCD	12/20/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 132**	< 1	< 1	**< 70**	**< 20**
MCD	12/21/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 77**	< 1	< 1	< 51	**< 16**
MCD	12/22/09	< 2	< 2	< 6	< 2	< 4	< 3	< 4	**< 122**	< 2	< 2	**< 86**	**< 27**
MCD	12/23/09	< 1	< 2	< 4	< 1	< 3	< 2	< 4	**< 85**	< 1	< 1	**< 63**	< 14
MCD	12/24/09	< 1	< 2	< 3	< 1	< 2	< 2	< 2	**< 78**	< 1	< 1	< 45	**< 16**
MCD	12/25/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 70**	< 1	< 1	< 52	< 14
MCD	12/26/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 63**	< 1	< 1	< 39	< 10
MCD	12/27/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 79**	< 1	< 1	< 53	**< 19**
MCD	12/28/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 65**	< 1	< 1	< 50	**< 17**
MCD	12/29/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 60**	< 1	< 1	< 43	**< 16**
MCD	12/30/09	< 1	< 2	< 5	< 2	< 3	< 2	< 3	**< 86**	< 1	< 1	< 57	**< 17**
MCD	12/31/09	< 1	< 2	< 4	< 1	< 2	< 2	< 4	**< 65**	< 1	< 1	< 47	**< 16**
SW-1	05/05/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 31**	< 1	< 1	< 31	< 10
SW-1	05/12/09	< 2	< 2	< 6	< 2	< 4	< 2	< 4	**< 39**	< 1	< 2	< 41	< 15
SW-1	05/19/09	< 3	< 4	< 9	< 4	< 7	< 4	< 7	**< 23**	< 3	< 4	< 39	< 12
SW-1	05/26/09	< 4	< 5	< 11	< 5	< 11	< 5	< 8	**< 16**	< 5	< 5	< 37	< 12
SW-1	06/02/09	< 5	< 5	< 12	< 5	< 12	< 5	< 10	< 10	< 5	< 5	< 26	< 8
SW-1	06/08/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 18**	< 1	< 1	< 20	< 6
SW-1	06/15/09	< 1	< 1	< 3	< 1	< 3	< 2	< 3	< 14	< 1	< 1	< 19	< 6
SW-1	06/22/09	< 2	< 2	< 4	< 2	< 4	< 2	< 4	< 12	< 2	< 2	< 19	< 6
SW-1	06/26/09	< 4	< 4	< 8	< 3	< 8	< 4	< 7	**< 17**	< 3	< 3	< 32	< 11
SW-1	06/27/09	< 3	< 3	< 7	< 3	< 6	< 3	< 6	**< 39**	< 2	< 3	< 52	< 15
SW-1	06/28/09	< 3	< 3	< 9	< 3	< 7	< 4	< 7	**< 34**	< 3	< 3	< 43	< 14
SW-1	06/29/09	< 3	< 3	< 7	< 3	< 5	< 3	< 5	**< 28**	< 2	< 3	< 38	< 15
SW-1	06/30/09	< 2	< 3	< 7	< 3	< 5	< 3	< 5	**< 21**	< 2	< 2	< 32	< 11
SW-1	07/01/09	< 3	< 3	< 7	< 3	< 6	< 4	< 6	**< 30**	< 3	< 3	< 42	< 14
SW-1	07/02/09	< 2	< 3	< 7	< 3	< 5	< 3	< 5	**< 21**	< 2	< 2	< 31	< 12
SW-1	07/03/09	< 3	< 3	< 6	< 2	< 5	< 3	< 4	**< 22**	< 2	< 3	< 35	< 11
SW-1	07/04/09	< 2	< 3	< 7	< 3	< 5	< 3	< 6	**< 25**	< 2	< 3	< 38	< 13
SW-1	07/05/09	< 2	< 3	< 6	< 3	< 5	< 3	< 6	**< 29**	< 2	< 2	< 42	< 13
SW-1	07/06/09	< 2	< 3	< 6	< 2	< 4	< 3	< 5	**< 27**	< 2	< 2	< 38	< 12
SW-1	07/07/09	< 2	< 3	< 6	< 3	< 6	< 3	< 5	**< 23**	< 2	< 2	< 35	< 13

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-1	07/08/09	< 3	< 3	< 7	< 3	< 5	< 3	< 5	**< 31**	< 3	< 3	< 44	< 11
SW-1	07/09/09	< 3	< 3	< 8	< 3	< 6	< 4	< 6	**< 26**	< 3	< 3	< 40	< 14
SW-1	07/10/09	< 3	< 3	< 7	< 3	< 5	< 3	< 5	**< 20**	< 2	< 3	< 34	< 10
SW-1	07/11/09	< 2	< 3	< 7	< 3	< 5	< 3	< 5	**< 31**	< 2	< 3	< 42	< 15
SW-1	07/12/09	< 2	< 2	< 6	< 2	< 5	< 3	< 5	**< 29**	< 2	< 2	< 38	< 14
SW-1	07/13/09	< 2	< 3	< 7	< 3	< 4	< 3	< 5	**< 21**	< 2	< 2	< 32	< 9
SW-1	07/14/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**< 17**	< 2	< 2	< 26	< 9
SW-1	07/15/09	< 2	< 2	< 6	< 2	< 5	< 3	< 4	**< 22**	< 2	< 2	< 33	< 10
SW-1	07/16/09	< 3	< 3	< 6	< 2	< 5	< 3	< 5	**< 17**	< 2	< 2	< 27	< 8
SW-1	07/17/09	< 4	< 5	< 10	< 4	< 9	< 5	< 8	**< 27**	< 4	< 4	< 47	< 15
SW-1	07/18/09	< 3	< 4	< 9	< 4	< 7	< 4	< 7	**< 20**	< 3	< 4	< 34	< 12
SW-1	07/19/09	< 2	< 3	< 7	< 2	< 5	< 3	< 5	**< 20**	< 2	< 2	< 30	< 10
SW-1	07/20/09	< 2	< 2	< 6	< 2	< 5	< 3	< 4	**< 19**	< 2	< 2	< 29	< 9
SW-1	07/21/09	< 2	< 2	< 5	< 2	< 4	< 3	< 4	**< 16**	< 2	< 2	< 26	< 8
SW-1	07/22/09	< 3	< 3	< 8	< 4	< 6	< 4	< 6	**< 24**	< 2	< 3	< 40	< 14
SW-1	07/23/09	< 3	< 3	< 8	< 3	< 7	< 4	< 6	**< 25**	< 3	< 3	< 40	< 14
SW-1	07/24/09	< 3	< 4	< 8	< 3	< 7	< 4	< 7	**< 26**	< 3	< 3	< 41	< 13
SW-1	07/25/09	< 2	< 2	< 6	< 3	< 5	< 2	< 5	< 11	< 2	< 2	< 20	< 7
SW-1	07/26/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 9	< 2	< 2	< 19	< 5
SW-1	07/27/09	< 3	< 3	< 7	< 3	< 6	< 3	< 6	< 13	< 3	< 3	< 25	< 8
SW-1	07/28/09	< 3	< 3	< 6	< 3	< 6	< 3	< 5	< 7	< 2	< 3	< 19	< 6
SW-1	07/29/09	< 4	< 4	< 10	< 4	< 8	< 5	< 8	< 19	< 4	< 4	< 36	< 12
SW-1	07/30/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	< 50	< 15
SW-1	07/31/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**>10000**	< 1	< 1	< 43	< 12
SW-1	08/01/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**>10000**	< 1	< 1	< 47	< 15
SW-1	08/02/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 77**	< 1	< 1	< 57	< 13
SW-1	08/03/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 65**	< 1	< 2	< 49	< 12
SW-1	08/04/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 39**	< 1	< 1	< 35	< 11
SW-1	08/05/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**< 38**	< 1	< 2	< 41	< 13
SW-1	08/06/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 29**	< 1	< 1	< 30	< 10

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-1	08/07/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 24**	< 1	< 1	< 27	< 8
SW-1	08/08/09	< 1	< 2	< 5	< 2	< 3	< 2	< 3	**< 32**	< 1	< 1	< 37	< 13
SW-1	08/09/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 28**	< 1	< 1	< 29	< 8
SW-1	08/10/09	< 2	< 2	< 6	< 2	< 4	< 2	< 4	**< 36**	< 1	< 2	< 43	< 15
SW-1	08/11/09	< 2	< 2	< 6	< 2	< 4	< 2	< 4	**< 37**	< 2	< 2	< 39	< 13
SW-1	08/12/09	< 2	< 2	< 4	< 2	< 4	< 2	< 4	**< 29**	< 2	< 2	< 32	< 13
SW-1	08/13/09	< 2	< 3	< 6	< 2	< 4	< 2	< 4	**< 37**	< 2	< 2	< 44	< 13
SW-1	08/14/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 40**	< 1	< 1	< 39	< 13
SW-1	08/15/09	< 2	< 2	< 6	< 2	< 4	< 3	< 4	**< 50**	< 2	< 2	< 51	< 14
SW-1	08/16/09	< 2	< 2	< 6	< 2	< 4	< 2	< 4	**< 50**	< 2	< 2	< 51	< 13
SW-1	08/17/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 36**	< 1	< 1	< 38	< 11
SW-1	08/18/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**< 40**	< 2	< 2	< 40	< 14
SW-1	08/19/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 31**	< 1	< 2	< 37	< 9
SW-1	08/20/09	< 2	< 3	< 7	< 2	< 4	< 3	< 5	**< 166**	< 2	< 2	**< 101**	**< 29**
SW-1	08/21/09	< 2	< 3	< 8	< 2	< 4	< 3	< 5	**< 181**	< 2	< 2	**< 105**	**< 35**
SW-1	08/22/09	< 2	< 3	< 9	< 2	< 5	< 3	< 6	**< 189**	< 2	< 2	**< 122**	**< 31**
SW-1	08/23/09	< 2	< 2	< 7	< 2	< 3	< 2	< 4	**< 145**	< 2	< 2	**< 91**	**< 27**
SW-1	08/24/09	< 1	< 2	< 5	< 2	< 3	< 2	< 4	**< 119**	< 1	< 1	**< 77**	**< 25**
SW-1	08/25/09	< 2	< 3	< 6	< 2	< 4	< 3	< 4	**< 136**	< 1	< 2	**< 90**	**< 24**
SW-1	08/26/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**>10000**	< 1	< 1	< 58	< 14
SW-1	08/27/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 66**	< 1	< 1	< 54	**< 16**
SW-1	08/28/09	< 1	< 2	< 5	< 2	< 2	< 1	< 3	**>10000**	< 1	< 1	< 39	< 13
SW-1	08/29/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 48**	< 1	< 1	< 39	< 12
SW-1	08/30/09	< 2	< 2	< 4	< 1	< 3	< 2	< 3	**< 69**	< 1	< 1	< 59	**< 16**
SW-1	08/31/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 51**	< 1	< 1	< 47	< 14
SW-1	09/01/09	< 1	< 1	< 2	< 1	< 1	< 1	< 2	**< 32**	< 1	< 1	< 29	< 8
SW-1	09/02/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 40**	< 1	< 1	< 32	< 8
SW-1	09/03/09	< 1	< 1	< 3	< 1	< 2	< 2	< 3	**< 47**	< 1	< 1	< 38	< 14
SW-1	09/04/09	< 1	< 1	< 3	< 1	< 3	< 2	< 3	**< 29**	< 1	< 1	< 31	< 9
SW-1	09/05/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 32**	< 1	< 2	< 32	< 9
SW-1	09/06/09	< 2	< 2	< 6	< 2	< 4	< 3	< 4	**< 36**	< 2	< 2	< 43	< 13

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-1	09/07/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 25**	< 1	< 1	< 25	< 6
SW-1	09/08/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 22**	< 1	< 1	< 22	< 6
SW-1	09/09/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 21**	< 1	< 1	< 22	< 7
SW-1	09/10/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**< 22**	< 2	< 2	< 27	< 9
SW-1	09/11/09	< 3	< 3	< 8	< 3	< 5	< 3	< 6	**< 27**	< 2	< 3	< 38	< 13
SW-1	09/12/09	< 2	< 2	< 5	< 2	< 4	< 2	< 5	**< 24**	< 2	< 2	< 33	< 9
SW-1	09/13/09	< 3	< 4	< 9	< 4	< 7	< 4	< 7	**< 25**	< 3	< 4	< 40	< 12
SW-1	09/14/09	< 3	< 4	< 9	< 3	< 6	< 4	< 7	**< 24**	< 3	< 3	< 39	< 13
SW-1	09/15/09	< 3	< 3	< 7	< 2	< 5	< 3	< 5	**< 19**	< 2	< 3	< 31	< 11
SW-1	09/16/09	< 2	< 2	< 5	< 1	< 3	< 2	< 4	**< 51**	< 1	< 2	< 46	**< 17**
SW-1	09/17/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**< 52**	< 1	< 1	< 49	< 13
SW-1	09/18/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 43**	< 1	< 1	< 40	< 12
SW-1	09/19/09	< 2	< 2	< 5	< 2	< 3	< 2	< 3	**< 42**	< 1	< 2	< 44	< 14
SW-1	09/20/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 34**	< 1	< 1	< 37	< 11
SW-1	09/21/09	< 1	< 2	< 4	< 1	< 4	< 2	< 3	**< 35**	< 1	< 2	< 38	< 11
SW-1	09/22/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 18**	< 1	< 1	< 23	< 7
SW-1	09/23/09	< 1	< 2	< 4	< 2	< 3	< 2	< 4	**< 22**	< 1	< 2	< 29	< 9
SW-1	09/24/09	< 1	< 1	< 3	< 1	< 3	< 2	< 2	**< 18**	< 1	< 1	< 20	< 6
SW-1	09/25/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 25**	< 1	< 1	< 30	< 8
SW-1	09/26/09	< 1	< 2	< 3	< 1	< 3	< 2	< 3	**< 21**	< 1	< 1	< 24	< 8
SW-1	09/27/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 17**	< 1	< 1	< 22	< 5
SW-1	09/28/09	< 1	< 1	< 5	< 1	< 2	< 2	< 3	**< 193**	< 1	< 1	**< 91**	**< 26**
SW-1	09/29/09	< 1	< 1	< 4	< 1	< 2	< 2	< 2	**< 189**	< 1	< 1	**< 86**	**< 25**
SW-1	09/30/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 215**	< 1	< 1	**< 92**	**< 31**
SW-1	10/01/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 222**	< 1	< 1	**< 111**	**< 32**
SW-1	10/02/09	< 5	< 5	< 10	< 5	< 9	< 5	< 8	< 9	< 4	< 5	< 24	< 8
SW-1	10/02/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 195**	< 1	< 1	**< 102**	**< 29**
SW-1	10/03/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 185**	< 1	< 1	**< 77**	**< 22**
SW-1	10/04/09	< 1	< 2	< 6	< 1	< 2	< 2	< 3	**< 634**	< 1	< 1	**< 179**	**< 57**
SW-1	10/05/09	< 1	< 2	< 7	< 1	< 3	< 3	< 4	**< 946**	< 1	< 1	**< 274**	**< 78**
SW-1	10/06/09	< 1	< 2	< 6	< 1	< 2	< 2	< 4	**< 689**	< 1	< 1	**< 202**	**< 67**

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-1	10/07/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 58**	< 1	< 1	< 54	< 14
SW-1	10/08/09	< 2	< 2	< 6	< 2	< 3	< 2	< 4	**< 62**	< 1	< 2	< 60	**< 16**
SW-1	10/09/09	< 2	< 2	< 5	< 1	< 3	< 2	< 4	**< 62**	< 1	< 2	< 57	**< 17**
SW-1	10/10/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 190**	< 1	< 1	**< 89**	**< 27**
SW-1	10/11/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 129**	< 1	< 1	**< 67**	**< 24**
SW-1	10/12/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 105**	< 1	< 1	**< 61**	**< 18**
SW-1	10/13/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 32**	< 1	< 1	< 31	< 9
SW-1	10/14/09	< 1	< 2	< 4	< 2	< 3	< 2	< 3	**< 44**	< 1	< 2	< 43	**< 16**
SW-1	10/15/09	< 2	< 2	< 5	< 2	< 3	< 2	< 4	**< 44**	< 2	< 2	< 44	< 14
SW-1	10/16/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 53**	< 1	< 1	< 40	< 11
SW-1	10/16/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 435**	< 1	< 1	**< 142**	**< 41**
SW-1	10/17/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 56**	< 1	< 1	< 42	< 9
SW-1	10/17/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 574**	< 1	< 1	**< 199**	**< 68**
SW-1	10/18/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 58**	< 1	< 1	< 40	< 12
SW-1	10/18/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 462**	< 1	< 1	**< 174**	**< 44**
SW-1	10/19/09	< 1	< 1	< 3	< 1	< 1	< 1	< 2	**< 57**	< 1	< 1	< 38	< 13
SW-1	10/20/09	< 1	< 1	< 5	< 1	< 2	< 2	< 3	**< 90**	< 1	< 1	**< 62**	**< 20**
SW-1	10/21/09	< 1	< 1	< 3	< 1	< 2	< 2	< 2	**< 60**	< 1	< 1	< 46	< 10
SW-1	10/22/09	< 1	< 1	< 2	< 1	< 1	< 1	< 2	**< 38**	< 1	< 1	< 29	< 10
SW-1	10/23/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 38**	< 1	< 1	< 34	< 9
SW-1	10/24/09	< 1	< 2	< 4	< 2	< 3	< 2	< 3	**< 51**	< 1	< 1	< 48	< 14
SW-1	10/25/09	< 1	< 2	< 6	< 1	< 3	< 2	< 4	**< 406**	< 1	< 1	**< 154**	**< 39**
SW-1	10/26/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 249**	< 1	< 1	**< 104**	**< 32**
SW-1	10/27/09	< 1	< 1	< 4	< 1	< 2	< 2	< 2	**< 233**	< 1	< 1	**< 91**	**< 32**
SW-1	10/28/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 62**	< 1	< 1	< 42	< 11
SW-1	10/29/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 63**	< 1	< 1	< 51	**< 16**
SW-1	10/30/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 67**	< 1	< 1	< 54	**< 16**
SW-1	10/31/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 133**	< 1	< 1	**< 76**	**< 19**
SW-1	11/01/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 171**	< 1	< 1	**< 93**	**< 28**
SW-1	11/02/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**< 113**	< 1	< 1	**< 70**	**< 18**
SW-1	11/03/09	< 1	< 2	< 6	< 1	< 2	< 2	< 3	**< 846**	< 1	< 1	**< 238**	**< 69**

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-1	11/04/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 87**	< 1	< 1	< 57	**< 18**
SW-1	11/05/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**< 76**	< 1	< 1	< 52	< 14
SW-1	11/06/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 53**	< 1	< 1	< 47	< 12
SW-1	11/07/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 37**	< 1	< 1	< 29	< 10
SW-1	11/08/09	< 2	< 2	< 5	< 2	< 3	< 2	< 4	**< 63**	< 2	< 2	< 56	**< 16**
SW-1	11/09/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 302**	< 1	< 2	**< 148**	**< 22**
SW-1	11/10/09	< 1	< 1	< 3	< 1	< 1	< 1	< 2	**< 65**	< 1	< 1	< 43	< 11
SW-1	11/11/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 52**	< 1	< 1	< 32	< 12
SW-1	11/12/09	< 1	< 1	< 4	< 1	< 3	< 2	< 3	**< 38**	< 1	< 1	< 35	< 10
SW-1	11/13/09	< 1	< 1	< 3	< 1	< 2	< 2	< 2	**< 31**	< 1	< 1	< 34	< 8
SW-1	11/14/09	< 1	< 1	< 2	< 1	< 2	< 1	< 2	**< 31**	< 1	< 1	< 26	< 8
SW-1	11/15/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 79**	< 1	< 1	< 47	**< 16**
SW-1	11/16/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 75**	< 1	< 1	< 48	< 14
SW-1	11/17/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 81**	< 1	< 1	< 47	< 15
SW-1	11/18/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 174**	< 1	< 1	**< 90**	**< 23**
SW-1	11/19/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 163**	< 1	< 1	**< 76**	**< 32**
SW-1	11/20/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 129**	< 1	< 1	**< 73**	**< 25**
SW-1	11/21/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 83**	< 1	< 1	**< 64**	**< 21**
SW-1	11/22/09	< 1	< 1	< 4	< 1	< 2	< 2	< 2	**< 67**	< 1	< 1	< 46	< 14
SW-1	11/23/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 47**	< 1	< 1	< 33	< 10
SW-1	11/25/09	< 1	< 1	< 2	< 1	< 1	< 1	< 2	**< 30**	< 1	< 1	< 26	< 8
SW-1	11/26/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 187**	< 1	< 1	**< 93**	**< 27**
SW-1	11/27/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 196**	< 1	< 1	**< 99**	**< 28**
SW-1	11/28/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 157**	< 1	< 1	**< 87**	**< 24**
SW-1	11/29/09	< 2	< 2	< 6	< 2	< 3	< 2	< 3	**< 283**	< 1	< 1	**< 145**	**< 46**
SW-1	11/30/09	< 1	< 2	< 6	< 1	< 2	< 2	< 3	**< 965**	< 1	< 1	**< 224**	**< 79**
SW-1	12/01/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 860**	< 1	< 1	**< 240**	**< 46**
SW-1	12/02/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 113**	< 1	< 1	**< 72**	**< 24**
SW-1	12/03/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 122**	< 1	< 1	**< 82**	**< 29**
SW-1	12/04/09	< 2	< 2	< 5	< 1	< 3	< 2	< 4	**< 83**	< 1	< 2	**< 61**	**< 21**
SW-1	12/05/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 50**	< 1	< 1	< 37	< 12

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-1	12/06/09	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 11	< 1	< 1	< 15	< 4
SW-1	12/07/09	< 1	< 1	< 2	< 1	< 2	< 1	< 2	< 11	< 1	< 1	< 17	< 5
SW-1	12/08/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 15	< 6
SW-1	12/09/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 105**	< 1	< 1	**< 63**	**< 19**
SW-1	12/10/09	< 1	< 1	< 3	< 1	< 2	< 2	< 2	**< 87**	< 1	< 1	< 51	< 15
SW-1	12/11/09	< 1	< 2	< 6	< 2	< 3	< 2	< 4	**< 132**	< 1	< 1	**< 79**	**< 18**
SW-1	12/12/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 114**	< 1	< 1	**< 73**	**< 23**
SW-1	12/13/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 116**	< 1	< 1	**< 62**	**< 19**
SW-1	12/14/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 160**	< 1	< 1	**< 76**	**< 21**
SW-1	12/15/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 135**	< 1	< 1	**< 67**	**< 19**
SW-1	12/16/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 139**	< 1	< 1	**< 76**	**< 21**
SW-1	12/17/09	< 1	< 1	< 5	< 1	< 2	< 2	< 3	**< 125**	< 1	< 1	**< 78**	**< 22**
SW-1	12/18/09	< 2	< 2	< 6	< 1	< 3	< 3	< 4	**< 168**	< 1	< 2	**< 96**	**< 29**
SW-1	12/18/09	< 3	< 4	< 9	< 4	< 8	< 4	< 7	**< 20**	< 3	< 3	< 34	< 12
SW-1	12/19/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 123**	< 1	< 1	**< 62**	**< 22**
SW-1	12/20/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 106**	< 1	< 1	< 60	< 14
SW-1	12/21/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 74**	< 1	< 1	< 43	< 15
SW-1	12/22/09	< 2	< 2	< 5	< 1	< 3	< 2	< 4	**< 90**	< 1	< 1	**< 65**	**< 18**
SW-1	12/23/09	< 1	< 2	< 4	< 2	< 3	< 2	< 4	**< 85**	< 1	< 1	**< 62**	**< 18**
SW-1	12/24/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 87**	< 1	< 1	< 59	< 14
SW-1	12/25/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 70**	< 1	< 1	< 48	< 14
SW-1	12/26/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 52**	< 1	< 1	< 38	< 11
SW-1	12/27/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 92**	< 1	< 1	**< 71**	**< 19**
SW-1	12/28/09	< 1	< 2	< 4	< 1	< 3	< 2	< 2	**< 73**	< 1	< 1	< 50	< 14
SW-1	12/29/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 64**	< 1	< 1	< 46	< 14
SW-1	12/30/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 45**	< 1	< 1	< 35	< 6
SW-1	12/31/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 79**	< 1	< 1	< 50	**< 16**
SW-2	05/05/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 28**	< 1	< 1	< 29	< 10
SW-2	05/12/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 31**	< 1	< 1	< 28	< 8
SW-2	05/19/09	< 4	< 4	< 10	< 4	< 8	< 5	< 8	**< 32**	< 3	< 4	< 55	< 13
SW-2	05/26/09	< 4	< 4	< 11	< 4	< 9	< 5	< 7	< 15	< 4	< 4	< 34	< 13

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	06/02/09	< 6	< 4	< 11	< 5	< 12	< 5	< 10	< 8	< 5	< 6	< 23	< 7
SW-2	06/08/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 23**	< 1	< 1	< 26	< 7
SW-2	06/15/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 17**	< 1	< 2	< 23	< 7
SW-2	06/22/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 10	< 2	< 2	< 18	< 6
SW-2	06/26/09	< 3	< 4	< 8	< 3	< 7	< 4	< 6	**< 17**	< 3	< 3	< 33	< 9
SW-2	06/27/09	< 2	< 3	< 6	< 3	< 5	< 3	< 5	**< 28**	< 2	< 2	< 38	< 12
SW-2	06/28/09	< 3	< 3	< 7	< 2	< 5	< 3	< 6	**< 25**	< 2	< 2	< 39	< 8
SW-2	06/29/09	< 3	< 3	< 8	< 3	< 6	< 3	< 6	**< 30**	< 3	< 3	< 42	< 14
SW-2	06/30/09	< 3	< 4	< 8	< 3	< 7	< 4	< 6	**< 39**	< 3	< 3	< 49	< 15
SW-2	07/01/09	< 2	< 3	< 7	< 2	< 5	< 3	< 6	**< 31**	< 3	< 3	< 43	< 12
SW-2	07/02/09	< 3	< 3	< 7	< 3	< 6	< 3	< 6	**< 27**	< 2	< 3	< 43	< 14
SW-2	07/03/09	< 3	< 3	< 7	< 2	< 5	< 3	< 5	**< 30**	< 2	< 2	< 39	< 13
SW-2	07/04/09	< 3	< 4	< 7	< 3	< 5	< 3	< 6	**< 33**	< 2	< 3	< 45	< 14
SW-2	07/05/09	< 3	< 3	< 8	< 3	< 6	< 3	< 5	**< 29**	< 2	< 3	< 43	< 12
SW-2	07/06/09	< 2	< 2	< 6	< 2	< 5	< 3	< 5	**< 26**	< 2	< 2	< 34	< 13
SW-2	07/07/09	< 2	< 3	< 7	< 3	< 5	< 3	< 6	**< 28**	< 2	< 2	< 42	< 11
SW-2	07/08/09	< 2	< 3	< 6	< 2	< 4	< 3	< 5	**< 29**	< 2	< 2	< 38	< 10
SW-2	07/09/09	< 3	< 3	< 5	< 2	< 5	< 3	< 5	**< 18**	< 2	< 3	< 32	< 8
SW-2	07/10/09	< 3	< 3	< 7	< 3	< 6	< 3	< 5	**< 24**	< 2	< 2	< 37	< 8
SW-2	07/11/09	< 3	< 3	< 7	< 2	< 5	< 3	< 6	**< 41**	< 2	< 3	< 48	< 15
SW-2	07/12/09	< 3	< 3	< 8	< 4	< 5	< 3	< 5	**< 32**	< 3	< 3	< 41	< 14
SW-2	07/13/09	< 2	< 2	< 5	< 3	< 4	< 2	< 4	**< 17**	< 2	< 2	< 26	< 9
SW-2	07/14/09	< 2	< 2	< 6	< 2	< 5	< 3	< 5	**< 17**	< 2	< 2	< 27	< 9
SW-2	07/15/09	< 2	< 3	< 7	< 3	< 5	< 3	< 5	**< 20**	< 2	< 3	< 31	< 10
SW-2	07/16/09	< 3	< 3	< 6	< 3	< 5	< 3	< 5	**< 17**	< 3	< 3	< 29	< 9
SW-2	07/17/09	< 3	< 4	< 8	< 4	< 6	< 3	< 6	**< 22**	< 3	< 3	< 35	< 13
SW-2	07/18/09	< 3	< 3	< 6	< 3	< 5	< 3	< 6	**< 18**	< 3	< 3	< 28	< 9
SW-2	07/19/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**< 17**	< 2	< 2	< 25	< 8
SW-2	07/20/09	< 2	< 2	< 6	< 2	< 4	< 3	< 4	**< 18**	< 2	< 2	< 27	< 9
SW-2	07/21/09	< 3	< 4	< 10	< 3	< 8	< 4	< 8	**< 33**	< 3	< 3	< 50	< 15
SW-2	07/22/09	< 3	< 4	< 8	< 3	< 6	< 4	< 6	**< 27**	< 3	< 3	< 39	< 14

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	07/23/09	< 3	< 3	< 8	< 3	< 5	< 3	< 6	**< 24**	< 3	< 3	< 37	< 11
SW-2	07/24/09	< 4	< 4	< 10	< 4	< 8	< 5	< 7	**< 31**	< 4	< 4	< 48	< 14
SW-2	07/25/09	< 2	< 3	< 6	< 3	< 5	< 3	< 5	< 12	< 2	< 2	< 21	< 6
SW-2	07/26/09	< 2	< 3	< 6	< 2	< 5	< 3	< 5	< 14	< 2	< 3	< 25	< 7
SW-2	07/27/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	< 10	< 2	< 2	< 19	< 6
SW-2	07/28/09	< 3	< 3	< 6	< 3	< 6	< 3	< 6	< 9	< 2	< 3	< 19	< 6
SW-2	07/29/09	< 4	< 4	< 9	< 4	< 9	< 5	< 8	< 15	< 4	< 4	< 32	< 10
SW-2	07/30/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**>10000**	< 1	< 1	< 48	< 15
SW-2	07/31/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**>10000**	< 1	< 1	< 59	< 14
SW-2	08/01/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**>10000**	< 1	< 1	< 44	< 13
SW-2	08/02/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 58**	< 1	< 1	< 50	< 14
SW-2	08/03/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 63**	< 1	< 1	< 52	< 14
SW-2	08/04/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 41**	< 1	< 1	< 34	< 10
SW-2	08/05/09	< 1	< 2	< 5	< 2	< 3	< 2	< 3	**< 33**	< 1	< 1	< 33	< 12
SW-2	08/06/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 33**	< 1	< 1	< 35	< 11
SW-2	08/07/09	< 2	< 2	< 5	< 2	< 3	< 2	< 4	**< 34**	< 1	< 2	< 37	< 12
SW-2	08/08/09	< 2	< 2	< 4	< 1	< 3	< 2	< 3	**< 34**	< 1	< 2	< 35	< 12
SW-2	08/09/09	< 2	< 2	< 4	< 1	< 3	< 2	< 3	**< 31**	< 1	< 1	< 30	< 10
SW-2	08/10/09	< 2	< 2	< 5	< 1	< 3	< 2	< 4	**< 33**	< 1	< 1	< 38	< 15
SW-2	08/11/09	< 2	< 2	< 5	< 2	< 4	< 2	< 3	**< 34**	< 1	< 2	< 37	< 12
SW-2	08/12/09	< 1	< 2	< 5	< 2	< 3	< 2	< 3	**< 27**	< 1	< 1	< 31	< 10
SW-2	08/13/09	< 2	< 2	< 6	< 3	< 4	< 2	< 4	**< 34**	< 2	< 2	< 39	< 13
SW-2	08/14/09	< 2	< 2	< 6	< 2	< 4	< 3	< 4	**< 56**	< 2	< 2	< 54	< 13
SW-2	08/15/09	< 1	< 2	< 4	< 1	< 3	< 2	< 4	**< 41**	< 1	< 2	< 38	< 12
SW-2	08/16/09	< 2	< 2	< 5	< 2	< 3	< 2	< 4	**< 40**	< 2	< 2	< 41	< 9
SW-2	08/17/09	< 2	< 2	< 5	< 2	< 3	< 2	< 4	**< 42**	< 2	< 2	< 43	< 15
SW-2	08/18/09	< 2	< 2	< 6	< 2	< 4	< 2	< 4	**< 42**	< 2	< 2	< 46	< 11
SW-2	08/19/09	< 2	< 2	< 6	< 2	< 4	< 3	< 4	**< 44**	< 2	< 2	< 44	< 13
SW-2	08/20/09	< 2	< 3	< 7	< 1	< 4	< 3	< 5	**< 186**	< 2	< 2	**< 112**	**< 42**
SW-2	08/21/09	< 2	< 2	< 6	< 2	< 4	< 3	< 4	**< 134**	< 1	< 2	**< 85**	**< 28**
SW-2	08/22/09	< 2	< 2	< 8	< 2	< 4	< 3	< 5	**< 158**	< 2	< 2	**< 109**	**< 31**

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	08/23/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 129**	< 1	< 1	**< 88**	**< 23**
SW-2	08/24/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 104**	< 1	< 1	**< 68**	**< 18**
SW-2	08/25/09	< 2	< 2	< 6	< 2	< 3	< 2	< 4	**< 121**	< 1	< 2	**< 77**	**< 23**
SW-2	08/26/09	< 1	< 2	< 3	< 1	< 2	< 2	< 3	**>10000**	< 1	< 1	< 47	< 13
SW-2	08/27/09	< 1	< 1	< 4	< 1	< 2	< 2	< 2	**>10000**	< 1	< 1	< 39	< 13
SW-2	08/28/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**>10000**	< 1	< 1	< 51	< 14
SW-2	08/29/09	< 1	< 1	< 4	< 2	< 3	< 2	< 3	**< 52**	< 1	< 1	< 43	**< 16**
SW-2	08/30/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 59**	< 1	< 1	< 53	< 13
SW-2	08/31/09	< 1	< 2	< 4	< 2	< 3	< 2	< 3	**< 59**	< 1	< 2	< 42	**< 17**
SW-2	09/01/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 55**	< 1	< 1	< 44	< 12
SW-2	09/02/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 50**	< 1	< 1	< 39	< 12
SW-2	09/03/09	< 1	< 2	< 3	< 1	< 2	< 2	< 3	**< 61**	< 1	< 1	< 48	< 14
SW-2	09/04/09	< 2	< 2	< 5	< 2	< 3	< 2	< 4	**< 36**	< 1	< 2	< 37	< 13
SW-2	09/05/09	< 1	< 2	< 3	< 1	< 3	< 2	< 3	**< 32**	< 1	< 1	< 34	< 10
SW-2	09/06/09	< 2	< 2	< 5	< 2	< 4	< 2	< 4	**< 35**	< 2	< 2	< 38	< 14
SW-2	09/07/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 36**	< 1	< 1	< 37	< 12
SW-2	09/08/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**< 26**	< 1	< 1	< 26	< 9
SW-2	09/09/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 23**	< 1	< 1	< 23	< 8
SW-2	09/10/09	< 3	< 3	< 7	< 2	< 5	< 3	< 6	**< 31**	< 2	< 3	< 42	< 12
SW-2	09/11/09	< 2	< 2	< 6	< 2	< 4	< 3	< 4	**< 23**	< 2	< 2	< 31	< 11
SW-2	09/12/09	< 2	< 3	< 6	< 2	< 4	< 3	< 5	**< 25**	< 2	< 2	< 33	< 10
SW-2	09/13/09	< 3	< 4	< 9	< 3	< 7	< 4	< 7	**< 31**	< 3	< 4	< 48	< 12
SW-2	09/14/09	< 3	< 3	< 8	< 3	< 6	< 3	< 6	**< 22**	< 2	< 3	< 35	< 12
SW-2	09/15/09	< 3	< 3	< 7	< 2	< 6	< 3	< 6	**< 22**	< 3	< 3	< 36	< 10
SW-2	09/16/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 53**	< 1	< 1	< 44	< 15
SW-2	09/17/09	< 1	< 2	< 6	< 2	< 3	< 2	< 3	**< 46**	< 1	< 1	< 45	< 14
SW-2	09/18/09	< 1	< 2	< 5	< 2	< 3	< 2	< 3	**< 43**	< 1	< 1	< 42	< 14
SW-2	09/19/09	< 1	< 2	< 5	< 2	< 3	< 2	< 3	**< 33**	< 1	< 1	< 33	< 12
SW-2	09/20/09	< 1	< 2	< 4	< 2	< 3	< 2	< 3	**< 35**	< 1	< 1	< 29	< 11
SW-2	09/21/09	< 1	< 1	< 4	< 1	< 3	< 2	< 3	**< 26**	< 1	< 1	< 25	< 8
SW-2	09/22/09	< 2	< 2	< 4	< 2	< 3	< 2	< 3	**< 30**	< 1	< 2	< 35	< 8

BOLDED VALUES INDICATE THE LLD WAS NOT MET
IF REPORTED AS >10,000, RESULT NOT QUANTIFIED

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	09/23/09	< 1	< 2	< 4	< 2	< 3	< 2	< 3	**< 24**	< 1	< 2	**< 27**	< 8
SW-2	09/24/09	< 1	< 2	< 5	< 2	< 3	< 2	< 3	**< 21**	< 1	< 2	**< 29**	< 9
SW-2	09/25/09	< 1	< 1	< 3	< 1	< 3	< 1	< 3	**< 20**	< 1	< 1	**< 20**	< 6
SW-2	09/26/09	< 1	< 1	< 3	< 1	< 2	< 2	< 2	**< 23**	< 1	< 1	**< 28**	< 6
SW-2	09/27/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 19**	< 1	< 1	**< 24**	< 7
SW-2	09/28/09	< 1	< 1	< 4	< 1	< 2	< 2	< 2	**< 163**	< 1	< 1	**< 72**	**< 25**
SW-2	09/29/09	< 3	< 3	< 7	< 4	< 6	< 4	< 7	< 7	< 3	< 4	< 18	< 5
SW-2	09/29/09	< 4	< 4	< 9	< 5	< 9	< 5	< 9	< 11	< 5	< 4	< 27	< 9
SW-2	09/29/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 251**	< 1	< 1	**< 114**	**< 35**
SW-2 EIML QC	09/29/09	< 2	< 4	< 6	< 3	< 5	< 3	< 5	< 9	< 2	< 2	< 22	< 4
SW-2	09/30/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 238**	< 1	< 1	**< 121**	**< 32**
SW-2	10/01/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 245**	< 1	< 1	**< 120**	**< 30**
SW-2	10/02/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 185**	< 1	< 1	**< 89**	**< 28**
SW-2	10/03/09	< 2	< 3	< 9	< 2	< 4	< 3	< 5	**< 384**	< 1	< 2	**< 171**	**< 70**
SW-2	10/04/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 605**	< 1	< 1	**< 195**	**< 64**
SW-2	10/05/09	< 1	< 2	< 6	< 1	< 2	< 2	< 4	**< 655**	< 1	< 1	**< 204**	**< 73**
SW-2	10/06/09	< 2	< 4	< 12	< 2	< 5	< 5	< 8	**< 1330**	< 2	< 2	**< 392**	**< 149**
SW-2	10/07/09	< 1	< 1	< 3	< 1	< 2	< 2	< 3	**< 50**	< 1	< 1	< 39	< 11
SW-2	10/08/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 49**	< 1	< 1	< 40	< 14
SW-2	10/09/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 51**	< 1	< 1	< 39	< 12
SW-2	10/10/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 130**	< 1	< 1	**< 70**	**< 20**
SW-2	10/11/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 117**	< 1	< 1	**< 65**	**< 22**
SW-2	10/12/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 131**	< 1	< 1	**< 62**	**< 19**
SW-2	10/13/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 36**	< 1	< 1	< 35	< 9
SW-2	10/14/09	< 2	< 2	< 5	< 2	< 4	< 3	< 5	**< 52**	< 2	< 2	< 46	**< 16**
SW-2	10/15/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 33**	< 1	< 1	< 36	< 11
SW-2	10/16/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 65**	< 1	< 1	< 47	< 14
SW-2	10/16/09	< 1	< 2	< 7	< 1	< 3	< 2	< 4	**< 659**	< 1	< 1	**< 223**	**< 70**
SW-2	10/17/09	< 1	< 1	< 2	< 0	< 2	< 1	< 2	**< 46**	< 1	< 1	< 29	< 9
SW-2	10/17/09	< 1	< 3	< 11	< 2	< 4	< 4	< 6	**< 4900**	< 1	< 1	**< 781**	**< 243**
SW-2	10/18/09	< 1	< 1	< 2	< 1	< 2	< 1	< 2	**< 42**	< 1	< 1	< 30	< 9

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	10/18/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 490**	< 1	< 1	**< 168**	**< 39**
SW-2	10/19/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 82**	< 1	< 1	< 58	**< 20**
SW-2	10/20/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 63**	< 1	< 1	< 42	< 12
SW-2	10/21/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 74**	< 1	< 1	< 57	**< 16**
SW-2	10/22/09	< 1	< 1	< 4	< 1	< 2	< 2	< 2	**< 56**	< 1	< 1	< 43	< 14
SW-2	10/23/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 50**	< 1	< 1	< 42	< 11
SW-2	10/24/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**< 47**	< 1	< 1	< 38	< 12
SW-2	10/25/09	< 1	< 1	< 5	< 1	< 2	< 1	< 3	**< 305**	< 1	< 1	**< 113**	**< 34**
SW-2	10/26/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 282**	< 1	< 1	**< 110**	**< 25**
SW-2	10/27/09	< 1	< 2	< 7	< 1	< 3	< 2	< 4	**< 386**	< 1	< 1	**< 143**	**< 51**
SW-2	10/28/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 46**	< 1	< 1	< 33	< 8
SW-2	10/29/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 73**	< 1	< 1	< 52	< 14
SW-2	10/30/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 60**	< 1	< 1	< 44	< 10
SW-2	10/31/09	< 1	< 1	< 4	< 1	< 2	< 2	< 2	**< 155**	< 1	< 1	**< 86**	**< 21**
SW-2	11/01/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 160**	< 1	< 1	**< 80**	**< 22**
SW-2	11/02/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 113**	< 1	< 1	**< 66**	**< 18**
SW-2	11/03/09	< 1	< 1	< 4	< 1	< 2	< 2	< 2	**< 91**	< 1	< 1	< 56	< 13
SW-2	11/04/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 106**	< 1	< 1	< 60	**< 19**
SW-2	11/05/09	< 1	< 2	< 5	< 1	< 3	< 2	< 3	**< 98**	< 1	< 1	**< 64**	**< 23**
SW-2	11/06/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 40**	< 1	< 1	< 36	< 9
SW-2	11/07/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 46**	< 1	< 1	< 44	< 11
SW-2	11/08/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 39**	< 1	< 1	< 32	< 12
SW-2	11/09/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 64**	< 1	< 1	< 45	< 12
SW-2	11/10/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 63**	< 1	< 1	< 42	< 13
SW-2	11/11/09	< 1	< 1	< 2	< 1	< 1	< 1	< 2	**< 56**	< 1	< 1	< 35	< 13
SW-2	11/12/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 41**	< 1	< 1	< 39	< 10
SW-2	11/13/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 39**	< 1	< 1	< 38	< 11
SW-2	11/14/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 48**	< 1	< 1	< 38	< 13
SW-2	11/15/09	< 1	< 1	< 3	< 1	< 2	< 2	< 2	**< 98**	< 1	< 1	< 56	< 15
SW-2	11/16/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 88**	< 1	< 1	< 58	**< 16**
SW-2	11/17/09	< 1	< 1	< 5	< 1	< 3	< 2	< 3	**< 117**	< 1	< 1	**< 76**	**< 16**
SW-2	11/18/09	< 2	< 3	< 8	< 1	< 4	< 3	< 5	**< 322**	< 2	< 2	**< 165**	**< 52**

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	11/19/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 149**	< 1	< 1	**< 87**	**< 23**
SW-2	11/20/09	< 1	< 2	< 5	< 1	< 2	< 2	< 4	**< 170**	< 1	< 1	**< 95**	**< 33**
SW-2	11/21/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 67**	< 1	< 1	< 52	**< 18**
SW-2	11/22/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**< 57**	< 1	< 1	< 41	< 11
SW-2	11/23/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 75**	< 1	< 2	< 57	**< 20**
SW-2	11/24/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 42**	< 1	< 1	< 39	< 10
SW-2	11/25/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 45**	< 1	< 1	< 35	< 10
SW-2	11/26/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 158**	< 1	< 1	**< 87**	**< 29**
SW-2	11/27/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 116**	< 1	< 1	**< 66**	**< 18**
SW-2	11/28/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 337**	< 1	< 1	**< 131**	**< 46**
SW-2	11/29/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 255**	< 1	< 1	**< 118**	**< 37**
SW-2	11/30/09	< 1	< 2	< 6	< 1	< 2	< 2	< 3	**< 1070**	< 1	< 1	**< 284**	**< 79**
SW-2	12/01/09	< 1	< 2	< 5	< 1	< 2	< 2	< 3	**< 824**	< 1	< 1	**< 221**	**< 57**
SW-2	12/02/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 141**	< 1	< 2	**< 77**	**< 22**
SW-2	12/03/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 179**	< 1	< 1	**< 88**	**< 23**
SW-2	12/04/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 49**	< 1	< 1	< 38	< 10
SW-2	12/05/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 78**	< 1	< 1	< 52	< 15
SW-2	12/06/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 12	< 1	< 1	< 16	< 5
SW-2	12/07/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	< 13	< 1	< 1	< 16	< 6
SW-2	12/08/09	< 1	< 1	< 2	< 1	< 2	< 1	< 1	< 9	< 1	< 1	< 13	< 4
SW-2	12/09/09	< 1	< 1	< 4	< 1	< 2	< 2	< 3	**< 105**	< 1	< 1	**< 63**	**< 18**
SW-2	12/10/09	< 1	< 2	< 5	< 1	< 3	< 2	< 4	**< 141**	< 1	< 2	**< 82**	**< 18**
SW-2	12/11/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 121**	< 1	< 1	**< 77**	**< 17**
SW-2	12/12/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 128**	< 1	< 1	**< 78**	**< 17**
SW-2	12/13/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 172**	< 1	< 1	**< 77**	**< 33**
SW-2	12/14/09	< 1	< 1	< 4	< 1	< 2	< 2	< 2	**< 168**	< 1	< 1	**< 80**	**< 19**
SW-2	12/15/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 111**	< 1	< 1	**< 60**	< 15
SW-2	12/16/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 137**	< 1	< 1	**< 74**	**< 22**
SW-2	12/17/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**< 113**	< 1	< 1	**< 66**	**< 17**
SW-2	12/18/09	< 2	< 2	< 7	< 2	< 4	< 3	< 5	**< 198**	< 2	< 2	**< 125**	**< 31**
SW-2	12/18/09	< 4	< 5	< 11	< 4	< 9	< 6	< 9	**< 26**	< 4	< 4	< 46	< 13

BOLDED VALUES INDICATE THE LLD WAS NOT MET

TABLE B-II.2 **CONCENTRATIONS OF GAMMA EMITTERS IN SURFACE WATER SAMPLES COLLECTED IN THE VICINITY OF OYSTER CREEK GENERATING STATION, 2009**

RESULTS IN UNITS OF PCI/LITER ± 2 SIGMA

SITE	COLLECTION PERIOD	Mn-54	Co-58	Fe-59	Co-60	Zn-65	Nb-95	Zr-95	I-131	Cs-134	Cs-137	Ba-140	La-140
SW-2	12/19/09	< 1	< 2	< 4	< 1	< 2	< 2	< 3	**< 113**	< 1	< 1	**< 74**	**< 21**
SW-2	12/20/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 103**	< 1	< 1	**< 63**	**< 20**
SW-2	12/21/09	< 1	< 1	< 3	< 1	< 2	< 1	< 3	**< 90**	< 1	< 1	< 55	**< 17**
SW-2	12/22/09	< 2	< 2	< 5	< 2	< 3	< 2	< 3	**< 98**	< 1	< 2	**< 72**	**< 24**
SW-2	12/23/09	< 2	< 2	< 7	< 2	< 3	< 2	< 5	**< 110**	< 2	< 2	**< 78**	**< 23**
SW-2	12/24/09	< 1	< 1	< 4	< 1	< 2	< 1	< 3	**< 79**	< 1	< 1	< 49	< 15
SW-2	12/25/09	< 1	< 1	< 4	< 1	< 2	< 1	< 2	**< 69**	< 1	< 1	< 46	< 13
SW-2	12/26/09	< 1	< 2	< 4	< 1	< 2	< 1	< 3	**< 69**	< 1	< 1	< 53	< 15
SW-2	12/27/09	< 1	< 1	< 5	< 1	< 3	< 2	< 3	**< 84**	< 1	< 1	< 54	< 15
SW-2	12/28/09	< 1	< 1	< 3	< 1	< 2	< 2	< 3	**< 77**	< 1	< 1	< 55	**< 16**
SW-2	12/29/09	< 1	< 1	< 3	< 1	< 2	< 1	< 2	**< 50**	< 1	< 1	< 37	< 10
SW-2	12/30/09	< 1	< 2	< 4	< 1	< 3	< 2	< 4	**< 83**	< 1	< 2	< 60	< 12
SW-2	12/31/09	< 1	< 2	< 4	< 1	< 3	< 2	< 3	**< 69**	< 1	< 1	< 52	< 15
OY-SW-3	09/29/09	< 5	< 5	< 10	< 5	< 9	< 5	< 8	< 10	< 4	< 5	< 25	< 8

BOLDED VALUES INDICATE THE LLD WAS NOT MET