GZA GeoEnvironmental, Inc.

FINAL
IPEC QUARTERLY LONG-TERM GROUNDWATER MONITORING REPORT
QUARTER THREE 2010
(REPORT NO. 11)
INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

PREPARED FOR:

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THE POWER OF PEOPLE™

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Re: **FINAL IPEC Quarterly Groundwater Monitoring Report**
Quarter Three 2010 (Report No. 11)
Indian Point Energy Center
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Buchanan, New York 11501

Dear Mr. Donahue:

GZA GeoEnvironmental of New York (GZA) is pleased to provide this Quarterly Groundwater Monitoring Report for Indian Point Energy Center located at 450 Broadway, Buchanan, NY.

We trust that this information satisfies your present needs. Should you need any additional information, please do not hesitate to call us at (781) 278-3805.

Very truly yours,

GZA GEOENVIRONMENTAL OF NEW YORK

Josh Simpson
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Attachments: 3 Copies

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1.0 EXECUTIVE SUMMARY

On behalf of Entergy Nuclear Northeast, Inc., GZA GeoEnvironmental of New York (GZA) has completed the Q3 2010 quarterly groundwater monitoring for the Indian Point Energy Center (IPEC), culminating in this report. Interpretations of the monitoring data have been made in the context of the current Conceptual Site Model. Development of this model began at the outset of the site investigations and has been iteratively enhanced as subsequent data has become available, in part through quarterly monitoring. The report has been written with a focus on the subject quarter's data. Relationships to prior data, more in-depth technical explanations and exceptions to generalized statements and conclusions have typically been relegated to footnotes. This report format was chosen to allow efficient assimilation of the most current data and analyses by those already familiar with the project. The footnotes contain important information and should be carefully read by all, but particularly by those less familiar with the technologies involved and the project history. It is further noted that the analyses and conclusions presented in this report are based on the data and information available up to and including the subject quarter. Data that becomes available after the subject quarter, but before the finalization date of the report is sequentially reflected in the associated subsequent reports.

Based on the quarterly groundwater sampling data for Q3 2010, GZA concludes that groundwater contaminants continue to migrate toward the Hudson River to the West, and have not migrated off the Site to the North, East or South.

Radionuclide concentrations measured during Q3 2010 were combined with previous quarterly and post-quarterly data to compute rolling average concentrations reflective of groundwater contaminant levels over the past twelve months. These data were multiplied by the associated individual zone-specific groundwater flux values, derived from the Precipitation Mass Balance Model[1], to compute yearly average radionuclide release rates to the Discharge Canal and Hudson River. The Conceptual Site Model[2] (CSM), upon which this radionuclide dose computation is based, continues to be validated through: (1) groundwater elevation data downloaded quarterly from a focused set of transducer-monitored well installations; and (2) the behavior of both the Unit 1 Strontium plume and the Unit 2 Tritium plume as evaluated each quarter. These data, in our opinion, continue to support the use of the current CSM as a basis for Long Term Monitoring Program design.

The most recent quarterly data further support the conclusion that the <u>overall Tritium activity in the Unit 2 plume</u> is generally showing a historically decreasing trend, from both qualitative and quantitative perspectives. These overall reductions are seen on **Figure G-17**, where the total Tritium activity has decreased by approximately 45% since Q2 2007, and 89% when compared to the bounding level Tritium activities. This overall trend is also evident on **Figures 6** and **6A,** where the shaded plume[3] no longer extends downgradient to the river, as first observed in the

[1] Refer to Appendix H of the Quarter 2 2009 Quarterly Long-Term Groundwater Monitoring Report for discussion of the recalibration of the Precipitation Mass Balance Model. Precipitation and groundwater elevation data were collected onsite between 2007 and 2009 and used to compute groundwater fluxes across the site. Based on analyses of these data, it was concluded that this data set sufficiently encompassed the historical variability in groundwater elevation and flux response to seasonal and yearly precipitation variability. Therefore, maximum onsite groundwater fluxes were calculated from the elevation data, and used to conservatively recalibrate the Precipitation Mass Balance Model, as discussed and employed in the Q2 2009 Quarterly LTM Report.

[2] The formulation and basis for the overall CSM and the Precipitation Mass Balance model are presented in the Hydrogeologic Site Investigation Report, January 7, 2008, prepared by GZA GeoEnvironmental, Inc, on behalf of Enercon Services, Inc., for Entergy Nuclear Northeast, Indian Point Energy Center, 450 Broadway, Buchanan, NY 10511.

[3] The plume shading on **Figure 6** demarks the estimated boundary that separates Tritium levels greater than 5,000 pCi/L from those below this value, and provides a reasonable demarcation level for illustrating plume geometry and temporal variation. Although this value equates to one-quarter of the drinking water standard for Tritium, GZA emphasizes that drinking water standards (USEPA MCLs) do not apply to the IPEC property given that there are no drinking water sources on or proximate to the site Where yearly rolling average radionuclide activity data were available for multiple depths at a given location, GZA used the highest value to

Q2 2009 quarterly data. It is further visually evident from **Figure 6A** that the core of the plume has also shown a marked decrease in concentration and extent over time in the vicinity of MW-111. These findings are consistent with our CSM, which anticipates overall decreasing trends in Tritium activity.

Consistent with one of the purposes of this Report, we also point out and explain data which, when first considered, may initially appear inconsistent with the assumptions used to develop the CSM. Such examples, where Tritium has increased in recent quarters, include:

- A transient Tritium peak in Manhole A2 and, to a lesser extent, MH-A4 was observed during the current (Q3 2010) quarterly monitoring round. Following the early July 2010 peak, the Tritium activity rapidly decreased (<1 week) to typical levels within the storm drain system. A similar transient Tritium peak was also observed in Manhole A2 during Q2 2009. As discussed in more detail in **Section 3.4** below, while the investigation into the source of these peaks is still ongoing, all indications are that it is associated with higher levels of washout entering the Fuel Storage Building (FSB) roof drain leading into MH-A2 when the SFP vent fan is not operating.
- The Q3-2010 result for MH-5 VCFD also showed a clear increase in Tritium activity when compared to the previous base line sampling results (including the previous sample from Q2 2010); however, the Post-Q3 2010 sampling data from only 10 days later show the Tritium activity in MH-5 VCFD had already returned to the previous baseline levels. The remaining radionuclides were all non-detect during both the Q3 2010 and the Post-Q3 2010 sampling events at MH-5 VCFD.
- A clear increase in the volume of water collected by the Unit 2 Leak Collection Device (LCD) was measured during the current (Q3 2010) quarter, beginning on July 5, 2010. The flow rate averaged approximately 1.5 L/day over the quarter. Investigations indicated that the increased flow could potentially be correlated[4] with atypically elevated water levels in the fuel pool, as associated with dry cask work. Following the limiting of these increases in pool water elevation, a marked decrease was observed in the LCD flow rate by the end of Quarter 3 / beginning of Quarter 4, back to levels generally consistent with baseline values of less than approximately 0.02 L/day. Based on these observations, a new figure (**Figure 6B**) has been included in this, Q3 2010, quarterly report which visually presents both the U2 LCD data and the historical Tritium data for the sampling intervals located within the Unit 2 Tritium plume boundaries. The recent LCD data are discussed in more detail in **Section 3.4** below.
- Peaks in Tritium activity have been observed in multiple sampling ports of MW-31 and MW-32 since Q1 2009, and to a lesser extent since monitoring began. This long-term variability appears to be consistent with episodic releases of Tritium historically stored in the subsurface via natural and anthropogenic Retention Mechanisms[5]. This conclusion is further supported by the tracer data and other analyses discussed in Section 3.6 of the Q1 2009 Long Term Monitoring Report.
- While Retention Mechanisms clearly appear to impact Tritium levels as summarized above, more noticeable increases in Tritium activity in a number of intervals within MW-31 and MW-32 were initially measured during the Q1 and post Q1 2010 sampling events, where Tritium activities peaked at levels higher than previously measured. Similarly elevated Tritium activities continued in Q2 and through the current Q3 and post

develop plume delineations. This is a typical approach to conservatively represent three-dimensional contaminant data sets on two-dimensional maps.

[4] While the data trends appear to correlate, it is noted that simple correlation does not demonstrate causation.

[5] These Retentions Mechanisms are discussed along with the CSM in the previously cited Hydrogeologic Site Investigation Report.

Q3 2010 sampling events at these Unit 2 locations. These Q1 through Q3 2010 Tritium peaks appear related to a Q4 2009 localized and transient surface spill from a temporary rental RWST/R.O. processing skid[6] which was first detected during routine 80-10 sampling of MH-9 in mid-January 2010.

- The activity at most downgradient wells this quarter appears to be decreasing relative to the previous quarter, with only a limited number of new peaks observed. While the number of these peaks is significantly lower than that observed in the previous quarter, it is expected that such peaks, potentially exceeding the Unit 2 Tritium I.L.s, will continue to be observed in downgradient wells as the transient RWST/R.O. spill works its way towards the river, The number and degree of Tritium peaks measured in the previous quarter (Q2 2010) resulted in an increase in the Unit 2 plume total Tritium activity. However, as shown on **Figure G-17** (**Appendix G**), this previous increase was immediately followed by a decrease (of similar magnitude) in total Tritium activity during the current, Q3 2010 quarter.
- Pursuant to the RWST/R.O. surface spill, it is further noted that Tritium activity in MH-9 quickly returned to typical background levels once the spill was addressed. It is therefore anticipated that the Tritium peaks attributed to the RWST/R.O. skid surface spill will also continue to generally decrease over the next several quarters, as is already reflected by the decrease in the current Q3 2010 graph of total Tritium activity in the Unit 2 plume.
- Our review of data generally found no compelling evidence that the observed increases in Tritium activity result from development of new, unidentified leaks in the Unit 2 SFP or other monitored Systems, Structures, or Components. However, it is noted that the LCD showed increased flow rate during this quarter. While all LCD water is fully contained and does not enter the groundwater regime, and the Tritium peaks observed in the groundwater monitoring intervals can be explained by the transient RWST/R.O. processing skid surface spill and associated Retention Mechanisms, peaks in MW-31, MW-32 and MH-5 VCFD appear to be potentially correlated, on a temporal basis, with this increased LCD flow rate[7].

The overall <u>Sr-90 activity within the Unit 1 plume</u> had generally been stable to decreasing in response to the West Pool demineralization operations conducted by Entergy beginning in 2006. However, the final defueling of the Unit 1 SFPs, completed in Q4 of 2008, resulted in a noticeable increase in Strontium activity proximate to the SFPs, followed by downgradient increases (see **Figure 7** and **7A**). This was expected given the requirement to temporarily raise the pool levels for fuel rod removal, thus increasing leakage rate from the SFPs[8]. As expected, the levels proximate to the pool have since decreased to pre-defueling Strontium activities and levels downgradient of the pool are currently exhibiting decreasing trends approaching pre-defueling levels or have already decreased to pre-defueling Strontium activities (MW-55, MW-57) this quarter. It is expected that the further downgradient wells will also fully return to pre-defueling levels once this transient perturbation has passed through the groundwater flow system. It is anticipated that this flushing mechanism will be protracted given the impact of partitioning on Strontium levels in the groundwater.

Based on the data and analyses provided herein, our conclusion is that the Tritium and Strontium plumes have both been undergoing overall long-term reductions in activity after the

[6] The spill involved a rented RWST/R.O. processing skid brought on-site by an outside contractor. As such, this equipment is not an in-place Unit 2 SSCs and is no longer on site.

[7] While the data trends appear to correlate on a temporal basis, it is noted that simple correlation does not demonstrate causation.

[8] As of late 2008, all the fuel rods have been removed from the Unit 1 SFPs and the pool water has been drained. As such, the Unit 1 SFPs is no longer an active source of radionuclides to the subsurface.

respective source interdiction. Given this conclusion, and the recognition that Entergy has terminated all identified leaks in the Unit 2 SFP[9] and has decommissioned the Unit 1 SFPs, these plumes satisfy the requirements for Monitored Natural Attenuation (MNA), the remedial technology selected for the IPEC Site. However, it is also concluded that, while a portion of the leakage from the above cited localized, transient spills traveled directly to the saturated groundwater regime and resulted in the observed transient "peaks" in radionuclide levels, additional portions of these releases likely remain above the water table as recharge to the various Retention Mechanisms. This additional unsaturated zone source recharge will likely be manifested in the future as additional non-specific peaks in radionuclide levels due to episodic releases to the groundwater flow regime from these mechanisms (e.g., from intense/prolonged precipitation events). These localized release events also interfere with the goal of resetting Site Investigation Levels (I.L.s); updating of Strontium I.L.s must therefore await return to the original Strontium baseline levels existing prior to Unit 1 defueling, and additional seasonal data is required to better assess Tritium response to precipitation-driven Retention Mechanism release variability. Therefore, the ultimate confirmation of the above conclusions will require monitoring over a number of years so as to allow ranges in seasonal variation to be adequately reflected in the monitoring data and thus demonstrate the rate of continued depletion of Tritium and Strontium from the Retention Mechanisms. In this regard, it is important to recognize that even with the somewhat increased Tritium levels currently observed due to the transient surface spill from the temporary rental RWST/R.O. skid, the amount of radionuclides being released through the groundwater pathway is still small compared to permitted levels of Tritium discharge to the river through the Discharge Canal.

In summary, based on the data collected to date, the apparent strength of the CSM to evaluate that data, and the completion of source interdictions by Entergy, we believe all Program Objectives (see **Section 3.0**) are being met. These objectives are consistent with and fully encompass the guidance provided in the NEI Groundwater Protection Initiative (GPI).

[9] Further justification for this conclusion can be found in Section 3.6 of the Q1 2009 Quarterly Monitoring Report as well as the Hydrogeologic Site Investigation Report. The Q1 2009 Report summarizes additional, more quantitative analyses which were completed to further investigate the integrity of the Unit 2 SFP. These analyses provide further support for the original conclusion that the Unit 2 SFP is no longer leaking. However, given the behavior observed in the Unit 2 collection device data (see Section 3.6 of the Q1 2009 Long Term Monitoring Report and the more recent data presented herein for this quarter – Q3 2010), additional investigations/data evaluations are underway to further rule out potential Unit 2 SFP leak mechanisms. In this regard, it is noted that these analyses cannot definitively and completely rule out the possibility of a remaining small leak which could then also be supplying Tritium to the groundwater flow regime in addition to the Retention Mechanism(s) and surface spill from the process skid discussed above. While it is not possible to quantify the size of the minimum detectable leak with any degree of certainty, we believe that the maximum leak rate from the Unit 2 SFP that could potentially remain undetected by the groundwater monitoring system is less than 10 to 30 gpd (0.007 to 0.021 gallons per minute). It is also likely that if a small leak exists in the Unit 2 SFP liner, it should not get worse with time. This opinion is based on liner evaluations previously conducted by Entergy. It is further emphasized that while a leak of more than 0.02 gallons per minute should be large enough to be readily detectable with the existing Long Term Monitoring Program; this amount of Tritium release to the river is still small compared to permitted levels of Tritium discharge to the river through the Discharge Canal.

2.0 SCOPE OF WORK

During Q3 2010, GZA performed groundwater monitoring at IPEC in Buchanan, New York (Site) as part of IPEC's overall Long Term Groundwater Monitoring Program (LTMP) at the Site[10]. The overall foundation for the development and execution of this LTMP is based on the CSM, a description of which is contained within GZA's Hydrogeologic Site Investigation Report[11]. The scope of work completed for this quarter's monitoring is described in the Sections below. Refer to **Figures 1 and 2** for a Site Location Plan and Site Plan. **Figure 3** provides a Lower Hudson Valley Geologic Map and **Figure 4** summarizes Current and Potential Future SSC Source Locations.

2.1 Groundwater Elevation Measurement

GZA maintains a network of long-term monitoring transducers and dataloggers as part of the instrumentation located across the Site. These instruments record groundwater elevation and temperature measurements at regular time intervals[12], which are then downloaded on a quarterly basis[13]. Transducer installation logs are presented in **Appendix B**.

During the quarterly sampling, GZA downloaded groundwater elevation data from the long-term monitoring transducers, which collected data over the entire duration of the quarter. The low-tide groundwater elevation data during Q3 2010 (07/31/2010) from these 22 transducers are presented in **Table 2** and compared to historic minimum and maximum values on **Figure 5A**[14]**.** The Q3 2010 groundwater elevation data at two locations (three transducer intervals) are outside the Q2-2007 through Q2-2009 range; however, the maximum deviation was still only one foot in elevation. In addition, the data showed no change in groundwater flow direction and no substantial variations in overall horizontal and vertical gradients were evident from these Q3 2010 groundwater elevation data. Therefore, these data demonstrate that substantial variations to the observed flow field have <u>not</u> occurred. These data thus further validate the applicability of the Precipitation Mass Balance Model (PMBM) for use in subsequent radiological dose computations – see **Section 3.1**.

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[10] Refer to the "Quarterly Long-Term Groundwater Monitoring Report Q2–Q4 2007 (Report No. 1)," dated May 2008 for Site background information and a description of the environmental setting.

[11] Hydrogeologic Site Investigation Report, January 7, 2008, prepared by GZA GeoEnvironmental, Inc, on behalf of Enercon Services, Inc., for Entergy Nuclear Northeast, Indian Point Energy Center, 450 Broadway, Buchanan, NY 10511.

[12] Currently, transducers record groundwater elevation and temperature readings on a 20 minute time interval so as to allow capture of tidal variability. An original, more extensive network of pressure transducers provided critical data inputs for the development of the CSM and the computation of yearly radiological dose to the Hudson River. Over the first nine quarters of the LTM program (Q2 2007 through Q2 2009) sufficient data was collected from this more extensive network of transducers to capture groundwater elevation response to seasonal and yearly precipitation variability. Therefore, starting with the Q3 2009 quarterly report, the transducer monitoring program was refocused on a select subset of locations to routinely monitor the on-Site groundwater conditions going forward. These locations were selected to provide the data required to document that groundwater flow conditions remain consistent with the CSM, thus demonstrating the veracity of the subsequent dose computations. The rationale for the specific locations and depths included in the LTMP transducer redeployment are provided in Appendix K of the Q1 2009 Quarterly Monitoring Report (Report No.5), dated July 2, 2010 and Appendix J of the Q2 2009 Quarterly Monitoring Report (Report No.6).

[13] With regard to these ongoing long term monitoring locations, it is noted that the transducers have a limited life. While some of the transducers can be replaced, and have been replaced in the past, others are permanently installed in the subsurface and are no longer accessible for replacement. However, with time, the base of data upon which model validity is assessed becomes increasingly more robust. Therefore, if some of these transducers fail over time, it is not likely that replacement will be imperative. This is because the likelihood of encountering a precipitation event substantially outside the already captured range becomes increasingly more remote with time as more data are collected. In addition, it is again emphasized that considerable conservatism has been incorporated within the model development and the dose rates computed are still far below those permitted by regulation.

[14] Figure 5, which previously presented shallow and deep groundwater contours, can be found in quarterly reports prior to, and including Q2 2009. This figure is no longer required given that sufficient quarterly contour data has already been obtained (See Q2 2009 for further analysis).

2.2 Monitoring Installation Sampling

During Q3 2010, GZA collected groundwater samples for radionuclide analysis from scheduled sampling intervals within select monitoring installations ("wells") as shown in **Table 3**. Chains of Custody for these samples are presented in **Appendix C**. Collection of additional groundwater sample volume to provide aliquots to regulatory agencies (e.g., Nuclear Regulatory Commission (NRC), NYDEC, etc.) was not required this quarter.

GZA used a number of different types of pumping equipment depending upon the sampling method and the characteristics of the individual monitoring installation[15]. **Table 1** lists the monitoring installations sampled, the sampling depths and elevations within sampling installations, and the sampling method and equipment used.

In general, GZA implemented two basic methods of sampling to collect representative groundwater samples: the Low Flow method and a modified well volume purge method. The Low Flow method allows collection of representative groundwater samples from discrete sampling zones within a monitoring installation, while limiting the accumulation of wastewater[16]. As agreed by Entergy Nuclear Northeast, the NRC, NYSDEC, and GZA, the modified traditional purge method[17] allows for the collection of a representative groundwater sample from a monitoring installation after purging 1.5 volumes of water[18]. We implemented this method in wells where low flow sampling was not practical. Sampling Data Sheets summarizing water quality data and sampling information are presented in **Appendix D**.

With all of the above sampling methods, GZA used dedicated sampling equipment, including polyethylene and/or nylon tubing and submersible electric pumps to the extent practical. The use of dedicated sampling equipment limits the possibility of cross-contamination between monitoring installations and/or individual multi-level samples within a single installation. Refer to T**able 1** for a summary of the sampling methods, equipment, frequency, and depths employed during this quarter's groundwater monitoring round.

2.3 Vapor Containment Building Foundation Drain Sampling

GZA collected a water sample from on-Site manholes MH-5 VCFD, B-1 and B-6 to characterize discharge from foundation drains around and below the Unit 2 and 3 Vapor Containment Structures. These drains include both foundation drains around the building peripheries ("curtain drains") as well as those around the sumps near the middle of the structures ("reactor sump footing drains"[19]).[20]

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[15] Refer to Section 4.3 of the Final 2007 Quarterly Long-Term Groundwater Monitoring Report No. 1, dated May 2008, for sampling method and equipment selection rationale.

[16] As described in: Low-Flow Sample Collection, GZA, 7/18/2007

[17] As described in: Modified Traditional Groundwater Sample Collection, GZA, 7/18/2007

[18] When external factors (such as well-surface-flooding from storm water runoff or overland flow of plant component leaks) might have infiltrated the top of the well and impacted ambient groundwater conditions at a specific sampling location, GZA typically purged three to five volumes of water (using the modified traditional purge method) prior to collection of a sample to attempt to obtain a representative groundwater sample.

[19] We could not verify that a foundation drain exists around the reactor sump in Unit 2. The assumption that it does exist is based on the plans for Unit 3 and the similarities in construction of both units.

[20] These two Unit 2 drains which discharge into MH-5, along with similar drains for Unit 3 which discharge into Manholes B-1 and B-6, form an integral part of the early leak detection monitoring network. However, sampling from these three manholes has generally been problematic for a number of reasons, but particularly due to conflicts with plant security measures which mandate that the manhole covers be permanently welded shut. Some limited access has been reestablished by modifying the manhole covers to allow for a small access opening. However, for Manholes B-1 and B-6, this modification still limits the ability to routinely collect samples clearly representative of only the foundation drain discharges rather than the total flow through the storm drains. The piping configuration in MH-5 does allow sampling specific to the foundations drains, hence the designation of this sample as MH-5 VCFD (i.e., Vapor Containment Foundation Drain). Further work is being undertaken on the manhole sampling systems in B-1 and B-6 to facilitate more representative sampling of these foundations drains.

2.4 Proactive Mid-Quarter and Confirmatory Sample Collection

In response to the recent peaks in Tritium activity in multiple MW-31 and MW-32 sampling intervals, additional Post-Q3 2010 groundwater samples were collected at all sampling intervals within MW-31 and MW-32 (as well as MW-30). Post-Q3 2010 groundwater samples were also collected at MW-33, MW-111 and MH-5 VCFD. The MH-5 VCFD confirmatory sample was collected to investigate/verify the elevated Tritium result during the Q3 2010 sampling event (discussed in **Section 3.4.4** below).

The results of the confirmatory and proactive mid-quarter samples are presented in **Section 3.4** along with the quarterly data. Sampling Data Sheets summarizing water quality data and sampling information are presented in **Appendix E**.

2.5 Preventative Maintenance

GZA performed general wellhead maintenance tasks, such as housekeeping of well vaults and roadboxes, and replacement of dedicated sampling equipment, tubing and transducers, as required.

3.0 DATA EVALUATION

The Long Term Monitoring Program was designed to provide data to address four main objectives:

- Monitor radionuclide activities and evaluate groundwater flow rate to both detect and characterize current and potential future off-Site groundwater contaminant migration to the Hudson River, both via direct groundwater discharge to the river and through infiltration into the Discharge Canal, from unplanned radionuclide releases of liquid effluents, so as to allow computation of potential radiation dose to the public from these releases;
- Monitor groundwater proximate to Systems, Structures and Components (SSCs) that exhibit a credible probability of resulting in a visually undetected release of radionuclides to the subsurface carrying an activity level of significance;
- Monitor groundwater along the property boundary to confirm that contaminated groundwater is not migrating off of the property to locations other than the river; and
- Monitor the groundwater plumes identified on-Site to demonstrate overall reductions in total activity over time as is consistent with the requirements of Monitored Natural Attenuation (MNA)[21], the selected remediation for the IPEC Site.

These objectives are consistent with and fully encompass the guidance provided in the NEI Groundwater Protection Initiative (GPI). The following sections provide data analyses to address these four objectives.

3.1 Groundwater Mass Flux Computation

As presented in the Hydrogeologic Site Investigation Report, the groundwater flow in both the upper and lower flow zones is toward the power block area from the North, East and South, with subsequent discharge to the Hudson River to the West. We estimate that groundwater flow associated with infiltration from the watershed may be as deep as 350 feet, but still ultimately discharges to the river. A corollary to this conclusion is that there is no groundwater flow, and thus no off-Site radionuclide migration from the power block area to the North, East or South.

To estimate groundwater flow (i.e., groundwater mass flux) beneath the Site, a groundwater flow model was constructed based on a precipitation mass balance analysis. This analysis is based on the precept that, on a long term average, the groundwater flowing through and discharging from the aquifer is equal to the watershed infiltration recharge; this conclusion was reached because the only substantial source of recharge to the aquifer is areal recharge derived from precipitation. The previous fifteen year average for precipitation measured at the Site is approximately 36 inches per year. Based on a USGS infiltration study[22], as well as the Precipitation Mass Balance Model (PMBM) calibration[23], approximately 25 percent of the

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[21] The selection of MNA as the remedial strategy for the Site is discussed further in the Hydrogeologic Site Investigation Report.

[22] USGS. Water Use, Ground-Water Recharge and Availability, and Quality of Water in the Greenwich Area, Fairfield County, Connecticut and Westchester County, New York, 2000-2002.

[23] The Precipitation Mass Balance Model (PMBM) was initially calibrated to groundwater fluxes based on a Darcy's Law Model with groundwater gradients derived from Q2 2007 (June 1, 2007) low-tide groundwater elevation contours (initial reference data set). The two models use different sets of input parameters which are not dependent or related to each other. This calibration not only verified the reasonableness of the overall groundwater flow rates predicted by the PMBM, but also allowed further discretization of the groundwater flow into upper and lower flow zones as well as flow volumes upgradient and downgradient of the Discharge Canal. After reviewing the groundwater elevation and precipitation data from the Indian Point meteorological station over the time period from Q2 2007 to Q2 2009, it was concluded that sufficient seasonal data had been collected to encompass the majority of the precipitation variability observed over the last fifteen years. Therefore, the PMBM was also recalibrated after collecting the final full set of transducer data in Q2 2009. Data analyses demonstrated that recalibration to the Q4 2008 data set yielded the most

precipitation falling on pervious surfaces over the Site watershed area recharges the groundwater system via infiltration.

Since precipitation represents the driving variable for groundwater flux in the PMBM[24], the yearly precipitation just prior to Q3 2010 (approximately 37 inches) was calculated and input into the recalibrated model to compute the flows used in the estimation of Q3 2010 dose values. Based on the USGS study cited above, the aquifer recharge rate is therefore approximately 10 inches for the year prior to the Q3 2010 monitoring event. Applying this value to the pervious surfaces within the six individual groundwater flow zones shown on **Figure 4**, it is estimated that approximately 5 gpm of groundwater flowed into the Discharge Canal from the upper and lower zones during the previous year. In addition, approximately 9 gpm and 11 gpm of groundwater flowed into the Hudson River from the upper and lower zones, respectively. Storm water discharging into the Discharge Canal and directly into the Hudson River was estimated to be approximately 41 and 4 gpm, respectively. These flows are further subdivided into flow zones with the further detail shown in the table in **Appendix F.**

3.2 Groundwater Sampling

The following sections describe the groundwater sampling results and associated QA/QC protocols.

3.2.1 Groundwater Sampling Results

Groundwater samples collected on behalf of Entergy during Q3 2010 were analyzed at GEL Laboratories for Tritium, Sr-90, Cs-137, Co-60, and Ni-63[25]. T**able 3** presents the Q3 2010 analytical results for these radionuclides. The rolling yearly averages, which are calculated using all the valid data from the previous year [Q4 09 through Q3 10], including Mid-Quarter and confirmatory samples, are also presented in **Table 3**. **Table 4** presents minimum detection concentrations (MDC), standard deviation, and I.L.s assigned to each well for the Q3-2010 analytical results. **Table 5** presents historic Site groundwater analytical data. Isopleth maps of rolling averages for Tritium and Sr-90 are presented in **Figures 6** and **7**, respectively. **Figure 8** presents a data map of rolling averages for Cs-137, Co-60, and Ni-63[26].

An overall evaluation of the sample handling, shipment and analytical procedures, indicates that the quality assurance quality control protocols have been met in Q3 2010 for all of the samples, and the analytical results should be useable as presented in **Table 5**. This conclusion is further supported by a review of the Q3 2010 analytical data, as compared to previous historical trends.

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conservative (highest dose to the river) calibration of the nine quarterly data sets obtained during the LTMP, thus this quarter's (Q4 2008) data set was adopted for further dose computations. The recalibration of the model to the Q4 2008 data yielded Unit ½ Zone and total groundwater fluxes approximately 40% and 25% greater, respectively, than the original reference (Q2 2007) data set. Further information and the data analyses are provided in the Q2 2009 LTM report.

[24] To continue to validate the appropriateness and applicability of the PMBM, a subset of the existing transducers are being maintained and monitored quarterly as part of the Long Term Monitoring Program, starting with the Q3 2009 Quarterly Report. The primary objective of maintaining these transducers is to provide ongoing confirmatory data that demonstrate substantial changes to the on-Site groundwater flow field have not taken place and thus verify that the basic assumptions inherent in the PMBM continue to remain valid. The transducer locations are provided on **Figure 5A** of this quarterly report, and the rationale for the selection of these specific individual transducer locations is discussed in the Q1 and Q2 2009 quarterly reports. With regard to these ongoing long-term monitoring locations, it is noted that the transducers have a limited life. While some of the transducers can be replaced, and have been replaced in the past, others are permanently installed in the subsurface and are no longer accessible for replacement. However, with time, the base of data upon which model validity is assessed becomes increasingly more robust. Therefore, if some of these transducers fail over time, it is not likely that replacement will be imperative. This is because the likelihood of encountering a precipitation event substantially outside the already captured range becomes increasingly more remote with time as more data is collected. In addition, it is again emphasized that considerable conservatism has been incorporated within the model development and the dose rates computed are still far below those permitted by regulation.

[25] It should be noted that samples were also analyzed for gamma emitters via gamma spectroscopy. Although only Co-60 and Cs-137 are reported, gamma spectroscopy should detect and identify other gamma emitters if they became present in groundwater.

[26] Isopleths were not drawn for Cs-137, Co-60, and Ni-63 because the few positive detections observed did not indicate the existence of a groundwater plume containing these radionuclides. This is likely a result of the high surface affinity (highly adsorptive nature) of these radionuclides for solid geological materials. They therefore tend to rapidly partition out of the groundwater.

Refer to **Section 5.2.2** of the Final 2007 Quarterly Long-Term Groundwater Monitoring Report No. 1 for further details pursuant to quality assurance quality control protocols.

3.3 Radionuclide Release Rates

The recalibrated PMBM-derived groundwater flows within each of the six flow zones are multiplied by yearly rolling average radionuclide levels within each zone to compute groundwater radionuclide release rates to the Discharge Canal and Hudson River. These groundwater radionuclide release rates are computed separately for upper and lower flow zones as well as upgradient and downgradient of the Discharge Canal. The selection of specific monitoring locations for each of the six zones is described in the January 25, 2008 Memorandum – Synopsis of Long Term Monitoring Plan Bases.

Storm drain flows[27] computed based on yearly precipitation rates are multiplied by radionuclide concentrations measured in the storm drains to compute the associated storm drain radionuclide release rates[28] to the Discharge Canal and Hudson River.

The radionuclide release rates from the groundwater and storm drains to the Discharge Canal and Hudson River for Q3 2010 are shown in the table below.

	GROUNDWATER AND SURFACE WATER TO RIVER (Ci/YR)	GROUNDWATER AND SURFACE WATER TO CANAL (Ci/YR)
Northern Clean Zone*	3.64E-04	0.00E+00**
Unit 2 North Zone	5.55E-04	4.17E-02
Unit ½ Zone	5.98E-03	6.34E-03
Unit 3 North Zone	2.87E-03	8.32E-04
Unit 3 South Zone	1.67E-03	1.90E-02
Southern Clean Zone*	3.38E-03	1.17E-02

* Activity in the Northern Clean Zone is attributable to an assumed Tritium background concentration of 150 pCi/L in the groundwater. The remaining radionuclides were assumed to not be present in this streamtube. Radionuclide release rate in the Southern Clean Zone is calculated from activity measured in monitoring wells MW-40 and MW-51.

** The radionuclide release rate to the Discharge Canal from the Northern Clean Zone is zero because the Discharge canal does not extend far enough to the north to be downgradient of the Northern Clean Zone.

These release rates are then used by Entergy to calculate the radiological dose to a hypothetical maximally exposed individual and the environment via the Discharge Canal and the Hudson River using the procedure outlined in the Off Site Dose Calculation Manual (ODCM) Reversion 3.

3.4 SSCs and Property Boundary Monitoring

In addition to providing the data for the dose computation discussed above, the Long Term Monitoring Program has been designed to also provide rapid detection of potential leaks from SSCs. This monitoring is specifically focused on those SSCs which exhibit a credible probability of resulting in a visually undetected release of radionuclides to the subsurface[29]. The monitored SSCs are shown on **Figure 4** and a description of the specific monitoring installations

[27] The storm drain flows also include groundwater discharges from the foundation drains for Unit 2 and Unit 3 VC Buildings, but not from the Unit 1 NCD and SFDS, which are otherwise accounted for.

[28] It is noted that storm drain samples are <u>not</u> typically taken at times coincident with peak, or even average storm drain flow rates. By its very nature, the vast majority of the flow through the storm drain system tends to be episodic and of short duration due to storm events; sampling rounds are generally scheduled to avoid such events. Radionuclide concentrations are primarily due to groundwater infiltration into the drains and thus tend to be highest during periods of little rain when this infiltration is not diluted by the storm water flow. This incongruence therefore yields a high bias to the dose computation because the elevated concentrations associated with low flow rates are multiplied by the much higher flow rates based on total yearly rainfall.

[29] As discussed further in the following sections, reporting of visually identified spills/leaks within structures is included within Condition Reports under Entergy's Corrective Action Program. Additional emphasis has been placed on routine review of these reports as they potentially relate to GPI objectives.

associated with each SSC are provided in the January 25, 2008 Memorandum – Synopsis of Long Term Monitoring Plan Bases. In addition to monitoring the SSCs, on-Site and off-Site wells are used to monitor the property boundaries for unanticipated radionuclide migration across these boundaries. Again, the rationale underpinning the selection of wells designated for this purpose is provided in the above cited Memorandum. These monitoring protocols are consistent with the NEI Groundwater Protection Initiative (GPI).

Entergy is also in the planning process to add an additional multi-level monitoring installation located near the south west corner of the Unit 3 Transformer Yard, downgradient of MW-46[30]. While MW-46 was previously evaluated relative to Unit 3 monitoring effectiveness, and was found to be very useful for detecting potential future releases, we also concluded that without a further monitoring well installation, there is a moderate risk that some releases could go undetected. In particular, it appears that a release in the vicinity of the Waste Holdup Tank pit could potentially proceed toward the river to the south of MW-46, given the likely hydrology associated with the pre-construction bedrock valley in this area. As such, we recommend, and Entergy agreed to, the construction of an additional monitoring installation at Unit 3 to increase the robustness of the Unit 3 well network and thus reduce this potential risk. Installation of this well is currently scheduled for 2011. The sampling of U1-NCD and U1-SFDS will also be continued as part of the Long Term Monitoring Program.

I.L.s were established for the associated monitoring wells to set quantitative radionuclide concentrations above which further action would be undertaken. As part of the ongoing groundwater monitoring program, the reported analytical concentrations are compared against I.L.s established based on the criteria shown in the table below. I.L.s are currently computed each year based on yearly averages of all the valid groundwater sampling analytical results of the previous year including Aliquot, Confirmatory, and Mid-Quarter sample results[31]. The monitoring well-specific I.L.s are presented in **Table 4** and are established for comparison with 2010 analytical results based on the quarterly samples collected and analyzed in 2009.

[30] A cross section has also previously been developed through the Unit 3 area to supplement **Figure 4** and further demonstrate the relationship of site groundwater flow patterns and monitoring well placement relative to the individual Unit 3 SSCs (similar cross sections were previously developed for Units 1 and 2, as presented in the Hydrogeologic Site Investigation Report). This Unit 3 cross section C-C' is included in the Q1 2009 Quarterly Report as Figure 4A.

[31] The calculation of ILs and yearly rolling averages prior to the Q1 2009 Report were based on the analytical results from the quarterly sampling rounds only, and therefore excluded aliquot, confirmatory and mid-quarter sample results. For the Q1 2009 Report and thereafter, if an aliquot analytical result confirms that the original quarterly analytical result was false, then only the aliquot result is utilized in the yearly IL calculation. If the aliquot result confirms the original quarterly result is valid, then both the original and the aliquot results are averaged together and then averaged into the yearly IL calculation as a single value. Confirmatory analytical results have the potential to impact the use of the original quarterly sample in the same manner as aliquots; however, unlike aliquots, these "independent samples" are averaged directly into the yearly rolling average without "pre-averaging" with the associated quarterly sample. Similar to confirmatory samples, mid-quarter samples are also averaged directly into the yearly rolling average calculation. However, mid-quarter sample results do not have any impact on the use of the initial quarterly samples as can either aliquot or confirmatory samples, as described above. In the case of both confirmatory and mid-quarter sample results, direct averaging into the yearly average of these additional results can somewhat bias the yearly average toward a particular quarter/season. However, given that confirmatory and mid-quarter samples are typically taken to confirm and/or prepare for uncharacteristically high radionuclide concentrations, this direct averaging provides a high bias to the subsequent yearly dose computations, and is thus conservative. In cases such as this where some bias inevitably will be created, establishing a conservative bias in the dose computations is considered more important than maintaining a seasonal non-bias.

WELL ID	INVESTIGATION LEVELS (I.L.s)		
	TRITIUM pCi/L	Sr-90 pCi/L	OTHER PLANT-RELATED RADIONUCLIDES
Off-Site Boundary Wells (LAF-002)	any detection*	any detection*	any detection*
On-Site Boundary Wells (MW-40, MW-51, MW-52, and MW-107)	1,000**	2**	any detection*
Riverfront Boundary Wells (MW-60, MW-62, MW-63)	2,000**	2**	any detection*
All Other Wells	>2x average***	>2x average***	>2x average***

* A radionuclide is positively detected when the result is greater than or equal to the MDC and 3 times the 1 sigma uncertainty.
** The values of 1000 and 2000 pCi/L for H-3 and 2 pCi/L for Sr-90 have been chosen to be low enough to result in timely detection of a new release or change to an existing release and still be outside the normal expected range of sample results at these locations, to the extent possible with the currently available data over time.
*** Any positively detected radionuclide that has a result greater than 2 times the average from the previous year. However, the IL is not reached until an H-3 result is also greater than 1000 pCi/L or a Sr-90 result is also greater than 2 pCi/L.

In the event that the analytical results of a groundwater sample exceed the designated I.L., the following series of actions will be considered:

- Contact the laboratory to verify that all quality control checks were satisfactory, sufficient sample volume was used; required MDC's were met, etc.;
- Re-analyze Aliquots of the original sample;
- Re-sample the location (Confirmatory sample) to verify the result;
- Increase the frequency of sampling (Mid-Quarter samples) for this location[32];
- Initiate an investigation utilizing Entergy's corrective action program and related resources as appropriate (e.g. site engineering / radiation protection); and
- Initiation of source/ground water remediation techniques commensurate with the potential dose impact analyses and good environmental stewardship.

3.4.1 Proactive Mid Quarter Samples

During the Q3 2010 monitoring period, there were no planned operations that required increased sampling. However, recent peaks in Tritium levels have been observed in multiple MW-31 and MW-32 sampling intervals and also in MH-5 VCFD; thus, additional Post-Q3 2010 groundwater samples were collected at all sampling intervals within MW-31 and MW-32 (as well as MW-30, MW-33, MW-111, and MH-5 VCFD). The results of these samples are reported and discussed below along with the quarterly results.

3.4.2 Previous Q2-2010 Investigation Level Exceedances

As indicated in the previous Q2 2010 Quarterly LTM Report, a comparison of the Q2 2010 analytical results to their respective I.L. values showed that the I.L.s were initially exceeded at ten sampling locations. Four of these I.L. exceedances are still ongoing, and are discussed individually in **Section 3.4.4** below. The remaining six I.L. exceedances (MW-36-24, MW-37-40, MW-50-42 (Tritium), MW-53-82, MW-111 and U3-4D) were resolved during the Post Q2 2010 and/or Q3 2010 sampling, as summarized below.

MW-36-24. The Q2 2010 Tritium activity at this sampling location slightly exceeded the I.L.[33] The subsequent Q3 2010 results indicate that Tritium has decreased to a level approximately

[32] It is noted that Mid-Quarter samples are also proactively obtained when plant operations could potentially result in an increased probability of a release to the subsurface.

one order of magnitude below the I.L.. Based on the downgradient well location and the Q2 2010 timing of the increase, it was concluded that the likely cause was the transient surface spill from the temporary rental RWST/R.O. processing skid[34]. Because the RWST/R.O skid spill was terminated and Tritium is a non-sorbing radionuclide, Tritium levels were expected to decrease relatively quickly, as supported by the Q3 2010 data.

MW-37-40. The Strontium result for Q2 2010 slightly exceeded the I.L. for this sampling interval; however, the Strontium activity decreased below the I.L. during the current, Q3 2010 sampling event. An elevated Strontium activity has been observed at MW-37-40 since Q3 2009, which has been attributed to a delayed response to the increase in water levels during defueling operations in the Unit 1 SFPs. The trend for this depth interval over the previous two years is similar to those exhibited by the intervals immediately above and below (MW-37-32 and MW-37-57), except that MW-37-40 lags in response somewhat. This time lag is likely a result of the lower hydraulic conductivity (by two to three orders of magnitude) of the bedrock accessed by this depth interval. Because MW-37-57 had already decreased to pre-defueling levels and MW-37-32 had steadily decreased towards pre-defueling levels over the past four quarters (including a greater magnitude decrease from Q2 2010 to the current (Q3 2010) quarter - see **Figure 7A**), it is expected that the Strontium activity in MW-37-40 will continue to decrease towards pre-defueling levels over the next few quarterly monitoring rounds.

MW-50-42. The Q2 2010 Tritium result, which slightly exceeded the I.L. at this sampling location, was immediately followed by a decrease in activity by nearly one order of magnitude in Q3 2010. Similar to MW-36-24[35], it was concluded that the likely cause for this increase was the transient RWST/R.O. processing skid spill. It was therefore also expected that Tritium levels would decrease relatively quickly in this well, again as supported by the Q3 2010 data.

MW-53-82. After generally[36] stable levels for the previous 3.5 years, a peak in Tritium activity was observed at this location during the Q1 2010 sampling event. Tritium levels exceeding the I.L. by nearly a factor of two and were the highest observed since Q4 2006. The Tritium activity decreased in Q2 2010, but still exceeded the I.L. The Tritium activity in MW-53-82 continued to decrease (by a factor of over two) with the current, Q3 2010 result at a level below the I.L.. While MW-53 is not located in the groundwater flow path downgradient of the RWST/R.O. spill, the timing of this peak is consistent with this release. In addition, and more importantly, this location has previously been demonstrated to be "down-slope" of the RWST/R.O. spill along vadose zone flow paths, as demonstrated by the tracer testing conducted as part of the hydrogeologic site investigations (see Figure 7.2 of the Hydrogeologic Site Investigation Report, January 7, 2008). While it is noted that other monitoring locations in the vicinity of MW-53-82 did <u>not</u> exhibit peaks in Tritium activity during the Q1 2010 and Q2 2010 sampling events (e.g., the deeper, companion sampling interval (MW-53-120), the two sampling intervals in upgradient monitoring well MW-42 and the nearby U1-NCD monitoring location), these findings are also

[33] Additionally, the Tritium I.L. was previously exceeded at MW-36-24 in Q3 2009; but the Q4 2009 and Q1 2010 results showed a decreasing trend over that time period. Therefore, this I.L. exceedance is not likely related to the past exceedance.

[34] The spill involved a rented RWST/R.O. processing skid brought on-site by an outside contractor. As such, this equipment is not an in-place Unit 2 SSC and is no longer on site. This release was first detected during routine 80-10 sampling of MH-9. The Tritium levels were measured at ~85,000 pCi/L in this MH on January 14th and 15th, 2010, and then decreased to 4,650 pCi/L on January 19th. Typical Tritium levels prior and post-spill were ~1,500-4,000 pCi/L in MH-9. It is therefore likely that Tritiated water entered the subsurface through this storm drain pathway, as well as potentially through the upper portions of the MW-32 installation (see Q1 2010 Quarterly Report, 1/11/11).

[35] It is noted that MW-36-24 and MW-50-42 are similarly located proximate to the upgradient (eastern) discharge canal wall, and are likely at least somewhat connected along preferential flow paths associated with the canal wall construction (e.g., blast-fractured bedrock and backfilling with permeable soils (Unit 2)). As such, it is not surprising that these two sampling locations have shown remarkably similar Tritium trends over the past 2.5 years

[36] It is noted that a clear peak in Tritium activity in this interval was measured in Q1 2009. This peak was attributed to a transient release from the Unit 1 distillation tank valves, which subsequently has appeared to have dissipated through the groundwater flow system.

consistent with the tracer test data as shown in the above referenced Figure 7.2. Therefore, it appears that the Tritium peak observed in MW-53-82 was a result of the Q4 2009 RWST/R.O. spill. Because this source was quickly terminated and Tritium is a non-sorbing radionuclide, the Tritium activity at this location will likely continue to decrease to pre-R.O. spill levels.

MW-111. Cesium was detected for the first time at this sampling location during Q2 2010. The Cesium activity was only slightly greater than the three times 1 sigma uncertainty level. Therefore, one possible explanation for the Cesium detection at MW-111 was a laboratory false positive. Both the Q3 2010 and the Post-Q3 2010 laboratory analytical results, which indicate non-detect Cesium activity at MW-111, are in agreement with this explanation.

U3-4D. The Q2 2010 Tritium result slightly exceeded the I.L. at this sampling location[37]. This I.L. exceedance was preceded (Q1 2010) by a noticeable increase above the baseline established in 2008 and 2009. The current, Q3 2010 result showed a return to 2008 and 2009 baseline levels. While it is not understood what caused this Tritium increase at U3-4D, it was possibly related to a delayed response to the Tritium increase noted in manhole A2 and MW-45-42 in Q2 2009.

3.4.3 Q3 2010 Boundary Investigation Levels

A comparison of the Q3 2010 analytical results for the On and Off-Site Boundary Wells to their respective I.L. values shows that the I.L.s were not met for any of the monitoring locations. Therefore, there was no requirement to further investigate radionuclide activity in these wells. However, monitoring installation MW-40 and MW-51 are being further evaluated on a routine basis, as discussed below.

MW-40 and MW-51. While there have been no historic I.L. exceedances at these two southern boundary locations, and all of the data from this quarter (Q3 2010) fall within previous ranges, these monitoring locations continue to be closely scrutinized on a routine basis given the sensitivity associated with the southern power block boundary. Even though it is recognized that the peak Tritium levels detected are low (less that 350 pCi/L) and near the lower limit of detection, there appears to be a general correlation in Tritium peaks (seasonal cyclical pattern) at multiple depth intervals in both of these monitoring installations (see **Figure H1** in **Appendix H**). This general correlation is evident in MW-51 this quarter (Q3 2010) as all of the depth intervals recorded an increase (similar magnitude) in Tritium activity since the previous (Q2 2010) sampling event. MW-40 also remained consistent with the trend, but it peaked earlier than MW-51, with most its intervals decreasing this quarter. An appropriate metric to evaluate whether or not these peaks are due to groundwater migration of Tritium from the power block area is the relative groundwater elevations between these locations and the power block areas where Tritium contamination exists. As discussed at length in the CSM sections of the Site Investigation Report, southern boundary groundwater elevations are well above those in the power block area. As such, groundwater, and thus Tritium in the groundwater, cannot migrate from the power block to the south; in fact, groundwater is migrating in the opposite direction. This conclusion was previously validated for nine quarters (between Q2 2007 and Q2 2009) through analyses of groundwater elevation contours (see **Figure 5** in the quarterly reports prior to Q3 2009). In addition, starting with the Q1 2009 Quarterly Report, **Figure 5A** is being generated to specifically compare high importance transducer readings to historic maximum and minimum readings. The objective of this analysis is to demonstrate that substantial changes to the on-site groundwater flow field have not taken place and that the CSM remains valid. Multiple sampling zones from both the MW-40 and MW-51 monitoring installations are included in this analysis. Based on these analyses, as well as the substantial body of data developed

[37] It should be noted that the Tritium I.L. is only 1,000 pCi/L at this sampling location, and the Q2 2010 analytical Tritium result was 1,070 pCi/L. Therefore, the Q2 2010 Tritium activity at U3-4D is still five times lower than the lowest isopleth drawn for the Unit 2 Tritium plume (5,000 – 10,000 pCi/L). It is noted that there is no Tritium plume associated with Unit 3.

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over the last 5 years of investigation which underpin our CSM, we conclude, with a high degree of confidence that the low level peaks in the Tritium activities observed in these two monitoring installations are not due to groundwater migration from the power block area. This conclusion has continued to be validated each quarter. However, we do not have a definitive explanation for the observed peaks. Further investigation into other potential mechanisms, such as seasonal atmospheric Tritium washout and seasonal laboratory biases are ongoing.

3.4.4 Q3 2010 SSC Investigation Levels

For the SSC monitoring wells, a comparison of the Q3 2010 and Post-Q3 2010 analytical results to their respective I.L. values shows that the I.L.s were met at ten sampling locations this quarter. The following table summarizes the cases where the I.L.s were met, with these exceedances individually discussed below.

WELL ID	RADIONUCLIDE	RESULT (pCi/L)***	REANALYZED RESULT (pCi/L)	INVESTIGATION LEVEL (pCi/L)
MW-31-49 (Q3 2010 / Post Q3)	H3	54,600 / 104,000	NA*	42,776
MW-31-63 (Q3 2010 / Post Q3)	H3	61,700 & 66,900 / 46,500	NA*	39,857
MW-32-59 (Q3 2010 / Post Q3)	H3	65,400 / 74,400	NA*	34,230
MW-32-149 (Q3 2010 / Post Q3)	H3	3,810 & 2,600 / 2,120	NA*	1,000
MW-32-173 (Q3 2010 / Post Q3)	H3	2,470 & 2,190 / 1,980	NA*	1,496
MW-39-102	Sr-90	4.05	NA*	3.64
MW-41-40	H3	2,790	NA*	1,000
MW-46	H3	1,920	NA*	1,844
MW-50-42	Sr-90	8.43	NA*	8.20
MW-67-105	Sr-90	2.61	NA*	2.0

* NA indicates that the sample was not reanalyzed.
** ND indicates that the radionuclide was not detected greater than or equal to the MDC and 3 times the 1 sigma uncertainty.
*** A radionuclide is positively detected when the result is greater than or equal to the MDC and 3 times the 1 sigma uncertainty.

MW-31-49. The Q3 2010 Tritium activity at MW-31-49 increased by a factor of three, which was the highest Tritium activity measured in this interval since the initiation of the LTMP. Following this I.L. exceedance, a second Q3 2010 sample was collected which showed a noticeable decrease (thirteen-fold) in activity to a level well below the Tritium I.L. However, the Post-Q3 2010 result was once again elevated above the I.L., and to a level twice that ever measured in this interval (including the previous Q3 2010 peak). These peaks in Tritium activity are possibly related to a somewhat delayed response to the transient RWST/R.O. skid surface spill[38] in Q4 2009[39], as potentially mediated by Retention Mechanisms. This hypothesis is further supported by the response of MW-31-63, as discussed below. Assuming the R.O. skid spill is, in fact, the source, tritium activity in his well should relatively quickly return to pre-release levels given this spill was terminated and Tritium is a non-sorbing radionuclide (see further discussion below and in **Section 3.4.5**).

However, it has also been observed that these two recent Tritium peaks, as well as the previous peak in Q4 2009, appear to closely follow noticeable increases in flow into the Leak Collection

[38] The spill involved a rented RWST/R.O. processing skid brought on-site by an outside contractor. As such, this equipment is not an in-place Unit 2 SSC and is no longer on site. This release was first detected during routine 80-10 sampling of MH-9. The Tritium levels were measured at ~85,000 pCi/L in this MH on January 14th and 15th, 2010, and then decreased to 4,650 pCi/L on January 19th. Typical Tritium levels prior and post-spill were ~1,500-4,000 pCi/L in MH-9. It is therefore likely that Tritiated water entered the subsurface through this storm drain pathway, as well as potentially through the upper portions of the MW-32 installation (see Q1 2010 Quarterly Report, 1/11/11).

[39] Based on forensic research conducted by Entergy, it appears that the date of the spill was November 21, 2009.

Device (LCD)[40], and also coincide with a ten-fold increase in the tritium level in MH-5 VCFD[41] (see **Figure 6B).** These temporal correlations lead to consideration of a potential link between LCD flow and peaks in groundwater tritium activity[42]. Because the flow rate into the LCD has decreased back to baseline levels (typically less than 20 ml/day after 10/4/2010), the Tritium activity in MW-31-49 is also expected to decrease, if there is a link as contemplated above. This location will be specifically evaluated further with the additional data acquired during the upcoming quarterly monitoring rounds to better understand the underlying cause of the recent peaks in Tritium activity.

MW-31-63. The three 2010 third quarter data points define a new tritium peak at this location; the Q3 result is increasing toward the peak from lower values measured in Q2 and post-Q2 2010, the first post-Q3 result is at the peak, with the second post-Q3 sample showing a decrease. This third quarter peak is nearly as high as the previous peak observed in the first quarter (post-Q1 2010 sample), which was the highest measured Tritium activity in this interval since the initiation of the LTMP. The first of these two recent peaks was previously attributed to the localized, transient RWST/R.O. processing skid surface spill in Q4 2009. The second peak is hypothesized to be a continued, delayed response to this spill (similar to MW-31-49 above), with the delay due to release of additional Tritium via the Retention Mechanisms. Given that the apparent source of this peak has been terminated and Tritium is a non-sorbing radionuclide, Tritium levels should relatively quickly returned to pre-release levels in MW-31-63 once the residual impact of the RWST/R.O. spill has flushed through the groundwater system, as mediated through the Retention Mechanisms (see further discussion below and in **Section 3.4.5**).

In this regard, it is noted that peaks in Tritium level, likely related to mobilization of historically stored Tritium[43], have been noted in MW-31-63 since the Q1 2009 sampling event, with somewhat less, but still noticeable variability evident all the way back to the beginning of monitoring. This behavior has also been noted in other sampling depths at this location as well as at proximate locations MW-32 and MW-30, particularly at shallower depth intervals[44]. Therefore, while the post-Q1 2010 peak has been associated with the transient RWST/R.O. skid spill, which had been terminated prior to the second Tritium peak observed in the Post-Q3 2010 samples, this subsequent peak is still likely due to the spill through R.O. skid spill replenishment of the Retention Mechanisms, thus resulting in further releases from these Retention Mechanisms into the groundwater flow regime (i.e., second peak). Therefore, future Tritium increases at this sampling location due to the transient RWST/R.O. processing skid spill are still likely.

However, as discussed above for MW-31-49, it is also possible that while the initial post-Q1 2010 peak at this location was due to the R.O. skid spill, the subsequent Post-Q3 2010 peak could potentially be related to the increased flow observed in the LCD. Given the uncertainty,

[40] Recent and ongoing investigations indicate that the increased LCD flow could potentially be related to particularly high SFP levels associated with dry cask work. Procedures have therefore been put in place to better control pool levels. It is also noted that all flow into the LCD is captured, measured and discharged as a monitored release.

[41] While this is the highest Tritium level measured at this location since monitoring began, it is noted that the increased Tritium in this drain is captured and routed to the discharge canal as a monitored release.

[42] While the data trends appear to correlate on a temporal basis, it is noted that simple correlation does not demonstrate causation.

[43] As discussed in the January 7, 2008 Hydrogeologic Site Investigation Report, it has been concluded that portions of the Tritium released prior to Energy's last remediation interdiction (rectifying the Transfer Canal liner weld imperfection in December 2007 - the final identified leak) have been stored in the subsurface (Retention Mechanism(s)).

[44] As discussed in previous quarterly reports, the historic variability in Tritium activity measured in MW-30, 31 and 32 has typically been attributed to the mobilization of Tritium stored in the shallow bedrock and/or within anthropogenic structural features. This storage/Retention Mechanism(s) was confirmed during tracer testing as described in the Hydrogeologic Site Investigation Report prepared by GZA, dated January 7, 2008, and as further supported by more recent tracer data discussed in the Q1 2009 LTM Report. Therefore, while the storage/Retention Mechanism(s) clearly contribute to the observed Tritium variability, it is equally clear that some of this variability is attributable to localized transient release events.

this potential relationship will be further evaluated based on the additional data obtained during the upcoming quarterly monitoring rounds.

MW-32-59. Similar to the Q1 2010 through Post-Q2 2010 samples[45], the initial Q3 2010 Tritium result at this sampling location exceeded the Tritium I.L. However, a noticeable decrease in Tritium activity is observed from the Post-Q2 result to this initial Q3 2010 sample, and the initial Q3 2010 result represented the lowest activity in MW-32-59 since the transient R.O. processing skid surface spill. A second Q3 2010 sample showed another noticeable decrease to a Tritium activity well below the I.L. in MW-32-59. However, a subsequent Tritium peak was observed in Post-Q3 2010, with the Tritium activity back above the I.L. and slightly above the initial Q3 2010 result. Similar to the MW-31-49 Tritium I.L. exceedances, this recent Tritium peak is likely attributable to the transient surface spill which occurred in Q4 2009 during RWST/R.O. processing skid operations. In addition to entering the subsurface through the storm drain system, this spill also entered the MW-32 well vault[46], and may have penetrated the well casings, thus potentially explaining the particularly high Tritium activities observed in this shallowest interval in MW-32. Because the surface spill was transient in nature, as concluded, in part, from the MH-9 data, it is expected that the Tritium activity should again quickly decrease below the I.L. at this location. However, this expected decrease could be masked by additional future contributions of Tritium from the storage/Retention Mechanism(s), as discussed more fully above for MW-31-63 and possibly seen in the Post-Q3 2010 result.

Inspection of **Figure 6B** indicates that this recent Post-Q3 2010 Tritium peak could also possibly be attributed to the increase leakage observed in the Unit 2 LCD. Prior to the Post-Q3 2010 peak, the previous two sampling results indicated a noticeable decrease in Tritium at this location, which was expected due to the transient source, the chemical nature/transport behavior of Tritium, and the rapid decrease in Tritium activity observed in MH-9. The noticeable decrease at this sampling interval (MW-32-59) occurred prior to the increased leakage measured in the U2 LCD. However, the Post-Q3 2010 sample was collected after the increased leakage was observed, and therefore, could be possibly attributed to the recent conditions observed at the U2 LCD. As such, this location will be specifically evaluated further with the additional data acquired during the upcoming quarterly monitoring round.

MW-32-149. The Q1 2010 through Post-Q2 2010 results at this location showed an increase in Tritium activity to nearly ten times the I.L. in the Post-Q2 2010 sample[47]. The current, Q3 2010 and Post-Q3 2010 samples all exceeded the Tritium I.L. at this location, but the Tritium activity noticeably decreased by a factor of greater than four at MW-32-149 during these current sampling events. Similar to the other MW-31 and MW-32 exceedances discussed above and below, this Tritium peak has also been attributed to the transient surface spill which occurred in Q4 2009 during RWST/R.O. processing skid operations. The quick response of this deep sampling interval to the Tritium surface release provides further evidence that the spill may have penetrated the well casings and entered the subsurface immediately proximate to the sampling installation. This conclusion is based on the previously observed behavior of this sampling interval, which had historically exhibited a relatively uniformly decreasing trend for the last three

[45] The Post-Q2 2010 result was the highest Tritium activity measured at this location (in all depth intervals) since the initiation of the LTMP, and exceeded the I.L. by a factor of nearly five.

[46] An initial sample was taken of the water remaining in the MW-32 vault on 2/1/2010. This water exhibited a Tritium activity of 390,000 pCi/L. Subsequent sampling of this water in May 2010 measured residual Tritium levels of ~65,000 pCi/L prior to the water being fully removed from the vault. It is further noted that the water in the vault contained other radionuclides in addition to Tritium. These included Co-60, Sb-125, Cs-134, Cs-137, etc. Therefore, the Q1 2010 groundwater data from wells proximate to, and downgradient of, the MH-9 and MW-32 vault release points were evaluated for detections of these radionuclides, none were found. However, Cs-137 was detected at MW-111 in Q2 2010. While this well is located downgradient of MW-32, no other wells showed detections of Cs-137, or the other radionuclides discussed above, in Q2 2010. Cs-137 at MW-111 and downgradient of MW-111 will be closely monitored in the upcoming quarterly reports.

[47] Only the first sample collected at this location (1/19/2007) showed a higher Tritium activity (10,500 pCi/L) than the Post-Q2 2010 sample results (9,760 pCi/L).

years, absent the peaks observed in shallower intervals[48]. Because the probable source has been terminated, we anticipate that the Tritium activity should continue to decease at this location. However, as discussed above for MW-32-59, the future behavior of this sampling interval is in question due to possible contributions from the storage/Retention Mechanism(s) and will therefore be specifically evaluated further with the additional data acquired during the upcoming quarterly monitoring round.

MW-32-173. Both the Q2 2010 and Post-Q2 2010 Tritium results exceeded the I.L. at this sampling location following the initial increase in Tritium activity during the Q1 2010 sampling event to a level near the I.L. Similar to MW-32-149, the Tritium activity steadily decreased over the current (Q3 2010 and Post-Q3 2010) sampling period; however, a slightly delayed response is observed as the activity slightly increased between Post-Q2 2010 to the initial Q3 2010 result. The activity still remains above the Tritium I.L. at this location. Similar to the other MW-31 and MW-32 exceedances discussed above, this overall increase in Tritium levels over the past three quarters has also been attributed to the transient surface spill which occurred in Q4 2009 during RWST/R.O. processing skid operations. The delayed response, compared to MW-32-59 and MW-32-149, and the shallower slope to the increasing trend at this sampling depth provide evidence that this depth interval may be responding to vertically downward migration from above. This conclusion is supported by both the four-fold higher activities measured in intervals immediately above this point, as well as the strong vertically downward gradients exhibited by the bedrock formation at this location. As discussed above, the Tritium activity at this depth interval should continue to decrease as the Tritium activity above decreases (given the transient nature of the spill), but is likely to decrease more slowly[49]. It is also noted that the expected decrease could be masked by future contributions of Tritium from the storage/Retention Mechanism(s), as discussed more fully above for MW-31-63. As such, this location will therefore be specifically evaluated further with the additional data acquired during the upcoming quarterly monitoring round.

MW-39-102. The Q3 2010 Strontium activity at this sampling location slightly exceeded the I.L. and represents the highest Strontium activity measured at MW-39-102 since the initiation of the LTMP. Similarly, the sampling interval directly below this location (MW-39-124) and the uppermost sampling interval (MW-39-67) also showed increases in Strontium during Q3 2010. As discussed in the Hydrogeologic Site Investigation Report prepared by GZA, dated January 7, 2008, MW-39 is located near the Legacy IP1 Storm Drain piping, which historically carried water collected in the Unit 1 SFDS. Previous testing along these pipes revealed that numerous sections were compromised and leaking; therefore, the SFDS discharge was rerouted in 1994 after detecting Strontium contamination in the effluent of the SFDS. As such, no active source of contamination was present in the Legacy piping after 1994, but several Strontium peaks were observed in multiple MW-39 sampling intervals since the initiation of the LTMP. Therefore, releases from storage/Retention Mechanism(s) and/or the sorptive properties of Strontium (desorbs back into groundwater) possibly contributed to these previous peaks and this current I.L. exceedance in MW-39-102. It is also noted that in addition to terminating the Strontium contamination in the Legacy piping, the ultimate source (Unit 1 SFPs) has also been terminated during the defueling and pool sealing operations in 2008. Therefore, the current Strontium peak in MW-39-102 will likely be transient and quickly return to lower levels at this location. Due to this Q3 2010 peak in MW-39-102, as well as Strontium increases in MW-39-67 and MW-39-124, this location will be specifically evaluated further with the additional data acquired during the upcoming quarterly monitoring round.

[48] It is also noted that the sampling interval immediately above this interval, MW-32-85, did not exhibit a Tritium peak in Q1 2010; however, the Tritium activity increased during Q2 2010 through Post-Q3-2010 to levels slightly below the Tritium I.L.

[49] The current (Q3 2010 and Post-Q3 2010) sampling period results support this premise, as the Tritium activity decreased by ~1,700 pCi/L in MW-32-149 and only ~500 pCi/L in MW-32-173. Similarly, the Tritium activity in MW-32-149 has decreased by ~7,600 pCi/L since Post-Q2 2010, while MW-32-173 has only seen a ~350 pCi/L decrease over that time period.

MW-41-40. The Q3 2010 Tritium activity exceeded the I.L. by nearly a factor of three at this sampling location. A noticeable increase in Tritium activity (~60,000 pCi/L) was also concurrently observed in manhole A2 during routine 80-10 Effluents Program sampling (7/7/2010 sample date). Similarly, an increase in Tritium activity was also observed in a downstream manhole, A4, of this storm drain system. MW-41 is located directly adjacent to this storm drain system, between manholes A2 and A4. Therefore, this Q3 2010 Tritium increase in MW-41-40 is likely related to the increases observed in manholes A2 and A4. Rapid decreases in Tritium activity were observed in subsequent samples collected from these manholes (<1 week); therefore, this current Tritium peak would be expected to be transient in nature based on this information. However, an additional Tritium peak was also previously observed in manhole A2[50] in Q2 2009, and other potential similar, but undetected increases are certainly possible given the likely release mechanism. While investigation into the source of the peaks in the drain system, and thus this monitoring well, is still ongoing, all indications are that they are associated with higher levels of washout entering the Fuel Storage Building (FSB) roof drain leading directly into A2 when the vent fan is not operating; during specific climatic conditions, SFP evaporation can condense on the roof, and be transported into the storm drain system via rain water. Thus, this location will be specifically evaluated further with the additional data acquired during the upcoming quarterly monitoring round.

MW-46. The Q3 2010 Tritium activity at this sampling location exceeded the Tritium I.L. by over a factor of two. While the exact cause of this increase in Tritium activity is not fully clear, it appears that, like upgradient well MW-41-40, it is a groundwater response to the Tritium peak observed in manhole A2, as discussed above. Similar to A2, no other radionuclides were detected at MW-46 during the Q3 2010 monitoring event. Because the Tritium activity in manhole A2 (and A4) rapidly decreased, this current Tritium peak observed in MW-46 should also be transient, with similar reasoning and cautions as discussed above for MW-41-40. Therefore, this location will be specifically evaluated further with the additional data acquired during the upcoming quarterly monitoring round.

MW-50-42. The Strontium activity for Q3 2010 slightly exceeded the I.L. for this sampling interval. A slightly elevated Strontium activity has been observed at MW-50-42 since Q3 2009, which has been attributed to a delayed response to the increase in water levels during defueling operation in the Unit 1 SFPs (see MW-50 graph on **Figure 7A**). Prior to this current peak, the Strontium activity exhibited a decreasing trend from Q4 2009 to Q2 2010; thus the Q3 2010 result could indicate a contribution of Strontium from the storage/Retention Mechanism(s). However, it is also noted that these elevated levels are still significantly lower than the Strontium levels in the interval below (MW-50-66), which are exhibiting a substantial downward trend. Because the probable source is terminated, it is expected that the Strontium activity in MW-50-42 will again decrease towards pre-defueling levels over the next few quarters. The eventual decrease to pre-fueling levels might extend over multiple quarterly monitoring events due to the sorptive behavior of this radionuclide and the Retention Mechanism(s) discussed previously. Therefore, this location will be specifically evaluated further with the additional data acquired during the upcoming quarterly monitoring round.

MW-67-105. The Strontium result for Q3 2010 represented the historical maximum Strontium activity measured at this sampling interval since the initiation of the LTMP and exceeded the I.L. Furthermore, this current peak was preceded by a noticeable increase in Strontium activity during the previous (Q2 2010) monitoring event. However, it is also noted that these relatively elevated levels are still significantly lower than the Strontium levels in the interval above (MW-67-39), which are exhibiting a substantial downward trend. Prior to Q2 2010, relatively low and

[50] A concurrent peak in Tritium activity and I.L. exceedance was also noted in the uppermost sampling interval of MW-45 (MW-45-42) during Q2 2009. Similar to the rapid decrease of Tritium activity noted in manhole A2, the Tritium activity in MW-45-42 quickly decreased to levels below the I.L. during the following, Q3 2009, monitoring round.

stable Strontium levels were observed at MW-67-105 since the first sample was collected in August 2007. Because this riverfront monitoring location is downgradient of Unit 1, this current peak is likely a response to the Unit 1 SFP defueling operation, as the water containing higher Strontium activity has migrated farther downgradient. Because the probable source has been terminated, the Strontium activity is expected to eventually return to the historical, low levels seen from August 2007 through Q1 2010 at this sampling interval as the perturbation passes through the system. This location will be specifically evaluated further with the additional data acquired during the upcoming quarterly monitoring round.

MH-5 VCFD, B-l and B-6. The Unit 2 foundation drains which discharge into MH-5 VCFD, along with similar drains for Unit 3 which discharge into Manholes B-1 and B-6, form an integral part of the early leak detection monitoring network.

The Q3-2010 result for MH-5 VCFD shows a clear increase in Tritium activity (approximately by an order of magnitude) when compared to the previous base line sampling results (including the previous sample from Q2 2010); however, the Post-Q3 2010 sampling data from only 10 days later, show the Tritium activity in MH-5 had already returned to the previous baseline levels (**see Figure 6B**). The remaining radionuclides were all non-detect during both the Q3 2010 and the Post-Q3 2010 sampling events at MH-5.

The Q3 2010 results at Unit 3 indicate a noticeable increase in Tritium activity in B-1 to the historical maximum activity at this manhole (approximately one order of magnitude greater than previous results). This peak is consistent with the transient increase in Tritium activity observed in Manhole A2 during the current (Q3 2010) quarter. This increase in A2 Tritium levels is believed to be due to condensation of SFP evaporation on the roof when the vent fan is not operating, which then enters the building roof drain leading directly into A2 during rainfall events, as is currently still being verified. Cesium also increased by a factor of approximately two at B-1 during Q3 2010, as compared to the previous sampling result (Q2 2010). These Cesium levels are well below the 80-10 Effluents Program reporting limits, and are believed to be associated with contaminated Unit 1 backfill in the vicinity of the Unit 3 VC Building.

All radionuclides (including Tritium) were non-detect at B-6 during the Q3 2010 sampling event.

Leak Collection Device (LCD). A clear increase in the volume of water collected by the Unit 2 LCD was noted during the current (Q3 2010) quarter, beginning on July 5, 2010. The flow rate averaged approximately 1.5 L/day over the quarter[51]. Investigations indicated that the increased flow appeared correlated with atypically elevated water levels in the fuel pool as associated with dry cask work. Limiting such increases in pool water elevation resulted in a marked decrease in the LCD flow rate, at the very beginning of quarter 4, back to levels generally consistent with the baseline of less than approximately 0.02 L/day. Based on these observations, a new figure (**Figure 6B**) has been included for the first time in this, Q3 2010, quarterly report which visually presents both the historical Tritium data and the U2 LCD data for the sampling intervals located within the Unit 2 Tritium plume boundaries. Potential correlations between the Q3 increased LCD flow rate and proximate monitoring intervals, including MH-5 VCFD, are discussed above under monitoring interval MW-31-49 and below in **Section 3.4.5**.

U1 NCD AND U1-SFDS. Sampling of the Unit 1 North Curtain Drain (U1-NCD) and the Unit 1 Sphere Foundation Drain Sump (U1-SFDS) are currently included as part of the Long Term Monitoring Program. These drains have been documented to capture a large proportion of the Strontium leakage from the Unit 1 SFPs, and continue to collect groundwater containing Strontium and Cesium and direct it to treatment. These drains have also historically been

[51] The LCD collected approximately 50 liters of water during the July to September 2010 time frame, which is greater than the total volume of water collected during the previous 3 year period (April 2007 through June 2010). In this regard, however, it is noted that all of the water collected by the LCD is fully contained and does not enter the groundwater regime.

assumed to collect some groundwater contaminated with Tritium from the Unit 2 SFP. This conclusion was validated by the tracer test conducted as part of the hydrogeologic site investigation (see the Hydrogeologic Site Investigation Report prepared by GZA, dated January 7, 2008). The limited amount of quarterly sampling data, as well as the impact of the Unit 1 defueling operations, render the setting of I.L.s for these monitoring points currently premature. However, visual inspection of the existing data was performed and relatively stable Tritium levels were exhibited by the Q1 2010 through Q3 2010 U1-SFDS data, while a noticeable increase in Tritium levels in U1-NCD is evident over this time frame, particularly in Q3 2010[52]. Therefore, the Tritium results for this drain will be specifically evaluated further with the additional data acquired during the upcoming quarterly monitoring rounds. Strontium data from these drains continued to show relatively stable (U1-NCD) and slightly increasing (U1-SFDS) trends. Both drains have generally reached and decreased to pre-defueling Strontium levels, as summarized on **Figure 7A**.

3.4.5 Conclusions - Boundary and SSC Leak Detection Monitoring

Recognizing that measured activities in the Off-Site and On-Site Boundary Wells have remained below I.L. levels, this overall data set continues to demonstrate that radionuclides are migrating toward the Hudson River to the West, and are not migrating off of the property to the North, East or South, as expected given the measured groundwater flow directions from the property periphery toward the power block area.

Given the analyses discussed above, there is also no compelling reason to believe that any new unidentified, leaks have developed[53] in the SSCs monitored relative to Unit 2 or 3. As discussed in Section 3.4.4 above, the increased Q3 Tritium activity in manholes A2 and A4 is, in all probability, due to condensation of SFP evaporation on the building roof when the vent fan is not operating, which then enters the building roof drain leading directly into A2 during rainfall events; Entergy is in the process of final verification of this hypothesis. It is further believed that this condensation is also the underlying cause of the Tritium I.L. exceedances observed in both nearby and downgradient sampling locations, MW-41-40, and MW-46 and B-1, respectively. Finally, it is noted that the tritiated water vapor evaporating from the SFP is a permitted release[54] and is accounted for as such in the dose computations. This same Tritium is therefore “double counted” because it is again included in the storm drain and groundwater portions of the dose computations.

Additionally, as discussed in the Q1 2010 Quarterly Monitoring Report, a peak in Tritium activity was measured in MH-9 during routine 80-10 Effluents Program sampling. The Q1 2010 sample from the upper-most interval of MW-32 (MW-32-59) also exceeded its I.L with the highest Tritium activity measured since the initiation of the LTMP. After further investigation by IPEC, it appears that these Tritium increases originated from a Q4 2009 localized, transient surface spill just outside the Unit 2 FSB. The spill involved a rented RWST/R.O. processing skid brought on-site by an outside contractor[55]; the temporary leakage likely emanated from connection hoses during or just after the filtration process. It appears that this transient release entered both MH-9 and the well vault for MW-32 (which employs a drain empting into MH-9), and may have also penetrated the MW-32 well casings. Both the storm drains and the well vault likely provided pathways for radionuclides to enter the subsurface. The Q2 2010 and Post-Q2 2010 data

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52 The Q3 2010 Tritium result in U1-NCD increased by nearly a factor of three and is the highest Tritium activity measured in this drain to date.

53 However, as discussed further below, it is possible that a small leak exists and remains undetected in the Unit 2 SFP. Given the recent data from MH-5 VCFD and the LCD, additional investigations have been initiated.

54 It is noted that the permitted release is through the Plant Vent located atop the VC building. Analyses were conducted to account for this release to the FSB roof in the dose computations.

55 As such, this unit is not an in-place, plant SSC, and is no longer on site.

showed further I.L. exceedances both at deeper intervals (MW-32-173) and farther down gradient (MW-36-24 and MW-50-42), as would be expected as the spill worked its way through the groundwater flow regime. These additional Tritium exceedances were also attributed to this transient R.O. skid surface spill. The Q3 2010 and Post-Q3 2010 data indicate that the downgradient Tritium activities in MW-36-24 and MW-50-42 have both quickly returned below the I.L.; however, the Tritium levels in multiple "near source" sampling intervals (MW-31-49, MW-31-63, MW-32-59, MW-32-149, and MW-32-173) still exceed the Tritium I.L. Based on the above analysis, it is clear that a previously unidentified transient spill has once again successfully been identified by the LTMP.

Finally, increased leakage measured in the Unit 2 Leak Collection Device (LCD) from July 2010 to October 2010 appears attributable to raised pool levels within the U2 SFP during various dry cask fuel transfer procedures. While all the flow into the LCD is captured and released through monitored pathways, the recent Tritium peaks seen in MW-31-49, MW-32-59 and MH-5 VCFD appear to be potentially correlated, on a temporal basis, with this increased LCD flow rate. Based on the data from the end of Quarter 3 / beginning of Quarter 4, the flow into the LCD has decreased back to baseline levels of less than 0.02 L/day. This decrease appears to be in response to the post-investigation limiting of pool elevation increases during dry cask work.

The U2 plume[56] is continuing to generally exhibit overall, long-term reductions in Tritium activity[57]. While Q2 2010 increases in Tritium activity were observed in multiple monitoring locations within the delineated U2 plume, these data were consistent with both the Q4 2009 transient RWST/R.O. processing skid surface spill and the overall historic variability observed in Tritium levels attributed to episodic releases of Tritium stored in the subsurface via natural and anthropogenic Retention Mechanisms[58]. This conclusion is further supported by the tracer data and other analyses[59] discussed in Section 3.6 of the Q1 2009 Long Term Monitoring Report. Furthermore, reductions in Tritium activity were seen in numerous Unit 2 monitoring locations during Q3 2010, and the total tritium activity returned to the previous trend, as seen in **Figure G-17**.

Relative to the Unit 1 Strontium data, increased leakage was anticipated during final fuel removal from Unit 1 SFPs. This leakage was readily detected as increased Strontium in the groundwater by the Long Term Monitoring Program. The initial near-pool and subsequent downgradient Strontium increases have been routinely monitored as summarized on **Figure 7A**. Currently, the near-pool and more downgradient monitoring locations have generally returned to pre-defueling Strontium levels, with outliers (such as MW-37-40[60]) expected to continue to show further decreases towards pre-defueling levels in the upcoming quarters. Additionally, the near-river monitoring locations (MW-67-39, MW-67-105, and MW-62-138) are currently exhibiting an increase in Strontium activity, as the perturbation migrates downgradient.

Overall, GZA believes that continued monitoring will further demonstrate decreasing long term trends in groundwater contaminant activities over time for both the Unit 1 and Unit 2 plumes

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[56] It is noted that there is no Tritium plume associated with Unit 3.

[57] It is noted that an increase was observed in the total Tritium activity of the Unit 2 plume during Q2 2010, as elucidated in **Figure G-17**. This Tritium mass increase was attributed to the transient RO. skid surface spill, which was only expected to temporarily increase the Unit 2 Tritium mass. Accordingly, a reduction back to the previous trend has been observed in the Q3 2010 total plume activity.

[58] These Retention Mechanisms are discussed along with the CSM in the previously cited Hydrogeologic Site Investigation Report.

[59] These data and analyses further support a conclusion that the Unit 2 SFP had ceased leaking after the transfer canal "pin hole leak" was repaired in late 2007. However, given the more recent behavior observed in the Unit 2 collection device data (see Section 3.6 of the Q1 2009 Long Term Monitoring Report), additional investigations/data evaluations are underway to further rule out potential Unit 2 SFP leak mechanisms.

[60] As discussed above, the 40 foot interval in the MW-37 monitoring installation is showing a delayed decrease in Strontium levels as compared to the depth intervals above and below. This response time lag is likely a result of the lower hydraulic conductivity (by two to three orders of magnitude) of the bedrock accessed by this depth interval.

given the source interdictions completed by Entergy. However, ultimate confirmation of these conclusions will require monitoring over a number of years to demonstrate continued depletion of Tritium and Strontium from the Retention Mechanisms originally sourced by: (1) historic Unit 2 SFP Tritium leakage; and (2) the historic and more recent Strontium leakage due to Unit 1 defueling, as well as impacts associated with a number of localized, transient release events. It is further noted that quantification of these overall radionuclide reductions will require that ranges in seasonal variation be adequately reflected in the monitoring data and any further additions of radionuclides to the Retention Mechanisms, such as through the transient releases discussed above, be dissipated from the geohydrologic flow regime.

Given the above cited constraints, it is premature to begin recalibrating the I.L.s, which were originally established at the beginning of the LTMP in 2007. Since inception of this program, it has been observed that I.L.s have been routinely exceeded in a number of cases where subsequent data have demonstrated that no new leaks have occurred. The majority of these cases occur where the radionuclide levels are generally low and/or near their detection limits. It appears that data variability, likely due to seasonal precipitation influences and local variations in flow paths and/or other in-situ processes, is the primary cause of these false positives[61], particularly pursuant to Tritium. Therefore, the basis upon which the I.L.s are computed needs to be re-evaluated in light of the long-term natural transient variability of the groundwater system in response to precipitation events, etc. Furthermore, while re-evaluation/re-setting of I.L.s is a clear goal, it is still premature given the lack of sufficient data. This is particularly true given the recent behavior in Strontium levels due to the Unit 1 defueling (see **Figure 7A**) and the transient Tritium releases discussed above and in the Q1 2009 Quarterly LTM Report. As such, the current I.Ls will remain in effect while a sufficient data base is acquired to allow better quantification of the natural (non-leak related) variability in the data.

Five critical conclusions can be drawn from the above summarized data and analyses:

1. The current CSM for the IPEC site provides a good basis for the design of the Long Term Monitoring Program;
2. The procedures and rationale used for selecting monitoring locations for leak detection have been further validated given the clear detection of the confirmed Unit 1 SFPs increased leakage during fuel removal, the transient Q1 2009 U1 FSB distillation tank valve leak (see Q4 2009 Quarterly LTM Report for further discussion), the surficial release of Tritium to Manhole A2 in Q2 2009 and Q3 2010, and the Q4 2009 RWST/R.O. processing skid surficial release to MH-9;
3. Increases in Strontium levels following a documented leak take longer to materialize in the groundwater than might otherwise be expected[62];
4. Localized, transient Tritium spills have a pronounced short term impact on Unit 2 Tritium plume activity, with potential longer term impacts via Retention Mechanism(s); and
5. Even with the somewhat increased Tritium levels currently observed due to the RWST/R.O. skid transient surface spill, the amount of radionuclides being released through the groundwater pathway is still small compared to permitted levels of Tritium discharge to the river through the Discharge Canal.

[61] In this context, "false positive" does not refer to an error in the actual data value. Rather, it means that the I.L exceedance in question did not result from a new release. While I.L.s are meant to be set at conservatively low values, and thus "false positives" should be expected, a corollary objective is to set I.L values which keep the number of false positives low enough to eliminate development of complacency.

[62] Given the proximity of monitoring installations to documented release events, the delay in release arrival is likely due primarily to Strontium partitioning and the time required for leakage to traverse anthropogenic features.

3.5 Plume Natural Attenuation Monitoring

The fourth and final objective of the Long Term Monitoring Program is to evaluate if the groundwater plumes identified on-Site demonstrate overall reductions in total activity over time, as is consistent with the requirements of Monitored Natural Attenuation (MNA), the selected remediation for the IPEC Site[63].

Given the likely ages of the SFP leaks identified and characterized during the hydrogeologic investigation, it is probable that the Unit 2 (Tritium) and Unit 1 (Strontium) plumes had reached steady state conditions prior to the beginning of the LTMP. Given that: (1) the identified leaks in the Unit 2 SFP have all been previously repaired (the last leak repaired in 2007) and; (2) the water in the Unit 1 West Pool underwent intensified demineralization (beginning in April 2006 with a reduction in Strontium levels of over 95 percent), one might expect that the plumes should have started to markedly attenuate toward zero with time. Both plumes have in fact generally shown significant levels of attenuation, when they are viewed in their entirety and past release events and expected seasonal variability in the sampling data are accounted for. However, the attenuation has not been as rapid as we originally anticipated during time frames subsequent to the source interdictions implemented by Entergy.

In the case of the Unit 2 Tritium plume, levels have dropped markedly from the highest levels measured during the two-year hydrogeologic investigation. However, the rate of Tritium decrease with time has decreased. This rate of reduction has been difficult to predict due to the impact of natural geologic and anthropogenic Retention Mechanisms. These subsurface features have trapped and stored Tritium released during historic Unit 2 SFP leaks, and are still likely releasing this Tritium to the groundwater flow regime in an episodic manner after the physical leaks have been terminated. This conclusion is consistent with the original CSM presented in the Hydrogeologic Site Investigation Report, as further supported by the tracer test data in that report as well as subsequent tracer data, as described in Section 3.6 of the Q1 2009 Quarterly Monitoring Report, dated July 2, 2010. In addition, trend identification is further complicated by impacts associated with localized transient releases (most recently, the RWST/R.O. processing skid surface spill). As described above, these transient spills have resulted in a clearly identified, increasing trend in Tritium activity in a number of wells proximate to, and downgradient of, these spills. As such, these increases do not appear to be indicative of a new leak in the Unit 2 SFP. Further discussion of this quarter's data pursuant to evaluation of the Unit 2 Tritium plume MNA is provided in **Section 3.5.1** below.

Relative to the Unit 1 Strontium plume, Strontium levels should drop much more slowly than Tritium levels. This is because, in addition to the Retention Mechanisms discussed above for Tritium (which also apply to Strontium), Strontium also undergoes partitioning whereby this radionuclide is adsorbed from the groundwater onto solid surfaces (both geologic and anthropogenic). When the input of Strontium to the groundwater is reduced (such as via the initial fuel pool demineralization and subsequent decommissioning) the solid surfaces desorb the "stored" Strontium back into the groundwater, thus maintaining Strontium levels. Strontium partitioning is therefore expected to substantially slow plume attenuation. Despite partitioning effects, some plume attenuation was observed in response to pool demineralization prior to defueling, particularly proximate to the pool. However, defueling of Unit 1 resulted in a temporarily increase in the leakage rate of West Pool water into the formation. This was expected based on previous work on the Unit 1 SFPs, but was unavoidable given the requirement to raise the pool level for fuel rod removal[64]. The increased leakage rate had resulted in a noticeable increase in Strontium levels in the immediate vicinity, and downgradient

[63] The selection of MNA as the remediation for the Site is more fully discussed in the Hydrogeologic Site Investigation Report.

[64] As of late 2008, all the fuel rods have been removed from the Unit 1 SFPs and the pool water has been drained. As such, the Unit 1 SFPs is no longer an active source of radionuclides to the subsurface.

of, the fuel pool. However, as more currently observed, the near-pool and more downgradient monitoring locations have generally returned to pre-defueling Strontium levels, with outliers expected to continue to show further decreases towards pre-defueling levels in the upcoming quarters, as discussed further in **Section 3.5.2** below.

3.5.1 Unit 2 Tritium Plume Attenuation

Qualitative Evaluation

From a qualitative perspective, a reduction in overall Tritium activity in the Unit 2 plume can be seen through a comparison of the Q3 2010 delineated plume boundary (**Figure 6A**) to those in early LTMP quarterly reports (2007 and 2008). Not only have Tritium levels within the plume generally shown an overall, long-term decreasing trend, but the reductions over the past few quarters, downgradient of the discharge canal, have become particularly evident in the delineated, shaded bounds of the plume. This quarter continues the trend where the shaded plume[65] no longer extends to the river as it did in previous quarters through 2008. Additionally, the rolling average Tritium activity in MW-111, indicative of the core of the plume, has shown an overall decrease by a factor of approximately two from Q1 2009 (70,150 pCi/L) to the current, Q3 2010, quarterly monitoring round (33,580 pCi/L). This trend over time has been summarized on **Figure 6A**, which is a compilation of the quarterly Tritium plume maps as well as that from the Investigation Report.

Mann-Kendall Quantitative Analysis

To more quantitatively evaluate MNA progress, a Mann-Kendall analysis, as referenced in USEPA Guidance for Data Quality Assessment – Practical Methods for Data Analysis,[66] was performed on the Tritium levels measured through Q3 2010 at monitoring locations associated with the IP2-SFP and downgradient Unit 2 Tritium plume[67]. Each of the vertical monitoring intervals at each monitoring installation location was analyzed separately. In general, only data collected after final completion of the multi-level installation[68] was used. However, there were a number of exceptions to this generalization where open borehole and/or borehole packer testing data were also used. These data were incorporated where possible given the importance of early time data (proximate to when documented leaks were still active). Additional, more detailed discussion relative to the basis for including these data is provided in Section 3.6 of the Q1 2009 Quarterly LTM Report.

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[65] The plume shading on **Figure 6** demarks the estimated boundary that separates Tritium levels greater than 5,000 pCi/L from those below this value, and provides a reasonable demarcation level for illustrating plume geometry and temporal variation. Although this value equates to one-quarter of the drinking water standard for Tritium, GZA emphasizes that drinking water standards (USEPA MCLs) do not apply to the IPEC property given that there are no drinking water sources on or proximate to the site. Where yearly rolling average radionuclide activity data were available for multiple depths at a given location, GZA used the highest value to develop plume delineations. This is a typical approach to represent three-dimensional contaminant data sets on two-dimensional maps.

[66] USEPA Guidance for Data Quality Assessment – Practical Methods for Data Analysis, EPA QA/G9, QA00 UDATE; EPA/600/R-96/084, July, 2000.

[67] The Mann-Kendall statistical technique was initially chosen because it is particularly well suited for data sets with a limited number of points. The method was subsequently retained because it is also a non-parametric analysis and therefore does <u>not</u> introduce bias by presupposing any particular shape for the trend curve. In addition, the method is robust with respect to outliers, which allows it to handle the variability inherent in the data set. Finally, the method tolerates non-uniform sampling frequencies. This is important because while the sampling frequency is typically quarterly, more frequent samples are proactively taken when a scheduled operation carries an increased risk of potential release, and also when something unexpected is observed that could indicate a new leak or spill.

[68] The majority of the boreholes were completed as multi-level installations. These multi-level completions were designed to segregate the borehole length into individual sampling zones with depth. The sampling zones were generally established to coincide with the more productive zones of the fractured bedrock and overburden (both natural soils and backfill). These zones were then isolated from each other with various types of seals placed in the open borehole. The objective of the seals is to prevent vertical flow through the borehole and thus establish the same conditions in the formation which existed prior to the drilling of the borehole. As such, the Tritium data is considered depth-discrete. It is noted that the multi-level installations at some monitoring locations were removed and replaced with upgraded systems, such as for the monitoring installation at MW-32.

Graphs showing the variation in Tritium concentration over time in the immediate vicinity of the Unit 2 SFP are presented as **Figures G-1**, **G-2** and **G-3** in **Appendix G**, for MW-30, 31 and 32, respectively. Additional graphs are also presented in the appendix for the other monitoring locations downgradient of the Unit 2 SFP (see **Figures G-4** through **G-14** for MW-33 through 37, 42[69], 49, 50, 53[69], 55 and 111) and downgradient[30], river boundary wells (see **Figures G-15** and **G-16** for MW-66 and 67, respectively). The Mann–Kendall analyses for the individual monitoring points are summarized on **Table G-1** in **Appendix G**. The table includes the results of the analysis for each depth interval ("well") at each of the multi-level monitoring locations enumerated above. The table is color coded, with green shading designating wells showing a decreasing trend, yellow for no trend, and red for an increasing trend.

Comparison of **Table G-1** for Q3 2010 to that from Q2 2010 indicates that there have been no major changes since last quarter. Of the 32 non-river-boundary intervals included on the table for Q3 2010, approximately one-half (17) show a decreasing trend, which is the same as last quarter. Slightly less than one-half (4) of the 9 river boundary monitoring intervals show a decreasing trend, similar to last quarter. It is important to note that this group of "decreasing wells" includes all those located within the core of the plume with the highest Tritium activities (MW-30-69, MW-33 and MW-111). These high-activity wells better represent overall plume behavior because they encompass a high percentage of the total Tritium activity in the plume.

However, relative to the primary intent of the Mann-Kendal analyses for evaluation of plume attenuation after SFP leak termination, it is noted that the number of wells exhibiting a decreasing trend is decreasing (i.e., changing to a no-trend status). This issue is, in part, due to a shortcoming of the Mann Kendall analysis method, itself. This method only evaluates the number of increases relative to decreases, and does not weight the analysis relative to the magnitude of each change. Therefore, once a clearly decreasing trend, even of substantial magnitude, has reached a nearly horizontal asymptotic behavior, numerous insignificantly small positive and negative changes over time (such as due to sampling and hydrogeologic variability) can overwhelm the relatively short, early-time string of decreasing changes, thus resulting in a switch from a decreasing trend to a no-trend status. This is particularly true when a 95% confidence interval is applied. Of even greater import relative to the masking of SFP plume attenuation is the impact of localized, transient Tritium surface spills. These have been shown to result in increases in activity, which, while valid measures of plume activity, impair the ability of the trend analysis to serve as a measure of plume attenuation due to successful SFP leak termination, the intended purpose of this analysis. As a case in point, and as described in more detail for individual impacted wells below, a number of wells have changed from decreasing to no-trend and from no-trend to increasing trends this quarter (Q3 2010) in response to the RWST/R.O. transient surface spill[70]. While this transient spill was identified and described two quarters ago, the number of samples showing increased tritium levels has reached a point where these data have overwhelmed the previously decreasing trend which was reflective of the SFP leak terminations. Of the 11 non-river-boundary wells shaded in yellow (exhibiting "no-trend"), only one currently potentially provides a valid representation (as shaded) of Unit 2 plume behavior pursuant to the Unit 2 SFP (discussed at the end of this section). The shading

[69] MW-42 and MW-53 are located downgradient of the Unit 1 SFPs, rather than the Unit 2 SFP. However, these two wells were included in the analyses due to the long-standing hypothesis that the Unit 2 SFP contributes Tritium to the Unit 1 groundwater flow regime via vadose zone transport (see the graphic representation in **Figure 6** herein and the discussion in the Hydrogeologic Site Investigation Report). It is noted that any decreasing Tritium trend in this area due to the termination of leaks from the Unit 2 SFP could be masked by increased leakage of Tritiated water from the Unit 1 SFPs up through the completion of defueling in November 2008, and then thereafter via the Retention Mechanism(s) and localized transient releases, as described above.

[70] Investigation of this type of spill typically results in numerous samples over a short period of time during the peak activity. Again, only the number of elevated points is considered and not the duration of the increased activity, which then results in a misleadingly prolonged deviation from the underlying SFP decreasing trend condition.

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designation (in and of itself) for the others can no longer[71] be used to infer conclusions relative to overall plume trend as an indicator of Unit 2 SFP integrity based on this analysis, as follows:

- Three wells (MW-42-49, MW-42-78, and MW-53-82) are located downgradient of the Unit 1 SFPs, rather than the Unit 2 SFP.[72] In addition, as discussed in **Section 3.4.2**, MW-53-82 appears to have been impacted during the Q2 2010 quarterly monitoring event by the more recent RWST/R.O. spill, as well as the prior U1 FSB valve leak.
- Inspection of the graph for MW-36-24 **(Figure G-7)** shows a rapid and large decrease in Tritium activity at early times in this overburden (discharge canal backfill) well (from >30,000 pCi/L to <3,000 pCi/L). This large decrease is followed by a number of small perturbations around a relatively flat trend. While it is visually clear that this well has shown a major decrease in Tritium levels since containment of the 2005 shrinkage crack leak, the Mann–Kendall analysis only evaluates the number of increases relative to decreases and does not weight the analysis relative to the magnitude of each change. As such, visual inspection demonstrates that this location actually exhibits an overall decreasing trend, even though the analysis results in a no-trend designation (yellow shading on table). However, it is also noted that the last few quarters have shown what appear to be short-term, small peaks in the Tritium activity in this well, as likely associated with the transient Q1 2009 release from the U1 FSB distillation valves, the Q4 2009 RWST/R.O spill and/or the recent increases noted in MW-31 and MW-32.
- Inspection of the graph for MW-50-42 (**Figure G-11**) shows a similar historical trend as exhibited by MW-36-24, as discussed above. As such, the same conclusion has been reached for this well.
- Inspection of the graph for MW-55-24 (**Figure G-13**) shows a similar historical trend[73] as exhibited by MW-36-24and MW-50-42, as discussed above, although the initial decrease in Tritium activity at this sampling interval is not as substantial as the two previously discussed monitoring locations. As such, the same conclusion has been reached for this well.
- Inspection of the graph for MW-32-149 (**Figure G-3**) shows a relatively well behaved decreasing trend in Tritium activity, starting at the beginning of the LTMP and continuing all the way until Q1 2010. This is as would be expected in response to termination of all the identified SFP leaks. However, a distinctly increasing trend began thereafter, as correlated with the Q4 2009 transient RWST/R.O. processing skid surface spill. As such, the shift from a decreasing trend to a no-trend Mann-Kendall status appears to most probably reflect the RWST/R.O spill and not a new leak in the Unit 2 SFP.

[71] While the Mann Kendall has many advantages for trend analysis, particularly where the number of data points is limited, it suffers from an inability to account for the magnitude of each change, only assessing the number of positive changes relative to negative changes. This shortcoming was inconsequential at early-times when larges decreases in Tritium activity were observed in response to Entergy's termination of all of the identified leaks in the Unit 2 SFP. However, now that many of the graphs of Tritium activity vs. time have nearly reached a horizontal asymptote, the accumulating number of small positive and negative changes is overwhelming the relatively short, early-time string of decreasing changes, thus resulting in a switch from a decreasing trend to a no-trend status. In addition, localized, transient Tritium surface spills have impaired the ability of the trend analysis to serve as a measure of plume attenuation as related to SFP leak termination, the intended purpose of this analysis.

[72] MW-42 and MW-53 are located downgradient of the Unit 1 SFPs, rather than the Unit 2 SFP. However, these two wells were included in the analyses due to the long-standing hypothesis that the Unit 2 SFP contributes Tritium to the Unit 1 groundwater flow regime via vadose zone transport (see the graphic representation in **Figure 6** herein and the discussion in the Hydrogeologic Site Investigation Report). It is noted that any decreasing Tritium trend in this area due to the termination of leaks from the Unit 2 SFP are more likely to be masked by increased leakage of Tritiated water from the Unit 1 SFPs up through the completion of defueling in November 2008, and then thereafter via the Retention Mechanism(s) and localized transient releases, as described above. This conclusion is based on their distance from The Unit 2 SFP and their proximity to the Unit 1 SFPs and the Unit 1 FSB distillation tank valve leak.

[73] It is noted that MW-55-24 exhibits a similar trend to MW-36-24, except at very early times where it does not show as large a drop in Tritium activities.

Because this transient source has been terminated, the MW-32-149 Tritium activity will likely continue to return to pre-spill levels, and it is anticipated that the Mann-Kendall analysis will eventually re-designate this well as "decreasing trend", as it has been for all quarterly monitoring reports prior to Q2 2010.

- Inspection of the graph for MW-32-173 (**Figure G-3**) shows a clear, well behaved decreasing trend through Q4 2009[74]. Similar to MW-32-149 discussed above, the current switch to an increasing trend is in response to the Q4 2009 transient RWST/R.O. processing skid surface spill. However, visual inspection of the data indicates that the Tritium activity is again decreasing as would be expected given the transient nature of the spill. Therefore, it is anticipated that the Mann-Kendall analysis will eventually re-designate this well as "decreasing trend," as it has been for all quarterly monitoring reports prior to Q3 2010.
- Inspection of the graph for MW-32-59 (**Figure G-3**) shows two major spikes, one just after the Unit 1 distillation tank valve leak[75] and a more prolonged peak just after the RWST/R.O. processing skid surface spill. As for MW-32-149 discussed above, the behavior of this well has been substantially impacted by the RWST/R.O. processing skid surface spill.
- Inspection of the graph for MW-55-54 (**Figure G-13**) shows a similar historical trend[76]as discussed above for MW-32-149. As such, the same conclusion has been reached for this well.

The one "no trend" well that currently may potentially still provide a valid representation of U2 SFP behavior[77] is the shallowest sampling port in monitoring location MW-31. Additionally, two of the four "increasing trend" non-river boundary monitoring intervals are also located in the MW-31 monitoring installation (MW-31-63 and MW-31-85). These three intervals in MW-31 have not been clearly shown to be impacted by surface spills, and may thus be representative of SFP behavior. The MW-31 location is actually not located downgradient of the Unit 2 SFP from a saturated groundwater flow standpoint. Rather, it is generally located up-gradient[78]. All three intervals in MW-31 have shown clear peaks in Tritium levels over the last seven quarters (Q1 2009 through Q3 2010) with somewhat less, but still noticeable variability evident all the way back to the beginning of monitoring. The current and historic variability in these data can be explained by either: 1) an ongoing small <u>episodic</u> (< 10L/day) leak in the Unit 2 SFP; 2) a "Retention Mechanism" in the saturated and unsaturated zones under the SFP that can retain substantial volumes of highly Tritiated water (e.g., historic SFP leakage) for substantial amounts

[74] In fact, when applying the Mann-Kendall analysis to MW-32-173's Tritium data through Q4 2009, it produces a "decreasing trend" status at the 99.9% level of significance. Typically, only a 95% level of significance is used to designate a "decreasing trend" in environmental data using the Mann Kendall analysis. As such, this monitoring interval, MW-32-173, only switched to a "no trend" status during the current (Q3 2010) quarterly monitoring period. Other intervals at this monitoring location that exhibited similar responses to the RWST/R.O. transient spill had already switched to "no trend" designations by the Mann-Kendall analysis in prior (Q1 and Q2 2010) quarterly monitoring periods.

[75] While this leak preceded the peak and appears temporally correlated, a migration mechanism from the leak area to this well has not been identified.

[76] While MW-55-54 exhibits a similar trend to MW-32-149, it is noted that there is a small, extended increase in Tritium activity over the middle of the graph, which is not seen in MW-32-149. This increase started prior to the documented localized, transient spills discussed above. As such, it is possible that this increase is associated with the coincident increase in Unit 2 SFP leak collection device flow rate during 2008 dry cask activities. This possible relationship is currently being investigated further.

[77] As described above, the ability of a number of monitoring intervals to provide SFP trend monitoring has been masked, at least temporarily, by the RWST/R.O. processing skid surface spill.

[78] While not downgradient of the SFP from a groundwater flow perspective, Tritium leakage from the SFP can still migrate to this location via vadose zone transport above the water table along dipping bedrock fractures. During the site investigation work, a tracer test was performed which clearly demonstrated that water released proximate to the SFP foundations (adjacent to MW-30) does migrate to the east past MW-31 prior to entering the water table, and then flows with the groundwater through this well and then to the river to the west. This vadose zone migration mechanism is discussed more fully in the Hydrogeologic Site Investigation Report.

of time[79]; 3) localized, transient releases[80] and/or 4) a combination of the above. While Tritium concentrations in the groundwater plume could be impacted by both an ongoing leak and the Retention Mechanisms cited above, tracer concentrations in the groundwater cannot be replenished by SFP leakage. As discussed in further detail in Section 3.6 of the Q1 2009 Quarterly Monitoring Report, the original and updated tracer data strongly support the existence of a Retention Mechanism. In addition, it would be expected that Tritium release from the Retention Mechanisms would be episodic, for example as associated with periods of increased infiltration from precipitation. Such episodic releases would be expected to result in the peaks in Tritium concentrations observed. However, it is also becoming increasingly evident that relatively recent localized, transient spills are also contributing to the observed peaks in Tritium activity in a number of monitoring intervals.

The third remaining interval reported as "increasing trend", MW-32-85, (**Figure G-3**) had not previously exhibited an increasing trend. However, the Tritium activity has been steadily increasing after the RWST/R.O. processing skid surface spill. As discussed above for MW-32-149, the same conclusion has been reached for MW-32-85 relative to a projected eventual resumption of a decreasing-trend Mann-Kendall status given the transient nature of the underlying-cause RWST/R.O. processing skid surface spill.

The fourth and final interval reported as "increasing trend", MW-30-84, is located immediately next to the SFP and generally downgradient of MW-31-63 and MW-31-85 (intervals with increasing trend). In agreement with the Mann-Kendall analysis yielding an increasing trend for MW-30-84, this interval does exhibit a distinctly increasing, sustained trend beginning in the late fall of 2008. The specific reason for this increase is not known, but it is worth noting that the Tritium activity in this interval is approximately an order of magnitude below that measured in upgradient monitoring intervals MW-31-63 and MW-31-85, both of which are exhibiting increasing trends. As such, the increasing trend in MW-30-84 could be a response to infiltration of this higher activity water over time. In addition, there are also peaks in the Tritium over time data for MW-30-84 which are consistent with the timing of the above discussed localized, transient surface spills. Finally, the beginning of the general increasing trend in Tritium activity in this well appears to predate the identified localized spills, and is coincident with the increase in Unit 2 SFP LCD flow rate during 2008 dry cask operations. This potential relationship is currently being investigated further.

Of the seven depth intervals in river boundary well MW-67, three show no trend and three exhibit a decreasing trend using the Mann-Kendall analysis (**Figure G-16**). This is the same distribution as last quarter, but with one additional decreasing trend interval relative to the previous quarter (Q1 2010)). It is critical to note that two of the three wells showing the decreasing trend are those with the highest Tritium activities (MW-67-39 and MW-67-105); activities up to four times those in the no trend wells[81]. In addition, the no trend wells all have maximum Tritium activities less than 1500 pCi/L. Finally, the only depth interval that shows an

[79] This hypothesized "Retention Mechanism" is supported by our understanding of the construction methods used for the IP2-SFP and adjacent structures, evaluations of contaminant concentration variability trends over short timeframes and precipitation events, as well as the original and subsequent tracer test results, as further described in Sections 7.0 and 8.0 of the Hydrologic Site Investigation Report and the Q1 2009 monitoring report.

[80] That is, any other leak or spill above the upgradient portions of the Unit 2 Tritium plume (such as the previous distillate tank valve leak first discussed in the Q1 2009 Quarterly Report and the more recent RWST/R.O. processing skid spill discussed in **Section 3.4** above). While relatively infrequent and transient, these spills of radionuclides into the subsurface clearly further complicate the analyses and evaluation of long term trends as used to verify the cessation of Unit 2 SFP leakage. The impact of these releases are also becoming increasingly difficult to separate from impacts associated with the storage /Retention Mechanism(s) to which these releases also contribute. To the extent possible, these transient releases have been accounted for in the previous discussions and analyses.

[81] It is also noted that all three monitoring intervals exhibiting decreasing trends are the shallowest sampling intervals within MW-67.

increasing trend (MW-67-340) generally has the lowest Tritium activities[82] of all 7 intervals; it is further noted that the maximum activity measured in this interval is well below 1,000 pCi/L. It is also important to recognize that MW-67 was installed and first sampled in late 2007, well after the majority of the Unit 2 Tritium activity reduction occurred (2005 through early 2007, as exhibited by the upgradient wells). Therefore, what may have been decreasing trends in these "no trend" wells, cannot be reconstructed with the available limited late-time data sets. It is currently GZA's opinion that the no and increasing trend wells in MW-67 should continue to be monitored, but the data and trend analyses that they currently provide via the Mann-Kendall analysis method should be of no current concern. A similar analysis and conclusions apply to the two depth intervals in MW-66 (see **Figure G-15**).

Based on the evaluation summarized above, the Mann-Kendall analyses of the individual depth intervals within the groundwater monitoring installations located proximate to and downgradient of the Unit 2 SFP previously have overwhelmingly supported a conclusion that the Tritium plume has exhibited an overall decreasing trend with time since monitoring began. This conclusion was clear at early-times when larges decreases in Tritium activity were observed in response to Entergy's termination of all of the identified leaks in the Unit 2 SFP. However, now that many of the graphs of Tritium activity vs time have reached a horizontal asymptote, the accumulating number of small positive and negative changes is overwhelming the early-time string of decreasing changes, thus resulting in a switch from a decreasing trend to a no-trend status. Therefore, identification of another, more appropriate method is being investigated, particularly as the total LTMP data set becomes more robust with time. However, localized, transient Tritium spills have also impaired the ability of the trend analysis to serve as an appropriate measure of plume attenuation as related to SFP leak termination, the intended purpose of this analysis. As such, it is also important to recognize that the increases in Tritium activity measured in the monitoring wells have been readily explained by localized, transient surface spills which are unrelated to the Unit 2 SFP. As such, there is still currently no definitive evidence of new, <u>unidentified</u> leaks from the monitored Systems, Structures, or Components, including the Unit 2 SFP.

<u>Tritium Plume Total Activity Analysis</u>

As discussed above, the individual well trend data, when viewed collectively, support a conclusion that the Tritium plume concentrations have generally been decreasing with time since monitoring began. Another method to analyze plume behavior is to compute the total Tritium activity in the plume at multiple snapshots over time. This procedure[83] was implemented for each quarterly LTMP sampling round from Q2 2007 to Q3 2010. In addition, the bounding Tritium concentrations from Figure 8.1 of the Hydrogeologic Site Investigation Report[84] have also been included as a starting point for the graph. These data are summarized as a histogram on **Figure G-17** in **Appendix G**.

As can be seen from the figure, the total Tritium activity in the plume downgradient of the Unit 2 SFP has shown a distinctly decreasing trend over time. After a noticeable increase in total Tritium mass last quarter (Q2 2010)[85], the total Tritium activity noticeably decreased during the

[82] Monitoring intervals MW-67-323 and MW-67-340 have historically exhibited similar Tritium activities; however, the activity in MW-67-323 is typically slightly less than that in MW-67-340.

[83] The individual sampling point Tritium concentrations were multiplied by the groundwater volumes in representative zones (discretized over area and depth), as computed using soil and bedrock effective porosities developed from the pumping and tracer tests (see the Hydrogeologic Site Investigation Report for further information).

[84] Hydrogeologic Site Investigation Report, January 7, 2008, prepared by GZA GeoEnvironmental, Inc, on behalf of Enercon Services, Inc., for Entergy Nuclear Northeast, Indian Point Energy Center, 450 Broadway, Buchanan, NY 10511.

[85] Approximately 70% of the sampling intervals used in the total Unit 2 Tritium activity calculations recorded an increase in Tritium activity from Q1 2010 to Q2 2010. It should be noted that an increase in Tritium activity for sampling locations completed in soil (backfill) have greater impacts on the total Tritium mass calculations due to difference in overburden porosity vs. bedrock porosity.

current quarter (Q3 2010) and resumed the historical decreasing trend over time. Similar to the increase in Unit 2 I.L. exceedances, the overall activity increase during Q2 2010 appears to have been caused by the transient surface spill related to the RWST/R.O. processing skid operations. As such, the total Tritium activity is expected to continue its overall decreasing trend, similar to the current (Q3 2010) quarterly monitoring round, given the transient nature of this spill. Based on the Q3 2010 data, the total Tritium activity in the plume has decreased 45 percent since Q2 2007, and has decreased by 89 percent when compared to the bounding level Tritium concentrations. It is noted that the time/activity data appear to be approaching a non-zero horizontal asymptote[86]. While the general "first order" plume decay is what would be expected for a plume undergoing Monitored Natural Attenuation after source termination, a non-zero asymptote suggests a continued input of Tritium into the groundwater flow regime. The data currently available lead us to believe this continuing Tritium input is likely associated with the Retention Mechanism(s), the localized transient releases detected to date and/or potentially a small unidentified Unit 2 SFP leak, as described in this and earlier reports.

Conclusion- Unit 2 Tritium Plume MNA

Based on the data and analyses provided above, our conclusion is that the Tritium plume associated with the historic Unit 2 SFP leaks is undergoing overall, long-term reductions in activity which are consistent with Monitored Natural Attenuation (MNA), the remedial technology selected for the IPEC Site. Given this conclusion and the recognition that Entergy has terminated all identified leaks in the Unit 2 SFP, this Unit 2 Tritium plume satisfies the requirements for Monitored Natural Attenuation[87]. Further justification for this conclusion can be found in Section 3.6 of the Q1 2009 Quarterly Monitoring Report as well as the Hydrogeologic Site Investigation Report.

Finally, it is important to recognize that even with the somewhat increased Tritium levels currently observed due to the RWST/R.O. skid transient surface spill, the amount of tritium being released through the groundwater pathway is still small compared to permitted levels of Tritium discharge to the river through the Discharge Canal.

3.5.2 Unit 1 Strontium Plume Attenuation

Despite the effects of partitioning, as discussed above, the overall Strontium activity within the Unit 1 plume had generally shown some attenuation in response to the West Pool demineralization conducted by Entergy in preparation for defueling. This work began in 2006 and resulted in an approximately 98% reduction in Strontium in the West Pool (see **Figure 7A**: U1-NCD, U1-SFDS, MW-42, U1-CSS). However, the final defueling of the Unit 1 SFPs had resulted in a noticeable increase in Strontium levels proximate to the SFPs (U1-NCD, U1-SFDS, MW-42, and U1-CSS; all of which have shown large sustained decreases since mid 2009 to pre-defueling levels). Farther downgradient (MW-53, MW-55, MW-54, MW-57, MW-50, and MW-37), increases in the Strontium plume activities were also measured, but generally after a time lag as compared to wells more proximate to the SFPs. The majority of these more downgradient monitoring locations have most recently shown decreases approaching pre-defueling levels. The farthest downgradient, river boundary wells (MW-67 and MW-62) have

[86] One physical cause for a horizontal asymptote would include a persistent, unidentified leak still remaining in the Unit 2 SFP. With Tritium at approximately 30,000,000 pCi/L in the SFP, a leak directly from the pool of only approximately 10 L/day would be sufficient to provide the required Tritium input to the groundwater. To date, the available data do not appear to support the existence of such a leak. The rationale underlying this continued conclusion is discussed more fully in Section 3.6 of the Q1 2009 Quarterly Monitoring Report. However, this conclusion is continually reassessed on a quarterly basis as new data becomes available. In particular, this quarter's new LCD data as well as that for MH-5 VCFD have resulted in the initiation of additional investigations.

[87] It is noted that the previously clear attenuation of the Unit 2 tritium plume has been confounded by a number of localized, transient surface spills. Entergy is currently in the process of reviewing and addressing work practices which may have contributed to the occurrence of these spills.

possibly shown Strontium activity increases in the past few quarterly sampling events. This increase, followed by a longer term decrease, is as was predicted given the requirement to temporarily raise the pool levels for fuel rod removal, thus increasing the leakage rate from the SFPs prior to fully draining the pool[88].

The data for Q3 2010 indicate that the overall Strontium levels continued to exhibit a general decrease and have now generally reached pre-defueling levels in the immediate vicinity of the pool (U1-NCD, MW-42, U1-SFDS, U1-CSS and MW-53). These monitoring locations would be expected to be the first to reflect the complete decommissioning of the SFPs given their location/function. Somewhat farther downgradient, the Q3 2010 data are consistent with the "tail" portion of the perturbation as the previous increase in U1-SFPs leakage works its way towards the river. This behavior is most evident at monitoring locations MW-37, MW-50[89], MW-55 and MW-57[90] where, for the most part, the maximum Strontium levels were recorded in 2009 and have decreased over the past few quarters, approaching pre-defueling activities. MW-54, however, appeared to have already exhibited a Strontium peak in Q4 2008, and then decreased back to previous levels, even though this monitoring installation is relatively far downgradient. This behavior serves to again emphasize that the IPEC Site is located in a bedrock fracture controlled hydrologic regime[91]. As such, this type of localized "distance-based inconsistency" is to be expected and likely indicates that these wells are closer to (or within) the more pervious preferential flow pathway that is hypothesized to be responsible for the convergence and narrowing of the Tritium and Strontium plumes as they move toward the river from sources centered at widely spaced locations upgradient[92].

Farther downgradient, in the vicinity of the river, increases in Strontium activity in MW-62 may be reflective of the Unit 1 SFPs defueling operations. The MW-62-138 depth interval (along with, but to a lesser extent the shallower intervals in overburden) appears to show two distinct Strontium peaks in Q1 2009 and Q4 2009[93]. Furthermore, a third, smaller magnitude, increase in Strontium activity is observed during the current (Q3 2010) quarter, and the activity is again greater than the approximate pre-defueling levels. However, it is noted that the Strontium levels in this monitoring installation are all relatively low (below 3 pCi/l), and this location does not appear to be proximate to (or within) the preferential flow path cited above for the Strontium plume. Therefore, the peaks in Strontium observed may not be associated with the Unit 1 defueling, and may be due to nothing more than hydrogeological variability. The other riverfront monitoring installation downgradient of the unit 1 Strontium plume, MW-67, may also be exhibiting impacts from the Unit 1 SFPs defueling. The shallowest depth interval, MW-67-39 has shown a moderate increase in Strontium levels in Q4 2009 followed by slight decreases in

[88] As of late 2008, all the fuel rods have been removed from the Unit 1 SFPs and the pool water has been drained. As such, the Unit 1 SFPs is no longer an active source of radionuclides to the subsurface.

[89] As noted in Section 3.4.4 above, the Q3 2010 Strontium result in MW-50-42 exceeded the I.L. at this sampling interval. On the other hand, a decrease in Strontium activity was observed in MW-50-66, consistent with the "tail" portion of the perturbation.

[90] Based on Q2 2010 data; both sampling intervals in this monitoring location have approximately reached pre-defueling Strontium levels. This monitoring location is sampled semi-annually, thus no sample was collected during Q3 2010.

[91] While groundwater flow through the fractured bedrock at the IPEC Site is highly preferential at small areal scales, it is characterized by sufficiently interconnected small bedrock fractures to allow the hydrogeologic system to function and be modeled as a non-homogeneous, anisotropic, porous media at Site-wide scales.

[92] By way of contrast, in a porous media flow regime, the centerlines of plumes that start at widely spaced locations (spaced perpendicular to the groundwater flow path) will typically remain widely spaced (although the edges of the plumes will likely move closer as the plumes get wider through dispersion). In the case of fracture flow at IPEC however, not only do the Strontium and Tritium plume centerlines converge, but the plumes also get narrower as they move downgradient. In addition, MW-50 displays high relative Strontium concentrations and fault gouge was encountered during the drilling of this well. These behaviors/data are hallmark signatures of a more highly fractured zone preferentially controlling groundwater flow and thus the migration of the contaminants therein (see the Site Hydrologic Investigation Report for further CSM-focused discussion of this issue).

[93] The increase in Q1 2009 in MW-62-138 was followed by a steady decrease over the next two quarterly monitoring events, and the peak in Q4 2009 was followed by a greater magnitude decrease in Q1 2010; the Q2 2010 Strontium activity slightly increased compared to Q1 2010.

Q1 2010 through Q3 2010 (trends consistent with "tailing off" portion of an adsorbing radionuclide) after an overall, clear decreasing trend since October 2007. However, the monitoring interval directly below MW-67-39 (MW-67-105) has shown increases in Strontium activity over the past two monitoring events; this interval had previously shown generally stable Strontium levels since the initiation of the LTMP. Additionally, the Q3 2010 result exceeded the Strontium I.L. at MW-67-105, as discussed in **Section 3.4.4** above. The Strontium activity in this sampling interval is expected to decrease once this perturbation passes through the system.

From an overall, long-term perspective, Strontium levels downgradient of the Unit 1 SFPs are generally behaving as expected. The monitoring installations closest to the SFPs (e.g., U1-NCD, MW-42, U1-CSS and U1-SFDS) exhibited strong peaks in Strontium activity in response to defueling, and then have generally decreased to pre-defueling levels. Monitoring installations farther downgradient are generally showing decreases in Strontium activity over the past three quarterly sampling rounds and are approaching pre-defueling levels (e.g., MW-37, MW-55, and MW-57). It is expected that Strontium activities in these wells will continue to decrease to pre-defueling levels. Monitoring installations closer to the river may still show Strontium increases (similar to the current increase at MW-67-105) as the additional leakage experienced during defueling flushes through the groundwater flow system. It is expected that completion of this flushing mechanism will be protracted given the aforementioned impact of partitioning on Strontium levels in the groundwater. However, over time it is expected that downgradient Strontium plume levels will also continue their overall downward trend once this perturbation has fully passed through the system; decreasing trends are expected and predicted given that Entergy has terminated all leaks in the Unit 1 SFPs through decommissioning and the Unit 1 Strontium plume continues to decrease in accord with Monitored Natural Attenuation. Given this conclusion and the recognition that Entergy has terminated all identified leaks in the Unit 1 SFPs through decommissioning, the Unit 1 Strontium plume satisfies the requirements for Monitored Natural Attenuation.

4.0 CONCLUSIONS AND PLANNED FUTURE WORK

Given the data collected to date, the apparent strength of the CSM to evaluate those data, and the completion of source interdictions by Entergy, we believe all Program Objectives (see **Section 3.0)** are being met. These objectives are consistent with and fully encompass the guidance provided in the NEI Groundwater Protection Initiative (GPI).

Based on the specific results and evaluation of the Q3 2010 groundwater monitoring within the context of the Long Term Monitoring Program, IPEC plans to continue routine groundwater monitoring, related monitoring network maintenance and reporting of the data and engineering analyses. In this context, it is noted that the analyses and conclusions presented in this report are based on the data and information available up to and including the subject quarter. Data that becomes available after the subject quarter, but before the finalization date of the report is sequentially reflected in the associated subsequent reports.

This work will be conducted in accordance with the IPEC Radiological Groundwater Monitoring Program IP-SMM-CY-110.

More specifically, evaluation of data collected during Q3 2010 has shown the following:

- While I.L.s have again been met at a number of Unit 2 locations this quarter, there is no compelling evidence that any new <u>unidentified</u> leaks have developed in the Unit 2 SFP or other monitored Systems, Structures, or Components. The rationale underlying this continued conclusion is discussed more fully in Section 3.6 of the Q1 2009 Quarterly Monitoring Report. The validity of this conclusion is also not diminished by the Q3 2010 and/or Post-Q3 2010 I.L. exceedances in multiple MW-31 and MW-32 sampling intervals (MW-31-49, MW-31-63, MW-32-59, MW-32-149, and MW-32-173) proximate to the Unit 2 SFP because these Tritium increases have been generally shown to be due to a localized, transient surface spill from a temporary, rental RWST/R.O. processing skid during Q4 2009 (see **Section 3.4.5**). Given that this Tritium release was eliminated, it is expected that the Tritium activities will decrease to pre-spill levels at these sampling intervals[94]; although future releases from the storage/Retention Mechanism(s), replenished by these spills and historic SFP leaks, could create additional perturbations in Tritium levels. The above conclusion is continually reassessed on a quarterly basis as new data becomes available. In particular, this quarter's new LCD data as well as that for MH-5 VCFD have resulted in the initiation of additional investigations. While all LCD water is fully contained and does not enter the groundwater regime, the increases observed in MW-31, MW-32 and MH-5 VCFD appear to be potentially correlated, on a temporal basis, with this increased LCD flow rate[95].
- Previously identified, more historic transient leaks included: the additional leakage from the Unit 1 SFPs during the 2008 defueling operations, the transient leakage from the distillation tank valves in Q1 2009, and the two transient surficial Tritium releases to Unit 3 Manhole A2 in Q2 2009 and the current Q3 2010:
  - Based on past work, additional leakage was expected during the raising of water levels in the Unit 1 SFPs for final fuel removal to ISFSI storage. Unit 1 SFPs leakage

[94] An overall decrease in Tritium activity is observed in all three previously mentioned MW-32 sampling intervals (MW-32-59, MW-32-149 and MW-32-173) during Q3 2010 for the first time since the transient RWST/R.O. surface spill was first seen at this location. However, the two MW-31 sampling intervals are still exhibiting overall increasing Tritium trends through Q3 2010.

[95] While the data trends appear to correlate on a temporal basis, it is noted that simple correlation does not demonstrate causation.

was terminated with the drainage and sealing of the pools. This previous, transient leakage was initially verified as pronounced increases in Strontium and Cesium in the monitoring locations closest to Unit 1, and continues to be monitored.

- The Q1 2009 leakage from the distillation tank valves was independently[96] identified based on an increase in Tritium levels in monitoring installation MW-42 proximate to the tanks, and subsequent increases in downgradient wells (MW-53-82, U1-CSS, and MW-50-42). These valves were immediately repaired and the leakage was terminated. Based on the observed data trends, it appears that the Tritium input into the groundwater flow regime from the waste distillation tank valving leak has generally dissipated through the system[97]. However, the potential impact of this release further downgradient will be specifically scrutinized during subsequent monitoring rounds.
- Elevated Tritium activity was detected in Unit 3 Manhole A2 during routine 80-10 Effluents Program sampling during Q2 2009. This manhole is located proximate to the Unit 3 FSB. Subsequent re-sampling of this manhole showed rapidly decreasing Tritium activity, indicating that this was a one-time transient event. This elevated Tritium was also detected in a proximate groundwater monitoring installation (MW-45), likely due to exfiltration of Tritium from the manhole. A second elevated Tritium activity was detected in Manhole A2 (as well as Manhole A4, to a lesser degree) during routine 80-10 Effluents Program sampling during the current, Q3 2010, monitoring period. Similar to the peak observed in Q2 2009, the subsequent re-sampling indicated a rapid decrease in Tritium activity within the storm drain system. Both increases in A2 Tritium levels are believed to be due to condensation of SFP evaporation on the roof when the vent fan is not operating, which then enters the building roof drain leading directly into A2 during rainfall events, as is currently being verified. Both a nearby sampling interval (MW-41-40) and two downgradient sampling intervals (MW-46 and B-1) have also shown elevated Tritium levels during Q3 2010. The Tritium activity at these locations is expected to decrease, similar to the trends observed within the storm drain system.

As such, these data support the validity of the current CSM for use as a basis for Long Term Monitoring Program design. It is further noted that, while a portion of the above five documented localized release events traveled directly to the saturated groundwater regime and resulted in the observed transient "peaks" in radionuclide levels, additional portions of these releases likely remain above the water table as recharge to the various Retention Mechanisms. This additional unsaturated zone source recharge will likely be manifested in the future as additional non-specific peaks in radionuclide levels due to episodic releases to the groundwater flow regime from these mechanisms (e.g., from intense/prolonged precipitation events).

- While the current <u>Tritium</u> I.L. levels proved helpful over the past three quarters (Q1 through Q3 2010) in identifying a localized, transient surface spill from a temporary

[96] The valve leakage was initially identified during routine visual inspection rounds and immediately terminated. Given that the leak was within the Unit 1 FSB structure, it was documented in a Condition Report under Entergy's Corrective Action Program. This valve leak and repair subsequently came to light within the GPI program during investigations into the cause of the abrupt increase in Tritium levels in MW-42. Additional emphasis has therefore been placed on routine review of these reports as they potentially relate to GPI objectives.

[97] Additional portions of these releases likely remain above the water table in the release area as recharge to the various Retention Mechanisms. This additional unsaturated zone source recharge will likely be manifested in the future as additional non-specific peaks in radionuclide levels due to episodic releases to the groundwater flow regime from these mechanisms (e.g., from intense/prolonged precipitation events).

rental RWST/R.O. skid, data collected during previous quarters have generally demonstrated that the I.L.s originally established are somewhat too sensitive relative to natural seasonal/precipitation-driven transient variations in radionuclide activities, as well as the variability inherent in the laboratory analyses. Relative to Strontium from the Unit 1 SFPs, the previous increases in activity in a number of monitoring points, due to the previous Unit 1 defueling operations, limit our ability to establish Strontium baseline levels for assessment of new I.L.s pursuant to the Monitored Natural Attenuation (MNA) of this plume. It is anticipated that this additional Strontium activity will take a number of quarters to completely flush through the onsite groundwater flow system and attenuate to reasonably stable levels. As such, the originally established I.L.s for both Tritium and Strontium will continue to be used until sufficient data is collected to allow re-evaluation of I.L. levels for the radionuclides of interest.

- From both qualitative and quantitative perspectives, the overall quarterly monitoring data set supports the conclusion that the overall Tritium activity in the Unit 2 plume has been decreasing since termination of the identified Unit 2 SFP leaks. These overall reductions have become particularly evident on the more recent quarterly report **Figures 6** and **6A** where the shaded plume[98] no longer extends to the river, as it did prior to Q2 2009. It is further visually evident from **Figure 6A** that the core of the plume (with quarterly rolling average activities greater than 100,000 pCi/L and 2007 bounding core activities greater than 250,000 pCi/L) has also shown a marked decrease in activity and extent. Based on the data and analyses provided above, our conclusion is that the Tritium plume associated with the historic leaks in the Unit 2 SFP has been undergoing long-term, overall reductions in activity which are consistent with Monitored Natural Attenuation (MNA), the remedial technology selected for the IPEC Site[99]. Given this conclusion, and the recognition that Entergy has terminated all identified leaks in the Unit 2 SFP[100], this Unit 2 Tritium plume satisfies the requirements for Monitored Natural Attenuation.
- The overall Strontium activity within the Unit 1 plume had generally been stable or decreasing in response to West Pool demineralization conducted by Entergy beginning in 2006. However, the final defueling of the Unit 1 SFPs resulted in an initial, noticeable increase, followed by a subsequent and commensurate decrease, in Strontium levels

[98] The plume shading on **Figure 6** demarks the estimated boundary that separates Tritium levels greater than 5,000 pCi/L from those below this value, and provides a reasonable demarcation level for illustrating plume geometry and temporal variation,. Although this value equates to one-quarter of the drinking water standard for Tritium, GZA emphasizes that drinking water standards (USEPA MCLs) do not apply to the IPEC property given that there are no drinking water sources on or proximate to the site. Where yearly rolling average radionuclide activity data were available for multiple depths at a given location, GZA used the highest value to develop plume delineations. This is a typical approach to represent three-dimensional contaminant data sets on two-dimensional maps.

[99] It is noted that the previously clear attenuation of the Unit 2 tritium plume has been confounded by a number of localized, transient surface spills. Entergy is currently in the process of reviewing and addressing work practices which may have contributed to the occurrence of these spills.

[100] Further justification for this conclusion can be found in Section 3.6 of the Q1 2009 Quarterly Monitoring Report as well as the Hydrogeologic Site Investigation Report. The Q1 2009 Report summarizes additional, more quantitative analyses which were completed to further investigate the integrity of the Unit 2 SFP. These analyses provide further support for the original conclusion that the Unit 2 SFP is no longer leaking. However, given the more recent behavior observed in the Unit 2 Leak Collection Device and MH-5 VCFD data, additional investigations/data evaluations are underway. In this regard, it is noted that these analyses cannot definitively and completely rule out the possibility of a remaining small Unit 2 SFP leak which could then also be supplying Tritium to the groundwater flow regime in addition to the Retention Mechanism(s) and surface spill from the process skid discussed above. While it is not possible to quantify the size of the minimum detectable leak with any degree of certainty, we believe that the maximum leak rate from the Unit 2 SFP that could potentially remain undetected by the groundwater monitoring system is less than 10 to 30 gpd (0.007 to 0.021 gallons per minute). It is also likely that if a small leak exists in the Unit 2 SFP liner, it should not get worse with time, as based on liner evaluations previously conducted by Entergy. It is further emphasized that while a leak of greater than 0.02 gallons per minute should be large enough to be readily detectable with the existing Long Term Monitoring Program, this amount of Tritium release to the river is still small compared to permitted levels of Tritium discharge to the river through the Discharge Canal.

proximate to the SFPs, with later increases in the downgradient Strontium levels (see **Figure 7** and **7A**). This is as was predicted given the requirement to temporarily raise the pool levels for fuel rod removal, thus increasing leakage rate from the SFPs[101]. As anticipated, the levels proximate to the pool have decreased to pre-defueling Strontium levels, and levels downgradient of the pool are generally showing continued decreases as this additional Strontium-contaminated water flushes through the groundwater flow system. It is expected that this flushing mechanism will be protracted given the aforementioned impact of partitioning on Strontium levels in the groundwater. However, over time it is expected that downgradient Strontium plume levels will also achieve an overall downward trend below pre-defueling levels once this perturbation is finished passing through the system. Given this conclusion and the recognition that Entergy has terminated all identified leaks in the Unit 1 SFPs through decommissioning, the Unit 1 Strontium plume satisfies the requirements for Monitored Natural Attenuation. However, as indicated above, the establishment of updated I.L.s for the Unit 1 Strontium plume must await return to the original Strontium baseline levels existing prior to Unit 1 defueling.

- The amount of radionuclides being released through the groundwater pathway, even with the somewhat increased Tritium levels currently observed due to the RWST/R.O. skid transient surface spill, is still small compared to permitted levels of Tritium discharge to the river through the Discharge Canal.

[101] As of late 2008, all the fuel rods have been removed from the Unit 1 SFPs and the pool water has been drained. As such, the Unit 1 SFPs is no longer an active source of radionuclides to the subsurface.

TABLES

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TABLE 1
GROUNDWATER SAMPLING METHODS, EQUIPMENT, FREQUENCY AND DEPTHS
INDIAN POINT ENGERGY CENTER
BUCHANAN, NY

Well ID[1]	Sampling Method	Sampling Equipment Used	Current Sampling Frequency	SAMPLING INTERVAL[2] Ft Below Top of Casing Top	SAMPLING INTERVAL[2] Ft Below Top of Casing Bottom	SAMPLING INTERVAL[2] Elevation in Feet msl Top	SAMPLING INTERVAL[2] Elevation in Feet msl Bottom	SAMPLING DEPTH[3] Feet Below TOC	SAMPLING DEPTH[3] Elevation in Feet msl
MW-30-69	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	67.3	71.3	8.4	4.4	69.3	6.4
MW-30-84	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	77.3	85.4	-1.6	-9.5	83.8	-8.1
MW-31-49	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	34.8	49.3	40.8	26.3	48.8	26.8
MW-31-63	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	55.3	63.8	20.3	11.8	63.3	12.3
MW-31-85	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	69.8	85.4	5.8	-9.6	84.8	-9.2
MW-32-59	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	28.3	61.3	48.8	15.8	58.8	18.3
MW-32-85	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	79.3	92.8	-2.2	-15.7	85.3	85.3
MW-32-131	Waterloo Low Flow	Waterloo Multilevel System	Inactive	125.8	138.3	-48.7	-61.2	130.8	-53.7
MW-32-149	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	125.8	156.8	-70.2	-79.7	149.3	-72.2
MW-32-173	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	165.8	174.3	-88.7	-97.2	172.8	-95.7
MW-32-190	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	180.3	193.9	-103.2	-116.8	190.3	-113.7
MW-33	Low Flow	Peristaltic Pump	Annually	8.0	30.0	10.6	-11.7	16	2.8
MW-34	Low Flow	Peristaltic Pump	Inactive	5.0	30.0	13.5	-11.5	16.5	2.0
MW-35	Low Flow	Peristaltic Pump	Annually	6.5	30.0	12.1	-11.4	15.0	3.6
MW-36-24[4]	Low Flow	Peristaltic Pump	Quarterly	11.0	24.0	0.8	-12.2	17.0	-5.2
MW-36-41	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	36.0	41.0	-24.2	-29.2	37.0	-25.2
MW-36-52	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	48.0	53.0	-36.2	-41.2	50.0	-38.2
MW-37-22	Low Flow	Peristaltic Pump	Quarterly	12.0	22.0	3.0	-7.0	17.0	-2.0
MW-37-32	Low Flow	Peristaltic Pump	Quarterly	28.0	32.5	-13.0	-17.5	29.0	-14.0
MW-37-40	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	38.5	40.5	-23.5	-24.5	39.0	-24.0
MW-37-57	Low Flow	Peristaltic Pump	Quarterly	52.0	57.0	-37.0	-42.0	55.0	-40.0
MW-38	Low Flow	Peristaltic Pump	Inactive	5.0	40.0	9.3	-25.7	25.4	-11.1
MW-39-67	Waterloo Low Flow	Waterloo Multilevel System	Semi-Annually	65.0	70.5	15.0	9.5	67.0	13.0
MW-39-84	Waterloo Low Flow	Waterloo Multilevel System	Semi-Annually	76.5	85.0	3.5	-5.0	83.5	-3.5
MW-39-102	Waterloo Low Flow	Waterloo Multilevel System	Semi-Annually	93.0	103.0	-13.0	-23.0	101.5	-21.5
MW-39-124	Waterloo Low Flow	Waterloo Multilevel System	Semi-Annually	115.0	126.5	-35.0	-46.5	124.0	-44.0
MW-39-183	Waterloo Low Flow	Waterloo Multilevel System	Semi-Annually	169.5	186.0	-89.5	-106.0	182.5	-102.5
MW-39-195	Waterloo Low Flow	Waterloo Multilevel System	Semi-Annually	193.0	198.6	-113.0	-118.4	195.0	-115.0
MW-40-27	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	18.2	35.2	55.0	38.0	26.7	46.5
MW-40-46	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	44.2	53.7	29.0	19.5	46.2	27.0
MW-40-81	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	64.7	84.2	8.5	-11.0	80.7	-7.5
MW-40-100	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	93.2	106.7	-20.0	-33.5	100.2	-27.0
MW-40-127	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	125.2	136.7	-52.0	-63.5	127.2	-54.0
MW-40-162	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	158.7	190.3	-85.5	-116.9	161.7	-88.5
MW-41-40	Low Flow	Peristaltic Pump	Quarterly	22.0	42.0	32.9	12.9	36.0	18.9
MW-41-63	Modified Well Vol. Purge	Waterra Pump	Quarterly	59.0	64.0	-4.1	-9.1	61.0	-6.1
MW-42-49	Low Flow	Bladder Pump	Quarterly	31.0	51.0	38.7	18.7	41.0	28.7
MW-42-78	Modified Well Vol. Purge	Waterra Pump	Quarterly	69.0	79.0	0.7	-9.3	74.0	-4.3
MW-43-28	Low Flow	Bladder Pump	Quarterly	8.0	28.0	40.8	20.7	23.0	25.8
MW-43-62	Low Flow	Bladder Pump	Quarterly	42.0	62.0	6.8	-13.2	54.0	-5.2
MW-44-66	Modified Well Vol. Purge	Bladder Pump	Quarterly	52.0	67.0	41.5	26.5	63.0	30.5
MW-44-102	Modified Well Vol. Purge	Waterra Pump	Quarterly	79.0	104.0	14.5	-10.5	80.0	13.5
MW-45-42	Modified Well Vol. Purge	Bladder Pump	Quarterly	27.5	42.5	26.2	11.2	37.0	16.6
MW-45-61	Modified Well Vol. Purge	Waterra Pump	Quarterly	51.5	61.5	2.2	-7.8	58.0	-4.4
MW-46	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	6.0	30.0	12.1	-11.9	10.5	7.6
MW-47-56	Low Flow	Submersible Pump	Inactive	36.0	56.0	34.3	14.3	52.0	18.3
MW-47-80	Modified Well Vol. Purge	Waterra Pump	Inactive	70.0	80.0	0.3	-9.7	72.0	-1.7

See Page 3 for Notes

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TABLE 1
GROUNDWATER SAMPLING METHODS, EQUIPMENT, FREQUENCY AND DEPTHS
INDIAN POINT ENGERGY CENTER
BUCHANAN, NY

Well ID[1]	Sampling Method	Sampling Equipment Used	Current Sampling Frequency	SAMPLING INTERVAL[2] Ft Below Top of Casing		SAMPLING INTERVAL[2] Elevation in Feet msl		SAMPLING DEPTH[3]	
				Top	Bottom	Top	Bottom	Feet Below TOC	Elevation in Feet msl
MW-48-23	Low Flow	Peristaltic Pump	Inactive	8.0	23.0	7.4	-7.6	15.8	-0.4
MW-48-37	Low Flow	Peristaltic Pump	Inactive	33.0	38.0	-17.6	22.6	35.8	-20.4
MW-49-26	Low Flow	Peristaltic Pump	Quarterly	15.0	25.0	-0.3	-10.4	20.0	-5.3
MW-49-42	Low Flow	Peristaltic Pump	Quarterly	32.0	42.0	-17.4	-27.4	37.0	-22.3
MW-49-65	Low Flow	Peristaltic Pump	Quarterly	60.0	65.0	-45.4	-50.4	61.0	-46.4
MW-50-42	Low Flow	Peristaltic Pump	Quarterly	22.0	42.0	-7.1	-27.1	27.0	-12.1
MW-50-66	Low Flow	Peristaltic Pump	Quarterly	62.0	67.0	-47.1	-52.1	60.0	-45.1
MW-51-40	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	29.7	44.2	38.0	23.5	39.7	28.0
MW-51-79	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	63.2	81.2	4.5	-13.5	78.7	-11.0
MW-51-104	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	101.2	111.2	-33.5	-43.5	103.7	-36.0
MW-51-135	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	130.2	143.7	-62.5	-76.0	135.2	-67.5
MW-51-163	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	154.7	166.2	-87.0	-98.5	162.7	-95.0
MW-51-189	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	184.2	197.8	-116.5	-129.9	189.2	-121.5
MW-52-11	Modified Well Vol. Purge	Peristaltic Pump	Annually	2.0	12.0	14.8	4.8	10.0	6.8
MW-52-18	Waterloo Low Flow	Waterloo Multilevel System	Annually	10.0	30.0	4.9	-15.1	17.5	-2.6
MW-52-48	Waterloo Low Flow	Waterloo Multilevel System	Annually	48.0	56.0	-33.1	-41.1	48.0	-33.1
MW-52-64	Waterloo Low Flow	Waterloo Multilevel System	Annually	59.0	71.5	-44.1	-56.6	64.0	-49.1
MW-52-122	Waterloo Low Flow	Waterloo Multilevel System	Annually	110.5	123.5	-95.6	-108.6	122.0	-107.1
MW-52-162	Waterloo Low Flow	Waterloo Multilevel System	Annually	154.5	164.0	-139.6	-149.1	161.5	-146.6
MW-52-181	Waterloo Low Flow	Waterloo Multilevel System	Annually	171.0	198.1	-156.1	-183.0	181.0	-166.1
MW-53-82	Low Flow	Bladder Pump	Quarterly	62.0	82.0	8.3	-11.7	75.0	-4.7
MW-53-120	Modified Well Vol. Purge	Waterra Pump	Quarterly	100.0	120.0	-29.7	-49.7	105.0	-34.7
MW-54-37	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	29.0	42.0	-15.9	-28.9	36.5	-23.4
MW-54-58	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	51.5	64.0	-38.4	-50.9	57.5	-44.4
MW-54-123	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	116.0	126.0	-102.9	-112.9	123.0	-109.9
MW-54-144	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	135.0	155.5	-121.9	-142.4	144.0	-130.9
MW-54-173	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	170.5	182.0	-157.4	-168.9	172.5	-159.4
MW-54-190	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	185.0	203.6	-171.9	-190.3	190.0	-176.9
MW-55-24	Low Flow	Peristaltic Pump	Quarterly	14.0	24.0	4.3	-5.8	16.0	2.3
MW-55-35	Low Flow	Peristaltic Pump	Quarterly	30.0	35.0	-11.8	-16.8	32.0	-13.8
MW-55-54	Low Flow	Peristaltic Pump	Quarterly	44.0	54.0	-25.8	-35.8	47.0	-28.8
MW-56-53	Low Flow	Bladder Pump	Semi-Annually	49.2	54.2	21.0	16.0	52.0	18.3
MW-56-83	Modified Well Vol. Purge	Waterra Pump	Semi-Annually	69.9	84.9	0.4	-14.6	74.0	-3.7
MW-57-11	Modified Well Vol. Purge	Peristaltic Pump	Annually	6.0	11.0	9.0	4.0	10.0	5.0
MW-57-20	Modified Well Vol. Purge	Peristaltic Pump	Annually	15.5	20.5	-0.5	-5.5	19.0	-4.0
MW-57-45	Modified Well Vol. Purge	Peristaltic Pump	Annually	30.5	45.5	-15.5	-30.5	40.0	-25.0
MW-58-26	Low Flow	Peristaltic Pump	Semi-Annually	16.0	26.0	-1.4	-11.4	20.0	-5.4
MW-58-65	Low Flow	Peristaltic Pump	Semi-Annually	50.0	65.0	-35.4	-50.4	54.0	-39.4
MW-59-32	Low Flow	Peristaltic Pump	Inactive	21.0	31.0	-6.5	-16.5	27.0	-12.5
MW-59-45	Low Flow	Peristaltic Pump	Inactive	35.0	45.0	-20.5	-30.5	42.0	-27.5
MW-59-68	Low Flow	Peristaltic Pump	Inactive	53.0	68.0	-38.5	-53.5	58.0	-43.5
MW-60-35	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	24.9	39.4	-12.4	-26.9	34.9	-22.4
MW-60-53	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	45.4	59.4	-32.9	-46.9	53.4	-40.9
MW-60-72	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	66.4	78.9	-53.9	-66.4	72.4	-59.9
MW-60-135	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	124.9	141.4	-112.4	-128.9	134.9	-122.4
MW-60-154	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	147.4	164.9	-134.9	-152.4	154.4	-141.9
MW-60-176	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	170.9	200.4	-158.4	-187.8	175.9	-163.4

See Page 3 for Notes

TABLE 1
GROUNDWATER SAMPLING METHODS, EQUIPMENT, FREQUENCY AND DEPTHS
INDIAN POINT ENGERGY CENTER
BUCHANAN, NY

Well ID[1]	Sampling Method	Sampling Equipment Used	Current Sampling Frequency	SAMPLING INTERVAL[2] Ft Below Top of Casing – Top	SAMPLING INTERVAL[2] Ft Below Top of Casing – Bottom	SAMPLING INTERVAL[2] Elevation in Feet msl – Top	SAMPLING INTERVAL[2] Elevation in Feet msl – Bottom	SAMPLING DEPTH[3] Feet Below TOC	SAMPLING DEPTH[3] Elevation in Feet msl
MW-62-18	Low Flow	Peristaltic Pump	Quarterly	4.7	14.7	10.0	0.0	13.5	1.2
MW-62-37	Low Flow	Peristaltic Pump	Quarterly	33.3	38.3	-18.6	-23.6	34.5	-19.8
MW-62-53	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	49.6	54.1	-36.8	-41.3	53.1	-40.3
MW-62-71	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	61.1	82.6	-48.3	-69.8	71.1	-58.3
MW-62-92	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	88.6	99.1	-75.8	-86.3	91.6	-78.8
MW-62-138	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	126.1	143.6	-113.3	-130.8	138.1	-125.3
MW-62-182	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	177.6	198.7	-164.8	-185.7	182.1	-169.3
MW-63-18	Low Flow	Peristaltic Pump	Quarterly	8.0	18.0	-3.8	-13.8	14.9	0.7
MW-63-34	Low Flow	Peristaltic Pump	Quarterly	30.0	35.0	-15.8	-20.8	31.5	-17.3
MW-63-50	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	41.5	58.0	-29.2	-45.7	49.5	-37.2
MW-63-93	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	81.5	100.5	-69.2	-88.2	93.0	-80.7
MW-63-112	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	106.5	112.0	-94.2	-99.7	111.5	-99.2
MW-63-121	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	118.0	127.5	-105.7	-115.2	121.0	-108.7
MW-63-163	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	150.5	165.0	-138.2	-152.7	162.5	-150.2
MW-63-174	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	168.0	191.1	-155.7	-178.6	174.0	-161.7
MW-66-21	Low Flow	Peristaltic Pump	Quarterly	7.0	27.0	6.0	-7.0	14.1	0
MW-66-36	Low Flow	Peristaltic Pump	Quarterly	31.0	36.0	-17.0	-22.0	33.6	-19.5
MW-67-39	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	28.8	54.3	-15.8	-41.3	38.3	-25.8
MW-67-105	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	90.3	110.8	-77.3	-97.8	104.8	-92.3
MW-67-173	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	164.8	188.3	-151.8	-175.3	172.3	-159.8
MW-67-219	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	209.3	229.8	-196.3	-216.8	218.8	-206.3
MW-67-276	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	250.8	281.3	-237.8	-268.3	275.3	-262.8
MW-67-323	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	317.8	328.3	-304.8	-315.3	322.3	-309.8
MW-67-340	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	335.3	347.9	-322.3	-334.9	339.8	-327.3
MW-107	Low Flow	Bladder Pump	Annually	105.1	126.1	34.9	13.9	32.7	110.1
MW-111	Low Flow	Peristaltic Pump	Semi-Annually	11.6	17.4	7.0	1.5	16.5	2.4
U3-4D	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	25.0	27.6	-10.2	-12.8	25.6	-10.8
U3-4S	Low Flow	Peristaltic Pump	Quarterly			8.3	-2.7		2.8
U3-T1	Low Flow	Peristaltic Pump	Quarterly	0.2	1.2	3.1	2.1	5.7	2.8
U3-T2	Low Flow	Peristaltic Pump	Quarterly	0.6	1.6	2.7	1.7	5.7	2.6
U1-CSS	Low Flow	Bladder Pump	Semi-Annually	NA	10.2	NA	4.9	14.0	6.1
LAF-002	Low Flow	NA	Semi-Annually	NA	NA	NA	NA	NA	-22.3
U1-NCD	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA
U1-SFDS	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA
I-2	Low Flow	Peristaltic Pump	Quarterly	NA	NA	NA	NA	NA	NA
MH-5 VCFD[5]	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA
B-1[5]	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA
B-6[5]	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA

Notes:
1. For nested multi-level monitoring wells, suffix of well ID indicates depth (rounded to nearest foot) from reference point on casing to bottom of well screen. For Waterloo multi-level systems, suffix indicates depth (rounded to nearest foot) from reference point on casing to top of sampling port. Well IDs without a suffix are open bedrock wellbores.
2. For nested multi-level monitoring wells, interval includes well screen and sand pack. For Waterloo multi-level systems, interval includes open wellbore between bottom of 1st packer above and top of 1st packer below sampling port. For open bedrock wellbores, interval extends from bottom of casing to bottom of hole.
3. Sampling depths within sampling intervals (i.e. location of pump intake) have been located adjacent to a transmissive zone where possible.
4. Dot pattern denotes sampling interval is positioned within overburden. Open box indicates sampling interval is in bedrock.
5. These locations are storm drains.

TABLE 2
HISTORIC QUARTERLY LOW TIDE GROUNDWATER ELEVATIONS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID	LOW RIVER TIDE GROUNDWATER ELEVATIONS (Feet msl)												
	Quarter 2[1], 2007	Quarter 3[2], 2007	Quarter 4[3], 2007	Quarter 1[4], 2008	Quarter 2[5], 2008	Quarter 3[6], 2008	Quarter 4[7], 2008	Quarter 1[8], 2009	Quarter 2[9], 2009	Quarter 3[10,11], 2009	Quarter 4[13], 2009	Quarter 1[14], 2010	Quarter 2[15], 2010	Quarter 3[16], 2010
HR-1	NA	-0.86	-1.57	-2.15	-1.13	-1.05	-1.69	-3.28	-1.52	-0.27	-3.59	-0.36	-0.56	-0.71
I-2	50.23	48.62	51.87	53.73	52.11	52.90	50.75	NA	NA	NA	51.69	52.46	53.33	50.49
MW-30-69	11.83	11.53	12.00	NA	12.28	11.77	11.71	12.33	11.84	13.76	NA	NA	NA	NA
MW-30-84	12.77	12.47	12.83	NA	13.06	12.68	12.36	13.13	12.82	12.48	12.27	13.26	12.76	11.31
MW-31-49	44.09	NA	45.40	47.50	46.14	45.39	44.13	46.44	45.40	-	-	-	-	-
MW-31-63	41.56	NA	42.71	15.52	43.96	42.17	41.21	44.12	43.20	-	-	-	-	-
MW-31-85	39.59	NA	40.81	43.19	41.89	40.58	39.64	42.10	40.64	-	-	-	-	-
MW-32-48	NA	42.12	46.73	48.81	47.77	46.98	45.79	48.08	47.31	-	-	-	-	-
MW-32-59	NA	41.44	45.99	47.99	46.75	45.72	44.48	46.83	45.62	-	-	-	-	-
MW-32-85 (MW-32-92)[12]	10.27	12.35	12.78	13.30	13.17	12.30	12.16	12.60	11.61	-	-	-	-	-
MW-32-131 (MW-32-140)[12]	13.11	11.96	13.21	25.01	15.67	11.34	11.53	11.86	11.06	-	-	-	-	-
MW-32-149 (MW-32-165)[12]	8.18	9.87	10.06	10.20	10.04	9.71	9.77	10.00	9.18	-	-	-	-	-
MW-32-173	NA	9.73	9.86	9.92	9.70	9.45	9.45	9.68	8.81	-	-	-	-	-
MW-32-190 (MW-32-196)[12]	6.74	8.05	7.88	7.88	7.52	7.16	7.05	7.24	6.26	-	-	-	-	-
MW-33	10.08	9.80	10.38	11.49	11.66	10.55	10.60	11.23	10.52	-	-	-	-	-
MW-34	9.87	9.82	10.44	11.63	12.03	10.54	10.54	11.25	6.71	-	-	-	-	-
MW-35	10.03	9.67	10.37	11.65	12.06	10.68	10.68	11.36	NA	-	-	-	-	-
MW-36-24	8.89	7.31	7.67	6.85	6.86	7.58	9.05	NA	7.25	-	-	-	-	-
MW-36-41	8.22	NA	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	-
MW-36-52	7.43	6.43	6.45	6.12	6.29	6.99	7.45	8.12	6.62					
MW-37-22	5.51	5.15	4.83	4.66	4.18	5.36	5.55	4.45	5.24	-	-	-	-	-
MW-37-32	5.51	5.07	4.82	4.63	4.05	5.36	5.64	4.55	5.32	-	-	-	-	-
MW-37-40	5.40	6.83	6.19	6.17	5.95	6.18	6.04	5.46	6.19	-	-	-	-	-
MW-37-57	7.07	6.23	6.39	6.28	6.07	6.64	7.20	6.50	6.56	-	-	-	-	-
MW-38	3.01	2.19	1.46	2.22	1.53	2.12	1.22	NA	2.24	-	-	-	-	-
MW-39-67	NA	NA	26.84	32.20	31.69	25.96	25.21	28.74	NA	-	-	-	-	-
MW-39-84	NA	NA	26.64	31.94	31.48	25.78	25.12	28.62	NA	-	-	-	-	-
MW-39-100	NA	NA	26.38	30.99	31.34	25.52	24.79	28.32	NA	-	-	-	-	-
MW-39-102	NA	NA	26.31	31.56	NA	NA	NA	NA	NA	-	-	-	-	-
MW-39-124	NA	NA	26.05	28.37	30.67	25.07	24.43	27.74	NA	-	-	-	-	-
MW-39-183	NA	NA	25.28	29.74	29.83	22.33	23.79	26.78	NA	-	-	-	-	-
MW-39-195	NA	NA	24.36	28.80	28.89	23.35	22.70	25.63	NA	-	-	-	-	-
MW-40-27	NA	NA	55.46	60.39	59.99	54.70	54.22	59.53	57.25	58.75	55.71	59.08	59.86	52.85
MW-40-46	NA	47.27	53.19	59.35	59.09	52.57	52.35	59.13	56.56	-	-	-	-	-
MW-40-81	NA	41.65	47.45	56.06	55.78	47.28	46.83	55.67	53.13	-	-	-	-	-
MW-40-100	NA	39.47	45.18	54.10	53.75	44.83	44.32	53.59	51.24	-	-	-	-	-
MW-40-127	NA	38.89	44.60	53.61	53.39	44.33	43.87	53.29	50.59	-	-	-	-	-
MW-40-162	NA	36.67	41.09	50.49	50.26	41.32	40.66	49.76	46.80	48.42	12.85	49.55	50.03	38.96
MW-41-40	29.87	NA	32.48	36.57	33.81	31.28	30.71	33.62	32.05	-	-	-	-	-
MW-41-63	25.94	NA	27.77	33.31	32.76	27.53	26.96	30.38	28.39	-	-	-	-	-
MW-42-49	NA	NA	34.55	34.96	34.81	34.52	34.43	34.78	34.47	-	-	-	-	-
MW-42-78	NA	NA	35.71	36.63	36.28	35.38	35.07	36.03	35.75	-	-	-	-	-
MW-43-28	32.75	31.08	31.98	33.47	33.95	32.51	32.15	33.43	32.54	32.66	NA	NA	34.23	37.14
MW-43-62	30.83	NA	NA	NA	32.16	30.48	31.76	34.13	30.88	NA	30.28	32.00	32.00	30.20
MW-44-67	33.36	NA	34.36	37.99	35.47	35.29	34.00	34.96	34.50	-	-	-	-	-
MW-44-102	23.10	NA	24.84	NA	30.88	25.86	25.16	28.09	27.41	-	-	-	-	-
MW-45-42	NA	24.82	28.47	34.19	37.16	28.63	25.45	32.02	29.03	-	-	-	-	-
MW-45-61	NA	24.33	27.57	32.91	32.46	27.16	26.68	29.99	23.25	-	-	-	-	-
MW-46	12.80	11.95	12.57	15.05	14.97	12.62	12.81	14.29	12.47	12.83	NA	NA	16.49	12.45
MW-47-56	21.83	20.77	23.05	27.76	31.53	22.84	22.37	26.51	23.43	-	-	-	-	-
MW-47-80	22.29	21.41	21.82	26.53	28.35	21.52	21.08	26.37	24.18	-	-	-	-	-
MW-48-23	-0.08	-0.27	-0.39	-1.14	-0.23	-0.18	-0.48	-0.91	-0.19	-	-	-	-	-
MW-48-37	0.64	0.26	-0.06	-0.18	0.32	0.06	-0.15	-0.50	0.04	-	-	-	-	-
MW-49-26	1.04	NA	-0.37	-0.62	0.51	0.37	0.49	-0.25	0.54	-	-	-	-	-
MW-49-42	0.31	0.90	0.40	-0.44	0.92	1.02	0.68	-0.06	0.51	-	-	-	-	-

J:\17,000-18,999\17869\17869-92.MG\Q3-2010\FINAL\Tables\;
Table 2-Historic Quarterly Low Tide Groundwater Elevations.xlsx;
gw elevations

See Page 3 for Notes

IPEC00263575

TABLE 2
HISTORIC QUARTERLY LOW TIDE GROUNDWATER ELEVATIONS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID	LOW RIVER TIDE GROUNDWATER ELEVATIONS (Feet msl)													
	Quarter 2[1], 2007	Quarter 3[2], 2007	Quarter 4[3], 2007	Quarter 1[4], 2008	Quarter 2[5], 2008	Quarter 3[6], 2008	Quarter 4[7], 2008	Quarter 1[8], 2009	Quarter 2[9], 2009	Quarter 3[10,11], 2009	Quarter 4[13], 2009	Quarter 1[14], 2010	Quarter 2[15], 2010	Quarter 3[16], 2010
MW-49-65	0.89	1.01	0.34	0.07	0.70	0.68	0.47	-0.08	0.57	-	-	-	-	-
MW-50-42	7.24	NA	NA	NA	5.24	6.40	7.06	5.66	6.09	-	-	-	-	-
MW-50-66	3.71	NA	NA	1.97	2.24	2.83	2.34	1.95	2.82	-	-	-	-	-
MW-51-40	NA	48.69	50.07	51.95	52.35	49.44	49.24	49.32	45.15	46.45	42.45	43.37	41.72	41.89
MW-51-79	NA	39.92	41.07	42.91	44.17	40.71	40.36	42.75	42.15	-	-	-	-	-
MW-51-102	NA	35.98	38.07	38.46	39.04	36.56	36.17	38.18	37.78	-	-	-	-	-
MW-51-104	NA	NA	37.93	38.41	39.02	36.49	36.03	37.99	37.49	-	-	-	-	-
MW-51-135	NA	37.42	39.47	39.99	40.71	38.10	37.68	39.75	39.34	-	-	-	-	-
MW-51-163	NA	33.79	34.83	36.15	36.77	34.30	33.90	35.74	35.44	-	-	-	-	-
MW-51-189	NA	29.33	30.16	31.34	31.79	29.65	29.36	30.81	30.48	32.18	29.93	31.85	31.42	29.07
MW-52-11	6.04	5.61	8.12	8.47	8.85	8.65	8.44	8.19	9.20	-	-	-	-	-
MW-52-18	6.64	NA	8.63	6.04	6.07	5.89	6.02	5.78	5.87	-	-	-	-	-
MW-52-48	7.08	NA	6.55	6.53	5.95	6.20	6.14	6.05	5.75					
MW-52-64	5.96	NA	5.90	5.25	5.03	5.21	5.16	5.20	4.89	-	-	-	-	-
MW-52-118	5.34	NA	4.41	4.44	4.32	4.36	4.68	4.23	4.23	-	-	-	-	-
MW-52-122	5.25	NA	4.26	4.32	4.18	4.21	4.55	4.11	4.20	-	-	-	-	-
MW-52-162	0.67	NA	-0.80	-1.31	-0.80	-0.98	-1.30	-2.07	-1.18	-	-	-	-	-
MW-52-181	0.41	NA	-1.08	-1.56	-1.00	-1.30	-1.64	-2.38	-1.54	-	-	-	-	-
MW-53-82	NA	9.59	10.03	11.99	12.60	10.35	NA	11.11	NA	11.11	9.87	11.15	11.67	9.98
MW-53-120	9.91	9.18	9.59	10.87	11.49	9.76	NA	10.55	9.78	10.43	9.13	10.53	11.02	9.60
MW-54-35	NA	NA	6.40	6.27	6.36	6.16	6.41	5.75	5.87	-	-	-	-	-
MW-54-37	7.52	NA	6.58	6.45	6.53	6.30	6.58	5.90	6.04	-	-	-	-	-
MW-54-58	6.86	NA	5.82	5.60	5.55	5.53	5.76	5.49	5.17	-	-	-	-	-
MW-54-123	5.69	NA	4.16	3.65	3.52	4.01	4.06	2.99	3.56	-	-	-	-	-
MW-54-144	8.85	NA	7.13	6.60	6.48	6.92	6.97	5.89	6.53	-	-	-	-	-
MW-54-173	5.17	NA	3.52	2.99	2.85	3.27	3.29	2.19	2.72	-	-	-	-	-
MW-54-190	5.08	NA	3.46	2.91	2.76	3.16	3.13	2.00	2.49	-	-	-	-	-
MW-55-24	8.56	7.82	7.97	8.17	8.16	8.18	9.02	8.35	8.06	8.39	7.80	8.58	8.56	8.02
MW-55-35	8.10	7.29	7.52	7.60	7.59	7.69	8.30	7.63	9.49	-	-	-	-	-
MW-55-54	8.47	7.65	7.75	8.08	8.32	8.22	8.82	NA	7.89	8.14	7.66	8.39	8.34	7.97
MW-56-53	21.01	20.16	NA	NA	29.93	NA	21.90	27.33	22.06	-	-	-	-	-
MW-56-83	21.10	20.10	22.18	26.41	29.16	NA	21.51	25.13	22.60	-	-	-	-	-
MW-57-11	9.57	8.83	9.36	10.99	NA	10.03	10.27	11.11	10.09	-	-	-	-	-
MW-57-20	9.38	NA	NA	NA	12.07	10.02	9.92	10.63	9.84	-	-	-	-	-
MW-57-45	9.08	NA	NA	NA	10.59	NA	NA	10.71	NA	-	-	-	-	-
MW-58-26	8.03	6.49	6.58	8.32	NA	7.29	7.19	7.56	7.40	-	-	-	-	-
MW-58-65	6.03	6.83	6.22	NA	7.36	7.13	6.46	6.68	6.70	-	-	-	-	-
MW-59-32	1.06	NA	0.67	0.42	0.77	0.81	0.47	0.31	1.37	-	-	-	-	-
MW-59-45	1.06	1.27	0.42	NA	9.23	NA	2.52	0.44	NA	-	-	-	-	-
MW-59-68	2.91	2.51	1.97	0.90	-0.11	NA	-1.79	-5.66	7.93	-	-	-	-	-
MW-60-35	2.19	1.28	1.32	1.58	1.63	0.82	2.04	1.99	3.07	-	-	-	-	-
MW-60-53	-0.63	-1.24	-1.67	-2.04	-1.37	-1.76	-2.03	-2.70	NA					
MW-60-55	NA	-0.28	-0.73	-1.10	-0.47	-0.90	-1.21	-1.91	NA	-	-	-	-	-
MW-60-72	0.74	-0.09	-0.45	-0.68	-0.14	-0.64	NA	-1.43	0.28	-	-	-	-	-
MW-60-135	0.94	0.11	-0.44	-0.90	-0.27	-0.71	-1.02	-1.72	0.11	-	-	-	-	-
MW-60-154	0.08	-0.96	-1.61	-2.07	-1.49	-1.91	-2.25	-2.99	NA	-	-	-	-	-
MW-60-176	-0.48	-1.38	-2.03	-2.47	-1.82	-2.16	-2.59	-3.41	NA	-	-	-	-	-
MW-62-18	0.25	0.25	-0.37	-0.79	0.13	0.06	-0.12	-0.82	NA	-	-	-	-	-
MW-62-37	0.59	0.61	-0.03	-0.46	0.49	0.59	-0.15	-1.13	0.11	-	-	-	-	-
MW-62-52	NA	0.48	-0.30	-1.13	-0.19	-0.29	-0.93	-1.64	-0.42	-	-	-	-	-
MW-62-53	0.95	0.54	-0.25	-1.01	-0.10	-0.16	-0.84	-2.03	-0.44	-	-	-	-	-
MW-62-71	0.89	0.22	-0.56	-1.26	-0.55	-0.56	-1.24	-2.15	-1.03	-	-	-	-	-
MW-62-92	1.07	0.58	-0.09	-0.76	-0.11	-0.10	-0.85	-1.68	-0.70	-	-	-	-	-
MW-62-138	1.40	0.77	0.09	-0.49	0.13	0.26	-0.37	-1.33	-0.40	-	-	-	-	-
MW-62-181	1.33	0.38	-0.33	-0.99	-0.32	-0.36	-0.92	NA	-0.88	-	-	-	-	-
MW-62-182	NA	-0.33	-1.83	-0.78	-1.29	-1.25	-1.85	-2.66	-1.82	-	-	-	-	-

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Table 2-Historic Quarterly Low Tide Gronndwater Elevations.xlsx;
gw elevations

See Page 3 for Notes

TABLE 2
HISTORIC QUARTERLY LOW TIDE GROUNDWATER ELEVATIONS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID	LOW RIVER TIDE GROUNDWATER ELEVATIONS (Feet msl)													
	Quarter 2[1], 2007	Quarter 3[2], 2007	Quarter 4[3], 2007	Quarter 1[4], 2008	Quarter 2[5], 2008	Quarter 3[6], 2008	Quarter 4[7], 2008	Quarter 1[8], 2009	Quarter 2[9], 2009	Quarter 3[10,11], 2009	Quarter 4[13], 2009	Quarter 1[14], 2010	Quarter 2[15], 2010	Quarter 3[16], 2010
MW-63-18	0.14	0.09	-0.10	-0.37	0.09	0.32	-0.08	-0.64	0.02	-	-	-	-	-
MW-63-34	0.51	0.19	-0.09	-0.40	0.13	0.05	-0.13	-0.74	0.18	-	-	-	-	-
MW-63-50	0.86	0.29	-0.38	-1.03	-0.47	-0.55	-1.24	-2.08	-0.45	-	-	-	-	-
MW-63-91	1.16	0.48	-0.19	-0.87	-0.25	-0.16	-0.89	NA	-0.01	-	-	-	-	-
MW-63-93	NA	0.55	-0.20	-0.87	-0.30	-0.24	-0.98	-1.68	-0.13	-	-	-	-	-
MW-63-112	0.03	-0.82	-1.46	-2.05	-1.69	-1.60	-2.26	-3.14	-1.45	-	-	-	-	-
MW-63-121	1.41	0.60	-0.18	-0.78	-0.24	-0.05	-0.86	-1.49	0.11	-	-	-	-	-
MW-63-163	0.70	-0.09	-0.83	-1.48	-0.86	-0.90	-1.54	-2.46	-0.98	-	-	-	-	-
MW-63-174	0.88	0.05	-0.65	-1.29	-0.62	-0.61	-1.19	-1.97	-0.59	-	-	-	-	-
MW-65-48	NA	NA	NA	NA	38.60	43.22	NA	48.19	36.98	40.08	38.06	39.94	42.26	59.97
MW-65-80	NA	NA	NA	NA	34.97	32.95	32.72	33.71	33.30	33.79	32.81	33.69	33.98	49.35
MW-66-21	0.26	0.17	-0.22	-0.74	0.05	0.17	0.29	-0.33	0.50	0.52	0.10	-0.01	1.82	1.05
MW-66-36	0.81	0.48	-0.04	-0.51	0.35	0.15	0.10	-0.86	0.51		-0.25	-0.43	1.75	1.49
MW-67-39	NA	1.02	0.34	-0.33	0.36	0.41	-0.02	-0.07	-0.56	0.81	-1.25	-0.76	-0.13	-0.09
MW-67-105	NA	1.39	0.61	-0.04	0.57	0.65	0.16	-0.67	-0.43	-	-	-	-	-
MW-67-173	NA	0.75	-0.14	-0.83	-0.28	-0.26	-0.82	-1.62	-1.55	-	-	-	-	-
MW-67-219	NA	0.74	-0.19	-0.91	-0.32	-0.32	-0.86	-1.87	-1.59	-	-	-	-	-
MW-67-276	NA	1.61	0.60	-0.13	0.44	0.41	-0.14	-1.03	-0.91	-	-	-	-	-
MW-67-323	NA	0.18	-0.96	-1.75	-1.13	-1.35	-1.93	-2.86	-2.73	-	-	-	-	-
MW-67-340	NA	0.63	-0.52	-1.31	-0.87	-0.96	-1.56	-2.42	-2.40	-0.76	-3.27	-2.63	-2.26	-1.97
MW-107	116.85	113.87	117.48	121.79	118.94	115.00	115.76	120.28	117.52	-	-	-	-	-
MW-108	9.58	8.61	8.77	9.98	10.07	NA	9.02	9.65	9.26	-	-	-	-	-
MW-109	9.52	6.80	7.22	9.50	10.12	7.82	7.88	NA	4.95	-	-	-	-	-
MW-111	9.56	9.66	9.74	10.74	11.24	9.74	10.48	10.87	9.47	-	-	-	-	-
OUT-1	NA	1.31	1.16	0.76	0.81	NA	NA	NA	1.08	-	-0.77	1.02	5.06	NA
RW-1	NA	NA	30.15	NA	30.04	29.52	29.05	29.10	NA	-	-	-	-	-
U1-CSS	NA	8.98	NA	NA	19.11	15.39	NA	20.46	13.89	-	-	-	-	-
U3-1	4.20	NA	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	-
U3-2	5.34	NA	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	-
U3-3	7.53	6.52	6.63	8.67	9.25	8.25	8.94	9.13	7.29	-	-	-	-	-
U3-4D	4.25	NA	3.35	3.22	2.74	3.49	2.69	3.41	3.75	-	-	-	-	-
U3-4S	3.91	4.13	3.80	3.74	3.97	4.31	3.81	4.01	4.23	-	-	-	-	-
U3-C1	NA	1.64	3.58	3.36	0.99	2.36	0.81	0.64	1.92	2.43	0.12	0.20	2.98	NA
U3-T1	4.51	4.12	3.67	3.99	3.86	4.33	3.69	3.83	4.12	-	-	-	-	-
U3-T2	4.33	4.02	3.79	4.20	3.94	4.28	3.76	4.05	4.20					

Notes:

NA = Data Not Available

1. Quarter 2 groundwater elevations were measured on 6/1/07 at 6:20 am.
2. Quarter 3 groundwater elevations were measured on 9/25/07 at 4:32 am.
3. Quarter 4, 2007 groundwater elevations were measured on 12/9/07 at 4:15 am.
4. Quarter 1, 2008 groundwater elevations were measured on 1/3/08 at 1:14 a.m.
5. Quarter 2, 2008 groundwater elevations were measured on 4/4/08 at 5:14 pm.
6. Quarter 3, 2008 groundwater elevations were measured on 7/10/08 at 11:35 am.
7. Quarter 4, 2008 groundwater elevations were measured on 11/11/08 at 2:54 am.
8. Quarter 1, 2009 groundwater elevations were measured on 1/9/09 at 2:42 am.
9. Quarter 2, 2009 groundwater elevations were measured on 5/22/09 at 2:41 pm.
10. Quarter 3, 2009 groundwater elevations were measured on 8/9/09 at 8:18 am.
11. Subsequent to Quarter 2, 2009, as described in our June 14, 2010 memorandum which was included as Appendix J in the Quarter 1, 2009 Report, a reduced number of transducers will be maintained in long term operation. The rationale for this reduced transducer redeployment is included in the June 14, 2010 memorandum.
12. MW-32 groundwater elevations from 2nd quarter, 2007 were based on an initial Waterloo Multi-Level configuration, which was subsequently reconfigured; initial depth intervals approximately corresponding to current configuration are listed in parentheses. The current configuration intervals MW-32-48 and MW-32-173 have no representative equivalent within the old configuration.
13. Quarter 4, 2009 groundwater elevations were measured on 11/28/09 at 3:45 pm.
14. Quarter 1, 2010 groundwater elevations were measured on 1/30/10 at 6:00 am.
15. Quarter 2, 2010 groundwater elevations were measured on 4/09/10 at 12:06 pm.
16. Quarter 3, 2010 groundwater elevations were measured on 7/31/10 at 12:30 am.

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Table 2-Historic Quarterly Low Tide Groundwater Elevations.xlsx;
gw elevations

See Page 3 for Notes

TABLE 3
THIRD QUARTER 2010 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER, Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS															YEARLY ROLLING AVERAGES[4]					Well ID
							TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			TRITIUM (pCi/L)	Sr-90 (pCi/L)	Cs-137 (pCi/L)	Co-60 (pCi/L)	Ni-63 (pCi/L)	
					Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Average	Average	Average	Average	Average	
MW-30-69	Q4-2009	028	69.3	6.4	11/9/2009	1121	9.01E+04	2.63E+03	1.78E+02	-4.26E-01	6.63E-01	8.14E-01	-3.87E-01	5.45E+00	6.20E+00	-2.47E-01	6.03E+00	5.76E+00	NA	NA	NA	1.28E+05	ND	ND	ND	NA	MW-30-69
MW-30-69	Q1-2010	029	69.3	6.4	1/27/2010	1130	1.25E+05	3.99E+03	6.15E+02	3.42E-02	7.18E-01	8.83E-01	-3.23E-01	3.30E+00	3.58E+00	2.05E-01	3.17E+00	3.57E+00	NA	NA	NA						
MW-30-69	Q1-2010 Mid	030	69.3	6.4	2/24/2010	1235	1.36E+05	2.01E+03	2.05E+02	-7.42E-02	3.54E-01	5.00E-01	6.84E-01	3.79E+00	4.26E+00	-1.38E+00	3.65E+00	3.73E+00	NA	NA	NA						
MW-30-69	Q2-2010	031	69.3	6.4	4/29/2010	1255	1.61E+05	4.67E+03	2.78E+02	-1.21E-01	7.56E-01	9.40E-01	-2.29E+00	5.31E+00	5.59E+00	2.06E+00	5.37E+00	5.58E+00	NA	NA	NA						
MW-30-69	Q2-2010 Mid	032	69.3	6.4	6/8/2010	1232	1.52E+05	4.42E+03	4.80E+02	2.55E-01	4.79E-01	5.40E-01	-1.20E+00	6.55E+00	7.22E+00	-1.72E-01	5.45E+00	5.99E+00	NA	NA	NA						
MW-30-69	Q3-2010	033	69.3	6.4	7/28/2010	1233	1.28E+05	3.72E+03	1.80E+02	9.14E-02	5.26E-01	6.33E-01	-5.08E-01	9.69E+00	1.09E-01	1.67E+00	7.46E+00	9.20E+00	NA	NA	NA						
MW-30-69	Q3-2010	034	69.3	6.4	8/20/2010	1508	1.11E+05	3.24E+03	2.02E+02	3.53E-01	7.80E-01	9.03E-01	-3.14E+00	5.22E+00	5.12E+00	-2.41E+00	5.35E+00	5.03E+00	NA	NA	NA						
MW-30-69	Q3-2010 Mid	035	69.3	6.4	9/8/2010	1235	1.23E+05	3.65E+03	4.47E+02	1.93E-01	4.41E-01	5.14E-01	-1.10E+00	4.42E+00	4.37E+00	1.40E+00	4.72E+00	5.73E+00	NA	NA	NA						
MW-30-84	Q4-2009	019	83.8	-8.1	11/9/2009	1227	6.27E+03	3.35E+02	9.70E+01	8.84E-02	7.33E-01	8.42E-01	2.06E-01	5.92E+00	6.74E+00	-3.17E+00	5.33E+00	4.98E+00	NA	NA	NA	8.52E+03	ND	ND	ND	NA	MW-30-84
MW-30-84	Q1-2010	020	83.8	-8.1	1/27/2010	1215	6.60E+03	1.07E+03	6.37E+02	1.64E-01	2.43E-01	4.02E-01	3.93E-01	3.06E+00	3.11E+00	8.46E-01	3.03E+00	3.19E+00	NA	NA	NA						
MW-30-84	Q1-2010 Mid	021	83.8	-8.1	2/24/2010	1244	6.94E+03	3.63E+02	1.68E+02	1.33E-01	4.23E-01	5.06E-01	1.17E+00	4.58E+00	5.35E+00	9.09E-01	4.74E+00	5.54E+00	NA	NA	NA						
MW-30-84	Q2-2010	022	83.8	-8.1	4/29/2010	1346	9.56E+03	5.41E+02	1.48E+02	4.08E-01	8.33E-01	9.56E-01	-3.84E-01	5.71E+00	6.36E+00	2.19E+00	5.36E+00	5.57E+00	NA	NA	NA						
MW-30-84	Q2-2010 Mid	023	83.8	-8.1	6/8/2010	1219	9.40E+03	4.37E+02	2.14E+02	2.01E-01	4.85E-01	5.52E-01	7.20E-01	5.49E+00	6.21E+00	-4.01E+00	6.30E+00	5.10E+00	NA	NA	NA						
MW-30-84	Q3-2010	024	83.8	-8.1	7/28/2010	1307	9.26E+03	5.03E+02	1.01E+02	4.43E-01	7.63E-01	8.52E-01	-1.46E+00	9.30E+00	1.12E-01	-3.03E-01	9.79E+00	1.08E+01	NA	NA	NA						
MW-30-84	Q3-2010	025	83.8	-8.1	8/20/2010	1651	1.00E+04	5.57E+02	1.29E+02	5.65E-01	8.70E-01	9.53E-01	3.22E+00	6.27E+00	7.54E+00	-3.97E+00	6.09E+00	5.20E+00	NA	NA	NA						
MW-30-84	Q3-2010 Mid	026	83.8	-8.1	9/8/2010	1314	1.01E+04	4.32E+02	2.10E+02	3.13E-01	6.20E-01	7.05E-01	-1.48E+00	6.13E+00	6.74E+00	-4.19E-01	7.65E+00	5.58E+00	NA	NA	NA						
MW-31-49	Q4-2009	020	48.8	26.8	10/22/2009	1258	4.58E+04	8.63E+02	1.63E+02	5.63E-01	8.72E-01	9.67E-01	2.29E-01	6.17E+00	6.34E+00	4.70E-01	6.25E+00	5.61E+00	NA	NA	NA	2.98E+04	ND	ND	ND	NA	MW-31-49
MW-31-49	Q1-2010	021	48.8	26.8	1/26/2010	1207	4.46E+02	1.35E+02	1.12E+02	1.88E-01	7.59E-01	9.05E-01	-4.18E-01	5.30E+00	4.07E+00	-1.34E+00	3.34E+00	3.99E+00	NA	NA	NA						
MW-31-49	Q1-2010 Mid	022	48.8	26.8	3/5/2010	1130	4.89E+02	1.71E+02	1.69E+02	1.47E-02	3.51E-01	4.50E-01	-4.63E-01	4.52E+00	5.10E+00	1.18E+00	4.83E+00	5.71E+00	NA	NA	NA						
MW-31-49	Q2-2010	023	48.8	26.8	4/14/2010	1042	1.16E+04	3.93E+02	1.00E+02	1.13E-01	4.62E-01	5.72E-01	-2.95E+00	8.54E+00	9.30E+00	9.25E-03	8.91E+00	9.95E+00	NA	NA	NA						
MW-31-49	Q2-2010 Mid	024	48.8	26.8	6/7/2010	1130	1.73E+04	5.74E+02	2.22E+02	3.41E-01	7.95E-01	9.13E-01	-3.80E+00	7.43E+00	7.51E+00	1.82E+00	6.72E+00	8.03E+00	NA	NA	NA						
MW-31-49	Q3-2010	025	48.8	26.8	7/27/2010	1443	5.46E+04	1.59E+03	1.21E+02	3.05E-01	4.71E-01	5.22E-01	2.74E+00	1.17E+01	1.40E-01	2.23E+00	8.03E+00	9.96E+00	NA	NA	NA						
MW-31-49	Q3-2010	026	48.8	26.8	8/23/2010	1211	4.11E+03	3.55E+02	1.23E+02	1.62E-01	7.89E-01	9.57E-01	-1.21E+00	5.42E+00	5.91E+00	-3.35E-02	5.19E+00	5.80E+00	NA	NA	NA						
MW-31-49	Q3-2010 Mid	027	48.8	26.8	9/7/2010	1349	1.04E+05	3.02E+03	1.68E+02	-1.15E-01	2.82E-01	4.23E-01	3.35E+00	5.52E+00	6.58E+00	2.16E+00	5.97E+00	7.20E+00	NA	NA	NA						
MW-31-63	Q4-2009	020	63.3	12.3	10/22/2009	1320	2.00E+04	5.85E+02	1.67E+02	1.10E+00	7.45E-01	7.37E-01	1.92E-01	5.92E+00	6.75E+00	2.27E+00	6.42E+00	7.79E+00	NA	NA	NA	4.65E+04	1.10E+00	ND	ND	NA	MW-31-63
MW-31-63	Q1-2010	021	63.3	12.3	1/26/2010	1308	3.36E+04	2.21E+03	6.66E+02	5.45E-01	8.55E-01	9.50E-01	1.63E+00	3.12E+00	3.58E+00	-1.56E+00	3.36E+00	3.52E+00	NA	NA	NA						
MW-31-63	Q1-2010 Mid	022	63.3	12.3	3/5/2010	1217	7.35E+04	1.11E+03	1.72E+02	1.21E-01	3.38E-01	4.02E-01	2.57E+00	4.49E+00	5.38E+00	-3.85E+00	4.02E+00	4.24E+00	NA	NA	NA						
MW-31-63	Q2-2010	023	63.3	12.3	4/14/2010	1305	1.84E+04	5.45E+02	1.08E+02	1.50E-01	4.43E-01	6.61E-01	4.58E+00	9.18E+00	9.12E+00	2.75E-01	9.97E+00	1.12E+01	NA	NA	NA						
MW-31-63	Q2-2010 Mid	024	63.3	12.3	6/7/2010	1219	5.11E+04	1.53E+03	2.93E+02	3.63E-01	8.04E-01	9.11E-01	2.95E+00	5.94E+00	7.20E+00	9.47E-01	6.12E+00	7.09E+00	NA	NA	NA						
MW-31-63	Q3-2010	025	63.3	12.3	7/27/2010	1554	6.17E+04	1.83E+03	1.27E+02	5.31E-01	6.45E-01	6.89E-01	-1.81E+00	8.27E+00	8.91E+00	1.22E+00	7.33E+00	8.70E+00	NA	NA	NA						
MW-31-63	Q3-2010	026	63.3	12.3	8/23/2010	1311	6.69E+04	1.95E+03	1.60E+02	4.60E-01	7.62E-01	8.43E-01	1.77E+00	6.11E+00	7.13E+00	-1.67E+00	6.17E+00	6.44E+00	NA	NA	NA						
MW-31-63	Q3-2010 Mid	027	63.3	12.3	9/7/2010	1528	4.65E+04	1.41E+03	1.46E+02	3.99E-01	7.26E-01	8.13E-01	4.05E-01	4.75E+00	5.31E+00	-1.47E+00	5.45E+00	5.56E+00	NA	NA	NA						
MW-31-85	Q4-2009	020	84.8	-9.2	10/22/2009	1254	4.50E+03	3.06E+02	1.67E+02	5.53E-01	6.67E-01	7.18E-01	3.27E-01	6.72E+00	6.39E+00	1.12E+00	6.11E+00	7.07E+00	NA	NA	NA	7.73E+03	ND	ND	ND	NA	MW-31-85
MW-31-85	Q1-2010	021	84.8	-9.2	1/26/2010	1208	2.25E+04	1.83E+03	6.64E+02	-3.53E-01	7.18E-01	9.43E-01	5.22E-01	2.96E+00	3.33E+00	1.51E+00	2.96E+00	3.49E+00	NA	NA	NA						
MW-31-85	Q1-2010 Mid	022	84.8	-9.2	3/5/2010	1149	2.69E+03	2.52E+02	1.68E+02	1.32E-01	3.31E-01	3.88E-01	1.93E+00	4.32E+00	5.05E+00	4.48E-01	4.46E+00	5.01E+00	NA	NA	NA						
MW-31-85	Q2-2010	023	84.8	-9.2	4/14/2010	1209	4.85E+03	2.60E+02	9.99E+01	-1.42E-01	4.23E-01	6.36E-01	3.84E+00	6.90E+00	8.50E+00	1.40E-01	6.13E+00	6.84E+00	NA	NA	NA						
MW-31-85	Q2-2010 Mid	024	84.8	-9.2	6/7/2010	1200	9.34E+03	4.35E+02	2.13E+02	3.29E-01	5.73E-01	6.43E-01	2.30E+00	4.86E+00	5.78E+00	-1.07E+00	4.70E+00	4.81E+00	NA	NA	NA						
MW-31-85	Q3-2010	025	84.8	-9.2	7/27/2010	1522	6.70E+03	4.34E+02	1.00E+02	5.55E-01	4.72E-01	5.04E-01	-3.96E+00	6.62E+00	9.22E+00	2.50E+00	6.43E+00	7.95E+00	NA	NA	NA						
MW-31-85	Q3-2010	026	84.8	-9.2	8/23/2010	1210	5.07E+03	3.95E+02	1.25E+02	6.61E-03	7.89E-01	9.16E-01	3.42E+00	4.97E+00	6.18E+00	1.52E+00	4.77E+00	5.71E+00	NA	NA	NA						
MW-31-85	Q3-2010 Mid	027	84.8	-9.2	9/7/2010	1414	6.21E+03	5.24E+02	1.44E+02	-3.25E-01	4.45E-01	6.85E-01	-1.54E+00	5.68E+00	6.11E+00	2.71E+00	6.42E+00	7.79E+00	NA	NA	NA						
MW-32-48	Q1-2010	005			3/4/2010	1316	4.52E+04	7.44E+02	1.68E+02	1.02E-01	7.47E-01	9.27E-01	-1.65E-01	3.88E+00	4.41E+00	-5.57E-01	4.11E+00	4.54E+00	NA	NA	NA	2.91E+04	ND	ND	ND	NA	MW-32-48
MW-32-48	Q2-2010	006			4/28/2010	1128	6.18E+04	1.83E+03	1.79E+02	7.51E-01	8.02E-01	8.21E-01	3.11E+00	7.80E+00	7.52E+00	1.38E+00	6.18E+00	7.26E+00	NA	NA	NA						
MW-32-48	Q3-2010	007			7/27/2010	1252	3.69E+03	3.25E+02	9.94E+01	3.53E-01	8.37E-01	9.60E-01	1.54E-01	7.00E+00	8.04E+00	-3.86E+00	7.74E+00	7.51E+00	NA	NA	NA						
MW-32-48	Q3-2010	008			8/24/2010	1403	5.90E+03	3.51E+02	2.10E+02	3.55E-01	6.33E-01	7.09E-01	-4.34E-01	4.49E+00	5.04E+00	1.96E+00	4.95E+00	5.95E+00	NA	NA	NA						
MW-32-59	Q4-2009	014	58.8	18.2	10/22/2009	1337	5.61E+03	3.33E+02	1.66E+02	-5.42E-01	6.48E-01	9.80E-01	5.15E-01	5.36E+00	6.35E+00	-3.01E+00	7.38E+00	7.04E+00	NA	NA	NA	6.90E+04	ND	ND	ND	NA	MW-32-59
MW-32-59	Q1-2010	015	58.8	18.2	1/28/2010	1401	8.92E+04	3.45E+03	6.39E+02	4.07E-02	3.15E-01	4.04E-01	1.02E+00	4.07E+00	4.72E+00	3.06E+00	3.93E+00	4.92E+00	NA	NA	NA						
MW-32-59	Q1-2010 Mid	016	58.8	18.2	3/4/2010	1323	8.81E+04	1.03E+03	1.67E+02	1.51E-01	6.31E-01	7.80E-01	6.65E-01	5.30E+00	4.46E+00	-1.40E+00	5.32E+00	4.34E+00	NA	NA	NA						
MW-32-59	Q2-2010	017	58.8	18.2	4/28/2010	1130	6.83E+04	2.01E+03	1.88E+02	-3.10E-01	3.61E-01	6.30E-01	4.95E+00	4.86E+00	6.21E+00	1.55E+00	4.36E+00	5.81E+00	NA	NA	NA						
MW-32-59	Q2-2010 Mid	018	58.8	18.2	6/9/2010	1453	1.55E+05	4.53E+03	4.89E+02	4.11E-01	7.75E-01	8.75E-01	-9.71E-01	6.12E+00	6.76E+00	1.48E+00	6.06E+00	7.93E+00	NA	NA	NA						
MW-32-59	Q3-2010	019	58.8	18.2	7/27/2010	1300	6.54E+04	1.91E+03	1.33E+02	1.50E-01	4.37E-01	5.21E-01	1.07E+00	1.02E+01	1.14E-01	3.80E+00	9.36E+00	1.21E+01	NA	NA	NA						
MW-32-59	Q3-2010	020	58.8	18.2	8/24/2010	1422	5.78E+03	3.48E+02	2.10E+02	-9.82E-02	6.14E-01	8.32E-01	3.21E+00	5.84E+00	7.14E+00	-2.01E+00	6.60E+00	6.75E+00	NA	NA	NA						
MW-32-59	Q3-2010 Mid	021	58.8	18.2	9/9/2010	1357	7.44E+04	2.18E+03	1.67E+02	4.21E-01	7.20E-01	8.03E-01	1.68E+00	5.41E+00	6.39E+00	-1.58E+00	5.38E+00	5.54E+00	NA	NA	NA						
MW-32-85	Q4-2009	017	85.3	-8.2	10/22/2009	1353	7.80E+03	3.83E+02	1.66E+02	1.01E-02	4.27E-01	5.44E-01	1.58E+00	1.11E+01	5.34E+00	2.01E+00	6.51E+00	6.87E+00	NA	NA	NA	1.11E+04	ND	ND	ND	NA	MW-32-85
MW-32-85	Q1-2010	018	85.3	-8.2	1/28/2010	1438	8.03E+03	1.11E+03	4.26E+02	6.85E-01	8.28E-01	8.91E-01	2.21E+00	3.65E+00	4.30E+00	2.29E+00	3.37E+00	4.05E+00	NA	NA	NA						
MW-32-85	Q1-2010 Mid	019	85.3	-8.2	3/4/2010	1444	9.31E+03	3.62E+02	1.68E+02	-2.46E-01	4.71E-01	7.01E-01	3.62E-01	3.45E+00	3.35E+00	-1.26E+00	3.38E+00	4.04E+00	NA	NA	NA						
MW-32-85	Q2-2010	020	85.3	-8.2	4/28/2010	1308	1.15E+04	5.85E+02	1.45E+02	3.95E-02	6.03E-01	7.62E-01	7.18E-01	9.07E+00	9.43E+00	1.03E+00	6.79E+00	6.05E+00	NA	NA	NA						
MW-32-85	Q2-2010 Mid	021	85.3	-8.2	6/9/2010	1203	1.20E+04	4.85E+02	2.14E+02	3.33E-01	7.56E-01	8.66E-01	-1.92E+00	5.57E+00	6.15E+00	-7.73E-01	5.68E+00	6.30E+00	NA	NA	NA						
MW-32-85	Q3-2010	022	85.3	-8.2	7/27/2010	1451	1.21E+04	5.81E+02	1.01E+02	3.83E-01	6.37E-01	7.07E-01	1.38E+00	7.47E+00	8.59E+00	2.30E+00	7.74E+00	9.52E+00	NA	NA	NA						
MW-32-85	Q3-2010	023	85.3	-8.2	8/24/2010	1103	1.38E+04	4.94E+02	2.10E+02	-3.76E-01	4.75E-01	7.02E-01	-6.66E-01	5.96E+00	6.52E+00	-1.19E+00	5.22E+00	5.48E+00	NA	NA	NA						
MW-32-85	Q3-2010 Mid	024	85.3	-8.2	9/9/2010	1529	1.44E+04	6.57E+02	1.27E+02	1.34E-01	6.77E-01	8.36E-01	1.43E+00	6.27E+00	6.70E+00	1.25E-01	5.49E+00	5.10E+00	NA	NA	NA						
MW-32-149	Q4-2009	015	149.3	-72.3	10/22/2009	1539	2.95E+02	1.59E+02	1.67E+02	-9.56E-02	4.01E-01	5.33E-01	-6.75E+00	9.40E+00	7.45E+00	-5.88E-01	8.74E+00	3.40E+00	NA	NA	NA	4.35E+03	ND	ND	ND	NA	MW-32-149
MW-32-149	Q1-2010	016	149.3	-72.3	1/28/2010	1147	5.28E+03	9.24E+02	4.30E+02	2.02E-01	7.48E-01	8.83E-01	2.15E+00	3.71E+00	4.43E+00	4.50E-01	4.17E+00	4.73E+00	NA	NA	NA						
MW-32-149	Q2-2010	017	149.3	-72.3	4/28/2010	1350	6.60E+03	4.52E+02	1.47E+02	3.03E-01	7.08E-01	8.24E-01	1.98E+00	6.88E+00	7.55E+00	9.80E-01	4.44E+00	5.36E+00	NA	NA	NA						
MW-32-149	Q2-2010 Mid	018	149.3	-72.3	6/9/2010	1252	9.76E+03	4.44E+02	2.14E+02	-1.16E-01	6.45E-01	8.05E-01	-8.57E-01	8.30E+00	9.08E+00	-4.49E+00	6.20E+00	5.62E+00	NA	NA	NA						
MW-32-149	Q3-2010	019	149.3	-72.3	7/27/2010	1534	3.81E+03	3.33E+02	1.01E+02	1.14E-01	3.57E-01	4.33E-01	7.24E-01	1.22E+01	1.54E-01	1.53E+00	8.88E+00	1.06E+01	NA	NA	NA						
MW-32-149	Q3-2010	020	149.3	-72.3	8/24/2010	1127	2.60E+03	2.73E+02	2.10E+02	1.04E-01	6.64E-01	8.13E-01	1.04E-01	6.51E+00	7.44E+00	2.67E-02	5.89E+00	5.71E+00	NA	NA	NA						
MW-32-149	Q3-2010 Mid	021	149.3	-72.3	9/9/2010	1136	2.12E+03	2.73E+02	1.27E+02	2.27E-01	7.72E-01	9.22E-01	3.68E+00	7.83E+00	9.16E+00	1.24E+00	8.52E+00	1.00E+01	NA	NA	NA						
MW-32-173	Q4-2009	013	172.8	-95.7	10/22/2009	1536	4.31E+03	1.68E+02	1.68E+02	-1.01E-02	3.85E-01	4.95E-01	-2.49E-01	5.87E+00	6.51E+00	6.81E-01	5.70E+00	5.64E+00	NA	NA	NA	1.75E+03	ND	ND	ND	NA	MW-32-173
MW-32-173	Q1-2010	014	172.8	-95.7	1/28/2010	1142	1.33E+03	6.95E+02	6.63E+02	1.67E-01	7.37E-01	8.74E-01	-4.48E+00	7.32E+00	7.54E+00	2.11E+00	4.42E+00	5.30E+00	NA	NA	NA						
MW-32-173	Q2-2010	015	172.8	-95.7	4/28/2010	1545	1.54E+03	2.45E+02	1.48E+02	4.63E-01	5.34E-01	5.49E-01	4.96E+00	5.45E+00	6.79E+00	-8.08E-01	4.93E+00	5.21E+00	NA	NA	NA						
MW-32-173	Q2-2010 Mid	016	172.8	-95.7	6/9/2010	1223	2.34E+03	2.65E+02	2.08E+02	3.04E-01	5.97E-01	6.81E-01	-9.18E-01	6.61E+00	7.29E+00	8.09E-01	6.48E+00	7.43E+00	NA	NA	NA						
MW-32-173	Q3-2010	017	172.8	-95.7	7/27/2010	1517	2.47E+03	2.69E+02	9.88E+01	9.64E-02	3.38E-01	4.14E-01	-1.51E+00	8.71E+00	9.55E+00	-2.29E+00	7.04E+00	7.12E+00	NA	NA	NA						
MW-32-173	Q3-2010	018	172.8	-95.7	8/24/2010	1123	2.19E+03	2.63E+02	2.10E+02	-1.37E-01	3.98E-01	5.77E-01	2.92E+00	6.57E+00	7.32E+00	4.56E-01	6.55E+00	7.41E+00	NA	NA	NA						
MW-32-173	Q3-2010 Mid	019	172.8	-95.7	9/9/2010	1129	1.96E+03	2.63E+02	1.28E+02	5.82E-01	8.34E-01	8.96E-01	1.07E+00	4.80E+00	5.31E+00	9.94E-01	4.84E+00	5.77E+00	NA	NA	NA						
MW-32-190	Q4-2009	016	190.3	-113.7	10/22/2009	1530	1.63E+03	2.13E+02	1.67E+02	8.63E-02	3.60E-01	4.39E-01	-1.67E+00	6.11E+00	6.45E+00	3.05E-01	5.96E+00	5.67E+00	NA	NA	NA	1.70E+03	ND	ND	ND	NA	MW-32-190
MW-32-190	Q1-2010	017	190.3	-113.7	1/28/2010	1157	1.71E+03	5.91E+02	4.25E+02	4.33E-01	4.97E-01	5.09E-01	-1.94E-02	4.22E+00	4.30E+00	1.29E+00	4.62E+00	5.46E+00	NA	NA	NA						
MW-32-190	Q1-2010 Mid	018	190.3	-113.7	3/4/2010	1242	1.98E+03	2.11E+02	1.67E+02	4.99E-03	5.73E-01	7.52E-01	-6.41E-01	3.29E+00	3.70E+00	3.53E+00	3.74E+00	4.67E+00	NA	NA	NA						
MW-32-190	Q2-2010	019	190.3	-113.7	4/28/2010	1551	1.59E+03	2.43E+02	1.49E+02	2.52E-01	7.01E-01	9.85E-01	1.82E+00	5.66E+00	6.55E+00	2.37E+00	5.38E+00	5.33E+00	NA	NA	NA						
MW-32-190	Q2-2010 Mid	020	190.3	-113.7	6/9/2010	1243	1.76E+03	2.45E+02	2.05E+02	4.69E-01	8.43E-01	9.49E-01	-3.64E+00	5.89E+00	6.02E+00	1.50E+00	5.84E+00	5.92E+00	NA	NA	NA						
MW-32-190	Q3-2010	021	190.3	-113.7	7/27/2010	1541	1.58E+03	2.21E+02	9.83E+01	-8.57E-02	3.52E-01	5.06E-01	6.23E-01	7.98E+00	9.16E+00	-2.62E+00	7.77E+00	7.60E+00	NA	NA	NA						
MW-32-190	Q3-2010	022	190.3	-113.7	8/24/2010	1137	1.09E+03	2.43E+02	2.09E+02	2.54E-01	7.64E-01	9.25E-01	-5.47E-01	4.64E+00	5.43E+00	9.00E-01	4.90E+00	5.67E+00	NA	NA	NA						
MW-32-190	Q3-2010 Mid	023	190.3	-113.7	9/9/2010	1134	1.65E+03	2.48E+02	1.30E+02	-1.11E-01	5.85E-01	8.27E-01	-2.39E-01	9.83E+00	1.18E-01	2.00E+00	6.66E+00	7.98E+00	NA	NA	NA						
MW-33	Q1-2010	025	19.2	-0.4	2/2/2010	1315	3.20E+04	2.15E+03	4.38E+02	-1.15E-01	7.38E-01	9.21E-01	2.64E+00	3.44E+00	4.21E+00	4.59E-01	3.96E+00	4.42E+00	NA	NA	NA	2.57E+04	ND	ND	ND	NA	MW-33
MW-33	Q2-2010	026	19.2	-0.4	4/15/2010	1354	6.31E+04	1.05E+03	1.76E+02	-1.77E-01	6.60E-01	8.85E-01	-3.35E+00	7.39E+00	7.21E+00	-5.17E+00	7.74E+00	5.17E+00	NA	NA	NA						
MW-33	Q3-2010	027	19.2	-0.4	8/30/2010	1429	3.69E+03	3.42E+02	1.26E+02	1.64E-01	3.24E-01	3.69E-01	7.72E-01	5.64E+00	6.38E+00	-3.08E-01	5.07E+00	5.60E+00	NA	NA	NA						
MW-33	Q3-2010 Mid	028	19.2	-0.4	9/11/2010	1328	3.86E+03	3.53E+02	1.27E+02	9.95E-03	7.38E-01	9.23E-01	-1.30E+00	4.80E+00	5.14E+00	1.12E+00	5.10E+00	5.95E+00	NA	NA	NA						
MW-35	Q2-2010 Mid	020	19	-0.4	5/20/2010	1325	2.82E+03	2.87E+02	2.14E+02	-1.97E-01	4.52E-01	6.73E-01	1.51E+00	5.61E+00	6.71E+00	-1.24E+00	6.33E+00	5.84E+00	NA	NA	NA	2.82E+03	ND	ND	ND	NA	MW-35
MW-36-24	Q4-2009	016	16.1	-4.3	10/28/2009	1548	1.47E+03	2.03E+02	1.61E+02	6.33E-01	8.91E-01	9.73E-01	-9.30E-01	3.67E+00	4.33E+00	-3.01E-01	4.36E+00	5.04E+00	NA	NA	NA	1.48E+03	ND	ND	ND	NA	MW-36-24
MW-36-24	Q1-2010	017	16.1	-4.3	2/1/2010	1349	6.60E+03	5.97E+02	6.18E+02	7.81E-01	8.04E-01	8.46E-01	2.13E+00	3.24E+00	3.30E+00	0.00E+00	4.13E+00	4.27E+00	NA	NA	NA						
MW-36-24	Q2-2010	018	16.1	-4.3	4/28/2010	1414	3.53E+03	3.39E+02	1.45E+02	1.91E-01	5.60E-01	6.67E-01	1.74E+00	5.87E+00	6.36E+00	2.13E+00	5.66E+00	5.86E+00	NA	NA	NA						
MW-36-24	Q3-2010	019	16.1	-4.3	7/29/2010	1204	2.64E+02	1.17E+02	1.00E+02	2.45E-01	3.84E-01	4.23E-01	8.89E-01	9.88E+00	1.10E-01	-2.61E+00	1.19E-01	1.26E+01	NA	NA	NA						
MW-36-41	Q4-2009	010	37	-25.2	10/28/2009	1614	1.01E+04	4.29E+02	1.67E+02	5.14E+00	1.19E+00	7.96E-01	-2.95E-01	4.15E+00	4.70E+00	1.79E+00	4.56E+00	5.37E+00	NA	NA	NA	1.21E+04	4.39E+00	ND	ND	NA	MW-36-41
MW-36-41	Q1-2010	011	37	-25.2	2/1/2010	1225	9.56E+03	1.31E+03	6.06E+02	4.60E+00	9.53E-01	4.44E-01	1.66E+00	4.22E+00	4.78E+00	0.00E+00	4.35E+00	5.71E+00	NA	NA	NA						
MW-36-41	Q2-2010	012	37	-25.2	4/28/2010	1538	1.56E+04	6.89E+02	1.50E+02	5.95E+00	1.30E+00	5.74E-01	1.38E+00	6.42E+00	6.92E+00	8.55E-01	5.70E+00	5.68E+00	NA	NA	NA						
MW-36-41	Q3-2010	013	37	-25.2	7/29/2010	1223	1.30E+04	7.52E+02	1.46E+02	1.83E+00	7.41E-01	5.17E-01	-1.84E+00	6.35E+00	6.48E+00	4.07E+00	6.12E+00	7.75E+00	NA	NA	NA						
MW-36-52	Q4-2009	015	49.7	-37.9	10/28/2009	1539	8.23E+03	3.92E+02	1.67E+02	3.53E+00	1.05E+00	6.01E-01	1.38E+00	4.38E+00	4.38E+00	3.63E+00	4.05E+00	6.13E+00	NA	NA	NA	7.44E+03	3.66E+00	ND	ND	NA	MW-36-52
MW-36-52	Q1-2010	016	49.7	-37.9	2/1/2010	1528	5.97E+03	1.03E+03	6.42E+02	2.13E+00	6.87E-01	4.50E-01	-3.34E+00	6.50E+00	6.30E+00	-1.10E+00	3.79E+00	4.07E+00	NA	NA	NA						
MW-36-52	Q2-2010	017	49.7	-37.9	4/28/2010	1546	8.49E+03	5.09E+02	1.47E+02	5.36E+00	1.35E+00	6.85E-01	2.29E+00	5.31E+00	6.27E+00	2.98E+00	4.30E+00	5.12E+00	NA	NA	NA						
MW-36-52	Q3-2010	018	49.7	-37.9	7/29/2010	1224	7.07E+03	4.43E+02	1.00E+02	-1.12E-01	6.55E-01	6.25E-01	-1.05E+00	7.79E+00	6.55E+00	-1.74E+00	9.05E+00	1.05E+01	NA	NA	NA						

TABLE 3
THIRD QUARTER 2010 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER, Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS: TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			YEARLY ROLLING AVERAGES[4]: TRITIUM (pCi/L)	Sr-90 (pCi/L)	Cs-137 (pCi/L)	Co-60 (pCi/L)	Ni-63 (pCi/L)	Well ID
					Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Average	Average	Average	Average	Average	
MW-37-22	Q4-2009	016	17	-2	10/28/2009	1139	4.56E+03	2.93E+02	1.62E+02	1.24E+01	1.51E+00	4.86E-01	-5.18E-02	5.66E+00	6.30E+00	-3.95E-01	6.42E+00	5.70E+00	NA	NA	NA	5.72E+03	1.07E+01	ND	ND	NA	MW-37-22
MW-37-22	Q1-2010	017	17	-2	1/29/2010	1524	5.54E+03	9.63E+02	4.47E+02	1.22E+01	1.46E+00	4.07E-01	9.10E-01	3.98E+00	4.49E+00	-4.43E-01	4.51E+00	4.99E+00	NA	NA	NA						
MW-37-22	Q2-2010	018	17	-2	4/27/2010	1323	9.06E+03	4.25E+02	2.09E+02	1.29E+01	1.68E+00	6.44E-01	1.03E+00	5.72E+00	5.54E+00	1.34E+00	4.41E+00	5.29E+00	NA	NA	NA						
MW-37-22	Q3-2010	019	17	-2	8/5/2010	1406	3.70E+03	3.25E+02	9.90E+01	5.19E+00	1.39E+00	9.19E-01	-1.60E+00	7.62E+00	8.20E+00	4.53E+00	7.13E+00	9.76E+00	NA	NA	NA						
MW-37-32	Q4-2009	016	29	-14	10/28/2009	1137	4.56E+03	2.88E+02	1.61E+02	2.28E+01	2.04E+00	7.03E-01	-3.69E+00	7.75E+00	7.99E+00	2.12E-01	4.67E+00	5.38E+00	NA	NA	NA	5.57E+03	1.88E+01	ND	ND	NA	MW-37-32
MW-37-32	Q1-2010	017	29	-14	1/29/2010	1543	5.69E+03	1.05E+03	6.73E+02	2.03E+01	1.89E+00	4.73E-01	1.04E+00	3.51E+00	3.99E+00	-5.07E-01	3.75E+00	4.02E+00	NA	NA	NA						
MW-37-32	Q2-2010	018	29	-14	4/27/2010	1725	7.24E+03	3.91E+02	2.10E+02	1.87E+01	2.28E+00	6.59E-01	6.85E-01	5.82E+00	6.72E+00	-2.25E+00	4.38E+00	4.69E+00	NA	NA	NA						
MW-37-32	Q3-2010	019	29	-14	8/5/2010	1400	4.80E+03	3.64E+02	9.97E+01	1.42E+01	1.85E+00	5.42E-01	-5.90E+00	8.89E+00	8.37E+00	-3.93E-01	8.67E+00	7.54E+00	NA	NA	NA						
MW-37-40	Q4-2009	016	39.2	-24.3	10/28/2009	1348	4.52E+03	2.83E+02	1.62E+02	1.69E+01	1.75E+00	7.13E-01	-2.63E+00	6.40E+00	7.55E+00	3.10E+00	6.72E+00	3.29E+00	NA	NA	NA	5.40E+03	1.52E+01	ND	ND	NA	MW-37-40
MW-37-40	Q1-2010	017	39.2	-24.3	1/29/2010	1252	4.70E+03	8.82E+02	4.33E+02	1.25E+01	1.44E+00	4.29E-01	7.58E-01	5.10E+00	5.56E+00	-1.29E+00	4.93E+00	5.38E+00	NA	NA	NA						
MW-37-40	Q2-2010	018	39.2	-24.3	4/27/2010	1243	5.37E+03	3.45E+02	2.07E+02	1.71E+01	1.81E+00	6.52E-01	-2.56E+00	4.54E+00	4.41E+00	-7.35E-02	5.03E+00	5.51E+00	NA	NA	NA						
MW-37-40	Q3-2010	019	39.2	-24.3	8/5/2010	1425	7.00E+03	4.43E+02	9.99E+01	1.43E+01	1.74E+00	4.81E-01	3.15E-01	7.86E+00	9.00E+00	3.82E+00	7.44E+00	9.31E+00	NA	NA	NA						
MW-37-57	Q4-2009	016	53.2	-38.3	10/28/2009	1200	4.20E+03	2.81E+02	1.62E+02	2.83E+01	2.38E+00	8.82E-01	1.78E+00	5.84E+00	6.24E+00	-1.29E-01	6.51E+00	7.24E+00	NA	NA	NA	5.44E+03	2.07E+01	ND	ND	NA	MW-37-57
MW-37-57	Q1-2010	017	53.2	-38.3	1/29/2010	1543	5.07E+03	9.08E+02	4.31E+02	1.76E+01	1.80E+00	4.25E-01	1.11E+00	4.16E+00	4.74E+00	5.45E-01	3.90E+00	4.50E+00	NA	NA	NA						
MW-37-57	Q2-2010	018	53.2	-38.3	4/27/2010	1728	5.20E+03	3.53E+02	2.16E+02	1.90E+01	2.15E+00	6.60E-01	-5.08E+00	7.62E+00	7.24E+00	1.71E+00	6.43E+00	7.85E+00	NA	NA	NA						
MW-37-57	Q3-2010	019	53.2	-38.3	8/5/2010	1359	7.30E+03	4.52E+02	9.94E+01	1.73E+01	1.69E+00	5.57E-01	-2.16E+00	7.37E+00	7.75E+00	-6.93E-01	8.96E+00	9.77E+00	NA	NA	NA						
MW-39-67	Q4-2009	007	67	13	11/5/2009	1511	4.41E+02	1.23E+02	9.84E+01	2.37E+00	7.72E-01	5.03E-01	-6.24E-01	5.07E+00	5.46E+00	2.05E+00	5.31E+00	3.29E+00	NA	NA	NA	3.09E+02	1.79E+00	ND	ND	NA	MW-39-67
MW-39-67	Q2-2010	008	67	13	5/4/2010	1523	3.79E+02	2.10E+02	2.13E+02	1.26E+00	6.60E-01	6.33E-01	4.66E-01	5.42E+00	6.14E+00	1.30E+00	6.75E+00	7.87E+00	NA	NA	NA						
MW-39-67	Q3-2010	009	67	13	7/22/2010	1426	2.86E+02	1.13E+02	9.90E+01	1.73E+00	6.00E-01	3.90E-01	2.94E+00	6.31E+00	7.30E+00	-5.65E+00	7.35E+00	5.04E+00	NA	NA	NA						
MW-39-84	Q4-2009	007	83.5	-3.5	11/5/2009	1514	2.42E+02	1.02E+02	9.56E+01	1.12E+00	6.78E-01	6.28E-01	-1.25E+00	1.06E+01	1.16E+01	3.13E+00	6.33E+00	7.74E+00	NA	NA	NA	2.79E+02	1.07E+00	ND	ND	NA	MW-39-84
MW-39-84	Q2-2010	008	83.5	-3.5	5/4/2010	1532	2.25E+02	1.95E+02	2.12E+02	1.26E+00	6.00E-01	5.63E-01	1.07E+00	5.85E+00	6.31E+00	2.75E+00	5.78E+00	5.93E+00	NA	NA	NA						
MW-39-84	Q3-2010	009	83.5	-3.5	7/22/2010	1442	3.70E+02	1.30E+02	1.01E+02	8.43E-01	6.21E-01	5.85E-01	-3.32E+00	6.79E+00	6.90E+00	2.43E+00	6.95E+00	3.54E+00	NA	NA	NA						
MW-39-102	Q4-2009	007	101.5	-21.5	11/5/2009	1512	2.67E+02	1.08E+02	9.93E+01	1.24E+00	1.02E+00	1.05E+00	-2.19E+00	6.51E+00	5.39E+00	-4.21E+00	7.30E+00	5.76E+00	NA	NA	NA	3.00E+02	2.65E+00	ND	ND	NA	MW-39-102
MW-39-102	Q2-2010	008	101.5	-21.5	5/4/2010	1527	3.93E+02	2.01E+02	2.13E+02	4.15E-01	6.30E-01	6.97E-01	-2.40E+00	5.49E+00	5.72E+00	-5.13E-01	6.30E+00	5.91E+00	NA	NA	NA						
MW-39-102	Q3-2010	009	101.5	-21.5	7/22/2010	1452	2.39E+02	1.44E+02	1.49E+02	4.05E+00	9.93E-01	4.77E-01	-1.08E+00	6.35E+00	6.48E+00	-3.65E+00	5.55E+00	4.42E+00	NA	NA	NA						
MW-39-124	Q4-2009	007	124	-44	11/5/2009	1256	2.68E+02	1.09E+02	1.00E+02	1.87E+00	8.68E-01	7.66E-01	-6.47E-01	5.88E+00	6.55E+00	4.43E+00	7.04E+00	3.98E+00	NA	NA	NA	2.88E+02	2.06E+00	ND	ND	NA	MW-39-124
MW-39-124	Q2-2010	008	124	-44	5/4/2010	1232	3.08E+02	1.92E+02	2.06E+02	5.93E-01	8.18E-01	8.96E-01	-2.76E-02	5.41E+00	5.45E+00	1.35E-02	5.05E+00	5.58E+00	NA	NA	NA						
MW-39-124	Q3-2010	009	124	-44	7/22/2010	1139	1.12E+02	1.34E+02	1.46E+02	2.25E+00	7.71E-01	5.01E-01	-1.11E+00	8.32E+00	9.28E+00	-4.37E-01	9.75E+00	1.10E+01	NA	NA	NA						
MW-39-183	Q4-2009	007	182.5	-102.5	11/5/2009	1257	9.85E+01	9.25E+01	9.87E+01	3.71E-01	7.14E-01	8.05E-01	1.63E+00	9.42E+00	6.31E+00	1.94E+00	6.73E+00	7.46E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-39-183
MW-39-183	Q2-2010	008	182.5	-102.5	5/4/2010	1251	1.34E+02	1.84E+02	2.10E+02	8.21E-02	5.44E-01	6.90E-01	2.11E+00	6.52E+00	7.73E+00	-2.32E+00	7.59E+00	5.99E+00	NA	NA	NA						
MW-39-183	Q3-2010	009	182.5	-102.5	7/22/2010	1138	1.07E+02	1.12E+02	1.19E+02	2.08E-01	4.19E-01	4.79E-01	-4.62E+00	8.88E+00	9.31E+00	-5.09E+00	9.62E+00	3.98E+00	NA	NA	NA						
MW-39-195	Q4-2009	007	195	-115	11/5/2009	1303	1.09E+02	9.35E+01	9.86E+01	4.35E-01	7.60E-01	8.53E-01	2.05E+00	7.00E+00	7.38E+00	1.01E+00	8.71E+00	3.45E+00	NA	NA	NA	1.09E+02	ND	ND	ND	NA	MW-39-195
MW-39-195	Q2-2010	008	195	-115	5/4/2010	1314	6.99E+01	1.64E+02	1.84E+02	6.21E-01	6.54E-01	6.82E-01	-1.56E+00	6.42E+00	6.36E+00	-1.59E-01	6.84E+00	7.63E+00	NA	NA	NA						
MW-39-195	Q3-2010	009	195	-115	7/22/2010	1210	9.26E+01	1.11E+02	1.20E+02	5.61E-01	5.70E-01	5.97E-01	7.86E-01	8.64E+00	9.43E+00	-9.73E-01	8.93E+00	9.62E+00	NA	NA	NA						
MW-40-27	Q4-2009	009	26.7	46.5	11/19/2009	1457	1.17E+02	9.35E+01	9.75E+01	-6.51E-01	7.14E-01	8.73E-01	1.06E+00	4.59E+00	5.44E+00	-2.55E+00	5.33E+00	5.10E+00	NA	NA	NA	1.55E+02	ND	ND	ND	NA	MW-40-27
MW-40-27	Q1-2010	010	26.7	46.5	2/4/2010	1440	1.30E+02	1.65E+02	1.83E+02	1.11E-01	4.58E-01	5.59E-01	-1.62E+00	7.81E+00	6.98E+00	2.86E+00	6.71E+00	8.31E+00	NA	NA	NA						
MW-40-27	Q2-2010	011	26.7	46.5	4/15/2010	1600	1.48E+02	1.74E+02	1.93E+02	1.05E-01	6.29E-01	7.95E-01	-1.30E+00	4.02E+00	4.36E+00	-2.98E+00	5.64E+00	4.86E+00	NA	NA	NA						
MW-40-27	Q3-2010	012	26.7	46.5	8/26/2010	1442	1.93E+02	1.25E+02	1.24E+02	2.23E-01	6.54E-01	7.73E-01	1.95E+00	4.50E+00	5.46E+00	-1.01E+00	4.72E+00	5.12E+00	NA	NA	NA						
MW-40-46	Q4-2009	010	46.2	27	11/19/2009	1507	5.71E+01	8.82E+01	9.82E+01	9.55E-02	5.13E-01	5.03E-01	9.97E-01	4.25E+00	4.70E+00	1.09E+00	4.54E+00	6.35E+00	NA	NA	NA	2.35E+02	ND	ND	ND	NA	MW-40-46
MW-40-46	Q1-2010	011	46.2	27	2/4/2010	1459	9.28E+01	1.62E+02	1.82E+02	6.21E-01	7.56E-01	7.95E-01	2.03E+00	4.51E+00	5.36E+00	1.37E+00	4.96E+00	5.86E+00	NA	NA	NA						
MW-40-46	Q2-2010	012	46.2	27	4/15/2010	1618	2.35E+02	1.38E+02	1.45E+02	3.93E-01	7.23E-01	8.15E-01	2.73E+00	3.30E+00	4.38E+00	1.19E+00	3.40E+00	3.95E+00	NA	NA	NA						
MW-40-46	Q3-2010	013	46.2	27	8/26/2010	1456	1.24E+02	1.22E+02	1.29E+02	-1.63E-01	5.11E-01	7.19E-01	7.02E-01	6.01E+00	6.90E+00	5.46E+00	6.17E+00	5.30E+00	NA	NA	NA						
MW-40-81	Q4-2009	010	80.7	-7.5	11/17/2009	1351	9.11E+01	8.83E+01	9.45E+01	-1.58E-01	6.63E-01	8.17E-01	-4.31E+00	6.09E+00	5.16E+00	2.83E+00	3.76E+00	4.81E+00	NA	NA	NA	1.92E+02	ND	ND	ND	NA	MW-40-81
MW-40-81	Q1-2010	011	80.7	-7.5	2/4/2010	1056	1.47E+02	1.65E+02	1.83E+02	3.99E-02	6.37E-01	8.18E-01	1.42E+00	4.00E+00	4.59E+00	-7.13E-03	4.36E+00	5.42E+00	NA	NA	NA						
MW-40-81	Q2-2010	012	80.7	-7.5	4/15/2010	1215	1.92E+02	1.37E+02	1.47E+02	4.25E-01	7.02E-01	7.79E-01	1.72E+00	4.20E+00	4.93E+00	1.08E-01	3.82E+00	4.36E+00	NA	NA	NA						
MW-40-81	Q3-2010	013	80.7	-7.5	8/26/2010	1105	9.08E+01	1.11E+02	1.24E+02	2.45E-01	5.25E-01	6.06E-01	3.95E+00	5.27E+00	4.76E+00	2.67E+00	4.63E+00	1.20E+01	NA	NA	NA						
MW-40-100	Q4-2009	012	100.2	-27	11/17/2009	1434	7.32E+01	9.03E+01	9.89E+01	9.08E-02	6.51E-01	7.90E-01	-1.00E+00	3.72E+00	4.12E+00	-4.90E-01	4.50E+00	4.99E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-40-100
MW-40-100	Q1-2010	013	100.2	-27	2/4/2010	1110	1.47E+02	1.65E+02	1.82E+02	7.05E-01	7.83E-01	8.05E-01	-7.58E-01	4.20E+00	4.50E+00	-3.34E+00	4.75E+00	4.53E+00	NA	NA	NA						
MW-40-100	Q2-2010	014	100.2	-27	4/15/2010	1216	1.39E+02	1.33E+02	1.46E+02	-1.08E-01	5.37E-01	7.46E-01	-2.83E-01	3.54E+00	3.96E+00	-2.10E+00	5.12E+00	4.80E+00	NA	NA	NA						
MW-40-100	Q3-2010	015	100.2	-27	8/26/2010	1109	1.24E+02	1.37E+02	1.45E+02	-2.33E-01	3.95E-01	6.21E-01	8.87E-01	6.15E+00	7.12E+00	6.51E-01	5.61E+00	5.53E+00	NA	NA	NA						
MW-40-127	Q4-2009	012	127.2	-54	11/17/2009	1432	1.04E+02	9.33E+01	9.89E+01	2.64E-01	6.96E-01	7.95E-01	1.35E+00	5.58E+00	6.40E+00	-5.95E-01	6.08E+00	5.66E+00	NA	NA	NA	1.04E+02	ND	ND	ND	NA	MW-40-127
MW-40-127	Q1-2010	013	127.2	-54	2/4/2010	1112	8.56E+01	1.62E+02	1.82E+02	4.25E-01	6.79E-01	7.49E-01	-4.37E+00	6.12E+00	5.32E+00	1.98E+00	4.31E+00	5.14E+00	NA	NA	NA						
MW-40-127	Q2-2010	014	127.2	-54	4/15/2010	1313	1.26E+02	1.34E+02	1.47E+02	-5.12E-03	3.50E-01	4.61E-01	-2.40E+00	9.29E+00	9.36E+00	2.32E+00	9.72E+00	1.18E+01	NA	NA	NA						
MW-40-127	Q3-2010	015	127.2	-54	8/26/2010	1116	1.36E+02	1.43E+02	1.47E+02	2.23E-02	2.78E-01	3.67E-01	-5.02E+00	7.95E+00	8.28E+00	6.43E-01	6.48E+00	7.48E+00	NA	NA	NA						
MW-40-162	Q4-2009	010	161.7	-88.5	11/17/2009	1515	2.87E+01	8.52E+01	9.80E+01	-4.58E-01	6.48E-01	8.27E-01	9.75E-01	5.70E+00	6.47E+00	3.59E+00	5.43E+00	5.97E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-40-162
MW-40-162	Q1-2010	011	161.7	-88.5	2/4/2010	1157	2.20E+01	1.53E+02	1.82E+02	8.54E-02	5.94E-01	7.58E-01	4.31E-01	4.82E+00	5.46E+00	9.30E-01	4.44E+00	5.12E+00	NA	NA	NA						
MW-40-162	Q2-2010	012	161.7	-88.5	4/15/2010	1450	1.03E+02	1.32E+02	1.46E+02	9.77E-02	6.63E-01	8.13E-01	2.73E+00	8.36E+00	8.51E+00	3.35E+00	8.63E+00	1.05E+01	NA	NA	NA						
MW-40-162	Q3-2010	013	161.7	-88.5	8/26/2010	1229	1.02E+02	1.35E+02	1.48E+02	5.09E-01	7.23E-01	7.75E-01	7.14E-01	6.21E+00	7.08E+00	3.52E+00	6.78E+00	3.38E+00	NA	NA	NA						
MW-41-40	Q4-2009	014	34.4	20.5	11/10/2009	1308	3.15E+02	1.11E+02	9.85E+01	4.00E+00	1.10E+00	8.06E-01	1.79E+00	4.50E+00	5.18E+00	-2.05E+00	4.62E+00	4.72E+00	NA	NA	NA	1.12E+03	3.62E+00	ND	ND	NA	MW-41-40
MW-41-40	Q1-2010	015	34.4	20.5	3/1/2010	1728	9.35E+02	1.91E+02	1.66E+02	4.01E+00	8.96E-01	4.46E-01	-3.97E+00	8.42E+00	8.70E+00	1.01E+00	6.61E+00	6.59E+00	NA	NA	NA						
MW-41-40	Q2-2010	016	34.4	20.5	4/19/2010	1409	4.32E+02	1.73E+02	1.50E+02	2.09E+00	1.05E+00	8.40E-01	-2.56E+00	8.09E+00	8.29E+00	-6.83E-01	8.55E+00	9.32E+00	NA	NA	NA						
MW-41-40	Q3-2010	017	34.4	20.5	7/21/2010	1341	2.79E+02	3.02E+02	1.47E+02	4.37E+00	1.02E+00	6.33E-01	1.59E+00	5.82E+00	7.07E+00	-6.50E-01	7.18E+00	7.61E+00	NA	NA	NA						
MW-41-63	Q4-2009	013	59.5	-4.6	11/10/2009	1330	4.50E+02	1.21E+02	9.90E+01	3.83E+00	9.58E-01	5.94E-01	1.07E+00	3.63E+00	4.24E+00	-4.65E-01	4.35E+00	4.80E+00	NA	NA	NA	4.13E+02	3.59E+00	ND	ND	NA	MW-41-63
MW-41-63	Q1-2010	014	59.5	-4.6	3/1/2010	1600	2.48E+02	1.52E+02	1.68E+02	2.01E+00	6.78E-01	4.19E-01	3.00E+00	4.82E+00	5.36E+00	1.07E+00	5.37E+00	5.79E+00	NA	NA	NA						
MW-41-63	Q2-2010	015	59.5	-4.6	4/19/2010	1403	4.36E+02	1.77E+02	1.49E+02	3.66E+00	1.22E+00	7.70E-01	-4.51E+00	1.22E+01	1.52E+01	-7.27E-02	6.99E+00	7.76E+00	NA	NA	NA						
MW-41-63	Q3-2010	016	59.5	-4.6	7/21/2010	1341	5.18E+02	1.63E+02	1.43E+02	4.79E+00	1.09E+00	6.23E-01	-2.71E+00	8.29E+00	8.77E+00	1.61E+00	7.93E+00	9.59E+00	NA	NA	NA						
MW-42-49	Q4-2009	019	42.6	27.1	10/27/2009	1534	1.75E+03	2.21E+02	1.67E+02	[illegible]	2.00E+00	7.46E-01	2.44E+04	1.83E+03	1.54E-01	-1.66E-01	4.70E+00	5.17E+00	1.64E+02	3.04E+01	2.44E+01	1.43E+03	4.53E+01	3.30E+04	ND	3.27E+02	MW-42-49
MW-42-49	Q1-2010	020	42.6	27.1	2/16/2010	1649	9.79E+02	1.75E+02	1.53E+02	1.24E+02	5.92E+00	7.03E-01	6.52E+04	7.10E+03	3.34E-01	-9.83E-01	6.31E+00	5.79E+00	[illegible]	4.05E+01	[illegible]						
MW-42-49	Q2-2010	021	42.6	27.1	4/16/2010	1259	1.30E+03	4.25E+02	3.71E+02	2.40E+01	2.31E+00	8.23E-01	2.37E+04	2.85E+03	2.92E-01	8.37E-01	1.06E+01	1.23E+01	2.36E+02	3.88E+01	2.07E+01						
MW-42-49	Q3-2010	022	42.6	27.1	7/30/2010	1138	1.69E+03	2.34E+02	1.24E+02	1.39E+01	1.53E+00	3.90E-01	1.87E+04	2.40E+03	2.50E-01	7.33E-01	6.64E+00	7.77E+00	1.77E+02	3.97E+01	[illegible]						
MW-42-78	Q4-2009	014	74	-4.2	10/27/2009	1406	5.51E+02	1.73E+02	1.66E+02	9.09E-02	5.20E-01	6.23E-01	1.19E+00	3.54E+00	4.56E+00	-1.12E+00	3.62E+00	3.74E+00	-8.49E-01	[illegible]	2.25E+01	4.83E+02	ND	ND	ND	ND	MW-42-78
MW-42-78	Q1-2010	015	74	-4.2	2/16/2010	1619	3.57E+02	1.49E+02	1.52E+02	-1.14E-01	4.87E-01	6.80E-01	3.92E+00	5.40E+00	6.70E+00	-1.84E-01	4.93E+00	5.52E+00	-9.55E+00	[illegible]	2.08E+01						
MW-42-78	Q2-2010	016	74	-4.2	4/16/2010	1329	3.93E+02	2.91E+02	3.10E+02	1.81E-01	7.86E-01	9.23E-01	2.22E+00	8.67E+00	1.13E+01	-6.97E+00	9.34E+00	7.54E+00	-6.55E+00	[illegible]	2.08E+01						
MW-42-78	Q3-2010	017	74	-4.2	7/30/2010	1223	6.31E+02	1.71E+02	1.31E+02	2.73E-02	3.03E-01	3.85E-01	-1.17E-01	7.50E+00	8.30E+00	-7.43E-01	7.04E+00	7.42E+00	1.96E+00	[illegible]	1.52E+01						
MW-43-28	Q4-2009	013	23.5	25.1	11/10/2009	1410	1.73E+03	9.73E+01	9.64E+01	1.57E-03	5.19E-01	6.53E-01	-5.73E-03	3.86E+00	4.25E+00	2.17E+00	4.13E+00	4.96E+00	NA	NA	NA	2.04E+03	ND	ND	ND	NA	MW-43-28
MW-43-28	Q1-2010	014	23.5	25.1	3/2/2010	1730	2.13E+03	1.55E+02	1.68E+02	1.43E-01	3.81E-01	4.50E-01	-9.17E-01	5.10E+00	5.50E+00	2.29E+00	5.30E+00	5.91E+00	NA	NA	NA						
MW-43-28	Q2-2010	015	23.5	25.1	4/19/2010	1338	2.25E+03	1.39E+02	1.47E+02	-7.48E-02	5.52E-01	7.63E-01	-2.66E-01	5.61E+00	6.36E+00	-1.90E-01	5.61E+00	5.33E+00	NA	NA	NA						
MW-43-28	Q3-2010	016	23.5	25.1	7/20/2010	1348	9.11E+01	1.33E+02	1.47E+02	-6.43E-02	3.60E-01	5.33E-01	5.80E+00	7.51E+00	9.76E+00	-1.44E+00	9.49E+00	1.01E+01	NA	NA	NA						
MW-43-62	Q4-2009	013	51	-2.2	11/10/2009	1202	1.96E+02	1.01E+02	9.84E+01	1.24E+00	7.10E-01	6.59E-01	3.69E-01	5.16E+00	5.74E+00	-4.87E-01	5.54E+00	5.94E+00	NA	NA	NA	2.06E+02	1.24E+00	ND	ND	NA	MW-43-62
MW-43-62	Q1-2010	014	51	-2.2	3/2/2010	1446	1.31E+02	1.54E+02	1.68E+02	3.51E-01	3.93E-01	4.05E-01	1.64E+00	4.61E+00	5.43E+00	1.35E+00	4.75E+00	5.61E+00	NA	NA	NA						
MW-43-62	Q2-2010	015	51	-2.2	4/19/2010	1317	2.16E+02	1.34E+02	1.47E+02	6.35E-01	7.10E-01	7.15E-01	-1.08E+00	4.44E+00	4.90E+00	1.30E+00	4.68E+00	5.52E+00	NA	NA	NA						
MW-43-62	Q3-2010	016	51	-2.2	7/20/2010	1507	5.97E+01	1.33E+02	1.51E+02	4.41E-01	4.75E-01	4.94E-01	1.11E+00	7.96E+00	8.35E+00	2.40E+00	8.32E+00	3.59E+00	NA	NA	NA						
MW-44-66	Q4-2009	014	62.4	31.1	11/5/2009	1627	7.15E+02	1.37E+02	9.71E+01	3.23E-01	6.00E-01	6.79E-01	-4.93E+00	8.65E+00	7.50E+00	8.01E-01	4.83E+00	5.53E+00	NA	NA	NA	4.51E+02	ND	ND	ND	NA	MW-44-66
MW-44-66	Q1-2010	015	62.4	31.1	2/23/2010	1608	4.37E+02	1.73E+02	1.70E+02	4.84E-02	3.00E-01	3.79E-01	2.33E+00	4.32E+00	5.12E+00	-7.73E-01	4.49E+00	4.87E+00	NA	NA	NA						
MW-44-66	Q2-2010 Mid	016	62.4	31.1	6/10/2010	1530	4.75E+02	1.69E+02	1.92E+02	2.15E-01	6.77E-01	7.95E-01	-1.54E+00	5.91E+00	6.57E+00	-1.91E+00	6.06E+00	5.25E+00	NA	NA	NA						
MW-44-66	Q3-2010	017	62.4	31.1	7/22/2010	1547	1.75E+02	1.41E+02	1.47E+02	2.79E-01	5.63E-01	6.43E-01	-3.76E+00	6.86E+00	6.34E+00	1.20E+00	8.52E+00	3.73E+00	NA	NA	NA						
MW-44-102	Q4-2009	015	80	13.5	11/5/2009	1523	5.15E+02	1.25E+02	9.78E+01	7.83E-01	7.47E-01	8.12E-01	1.01E+00	5.22E+00	4.51E+00	-4.18E+00	5.71E+00	4.65E+00	NA	NA	NA	4.49E+02	ND	ND	ND	NA	MW-44-102
MW-44-102	Q1-2010	016	80	13.5	2/17/2010	1635	5.12E+02	1.71E+02	1.69E+02	2.24E-01	3.57E-01	3.93E-01	-3.93E+00	6.67E+00	5.43E+00	1.47E+00	3.56E+00	4.34E+00	NA	NA	NA						
MW-44-102	Q2-2010 Mid	017	80	13.5	6/10/2010	1313	4.94E+02	1.79E+02	1.83E+02	-1.79E-01	5.13E-01	6.74E-01	-2.41E+00	7.89E+00	8.11E+00	-5.22E+00	7.37E+00	5.86E+00	NA	NA	NA						
MW-44-102	Q3-2010	018	80	13.5	7/21/2010	1320	2.76E+02	1.49E+02	1.45E+02	4.11E-01	4.70E-01	4.80E-01	2.38E+00	1.02E+01	1.18E+01	-1.83E+00	8.35E+00	9.25E+00	NA	NA	NA						
MW-45-42	Q4-2009	018	37	16.6	11/10/2009	1449	2.50E+03	2.24E+02	1.04E+02	6.11E-02	6.16E-01	7.60E-01	-4.83E-01	4.44E+00	5.17E+00	-8.73E-01	5.57E+00	5.86E+00	NA	NA	NA	3.02E+03	6.43E-01	ND	ND	NA	MW-45-42
MW-45-42	Q1-2010	019	37	16.6	2/17/2010	1555	3.86E+03	2.83E+02	1.68E+02	6.43E-01	5.02E-01	4.73E-01	2.03E+00	4.29E+00	5.10E+00	-9.43E-01	4.35E+00	4.74E+00	Na	Na	Na						
MW-45-42	Q2-2010	020	37	16.6	4/20/2010	1613	2.02E+03	3.05E+02	1.51E+02	2.95E-01	6.27E-01	7.22E-01	2.94E+00	6.79E+00	7.52E+00	-7.47E+00	8.46E+00	5.97E+00	NA	NA	NA						
MW-45-42	Q3-2010	021	37	16.6	7/19/2010	1538	3.69E+03	3.35E+02	1.43E+02	5.03E-01	6.10E-01	6.47E-01	1.04E+00	7.75E+00	8.35E+00	-1.87E+00	7.10E+00	7.11E+00	NA	NA	NA						
MW-45-61	Q4-2009	018	58	-4.4	11/9/2009	1253	1.37E+03	1.77E+02	1.05E+02	3.44E-01	5.20E-01	5.74E-01	-4.63E-01	5.99E+00	6.70E+00	-3.72E+00	7.04E+00	5.99E+00	NA	NA	NA	1.20E+03	ND	ND	ND	NA	MW-45-61
MW-45-61	Q1-2010	019	58	-4.4	2/17/2010	1255	1.44E+03	2.10E+02	1.68E+02	3.03E-01	3.80E-01	3.95E-01	-8.12E-01	3.86E+00	4.17E+00	-2.61E+00	4.37E+00	4.43E+00	NA	NA	NA						
MW-45-61	Q2-2010	020	58	-4.4	4/20/2010	1113	9.89E+02	2.25E+02	1.45E+02	2.71E-01	7.70E-01	8.89E-01	-8.78E-02	7.91E+00	8.34E+00	-3.82E+00	8.70E+00	3.72E+00	NA	NA	NA						
MW-45-61	Q3-2010	021	58	-4.4	7/19/2010	1328	1.00E+03	2.07E+02	1.48E+02	4.07E-01	5.04E-01	5.30E-01	-2.93E+00	8.29E+00	8.51E+00	-2.24E+00	8.38E+00	9.24E+00	NA	NA	NA						

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Table 3-Third Quarter 2010 Groundwater Analytical Results and Averages.xlsx
Q1Table3

See Page 2 for Notes

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IPEC00263579

TABLE 3
THIRD QUARTER 2010 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER, Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS: TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			YEARLY ROLLING AVERAGES[4]: TRITIUM (pCi/L)	Sr-90 (pCi/L)	Cs-137 (pCi/L)	Co-60 (pCi/L)	Ni-63 (pCi/L)	Well ID
					Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Average	Average	Average	Average	Average	
MW-46	Q4-2009	018	10.5	7.6	11/6/2009	13:24	1.10E+03	1.67E+02	1.07E+02	8.61E-01	5.09E-01	4.14E-01	2.85E+00	6.25E+00	7.40E+00	-3.00E+00	6.12E+00	5.78E+00	NA	NA	NA	1.23E+03	8.59E-01	ND	ND	NA	MW-46
MW-46	Q1-2010	019	10.5	7.6	2/12/2010	12:44	1.13E+03	2.12E+02	1.82E+02	5.04E-01	5.69E-01	5.98E-01	1.41E+00	3.98E+00	4.54E+00	-1.64E+00	5.68E+00	4.98E+00	NA	NA	NA						
MW-46	Q2-2010	020	10.5	7.6	4/12/2010	11:32	7.62E+02	1.92E+02	1.77E+02	8.57E-01	7.68E-01	7.39E-01	2.73E+00	1.05E+01	1.14E+01	2.57E-01	1.05E+01	1.13E+01	NA	NA	NA						
MW-46	Q3-2010	021	10.5	7.6	7/23/2010	13:10	1.92E+03	2.58E+02	1.46E+02	1.83E-01	5.63E-01	6.59E-01	1.28E-01	7.65E+00	8.12E+00	-1.30E+00	7.96E+00	3.34E+00	NA	NA	NA						
MW-49-26	Q4-2009	018	19.1	-4.4	10/29/2009	13:14	3.17E+03	2.91E+02	1.88E+02	1.33E+01	1.71E+00	8.20E-01	7.51E-01	6.10E+00	6.91E+00	3.00E+00	5.38E+00	5.96E+00	-4.26E+00	1.77E+01	2.16E+01	3.01E+03	1.38E+01	ND	ND	ND	MW-49-26
MW-49-26	Q1-2010	019	19.1	-4.4	2/22/2010	14:35	2.82E+03	2.71E+02	1.74E+02	1.36E+01	1.92E+00	8.63E-01	2.49E+00	5.76E+00	6.56E+00	-1.91E-01	5.78E+00	6.41E+00	-6.01E+00	1.84E+01	2.16E+01						
MW-49-26	Q2-2010	020	19.1	-4.4	4/23/2010	14:42	3.00E+03	3.31E+02	1.38E+02	1.55E+01	2.44E+00	8.19E-01	2.82E+00	7.32E+00	8.42E+00	-2.28E-01	9.12E+00	1.01E+01	-7.28E+00	1.95E+01	2.26E+01						
MW-49-26	Q3-2010	021	19.1	-4.4	8/11/2010	11:27	3.03E+03	3.03E+02	1.27E+02	1.28E+01	1.44E+00	3.60E-01	-7.91E-01	1.14E+01	1.15E+01	-1.86E+00	1.10E+01	1.19E+01	3.37E-01	1.64E+01	1.92E+01						
MW-49-42	Q4-2009	018	38.1	-23.4	10/29/2009	13:04	2.51E+03	2.73E+02	1.88E+02	1.74E+01	1.91E+00	7.50E-01	6.14E-01	6.27E+00	7.22E+00	-9.33E-02	7.39E+00	3.25E+00	-9.33E+00	1.73E+01	2.03E+01	2.44E+03	1.80E+01	ND	ND	ND	MW-49-42
MW-49-42	Q1-2010	019	38.1	-23.4	2/22/2010	14:43	2.20E+03	2.49E+02	1.75E+02	1.85E+01	2.42E+00	7.57E-01	-2.91E-01	5.17E+00	5.55E+00	1.19E+00	5.75E+00	5.62E+00	1.66E-01	1.95E+01	2.25E+01						
MW-49-42	Q2-2010	020	38.1	-23.4	4/23/2010	14:39	2.76E+03	3.25E+02	1.43E+02	1.75E+01	2.28E+00	7.01E-01	-5.63E+00	6.62E+00	6.01E+00	-1.68E+00	7.58E+00	7.64E+00	-3.23E+00	2.18E+01	2.51E+01						
MW-49-42	Q3-2010	021	38.1	-23.4	8/11/2010	11:00	2.27E+03	2.72E+02	1.30E+02	1.85E+01	1.67E+00	3.91E-01	4.80E+00	7.88E+00	9.35E+00	-2.34E+00	8.76E+00	9.06E+00	-1.21E+00	1.65E+01	1.96E+01						
MW-49-65	Q4-2009	018	60	-45.4	10/29/2009	13:15	1.66E+03	2.37E+02	1.88E+02	1.14E+01	1.58E+00	8.10E-01	1.01E+00	9.43E+00	8.76E+00	1.59E+00	8.58E+00	8.81E+00	-6.50E+00	1.71E+01	2.30E+01	1.49E+03	1.24E+01	ND	ND	ND	MW-49-65
MW-49-65	Q1-2010	019	60	-45.4	2/22/2010	13:57	1.42E+03	2.17E+02	1.74E+02	1.55E+01	2.34E+00	7.71E-01	6.73E-01	5.17E+00	5.79E+00	1.50E+00	4.53E+00	5.47E+00	6.53E+00	1.81E+01	2.13E+01						
MW-49-65	Q2-2010	020	60	-45.4	4/23/2010	15:17	1.55E+03	2.63E+02	1.50E+02	1.04E+01	1.85E+00	6.37E-01	6.11E+00	1.30E+01	9.18E+00	-2.53E-01	1.17E-01	1.35E+01	-1.29E+01	1.96E+01	2.32E+01						
MW-49-65	Q3-2010	021	60	-45.4	8/11/2010	11:19	1.32E+03	2.15E+02	1.28E+02	1.24E+01	1.44E+00	4.49E-01	-1.12E+01	1.22E+01	1.43E-01	-2.53E-01	9.38E+00	1.11E+01	-6.74E-01	1.80E+01	2.13E+01						
MW-50-42	Q4-2009	019	42	-27.1	10/26/2009	14:41	4.09E+02	1.83E+02	1.88E+02	6.73E+00	1.09E+00	4.53E-01	-3.37E+00	1.01E+01	1.12E-01	2.52E-01	6.62E+00	7.45E+00	-1.40E-01	1.86E+01	2.22E+01	5.76E+02	6.27E+00	ND	ND	ND	MW-50-42
MW-50-42	Q1-2010	020	42	-27.1	2/19/2010	12:52	3.73E+02	1.71E+02	1.74E+02	5.56E+00	1.42E+00	8.15E-01	2.91E+00	5.42E+00	6.46E+00	3.03E+00	6.13E+00	7.39E+00	-1.37E+01	1.88E+01	2.23E+01						
MW-50-42	Q2-2010	021	42	-27.1	4/30/2010	12:34	1.36E+03	2.45E+02	1.68E+02	4.30E+00	1.33E+00	8.88E-01	8.49E-01	7.56E+00	8.38E+00	-1.97E+00	5.09E+00	5.04E+00	-1.48E+01	2.25E+01	2.61E+01						
MW-50-42	Q3-2010	022	42	-27.1	8/4/2010	13:11	1.61E+02	1.25E+02	1.28E+02	8.43E+00	1.42E+00	5.63E-01	-1.94E+00	8.65E+00	9.25E+00	1.30E-01	8.05E+00	7.05E+00	0.00E+00	1.59E+01	1.88E+01						
MW-50-66	Q4-2009	024	60	-45.1	10/26/2009	14:49	2.86E+03	2.82E+02	1.89E+02	3.00E+01	2.34E+00	5.34E-01	4.11E-01	5.89E+00	6.75E+00	2.56E+00	6.03E+00	7.46E+00	6.44E+00	1.86E+01	2.17E+01	2.99E+03	2.70E+01	ND	ND	ND	MW-50-66
MW-50-66	Q1-2010	025	60	-45.1	2/19/2010	15:51	2.84E+03	2.72E+02	1.74E+02	2.50E+01	3.04E+00	8.16E-01	-6.04E-01	4.68E+00	5.20E+00	-1.01E+00	5.01E+00	5.41E+00	-3.76E+00	1.91E+01	2.21E+01						
MW-50-66	Q2-2010	026	60	-45.1	4/30/2010	14:25	2.76E+03	3.21E+02	1.68E+02	2.99E+01	3.01E+00	8.81E-01	-1.86E+00	5.84E+00	6.18E+00	3.85E-01	5.38E+00	5.13E+00	-1.14E+01	2.19E+01	2.52E+01						
MW-50-66	Q3-2010	027	60	-45.1	8/4/2010	10:38	3.51E+03	3.33E+02	1.34E+02	2.65E+01	2.28E+00	4.80E-01	3.52E+00	8.29E+00	9.99E+00	9.22E-01	9.18E+00	1.06E+01	2.07E+00	1.50E+01	1.81E+01						
MW-51-40	Q4-2009	013	39.7	28	11/18/2009	14:26	1.55E+02	1.32E+02	1.41E+02	-2.16E-01	6.35E-01	8.09E-01	-1.42E+00	5.66E+00	6.80E+00	-1.14E+00	6.45E+00	5.92E+00	-5.58E+00	1.98E+01	2.20E+01	1.63E+02	ND	ND	ND	ND	MW-51-40
MW-51-40	Q1-2010	014	39.7	28	2/5/2010	14:31	7.54E+01	1.74E+02	1.98E+02	-5.43E-02	6.58E-01	8.64E-01	1.75E+00	4.09E+00	4.72E+00	-2.91E+00	5.31E+00	4.42E+00	NA	NA	NA						
MW-51-40	Q2-2010	015	39.7	28	4/8/2010	13:58	9.55E+01	1.32E+02	1.44E+02	-1.04E-01	7.30E-01	8.98E-01	8.94E-01	8.25E+00	9.56E+00	-1.94E+00	9.18E+00	9.55E+00	NA	NA	NA						
MW-51-40	Q3-2010	016	39.7	28	8/25/2010	16:29	1.70E+02	1.07E+02	1.03E+02	-4.01E-02	3.11E-01	4.19E-01	-2.48E+00	6.17E+00	6.53E+00	1.46E+00	5.21E+00	5.37E+00	NA	NA	NA						
MW-51-79	Q4-2009	013	78.7	-11	11/18/2009	14:31	1.15E+02	1.85E+02	2.08E+02	-4.50E-02	6.87E-01	8.44E-01	-8.05E-01	5.79E+00	6.45E+00	2.78E+00	6.58E+00	3.07E+00	2.96E-01	1.68E+01	1.34E+01	1.10E+02	ND	ND	ND	ND	MW-51-79
MW-51-79	Q1-2010	014	78.7	-11	2/5/2010	14:40	1.37E+02	1.81E+02	1.99E+02	-1.26E-01	6.10E-01	8.44E-01	3.61E-02	3.39E+00	3.74E+00	7.57E-01	3.57E+00	4.08E+00	NA	NA	NA						
MW-51-79	Q2-2010	015	78.7	-11	4/8/2010	14:21	6.44E+01	1.33E+02	1.51E+02	4.83E-01	8.07E-01	9.02E-01	4.35E+00	8.89E+00	1.11E+01	4.52E+00	1.00E+01	1.28E+01	NA	NA	NA						
MW-51-79	Q3-2010	016	78.7	-11	8/25/2010	16:47	1.10E+02	9.81E+01	1.01E+02	5.81E-01	8.23E-01	8.93E-01	5.29E+00	6.11E+00	7.76E+00	1.58E+00	6.71E+00	7.88E+00	NA	NA	NA						
MW-51-104	Q4-2009	011	103.7	-36	11/18/2009	11:34	1.44E+02	1.33E+02	1.43E+02	5.67E-01	7.29E-01	7.97E-01	-9.34E+00	1.07E+01	1.38E-01	-7.19E-01	6.11E+00	5.60E+00	3.03E+00	1.62E+01	1.84E+01	1.44E+02	ND	ND	ND	ND	MW-51-104
MW-51-104	Q1-2010	012	103.7	-36	2/5/2010	11:44	[illegible]	1.70E+02	1.99E+02	3.73E-03	6.18E-01	8.24E-01	3.36E-03	7.17E+00	6.23E+00	1.95E+00	5.38E+00	5.49E+00	NA	NA	NA						
MW-51-104	Q2-2010	013	103.7	-36	4/8/2010	10:42	1.10E+02	1.34E+02	1.45E+02	1.23E-01	7.62E-01	8.99E-01	-5.30E-01	8.41E+00	9.34E+00	2.15E+00	7.96E+00	7.79E+00	NA	NA	NA						
MW-51-104	Q3-2010	014	103.7	-36	8/25/2010	13:18	1.33E+02	1.37E+02	1.44E+02	7.62E-01	8.15E-01	8.20E-01	8.90E-01	5.75E+00	6.53E+00	-2.70E-01	4.96E+00	5.47E+00	NA	NA	NA						
MW-51-135	Q4-2009	011	135.2	-67.5	11/18/2009	11:35	1.30E+02	1.32E+02	1.43E+02	-5.62E-01	6.06E-01	8.17E-01	-1.52E-01	4.53E+00	5.17E+00	2.08E+00	5.09E+00	5.12E+00	1.08E+00	1.64E+01	1.88E+01	ND	ND	ND	ND	ND	MW-51-135
MW-51-135	Q1-2010	012	135.2	-67.5	2/5/2010	11:48	4.89E+00	1.71E+02	1.98E+02	7.14E-02	6.50E-01	8.21E-01	-1.07E-02	3.91E+00	4.35E+00	-4.54E-02	4.51E+00	5.10E+00	NA	NA	NA						
MW-51-135	Q2-2010	013	135.2	-67.5	4/8/2010	11:06	5.86E+01	1.31E+02	1.50E+02	2.09E-02	5.99E-01	7.85E-01	7.04E-03	8.72E+00	9.38E+00	4.95E-01	1.04E+01	1.19E+01	NA	NA	NA						
MW-51-135	Q3-2010	014	135.2	-67.5	8/25/2010	13:21	1.36E+02	1.41E+02	1.47E+02	-2.23E-01	4.44E-01	6.70E-01	-6.64E-01	6.15E+00	6.30E+00	1.74E+00	6.62E+00	7.77E+00	NA	NA	NA						
MW-51-163	Q4-2009	011	162.7	-95	11/18/2009	11:33	9.48E+01	1.29E+02	1.43E+02	6.98E-02	6.64E-01	7.96E-01	-2.63E+00	5.89E+00	6.34E+00	2.61E+00	5.53E+00	5.54E+00	-2.21E+00	1.66E+01	1.93E+01	ND	ND	ND	ND	ND	MW-51-163
MW-51-163	Q1-2010	012	162.7	-95	2/5/2010	11:46	6.10E+01	1.74E+02	1.96E+02	-1.82E-01	5.76E-01	8.21E-01	-6.29E-01	6.12E+00	7.94E+00	-1.95E+00	6.88E+00	5.07E+00	NA	NA	NA						
MW-51-163	Q2-2010	013	162.7	-95	4/8/2010	11:31	5.35E+01	1.27E+02	1.46E+02	-7.65E-02	6.06E-01	8.13E-01	-2.95E+00	8.55E+00	8.74E+00	-1.50E+00	1.04E+01	1.10E+01	NA	NA	NA						
MW-51-163	Q3-2010	014	162.7	-95	8/25/2010	13:51	8.26E+01	9.75E+01	1.05E+02	-1.08E-01	3.98E-01	5.31E-01	3.91E+00	6.72E+00	8.11E+00	8.67E-01	6.32E+00	7.26E+00	NA	NA	NA						
MW-51-189	Q4-2009	011	189.2	-121.5	11/18/2009	11:31	8.88E+01	1.35E+02	1.51E+02	3.60E-01	5.90E-01	6.53E-01	2.96E+00	5.58E+00	6.76E+00	-2.83E-01	5.32E+00	5.43E+00	-9.17E+00	1.92E+01	2.26E+01	ND	ND	ND	ND	ND	MW-51-189
MW-51-189	Q1-2010	012	189.2	-121.5	2/5/2010	11:35	3.42E+01	1.73E+02	1.98E+02	3.21E-01	6.03E-01	6.83E-01	1.25E+00	5.70E+00	6.54E+00	2.35E+00	6.75E+00	5.51E+00	NA	NA	NA						
MW-51-189	Q2-2010	013	189.2	-121.5	4/8/2010	11:16	5.35E+01	1.27E+02	1.46E+02	3.25E-01	7.35E-01	8.47E-01	-2.07E+00	8.19E+00	8.51E+00	3.45E-01	7.39E+00	3.29E+00	NA	NA	NA						
MW-51-189	Q3-2010	014	189.2	-121.5	8/25/2010	13:13	5.86E+01	9.33E+01	1.04E+02	4.40E-02	5.97E-01	7.65E-01	2.87E+00	5.64E+00	6.59E+00	-8.01E-01	5.85E+00	5.25E+00	NA	NA	NA						
MW-52-11	Q2-2010	005	10	6.8	5/5/2010	14:26	3.73E+02	1.74E+02	1.83E+02	1.89E-01	4.77E-01	5.62E-01	2.14E+00	5.99E+00	6.97E+00	-2.04E+00	5.91E+00	5.08E+00	NA	NA	NA	3.73E+02	ND	ND	ND	NA	MW-52-11
MW-52-18	Q2-2010	005	17.5	-2.6	5/5/2010	16:19	3.01E+02	1.71E+02	1.83E+02	8.03E-02	4.19E-01	5.36E-01	1.60E+00	5.61E+00	6.44E+00	9.40E-01	5.42E+00	5.22E+00	NA	NA	NA	3.01E+02	ND	ND	ND	NA	MW-52-18
MW-52-48	Q2-2010	005	48	-33.1	5/5/2010	16:43	1.60E+02	1.65E+02	1.82E+02	6.41E-01	6.58E-01	6.90E-01	-6.17E-01	6.04E+00	6.70E+00	-1.90E-01	5.73E+00	5.67E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-52-48
MW-52-64	Q2-2010	005	64	-49.1	5/5/2010	12:52	7.02E+01	1.61E+02	1.81E+02	-2.23E-01	7.02E-01	9.13E-01	-1.12E+00	5.21E+00	4.76E+00	1.49E+00	4.05E+00	4.98E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-52-64
MW-52-122	Q2-2010	005	122	-107.1	5/5/2010	14:57	6.46E+01	1.64E+02	1.84E+02	1.59E-01	4.06E-01	5.60E-01	3.04E-02	5.33E+00	6.31E+00	-3.21E+00	6.35E+00	5.14E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-52-122
MW-52-162	Q2-2010	005	161.5	-146.6	5/5/2010	12:39	2.60E+02	1.73E+02	1.83E+02	-7.86E-02	4.15E-01	5.66E-01	-1.54E+00	5.52E+00	5.36E+00	3.03E+00	5.68E+00	7.13E+00	NA	NA	NA	2.60E+02	ND	ND	ND	NA	MW-52-162
MW-52-181	Q2-2010	005	181	-166.1	5/5/2010	12:47	2.18E+02	1.73E+02	1.84E+02	2.80E-01	4.29E-01	4.67E-01	-2.64E-01	5.64E+00	6.37E+00	-2.38E+00	6.40E+00	5.61E+00	NA	NA	NA	2.18E+02	ND	ND	ND	NA	MW-52-181
MW-53-82	Q4-2009	013	75	-4.7	10/27/2009	12:01	6.64E+02	1.95E+02	1.87E+02	-1.89E-01	3.36E-01	4.96E-01	1.31E+00	2.90E+00	3.49E+00	2.42E+00	4.23E+00	4.89E+00	-9.46E+00	1.79E+01	2.10E+01	3.69E+03	2.23E+00	ND	ND	ND	MW-53-82
MW-53-82	Q1-2010	014	75	-4.7	2/16/2010	12:04	7.14E+03	3.41E+02	1.53E+02	2.23E+00	9.77E-01	7.74E-01	0.00E+00	5.41E+00	7.23E+00	9.93E-01	4.75E+00	1.91E+01	1.24E-01	1.76E+01	2.09E+01						
MW-53-82	Q2-2010	015	75	-4.7	4/15/2010	15:14	4.71E+03	6.55E+02	3.96E+02	4.05E-01	7.37E-01	8.29E-01	4.40E+00	1.27E+01	1.51E-01	-4.95E+00	1.13E+01	1.13E+01	1.19E+00	1.89E+01	2.19E+01						
MW-53-82	Q3-2010	016	75	-4.7	7/30/2010	12:32	2.25E+03	2.65E+02	1.27E+02	3.34E-01	3.83E-01	4.00E-01	-3.03E+00	8.30E+00	8.46E+00	-1.90E+00	8.00E+00	3.03E+00	-1.45E-01	1.77E+01	2.23E+01						
MW-53-120	Q4-2009	017	109.8	-39.5	10/27/2009	11:57	5.03E+03	3.47E+02	1.88E+02	3.10E+01	2.44E+00	7.18E-01	-1.77E-01	5.80E+00	6.55E+00	-2.12E+00	6.67E+00	7.01E+00	6.21E+00	1.80E+01	2.10E+01	4.41E+03	3.33E+01	ND	ND	ND	MW-53-120
MW-53-120	Q1-2010	018	109.8	-39.5	2/16/2010	11:51	4.66E+03	2.87E+02	1.53E+02	3.94E+01	3.39E+00	7.41E-01	-4.00E-01	5.82E+00	6.54E+00	-3.20E-01	6.23E+00	5.98E+00	6.73E+00	1.91E+01	2.16E+01						
MW-53-120	Q2-2010	019	109.8	-39.5	4/15/2010	14:36	4.10E+03	6.14E+02	3.86E+02	3.32E+01	2.69E+00	9.06E-01	-6.92E+00	8.71E+00	8.19E+00	2.24E-01	8.74E+00	9.97E+00	7.53E+00	1.96E+01	2.22E+01						
MW-53-120	Q3-2010	020	109.8	-39.5	7/30/2010	14:36	3.81E+03	3.38E+02	1.28E+02	2.97E+01	2.22E+00	4.77E-01	2.09E+00	1.27E+01	1.37E-01	-4.76E-01	8.04E+00	3.95E+00	3.59E+00	1.91E+01	2.21E+01						
MW-54-37	Q4-2009	011	36.5	-23.4	11/13/2009	14:35	1.60E+03	2.99E+02	2.00E+02	5.77E+00	1.09E+00	4.66E-01	6.22E-01	5.64E+00	6.28E+00	2.24E+00	6.35E+00	6.31E+00	1.36E+01	1.80E+01	1.50E+01	1.33E+03	4.91E+00	ND	ND	ND	MW-54-37
MW-54-37	Q1-2010	012	36.5	-23.4	2/11/2010	11:16	1.31E+03	1.89E+02	1.53E+02	5.17E+00	1.43E+00	7.17E-01	-8.12E-01	5.10E+00	5.56E+00	-1.85E+00	5.78E+00	5.93E+00	-5.50E-01	1.86E+01	2.15E+01						
MW-54-37	Q2-2010	013	36.5	-23.4	5/3/2010	14:09	1.18E+03	2.25E+02	1.38E+02	4.71E+00	1.26E+00	6.67E-01	-3.67E+00	8.42E+00	8.56E+00	1.69E+00	9.49E+00	1.14E+01	3.61E+00	2.07E+01	2.16E+01						
MW-54-37	Q3-2010	014	36.5	-23.4	8/4/2010	14:32	1.21E+03	2.10E+02	1.30E+02	4.00E+00	8.07E-01	3.32E-01	-4.96E-01	7.38E+00	8.14E+00	-3.97E+00	9.63E+00	9.58E+00	-3.50E+00	1.50E+01	1.80E+01						
MW-54-58	Q4-2009	011	57.5	-44.4	11/13/2009	14:54	8.73E+02	2.43E+02	2.03E+02	1.97E+00	7.62E-01	6.11E-01	-3.34E+00	5.65E+00	6.49E+00	-1.36E+00	5.79E+00	5.52E+00	7.85E+00	1.83E+01	2.17E+01	9.10E+02	1.52E+00	ND	ND	ND	MW-54-58
MW-54-58	Q1-2010	012	57.5	-44.4	2/11/2010	11:48	9.04E+02	1.74E+02	1.53E+02	1.38E+00	8.76E-01	7.99E-01	3.86E-01	5.50E+00	6.29E+00	1.08E+00	7.15E+00	7.82E+00	-1.32E-01	1.88E+01	2.23E+01						
MW-54-58	Q2-2010	013	57.5	-44.4	5/3/2010	14:23	1.11E+03	2.25E+02	1.42E+02	1.44E+00	8.33E-01	6.81E-01	6.00E-01	1.10E+01	1.30E-01	-4.85E-01	8.46E+00	9.38E+00	6.55E+00	1.99E+01	2.26E+01						
MW-54-58	Q3-2010	014	57.5	-44.4	8/4/2010	14:35	7.67E+02	1.79E+02	1.28E+02	1.36E+00	6.88E-01	6.20E-01	-3.95E+00	9.51E+00	9.35E+00	8.15E-01	1.14E+01	1.32E+01	-5.38E-01	1.44E+01	1.70E+01						
MW-54-123	Q4-2009	011	123	-109.9	11/13/2009	14:59	7.49E+02	2.43E+02	2.04E+02	3.77E+00	1.13E+00	8.73E-01	1.12E-01	1.25E+01	7.48E+00	5.15E+00	9.53E+00	7.53E+00	-1.31E-01	2.18E+01	2.59E+01	8.26E+02	3.10E+00	ND	ND	ND	MW-54-123
MW-54-123	Q1-2010	012	123	-109.9	2/11/2010	11:32	8.57E+02	1.71E+02	1.53E+02	3.40E+00	1.13E+00	7.64E-01	1.87E+00	5.45E+00	6.32E+00	8.01E-01	5.33E+00	5.09E+00	-3.75E+00	1.77E+01	2.16E+01						
MW-54-123	Q2-2010	013	123	-109.9	5/3/2010	15:08	9.16E+02	2.04E+02	1.37E+02	2.25E+00	1.12E+00	8.35E-01	-3.24E+00	8.00E+00	8.33E+00	5.74E-01	9.62E+00	1.09E+01	-6.51E+00	1.94E+01	2.25E+01						
MW-54-123	Q3-2010	014	123	-109.9	8/4/2010	14:49	7.83E+02	1.80E+02	1.28E+02	2.93E+00	7.55E-01	4.15E-01	1.53E+00	9.99E+00	1.16E-01	-9.37E-01	8.21E+00	3.72E+00	-5.12E+00	1.64E+01	1.97E+01						
MW-54-144	Q4-2009	011	144	-130.9	11/13/2009	12:13	1.40E+03	2.83E+02	2.03E+02	1.51E+01	1.83E+00	7.72E-01	-1.68E+00	4.38E+00	4.54E+00	-1.71E+00	3.72E+00	2.42E+00	-5.54E+00	1.92E+01	2.24E+01	1.33E+03	1.37E+01	ND	ND	ND	MW-54-144
MW-54-144	Q1-2010	012	144	-130.9	2/10/2010	10:37	1.20E+03	1.85E+02	1.53E+02	1.44E+01	2.07E+00	7.00E-01	-5.02E-01	9.22E+00	1.01E-01	-1.77E+00	7.62E+00	7.26E+00	-1.11E-01	1.88E+01	2.23E+01						
MW-54-144	Q2-2010	013	144	-130.9	5/3/2010	11:41	1.26E+03	2.40E+02	1.45E+02	1.37E+01	2.04E+00	6.93E-01	-3.06E+00	7.11E+00	7.03E+00	-4.60E+00	8.03E+00	5.97E+00	-6.93E+00	2.11E+01	2.40E+01						
MW-54-144	Q3-2010	014	144	-130.9	8/4/2010	11:44	1.44E+03	2.28E+02	1.33E+02	1.17E+01	1.42E+00	4.70E-01	8.96E+00	1.11E+01	1.44E-01	1.72E+00	8.79E+00	1.06E+01	1.38E+00	1.89E+01	2.21E+01						
MW-54-173	Q4-2009	011	172.5	-159.4	11/13/2009	12:04	1.83E+03	3.15E+02	2.03E+02	7.43E+00	1.29E+00	7.30E-01	7.30E-01	6.35E+00	7.30E+00	-1.25E+00	7.37E+00	5.86E+00	-1.70E+00	1.91E+01	2.10E+01	1.75E+03	6.80E+00	ND	ND	ND	MW-54-173
MW-54-173	Q1-2010	012	172.5	-159.4	2/10/2010	10:34	1.61E+03	2.01E+02	1.53E+02	7.51E+00	1.53E+00	7.44E-01	2.09E+00	5.21E+00	6.19E+00	1.33E+00	5.76E+00	5.72E+00	-9.09E+00	2.13E+01	2.50E+01						
MW-54-173	Q2-2010	013	172.5	-159.4	5/3/2010	11:47	2.03E+03	2.84E+02	1.42E+02	6.28E+00	1.42E+00	5.94E-01	3.87E-01	8.87E+00	9.74E+00	2.77E+00	7.82E+00	7.75E+00	1.58E+00	2.03E+01	2.33E+01						
MW-54-173	Q3-2010	014	172.5	-159.4	8/4/2010	12:09	1.53E+03	2.31E+02	1.30E+02	5.97E+00	1.02E+00	3.24E-01	-7.48E+00	8.07E+00	7.10E+00	4.86E-01	9.46E+00	1.08E+01	-1.31E+00	1.68E+01	1.99E+01						
MW-54-190	Q4-2009	011	190	-176.9	11/13/2009	12:17	2.01E+03	3.27E+02	2.03E+02	1.93E+01	1.94E+00	4.40E-01	1.55E+00	8.64E+00	5.52E+00	3.18E+00	5.42E+00	7.03E+00	1.53E+00	1.96E+01	2.36E+01	1.72E+03	2.03E+01	ND	ND	ND	MW-54-190
MW-54-190	Q1-2010	012	190	-176.9	2/10/2010	10:52	1.57E+03	1.95E+02	1.54E+02	2.35E+01	2.07E+00	6.75E-01	2.64E+00	4.96E+00	6.01E+00	1.64E-01	5.79E+00	5.77E+00	-9.59E+00	1.66E+01	1.99E+01						
MW-54-190	Q2-2010	013	190	-176.9	5/3/2010	12:01	1.71E+03	2.67E+02	1.44E+02	2.22E+01	2.61E+00	6.32E-01	3.80E+00	1.05E+01	1.25E-01	-3.30E+00	1.11E+01	1.14E+01	-6.39E+00	2.24E+01	2.60E+01						
MW-54-190	Q3-2010	014	190	-176.9	8/4/2010	12:34	1.60E+03	2.33E+02	1.28E+02	1.57E+01	1.51E+00	2.87E-01	-1.62E+00	8.25E+00	8.38E+00	-1.20E+00	8.80E+00	9.41E+00	-3.22E+00	1.84E+01	2.21E+01						
MW-55-24	Q4-2009	012	16	2.3	11/2/2009	13:01	1.38E+03	2.27E+02	1.88E+02	1.93E+01	1.95E+00	7.59E-01	1.03E+01	9.51E+00	5.59E+00	3.87E+00	5.63E+00	7.18E+00	-7.44E+00	1.53E+01	1.80E+01	1.61E+03	1.70E+01	1.03E+01	ND	ND	MW-55-24
MW-55-24	Q1-2010	013	16	2.3	2/18/2010	14:01	2.21E+03	2.49E+02	1.74E+02	2.06E+01	2.46E+00	7.08E-01	4.99E+00	4.10E+00	5.27E+00	7.07E-01	4.32E+00	4.92E+00	-8.06E+00	1.86E+01	2.18E+01						
MW-55-24	Q2-2010	014	16	2.3	4/21/2010	14:08	1.62E+03	4.65E+02	3.90E+02	1.94E+01	2.09E+00	8.38E-01	-1.91E+00	7.11E+00	7.46E+00	6.66E-01	9.22E+00	1.03E+01	-7.52E-01	1.79E+01	2.07E+01						
MW-55-24	Q3-2010	015	16	2.3	8/6/2010	13:11	1.21E+03	2.12E+02	1.30E+02	8.64E+00	1.22E+00	4.51E-01	1.13E+00	8.94E+00	1.04E-01	8.02E-01	8.32E+00	9.59E+00	1.17E+01	1.64E+01	1.81E+01						
MW-55-35	Q4-2009	011	32	-13.8	11/2/2009	12:34	2.37E+03	2.64E+02	1.88E+02	2.86E+01	2.40E+00	7.17E-01	6.51E-01	4.21E+00	4.96E+00	2.97E+00	4.46E+00	5.72E+00	-9.10E+00	1.73E+01	2.02E+01	2.19E+03	2.56E+01	ND	ND	ND	MW-55-35
MW-55-35	Q1-2010	012	32	-13.8	2/18/2010	14:03	2.49E+03	2.60E+02	1.74E+02	3.10E+01	3.29E+00	7.35E-01	-2.47E+00	4.86E+00	5.03E+00	1.05E+00	4.83E+00	5.63E+00	-5.22E+00	1.83E+01	2.13E+01						
MW-55-35	Q2-2010	013	32	-13.8	4/21/2010	14:31	2.01E+03	4.92E+02	3.90E+02	2.63E+01	2.44E+00	7.84E-01	-4.26E+00	8.04E+00	7.79E+00	2.77E+00	7.37E+00	9.17E+00	-4.98E-01	1.77E+01	2.06E+01						
MW-55-35	Q3-2010	014	32	-13.8	8/6/2010	13:15	1.89E+03	2.45E+02	1.25E+02	1.60E+01	1.65E+00	3.57E-01	-4.27E-01	8.61E+00	9.59E+00	4.31E+00	9.66E+00	1.22E+01	9.65E+00	1.62E+01	1.81E+01						
MW-55-54	Q4-2009	012	47	-28.8	11/2/2009	12:33	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-2.77E+00	1.91E+01	2.20E+01	8.77E+03	2.06E+01	ND	ND	ND	MW-55-54
MW-55-54	Q1-2010	013	47	-28.8	2/18/2010	14:05	8.23E+03	4.13E+02	1.74E+02	1.67E+01	2.22E+00	7.61E-01	-1.16E+00	3.60E+00	3.94E+00	6.65E-01	4.04E+00	4.57E+00	-1.58E+01	1.80E+01	2.15E+01						
MW-55-54	Q2-2010	014	47	-28.8	4/21/2010	13:56	1.13E+04	9.27E+02	3.88E+02	2.33E+01	2.31E+00	8.38E-01	-5.23E+00	1.21E+01	1.49E-01	-4.30E+00	1.11E-01	1.10E+01	-3.57E+00	1.79E+01	2.09E+01						
MW-55-54	Q3-2010	015	47	-28.8	8/6/2010	12:50	9.74E+03	5.22E+02	1.28E+02	1.93E+01	1.88E+00	3.96E-01	-1.51E+00	7.75E+00	8.26E+00	1.82E+00	7.36E+00	3.71E+00	-1.77E-01	1.41E+01	1.65E+01						

[illegible]\Tables\
Table 3-Third Quarter 2010 Groundwater Analytical Results and Averages.xlsx
Q1Table3

See Page 3 for Notes

TABLE 3
THIRD QUARTER 2010 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER, Elevation Ft msl[3]	SAMPLE COLLECTION Date	Time	TRITIUM (pCi/L) Result	Std. Dev.	MDC	Sr-90 (pCi/L) Result	Std. Dev.	MDC	Cs-137 (pCi/L) Result	Std. Dev.	MDC	Co-60 (pCi/L) Result	Std. Dev.	MDC	Ni-63 (pCi/L) Result	Std. Dev.	MDC	YEARLY ROLLING AVERAGES[4] TRITIUM (pCi/L) Average	Sr-90 (pCi/L) Average	Cs-137 (pCi/L) Average	Co-60 (pCi/L) Average	Ni-63 (pCi/L) Average	Well ID
MW-56-53	Q4-2009	7	52	18.3	11/4/2009	1409	6.86E+02	1.38E+02	1.03E+02	2.94E-01	6.00E-01	6.83E-01	5.47E-01	6.74E+00	7.50E+00	2.77E+00	6.31E+00	7.63E+00	NA	NA	NA	4.72E+02	ND	ND	ND	NA	MW-56-53
MW-56-53	Q2-2010	8	52	18.30	4/20/2010	5.41E-01	2.58E+02	1.65E+02	1.75E+02	-1.49E-01	5.35E-01	7.58E-01	3.61E+00	7.61E+00	9.44E+00	-1.55E+00	8.91E+00	9.68E+00	NA	NA	NA						MW-56-53
MW-56-83	Q4-2009	9	74	-3.7	11/4/2009	1547	3.15E+03	2.45E+02	1.02E+02	2.73E+00	8.12E-01	4.70E-01	2.01E+00	5.22E+00	6.13E+00	1.15E+00	5.96E+00	6.35E+00	NA	NA	NA	2.54E+03	2.39E+00	ND	ND	NA	MW-56-83
MW-56-83	Q2-2010	10	74	-3.70	4/20/2010	5.19E-01	1.93E+03	2.95E+02	1.48E+02	1.99E+00	1.05E+00	8.74E-01	2.04E+00	8.03E+00	9.48E+00	-1.05E+00	8.71E+00	9.04E+00	NA	NA	NA						MW-56-83
MW-57-11	Q2-2010	6	10	5	5/4/2010	1236	3.27E+03	3.48E+02	1.72E+02	2.46E+01	3.00E+00	8.46E-01	8.07E-01	6.20E+00	6.51E+00	1.85E-01	5.09E+00	5.67E+00	-1.79E+01	2.21E+01	2.56E+01	3.27E+03	2.46E+01	ND	ND	ND	MW-57-11
MW-57-20	Q2-2010	6	19	-4	5/4/2010	1245	8.07E+02	2.04E+02	1.61E+02	1.12E+00	9.05E-01	8.79E-01	-2.11E+00	7.94E+00	8.24E+00	-2.23E-01	7.54E+00	3.56E+00	-6.37E+00	2.19E+01	2.54E+01	8.07E+02	1.12E+00	ND	ND	ND	MW-57-20
MW-57-45	Q2-2010	7	40	-25	5/4/2010	1324	8.79E+02	2.14E+02	1.72E+02	1.38E+00	9.43E-01	8.65E-01	6.16E-02	5.31E+00	5.86E+00	-2.99E-01	4.77E+00	5.16E+00	7.57E-01	2.26E+01	2.58E+01	8.79E+02	1.38E+00	ND	ND	ND	MW-57-45
MW-58-26	Q2-2010	10	20	-5.4	4/30/2010	1412	5.75E+02	1.83E+02	1.82E+02	2.94E-01	5.47E-01	6.20E-01	4.25E-01	5.59E+00	6.47E+00	9.40E-01	5.75E+00	5.68E+00	NA	NA	NA	4.99E+02	ND	ND	ND	NA	MW-58-26
MW-58-26	Q4-2009	9	20	-5.40	10/23/2009	5.49E-01	4.23E+02	1.67E+02	1.68E+02	4.74E-01	6.36E-01	6.95E-01	1.68E+00	5.05E+00	5.98E+00	2.49E+00	5.68E+00	5.94E+00	NA	NA	NA						MW-58-26
MW-58-65	Q4-2009	9	54	-39.4	10/23/2009	1253	2.37E+02	1.56E+02	1.65E+02	6.33E-01	6.12E-01	6.29E-01	7.13E-01	5.70E+00	6.42E+00	2.46E+00	5.97E+00	7.18E+00	NA	NA	NA	2.98E+02	ND	ND	ND	NA	MW-58-65
MW-58-65	Q2-2010	10	54	-39.40	4/30/2010	5.77E-01	3.59E+02	1.64E+02	1.72E+02	7.38E-02	5.17E-01	6.40E-01	1.50E+00	8.09E+00	9.37E+00	3.34E-01	5.75E+00	5.60E+00	NA	NA	NA						MW-58-65
MW-60-35	Q4-2009	012	34.9	-22.4	10/30/2009	1510	2.29E+02	1.52E+02	1.61E+02	2.24E-01	6.33E-01	7.53E-01	-3.67E+00	1.00E+01	1.12E+01	4.15E+00	6.72E+00	3.44E+00	NA	NA	NA	2.49E+02	ND	ND	ND	ND	MW-60-35
MW-60-35	Q1-2010	012	34.9	-22.4	3/1/2010	1118	2.48E+02	1.64E+02	1.74E+02	5.08E-01	6.83E-01	7.32E-01	-1.38E+00	6.15E+00	5.99E+00	-1.00E+00	3.76E+00	4.07E+00	-1.11E+01	.88E+01	2.21E+01						
MW-60-35	Q2-2010 Mid	013	34.9	-22.4	5/10/2010	1558	2.85E+02	1.45E+02	1.35E+02	2.87E-02	5.05E-01	6.56E-01	1.78E+00	7.56E+00	8.33E+00	1.42E+00	9.12E+00	9.76E+00	4.12E-01	2.24E+01	2.56E+01						
MW-60-35	Q3-2010	014	34.9	-22.4	8/16/2010	1443	2.35E+02	1.42E+02	1.41E+02	3.13E-01	6.48E-01	7.39E-01	3.02E-01	5.73E+00	6.47E+00	-1.30E+00	6.23E+00	5.68E+00	-4.52E+00	2.14E+01	2.52E+01						
MW-60-53	Q4-2009	012	53.4	-40.9	10/30/2009	1419	1.47E+02	1.47E+02	1.61E+02	1.24E-01	4.95E-01	6.12E-01	-2.86E-01	6.88E+00	7.53E+00	-3.34E-02	6.96E+00	7.65E+00	NA	NA	NA	3.02E+02	ND	ND	ND	ND	MW-60-53
MW-60-53	Q1-2010	012	53.4	-40.9	3/1/2010	1107	1.37E+02	1.59E+02	1.75E+02	1.14E-01	5.66E-01	7.00E-01	-1.22E+00	4.51E+00	4.92E+00	-8.73E-01	4.93E+00	5.33E+00	-5.31E+00	.95E+01	2.27E+01						
MW-60-53	Q2-2010 Mid	013	53.4	-40.9	5/10/2010	1631	3.45E+02	1.58E+02	1.41E+02	-9.87E-02	4.95E-01	6.87E-01	8.10E-01	7.53E+00	8.31E+00	-2.10E+00	8.49E+00	9.12E+00	-5.72E+00	2.07E+01	2.40E+01						
MW-60-53	Q3-2010	014	53.4	-40.9	8/16/2010	1534	2.58E+02	1.50E+02	1.60E+02	-2.84E-02	4.87E-01	6.04E-01	-8.42E+00	7.91E+00	7.70E+00	-2.64E+00	6.03E+00	5.02E+00	-8.48E+00	.98E+01	2.17E+01						
MW-60-72	Q4-2009	012	72.4	-59.9	10/30/2009	1108	1.73E+02	1.48E+02	1.61E+02	4.02E-02	3.89E-01	4.83E-01	-3.13E+00	5.89E+00	5.96E+00	2.57E+00	7.02E+00	3.35E+00	NA	NA	NA	2.37E+02	ND	ND	ND	ND	MW-60-72
MW-60-72	Q1-2010	012	72.4	-59.9	2/25/2010	1131	1.27E+02	1.53E+02	1.74E+02	5.58E-02	5.52E-01	7.30E-01	6.83E+00	8.12E+00	7.73E+00	1.05E+00	4.38E+00	5.26E+00	4.35E+00	.94E+01	2.26E+01						
MW-60-72	Q2-2010 Mid	013	72.4	-59.9	5/10/2010	1211	3.01E+02	1.52E+02	1.40E+02	1.57E-02	5.49E-01	7.10E-01	-3.66E+00	1.29E+01	1.58E-01	-7.77E+00	1.16E-01	1.10E+01	-6.97E+00	2.07E+01	2.41E+01						
MW-60-72	Q3-2010	014	72.4	-59.9	8/17/2010	1159	2.33E+01	1.23E+02	1.44E+02	1.97E-01	5.90E-01	6.91E-01	-5.91E-01	5.40E+00	6.06E+00	-1.59E+00	6.08E+00	5.57E+00	1.19E+00	2.04E+01	2.27E+01						
MW-60-135	Q4-2009	012	134.9	-122.4	10/30/2009	1055	3.17E+02	1.55E+02	1.61E+02	-1.77E-01	5.93E-01	7.61E-01	1.75E+00	6.82E+00	7.81E+00	-2.32E+00	6.58E+00	5.63E+00	NA	NA	NA	3.09E+02	ND	ND	ND	ND	MW-60-135
MW-60-135	Q1-2010	012	134.9	-122.4	2/25/2010	1143	3.14E+02	1.68E+02	1.75E+02	1.21E-01	5.95E-01	7.32E-01	6.09E-01	4.11E+00	4.72E+00	-5.16E+00	7.25E+00	5.27E+00	-1.29E+00	.89E+01	2.18E+01						
MW-60-135	Q2-2010 Mid	013	134.9	-122.4	5/10/2010	1221	4.18E+02	1.80E+02	1.65E+02	-9.46E-02	6.05E-01	8.55E-01	1.55E+00	7.70E+00	9.03E+00	6.68E-03	8.37E+00	9.36E+00	-8.52E+00	2.04E+01	2.38E+01						
MW-60-135	Q3-2010	014	134.9	-122.4	8/17/2010	1209	1.87E+02	1.39E+02	1.43E+02	-2.74E-01	5.38E-01	7.27E-01	-3.46E+00	8.41E+00	9.07E+00	-1.52E+00	6.30E+00	5.70E+00	8.77E-01	2.11E+01	2.45E+01						
MW-60-154	Q4-2009	012	154.4	-141.9	10/30/2009	1056	4.09E+02	1.59E+02	1.61E+02	4.43E-01	8.40E-01	9.30E-01	1.34E+01	7.70E+00	6.99E+00	-1.32E-01	6.37E+00	7.01E+00	NA	NA	NA	3.80E+02	ND	1.34E+01	ND	ND	MW-60-154
MW-60-154	Q1-2010	012	154.4	-141.9	2/25/2010	1145	3.78E+02	1.71E+02	1.74E+02	1.97E-01	6.63E-01	7.90E-01	1.32E+00	4.72E+00	5.42E+00	-4.33E-04	4.36E+00	5.45E+00	-1.32E-01	.84E+01	2.19E+01						
MW-60-154	Q2-2010 Mid	013	154.4	-141.9	5/10/2010	1232	4.38E+02	1.85E+02	1.69E+02	3.52E-01	6.25E-01	7.01E-01	-1.33E+00	8.40E+00	9.22E+00	1.61E-01	7.65E+00	5.61E+00	-5.15E+00	2.13E+01	2.46E+01						
MW-60-154	Q3-2010	014	154.4	-141.9	8/17/2010	1218	2.93E+02	1.50E+02	1.45E+02	-2.23E-01	5.00E-01	6.61E-01	-4.41E-01	6.04E+00	6.57E+00	1.95E+00	6.78E+00	5.02E+00	-1.16E+00	2.13E+01	2.48E+01						
MW-60-176	Q4-2009	012	175.9	-163.4	10/30/2009	1126	1.02E+03	1.83E+02	1.61E+02	2.27E-01	4.68E-01	6.97E-01	8.58E-01	5.25E+00	5.75E+00	3.31E+00	5.37E+00	5.52E+00	NA	NA	NA	9.54E+02	ND	ND	ND	ND	MW-60-176
MW-60-176	Q1-2010	012	175.9	-163.4	2/25/2010	1224	9.90E+02	2.01E+02	1.74E+02	7.55E-02	3.36E-01	4.10E-01	2.82E+00	6.00E+00	6.92E+00	-3.93E-01	7.93E+00	7.20E+00	-1.79E+00	.99E+01	2.10E+01						
MW-60-176	Q2-2010 Mid	013	175.9	-163.4	5/10/2010	1329	9.93E+02	2.24E+02	1.63E+02	-3.09E-01	4.52E-01	6.99E-01	-5.66E-01	8.11E+00	9.07E+00	9.92E-01	8.25E+00	9.76E+00	0.00E+00	2.04E+01	2.34E+01						
MW-60-176	Q3-2010	014	175.9	-163.4	8/17/2010	1251	8.13E+02	1.91E+02	1.44E+02	-6.59E-01	6.48E-01	9.01E-01	1.23E-01	6.41E+00	7.32E+00	1.35E+00	5.80E+00	5.97E+00	0.00E+00	2.13E+01	2.48E+01						
MW-62-18	Q4-2009	012	13.5	1.2	11/12/2009	1536	2.83E+02	1.18E+02	1.05E+02	3.41E-01	7.05E-01	8.04E-01	-1.84E+00	6.40E+00	5.80E+00	-4.67E+00	7.20E+00	5.68E+00	NA	NA	NA	2.58E+02	ND	ND	ND	NA	MW-62-18
MW-62-18	Q1-2010	012	13.5	1.2	2/9/2010	1519	2.87E+02	1.83E+02	1.98E+02	5.25E-01	6.40E-01	6.64E-01	-1.57E+00	5.87E+00	6.19E+00	-2.90E+00	7.82E+00	7.61E+00	NA	NA	NA						
MW-62-18	Q2-2010	013	13.5	1.2	4/13/2010	1517	2.04E+02	1.34E+02	1.42E+02	2.74E-02	6.16E-01	7.97E-01	-1.48E+00	4.05E+00	4.37E+00	6.69E-01	5.38E+00	4.96E+00	NA	NA	NA						
MW-62-18	Q3-2010	014	13.5	1.2	8/3/2010	1300	1.14E+02	1.32E+02	1.44E+02	6.60E-01	6.55E-01	6.80E-01	3.08E+00	8.40E+00	1.03E+01	5.07E+00	1.02E+01	1.32E+01	NA	NA	NA						
MW-62-37	Q4-2009	012	34.5	-19.8	11/12/2009	1527	2.17E+02	1.07E+02	1.05E+02	-3.41E-01	7.05E-01	8.68E-01	-8.33E+00	1.00E+01	1.11E+01	-1.01E+00	7.35E+00	7.72E+00	NA	NA	NA	2.65E+02	ND	ND	ND	NA	MW-62-37
MW-62-37	Q1-2010	012	34.5	-19.8	2/9/2010	1540	3.93E+02	1.95E+02	1.98E+02	-1.80E-01	4.98E-01	6.60E-01	-2.99E+00	4.96E+00	4.33E+00	-2.54E-01	5.97E+00	5.51E+00	NA	NA	NA						
MW-62-37	Q2-2010	013	34.5	-19.8	4/13/2010	1522	2.59E+02	2.07E+02	2.26E+02	5.40E-01	7.33E-01	7.81E-01	-2.42E+00	3.80E+00	4.07E+00	1.34E+00	4.04E+00	4.80E+00	NA	NA	NA						
MW-62-37	Q3-2010	014	34.5	-19.8	8/3/2010	1252	1.91E+02	1.43E+02	1.47E+02	-1.52E-02	5.47E-01	6.85E-01	-9.69E-01	8.78E+00	9.70E+00	-5.31E+00	9.12E+00	7.92E+00	NA	NA	NA						
MW-62-53	Q4-2009	010	53.1	-40.3	11/12/2009	1338	2.81E+02	1.09E+02	1.01E+02	3.54E-01	6.45E-01	7.27E-01	2.51E-01	2.80E+00	3.32E+00	-6.92E-01	3.35E+00	3.51E+00	NA	NA	NA	2.78E+02	ND	ND	ND	NA	MW-62-53
MW-62-53	Q1-2010	012	53.1	-40.3	2/9/2010	1400	3.46E+02	1.92E+02	1.98E+02	-1.50E-01	4.35E-01	6.61E-01	-9.19E-01	5.87E+00	6.39E+00	1.34E+00	6.06E+00	7.13E+00	NA	NA	NA						
MW-62-53	Q2-2010	013	53.1	-40.3	4/13/2010	1527	3.25E+02	1.41E+02	1.47E+02	1.84E-02	5.67E-01	7.67E-01	1.33E+00	3.35E+00	3.37E+00	1.52E+00	5.03E+00	1.08E+01	NA	NA	NA						
MW-62-53	Q3-2010	013	53.1	-40.3	8/3/2010	1220	1.59E+02	1.40E+02	1.47E+02	3.13E-01	5.61E-01	6.32E-01	2.99E+00	1.11E+01	1.33E+01	2.39E-01	7.18E+00	3.24E+00	NA	NA	NA						
MW-62-71	Q4-2009	012	71.1	-58.3	11/12/2009	1240	4.68E+02	1.24E+02	1.02E+02	3.02E-01	6.66E-01	7.57E-01	2.35E+00	5.28E+00	6.35E+00	-1.55E+00	6.35E+00	5.71E+00	NA	NA	NA	4.07E+02	ND	ND	ND	NA	MW-62-71
MW-62-71	Q1-2010	012	71.1	-58.3	2/9/2010	1320	4.56E+02	2.01E+02	1.99E+02	4.07E-01	4.74E-01	4.89E-01	4.29E+00	5.40E+00	6.55E+00	-2.80E+00	5.37E+00	5.09E+00	NA	NA	NA						
MW-62-71	Q2-2010	013	71.1	-58.3	4/13/2010	1345	3.77E+02	2.15E+02	2.30E+02	-2.34E-01	5.64E-01	8.12E-01	-6.51E-01	4.44E+00	4.36E+00	-3.24E+00	5.39E+00	4.62E+00	NA	NA	NA						
MW-62-71	Q3-2010	014	71.1	-58.3	8/3/2010	1130	3.25E+02	1.70E+02	1.77E+02	2.44E-01	3.75E-01	4.12E-01	-2.03E+00	8.37E+00	8.79E+00	1.86E+00	9.37E+00	1.16E+01	NA	NA	NA						
MW-62-92	Q4-2009	012	91.6	-78.8	11/12/2009	1243	4.83E+02	1.23E+02	1.02E+02	3.91E-01	7.75E-01	8.70E-01	6.13E-01	5.23E+00	5.41E+00	2.98E-01	5.25E+00	5.86E+00	NA	NA	NA	4.81E+02	ND	ND	ND	NA	MW-62-92
MW-62-92	Q1-2010	012	91.6	-78.8	2/9/2010	1320	5.27E+02	2.03E+02	1.98E+02	4.05E-01	6.20E-01	6.83E-01	-2.81E+00	7.30E+00	6.45E+00	2.57E+00	6.50E+00	7.81E+00	NA	NA	NA						
MW-62-92	Q2-2010	013	91.6	-78.8	4/13/2010	1338	5.96E+02	1.55E+02	1.44E+02	1.77E-01	6.88E-01	8.34E-01	1.16E+00	3.72E+00	4.24E+00	7.22E-03	3.75E+00	4.13E+00	NA	NA	NA						
MW-62-92	Q3-2010	014	91.6	-78.8	8/3/2010	1132	3.18E+02	1.63E+02	1.76E+02	4.11E-01	5.37E-01	5.80E-01	-3.42E+00	8.11E+00	8.38E+00	-4.99E-01	7.59E+00	3.36E+00	NA	NA	NA						
MW-62-138	Q4-2009	012	138.1	-125.3	11/12/2009	1511	5.76E+02	1.35E+02	1.07E+02	2.83E+00	7.98E-01	4.84E-01	1.05E+00	7.42E+00	8.36E+00	7.24E-02	7.92E+00	3.71E+00	NA	NA	NA	6.51E+02	1.61E+00	ND	ND	NA	MW-62-138
MW-62-138	Q1-2010	012	138.1	-125.3	2/9/2010	1554	7.81E+02	2.18E+02	1.99E+02	8.78E-01	6.50E-01	6.24E-01	2.22E+00	5.01E+00	6.09E+00	3.56E+00	4.79E+00	1.02E+01	NA	NA	NA						
MW-62-138	Q2-2010	013	138.1	-125.3	4/13/2010	1802	6.54E+02	1.59E+02	1.46E+02	1.28E+00	7.41E-01	6.91E-01	-7.33E-01	6.39E+00	5.78E+00	-2.30E+00	6.71E+00	5.83E+00	NA	NA	NA						
MW-62-138	Q3-2010	014	138.1	-125.3	8/3/2010	1409	5.91E+02	1.82E+02	1.76E+02	1.47E+00	7.40E-01	6.56E-01	3.83E+00	7.20E+00	8.95E+00	-1.72E+00	7.35E+00	7.39E+00	NA	NA	NA						
MW-62-182	Q4-2009	012	182.1	-169.3	11/12/2009	1515	5.10E+02	1.27E+02	1.03E+02	1.53E-01	5.44E-01	6.32E-01	-3.00E+00	7.80E+00	8.39E+00	2.77E+00	6.00E+00	7.53E+00	NA	NA	NA	4.34E+02	ND	ND	ND	NA	MW-62-182
MW-62-182	Q1-2010	012	182.1	-169.3	2/9/2010	1607	4.69E+02	2.17E+02	2.10E+02	-2.03E-01	3.12E-01	4.91E-01	9.56E-01	5.40E+00	6.26E+00	-2.02E-01	5.46E+00	5.05E+00	NA	NA	NA						
MW-62-182	Q2-2010	013	182.1	-169.3	4/13/2010	1818	4.77E+02	1.52E+02	1.46E+02	2.85E-01	6.55E-01	7.61E-01	9.81E-01	3.91E+00	4.57E+00	3.69E-01	4.09E+00	4.65E+00	NA	NA	NA						
MW-62-182	Q3-2010	014	182.1	-169.3	8/3/2010	1402	2.78E+02	1.65E+02	1.75E+02	2.87E-01	7.05E-01	8.30E-01	-5.53E+00	1.24E+01	1.51E+01	-9.25E-01	8.00E+00	3.64E+00	NA	NA	NA						
MW-63-18	Q4-2009	012	14.9	0.7	11/3/2009	1219	1.24E+02	1.46E+02	1.61E+02	2.75E-02	5.64E-01	7.37E-01	6.29E-01	5.29E+00	5.78E+00	1.74E+00	7.30E+00	3.06E+00	NA	NA	NA	3.27E+02	ND	ND	ND	NA	MW-63-18
MW-63-18	Q1-2010	012	14.9	0.7	2/8/2010	1340	3.38E+02	1.63E+02	1.78E+02	5.39E-01	7.74E-01	8.34E-01	5.09E+00	4.35E+00	5.44E+00	4.40E-01	4.41E+00	5.00E+00	NA	NA	NA						
MW-63-18	Q2-2010	013	14.9	0.7	4/26/2010	1322	3.16E+02	1.55E+02	1.47E+02	-7.27E-02	6.62E-01	8.66E-01	3.73E-01	5.22E+00	5.91E+00	3.24E+00	6.03E+00	7.50E+00	NA	NA	NA						
MW-63-18	Q3-2010	014	14.9	0.7	8/10/2010	1208	1.62E+02	1.58E+02	1.73E+02	-1.55E-02	3.48E-01	4.72E-01	-6.04E-01	7.20E+00	8.11E+00	-2.17E+00	6.42E+00	5.45E+00	NA	NA	NA						
MW-63-34	Q4-2009	012	[illegible]	-17.3	11/3/2009	1102	3.10E+02	1.55E+02	1.62E+02	-1.73E-01	4.06E-01	6.87E-01	-6.69E-02	8.31E+00	9.16E+00	8.10E-01	5.76E+00	3.76E+00	NA	NA	NA	2.96E+02	ND	ND	ND	NA	MW-63-34
MW-63-34	Q1-2010	012	31.5	-17.3	2/8/2010	1319	3.96E+02	1.70E+02	1.78E+02	2.25E-01	6.78E-01	8.09E-01	-6.36E-01	3.94E+00	4.33E+00	-8.85E-01	4.26E+00	4.66E+00	NA	NA	NA						
MW-63-34	Q2-2010	013	31.5	-17.3	4/26/2010	1321	2.89E+02	1.53E+02	1.47E+02	-3.04E-01	7.18E-01	9.93E-01	-5.64E-01	5.55E+00	5.38E+00	-1.09E+00	5.19E+00	5.37E+00	NA	NA	NA						
MW-63-34	Q3-2010	014	31.5	-17.3	8/10/2010	1144	1.89E+02	1.64E+02	1.78E+02	2.21E-01	3.59E-01	3.95E-01	2.60E+00	9.29E+00	1.06E+01	3.10E+00	7.31E+00	9.27E+00	NA	NA	NA						
MW-63-50	Q4-2009	012	49.5	-37.2	11/3/2009	1042	3.60E+02	1.58E+02	1.61E+02	-5.27E-03	5.31E-01	6.94E-01	2.14E-01	6.81E+00	7.54E+00	-1.30E+00	7.30E+00	7.57E+00	NA	NA	NA	3.45E+02	ND	ND	ND	NA	MW-63-50
MW-63-50	Q1-2010	012	49.5	-37.2	2/8/2010	1245	3.34E+02	1.67E+02	1.77E+02	5.42E-01	7.40E-01	7.92E-01	-1.46E+00	3.25E+00	3.55E+00	7.99E-01	3.33E+00	3.81E+00	NA	NA	NA						
MW-63-50	Q2-2010	013	49.5	-37.2	4/26/2010	1206	4.13E+02	1.62E+02	1.45E+02	2.38E-01	5.82E-01	6.82E-01	-5.57E+00	1.01E+01	1.12E+01	-4.30E+00	6.74E+00	5.45E+00	NA	NA	NA						
MW-63-50	Q3-2010	014	49.5	-37.2	8/10/2010	1432	2.72E+02	1.65E+02	1.75E+02	-2.47E-02	5.47E-01	6.90E-01	-1.32E+00	7.10E+00	7.82E+00	7.73E-01	7.74E+00	3.96E+00	NA	NA	NA						
MW-63-93	Q4-2009	013	93	-80.7	11/3/2009	1055	3.01E+02	1.53E+02	1.61E+02	7.11E-01	7.17E-01	7.57E-01	-2.46E+00	4.82E+00	5.30E+00	5.40E-01	4.70E+00	5.26E+00	NA	NA	NA	2.72E+02	ND	ND	ND	NA	MW-63-93
MW-63-93	Q1-2010	013	93	-80.7	2/8/2010	1300	2.90E+02	1.65E+02	1.77E+02	1.73E-01	6.63E-01	8.06E-01	-1.10E+00	4.41E+00	4.71E+00	5.93E-01	4.54E+00	5.11E+00	NA	NA	NA						
MW-63-93	Q2-2010	014	93	-80.7	4/26/2010	1242	3.03E+02	1.55E+02	1.47E+02	-2.90E-02	5.61E-01	7.42E-01	-6.91E-01	5.52E+00	6.23E+00	-3.69E+00	5.52E+00	5.35E+00	NA	NA	NA						
MW-63-93	Q3-2010	015	93	-80.7	8/10/2010	1510	1.95E+02	1.61E+02	1.74E+02	-1.91E-01	4.38E-01	6.10E-01	1.24E+00	6.64E+00	7.70E+00	2.61E-01	7.58E+00	3.46E+00	NA	NA	NA						
MW-63-112	Q4-2009	012	111.5	-99.2	11/3/2009	1117	4.96E+02	1.62E+02	1.61E+02	5.07E-01	8.31E-01	9.25E-01	4.38E-01	6.15E+00	6.66E+00	-4.82E+00	7.04E+00	5.72E+00	NA	NA	NA	4.24E+02	ND	ND	ND	NA	MW-63-112
MW-63-112	Q1-2010	012	111.5	-99.2	2/8/2010	1314	3.80E+02	1.70E+02	1.79E+02	6.51E-01	7.23E-01	7.33E-01	-6.93E-01	3.86E+00	4.28E+00	-2.22E+00	5.70E+00	4.89E+00	NA	NA	NA						
MW-63-112	Q2-2010	013	111.5	-99.2	4/26/2010	1239	4.47E+02	1.64E+02	1.42E+02	4.81E-01	5.84E-01	6.06E-01	4.15E+00	6.75E+00	8.37E+00	1.44E+00	7.36E+00	9.87E+00	NA	NA	NA						
MW-63-112	Q3-2010	014	111.5	-99.2	8/10/2010	1452	3.71E+02	1.73E+02	1.78E+02	2.83E-01	4.37E-01	4.78E-01	-3.00E+00	7.68E+00	7.90E+00	-5.28E+00	9.73E+00	9.11E+00	NA	NA	NA						
MW-63-121	Q4-2009	012	121	-108.7	11/3/2009	1146	5.01E+02	1.64E+02	1.61E+02	5.65E-01	8.73E-01	9.67E-01	-5.33E+00	9.88E+00	8.44E+00	-2.07E+00	9.35E+00	3.77E+00	NA	NA	NA	5.40E+02	ND	ND	ND	NA	MW-63-121
MW-63-121	Q1-2010	012	121	-108.7	2/8/2010	1516	5.15E+02	1.74E+02	1.77E+02	5.15E-01	6.45E-01	7.40E-01	-2.07E-01	3.91E+00	4.50E+00	-2.46E-01	5.55E+00	4.92E+00	NA	NA	NA						
MW-63-121	Q2-2010	013	121	-108.7	4/26/2010	1259	6.06E+02	1.83E+02	1.46E+02	4.17E-01	6.09E-01	6.57E-01	3.57E+00	6.06E+00	7.40E+00	1.16E+00	6.13E+00	7.15E+00	NA	NA	NA						
MW-63-121	Q3-2010	014	121	-108.7	8/10/2010	1128	5.39E+02	1.83E+02	1.77E+02	3.67E-01	5.93E-01	6.58E-01	-9.48E-01	8.12E+00	8.95E+00	-6.53E-01	8.76E+00	9.58E+00	NA	NA	NA						
MW-63-163	Q4-2009	012	162.5	-150.2	11/3/2009	1347	5.22E+02	1.64E+02	1.61E+02	4.33E-01	8.28E-01	9.38E-01	-5.72E-01	4.56E+00	5.33E+00	5.80E+00	4.98E+00	7.07E+00	NA	NA	NA	5.15E+02	ND	ND	ND	NA	MW-63-163
MW-63-163	Q1-2010	012	162.5	-150.2	2/8/2010	1536	5.94E+02	1.77E+02	1.78E+02	-1.49E-01	5.64E-01	7.93E-01	-8.47E-02	6.87E+00	5.31E+00	9.37E-01	4.95E+00	5.83E+00	NA	NA	NA						
MW-63-163	Q2-2010	013	162.5	-150.2	4/26/2010	1430	5.29E+02	1.70E+02	1.43E+02	1.93E-01	5.64E-01	6.75E-01	-1.45E+00	7.71E+00	8.36E+00	-2.98E+00	6.17E+00	5.91E+00	NA	NA	NA						
MW-63-163	Q3-2010	014	162.5	-150.2	8/10/2010	1121	4.13E+02	1.74E+02	1.78E+02	2.45E-01	4.43E-01	4.98E-01	-6.87E-01	8.55E+00	9.17E+00	-5.25E-01	8.33E+00	9.24E+00	NA	NA	NA						
MW-63-174	Q4-2009	012	174	-161.7	11/3/2009	1353	4.98E+02	1.64E+02	1.61E+02	-1.04E-02	7.92E-01	9.93E-01	1.30E+00	6.69E+00	7.80E+00	3.41E+00	6.04E+00	3.21E+00	NA	NA	NA	4.59E+02	ND	ND	ND	NA	MW-63-174
MW-63-174	Q1-2010	012	174	-161.7	2/8/2010	1532	5.05E+02	1.74E+02	1.78E+02	3.28E-02	6.25E-01	8.03E-01	-9.48E-02	3.70E+00	4.18E+00	-2.02E+00	3.76E+00	3.88E+00	NA	NA	NA						
MW-63-174	Q2-2010	013	174	-161.7	4/26/2010	1428	4.98E+02	1.71E+02	1.46E+02	-1.69E-02	5.53E-01	7.24E-01	2.68E+00	4.74E+00	5.36E+00	-4.68E+00	5.26E+00	4.32E+00	NA	NA	NA						
MW-63-174	Q3-2010	014	174	-161.7	8/10/2010	1140	3.33E+02	1.65E+02	1.71E+02	3.54E-01	5.43E-01	6.01E-01	-3.32E+00	7.08E+00	6.89E+00	-1.41E+00	7.84E+00	3.11E+00	NA	NA	NA						
MW-66-21	Q4-2009	012	14.1	0	11/11/2009	1346	9.91E+02	2.57E+02	2.04E+02	3.53E-01	8.07E-01	9.17E-01	-2.53E-01	5.70E+00	6.26E+00	1.12E+00	5.73E+00	5.68E+00	-1.49E-01	.65E+01	1.90E+01	9.83E+02	1.03E+00	ND	ND	ND	MW-66-21
MW-66-21	Q1-2010	012	14.1	0	2/22/2010	1436	9.60E+02	2.00E+02	1.75E+02	8.97E-01	7.30E-01	7.14E-01	4.96E-01	4.72E+00	5.31E+00	-1.35E+00	5.07E+00	5.41E+00	-5.33E+00	.96E+01	2.28E+01						
MW-66-21	Q2-2010	013	14.1	0	4/9/2010	1527	9.50E+02	4.07E+02	3.82E+02	1.12E-02	4.34E-01	5.44E-01	3.09E+00	6.75E+00	8.43E+00	3.15E+00	5.19E+00	7.18E+00	-2.25E+00	.92E+01	2.25E+01						
MW-66-21	Q3-2010	014	14.1	0	8/9/2010	1230	1.07E+03	2.01E+02	1.29E+02	1.17E+00	5.52E-01	4.41E-01	-5.85E+00	9.45E+00	9.34E+00	-9.97E-01	8.07E+00	3.65E+00	3.1E+00	.19E+01	1.57E+01						

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Table 3-Third Quarter 2010 Groundwater Analytical Results and Averages.xlsx
Q1Table3

See Page 4 for Notes

TABLE 3
THIRD QUARTER 2010 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER, Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS															YEARLY ROLLING AVERAGES[4]					Well ID
							TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			TRITIUM (pCi/L)	Sr-90 (pCi/L)	Cs-137 (pCi/L)	Co-60 (pCi/L)	Ni-63 (pCi/L)	
					Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Average	Average	Average	Average	Average	
MW-66-36	Q4-2009	010	33.6	-19.5	11/11/2009	1318	4.32E+03	4.44E+02	2.04E+02	6.83E+00	1.24E+00	6.70E-01	3.75E+00	6.95E+00	8.31E+00	-8.32E-01	7.47E+00	7.95E+00	-3.91E+00	7.77E+00	2.08E+01	3.62E+03	6.83E+00	ND	ND	ND	MW-66-36
MW-66-36	Q1-2010	011	33.6	-19.5	2/22/2010	1404	3.43E+03	2.91E+02	1.75E+02	7.03E+00	1.53E+00	7.17E-01	4.16E-01	4.70E+00	5.29E+00	4.35E-01	5.42E+00	5.09E+00	-8.21E+00	[illegible]	2.26E+01						
MW-66-36	Q2-2010	012	33.6	-19.5	4/9/2010	1517	3.64E+03	5.90E+02	3.87E+02	7.05E+00	1.36E+00	7.54E-01	1.79E+00	7.65E+00	9.10E+00	5.63E+00	8.54E+00	1.20E+01	7.54E+00	[illegible]	2.12E+01						
MW-66-36	Q3-2010	013	33.6	-19.5	8/9/2010	1147	3.08E+03	3.05E+02	1.24E+02	6.40E+00	1.07E+00	3.74E-01	-1.53E+00	8.82E+00	9.41E+00	4.62E+00	7.61E+00	1.02E+01	4.59E+00	[illegible]	1.80E+01						
MW-67-39	Q4-2009	011	38.3	-25.8	11/11/2009	1409	2.80E+03	2.43E+02	1.65E+02	1.35E+01	1.83E+00	7.83E-01	-1.20E+00	8.07E+00	8.34E+00	-1.94E+00	1.00E+01	1.07E+01	-3.33E+00	1.49E+01	1.73E+01	3.01E+03	1.10E+01	ND	ND	ND	MW-67-39
MW-67-39	Q1-2010	012	38.3	-25.8	3/3/2010	1354	2.55E+03	2.63E+02	1.75E+02	1.24E+01	1.89E+00	6.03E-01	-9.37E-01	5.29E+00	5.31E+00	2.05E+00	6.38E+00	7.62E+00	-9.30E+00	2.03E+01	2.27E+01						
MW-67-39	Q2-2010	013	38.3	-25.8	5/6/2010	1538	3.30E+03	3.61E+02	1.70E+02	9.77E+00	1.69E+00	5.74E-01	-1.54E+00	9.44E+00	1.18E+01	-1.11E+00	7.71E+00	3.22E+00	-1.14E+00	[illegible]	2.24E+01						
MW-67-39	Q3-2010	014	38.3	-25.8	8/9/2010	1043	3.37E+03	3.15E+02	1.22E+02	8.52E+00	1.21E+00	5.69E-01	-9.27E+00	1.08E+01	1.30E+01	-1.39E+00	8.38E+00	3.77E+00	-2.31E+00	[illegible]	1.69E+01						
MW-67-105	Q4-2009	010	104.8	-92.3	11/11/2009	1431	2.12E+03	3.32E+02	2.03E+02	8.49E-01	5.43E-01	4.85E-01	1.63E-01	5.89E+00	6.71E+00	4.21E-01	7.59E+00	7.67E+00	-2.17E+00	1.71E+01	1.99E+01	1.63E+03	1.74E+00	ND	ND	ND	MW-67-105
MW-67-105	Q1-2010	011	104.8	-92.3	3/3/2010	1401	1.59E+03	2.23E+02	1.79E+02	5.93E-01	7.56E-01	8.05E-01	-2.99E-01	4.00E+00	4.38E+00	-1.50E+00	4.14E+00	4.26E+00	-4.08E+00	[illegible]	2.23E+01						
MW-67-105	Q2-2010	012	104.8	-92.3	5/6/2010	1546	1.54E+03	2.60E+02	1.64E+02	1.77E+00	1.01E+00	7.83E-01	4.33E-01	8.65E+00	9.34E+00	3.51E+00	1.01E-01	1.24E+01	-6.18E+00	2.07E+01	2.40E+01						
MW-67-105	Q3-2010	013	104.8	-92.3	8/9/2010	1037	1.26E+03	2.10E+02	1.24E+02	[illegible]	8.16E-01	6.26E-01	1.46E+00	6.24E+00	7.48E+00	1.75E+00	5.78E+00	7.28E+00	9.56E+00	[illegible]	1.90E+01						
MW-67-173	Q4-2009	011	172.3	-159.8	11/11/2009	1450	8.10E+02	2.43E+02	2.04E+02	1.07E-01	6.98E-01	8.10E-01	2.00E-01	9.81E+00	9.50E+00	-1.52E+00	6.95E+00	7.53E+00	-2.17E+00	[illegible]	2.10E+01	7.58E+02	ND	ND	ND	ND	MW-67-173
MW-67-173	Q1-2010	012	172.3	-159.8	3/3/2010	1421	8.70E+02	1.98E+02	1.80E+02	5.05E-01	5.66E-01	9.10E-01	3.74E+00	5.87E+00	5.33E+00	3.45E-01	3.34E+00	1.42E+00	1.57E+00	[illegible]	2.26E+01						
MW-67-173	Q2-2010	013	172.3	-159.8	5/6/2010	1603	6.78E+02	2.03E+02	1.66E+02	-1.35E-01	4.87E-01	7.07E-01	-3.30E+00	9.64E+00	1.02E-01	-8.43E-01	1.00E-01	1.11E+01	-7.30E+00	2.01E+01	2.27E+01						
MW-67-173	Q3-2010	014	172.3	-159.8	8/9/2010	1107	6.72E+02	1.71E+02	1.27E+02	7.73E-02	4.44E-01	5.35E-01	-7.06E-01	1.34E+01	1.58E-01	6.44E-01	8.97E+00	1.04E+01	-1.44E+00	[illegible]	1.24E+01						
MW-67-219	Q4-2009	010	218.8	-206.3	11/11/2009	1116	1.44E+03	2.38E+02	2.00E+02	-1.39E-01	6.37E-01	7.80E-01	1.78E+00	4.86E+00	5.52E+00	-4.94E-01	6.35E+00	3.90E+00	6.03E+00	[illegible]	1.97E+01	1.21E+03	ND	ND	ND	ND	MW-67-219
MW-67-219	Q1-2010	011	218.8	-206.3	3/3/2010	1123	1.09E+03	2.07E+02	1.79E+02	3.25E-01	7.37E-01	8.51E-01	-2.20E+00	3.01E+00	3.18E+00	1.81E+00	[illegible]	3.73E+00	4.56E+00	[illegible]	2.15E+01						
MW-67-219	Q2-2010	012	218.8	-206.3	5/6/2010	1151	1.20E+03	2.41E+02	1.66E+02	1.73E-01	6.31E-01	7.72E-01	2.27E+00	8.87E+00	1.05E-01	2.35E+00	7.38E+00	9.29E+00	-7.78E+00	[illegible]	2.11E+01						
MW-67-219	Q3-2010	013	218.8	-206.3	8/9/2010	1333	1.11E+03	2.01E+02	1.25E+02	9.94E-02	5.32E-01	6.42E-01	-7.99E-01	8.14E+00	9.12E+00	-6.19E+00	9.03E+00	3.33E+00	2.14E+00	[illegible]	1.19E+01						
MW-67-276	Q4-2009	010	275.3	-262.8	11/11/2009	1123	1.05E+03	1.83E+02	1.65E+02	2.33E-01	8.09E-01	9.59E-01	9.81E-01	8.21E+00	9.54E+00	1.26E+00	9.55E+00	1.17E+01	1.80E+00	[illegible]	1.91E+01	1.05E+03	ND	ND	ND	ND	MW-67-276
MW-67-276	Q1-2010	011	275.3	-262.8	3/3/2010	1125	1.11E+03	2.10E+02	1.80E+02	-1.30E-01	5.78E-01	8.23E-01	1.09E+00	3.92E+00	4.54E+00	-3.85E+00	6.67E+00	4.49E+00	1.73E+00	[illegible]	2.21E+01						
MW-67-276	Q2-2010	012	275.3	-262.8	5/6/2010	1220	1.09E+03	2.33E+02	1.65E+02	-1.16E-01	5.38E-01	7.47E-01	-1.34E+00	7.98E+00	8.70E+00	2.02E+00	[illegible]	1.09E+01	9.78E+00	2.03E+01	2.27E+01						
MW-67-276	Q3-2010	013	275.3	-262.8	8/9/2010	1330	9.33E+02	1.85E+02	1.22E+02	4.00E-01	4.00E-01	4.93E-01	2.50E+00	[illegible]	8.30E+00	-2.39E+00	8.32E+00	3.27E+00	9.94E+00	[illegible]	1.42E+01						
MW-67-323	Q4-2009	010	322.3	-309.8	11/11/2009	1134	4.72E+02	1.62E+02	1.65E+02	-3.92E-01	4.86E-01	7.25E-01	-3.00E+00	8.12E+00	8.50E+00	-1.44E+00	8.30E+00	3.97E+00	2.91E+00	[illegible]	1.74E+01	4.42E+02	ND	ND	ND	ND	MW-67-323
MW-67-323	Q1-2010	011	322.3	-309.8	3/3/2010	1131	4.71E+02	1.83E+02	1.80E+02	3.29E-01	7.45E-01	8.63E-01	-5.78E-01	3.68E+00	4.08E+00	-1.86E-01	3.66E+00	4.06E+00	8.96E+00	[illegible]	2.21E+01						
MW-67-323	Q2-2010	012	322.3	-309.8	5/6/2010	1230	4.44E+02	1.83E+02	1.67E+02	-1.63E-01	4.58E-01	6.67E-01	-2.50E+00	7.72E+00	7.37E+00	2.97E-01	8.31E+00	9.30E+00	-1.13E-01	[illegible]	2.23E+01						
MW-67-323	Q3-2010	013	322.3	-309.8	8/9/2010	1323	4.32E+02	1.43E+02	1.23E+02	6.33E-01	6.31E-01	6.53E-01	1.47E+00	6.68E+00	8.02E+00	3.22E-01	6.72E+00	7.56E+00	-4.51E+00	[illegible]	1.03E+01						
MW-67-340	Q4-2009	010	339.8	-327.3	11/11/2009	1128	5.37E+02	1.68E+02	1.65E+02	-2.27E-01	7.77E-01	9.54E-01	-3.00E-01	5.63E+00	6.15E+00	2.49E+00	6.63E+00	3.33E+00	-9.31E+00	1.49E+01	1.77E+01	5.69E+02	ND	ND	ND	ND	MW-67-340
MW-67-340	Q1-2010	011	339.8	-327.3	3/3/2010	1149	5.97E+02	1.85E+02	1.79E+02	1.19E-01	5.07E-01	6.26E-01	4.02E-01	4.41E+00	5.05E+00	2.42E+00	4.30E+00	5.86E+00	2.20E+00	[illegible]	2.19E+01						
MW-67-340	Q2-2010	012	339.8	-327.3	5/6/2010	1224	6.57E+02	2.03E+02	1.65E+02	-2.13E-01	4.00E-01	7.02E-01	-2.61E+00	7.77E+00	8.17E+00	3.62E-01	8.78E+00	1.00E+01	-5.47E+00	[illegible]	2.28E+01						
MW-67-340	Q3-2010	013	339.8	-327.3	8/9/2010	1320	4.86E+02	1.55E+02	1.25E+02	3.81E-02	5.00E-01	6.29E-01	1.20E+00	7.44E+00	8.75E+00	2.42E+00	6.98E+00	7.06E+00	2.60E+00	[illegible]	1.67E+01						
MW-107	Q2-2010	009	32.7	-10.1	4/22/2010	1011	9.67E+01	1.64E+02	1.83E+02	-7.61E-02	5.23E-01	6.74E-01	9.25E-01	6.08E+00	6.99E+00	-1.88E+00	7.35E+00	7.56E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-107
MW-111	Q4-2009	030	16.5	2.4	11/2/2009	1548	2.26E+04	6.93E+02	1.80E+02	8.45E-01	5.72E-01	5.25E-01	5.61E-02	5.91E+00	6.73E+00	-1.39E-01	6.92E+00	7.69E+00	NA	NA	NA	3.36E+04	1.30E+00	5.79E+00	ND	NA	MW-111
MW-111	Q1-2010	031	16.5	2.4	2/2/2010	1427	2.63E+04	1.94E+03	4.29E+02	1.07E+00	5.60E-01	4.40E-01	1.87E+00	3.62E+00	4.27E+00	-1.55E-01	3.90E+00	4.40E+00	NA	NA	NA						
MW-111	Q2-2010	032	16.5	2.4	4/21/2010	1448	3.35E+04	1.10E+03	1.91E+02	1.43E+00	7.26E-01	6.23E-01	6.79E+00	6.54E+00	4.32E+00	1.70E+00	4.37E+00	5.18E+00	NA	NA	NA						
MW-111	Q3-2010	033	16.5	2.4	8/27/2010	1521	3.86E+04	1.13E+03	1.28E+02	6.44E-01	8.07E-01	8.55E-01	-8.83E-01	6.30E+00	6.59E+00	1.88E+00	5.70E+00	5.84E+00	NA	NA	NA						
MW-111	Q3-2010 Mid	034	16.5	2.4	9/10/2010	1409	4.69E+04	1.37E+03	1.40E+02	1.80E+00	1.00E+00	8.02E-01	-5.04E+00	6.84E+00	6.38E+00	-5.62E-01	6.34E+00	7.62E+00	NA	NA	NA						
U3-4D	Q4-2009	022	25.6	-10.8	11/6/2009	1315	4.73E+02	1.23E+02	1.06E+02	8.66E-02	5.49E-01	6.68E-01	1.02E+00	5.84E+00	6.77E+00	3.35E-01	6.30E+00	7.03E+00	NA	NA	NA	7.73E+02	ND	ND	ND	NA	U3-4D
U3-4D	Q1-2010	023	25.6	-10.8	2/12/2010	1415	8.65E+02	1.85E+02	1.77E+02	-1.60E-02	6.00E-01	7.80E-01	7.15E-01	3.15E+00	3.59E+00	1.91E+00	3.66E+00	4.34E+00	NA	NA	NA						
U3-4D	Q2-2010	024	25.6	-10.8	4/12/2010	1249	1.07E+03	2.05E+02	1.77E+02	-4.68E-02	5.46E-01	7.39E-01	-5.85E+00	[illegible]	8.95E+00	[illegible]	8.04E+00	7.89E+00	NA	NA	NA						
U3-4D	Q3-2010	025	25.6	-10.8	7/23/2010	1321	6.84E+02	1.86E+02	1.77E+02	-1.56E-01	4.60E-01	6.46E-01	2.21E+00	7.50E+00	8.91E+00	-1.01E+00	7.61E+00	3.14E+00	NA	NA	NA						
U3-4S	Q3-2010	007			7/23/2010	1412	3.74E+02	1.74E+02	1.79E+02	3.79E-01	4.15E-01	[illegible]	9.00E-01	8.51E+00	9.30E+00	1.89E+00	7.75E+00	3.37E+00	NA	NA	NA	3.74E+02	ND	ND	ND	NA	U3-4S
U3-T1	Q4-2009	026	5.7	2.8	11/13/2009	1635	3.79E+02	1.13E+02	1.03E+02	3.87E-01	5.95E-01	6.63E-01	-6.81E-01	5.33E+00	5.76E+00	1.33E+00	6.33E+00	7.37E+00	NA	NA	NA	4.35E+02	ND	ND	ND	NA	U3-T1
U3-T1	Q1-2010	027	5.7	2.8	2/10/2010	1202	4.76E+02	1.73E+02	1.78E+02	2.19E-01	6.55E-01	7.83E-01	-1.28E+00	[illegible]	5.30E+00	2.78E+00	3.74E+00	4.78E+00	NA	NA	NA						
U3-T1	Q2-2010	028	5.7	2.8	5/5/2010	1654	5.00E+02	1.72E+02	1.84E+02	6.43E-02	4.95E-01	5.97E-01	3.25E+00	8.95E+00	1.04E-01	[illegible]	6.62E+00	7.16E+00	NA	NA	NA						
U3-T1	Q3-2010	029	5.7	2.8	7/26/2010	1215	3.84E+02	1.74E+02	1.78E+02	1.21E-02	3.91E-01	4.99E-01	5.07E+00	7.68E+00	9.77E+00	[illegible]	6.96E+00	7.49E+00	NA	NA	NA						
U3-T2	Q4-2009	031	5.7	2.6	11/16/2009	1253	8.94E+02	1.52E+02	1.03E+02	3.24E-01	6.54E-01	7.43E-01	3.94E-01	6.63E+00	6.48E+00	-2.09E+00	6.95E+00	5.93E+00	NA	NA	NA	9.22E+02	ND	ND	ND	NA	U3-T2
U3-T2	Q1-2010	032	5.7	2.6	2/11/2010	1243	9.41E+02	1.88E+02	1.78E+02	5.85E-01	7.72E-01	8.17E-01	-8.06E-01	3.38E+00	3.53E+00	7.20E-02	3.71E+00	4.10E+00	NA	NA	NA						
U3-T2	Q2-2010	033	5.7	2.6	5/7/2010	1305	9.75E+02	1.95E+02	1.83E+02	6.31E-01	6.31E-01	6.53E-01	-2.27E+00	5.70E+00	5.29E+00	-1.66E+00	6.62E+00	5.97E+00	NA	NA	NA						
U3-T2	Q3-2010	034	5.7	2.6	7/26/2010	1426	8.76E+02	1.92E+02	1.74E+02	5.34E-01	6.12E-01	6.47E-01	-2.12E+00	7.50E+00	7.59E+00	2.29E+00	7.31E+00	3.84E+00	NA	NA	NA						
I-2	Q3-2010	002			8/2/2010	1439	6.21E+01	1.54E+02	1.73E+02	-2.30E-01	3.72E-01	5.25E-01	7.84E+00	7.80E+00	1.32E-01	9.34E-02	6.54E+00	7.19E+00	NA	NA	NA	ND	ND	ND	ND	NA	I-2
MH-5 VCFD[8]	Q4-2009	007			11/16/2009	1110	6.28E+02	1.39E+02	1.07E+02	3.95E-01	6.57E-01	7.30E-01	-5.36E-01	1.07E+01	1.17E-01	2.75E+00	6.29E+00	7.70E+00	NA	NA	NA	2.14E+03	ND	ND	ND	NA	MH-5 VCFD[8]
MH-5 VCFD	Q1-2010	008			2/18/2010	1346	2.08E+03	1.57E+02	1.71E+02	6.25E-02	3.27E-01	4.03E-01	1.18E+00	4.41E+00	4.30E+00	1.81E+00	[illegible]	1.15E+00	NA	NA	NA						
MH-5 VCFD	Q2-2010 Mid	009			5/17/2010	1015	4.33E+02	1.73E+02	1.79E+02	3.65E-01	5.84E-01	6.43E-01	2.13E+00	6.00E+00	7.18E+00	4.52E-01	6.63E+00	7.65E+00	NA	NA	NA						
MH-5 VCFD	Q3-2010	010			8/5/2010	1445	7.32E+02	1.84E+02	1.77E+02	5.37E-01	5.67E-01	5.84E-01	7.26E-01	7.72E+00	8.59E+00	-2.20E+00	6.93E+00	7.07E+00	NA	NA	NA						
MH-5 VCFD	Q3-2010	011			8/30/2010	1530	9.90E+02	5.45E+02	1.20E+02	1.25E-01	5.21E-01	[illegible]	1.50E+00	5.52E+00	6.46E+00	6.06E-01	6.51E+00	7.50E+00	NA	NA	NA						
MH-5 VCFD	Q3-2010 Mid	012			9/10/2010	1530	8.80E+02	1.83E+02	1.25E+02	3.61E-01	6.35E-01	[illegible]	7.21E-01	6.47E+00	7.44E+00	1.23E+00	5.71E+00	5.85E+00	NA	NA	NA						
LAF-002	Q4-2009	012		-22.3	11/19/2009	1235	-7.51E+01	1.43E+02	1.65E+02	-1.84E-02	5.43E-01	7.29E-01	4.01E-01	8.91E+00	1.32E-01	5.99E+00	9.51E+00	1.27E+01	2.20E+00	[illegible]	1.68E+01	ND	ND	ND	ND	ND	LAF-002
LAF-002	Q2-2010 Mid	013		-22.3	5/11/2010	1344	-4.21E+01	1.32E+02	1.63E+02	6.55E-01	7.37E-01	7.73E-01	-1.49E+00	6.90E+00	7.50E+00	1.64E+00	6.08E+00	7.34E+00	-6.88E+00	[illegible]	2.54E+01						
B-1[8]	Q1-2010	007			2/23/2010	1410	1.49E+02	2.13E+02	1.69E+02	4.01E-02	3.00E-01	3.80E-01	4.53E+00	5.42E+00	6.44E+00	-6.69E-01	[illegible]	3.88E+00	NA	NA	NA	5.44E+03	ND	1.62E+01	ND	NA	B-1[8]
B-1	Q2-2010	008			4/23/2010	1644	8.15E+02	1.91E+02	1.85E+02	2.22E-01	5.20E-01	6.10E-01	9.79E+00	7.91E+00	6.38E+00	5.55E-01	6.74E+00	7.21E+00	NA	NA	NA						
B-1	Q3-2010	009			8/17/2010	1540	1.40E+04	6.43E+02	1.27E+02	1.25E-01	6.43E-01	[illegible]	2.27E+01	1.06E+01	5.37E+00	2.96E+00	6.00E+00	7.45E+00	NA	NA	NA						
B-6[8]	Q1-2010	007			2/19/2010	956	3.78E+02	1.65E+02	1.68E+02	1.14E-02	3.57E-01	4.59E-01	1.43E+00	4.12E+00	4.84E+00	2.21E-01	3.96E+00	4.54E+00	NA	NA	NA	3.78E+02	ND	ND	ND	NA	B-6[8]
B-6	Q2-2010 Mid	008			5/18/2010	940	4.48E+01	1.62E+02	1.84E+02	-1.02E-01	4.47E-01	[illegible]	5.39E-01	5.58E+00	6.34E+00	2.39E-01	5.50E+00	5.27E+00	NA	NA	NA						
B-6	Q3-2010	009			8/5/2010	1343	1.49E+03	1.62E+02	1.79E+02	1.12E-01	8.02E-01	9.73E-01	2.32E+00	[illegible]	8.33E+00	-9.21E-02	8.23E+00	3.37E+00	NA	NA	NA						
U1-CSS	Q4-2009	013	14	6.1	10/26/2009	1407	2.91E+03	2.81E+02	1.86E+02	1.75E+01	1.88E+00	5.38E-01	-1.10E-01	5.94E+00	6.71E+00	-4.96E+00	5.91E+00	5.17E+00	0.00E+00	2.04E+01	2.34E+01	2.40E+03	1.32E+01	ND	ND	ND	U1-CSS
U1-CSS	Q2-2010	014	14	6.1	5/3/2010	1558	1.88E+03	2.79E+02	1.70E+02	8.95E+00	1.81E+00	8.92E-01	4.61E-01	5.87E+00	6.56E+00	3.94E+00	5.32E+00	5.88E+00	-17.9	2.8	25.3						
U1-NCD	Q1-2010	007			1/4/2010	900	5.47E+03	3.43E+02	1.81E+02	6.40E+01	3.35E+00	4.39E-01	1.14E+04	1.56E+03	6.54E+00	8.50E-01	2.52E+00	2.89E+00	2.31E+02	2.85E+01	2.15E+01	9.49E+03	5.73E+01	1.14E+04	ND	2.61E+02	U1-NCD
U1-NCD	Q3-2010	008			7/15/2010	910	1.35E+04	4.41E+02	1.58E+02	5.06E+01	3.21E+00	7.59E-01	1.14E+04	1.42E+03	1.40E-01	7.51E-01	5.31E+00	5.03E+00	2.90E+02	3.39E+01	2.40E+01						
U1-SFDS	Q1-2010	008			1/6/2010	850	5.10E+02	1.83E+02	1.81E+02	1.25E+01	1.46E+00	4.47E-01	8.18E+00	4.08E+00	2.88E+00	-5.94E-01	2.91E+00	3.18E+00	-2.36E+00	[illegible]	2.15E+01	5.77E+02	1.57E+01	1.45E+01	ND	ND	U1-SFDS
U1-SFDS	Q3-2010	009			7/7/2010	845	6.44E+02	1.83E+02	1.45E+02	1.83E+01	2.10E+00	6.83E-01	2.09E+01	1.26E+01	7.48E+00	1.64E+00	7.91E+00	9.44E+00	3.42E+00	2.24E+01	2.58E+01						

Notes:
1 For nested multi-level monitoring wells, suffix of well ID indicates depth (rounded to nearest foot) from reference point on casing to bottom of well screen. For Waterloo multi-level systems, suffix indicates depth (rounded to nearest foot) from reference point on casing to top of sampling port. Well IDs without a suffix are open bedrock wellbores.
2 All analytical results from the last 12 months from each location are provided. Monitoring locations are sampled quarterly, bi-annually, or annually, and as necessary during the year.
3 Sampling depths within sampling intervals (i.e. location of pump intake) have been located adjacent to a transmissive zone where possible.
4 Averages provided are analytical result averages of all valid samples (including mid-quarter and confirmatory samples) collected from each monitoring location from the forth quarter of 2009 (Q3-2009) to the third quarter of 2010 (Q3-2010) including post Q3-2010 samples.
Monitoring locations are sampled quarterly, bi-annually, or annually and additional samples are collected when necessary. Therefore, some results provided are the average of more than 4 samples.
For quarters in which samples were reanalyzed due to potential false positives, both results were used to calculate averages if subsequent results confirmed the validity of the original sample/analysis. For cases in which reanalysis discredited the validity of the original sample result, the replacement results were used to calculate the average. If analytical results resulted in resampling, and the resample result discredited the validity of the original sample result of a particular radionuclide, the original sample results were not used for any radionuclide and only the resample result was used. For cases in which an aliquot of the original sample was reanalyzed, if the result of the aliquot confirmed the original result, then the aliquot result and the original result were averaged and the average of the two was used to calculate the rolling average. If the aliquot result indicated the original result was false, then only the aliquot result was used to calculate the rolling average.
5 NA indicates that the constituent was not analyzed.
6 ND indicates that all of the analytical results used to calculate the average were less than MDC and/or 3 times the 1 sigma uncertainty.
7 Dot pattern denotes sampling interval is positioned within overburden. Open box indicates sampling interval is in bedrock.
8 These locations are storm drains.
9 Mid-quarter samples were collected and analyzed to evaluate the potential effect of certain operations on groundwater quality.

IPEC00263581

TABLE 4
2010 3rd QUARTER
GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE COLLECTION		ANALYSIS RESULTS: TRITIUM (pCi/L)				Sr-90 (pCi/L)				Cs-137 (pCi/L)				Co-60 (pCi/L)				Ni-63 (pCi/L)				Well ID
		Date	Time	Result	Std. Dev.[7]	MDC	I.L.[3]	Result	Std. Dev.[7]	MDC	I.L.[3]	Result	Std. Dev.[7]	MDC	I.L.[3]	Result	Std. Dev.[7]	MDC	I.L.[3]	Result	Std. Dev.[7]	MDC	I.L.[3]	
MW-30-69	033	7/28/2010	12:33	1.28E+05	3.72E+03	1.80E+02	2.14E+05	9.14E-02	5.26E-01	6.35E-01	2.00E+00	-5.08E-01	9.69E+00	1.09E+01	positive	1.67E+00	7.45E+00	9.20E+00	positive	NA	NA	NA	positive	MW-30-69
MW-30-69	034	8/20/2010	15:08	1.11E+05	3.24E+03	2.02E+02	2.14E+05	3.53E-01	7.80E-01	9.08E-01	2.00E+00	-5.14E+00	5.22E+00	5.12E+00	positive	-2.41E+00	5.25E+00	5.03E+00	positive	NA	NA	NA	positive	MW-30-69
MW-30-69	035	9/8/2010	12:35	1.22E+05	3.65E+03	1.47E+02	2.14E+05	1.93E-01	4.41E-01	5.14E-01	2.00E+00	1.10E+00	4.42E+00	4.87E+00	positive	1.40E+00	4.72E+00	5.73E+00	positive	NA	NA	NA	positive	MW-30-69
MW-30-84	024	7/28/2010	12:07	9.26E+03	5.09E+02	1.01E+02	1.22E+04	4.48E-01	7.63E-01	8.52E-01	2.00E+00	-1.46E+00	9.30E+00	1.02E+01	1.79E+01	-3.03E-01	9.79E+00	1.08E+01	positive	NA	NA	NA	positive	MW-30-84
MW-30-84	025	8/20/2010	16:51	1.00E+04	5.57E+02	1.29E+02	1.22E+04	5.65E-01	8.70E-01	9.53E-01	2.00E+00	3.22E+00	5.27E+00	7.54E+00	1.79E+01	-3.97E+00	6.69E+00	6.20E+00	positive	NA	NA	NA	positive	MW-30-84
MW-30-84	026	9/8/2010	12:14	1.01E+04	4.32E+02	2.10E+02	1.22E+04	3.18E-01	6.20E-01	7.05E-01	2.00E+00	-1.48E+00	5.18E+00	6.74E+00	1.79E+01	-4.19E-01	7.65E+00	8.58E+00	positive	NA	NA	NA	positive	MW-30-84
MW-31-49	025	7/27/2010	14:43	5.46E+04	1.59E+03	1.23E+02	4.28E+04	3.05E-01	4.71E-01	5.22E-01	2.00E+00	2.74E+00	1.17E+01	1.40E+01	positive	2.23E+00	8.03E+00	9.96E+00	positive	NA	NA	NA	positive	MW-31-49
MW-31-49	026	8/23/2010	12:11	4.11E+03	3.56E+02	1.23E+02	4.28E+04	1.62E-01	7.89E-01	9.57E-01	2.00E+00	-1.21E+00	5.42E+00	5.91E+00	positive	-3.35E-02	5.19E+00	5.80E+00	positive	NA	NA	NA	positive	MW-31-49
MW-31-49	027	9/7/2010	12:49	1.04E+05	3.02E+03	1.68E+02	4.28E+04	-1.15E-01	2.82E-01	4.23E-01	2.00E+00	3.35E+00	5.52E+00	6.63E+00	positive	2.16E+00	5.97E+00	7.20E+00	positive	NA	NA	NA	positive	MW-31-49
MW-31-63	025	7/27/2010	15:54	6.47E+04	1.86E+03	1.22E+02	2.99E+04	5.31E-01	6.45E-01	6.89E-01	2.20E+00	-1.81E+00	8.27E+00	8.91E+00	positive	1.22E+00	7.33E+00	8.70E+00	positive	NA	NA	NA	positive	MW-31-63
MW-31-63	026	8/23/2010	12:11	6.69E+04	1.93E+03	1.60E+02	2.99E+04	4.60E-01	7.62E-01	8.48E-01	2.20E+00	1.77E+00	6.11E+00	7.13E+00	positive	-1.67E+00	6.17E+00	6.44E+00	positive	NA	NA	NA	positive	MW-31-63
MW-31-63	027	9/7/2010	15:28	4.67E+04	1.41E+03	1.46E+02	2.99E+04	3.99E-01	7.26E-01	8.18E-01	2.20E+00	4.05E-01	4.75E+00	5.31E+00	positive	-1.47E+00	5.45E+00	5.56E+00	positive	NA	NA	NA	positive	MW-31-63
MW-31-85	025	7/27/2010	15:22	6.70E+03	4.34E+02	1.00E+02	1.46E+04	3.55E-01	4.72E-01	5.04E-01	2.00E+00	-3.98E+00	8.82E+00	9.22E+00	positive	2.50E+00	8.43E+00	9.93E+00	positive	NA	NA	NA	positive	MW-31-85
MW-31-85	026	8/23/2010	12:10	5.07E+03	3.96E+02	1.25E+02	1.46E+04	6.61E-03	7.89E-01	9.16E-01	2.00E+00	3.42E+00	4.95E+00	6.03E+00	positive	1.52E+00	4.77E+00	5.71E+00	positive	NA	NA	NA	positive	MW-31-85
MW-31-85	027	9/7/2010	14:14	6.21E+03	5.24E+02	1.44E+02	1.46E+04	-3.25E-01	4.45E-01	6.85E-01	2.00E+00	-1.54E+00	5.68E+00	6.11E+00	positive	2.71E+00	6.42E+00	7.79E+00	positive	NA	NA	NA	positive	MW-31-85
MW-32-48	007	7/27/2010	12:52	3.69E+03	3.26E+02	9.94E+01	**	3.59E-01	8.37E-01	9.60E-01	**	1.54E-01	7.00E+00	8.04E+00	**	-3.86E+00	7.74E+00	7.51E+00	**	NA	NA	NA	**	MW-32-48
MW-32-48	008	8/24/2010	14:03	5.90E+03	3.51E+02	2.10E+02	**	3.55E-01	6.33E-01	7.09E-01	**	-4.34E-01	4.49E+00	5.04E+00	**	1.96E+00	4.95E+00	5.95E+00	**	NA	NA	NA	**	MW-32-48
MW-32-59	019	7/27/2010	12:00	6.54E+04	1.91E+03	1.33E+02	2.42E+04	1.50E-01	4.37E-01	5.21E-01	2.00E+00	1.07E+00	1.02E+01	1.14E+01	positive	3.80E+00	9.25E+00	1.21E+01	positive	NA	NA	NA	positive	MW-32-59
MW-32-59	020	8/24/2010	14:22	5.72E+03	3.42E+02	2.10E+02	2.42E+04	-9.82E-02	6.14E-01	8.52E-01	2.00E+00	2.21E+00	5.84E+00	7.14E+00	positive	-2.01E+00	6.60E+00	6.75E+00	positive	NA	NA	NA	positive	MW-32-59
MW-32-59	021	9/9/2010	12:57	7.44E+04	3.18E+03	1.67E+02	2.42E+04	4.21E-01	7.20E-01	8.03E-01	2.00E+00	1.68E+00	5.43E+00	6.39E+00	positive	1.58E+00	5.33E+00	5.54E+00	positive	NA	NA	NA	positive	MW-32-59
MW-32-85	022	7/27/2010	14:51	1.21E+04	5.81E+02	1.01E+02	1.63E+04	3.80E-01	6.37E-01	7.07E-01	2.00E+00	1.38E+00	7.47E+00	8.69E+00	positive	2.30E+00	7.74E+00	9.52E+00	positive	NA	NA	NA	positive	MW-32-85
MW-32-85	023	8/24/2010	11:03	1.38E+04	4.94E+02	2.10E+02	1.63E+04	-3.76E-01	4.75E-01	7.02E-01	2.00E+00	-5.66E-01	5.96E+00	6.62E+00	positive	-1.19E+00	5.22E+00	5.48E+00	positive	NA	NA	NA	positive	MW-32-85
MW-32-85	024	9/9/2010	12:29	1.44E+04	6.57E+02	1.21E+02	1.63E+04	1.34E-01	6.77E-01	8.36E-01	2.00E+00	1.43E+00	5.27E+00	6.93E+00	positive	-1.25E-01	5.49E+00	6.10E+00	positive	NA	NA	NA	positive	MW-32-85
MW-32-149	019	7/27/2010	15:34	3.81E+03	3.31E+02	1.01E+02	1.00E+03	1.14E-01	3.57E-01	4.33E-01	2.00E+00	7.24E-01	1.28E+01	1.64E+01	positive	1.53E+00	8.83E+00	1.06E+01	positive	NA	NA	NA	positive	MW-32-149
MW-32-149	020	8/24/2010	11:27	2.60E+03	2.70E+02	2.10E+02	1.00E+03	1.04E-01	6.64E-01	8.13E-01	2.00E+00	1.04E-01	5.51E+00	7.44E+00	positive	2.67E-02	5.89E+00	6.71E+00	positive	NA	NA	NA	positive	MW-32-149
MW-32-149	021	9/9/2010	11:36	2.12E+03	2.70E+02	1.22E+02	1.00E+03	2.27E-01	7.72E-01	9.22E-01	2.00E+00	3.68E+00	7.83E+00	9.15E+00	positive	1.24E+00	8.52E+00	1.00E+01	positive	NA	NA	NA	positive	MW-32-149
MW-32-173	017	7/27/2010	15:17	2.47E+03	2.69E+02	9.88E+01	1.50E+03	9.64E-02	3.38E-01	4.14E-01	2.00E+00	-1.51E+00	8.71E+00	9.65E+00	positive	-2.29E+00	7.04E+00	7.12E+00	positive	NA	NA	NA	positive	MW-32-173
MW-32-173	018	8/24/2010	11:23	2.49E+03	2.60E+02	2.10E+02	1.50E+03	-1.37E-01	3.98E-01	5.77E-01	2.00E+00	2.92E+00	5.57E+00	7.82E+00	positive	4.56E-01	6.55E+00	7.41E+00	positive	NA	NA	NA	positive	MW-32-173
MW-32-173	019	9/9/2010	11:29	1.98E+03	2.69E+02	1.28E+02	1.50E+03	5.82E-01	8.34E-01	8.96E-01	2.00E+00	1.67E+00	4.86E+00	5.81E+00	positive	9.94E-01	4.84E+00	5.77E+00	positive	NA	NA	NA	positive	MW-32-173
MW-32-190	021	7/27/2010	15:41	1.58E+03	2.21E+02	9.83E+01	4.21E+03	-8.57E-02	3.52E-01	5.06E-01	2.00E+00	6.23E-01	7.98E+00	9.15E+00	positive	-2.62E+00	7.77E+00	7.60E+00	positive	NA	NA	NA	positive	MW-32-190
MW-32-190	022	8/24/2010	11:37	1.69E+03	2.41E+02	2.09E+02	4.21E+03	2.54E-01	7.84E-01	9.25E-01	2.00E+00	-5.47E-01	4.84E+00	5.45E+00	positive	9.00E-01	4.95E+00	5.87E+00	positive	NA	NA	NA	positive	MW-32-190
MW-32-190	023	9/9/2010	11:34	1.67E+03	2.48E+02	1.30E+02	4.21E+03	-1.31E-01	5.86E-01	8.27E-01	2.00E+00	-2.39E-01	9.87E+00	1.03E+01	positive	2.00E+00	6.60E+00	7.98E+00	positive	NA	NA	NA	positive	MW-32-190
MW-33	027	8/30/2010	14:29	3.69E+03	3.41E+02	1.26E+02	6.88E+04	1.64E-01	3.24E-01	3.69E-01	2.00E+00	7.72E-01	5.64E+00	6.33E+00	positive	-3.08E-01	5.07E+00	5.60E+00	positive	NA	NA	NA	positive	MW-33
MW-33	028	9/11/2010	12:28	3.86E+03	3.51E+02	1.27E+02	6.88E+04	9.96E-03	7.38E-01	9.28E-01	2.00E+00	-1.30E+00	4.86E+00	5.14E+00	positive	1.12E+00	5.10E+00	5.95E+00	positive	NA	NA	NA	positive	MW-33
MW-36-24	019	7/29/2010	12:04	2.64E+02	1.17E+02	1.00E+02	2.56E+03	2.45E-01	3.84E-01	4.23E-01	2.00E+00	8.89E-01	9.88E+00	1.10E+01	positive	-2.61E+00	1.10E+01	1.26E+01	positive	NA	NA	NA	positive	MW-36-24
MW-36-41	013	7/29/2010	12:23	1.30E+04	7.52E+02	1.46E+02	2.10E+04	1.88E+00	7.41E-01	5.17E-01	1.09E+01	-1.84E+00	5.35E+00	6.48E+00	positive	4.07E+00	6.12E+00	7.75E+00	positive	NA	NA	NA	positive	MW-36-41
MW-36-52	018	7/29/2010	12:24	7.07E+03	4.46E+02	1.00E+02	1.48E+04	-1.52E-01	6.33E-01	8.23E-01	6.99E+00	-1.63E+00	7.79E+00	8.33E+00	positive	-1.74E+00	9.63E+00	1.03E+01	positive	NA	NA	NA	positive	MW-36-52
MW-37-22	019	8/5/2010	14:06	3.70E+03	3.26E+02	9.90E+01	9.19E+03	5.19E+00	1.39E+00	9.19E-01	2.11E+01	-1.60E+00	7.62E+00	8.20E+00	positive	4.53E+00	7.13E+00	9.76E+00	positive	NA	NA	NA	positive	MW-37-22
MW-37-32	019	8/5/2010	14:00	4.80E+03	3.69E+02	9.97E+01	9.32E+03	1.41E+01	1.85E+00	5.42E-01	3.71E+01	-5.90E+00	8.89E+00	8.07E+00	positive	-3.93E-01	8.67E+00	9.54E+00	positive	NA	NA	NA	positive	MW-37-32
MW-37-40	019	8/5/2010	14:25	7.00E+03	4.41E+02	9.99E+01	9.02E+03	1.43E+01	1.74E+00	4.61E-01	1.67E+01	1.15E-01	7.86E+00	9.03E+00	positive	3.82E+00	7.44E+00	9.31E+00	positive	NA	NA	NA	positive	MW-37-40
MW-37-57	019	8/5/2010	12:59	7.30E+03	4.51E+02	9.97E+01	9.62E+03	1.73E+01	1.69E+00	5.57E-01	5.27E+01	2.16E+00	7.37E+00	7.75E+00	positive	6.93E-01	8.95E+00	9.77E+00	positive	NA	NA	NA	positive	MW-37-57
MW-39-67	009	7/22/2010	14:26	2.86E+02	1.19E+02	9.90E+01	1.00E+03	1.73E+00	6.00E-01	3.90E-01	5.72E+00	2.94E+00	5.33E+00	7.80E+00	positive	-5.65E+00	7.25E+00	5.04E+00	positive	NA	NA	NA	positive	MW-39-67
MW-39-84	009	7/22/2010	14:42	3.70E+02	1.30E+02	1.01E+02	1.00E+03	8.43E-01	6.21E-01	5.85E-01	3.16E+00	-3.32E+00	5.79E+00	6.90E+00	positive	2.43E+00	6.95E+00	8.54E+00	positive	NA	NA	NA	positive	MW-39-84
MW-39-102	009	7/22/2010	14:52	2.39E+02	1.49E+02	1.49E+02	1.00E+03	4.05E+00	9.93E-01	4.71E-01	3.64E+00	-1.08E+00	5.35E+00	6.93E+00	positive	-3.68E+00	5.55E+00	4.42E+00	positive	NA	NA	NA	positive	MW-39-102
MW-39-124	009	7/22/2010	11:39	1.12E+02	1.34E+02	1.46E+02	1.00E+03	2.25E+00	7.71E-01	5.01E-01	2.79E+00	1.11E+00	3.32E+00	9.23E+00	positive	4.37E-01	9.75E+00	1.10E+01	positive	NA	NA	NA	positive	MW-39-124
MW-39-183	009	7/22/2010	11:38	1.07E+02	1.12E+02	1.19E+02	1.00E+03	2.08E-01	4.19E-01	4.79E-01	2.00E+00	-4.62E+00	8.88E+00	9.01E+00	positive	-5.09E+00	9.62E+00	8.98E+00	positive	NA	NA	NA	positive	MW-39-183
MW-39-195	009	7/22/2010	12:10	9.26E+01	1.11E+02	1.20E+02	1.00E+03	5.61E-01	5.70E-01	5.97E-01	2.00E+00	7.86E-01	8.64E+00	9.43E+00	positive	-9.78E-01	8.93E+00	9.62E+00	positive	NA	NA	NA	positive	MW-39-195
MW-40-27	012	8/26/2010	14:42	1.92E+02	1.26E+02	1.24E+02	1.00E+03	2.23E-01	6.54E-01	7.73E-01	2.00E+00	1.95E+00	4.50E+00	5.45E+00	positive	-1.03E+00	4.72E+00	5.12E+00	positive	NA	NA	NA	positive	MW-40-27
MW-40-46	013	8/26/2010	14:56	1.24E+02	1.22E+02	1.29E+02	1.00E+03	-1.83E-01	5.11E-01	7.19E-01	2.00E+00	7.02E-01	5.01E+00	6.90E+00	positive	5.48E+00	6.17E+00	8.30E+00	positive	NA	NA	NA	positive	MW-40-46
MW-40-81	013	8/26/2010	11:05	9.08E+01	1.14E+02	1.24E+02	1.00E+03	2.45E-01	5.25E-01	6.06E-01	2.00E+00	-3.95E+00	5.24E+00	4.95E+00	positive	-2.64E+00	4.63E+00	4.20E+00	positive	NA	NA	NA	positive	MW-40-81
MW-40-100	015	8/26/2010	11:09	1.24E+02	1.37E+02	1.45E+02	1.00E+03	-2.33E-01	3.95E-01	6.21E-01	2.00E+00	8.87E-01	5.15E+00	7.12E+00	positive	6.51E-01	5.61E+00	6.53E+00	positive	NA	NA	NA	positive	MW-40-100
MW-40-127	015	8/26/2010	11:16	1.36E+02	1.40E+02	1.47E+02	1.00E+03	2.23E-02	2.78E-01	3.67E-01	2.00E+00	-5.02E+00	7.95E+00	8.23E+00	positive	6.43E-01	6.43E+00	7.48E+00	positive	NA	NA	NA	positive	MW-40-127
MW-40-162	013	8/26/2010	12:29	1.02E+02	1.36E+02	1.48E+02	1.00E+03	5.09E-01	7.25E-01	7.75E-01	2.00E+00	7.14E-01	5.23E+00	7.03E+00	positive	3.52E+00	6.73E+00	8.38E+00	positive	NA	NA	NA	positive	MW-40-162
MW-41-40	017	7/21/2010	12:41	2.79E+03	3.02E+02	1.47E+02	1.00E+03	4.37E+00	1.02E+00	6.33E-01	9.12E+00	1.59E+00	5.82E+00	7.07E+00	positive	-6.50E-01	7.13E+00	7.61E+00	positive	NA	NA	NA	positive	MW-41-40
MW-41-63	016	7/21/2010	12:41	5.18E+02	1.68E+02	1.43E+02	1.00E+03	4.79E+00	1.09E+00	6.23E-01	7.09E+00	-2.71E+00	3.29E+00	8.77E+00	positive	1.61E+00	7.93E+00	9.59E+00	positive	NA	NA	NA	positive	MW-41-63
MW-42-49	022	7/30/2010	11:38	1.69E+03	2.34E+02	1.24E+02	2.16E+04	1.39E+01	1.53E+00	3.90E-01	6.19E+02	1.87E+04	2.46E+03	2.53E+01	1.35E+05	7.33E-01	6.64E+00	7.77E+00	1.05E+01	1.77E+02	2.97E+01	2.18E+01	1.30E+03	MW-42-49
MW-42-78	017	7/30/2010	12:23	6.31E+02	1.71E+02	1.31E+02	1.00E+03	2.78E-02	3.03E-01	3.85E-01	2.00E+00	-1.17E-01	7.56E+00	8.30E+00	positive	-7.43E-01	7.04E+00	7.42E+00	positive	1.96E+00	1.31E+01	1.52E+01	positive	MW-42-78
MW-43-28	016	7/20/2010	12:48	9.11E+01	1.32E+02	1.47E+02	1.00E+03	6.43E-02	3.80E-01	5.33E-01	2.00E+00	5.80E+00	7.53E+00	9.75E+00	positive	1.44E+00	9.49E+00	1.01E+01	positive	NA	NA	NA	positive	MW-43-28
MW-43-62	016	7/20/2010	15:07	5.97E+01	1.32E+02	1.51E+02	1.00E+03	4.41E-01	4.75E-01	4.94E-01	2.00E+00	-1.11E+00	7.96E+00	8.85E+00	2.36E+01	-2.40E+00	8.22E+00	8.59E+00	positive	NA	NA	NA	positive	MW-43-62
MW-44-66	017	7/22/2010	15:47	1.75E+02	1.41E+02	1.47E+02	1.00E+03	2.76E-01	5.63E-01	6.43E-01	2.00E+00	-3.76E+00	5.86E+00	6.84E+00	positive	1.20E+00	8.52E+00	9.73E+00	positive	NA	NA	NA	positive	MW-44-66
MW-44-102	018	7/21/2010	12:20	2.76E+02	1.49E+02	1.45E+02	1.00E+03	4.11E-01	4.70E-01	4.80E-01	2.00E+00	2.38E+00	1.02E+01	1.18E+01	positive	-1.83E+00	8.85E+00	9.25E+00	positive	NA	NA	NA	positive	MW-44-102
MW-45-42	021	7/19/2010	15:38	3.69E+03	3.35E+02	1.43E+02	5.90E+03	5.08E-01	6.10E-01	6.77E-01	2.00E+00	1.04E+00	7.75E+00	8.85E+00	positive	1.87E+00	7.10E+00	7.11E+00	positive	NA	NA	NA	positive	MW-45-42
MW-45-61	021	7/19/2010	12:28	1.00E+03	2.07E+02	1.48E+02	2.65E+03	4.07E-01	5.04E-01	5.30E-01	2.00E+00	-2.93E+00	3.29E+00	8.61E+00	positive	-2.24E+00	8.83E+00	9.24E+00	positive	NA	NA	NA	positive	MW-45-61
MW-46	021	7/23/2010	12:10	1.92E+03	2.58E+02	1.46E+02	1.84E+03	1.80E-01	5.63E-01	6.59E-01	2.00E+00	1.28E-01	7.65E+00	8.12E+00	positive	-1.36E+00	7.95E+00	8.34E+00	positive	NA	NA	NA	positive	MW-46
MW-49-26	021	8/11/2010	11:27	3.01E+03	3.01E+02	1.21E+02	6.52E+03	1.28E+01	1.44E+00	3.06E-01	2.72E+01	-7.91E-01	1.14E+01	1.15E+01	positive	-1.86E+00	1.10E+01	1.19E+01	positive	3.27E-01	1.64E+01	1.92E+01	positive	MW-49-26
MW-49-42	021	8/11/2010	11:00	2.27E+03	2.72E+02	1.30E+02	4.97E+03	1.85E+01	1.67E+00	3.91E-01	3.66E+01	4.80E+00	7.88E+00	9.85E+00	positive	-2.34E+00	8.75E+00	9.06E+00	positive	-1.91E+00	1.65E+01	1.96E+01	positive	MW-49-42
MW-49-65	021	8/11/2010	11:19	1.32E+03	2.16E+02	1.28E+02	2.03E+03	1.24E+01	1.44E+00	4.49E-01	2.70E+01	-1.12E+01	1.22E+01	1.43E+01	positive	-2.58E-01	9.83E+00	1.11E+01	positive	-6.74E-01	1.80E+01	2.13E+01	positive	MW-49-65
MW-50-42	022	8/4/2010	12:11	1.61E+02	1.25E+02	1.28E+02	1.04E+03	8.43E+00	1.42E+00	5.63E-01	8.21E+00	-1.94E+00	8.65E+00	9.25E+00	positive	1.30E-01	8.05E+00	9.05E+00	positive	0.00E+00	1.59E+01	1.88E+01	positive	MW-50-42
MW-50-66	027	8/4/2010	16:38	3.51E+03	3.32E+02	1.34E+02	5.90E+03	2.65E+01	2.28E+00	4.80E-01	5.56E+01	3.52E+00	8.29E+00	9.99E+00	positive	9.22E-01	9.13E+00	1.06E+01	positive	2.07E+00	1.56E+01	1.81E+01	positive	MW-50-66
MW-51-40	016	8/25/2010	16:29	1.70E+02	1.07E+02	1.03E+02	1.00E+03	-4.31E-02	3.11E-01	4.19E-01	2.00E+00	-2.48E+00	5.17E+00	6.53E+00	positive	1.46E+00	5.21E+00	6.37E+00	positive	NA	NA	NA	positive	MW-51-40
MW-51-79	016	8/25/2010	16:47	1.10E+02	9.84E+01	1.01E+02	1.00E+03	5.81E-01	8.23E-01	8.92E-01	2.00E+00	5.29E+00	5.13E+00	7.75E+00	positive	1.58E+00	6.71E+00	7.88E+00	positive	NA	NA	NA	positive	MW-51-79
MW-51-104	014	8/25/2010	12:18	1.32E+02	1.37E+02	1.44E+02	1.00E+03	7.62E-01	8.15E-01	8.20E-01	2.00E+00	8.90E-01	5.75E+00	6.63E+00	positive	-2.70E-01	4.95E+00	5.47E+00	positive	NA	NA	NA	positive	MW-51-104
MW-51-135	014	8/25/2010	12:21	1.36E+02	1.41E+02	1.47E+02	1.00E+03	-2.33E-01	4.44E-01	6.70E-01	2.00E+00	-5.64E-01	5.15E+00	6.80E+00	positive	1.74E+00	6.62E+00	7.77E+00	positive	NA	NA	NA	positive	MW-51-135
MW-51-163	014	8/25/2010	12:51	8.20E+01	9.72E+01	1.05E+02	1.00E+03	-1.08E-01	3.98E-01	5.31E-01	2.00E+00	3.91E+00	5.72E+00	8.11E+00	positive	8.67E-01	6.32E+00	7.26E+00	positive	NA	NA	NA	positive	MW-51-163
MW-51-189	014	8/25/2010	12:13	5.86E+01	9.38E+01	1.04E+02	1.00E+03	4.40E-02	5.97E-01	7.65E-01	2.00E+00	3.87E+00	5.64E+00	6.69E+00	positive	-8.01E-01	5.85E+00	6.25E+00	positive	NA	NA	NA	positive	MW-51-189
MW-53-82	016	7/30/2010	12:32	2.25E+03	2.66E+02	1.27E+02	1.83E+03	3.34E-01	3.83E-01	4.00E-01	4.60E+00	-3.03E+00	8.36E+00	8.45E+00	1.55E+01	-1.90E+00	8.00E+00	8.03E+00	positive	-1.45E+01	1.77E+01	2.22E+01	positive	MW-53-82
MW-53-120	020	7/30/2010	14:36	3.81E+03	3.38E+02	1.28E+02	1.05E+04	2.97E+01	2.22E+00	4.77E-01	5.54E+01	2.09E+00	1.27E+01	1.37E+01	positive	-4.76E-01	8.04E+00	8.95E+00	positive	3.59E+00	1.91E+01	2.21E+01	positive	MW-53-120
MW-54-37	014	8/4/2010	14:32	1.21E+03	2.10E+02	1.30E+02	2.71E+03	4.00E+00	8.07E-01	3.32E-01	1.18E+01	-4.96E-01	7.38E+00	8.14E+00	positive	-3.97E+00	9.63E+00	9.58E+00	positive	-3.50E+00	1.50E+01	1.80E+01	positive	MW-54-37
MW-54-58	014	8/4/2010	14:35	7.67E+02	1.79E+02	1.28E+02	1.48E+03	1.36E+00	6.88E-01	6.20E-01	3.65E+00	3.95E+00	9.51E+00	9.85E+00	positive	8.15E-01	1.11E+01	1.32E+01	positive	5.38E-01	1.44E+01	1.70E+01	positive	MW-54-58
MW-54-123	014	8/4/2010	14:49	7.83E+02	1.80E+02	1.28E+02	1.30E+03	2.98E+00	7.55E-01	4.15E-01	9.08E+00	1.53E+00	9.99E+00	1.15E+01	positive	-9.37E-01	8.21E+00	8.72E+00	positive	-5.12E+00	1.64E+01	1.97E+01	positive	MW-54-123
MW-54-144	014	8/4/2010	11:44	1.44E+03	2.28E+02	1.33E+02	2.64E+03	1.17E+01	1.42E+00	4.70E-01	2.92E+01	8.96E+00	1.13E+01	1.44E+01	positive	1.72E+00	8.79E+00	1.06E+01	positive	1.78E+00	1.89E+01	2.21E+01	positive	MW-54-144
MW-54-173	014	8/4/2010	12:09	1.51E+03	2.31E+02	1.30E+02	2.63E+03	5.97E+00	1.02E+00	3.24E-01	1.77E+01	-1.48E+00	8.07E+00	7.10E+00	positive	4.86E-01	9.45E+00	1.08E+01	positive	-1.31E+00	1.68E+01	1.99E+01	positive	MW-54-173
MW-54-190	014	8/4/2010	12:34	1.60E+03	2.32E+02	1.28E+02	2.49E+03	1.57E+01	1.51E+00	2.87E-01	3.92E+01	1.62E+00	3.25E+00	8.83E+00	positive	1.20E+00	8.80E+00	9.41E+00	positive	3.22E+00	1.84E+01	2.21E+01	positive	MW-54-190
MW-55-24	015	8/6/2010	12:11	1.21E+03	2.12E+02	1.30E+02	2.58E+03	8.64E+00	1.22E+00	4.51E-01	4.12E+01	1.13E+00	3.94E+00	1.04E+01	2.06E+01	8.02E-01	8.22E+00	9.59E+00	positive	1.17E+01	1.64E+01	1.81E+01	positive	MW-55-24
MW-55-35	014	8/6/2010	12:15	1.89E+03	2.46E+02	1.25E+02	4.38E+03	1.66E+01	1.65E+00	3.57E-01	6.11E+01	-4.27E-01	3.60E+00	9.69E+00	positive	4.31E+00	9.65E+00	1.22E+01	positive	9.65E+00	1.62E+01	1.81E+01	positive	MW-55-35
MW-55-54	015	8/6/2010	12:50	9.74E+03	5.22E+02	1.28E+02	1.28E+04	1.93E+01	1.88E+00	3.96E-01	5.28E+01	-1.51E+00	7.77E+00	8.25E+00	positive	1.82E+00	7.25E+00	8.71E+00	positive	-1.77E-01	1.41E+01	1.65E+01	positive	MW-55-54
MW-60-35	014	8/16/2010	14:43	2.32E+02	1.42E+02	1.41E+02	2.00E+03	3.19E-01	6.48E-01	7.39E-01	2.00E+00	1.02E-01	5.72E+00	6.47E+00	positive	-1.36E+00	6.23E+00	6.68E+00	positive	-4.52E+00	2.14E+01	2.52E+01	positive	MW-60-35
MW-60-53	014	8/16/2010	15:34	2.58E+02	1.50E+02	1.60E+02	2.00E+03	-2.84E-02	4.87E-01	6.04E-01	2.00E+00	-8.42E+00	7.92E+00	7.70E+00	positive	-2.64E+00	6.03E+00	6.02E+00	positive	-8.43E+00	1.98E+01	2.37E+01	positive	MW-60-53
MW-60-72	014	8/17/2010	11:59	2.33E+01	1.22E+02	1.44E+02	2.00E+03	1.97E-01	5.90E-01	6.91E-01	2.00E+00	-5.91E-01	5.40E+00	6.05E+00	positive	-1.59E+00	6.03E+00	6.57E+00	positive	1.19E+00	2.04E+01	2.37E+01	positive	MW-60-72
MW-60-135	014	8/17/2010	12:09	1.87E+02	1.39E+02	1.43E+02	2.00E+03	-2.74E-01	5.38E-01	7.27E-01	2.00E+00	-3.46E+00	3.41E+00	9.07E+00	positive	-1.52E+00	6.30E+00	6.70E+00	positive	8.77E-01	2.11E+01	2.45E+01	positive	MW-60-135
MW-60-154	014	8/17/2010	12:18	2.92E+02	1.50E+02	1.45E+02	2.00E+03	-2.33E-01	5.00E-01	6.01E-01	2.00E+00	-4.41E-01	5.04E+00	6.67E+00	positive	1.95E+00	6.73E+00	8.02E+00	positive	-1.16E+00	2.13E+01	2.48E+01	positive	MW-60-154
MW-60-176	014	8/17/2010	12:51	8.11E+02	1.91E+02	1.44E+02	2.00E+03	-6.59E-01	6.48E-01	9.01E-01	2.00E+00	1.23E-01	5.43E+00	7.32E+00	positive	1.35E+00	5.80E+00	6.97E+00	positive	0.00E+00	2.13E+01	2.48E+01	positive	MW-60-176

IPEC00263582

TABLE 4
2010 3rd QUARTER
GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE COLLECTION		ANALYSIS RESULTS: TRITIUM (pCi/L)				Sr-90 (pCi/L)				Cs-137 (pCi/L)				Co-60 (pCi/L)				Ni-63 (pCi/L)				Well ID
		Date	Time	Result	Std. Dev.[7]	MDC	I.L.[3]	Result	Std. Dev.[7]	MDC	I.L.[3]	Result	Std. Dev.[7]	MDC	I.L.[3]	Result	Std. Dev.[7]	MDC	I.L.[3]	Result	Std. Dev.[7]	MDC	I.L.[3]	
MW-62-18	014	8/3/2010	11:00	1.14E+02	1.32E+02	1.44E+02	2.00E+03	6.60E-01	6.55E-01	6.80E-01	2.00E+00	3.08E+00	3.40E+00	1.03E+01	positive	5.07E+00	1.02E+01	1.32E+01	positive	NA	NA	NA	positive	MW-62-18
MW-62-37	014	8/3/2010	12:52	1.91E+02	1.41E+02	1.47E+02	2.00E+03	-1.52E-02	5.47E-01	6.85E-01	2.00E+00	-9.69E-01	3.78E+00	9.70E+00	positive	-5.33E+00	9.12E+00	7.92E+00	positive	NA	NA	NA	positive	MW-62-37
MW-62-53	013	8/3/2010	12:20	1.59E+02	1.40E+02	1.47E+02	2.00E+03	3.13E-01	5.61E-01	6.32E-01	2.00E+00	2.99E+00	1.11E+01	1.33E+01	positive	2.39E-01	7.13E+00	8.24E+00	positive	NA	NA	NA	positive	MW-62-53
MW-62-71	014	8/3/2010	11:30	3.25E+02	1.70E+02	1.77E+02	2.00E+03	2.44E-01	3.75E-01	4.12E-01	2.00E+00	-2.03E+00	3.37E+00	8.93E+00	positive	1.86E+00	9.87E+00	1.16E+01	positive	NA	NA	NA	positive	MW-62-71
MW-62-92	014	8/3/2010	11:32	3.18E+02	1.68E+02	1.76E+02	2.00E+03	4.11E-01	5.37E-01	5.80E-01	2.00E+00	-3.42E+00	3.13E+00	8.33E+00	positive	-4.99E-01	7.59E+00	8.36E+00	positive	NA	NA	NA	positive	MW-62-92
MW-62-138	014	8/3/2010	14:09	5.91E+02	1.82E+02	1.76E+02	2.00E+03	1.47E+00	7.40E-01	6.56E-01	2.00E+00	3.83E+00	7.26E+00	8.95E+00	positive	-1.73E+00	7.35E+00	7.39E+00	positive	NA	NA	NA	positive	MW-62-138
MW-62-182	014	8/3/2010	14:02	2.78E+02	1.65E+02	1.75E+02	2.00E+03	2.87E-01	7.05E-01	8.30E-01	2.00E+00	-5.53E+00	1.24E+01	1.51E+01	positive	-9.25E-01	8.00E+00	8.64E+00	positive	NA	NA	NA	positive	MW-62-182
MW-63-18	014	8/10/2010	12:08	1.62E+02	1.58E+02	1.73E+02	2.00E+03	-1.55E-02	3.48E-01	4.72E-01	2.00E+00	-5.04E-01	7.20E+00	8.11E+00	positive	-2.17E+00	6.42E+00	6.45E+00	positive	NA	NA	NA	positive	MW-63-18
MW-63-34	014	8/10/2010	11:44	1.89E+02	1.64E+02	1.78E+02	2.00E+03	2.21E-01	3.59E-01	3.95E-01	2.00E+00	2.60E+00	9.29E+00	1.05E+01	positive	3.10E+00	7.21E+00	9.27E+00	positive	NA	NA	NA	positive	MW-63-34
MW-63-50	014	8/10/2010	14:32	2.72E+02	1.65E+02	1.75E+02	2.00E+03	-2.47E-02	5.47E-01	6.90E-01	2.00E+00	-1.32E+00	7.10E+00	7.82E+00	positive	7.73E-01	7.74E+00	8.96E+00	positive	NA	NA	NA	positive	MW-63-50
MW-63-93	015	8/10/2010	15:10	1.95E+02	1.61E+02	1.74E+02	2.00E+03	-1.91E-01	4.38E-01	6.16E-01	2.00E+00	1.24E+00	5.64E+00	7.70E+00	positive	2.61E-01	7.53E+00	8.40E+00	positive	NA	NA	NA	positive	MW-63-93
MW-63-112	014	8/10/2010	14:52	3.71E+02	1.72E+02	1.78E+02	2.00E+03	2.83E-01	4.37E-01	4.78E-01	2.00E+00	3.00E+00	7.68E+00	7.90E+00	positive	5.28E+00	9.73E+00	9.11E+00	positive	NA	NA	NA	positive	MW-63-112
MW-63-121	014	8/10/2010	11:28	5.39E+02	1.80E+02	1.77E+02	2.00E+03	3.67E-01	5.93E-01	6.58E-01	2.00E+00	-9.48E-01	3.12E+00	8.95E+00	positive	-6.58E-01	8.75E+00	9.58E+00	positive	NA	NA	NA	positive	MW-63-121
MW-63-163	014	8/10/2010	11:21	4.12E+02	1.74E+02	1.78E+02	2.00E+03	2.45E-01	4.43E-01	4.98E-01	2.00E+00	-5.87E-01	3.55E+00	9.17E+00	positive	-5.25E-01	8.23E+00	9.24E+00	positive	NA	NA	NA	positive	MW-63-163
MW-63-174	014	8/10/2010	11:40	3.31E+02	1.65E+02	1.71E+02	2.00E+03	3.54E-01	5.42E-01	6.01E-01	2.00E+00	-3.32E+00	7.07E+00	6.89E+00	positive	-1.41E+00	7.84E+00	8.11E+00	positive	NA	NA	NA	positive	MW-63-174
MW-66-21	014	8/9/2010	12:30	1.07E+03	2.01E+02	1.29E+02	1.33E+03	1.17E+00	5.52E-01	4.71E-01	2.00E+00	5.85E+00	9.45E+00	9.34E+00	1.80E+01	9.97E-01	8.07E+00	8.65E+00	positive	3.11E+00	1.19E+01	1.37E+01	positive	MW-66-21
MW-66-36	013	8/9/2010	11:47	3.08E+03	3.06E+02	1.24E+02	7.71E+03	6.40E+00	1.07E+00	3.74E-01	1.86E+01	-1.53E+00	3.82E+00	9.41E+00	positive	4.62E+00	7.61E+00	1.02E+01	positive	4.59E+00	1.58E+01	1.80E+01	positive	MW-66-36
MW-67-39	014	8/9/2010	10:43	3.37E+03	3.15E+02	1.22E+02	6.52E+03	8.52E+00	1.21E+00	5.69E-01	2.27E+01	-9.27E+00	1.08E+01	1.30E+01	positive	-1.39E+00	8.23E+00	8.77E+00	positive	-2.31E+00	1.43E+01	1.69E+01	positive	MW-67-39
MW-67-105	013	8/9/2010	10:37	1.26E+03	2.10E+02	1.24E+02	1.92E+03	2.61E+00	8.16E-01	6.26E-01	2.80E+00	1.46E+00	5.24E+00	7.43E+00	positive	1.75E+00	5.73E+00	7.28E+00	positive	9.56E+00	1.69E+01	1.90E+01	positive	MW-67-105
MW-67-173	014	8/9/2010	11:07	6.72E+02	1.71E+02	1.27E+02	1.61E+03	7.70E-02	4.44E-01	5.35E-01	2.00E+00	-7.06E-01	1.34E+01	1.63E+01	2.68E+01	6.44E-01	8.97E+00	1.04E+01	positive	-1.44E+00	1.14E+01	1.34E+01	1.68E+02	MW-67-173
MW-67-219	013	8/9/2010	11:33	1.11E+03	2.01E+02	1.25E+02	2.26E+03	9.94E-02	5.32E-01	6.41E-01	2.00E+00	-7.99E-01	3.14E+00	9.12E+00	positive	-6.19E+00	9.03E+00	8.33E+00	positive	2.34E+00	1.21E+01	1.39E+01	positive	MW-67-219
MW-67-276	013	8/9/2010	11:36	9.32E+02	1.86E+02	1.22E+02	2.01E+03	4.00E-01	4.66E-01	4.98E-01	2.00E+00	2.56E+00	7.22E+00	8.80E+00	positive	-2.39E+00	8.22E+00	8.27E+00	positive	9.94E+00	1.28E+01	1.42E+01	positive	MW-67-276
MW-67-323	013	8/9/2010	11:23	4.32E+02	1.48E+02	1.23E+02	1.00E+03	6.38E-01	6.31E-01	6.53E-01	2.00E+00	1.47E+00	5.88E+00	8.02E+00	positive	3.28E-01	6.72E+00	7.56E+00	positive	-4.51E+00	1.37E+01	1.61E+01	positive	MW-67-323
MW-67-340	013	8/9/2010	11:20	4.86E+02	1.52E+02	1.25E+02	1.01E+03	-3.81E-02	5.00E-01	6.29E-01	2.00E+00	1.20E+00	7.44E+00	8.75E+00	positive	-2.42E+00	6.93E+00	7.06E+00	positive	2.60E+00	1.45E+01	1.67E+01	positive	MW-67-340
MW-111	033	8/27/2010	15:21	3.86E+04	1.11E+03	1.28E+02	6.15E+04	6.44E-01	8.07E-01	8.55E-01	3.02E+00	-3.83E-01	5.30E+00	6.59E+00	positive	1.88E+00	5.70E+00	6.84E+00	positive	NA	NA	NA	positive	MW-111
MW-111	034	9/10/2010	14:09	4.69E+04	1.37E+03	1.40E+02	6.15E+04	1.80E+00	1.00E+00	8.02E-01	3.02E+00	-5.04E+00	5.84E+00	6.88E+00	positive	-5.62E-01	6.84E+00	7.62E+00	positive	NA	NA	NA	positive	MW-111
U3-4D	025	7/23/2010	11:21	6.84E+02	1.86E+02	1.77E+02	1.00E+03	-1.56E-01	4.60E-01	6.46E-01	2.00E+00	2.21E+00	7.56E+00	8.91E+00	positive	-1.01E+00	7.61E+00	8.14E+00	positive	NA	NA	NA	positive	U3-4D
U3-4S	001	7/23/2010	14:12	3.74E+02	1.74E+02	1.79E+02	**	3.76E-01	4.15E-01	4.21E-01	**	9.00E-01	3.51E+00	9.30E+00	**	1.89E+00	7.75E+00	9.37E+00	**	NA	NA	NA	**	U3-4S
U3-T1	029	7/26/2010	12:15	3.84E+02	1.74E+02	1.78E+02	1.00E+03	1.20E-02	3.91E-01	4.99E-01	2.08E+00	5.07E+00	7.68E+00	9.77E+00	positive	-6.61E-01	6.95E+00	7.49E+00	positive	NA	NA	NA	positive	U3-T1
U3-T2	034	7/26/2010	14:26	8.76E+02	1.92E+02	1.74E+02	2.08E+03	5.34E-01	6.12E-01	6.47E-01	3.52E+00	-2.12E+00	7.50E+00	7.69E+00	positive	2.29E+00	7.21E+00	8.84E+00	positive	NA	NA	NA	positive	U3-T2
U1-NCD	008	7/15/2010	9:10	1.35E+04	4.41E+02	1.58E+02	*	5.06E+01	3.21E+00	7.59E-01	*	1.14E+04	1.42E+03	1.40E+01	*	7.51E-01	5.21E+00	6.03E+00	*	2.90E+02	3.39E+01	2.40E+01	*	U1-NCD
U1-SFDS	009	7/7/2010	8:45	6.44E+02	1.80E+02	1.45E+02	*	1.88E+01	2.10E+00	6.82E-01	*	2.09E+01	1.26E+01	7.43E+00	*	1.64E+00	7.91E+00	9.44E+00	*	3.42E+00	2.24E+01	2.58E+01	*	U1-SFDS
I-2	001	8/2/2010	14:39	6.21E+01	1.52E+02	1.73E+02	**	2.56E-01	3.72E-01	5.25E-01	**	7.04E+00	7.80E+00	1.02E+01	**	9.34E-02	6.51E+00	7.19E+00	**	NA	NA	NA	**	I-2
MH-5 VCFD	010	8/5/2010	14:45	7.32E+02	1.89E+02	1.77E+02	*	5.37E-01	5.67E-01	5.84E-01	*	7.26E-01	7.72E+00	8.69E+00	*	-2.26E+00	6.93E+00	7.07E+00	*	NA	NA	NA	*	MH-5 VCFD
MH-5 VCFD	011	8/30/2010	11:30	9.96E+03	5.48E+02	1.26E+02	*	1.25E-01	3.21E-01	3.81E-01	*	1.50E+00	5.58E+00	6.43E+00	*	8.08E-01	6.51E+00	7.50E+00	*	NA	NA	NA	*	MH-5 VCFD
MH-5 VCFD	012	9/10/2010	15:30	8.80E+02	1.89E+02	1.25E+02	*	3.60E-01	6.35E-01	7.11E-01	*	7.21E-01	5.45E+00	7.44E+00	*	1.23E+00	5.71E+00	6.85E+00	*	NA	NA	NA	*	MH-5 VCFD
B-1	009	8/17/2010	15:40	1.40E+04	6.48E+02	1.27E+02	*	1.25E-01	6.42E-01	7.91E-01	*	2.27E+01	1.06E+01	5.87E+00	*	2.96E+00	6.00E+00	7.45E+00	*	NA	NA	NA	*	B-1
B-6	009	8/5/2010	11:43	1.49E+02	1.62E+02	1.79E+02	*	1.12E-01	8.02E-01	9.78E-01	*	2.32E+00	5.57E+00	8.03E+00	*	-9.21E-02	8.23E+00	9.37E+00	*	NA	NA	NA	*	B-6

Notes
1 For nested multi-level monitoring wells, suffix of well ID indicates depth (rounded to nearest foot) from reference point on casing to bottom of well screen. For Waterloo multi-level systems, suffix indicates depth (rounded to nearest foot) from reference point on casing to top of sampling port. Well IDs without a suffix are open bedrock wellbores
2 Sampling depths within sampling intervals (location of pump intake) have been established at location of most transmissive zone to the extent possible
3 I.L.s (Investigation Levels) are predetermined detection limits assigned to each sampling location which, if reached or exceeded, require further investigation or action. I.L.s presented here are established for 2010 based on 2009 averages. Positive detections indicate that the the result is greater than MDC and greater than or equal to 3 times the 1 sigma uncertainty
4 NA indicates that the constituent was not analyzed
5 Dot pattern denotes sampling interval is positioned within overburden soils. Open box indicates sampling interval is in bedrock
6 Shading indicates that the sample result exceeds the Investigation Level
7 Column heading of "Std. Dev." designate a value of three times the 1 sigma
* Indicates storm or foundation drain sampling locations for which Investigation Levels are not applicable
** Indicates 2010 I.L not computed for this well due to absence of 2009 data

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-30-69	001	69.3	6.4	1/30/2006	15:40	2.37E+05	2.76E+04	6.26E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-30-69
	003	69.3	6.4	6/23/2006	10:50	3.92E+05	3.35E+04	6.02E+03	3.34E-02	8.24E-01	1.09E+00	2.96E+01	1.40E-01	1.14E+01	4.23E+00	9.93E+00	1.14E+01	1.02E+01	1.27E+01	1.36E+01	
	004	69.3	6.4	8/18/2006	14:45	2.20E+05	4.20E+03	1.10E+03	8.14E-01	1.40E+00	1.52E+00	-7.33E+00	1.40E-01	1.41E+01	3.91E+00	1.51E+01	1.78E+01	NA	NA	NA	
	005	69.3	6.4	11/29/2006	10:45	1.06E+05	1.86E+03	5.30E+02	2.50E+00	8.40E-01	8.10E-01	3.13E+03	3.30E-01	5.00E+00	1.20E+00	2.28E+00	2.50E+00	1.15E+01	1.26E+01	1.40E+01	
	006	69.3	6.4	1/16/2007	14:05	8.17E+04	8.73E+03	6.34E+02	-1.60E-01	1.47E+00	1.60E+00	0.00E+00	2.10E+00	2.40E+00	-4.30E-01	2.07E+00	2.50E+00	7.07E+00	1.94E+01	2.20E+01	
	007	69.3	6.4	6/12/2007	10:20	2.97E+05	8.73E+03	6.34E+02	-2.63E-01	4.19E-01	6.45E-01	3.93E-01	3.75E+00	4.09E+00	6.88E-02	4.08E+00	3.94E+00	NA	NA	NA	
	008	69.3	6.4	7/18/2007	9:55	8.21E+04	2.46E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	69.3	6.4	3/1/2007	11:44	1.03E+05	3.09E+03	6.40E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	011	69.3	6.4	3/8/2007	10:00	9.96E+04	2.99E+03	6.32E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	012	69.3	6.4	8/15/2007	11:00	2.33E+05	6.99E+03	6.33E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	013	69.3	6.4	8/21/2007	9:45	1.07E+05	3.21E+03	7.05E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	014	69.3	6.4	8/30/2007	11:32	9.80E+04	2.94E+03	7.03E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	015	69.3	6.4	9/19/2007	11:00	9.20E+04	2.76E+03	7.02E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	016	69.3	6.4	10/23/2007	11:48	1.32E+05	3.90E+03	4.24E+02	2.32E-01	6.16E-01	7.12E-01	2.42E+00	5.76E+00	4.45E+00	-5.09E-01	3.66E+00	3.86E+00	NA	NA	NA	
	017	69.3	6.4	2/4/2008	13:00	1.87E+05	5.51E+03	3.95E+02	1.57E-01	6.98E-01	8.57E-01	1.26E+00	3.05E+00	3.56E+00	-6.00E-01	3.63E+00	3.28E+00	NA	NA	NA	
	018	69.3	6.4	5/6/2008	11:00	1.53E+05	3.01E+03	4.06E+02	3.34E-01	3.98E-01	6.71E-01	4.94E-01	1.83E+00	3.21E+00	-5.70E-01	1.71E+00	2.73E+00	NA	NA	NA	
	019	69.3	6.4	6/6/2008	11:01	7.36E+04	2.02E+03	5.06E+02	2.02E-01	3.20E-01	5.59E-01	-9.82E-01	2.10E+00	3.27E+00	4.91E-01	2.24E+00	3.85E+00	NA	NA	NA	
	020	69.3	6.4	3/5/2008	11:22	1.99E+05	3.92E+03	4.95E+02	2.09E-01	3.07E-01	5.34E-01	-1.57E-01	1.42E+00	2.38E+00	1.11E+00	1.28E+00	2.33E+00	NA	NA	NA	
	021	69.3	6.4	9/3/2008	11:29	8.53E+04	2.03E+03	5.50E+02	-3.12E-01	5.12E-01	9.72E-01	-1.89E+00	2.22E+00	3.36E+00	NA	NA	NA	NA	NA	NA	
	022	69.3	6.4	11/7/2008	10:27	9.55E+04	2.85E+03	3.06E+02	4.09E-01	5.53E-01	6.01E-01	7.83E-01	3.09E+00	3.66E+00	-1.07E-01	2.65E+00	2.85E+00	NA	NA	NA	
	023	69.3	6.4	1/30/2009	11:00	1.07E+05	2.51E+03	1.98E+02	-8.74E-02	7.58E-01	9.73E-01	-1.13E+00	2.61E+00	2.66E+00	1.06E+00	2.70E+00	3.24E+00	NA	NA	NA	
	024	69.3	6.4	4/27/2009	10:27	1.00E+05	3.65E+03	4.02E+02	-1.54E-01	4.28E-01	6.01E-01	1.49E+00	7.11E+00	4.74E+00	-2.78E-01	4.19E+00	4.60E+00	NA	NA	NA	
	025	69.3	6.4	6/1/2009	12:02	8.20E+04	3.21E+03	3.77E+02	3.12E-01	5.63E-01	6.32E-01	2.16E+00	9.80E+00	6.53E+00	8.26E-01	6.47E+00	7.42E+00	NA	NA	NA	
	026	69.3	6.4	3/6/2009	12:16	1.64E+05	4.77E+03	2.96E+02	6.79E-02	6.10E-01	7.41E-01	-2.09E+00	8.32E+00	7.30E+00	-2.07E+00	9.44E+00	9.70E+00	NA	NA	NA	
	027	69.3	6.4	9/12/2009	10:45	9.91E+04	2.91E+03	2.67E+02	-3.43E-02	6.45E-01	8.50E-01	-9.52E-01	5.52E+00	6.11E+00	4.45E+00	6.13E+00	7.88E+00	NA	NA	NA	
	028	69.3	6.4	11/9/2009	11:21	9.01E+04	2.63E+03	1.78E+02	-4.26E-01	6.63E-01	8.14E-01	-1.87E-01	5.47E+00	6.20E+00	-2.47E-01	6.03E+00	6.76E+00	NA	NA	NA	
	029	69.3	6.4	1/27/2010	11:30	1.25E+05	3.99E+03	6.15E+02	3.42E-02	7.18E-01	8.83E-01	-3.23E-01	3.36E+00	3.68E+00	2.05E-01	3.17E+00	3.57E+00	NA	NA	NA	
	030	69.3	6.4	2/24/2010	12:35	1.36E+05	2.01E+03	2.05E+02	-7.42E-02	3.54E-01	5.00E-01	6.84E-01	3.79E+00	4.26E+00	-1.38E+00	3.65E+00	3.73E+00	NA	NA	NA	
	031	69.3	6.4	4/29/2010	12:55	1.61E+05	4.67E+03	2.78E+02	-1.31E-01	7.56E-01	9.40E-01	-2.29E+00	5.33E+00	5.59E+00	2.06E+00	5.37E+00	6.58E+00	NA	NA	NA	
	032	69.3	6.4	6/8/2010	12:32	1.52E+05	4.49E+03	4.80E+02	2.56E-01	4.79E-01	5.40E-01	-1.20E+00	6.55E+00	7.22E+00	-1.72E-01	5.45E+00	5.99E+00	NA	NA	NA	
	033	69.3	6.4	7/28/2010	12:33	1.28E+05	3.72E+03	1.80E+02	9.14E-02	5.26E-01	6.35E-01	-5.08E-01	9.69E+00	1.09E+01	1.67E+00	7.46E+00	9.20E+00	NA	NA	NA	
	034	69.3	6.4	8/20/2010	15:08	1.11E+05	3.24E+03	2.02E+02	3.53E-01	7.80E-01	9.08E-01	-3.14E+00	5.22E+00	5.12E+00	-2.41E+00	5.25E+00	5.03E+00	NA	NA	NA	
	035	69.3	6.4	9/8/2010	12:35	1.23E+05	3.65E+03	4.47E+02	1.93E-01	4.41E-01	5.14E-01	-1.10E+00	4.42E+00	4.87E+00	1.40E+00	4.72E+00	5.73E+00	NA	NA	NA	
MW-30-84	001	83.8	-8.1	8/22/2006	13:15	1.25E+04	2.43E+03	1.61E+03	-1.60E-01	9.82E-01	1.13E+00	1.88E+00	1.09E-01	1.24E+01	-2.52E+00	1.00E+01	1.03E+01	NA	NA	NA	MW-30-84
	002	83.8	-8.1	11/29/2006	14:30	1.01E+04	1.59E+03	1.10E+03	-9.40E-01	7.80E-01	8.70E-01	2.94E+02	1.68E-01	5.00E+00	-3.00E-01	3.90E+00	4.80E+00	4.10E+00	1.17E+01	1.30E+01	
	003	83.8	-8.1	1/17/2007	9:45	7.33E+03	7.50E+02	5.30E+02	4.80E-01	1.50E+00	1.60E+00	1.18E+00	2.61E+00	2.90E+00	0.00E+00	2.91E+00	3.40E+00	NA	NA	NA	
	004	83.8	-8.1	6/12/2007	10:19	7.79E+03	9.47E+02	4.42E+02	-1.49E-01	4.44E-01	6.41E-01	-1.06E+00	2.29E+00	2.41E+00	-6.93E-01	2.38E+00	2.54E+00	-3.57E+00	1.74E+01	2.03E+01	
	005	83.8	-8.1	7/18/2007	10:25	4.80E+03	7.20E+02	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	006	83.8	-8.1	7/25/2007	13:00	5.02E+03	4.49E+02	2.43E+02	1.56E-01	3.09E-01	3.48E-01	2.83E+00	3.38E+00	2.84E+00	2.03E+00	2.91E+00	3.57E+00	NA	NA	NA	
	007	83.8	-8.1	10/23/2007	12:49	4.27E+03	7.38E+02	4.03E+02	5.95E-01	5.53E-01	5.59E-01	1.56E+00	2.81E+00	3.38E+00	-1.17E+00	3.72E+00	3.27E+00	NA	NA	NA	
	008	83.8	-8.1	2/4/2008	14:16	4.34E+03	2.61E+02	1.32E+02	-4.08E-01	4.55E-01	7.47E-01	-1.00E+00	2.55E+00	2.73E+00	-4.32E-01	2.97E+00	2.79E+00	NA	NA	NA	
	009	83.8	-8.1	5/6/2008	13:40	4.18E+03	2.83E+02	2.20E+02	3.26E-01	3.86E-01	6.51E-01	4.43E-01	2.37E+00	4.00E+00	-1.91E+00	2.53E+00	3.69E+00	NA	NA	NA	
	010	83.8	-8.1	6/6/2008	12:10	3.85E+03	5.33E+02	5.04E+02	1.54E-01	2.46E-01	4.34E-01	-8.97E-01	2.16E+00	3.57E+00	2.05E+00	2.31E+00	4.29E+00	NA	NA	NA	
	020	83.8	-8.1	3/5/2008	14:40	4.31E+03	2.28E+02	1.94E+02	2.77E-01	2.86E-01	4.67E-01	-1.87E-01	1.44E+00	2.35E+00	-1.04E-01	2.12E+00	2.66E+00	NA	NA	NA	
	021	83.8	-8.1	9/3/2008	11:59	3.78E+03	5.13E+02	5.35E+02	-4.62E-02	4.61E-01	9.06E-01	-3.02E-01	1.73E+00	2.89E+02	NA	NA	NA	NA	NA	NA	
	013	83.8	-8.1	11/7/2008	10:50	5.25E+03	3.23E+02	1.64E+02	1.07E-02	5.75E-01	7.61E-01	6.64E-01	4.63E+00	5.37E+00	2.13E+00	5.34E+00	6.53E+00	NA	NA	NA	
	014	83.8	-8.1	1/30/2009	11:21	4.69E+03	5.48E+02	1.99E+02	9.38E-02	5.97E-01	7.19E-01	8.97E+00	4.34E+00	3.02E+00	-8.43E-02	3.39E+00	3.81E+00	NA	NA	NA	
	015	83.8	-8.1	4/27/2009	14:30	5.34E+03	9.08E+02	4.11E+02	-1.19E-01	4.70E-01	6.29E-01	1.13E+00	6.54E+00	4.36E+00	1.33E+00	3.72E+00	4.50E+00	NA	NA	NA	
	016	83.8	-8.1	6/1/2009	13:25	5.83E+03	9.02E+02	3.76E+02	1.34E-01	7.19E-01	8.22E-01	3.90E-01	1.01E-01	6.75E+00	8.79E-02	6.06E+00	6.80E+00	NA	NA	NA	
	017	83.8	-8.1	3/6/2009	12:38	7.76E+03	5.03E+02	1.60E+02	6.08E-02	7.47E-01	9.19E-01	1.88E+00	4.82E+00	5.65E+00	-5.55E+00	6.12E+00	4.95E+00	NA	NA	NA	
	018	83.8	-8.1	9/12/2009	12:22	6.75E+03	3.89E+02	1.53E+02	-6.42E-02	7.28E-01	8.91E-01	1.76E+00	9.09E+00	5.02E+00	-7.70E-01	5.29E+00	5.82E+00	NA	NA	NA	
	019	83.8	-8.1	11/9/2009	12:27	6.27E+03	3.36E+02	9.70E+01	8.84E-02	7.33E-01	8.42E-01	2.06E-01	5.92E+00	6.74E+00	-3.17E+00	5.33E+00	4.98E+00	NA	NA	NA	
	020	83.8	-8.1	1/27/2010	12:15	6.60E+03	1.07E+03	6.37E+02	-1.64E-01	2.43E-01	4.02E-01	3.93E-01	3.06E+00	3.41E+00	-8.46E-01	3.03E+00	3.19E+00	NA	NA	NA	
	021	83.8	-8.1	2/24/2010	12:44	6.94E+03	3.63E+02	1.68E+02	1.30E-01	4.23E-01	5.06E-01	1.17E+00	4.58E+00	5.35E+00	9.09E-01	4.74E+00	5.54E+00	NA	NA	NA	
	022	83.8	-8.1	4/29/2010	13:46	9.56E+03	5.40E+02	1.48E+02	4.08E-01	8.33E-01	9.56E-01	-3.84E-01	5.71E+00	6.36E+00	2.19E+00	5.36E+00	6.57E+00	NA	NA	NA	
	023	83.8	-8.1	6/8/2010	12:19	9.40E+03	4.37E+02	2.14E+02	2.01E-01	4.85E-01	5.52E-01	7.20E-01	5.49E+00	6.21E+00	-4.01E+00	6.36E+00	6.10E+00	NA	NA	NA	
	024	83.8	-8.1	7/28/2010	13:07	9.26E+03	5.09E+02	1.01E+02	4.48E-01	7.63E-01	8.52E-01	-1.46E+00	9.30E+00	1.02E+01	-3.03E-01	9.79E+00	1.08E+01	NA	NA	NA	
	025	83.8	-8.1	8/20/2010	16:51	1.00E+04	5.57E+02	1.29E+02	5.65E-01	8.70E-01	9.53E-01	3.22E+00	6.27E+00	7.54E+00	-3.97E+00	6.69E+00	6.20E+00	NA	NA	NA	
	026	83.8	-8.1	9/8/2010	13:14	1.01E+04	4.32E+02	2.10E+02	3.18E-01	6.20E-01	7.05E-01	-1.48E+00	6.18E+00	6.74E+00	-4.19E-01	7.65E+00	8.58E+00	NA	NA	NA	
MW-31-49	001	48.8	26.8	11/27/2006	11:45	2.98E+02	1.74E+02	1.70E+02	0.00E+00	1.29E+00	1.40E+00	NA	NA	NA	1.30E+00	3.60E+00	4.00E+00	1.42E+02	1.65E+02	1.80E+02	MW-31-49
	002	48.8	26.8	1/18/2007	9:13	1.20E+03	5.70E+02	5.30E+02	3.00E-01	1.62E+00	1.80E+00	NA	NA	NA	-2.10E+00	8.10E+00	9.50E+00	NA	NA	NA	
	003	48.8	26.8	6/12/2007	14:24	1.48E+03	5.24E+02	4.37E+02	-1.51E-01	5.49E-01	7.52E-01	1.83E-01	2.12E+00	2.35E+00	1.26E-01	2.01E+00	2.26E+00	0.00E+00	1.11E+01	1.29E+01	
	004	48.8	26.8	3/2/2007	10:23	1.19E+04	1.27E+03	5.43E+02	-5.17E-01	7.89E-01	9.55E-01	8.83E+01	1.35E-01	3.31E+00	1.80E-01	3.63E+00	4.11E+00	NA	NA	NA	
	005	48.8	26.8	9/11/2007	13:10	6.98E+03	3.27E+02	1.59E+02	-2.26E-01	4.23E-01	6.01E-01	-1.20E+00	3.04E+00	3.24E+00	0.00E+00	4.96E+00	4.75E+00	NA	NA	NA	
	006	48.8	26.8	10/24/2007	15:50	8.77E+03	9.99E+02	4.00E+02	5.14E-02	4.26E-01	5.36E-01	-6.76E-01	3.94E+00	3.57E+00	1.35E+00	3.21E+00	3.52E+00	NA	NA	NA	
	007	48.8	26.8	1/16/2008	10:31	3.97E+02	1.94E+02	1.77E+02	-9.14E-02	6.86E-01	8.97E-01	-1.17E+00	4.74E+00	5.07E+00	-9.76E-01	4.41E+00	4.65E+00	NA	NA	NA	
	009	48.8	26.8	6/6/2008	15:05	3.04E+04	1.34E+03	4.69E+02	2.83E-01	3.39E-01	5.72E-01	1.11E+00	1.93E+00	3.47E+00	1.72E+00	2.01E+00	3.82E+00	NA	NA	NA	

See Page 29 for Notes

IPEC00263585

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-31-49	010	48.8	26.8	3/7/2008	12:43	5.94E+02	1.33E+02	1.92E+02	2.39E-01	2.67E-01	4.43E-01	7.07E-01	1.30E+00	2.23E+00	7.08E-01	1.49E+00	2.56E+00	NA	NA	NA	MW-31-49
	011	48.8	26.8	8/30/2008	11:55	1.36E+04	8.61E+02	5.53E+02	4.16E-01	4.80E-01	8.06E-01	1.27E+00	3.63E+00	3.09E+00	NA	NA	NA	NA	NA	NA	
	012	48.8	26.8	10/30/2008	11:30	6.43E+02	2.25E+02	1.71E+02	7.64E-02	1.71E-01	1.93E-01	1.39E+00	6.27E+00	7.25E+00	-9.09E-01	6.40E+00	6.88E+00	NA	NA	NA	
	013	48.8	26.8	11/18/2008	11:15	7.77E+02	1.79E+02	1.62E+02	4.11E-01	6.30E-01	6.97E-01	1.21E+00	4.18E+00	5.03E+00	9.78E-01	4.93E+00	5.84E+00	NA	NA	NA	
	014	48.8	26.8	2/6/2009	11:05	1.11E+04	7.86E+02	1.99E+02	1.18E-01	3.00E-01	3.57E-01	-1.67E-01	2.97E+00	3.35E+00	-4.61E-01	2.85E+00	3.14E+00	NA	NA	NA	
	015	48.8	26.8	4/14/2009	10:36	4.84E+04	1.42E+03	1.56E+02	4.85E-01	5.63E-01	5.97E-01	-5.81E-01	6.18E+00	4.12E+00	1.44E+00	3.90E+00	4.67E+00	NA	NA	NA	
	016	48.8	26.8	5/29/2009	11:42	9.34E+03	1.12E+03	3.77E+02	5.72E-01	5.75E-01	6.24E-01	-7.86E-01	9.50E+00	6.33E+00	-1.48E+00	6.63E+00	7.11E+00	NA	NA	NA	
	017	48.8	26.8	7/21/2009	11:53	7.36E+02	2.61E+02	2.27E+02	1.91E-01	5.01E-01	5.96E-01	-1.36E+00	3.38E+00	3.60E+00	1.04E+00	3.92E+00	4.66E+00	NA	NA	NA	
	019	48.8	26.8	9/14/2009	11:13	3.14E+04	9.35E+02	1.70E+02	-3.21E-02	7.29E-01	9.36E-01	-1.97E+00	5.31E+00	5.51E+00	3.23E+00	4.71E+00	6.12E+00	NA	NA	NA	
	020	48.8	26.8	10/22/2009	12:58	4.58E+04	8.63E+02	1.63E+02	5.63E-01	8.72E-01	9.67E-01	2.29E-01	6.17E+00	6.84E+00	-4.70E-01	6.15E+00	6.61E+00	NA	NA	NA	
	021	48.8	26.8	1/26/2010	12:07	4.46E+02	1.35E+02	1.12E+02	1.88E-01	7.59E-01	9.05E-01	-4.18E-01	5.33E+00	4.07E+00	-1.34E+00	3.84E+00	3.99E+00	NA	NA	NA	
	022	48.8	26.8	3/5/2010	11:30	4.89E+02	1.71E+02	1.69E+02	1.47E-02	3.51E-01	4.50E-01	-4.63E-01	4.53E+00	5.10E+00	1.18E+00	4.83E+00	5.71E+00	NA	NA	NA	
	023	48.8	26.8	4/14/2010	10:42	1.16E+04	3.90E+02	1.00E+02	1.18E-01	4.62E-01	5.72E-01	-2.95E+00	8.54E+00	9.00E+00	9.25E-03	8.91E+00	9.95E+00	NA	NA	NA	
	024	48.8	26.8	6/7/2010	11:30	1.73E+04	5.79E+02	2.22E+02	3.41E-01	7.95E-01	9.18E-01	-3.80E+00	7.42E+00	7.51E+00	1.82E+00	6.72E+00	8.03E+00	NA	NA	NA	
	025	48.8	26.8	7/27/2010	14:43	5.46E+04	1.59E+03	1.21E+02	3.05E-01	4.71E-01	5.22E-01	2.74E+00	1.17E-01	1.40E+01	2.23E+00	8.03E+00	9.96E+00	NA	NA	NA	
	026	48.8	26.8	8/23/2010	12:11	4.11E+03	3.56E+02	1.23E+02	1.62E-01	7.89E-01	9.57E-01	-1.21E+00	5.42E+00	5.91E+00	-3.35E-02	5.19E+00	5.80E+00	NA	NA	NA	
	027	48.8	26.8	9/7/2010	13:49	1.04E+05	3.02E+03	1.68E+02	-1.15E-01	2.82E-01	4.23E-01	3.35E+00	5.52E+00	6.68E+00	2.16E+00	5.97E+00	7.20E+00	NA	NA	NA	
MW-31-63	001	63.3	12.3	11/27/2006	12:10	6.89E+03	1.44E+03	1.10E+03	5.30E-01	1.26E+00	1.40E+00	1.99E+02	9.60E+00	3.60E+00	6.80E-01	2.94E+00	3.40E+00	4.10E+01	1.17E+02	1.30E+02	MW-31-63
	002	63.3	12.3	1/18/2007	9:25	1.41E+04	9.00E+02	5.20E+02	-6.50E-01	1.50E+00	1.70E+00	-4.00E-01	3.00E+00	3.50E+00	-4.50E-01	2.91E+00	3.50E+00	NA	NA	NA	
	003	63.3	12.3	6/12/2007	14:20	5.00E+03	7.85E+02	4.38E+02	4.72E-01	6.36E-01	6.78E-01	-5.01E-01	1.92E+00	2.09E+00	-8.78E-02	1.97E+00	2.20E+00	3.37E+00	1.89E+01	2.17E+01	
	004	63.3	12.3	3/2/2007	11:15	4.06E+04	2.27E+03	5.53E+02	-1.41E-01	7.84E-01	9.53E-01	1.20E+00	3.56E+00	4.18E+00	-3.09E-02	4.41E+00	4.23E+00	NA	NA	NA	
	005	63.3	12.3	9/11/2007	13:25	3.77E+04	1.13E+03	2.20E+02	-1.37E-01	4.52E-01	6.15E-01	-4.39E-01	3.51E+00	3.80E+00	-8.64E-01	3.92E+00	3.44E+00	NA	NA	NA	
	006	63.3	12.3	10/24/2007	14:55	3.58E+04	1.94E+03	4.00E+02	-1.63E-01	4.58E-01	6.34E-01	1.07E+00	5.31E+00	4.01E+00	1.01E+00	3.40E+00	4.11E+00	NA	NA	NA	
	007	63.3	12.3	1/16/2008	11:32	1.24E+04	7.35E+02	1.80E+02	-6.88E-02	5.34E-01	7.44E-01	-2.49E-01	4.04E+00	4.40E+00	-9.08E-01	4.19E+00	4.32E+00	NA	NA	NA	
	009	63.3	12.3	6/6/2008	16:16	1.02E+04	7.92E+02	5.04E+02	1.44E-01	3.40E-01	6.17E-01	-1.15E+00	2.11E+00	3.36E+00	2.47E+00	2.31E+00	4.45E+00	NA	NA	NA	
	010	63.3	12.3	3/7/2008	11:22	1.76E+04	4.17E+02	1.94E+02	-2.12E-01	2.61E-01	5.89E-01	-1.86E-01	1.28E+00	2.16E+00	3.73E-01	1.43E+00	2.49E+00	NA	NA	NA	
	011	63.3	12.3	8/30/2008	12:34	2.21E+04	1.07E+03	5.49E+02	-6.34E-01	4.35E-01	9.79E-01	3.76E-01	2.35E+00	4.04E+00	NA	NA	NA	NA	NA	NA	
	012	63.3	12.3	10/30/2008	12:14	2.30E+04	1.08E+03	1.73E+02	2.28E-01	2.33E-01	2.52E-01	2.21E+00	6.18E+00	7.37E+00	-1.47E+00	7.26E+00	7.77E+00	NA	NA	NA	
	013	63.3	12.3	11/18/2008	11:58	2.55E+04	8.07E+02	1.84E+02	3.95E-01	7.40E-01	8.36E-01	1.02E-02	5.89E+00	6.01E+00	-5.18E-01	6.54E+00	6.97E+00	NA	NA	NA	
	014	63.3	12.3	2/6/2009	11:53	1.28E+04	8.39E+02	1.97E+02	6.43E-01	6.42E-01	6.82E-01	-1.32E+00	3.42E+00	3.63E+00	-7.48E-01	3.86E+00	4.17E+00	NA	NA	NA	
	015	63.3	12.3	4/14/2009	12:07	3.24E+04	1.10E+03	1.48E+02	2.95E-01	6.81E-01	7.75E-01	1.76E+00	6.68E+00	4.45E+00	2.23E+00	3.87E+00	4.79E+00	NA	NA	NA	
	016	63.3	12.3	5/29/2009	12:34	3.16E+04	9.51E+02	1.95E+02	5.59E-01	5.58E-01	6.07E-01	1.79E+00	1.07E-01	7.12E+00	7.44E-01	6.45E+00	7.35E+00	NA	NA	NA	
	017	63.3	12.3	7/21/2009	12:50	1.45E+04	8.28E+02	2.31E+02	1.95E-01	7.52E-01	9.11E-01	3.48E-01	3.90E+00	4.37E+00	-1.56E+00	3.88E+00	3.75E+00	NA	NA	NA	
	018	63.3	12.3	9/1/2009	10:50	1.41E+04	5.09E+02	2.13E+02	1.51E-01	3.55E-01	4.13E-01	-1.38E+00	6.76E+00	6.17E+00	6.92E-01	5.01E+00	5.74E+00	NA	NA	NA	
	019	63.3	12.3	9/14/2009	12:45	1.41E+04	5.48E+02	1.55E+02	8.11E-01	8.72E-01	9.25E-01	-1.96E+00	4.75E+00	5.05E+00	-1.40E+00	5.87E+00	6.29E+00	NA	NA	NA	
	020	63.3	12.3	10/22/2009	13:20	2.00E+04	5.85E+02	1.67E+02	1.10E+00	7.45E-01	7.37E-01	1.92E-01	5.92E+00	6.75E+00	2.27E+00	6.42E+00	7.79E+00	NA	NA	NA	
	021	63.3	12.3	1/26/2010	13:08	3.36E+04	2.21E+03	6.66E+02	5.46E-01	8.55E-01	9.50E-01	1.63E+00	3.12E+00	3.68E+00	-1.56E+00	3.36E+00	3.52E+00	NA	NA	NA	
	022	63.3	12.3	3/5/2010	12:17	7.35E+04	1.11E+03	1.72E+02	1.20E-01	3.38E-01	4.02E-01	2.57E+00	4.49E+00	5.38E+00	-3.85E+00	4.62E+00	4.24E+00	NA	NA	NA	
	023	63.3	12.3	4/14/2010	13:05	1.84E+04	5.46E+02	1.08E+02	-1.50E-01	4.43E-01	6.61E-01	-4.58E+00	9.18E+00	9.12E+00	2.75E-01	9.97E+00	1.12E+01	NA	NA	NA	
	024	63.3	12.3	6/7/2010	12:19	5.11E+04	1.53E+03	2.93E+02	3.68E-01	8.04E-01	9.11E-01	2.95E+00	5.94E+00	7.20E+00	9.47E-01	6.12E+00	7.09E+00	NA	NA	NA	
	025	63.3	12.3	7/27/2010	15:54	6.17E+04	1.80E+03	1.27E+02	5.31E-01	6.45E-01	6.89E-01	-1.81E+00	8.27E+00	8.91E+00	1.22E+00	7.33E+00	8.70E+00	NA	NA	NA	
	026	63.3	12.3	8/23/2010	13:11	6.69E+04	1.95E+03	1.60E+02	4.60E-01	7.62E-01	8.48E-01	1.77E+00	6.11E+00	7.13E+00	-1.67E+00	6.17E+00	6.44E+00	NA	NA	NA	
	027	63.3	12.3	9/7/2010	15:28	4.65E+04	1.41E+03	1.46E+02	3.99E-01	7.26E-01	8.18E-01	4.05E-01	4.75E+00	5.31E+00	-1.47E+00	5.45E+00	5.56E+00	NA	NA	NA	
MW-31-85	001	84.8	-9.2	11/27/2006	12:20	4.62E+02	1.74E+02	1.70E+02	1.50E-01	1.44E+00	1.60E+00	1.52E+02	8.40E+00	3.20E+00	2.10E-01	2.19E+00	2.50E+00	2.20E+01	9.30E+01	1.00E+02	MW-31-85
	002	84.8	-9.2	1/18/2007	9:16	2.66E+03	6.00E+02	5.20E+02	-5.90E-01	1.59E+00	1.80E+00	-4.90E+00	8.70E+00	1.00E+01	-6.00E-01	8.70E+00	1.00E+01	8.35E+00	2.11E+01	2.39E+01	
	003	84.8	-9.2	6/12/2007	14:05	3.17E+02	1.62E+02	1.69E+02	-3.83E-01	6.62E-01	9.31E-01	3.95E-01	2.76E+00	1.91E+00	-5.71E-01	1.69E+00	1.83E+00	NA	NA	NA	
	004	84.8	-9.2	3/2/2007	10:58	2.69E+03	7.11E+02	5.31E+02	-7.29E-01	6.31E-01	9.31E-01	-5.01E-02	3.29E+00	3.59E+00	-1.90E+00	3.35E+00	3.31E+00	NA	NA	NA	
	005	84.8	-9.2	9/11/2007	13:20	4.32E+03	3.32E+02	1.82E+02	6.86E-01	7.48E-01	7.93E-01	-7.04E-01	3.04E+00	3.26E+00	-3.07E+00	3.68E+00	3.24E+00	NA	NA	NA	
	006	84.8	-9.2	10/24/2007	14:40	5.51E+03	8.15E+02	3.98E+02	2.53E-01	4.08E-01	4.51E-01	5.68E-01	2.90E+00	3.38E+00	4.76E-01	2.75E+00	3.19E+00	NA	NA	NA	
	007	84.8	-9.2	1/16/2008	11:26	1.31E+03	2.81E+02	1.84E+02	6.97E-01	7.67E-01	7.79E-01	2.68E+00	4.05E+00	4.83E+00	1.90E+00	3.80E+00	4.62E+00	NA	NA	NA	
	009	84.8	-9.2	6/6/2008	15:26	5.95E+03	6.30E+02	5.05E+02	1.52E-01	3.17E-01	5.69E-01	-8.07E-01	2.20E+00	3.45E+00	1.91E+00	2.45E+00	4.58E+00	NA	NA	NA	
	010	84.8	-9.2	3/7/2008	11:13	2.30E+03	1.83E+02	1.94E+02	1.07E-01	2.87E-01	5.30E-01	-6.47E-01	1.22E+00	1.94E+00	1.63E-02	1.31E+00	2.18E+00	NA	NA	NA	
	011	84.8	-9.2	8/30/2008	12:08	8.34E+03	7.00E+02	5.52E+02	4.46E-01	4.87E-01	8.10E-01	-5.50E-01	1.86E+00	3.07E+00	NA	NA	NA	NA	NA	NA	
	012	84.8	-9.2	10/30/2008	12:09	3.89E+03	4.52E+02	1.67E+02	4.08E-01	7.33E-01	8.25E-01	-5.63E+00	6.17E+00	4.73E+00	-4.82E+00	6.98E+00	6.56E+00	NA	NA	NA	
	013	84.8	-9.2	11/18/2008	12:00	4.41E+03	2.97E+02	1.61E+02	-2.44E-01	5.37E-01	8.11E-01	2.13E+00	3.79E+00	4.76E+00	2.84E+00	3.82E+00	5.19E+00	NA	NA	NA	
	014	84.8	-9.2	2/6/2009	11:22	7.37E+03	6.54E+02	2.02E+02	3.89E-01	5.58E-01	6.16E-01	1.22E+00	3.50E+00	4.06E+00	1.09E+00	3.57E+00	4.23E+00	NA	NA	NA	
	015	84.8	-9.2	4/14/2009	11:41	1.88E+04	8.49E+02	1.50E+02	5.35E-01	7.01E-01	7.64E-01	-6.49E-01	5.24E+00	3.49E+00	1.11E+00	3.50E+00	4.14E+00	NA	NA	NA	
	016	84.8	-9.2	5/29/2009	12:50	8.85E+03	1.09E+03	3.75E+02	1.84E-01	8.01E-01	9.30E-01	8.20E-01	1.04E-01	6.95E+00	6.97E-01	6.57E+00	7.51E+00	NA	NA	NA	
	017	84.8	-9.2	7/21/2009	12:13	2.96E+03	4.10E+02	2.29E+02	-2.28E-01	5.61E-01	8.08E-01	-2.54E+00	5.04E+00	4.22E+00	2.26E+00	3.71E+00	4.75E+00	NA	NA	NA	
	018	84.8	-9.2	9/1/2009	10:52	3.52E+03	3.00E+02	2.12E+02	4.12E-01	6.15E-01	6.81E-01	-8.48E-01	4.46E+00	4.89E+00	-5.30E-03	6.12E+00	6.86E+00	NA	NA	NA	
	019	84.8	-9.2	9/14/2009	12:05	5.14E+03	3.48E+02	1.56E+02	-4.43E-01	4.92E-01	8.14E-01	-1.68E-01	4.96E+00	5.62E+00	-2.91E-01	5.13E+00	5.72E+00	NA	NA	NA	
	020	84.8	-9.2	10/22/2009	12:54	4.50E+03	3.06E+02	1.67E+02	5.53E-01	6.67E-01	7.18E-01	3.27E-01	6.72E+00	6.89E+00	1.12E+00	6.11E+00	7.07E+00	NA	NA	NA	
	021	84.8	-9.2	1/26/2010	12:08	2.25E+04	1.83E+03	6.64E+02	-3.53E-01	7.18E-01	9.43E-01	5.22E-01	2.96E+00	3.33E+00	1.51E+00	2.96E+00	3.49E+00	NA	NA	NA	
	022	84.8	-9.2	3/5/2010	11:49	2.69E+03	2.52E+02	1.68E+02	1.39E-01	3.31E-01	3.88E-01	1.93E+00	4.34E+00	5.05E+00	4.48E-01	4.46E+00	5.01E+00	NA	NA	NA	
	023	84.8	-9.2	4/14/2010	12:09	4.85E+03	2.60E+02	9.99E+01	-1.42E-01	4.23E-01	6.36E-01	3.84E+00	6.90E+00	8.60E+00	1.40E-01	6.13E+00	6.84E+00	NA	NA	NA	
	024	84.8	-9.2	6/7/2010	12:00	9.34E+03	4.35E+02	2.13E+02	3.29E-01	5.73E-01	6.43E-01	2.30E+00	4.86E+00	5.78E+00	-1.07E+00	4.70E+00	4.81E+00	NA	NA	NA	
	025	84.8	-9.2	7/27/2010	15:22	6.70E+03	4.34E+02	1.00E+02	3.55E-01	4.72E-01	5.04E-01	-3.98E+00	8.82E+00	9.22E+00	2.50E+00	8.43E+00	9.93E+00	NA	NA	NA	

See Page 29 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-31-85	026	84.8	-9.2	8/23/2010	12:10	5.07E+03	3.96E+02	1.25E+02	6.61E-03	7.89E-01	9.16E-01	3.42E+00	4.95E+00	6.08E+00	1.52E+00	4.77E+00	5.71E+00	NA	NA	NA	MW-31-85
	027	84.8	-9.2	9/7/2010	14:14	6.21E+03	5.24E+02	1.44E+02	-3.25E-01	4.45E-01	6.85E-01	-1.54E+00	5.68E+00	6.11E+00	2.71E+00	6.12E+00	7.79E+00	NA	NA	NA	
MW-32-48	005			3/4/2010	13:16	4.52E+04	7.44E+02	1.68E+02	1.02E-01	7.47E-01	9.27E-01	-1.65E-01	3.88E+00	4.41E+00	-5.57E-01	4.11E+00	4.54E+00	NA	NA	NA	MW-32-48
	006			4/28/2010	11:28	6.18E+04	1.80E+03	1.79E+02	7.51E-01	8.02E-01	8.21E-01	3.11E+00	7.80E+00	7.62E+00	1.38E+00	6.18E+00	7.26E+00	NA	NA	NA	
	007			7/27/2010	12:52	3.69E+03	3.26E+02	9.94E+01	3.59E-01	8.37E-01	9.60E-01	1.54E-01	7.00E+00	8.04E+00	-3.86E+00	7.74E+00	7.51E+00	NA	NA	NA	
	008			8/24/2010	14:03	5.90E+03	3.51E+02	2.10E+02	3.55E-01	6.33E-01	7.09E-01	-4.34E-01	4.49E+00	5.04E+00	1.96E+00	4.95E+00	5.95E+00	NA	NA	NA	
MW-32-59	001	58.8	18.3	1/19/2007	9:30	7.67E+03	7.50E+02	5.20E+02	6.30E-01	1.47E+00	1.60E+00	-8.60E-01	1.98E+00	2.30E+00	4.90E-01	2.28E+00	2.60E+00	NA	NA	NA	MW-32-59
	002	58.8	18.3	6/28/2007	14:25	2.40E+04	7.37E+02	1.97E+02	-1.65E-01	5.90E-01	7.97E-01	-1.74E+00	3.51E+00	3.30E+00	-1.42E+00	3.87E+00	3.34E+00	NA	NA	NA	
	003	58.8	18.3	8/13/2007	13:07	1.42E+04	6.00E+02	1.99E+02	-2.71E-01	5.58E-01	7.58E-01	1.48E+00	2.10E+00	3.22E+00	-4.66E-01	3.30E+00	3.65E+00	NA	NA	NA	
	001	58.8	18.3	10/26/2007	12:07	1.11E+04	4.61E+02	1.84E+02	3.22E-01	6.43E-01	7.36E-01	-1.94E-01	3.82E+00	3.87E+00	2.45E+00	3.06E+00	4.08E+00	NA	NA	NA	
	002	58.8	18.3	1/18/2008	13:25	1.87E+04	9.11E+02	1.86E+02	4.67E-01	6.96E-01	7.57E-01	9.98E-01	4.25E+00	4.79E+00	1.99E+00	3.81E+00	4.65E+00	NA	NA	NA	
	003	58.8	18.3	5/5/2008	15:33	4.15E+03	2.01E+02	1.82E+02	7.61E-02	5.20E-01	9.70E-01	-7.05E-01	1.89E+00	3.05E+00	1.25E+00	2.01E+00	3.77E+00	NA	NA	NA	
	004	58.8	18.3	6/9/2008	12:10	2.85E+03	4.81E+02	5.06E+02	-3.39E-01	3.64E-01	7.61E-01	-1.22E+00	1.94E+00	2.98E+00	-7.10E-01	2.43E+00	3.91E+00	NA	NA	NA	
	005	58.8	18.3	7/31/2008	13:23	1.54E+03	1.63E+02	1.94E+02	1.72E-01	3.81E-01	6.90E-01	4.66E-01	1.97E+00	3.33E+00	-1.08E+00	2.48E+00	3.26E+00	NA	NA	NA	
	006	58.8	18.3	9/2/2008	13:52	2.44E+03	4.59E+02	5.53E+02	2.19E-01	5.54E-01	9.94E-01	7.77E-01	1.85E+00	3.21E+00	NA	NA	NA	NA	NA	NA	
	007	58.8	18.3	10/24/2008	13:59	4.13E+02	2.00E+02	1.73E+02	1.63E-01	6.06E-01	7.44E-01	-3.50E-01	7.51E+00	7.30E+00	-1.32E+00	6.29E+00	6.66E+00	NA	NA	NA	
	008	58.8	18.3	2/4/2009	15:46	1.78E+04	1.03E+03	1.98E+02	-1.01E-01	5.73E-01	7.69E-01	1.01E-01	3.54E+00	3.41E+00	2.70E+00	3.41E+00	4.34E+00	NA	NA	NA	
	009	58.8	18.3	4/27/2009	15:54	6.43E+04	3.00E+03	4.23E+02	4.22E-01	6.15E-01	6.76E-01	-3.21E+00	4.83E+00	3.22E+00	-5.75E-02	3.60E+00	4.11E+00	NA	NA	NA	
	010	58.8	18.3	6/2/2009	13:59	6.69E+03	9.60E+02	3.77E+02	3.26E-01	4.73E-01	5.25E-01	-1.72E-01	9.62E+00	6.41E+00	-7.66E-01	5.63E+00	6.03E+00	NA	NA	NA	
	011	58.8	18.3	3/3/2009	15:04	8.85E+02	2.07E+02	1.55E+02	1.87E-02	6.37E-01	7.81E-01	1.61E-01	5.47E+00	6.24E+00	9.57E-01	5.47E+00	6.44E+00	NA	NA	NA	
	012	58.8	18.3	8/31/2009	13:24	1.86E+04	5.93E+02	2.16E+02	1.76E-02	3.29E-01	4.26E-01	4.57E-02	4.61E+00	5.09E+00	-2.25E+00	5.87E+00	5.60E+00	NA	NA	NA	
	013	58.8	18.3	9/15/2009	14:33	5.92E+03	3.69E+02	1.55E+02	-4.42E-01	6.95E-01	9.02E-01	1.35E+00	4.70E+00	5.40E+00	-1.17E-01	5.10E+00	5.67E+00	NA	NA	NA	
	014	58.8	18.3	10/22/2009	13:37	5.61E+03	3.33E+02	1.66E+02	-5.42E-01	6.48E-01	9.80E-01	5.15E-01	5.36E+00	6.05E+00	-3.05E+00	7.18E+00	7.04E+00	NA	NA	NA	
	015	58.8	18.3	1/28/2010	14:01	8.92E+04	3.45E+03	6.39E+02	4.07E-02	3.15E-01	4.04E-01	1.02E+00	4.07E+00	4.72E+00	3.06E+00	3.93E+00	4.92E+00	NA	NA	NA	
	016	58.8	18.3	3/4/2010	13:23	8.81E+04	1.03E+03	1.67E+02	1.51E-01	6.31E-01	7.80E-01	6.65E-01	5.36E+00	4.46E+00	-1.40E+00	5.22E+00	4.34E+00	NA	NA	NA	
	017	58.8	18.3	4/28/2010	11:30	6.83E+04	2.00E+03	1.88E+02	-3.10E-01	3.61E-01	6.30E-01	4.95E+00	4.86E+00	6.21E+00	1.55E+00	4.86E+00	5.81E+00	NA	NA	NA	
	018	58.8	18.3	6/9/2010	14:53	1.55E+05	4.58E+03	4.89E+02	4.10E-01	7.75E-01	8.75E-01	-9.71E-01	6.12E+00	6.76E+00	1.48E+00	6.66E+00	7.93E+00	NA	NA	NA	
	019	58.8	18.3	7/27/2010	13:00	6.54E+04	1.91E+03	1.33E+02	1.50E-01	4.37E-01	5.21E-01	1.07E+00	1.02E-01	1.14E+01	3.80E+00	9.26E+00	1.21E+01	NA	NA	NA	
	020	58.8	18.3	8/24/2010	14:22	5.78E+03	3.48E+02	2.10E+02	-9.82E-02	6.14E-01	8.32E-01	3.21E+00	5.84E+00	7.14E+00	-2.01E+00	6.60E+00	6.75E+00	NA	NA	NA	
	021	58.8	18.3	9/9/2010	13:57	7.44E+04	2.18E+03	1.67E+02	4.21E-01	7.20E-01	8.03E-01	1.68E+00	5.43E+00	6.39E+00	-1.58E+00	5.38E+00	5.54E+00	NA	NA	NA	
MW-32-85	001	85.3	85.3	1/19/2007	9:40	1.12E+04	8.40E+02	5.30E+02	3.20E-01	1.47E+00	1.60E+00	1.57E+00	2.82E+00	3.10E+00	9.00E-01	4.20E+00	4.80E+00	NA	NA	NA	MW-32-85
	002	85.3	85.3	6/28/2007	15:05	5.42E+03	3.77E+02	1.95E+02	-4.15E-01	5.10E-01	6.75E-01	-1.70E-01	2.77E+00	3.03E+00	-3.05E-01	3.19E+00	3.21E+00	NA	NA	NA	
	003	85.3	85.3	8/13/2007	10:48	5.70E+03	4.05E+02	2.01E+02	-2.45E-02	4.47E-01	5.75E-01	3.28E-01	2.81E+00	3.15E+00	9.90E-01	2.98E+00	3.53E+00	NA	NA	NA	
	004	85.3	85.3	10/26/2007	11:12	1.26E+04	4.79E+02	1.79E+02	-1.17E-01	4.27E-01	6.25E-01	8.85E-01	2.97E+00	3.45E+00	-1.85E-02	3.23E+00	3.63E+00	NA	NA	NA	
	005	85.3	85.3	1/18/2008	14:50	1.07E+04	6.90E+02	1.83E+02	-3.03E-01	4.38E-01	7.35E-01	3.57E-01	2.64E+00	2.67E+00	-5.37E-01	1.97E+00	2.13E+00	NA	NA	NA	
	006	85.3	85.3	5/5/2008	14:10	8.36E+03	2.64E+02	1.81E+02	-6.65E-02	3.89E-01	7.59E-01	1.95E+00	2.16E+00	3.96E+00	-3.64E-01	2.06E+00	3.27E+00	NA	NA	NA	
	007	85.3	85.3	6/9/2008	12:25	1.11E+04	8.21E+02	5.04E+02	-9.56E-02	3.57E-01	7.12E-01	1.39E+00	2.01E+00	3.68E+00	-5.47E-01	2.04E+00	3.34E+00	NA	NA	NA	
	008	85.3	85.3	7/31/2008	14:35	7.48E+03	2.83E+02	1.93E+02	1.16E-01	3.35E-01	6.24E-01	2.14E-01	2.06E+00	3.50E+00	1.07E+00	1.88E+00	3.43E+00	NA	NA	NA	
	009	85.3	85.3	9/2/2008	14:40	8.05E+03	6.90E+02	5.52E+02	1.42E-01	4.15E-01	7.65E-01	-1.37E+00	2.45E+00	3.52E+00	NA	NA	NA	NA	NA	NA	
	010	85.3	85.3	10/24/2008	14:50	8.62E+03	6.66E+02	1.72E+02	1.13E-01	4.56E-01	5.68E-01	1.39E+00	5.78E+00	6.62E+00	3.08E+00	5.89E+00	7.32E+00	NA	NA	NA	
	011	85.3	85.3	2/4/2009	15:49	6.54E+03	6.38E+02	1.98E+02	5.26E-01	7.76E-01	8.50E-01	4.88E-01	2.85E+00	3.31E+00	2.27E+00	3.20E+00	4.15E+00	NA	NA	NA	
	012	85.3	85.3	4/27/2009	15:34	8.87E+03	1.17E+03	4.31E+02	1.21E-01	5.33E-01	6.47E-01	-2.07E+00	6.11E+00	4.07E+00	1.69E+00	4.08E+00	4.90E+00	NA	NA	NA	
	013	85.3	85.3	6/2/2009	15:11	8.07E+03	1.04E+03	3.76E+02	-1.55E-01	6.47E-01	7.60E-01	-1.73E+00	1.30E-01	8.65E+00	8.98E-01	8.75E+00	9.91E+00	NA	NA	NA	
	015	85.3	85.3	8/31/2009	14:11	8.98E+03	4.22E+02	2.14E+02	4.28E-02	7.57E-01	9.24E-01	8.15E-01	5.03E+00	5.69E+00	-4.97E+00	5.84E+00	5.36E+00	NA	NA	NA	
	016	85.3	85.3	9/15/2009	15:06	7.70E+03	4.17E+02	1.57E+02	1.08E-01	6.03E-01	7.16E-01	2.26E+00	4.83E+00	5.66E+00	-4.65E+00	5.54E+00	5.03E+00	NA	NA	NA	
	017	85.3	85.3	10/22/2009	13:53	7.80E+03	3.83E+02	1.66E+02	1.01E-02	4.27E-01	5.44E-01	1.58E+00	1.11E+01	5.84E+00	-2.02E+00	6.51E+00	6.87E+00	NA	NA	NA	
	018	85.3	85.3	1/28/2010	14:38	8.03E+03	1.11E+03	4.26E+02	6.86E-01	8.28E-01	8.91E-01	2.21E+00	3.65E+00	4.30E+00	2.29E+00	3.27E+00	4.05E+00	NA	NA	NA	
	019	85.3	85.3	3/4/2010	14:44	9.31E+03	3.62E+02	1.68E+02	-2.46E-01	4.71E-01	7.01E-01	3.62E-01	3.45E+00	3.85E+00	-1.26E+00	3.88E+00	4.04E+00	NA	NA	NA	
	020	85.3	85.3	4/28/2010	13:08	1.15E+04	5.85E+02	1.45E+02	3.95E-02	6.03E-01	7.62E-01	7.18E-01	9.07E+00	9.43E+00	1.03E+00	6.79E+00	8.05E+00	NA	NA	NA	
	021	85.3	85.3	6/9/2010	12:03	1.20E+04	4.85E+02	2.14E+02	3.30E-01	7.56E-01	8.66E-01	-1.92E+00	5.57E+00	6.05E+00	-7.73E-01	5.68E+00	6.30E+00	NA	NA	NA	
	022	85.3	85.3	7/27/2010	14:51	1.21E+04	5.81E+02	1.01E+02	3.80E-01	6.37E-01	7.07E-01	1.38E+00	7.47E+00	8.69E+00	2.30E+00	7.74E+00	9.52E+00	NA	NA	NA	
	023	85.3	85.3	8/24/2010	11:03	1.38E+04	4.94E+02	2.10E+02	-3.76E-01	4.75E-01	7.02E-01	-6.66E-01	5.96E+00	6.62E+00	-1.19E+00	5.22E+00	5.48E+00	NA	NA	NA	
	024	85.3	85.3	9/9/2010	15:29	1.44E+04	6.57E+02	1.27E+02	1.34E-01	6.77E-01	8.36E-01	1.43E+00	6.27E+00	6.90E+00	-1.25E-01	5.49E+00	6.10E+00	NA	NA	NA	
MW-32-131	001	130.8	-53.7	1/19/2007	9:45	1.13E+04	8.40E+02	5.30E+02	-1.03E+00	1.47E+00	1.70E+00	-6.00E-02	2.04E+00	2.30E+00	3.00E-02	2.07E+00	2.40E+00	NA	NA	NA	MW-32-131
	002	130.8	-53.7	6/28/2007	12:45	3.02E+02	1.88E+02	1.97E+02	-1.39E-01	5.13E-01	5.94E-01	-1.46E+00	5.09E+00	4.92E+00	9.88E-01	3.76E+00	4.38E+00	NA	NA	NA	
	003	130.8	-53.7	8/13/2007	11:15	1.29E+02	1.70E+02	1.87E+02	2.69E-01	7.33E-01	8.51E-01	-8.09E-01	4.86E+00	4.85E+00	-1.19E+00	3.29E+00	3.22E+00	NA	NA	NA	
	004	130.8	-53.7	10/26/2007	10:11	3.74E+02	2.39E+02	2.42E+02	2.47E-01	6.03E-01	7.06E-01	-1.81E-01	3.48E+00	3.82E+00	-2.55E-01	3.92E+00	3.99E+00	NA	NA	NA	
	005	130.8	-53.7	1/18/2008	11:23	5.04E+02	2.07E+02	1.79E+02	5.14E-01	7.79E-01	8.52E-01	8.47E-01	2.19E+00	2.21E+00	-8.40E-02	1.98E+00	2.18E+00	NA	NA	NA	
	006	130.8	-53.7	5/5/2008	12:35	1.03E+03	1.36E+02	1.83E+02	-2.89E-01	3.98E-01	7.75E-01	-1.21E+00	2.28E+00	3.55E+00	-3.26E-01	2.27E+00	3.66E+00	NA	NA	NA	
MW-32-149	004	149.3	-72.2	10/26/2007	10:10	2.92E+03	2.94E+02	1.90E+02	-2.45E-01	4.89E-01	7.22E-01	1.99E-01	3.10E+00	3.51E+00	1.65E-01	3.56E+00	3.99E+00	NA	NA	NA	MW-32-149
	005	149.3	-72.2	1/18/2008	11:18	1.15E+03	2.69E+02	1.85E+02	3.04E-01	8.25E-01	9.53E-01	2.94E+00	4.29E+00	3.08E+00	-8.74E-01	2.82E+00	2.93E+00	NA	NA	NA	
	006	149.3	-72.2	5/5/2008	10:54	8.83E+02	1.31E+02	1.82E+02	7.39E-01	5.05E-01	7.94E-01	-2.99E+00	2.67E+00	3.71E+00	2.04E+00	2.12E+00	4.12E+00	NA	NA	NA	
	007	149.3	-72.2	7/31/2008	11:10	5.32E+02	1.31E+02	1.94E+02	1.38E-02	3.46E-01	6.80E-01	1.06E+00	1.65E+00	2.87E+00	1.42E+00	1.56E+00	2.81E+00	NA	NA	NA	
	008	149.3	-72.2	10/24/2008	10:28	5.03E+02	2.10E+02	1.72E+02	4.69E-01	6.52E-01	6.99E-01	1.80E+00	5.22E+00	6.07E+00	1.25E+00	4.96E+00	5.82E+00	NA	NA	NA	
	009	149.3	-72.2	2/4/2009	13:50	2.65E+02	1.18E+02	1.17E+02	4.53E-01	6.75E-01	7.34E-01	5.44E-01	2.99E+00	3.38E+00	3.32E-01	2.91E+00	3.28E+00	NA	NA	NA	
	010	149.3	-72.2	4/27/2009	13:31	3.21E+02	1.79E+02	1.87E+02	7.04E-01	8.48E-01	9.20E-01	1.35E+00	4.26E+00	2.84E+00	-4.83E-02	2.34E+00	2.57E+00	NA	NA	NA	
	011	149.3	-72.2	6/2/2009	12:05	2.24E+02	1.53E+02	1.62E+02	-2.86E-01	6.60E-01	7.98E-01	-2.68E+00	1.02E-01	6.78E+00	2.12E+00	7.04E+00	8.40E+00	NA	NA	NA	

See Page 29 for Notes

IPEC00263587

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-32-149	012	149.3	-72.2	3/3/2009	12:43	3.90E+02	1.70E+02	1.57E+02	9.42E-02	6.51E-01	7.80E-01	2.86E+00	6.63E+00	7.79E+00	-9.46E-01	8.14E+00	7.75E+00	NA	NA	NA	MW-32-149
	013	149.3	-72.2	8/31/2009	11:29	4.57E+02	2.06E+02	2.15E+02	-2.81E-01	5.05E-01	6.80E-01	-1.45E+00	5.66E+00	6.05E+00	-1.77E-01	4.84E+00	5.32E+00	NA	NA	NA	
	014	149.3	-72.2	9/15/2009	12:39	1.99E+02	1.46E+02	1.54E+02	-9.07E-02	7.77E-01	9.52E-01	1.03E+00	5.91E+00	6.65E+00	2.31E+00	6.12E+00	7.24E+00	NA	NA	NA	
	015	149.3	-72.2	10/22/2009	15:39	2.95E+02	1.59E+02	1.67E+02	-9.56E-02	4.01E-01	5.33E-01	-6.75E+00	9.40E+00	7.45E+00	-5.88E-01	8.74E+00	8.40E+00	NA	NA	NA	
	016	149.3	-72.2	1/28/2010	11:47	5.28E+03	9.24E+02	4.30E+02	2.02E-01	7.48E-01	8.83E-01	2.15E+00	3.71E+00	4.43E+00	4.50E-01	4.17E+00	4.73E+00	NA	NA	NA	
	017	149.3	-72.2	4/28/2010	13:50	6.60E+03	4.52E+02	1.47E+02	3.03E-01	7.08E-01	8.24E-01	1.98E+00	6.88E+00	7.55E+00	9.80E-01	4.44E+00	5.36E+00	NA	NA	NA	
	018	149.3	-72.2	6/9/2010	12:52	9.76E+03	4.44E+02	2.14E+02	-1.16E-01	6.45E-01	8.05E-01	-8.57E-01	8.36E+00	9.08E+00	-4.49E+00	6.20E+00	5.62E+00	NA	NA	NA	
	019	149.3	-72.2	7/27/2010	15:34	3.81E+03	3.33E+02	1.01E+02	1.14E-01	3.57E-01	4.33E-01	7.24E-01	1.28E+01	1.64E+01	1.53E+00	8.88E+00	1.06E+01	NA	NA	NA	
	020	149.3	-72.2	8/24/2010	11:27	2.60E+03	2.70E+02	2.10E+02	1.04E-01	6.64E-01	8.13E-01	1.04E-01	6.51E+00	7.44E+00	2.67E-02	5.89E+00	6.71E+00	NA	NA	NA	
	021	149.3	-72.2	9/9/2010	11:36	2.12E+03	2.70E+02	1.27E+02	2.27E-01	7.72E-01	9.22E-01	3.68E+00	7.83E+00	9.16E+00	1.24E+00	8.52E+00	1.00E+01	NA	NA	NA	
MW-32-165	001	163	-85.9	1/19/2007	9:50	1.05E+04	8.70E+02	5.70E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-32-165
	002	163	-85.9	6/28/2007	13:06	5.81E+02	2.03E+02	1.97E+02	-2.82E-01	7.33E-01	9.70E-01	8.54E-01	2.85E+00	2.94E+00	-8.16E-01	2.46E+00	2.60E+00	NA	NA	NA	
	003	163	-85.9	8/13/2007	11:35	4.93E+02	2.09E+02	2.08E+02	-6.38E-01	3.81E-01	6.52E-01	-1.42E+00	3.76E+00	3.37E+00	1.63E+00	1.69E+00	2.91E+00	NA	NA	NA	
MW-32-173	001	172.8	-95.7	10/26/2007	9:55	5.89E+03	3.87E+02	1.92E+02	1.86E-02	5.87E-01	7.54E-01	6.92E-01	3.00E+00	3.51E+00	-9.97E-01	2.91E+00	3.02E+00	NA	NA	NA	MW-32-173
	002	172.8	-95.7	1/18/2008	11:05	3.40E+03	4.07E+02	1.82E+02	1.13E-01	6.02E-01	7.63E-01	-3.84E-01	2.00E+00	2.18E+00	-6.14E-01	2.09E+00	2.25E+00	NA	NA	NA	
	003	172.8	-95.7	5/5/2008	10:33	1.69E+03	1.52E+02	1.82E+02	1.11E-02	3.53E-01	7.09E-01	1.95E-01	2.18E+00	3.64E+00	5.47E-01	2.24E+00	3.91E+00	NA	NA	NA	
	004	172.8	-95.7	7/31/2008	10:52	1.08E+03	1.48E+02	1.92E+02	6.80E-01	4.52E-01	7.11E-01	-1.17E+00	1.58E+00	2.47E+00	6.06E-01	1.65E+00	2.96E+00	NA	NA	NA	
	005	172.8	-95.7	9/2/2008	11:30	9.72E+02	3.72E+02	5.48E+02	1.85E-01	4.64E-01	8.41E-01	-1.02E+00	2.67E+00	3.88E+00	NA	NA	NA	NA	NA	NA	
	006	172.8	-95.7	10/24/2008	10:25	1.03E+03	2.67E+02	1.74E+02	1.05E-01	3.60E-01	4.36E-01	8.63E-01	5.67E+00	6.61E+00	2.30E+00	6.36E+00	7.74E+00	NA	NA	NA	
	007	172.8	-95.7	2/4/2009	13:40	7.56E+02	1.45E+02	1.17E+02	2.57E-01	4.26E-01	4.74E-01	1.79E+00	3.65E+00	4.41E+00	2.56E+00	3.47E+00	4.49E+00	NA	NA	NA	
	008	172.8	-95.7	4/27/2009	13:32	7.86E+02	4.77E+02	4.31E+02	7.47E-02	4.43E-01	5.48E-01	-3.20E+00	6.12E+00	4.08E+00	1.19E+00	4.77E+00	5.59E+00	NA	NA	NA	
	009	172.8	-95.7	6/2/2009	11:58	1.72E+03	2.19E+02	1.68E+02	1.05E-01	5.78E-01	6.69E-01	-1.33E+00	9.20E+00	6.13E+00	-1.40E+00	6.21E+00	6.55E+00	NA	NA	NA	
	010	172.8	-95.7	3/3/2009	12:37	4.93E+02	1.77E+02	1.55E+02	-4.67E-02	3.89E-01	5.13E-01	3.21E+00	5.34E+00	6.46E+00	-7.71E-01	4.92E+00	5.26E+00	NA	NA	NA	
	011	172.8	-95.7	8/31/2009	11:31	5.79E+02	2.09E+02	2.13E+02	-4.09E-04	6.06E-01	7.50E-01	1.81E+00	4.96E+00	5.93E+00	2.58E+00	6.62E+00	7.35E+00	NA	NA	NA	
	012	172.8	-95.7	9/15/2009	12:11	4.71E+02	1.65E+02	1.55E+02	-5.93E-03	6.73E-01	8.21E-01	2.46E+00	4.92E+00	5.83E+00	-6.66E+00	7.39E+00	6.57E+00	NA	NA	NA	
	013	172.8	-95.7	10/22/2009	15:36	4.31E+02	1.68E+02	1.68E+02	-1.01E-02	3.85E-01	4.95E-01	-2.49E-01	5.87E+00	6.61E+00	6.81E-01	5.70E+00	6.64E+00	NA	NA	NA	
	014	172.8	-95.7	1/28/2010	11:42	1.33E+03	6.95E+02	6.63E+02	1.67E-01	7.37E-01	8.74E-01	-4.48E+00	7.32E+00	7.64E+00	2.11E+00	4.42E+00	5.30E+00	NA	NA	NA	
	015	172.8	-95.7	4/28/2010	15:45	1.54E+03	2.45E+02	1.48E+02	4.63E-01	5.34E-01	5.49E-01	4.96E+00	5.45E+00	6.79E+00	-8.08E-01	4.93E+00	5.21E+00	NA	NA	NA	
	016	172.8	-95.7	6/9/2010	12:23	2.34E+03	2.66E+02	2.08E+02	3.04E-01	5.97E-01	6.81E-01	-9.18E-01	6.63E+00	7.29E+00	8.09E-01	6.48E+00	7.43E+00	NA	NA	NA	
	017	172.8	-95.7	7/27/2010	15:17	2.47E+03	2.69E+02	9.88E+01	9.64E-02	3.38E-01	4.14E-01	-1.51E+00	8.71E+00	9.65E+00	-2.29E+00	7.04E+00	7.12E+00	NA	NA	NA	
	018	172.8	-95.7	8/24/2010	11:23	2.19E+03	2.60E+02	2.10E+02	-1.37E-01	3.98E-01	5.77E-01	2.92E+00	6.57E+00	7.82E+00	4.56E-01	6.55E+00	7.41E+00	NA	NA	NA	
	019	172.8	-95.7	9/9/2010	11:29	1.98E+03	2.63E+02	1.28E+02	5.82E-01	8.34E-01	8.96E-01	1.67E+00	4.86E+00	5.81E+00	9.94E-01	4.84E+00	5.77E+00	NA	NA	NA	
MW-32-190	001	190.3	-113.7	1/19/2007	9:55	1.13E+04	8.40E+02	5.20E+02	4.20E-01	1.50E+00	1.70E+00	2.60E-01	1.26E+00	1.40E+00	7.10E-01	1.50E+00	1.70E+00	NA	NA	NA	MW-32-190
	002	190.3	-113.7	6/28/2007	13:07	2.41E+03	2.72E+02	1.87E+02	-5.09E-02	6.12E-01	8.20E-01	1.52E+00	3.07E+00	3.64E+00	-1.29E+00	3.27E+00	3.37E+00	NA	NA	NA	
	003	190.3	-113.7	8/13/2007	11:25	1.72E+03	2.67E+02	2.03E+02	-3.65E-01	8.12E-01	1.04E+00	6.21E-01	2.49E+00	2.93E+00	-1.19E+00	2.38E+00	2.39E+00	NA	NA	NA	
	004	190.3	-113.7	10/26/2007	9:53	9.76E+03	4.80E+02	1.93E+02	-5.05E-01	7.75E-01	9.73E-01	-6.17E-01	3.07E+00	3.27E+00	-1.94E-01	3.18E+00	3.57E+00	NA	NA	NA	
	005	190.3	-113.7	1/18/2008	11:35	8.89E+03	6.32E+02	1.83E+02	4.28E-01	7.73E-01	8.69E-01	6.57E-01	1.71E+00	2.02E+00	5.18E-01	1.65E+00	1.96E+00	NA	NA	NA	
	006	190.3	-113.7	5/5/2008	10:57	6.73E+03	2.41E+02	1.82E+02	-1.68E-01	4.28E-01	8.16E-01	-1.18E+00	2.08E+00	3.24E+00	-2.62E+00	3.16E+00	2.97E+00	NA	NA	NA	
	007	190.3	-113.7	7/31/2008	11:24	4.71E+03	2.35E+02	1.94E+02	3.21E-01	3.35E-01	5.51E-01	-8.54E-01	1.55E+00	2.53E+00	2.22E+00	1.77E+00	3.30E+00	NA	NA	NA	
	008	190.3	-113.7	9/2/2008	11:40	3.81E+03	5.20E+02	5.44E+02	5.92E-01	5.81E-01	9.53E-01	1.39E+00	2.82E+00	4.63E+00	NA	NA	NA	NA	NA	NA	
	009	190.3	-113.7	10/21/2008	10:31	3.35E+03	4.31E+02	1.73E+02	3.30E-03	5.75E-01	7.41E-01	5.89E-01	5.33E+00	5.98E+00	3.85E+00	5.68E+00	7.16E+00	NA	NA	NA	
	010	190.3	-113.7	2/4/2009	13:45	2.69E+03	4.26E+02	1.98E+02	2.44E-01	5.57E-01	6.47E-01	3.60E-02	2.67E+00	2.95E+00	4.71E-01	3.02E+00	3.44E+00	NA	NA	NA	
	011	190.3	-113.7	4/27/2009	13:24	2.54E+03	6.68E+02	4.09E+02	-2.51E-02	5.58E-01	6.80E-01	-6.89E-01	4.01E+00	2.67E+00	5.11E-01	2.30E+00	2.68E+00	NA	NA	NA	
	012	190.3	-113.7	6/2/2009	12:01	1.95E+03	5.76E+02	3.78E+02	8.61E-02	5.09E-01	5.90E-01	3.64E-01	1.02E-01	6.77E+00	1.26E+00	5.70E+00	6.67E+00	NA	NA	NA	
	013	190.3	-113.7	3/3/2009	12:45	2.03E+03	2.76E+02	1.56E+02	1.36E-01	5.64E-01	6.69E-01	9.65E-02	5.25E+00	5.81E+00	-2.59E+00	4.95E+00	4.66E+00	NA	NA	NA	
	014	190.3	-113.7	8/31/2009	11:41	2.14E+03	2.61E+02	2.13E+02	1.65E-01	5.30E-01	6.20E-01	2.01E+00	6.21E+00	7.34E+00	2.09E+00	5.91E+00	7.13E+00	NA	NA	NA	
	015	190.3	-113.7	9/15/2009	12:13	1.77E+03	2.28E+02	1.53E+02	3.73E-01	7.22E-01	8.16E-01	1.75E+00	4.04E+00	4.89E+00	4.08E-01	4.59E+00	5.13E+00	NA	NA	NA	
	016	190.3	-113.7	10/22/2009	15:30	1.63E+03	2.18E+02	1.67E+02	8.62E-02	3.60E-01	4.39E-01	-1.67E+00	6.11E+00	6.45E+00	3.05E-01	5.96E+00	6.67E+00	NA	NA	NA	
	017	190.3	-113.7	1/28/2010	11:57	1.71E+03	5.91E+02	4.25E+02	4.33E-01	4.97E-01	5.09E-01	-1.94E-02	4.23E+00	4.80E+00	1.29E+00	4.62E+00	5.46E+00	NA	NA	NA	
	018	190.3	-113.7	3/4/2010	12:42	1.98E+03	2.10E+02	1.67E+02	4.99E-03	5.73E-01	7.52E-01	-6.41E-01	3.29E+00	3.70E+00	3.53E+00	3.74E+00	4.67E+00	NA	NA	NA	
	019	190.3	-113.7	4/28/2010	15:51	1.59E+03	2.48E+02	1.49E+02	-2.92E-01	7.01E-01	9.85E-01	1.82E+00	5.66E+00	6.65E+00	-2.37E+00	5.38E+00	5.33E+00	NA	NA	NA	
	020	190.3	-113.7	6/9/2010	12:43	1.76E+03	2.45E+02	2.05E+02	4.69E-01	8.43E-01	9.49E-01	-3.64E+00	5.89E+00	6.02E+00	1.50E+00	5.84E+00	6.92E+00	NA	NA	NA	
	021	190.3	-113.7	7/27/2010	15:41	1.58E+03	2.21E+02	9.83E+01	-8.57E-02	3.52E-01	5.06E-01	6.23E-01	7.98E+00	9.16E+00	-2.62E+00	7.77E+00	7.60E+00	NA	NA	NA	
	022	190.3	-113.7	8/24/2010	11:37	1.69E+03	2.43E+02	2.09E+02	2.54E-01	7.84E-01	9.25E-01	-5.47E-01	4.84E+00	5.45E+00	9.00E-01	4.96E+00	5.87E+00	NA	NA	NA	
	023	190.3	-113.7	9/9/2010	11:34	1.65E+03	2.48E+02	1.30E+02	-1.31E-01	5.85E-01	8.27E-01	-2.39E-01	9.87E+00	1.08E+01	2.00E+00	6.66E+00	7.98E+00	NA	NA	NA	
MW-33	001	19.2	-0.4	12/15/2005	8:00	1.42E+05	4.26E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-33
	002	19.2	-0.4	12/19/2005	11:38	1.99E+05	5.97E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	19.2	-0.4	12/29/2005	11:30	2.20E+05	6.60E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	19.2	-0.4	1/6/2006	12:30	1.89E+05	5.67E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	19.2	-0.4	1/13/2006	12:10	2.32E+05	6.96E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	006	19.2	-0.4	1/20/2006	10:40	2.26E+05	6.78E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	007	19.2	-0.4	1/27/2006	11:10	2.42E+05	7.26E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	008	19.2	-0.4	2/3/2006	12:15	2.50E+05	2.84E+04	6.33E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	009	19.2	-0.4	2/7/2006	16:00	2.14E+05	2.64E+04	6.37E+02	1.36E-01	5.06E-01	6.25E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	19.2	-0.4	2/16/2006	13:55	2.61E+05	2.91E+04	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	011	19.2	-0.4	3/3/2006	10:20	2.53E+05	7.59E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	012	19.2	-0.4	4/7/2006	10:25	2.21E+05	6.63E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-33	014	19.2	-0.4	5/17/2006	12:50	1.35E+05	2.01E+04	1.60E+03	7.79E-01	1.43E+00	1.47E+00	1.17E+01	1.19E-01	1.37E+01	4.62E+00	1.41E+01	1.28E+01	NA	NA	NA	MW-33
	015	19.2	-0.4	6/7/2006	10:15	1.41E+05	1.85E+04	1.32E+03	6.74E-01	5.63E-01	6.44E-01	6.95E-01	8.72E-00	9.58E+00	-6.11E+00	8.63E+00	8.02E+00	NA	NA	NA	
	017	19.2	-0.4	7/3/2006	9:50	2.64E+05	2.01E+04	3.85E+03	4.78E-01	1.37E+00	1.57E+00	-6.85E-01	1.17E-01	1.27E+01	-5.24E+00	1.28E+01	1.21E+01	NA	NA	NA	
	018	19.2	-0.4	8/4/2006	8:15	1.84E+05	2.54E+04	1.87E+03	NA	NA	NA	3.53E+00	6.31E-00	7.84E+00	-1.14E+00	7.35E+00	8.60E+00	NA	NA	NA	
	019	19.2	-0.4	8/30/2006	13:00	1.15E+05	1.77E+04	4.39E+03	NA	NA	NA	-6.99E-01	8.47E-00	8.90E+00	3.71E+00	7.21E+00	9.60E+00	NA	NA	NA	
	020	19.2	-0.4	6/15/2007	15:48	9.06E+04	3.26E+03	3.61E+02	-2.82E-01	2.86E-01	4.85E-01	-2.78E-01	3.82E+00	3.76E+00	-1.64E+00	3.44E+00	3.39E+00	-8.12E-01	1.16E+01	1.37E+01	
	021	19.2	-0.4	8/3/2007	10:20	2.30E+04	7.08E+02	2.04E+02	5.80E-01	8.49E-01	9.33E-01	8.18E-01	2.37E+00	2.83E+00	2.45E-01	2.13E+00	2.46E+00	NA	NA	NA	
	022	19.2	-0.4	4/28/2008	15:00	5.85E+04	1.16E+03	2.58E+02	1.69E-01	2.97E-01	5.22E-01	1.08E-01	1.87E+00	3.12E+00	-4.51E-02	2.12E+00	3.49E+00	NA	NA	NA	
	023	19.2	-0.4	9/4/2008	14:41	6.80E+04	1.82E+03	5.47E+02	1.33E-01	4.05E-01	7.55E-01	5.46E-01	1.61E+00	2.83E+00	NA	NA	NA	NA	NA	NA	
	024	19.2	-0.4	4/29/2009	15:12	3.44E+04	1.30E+03	1.72E+02	2.74E-01	5.39E-01	6.09E-01	-1.06E+00	8.93E+00	5.95E+00	1.83E+00	5.72E+00	6.77E+00	NA	NA	NA	
	025	19.2	-0.4	2/2/2010	13:15	3.20E+04	2.16E+03	4.38E+02	-1.15E-01	7.38E-01	9.21E-01	2.64E+00	3.44E-00	4.21E+00	4.59E-01	3.96E+00	4.42E+00	NA	NA	NA	
	026	19.2	-0.4	4/15/2010	13:54	6.31E+04	1.06E+03	1.76E+02	-1.77E-01	6.60E-01	8.85E-01	-3.35E+00	7.39E-00	7.21E+00	-5.17E+00	7.74E+00	6.17E+00	NA	NA	NA	
	027	19.2	-0.4	8/30/2010	14:29	3.69E+03	3.42E+02	1.26E+02	1.64E-01	3.24E-01	3.69E-01	7.72E-01	5.64E-00	6.38E+00	-3.08E-01	5.07E+00	5.60E+00	NA	NA	NA	
	028	19.2	-0.4	9/11/2010	13:28	3.86E+03	3.53E+02	1.27E+02	9.96E-03	7.38E-01	9.28E-01	-1.30E+00	4.86E-00	5.14E+00	1.12E+00	5.10E+00	5.95E+00	NA	NA	NA	
MW-34	001	18.9	-0.4	12/13/2005	13:53	6.39E+04	1.92E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-34
	002	18.9	-0.4	12/19/2005	10:35	1.21E+05	3.63E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	18.9	-0.4	12/29/2005	10:50	1.47E+05	4.41E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	18.9	-0.4	1/6/2006	11:35	1.59E+05	4.77E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	18.9	-0.4	1/13/2006	11:40	1.31E+05	3.93E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	006	18.9	-0.4	1/20/2006	10:00	2.11E+05	6.33E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	007	18.9	-0.4	1/27/2006	10:50	2.12E+05	6.36E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	008	18.9	-0.4	2/3/2006	12:20	2.24E+05	2.69E+04	6.33E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	009	18.9	-0.4	2/7/2006	15:15	1.74E+05	2.38E+04	6.37E+02	9.22E-02	3.78E-01	4.67E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	18.9	-0.4	2/16/2006	13:55	1.99E+05	2.55E+04	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	011	18.9	-0.4	3/3/2006	9:35	2.30E+05	6.90E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	012	18.9	-0.4	4/7/2006	10:05	2.76E+05	8.28E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	013	18.9	-0.4	5/17/2006	13:15	3.64E+04	5.52E+03	8.35E+02	2.50E-02	6.63E-01	9.24E-01	7.84E+00	1.39E-01	1.55E+01	2.72E+00	1.31E+01	1.44E+01	NA	NA	NA	
	014	18.9	-0.4	6/26/2006	10:20	1.05E+04	8.52E+02	3.41E+02	3.71E-01	6.49E-01	7.79E-01	1.83E+00	7.85E-00	8.96E+00	5.84E+00	7.34E+00	9.37E+00	NA	NA	NA	
	015	18.9	-0.4	7/26/2006	10:20	4.07E+04	3.51E+03	1.57E+03	2.18E-01	8.97E-01	1.16E+00	-1.73E-01	4.87E-00	5.24E+00	-2.54E-01	5.64E+00	6.78E+00	NA	NA	NA	
	016	18.9	-0.4	8/24/2006	12:18	6.69E+04	1.05E+04	3.39E+03	NA	NA	NA	1.62E+00	5.81E-00	6.78E+00	-1.60E+00	5.89E+00	5.85E+00	NA	NA	NA	
	017	18.9	-0.4	9/21/2006	9:45	1.61E+04	2.78E+03	5.86E+02	0.00E+00	1.12E+00	1.31E+00	6.09E-02	1.69E-00	1.85E+00	-2.10E-01	1.65E+00	1.79E+00	NA	NA	NA	
	018	18.9	-0.4	3/3/2007	10:21	2.22E+04	7.44E+02	2.13E+02	3.94E-02	7.08E-01	9.04E-01	-1.55E+00	4.53E-00	4.44E+00	2.12E+00	3.40E+00	4.01E+00	NA	NA	NA	
MW-35	001	19	-0.4	12/13/2005	13:50	4.23E+04	3.18E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-35
	002	19	-0.4	12/19/2005	10:17	7.60E+04	2.28E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	19	-0.4	12/29/2005	10:00	8.05E+04	2.42E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	19	-0.4	1/6/2006	11:10	9.54E+04	2.86E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	19	-0.4	1/13/2006	10:50	9.78E+04	2.93E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	006	19	-0.4	1/20/2006	9:30	1.04E+05	3.12E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	007	19	-0.4	1/27/2006	11:00	3.87E+04	1.16E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	008	19	-0.4	2/3/2006	12:20	5.14E+04	1.29E+04	6.33E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	009	19	-0.4	2/7/2006	14:40	8.44E+04	1.66E+04	6.37E+02	1.62E-01	4.32E-01	5.28E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	19	-0.4	2/16/2006	13:30	9.04E+04	1.72E+04	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	011	19	-0.4	3/3/2006	9:05	1.19E+05	3.57E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	012	19	-0.4	4/7/2006	9:55	5.62E+04	1.69E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	013	19	-0.4	5/17/2006	13:37	4.07E+04	6.15E+03	8.72E+02	4.70E-01	7.53E-01	7.87E-01	6.46E+00	2.07E+01	1.64E+01	3.04E+00	1.37E+01	1.53E+01	NA	NA	NA	
	014	19	-0.4	6/26/2006	10:40	1.74E+04	1.37E+03	4.29E+02	-2.30E-01	6.66E-01	8.69E-01	-1.34E+00	1.01E+01	1.09E+01	-2.45E+00	8.92E+00	9.36E+00	NA	NA	NA	
	015	19	-0.4	9/21/2006	9:30	4.53E+04	7.19E+03	9.12E+02	6.26E-01	1.30E+00	1.41E+00	-3.15E-01	1.96E+00	1.82E+00	2.44E-01	1.49E+00	1.69E+00	NA	NA	NA	
	016	19	-0.4	6/15/2007	13:58	2.03E+03	5.87E+02	3.84E+02	2.26E-01	4.34E-01	4.91E-01	4.66E+01	8.82E-00	2.81E+00	-1.27E+00	2.58E+00	2.63E+00	6.18E+00	1.92E+01	2.20E+01	
	017	19	-0.4	8/3/2007	10:22	5.95E+03	5.58E+02	2.70E+02	9.45E-02	5.76E-01	6.98E-01	-9.20E-01	2.71E-00	2.82E+00	5.74E-01	2.88E+00	3.33E+00	NA	NA	NA	
	018	19	-0.4	4/28/2008	13:38	1.04E+03	1.77E+02	2.19E+02	2.34E-01	2.96E-01	5.03E-01	-2.93E-02	2.03E-00	3.34E+00	-5.77E-02	2.36E+00	3.87E+00	NA	NA	NA	
	019	19	-0.4	4/30/2009	11:17	1.46E+03	3.03E+02	1.74E+02	-2.75E-01	5.13E-01	6.38E-01	-1.08E+00	9.27E-00	6.18E+00	-1.87E+00	5.79E+00	6.00E+00	NA	NA	NA	
	020	19	-0.4	5/20/2010	13:25	2.82E+03	2.87E+02	2.14E+02	-1.97E-01	4.52E-01	6.73E-01	1.51E+00	5.67E-00	6.71E+00	-1.24E+00	6.33E+00	6.84E+00	NA	NA	NA	
MW-36-24	001	16.1	-4.3	2/7/2006	17:00	NA	NA	NA	1.29E+00	5.48E-01	5.53E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-36-24
	002	16.1	-4.3	2/27/2006	9:45	3.04E+04	9.95E+03	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	16.1	-4.3	3/23/2006	16:00	3.42E+04	3.81E+03	1.86E+03	9.99E-01	6.42E-01	6.42E-01	-3.86E+00	1.01E-01	1.05E+01	5.02E+00	9.33E+00	1.22E+01	6.41E+01	1.59E+01	1.53E+01	
	004	16.1	-4.3	4/5/2006	10:30	NA	NA	NA	1.56E+00	4.86E-01	4.35E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	16.1	-4.3	6/5/2006	12:20	2.02E+02	1.59E+02	1.51E+02	3.70E-01	7.66E-01	9.31E-01	3.99E+00	1.03E-01	1.21E+01	6.90E-02	1.02E+01	1.12E+01	NA	NA	NA	
	006	16.1	-4.3	8/28/2006	10:30	2.45E+02	1.80E+02	1.71E+02	NA	NA	NA	-1.04E+00	3.27E-00	3.32E+00	1.66E+00	3.06E+00	4.19E+00	NA	NA	NA	
	007	16.1	-4.3	6/27/2007	10:40	1.54E+02	1.76E+02	1.93E+02	5.90E-01	7.92E-01	8.46E-01	3.31E-01	2.81E-00	3.17E+00	4.00E-01	3.03E+00	3.45E+00	NA	NA	NA	
	008	16.1	-4.3	8/8/2007	13:45	1.63E+02	1.85E+02	2.04E+02	-5.35E-01	6.81E-01	9.31E-01	1.53E-01	3.40E-00	3.77E+00	3.56E+00	3.40E+00	4.17E+00	-7.46E+00	2.10E+01	2.54E+01	
	009	16.1	-4.3	10/18/2007	10:06	2.86E+02	1.91E+02	2.01E+02	8.56E-02	7.60E-01	9.26E-01	7.20E-01	2.91E-00	3.37E+00	3.11E-01	3.01E+00	3.47E+00	NA	NA	NA	
	010	16.1	-4.3	1/23/2008	14:18	2.16E+03	2.36E+02	1.70E+02	1.03E-01	3.12E-01	3.76E-01	2.92E-02	2.39E-00	2.67E+00	-4.84E-01	2.37E+00	2.57E+00	NA	NA	NA	
	011	16.1	-4.3	7/24/2008	13:57	1.02E+03	1.22E+02	1.63E+02	3.38E-01	3.75E-01	6.24E-01	3.97E-01	2.09E-00	3.61E+00	-5.45E-01	2.37E+00	3.85E+00	NA	NA	NA	
	012	16.1	-4.3	11/10/2008	15:33	2.01E+02	1.50E+02	1.61E+02	5.52E-01	7.53E-01	8.04E-01	0.00E+00	6.81E-00	4.46E+00	2.72E+00	3.84E+00	5.41E+00	NA	NA	NA	
	013	16.1	-4.3	1/22/2009	12:48	2.37E+02	1.16E+02	1.06E+02	-6.26E-01	7.37E-01	9.48E-01	5.41E-01	2.88E-00	3.34E+00	3.15E-01	3.35E+00	3.82E+00	NA	NA	NA	
	014	16.1	-4.3	5/1/2009	13:55	4.98E+02	1.98E+02	1.62E+02	-1.28E-01	7.22E-01	8.58E-01	1.20E+00	7.73E-00	5.15E+00	-8.11E-01	4.19E+00	4.36E+00	NA	NA	NA	
	015	16.1	-4.3	8/4/2009	16:09	2.92E+03	3.20E+02	1.55E+02	4.60E-01	6.62E-01	7.29E-01	-2.97E-01	5.12E-00	4.98E+00	7.76E-01	5.67E+00	6.40E+00	NA	NA	NA	

IPEC00263588

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS																Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)				
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC		
MW-36-24	016	16.1	-4.3	10/28/2009	15:48	1.47E+03	2.00E+02	1.61E+02	6.36E-01	8.91E-01	9.78E-01	-9.30E-01	3.65E+00	4.03E+00	-3.01E-01	4.86E+00	5.04E+00	NA	NA	NA		MW-36-24
	017	16.1	-4.3	2/1/2010	13:49	6.60E+02	5.97E+02	6.18E+02	7.81E-01	8.04E-01	8.46E-01	2.13E+00	3.24E+00	3.80E+00	0.00E+00	4.13E+00	4.27E+00	NA	NA	NA		
	018	16.1	-4.3	4/28/2010	14:14	3.53E+03	3.39E+02	1.45E+02	1.91E-01	5.60E-01	6.67E-01	1.74E+00	5.87E+00	6.86E+00	2.13E+00	5.66E+00	6.86E+00	NA	NA	NA		
	019	16.1	-4.3	7/29/2010	12:04	2.64E+02	1.17E+02	1.00E+02	2.15E-01	3.84E-01	4.23E-01	8.89E-01	9.88E+00	1.10E+01	-2.61E+00	1.19E+01	1.26E+01	NA	NA	NA		
MW-36-41	001	37	-25.2	2/10/2006	11:10	4.75E+04	1.24E+04	6.38E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		MW-36-41
	002	37	-25.2	2/27/2006	13:45	4.58E+04	1.22E+04	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	003	37	-25.2	3/24/2006	12:45	5.52E+04	4.65E+03	1.86E+03	3.48E+00	5.46E-01	4.16E-01	-5.91E+00	1.39E+01	1.45E+01	2.97E+00	1.53E+01	1.74E+01	4.87E+01	1.65E+01	1.65E+01		
	004	37	-25.2	4/5/2006	12:55	NA	NA	NA	3.53E+00	6.24E-01	5.02E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	005	37	-25.2	6/5/2006	11:30	2.05E+04	3.17E+03	6.01E+02	2.30E+00	6.59E-01	6.10E-01	-3.37E+00	1.27E+01	1.33E+01	6.21E-02	1.03E+01	1.13E+01	NA	NA	NA		
	006	37	-25.2	8/28/2006	10:10	2.01E+04	3.09E+03	6.45E+02	NA	NA	NA	1.96E+00	4.15E+00	5.22E+00	-2.78E-01	3.56E+00	3.78E+00	NA	NA	NA		
	007	37	-25.2	6/27/2007	12:30	6.11E+03	3.50E+02	1.74E+02	2.18E+00	1.17E+00	9.85E-01	4.30E-01	4.61E+00	1.74E+00	1.36E+00	2.91E+00	3.67E+00	NA	NA	NA		
	008	37	-25.2	5/1/2009	14:40	1.13E+04	7.20E+02	1.64E+02	4.03E+00	1.14E+00	7.31E-01	-2.59E-01	6.14E+00	4.09E+00	1.04E-01	3.03E+00	3.26E+00	NA	NA	NA		
	009	37	-25.2	3/4/2009	14:29	1.01E+04	5.64E+02	1.57E+02	7.12E+00	1.34E+00	7.74E-01	3.04E+00	6.52E+00	7.88E+00	7.15E+00	7.15E+00	9.63E+00	NA	NA	NA		
	010	37	-25.2	10/28/2009	16:14	1.01E+04	4.29E+02	1.67E+02	5.14E+00	1.19E+00	7.96E-01	-2.95E-01	4.17E+00	4.70E+00	1.79E+00	4.56E+00	5.37E+00	NA	NA	NA		
	011	37	-25.2	2/1/2010	12:25	9.56E+03	1.30E+03	6.06E+02	4.60E+00	9.53E-01	4.44E-01	1.66E+00	4.23E+00	4.78E+00	0.00E+00	4.35E+00	5.71E+00	NA	NA	NA		
	012	37	-25.2	4/28/2010	15:38	1.56E+04	6.89E+02	1.50E+02	5.95E+00	1.30E+00	5.74E-01	1.38E+00	6.43E+00	6.92E+00	8.55E-01	5.70E+00	6.68E+00	NA	NA	NA		
	013	37	-25.2	7/29/2010	12:23	1.30E+04	7.52E+02	1.46E+02	1.88E+00	7.41E-01	5.17E-01	-1.84E+00	6.35E+00	6.48E+00	4.07E+00	6.12E+00	7.75E+00	NA	NA	NA		
MW-36-52	001	49.7	-37.9	2/10/2006	10:30	2.24E+04	8.55E+03	6.38E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		MW-36-52
	002	49.7	-37.9	2/27/2006	12:05	2.57E+04	9.14E+03	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	003	49.7	-37.9	3/24/2006	16:00	2.68E+04	3.47E+03	1.87E+03	4.11E+00	5.66E-01	5.14E-01	4.47E+00	9.06E+00	1.04E+01	-2.47E+00	9.69E+00	1.03E+01	1.18E+01	1.44E+01	1.54E+01		
	004	49.7	-37.9	4/5/2006	14:30	NA	NA	NA	5.01E+00	7.23E-01	6.26E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	005	49.7	-37.9	6/5/2006	11:30	2.40E+04	3.68E+03	6.40E+02	4.42E+00	8.33E-01	5.53E-01	3.49E+00	1.05E+01	1.21E+01	4.80E-01	1.04E+01	1.15E+01	NA	NA	NA		
	006	49.7	-37.9	8/28/2006	10:00	1.41E+04	2.19E+03	5.35E+02	NA	NA	NA	4.06E-01	6.52E+00	7.36E+00	-2.69E-01	5.23E+00	5.69E+00	NA	NA	NA		
	007	49.7	-37.9	6/27/2007	11:45	1.01E+04	4.89E+02	1.95E+02	2.62E+00	1.09E+00	3.28E-01	-3.82E-01	2.77E+00	2.99E+00	9.25E-01	2.61E+00	3.14E+00	NA	NA	NA		
	008	49.7	-37.9	3/8/2007	14:15	1.25E+04	1.24E+03	4.60E+02	2.26E+00	1.00E+00	2.82E-01	1.30E+00	2.97E+00	3.51E+00	-8.82E-01	3.31E+00	3.55E+00	4.27E+00	2.14E+01	2.47E+01		
	009	49.7	-37.9	1/23/2008	14:13	1.13E+04	4.47E+02	1.71E+02	4.85E+00	9.69E-01	4.24E-01	-2.89E-01	2.01E+00	2.25E+00	4.08E-01	1.86E+00	2.20E+00	NA	NA	NA		
	010	49.7	-37.9	7/24/2008	16:00	1.26E+04	7.66E+02	3.74E+02	5.67E+00	7.42E-01	4.73E-01	-4.79E-01	2.24E+00	3.69E+00	2.77E-02	2.11E+00	3.53E+00	NA	NA	NA		
	011	49.7	-37.9	11/10/2008	16:53	1.10E+04	4.40E+02	1.63E+02	8.27E+00	1.24E+00	3.89E-01	-3.85E-01	3.86E+00	4.21E+00	1.36E+00	4.67E+00	5.65E+00	NA	NA	NA		
	012	49.7	-37.9	1/22/2009	12:59	6.79E+03	6.03E+02	2.06E+02	3.37E+00	8.99E-01	6.07E-01	-6.07E-01	2.96E+00	3.24E+00	1.65E+00	3.24E+00	4.05E+00	NA	NA	NA		
	013	49.7	-37.9	5/1/2009	15:07	6.06E+03	5.33E+02	1.63E+02	2.40E+00	7.82E-01	5.20E-01	2.41E+00	7.13E+00	4.75E+00	1.70E+00	4.26E+00	5.17E+00	NA	NA	NA		
	014	49.7	-37.9	3/4/2009	12:02	8.61E+03	5.30E+02	1.62E+02	4.70E+00	1.05E+00	5.90E-01	1.90E-01	7.86E+00	6.96E+00	-1.37E+00	7.25E+00	7.05E+00	NA	NA	NA		
	015	49.7	-37.9	10/28/2009	15:39	8.23E+03	3.92E+02	1.67E+02	3.51E+00	1.05E+00	6.91E-01	1.28E+00	4.38E+00	4.98E+00	3.63E+00	4.05E+00	5.13E+00	NA	NA	NA		
	016	49.7	-37.9	2/1/2010	15:28	5.97E+03	1.03E+03	6.42E+02	2.12E+00	6.87E-01	4.50E-01	-3.34E+00	6.50E+00	6.30E+00	-1.10E+00	3.79E+00	4.07E+00	NA	NA	NA		
	017	49.7	-37.9	4/28/2010	15:46	8.49E+03	5.09E+02	1.47E+02	5.36E+00	1.35E+00	6.85E-01	2.29E+00	5.31E+00	6.27E+00	2.98E+00	4.80E+00	6.12E+00	NA	NA	NA		
	018	49.7	-37.9	7/29/2010	12:24	7.07E+03	4.46E+02	1.00E+02	-1.52E-01	6.33E-01	8.23E-01	-1.63E+00	7.79E+00	8.33E+00	-1.74E+00	9.63E+00	1.03E+01	NA	NA	NA		
MW-37-22	001	17	-2	2/24/2006	9:50	1.07E+04	5.92E+03	6.39E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		MW-37-22
	002	17	-2	2/28/2006	10:20	NA	NA	NA	2.40E+00	9.10E-01	9.16E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	002	17	-2	2/28/2006	10:20	1.28E+04	2.03E+03	1.31E+03	2.37E+00	8.91E-01	8.44E-01	2.41E+00	1.92E-01	1.95E+01	3.60E+00	1.58E+01	1.77E+01	4.24E+01	1.48E+01	1.47E+01		
	003	17	-2	3/10/2006	10:35	2.32E+04	2.57E+03	1.28E+03	4.70E+00	9.84E-01	7.87E-01	4.61E+00	1.46E-01	1.63E+01	5.65E+00	1.39E+01	1.57E+01	2.08E+01	1.27E+01	1.33E+01		
	004	17	-2	3/27/2006	10:35	3.49E+04	3.78E+03	1.81E+03	4.05E+00	8.76E-01	6.97E-01	9.75E-01	4.68E+00	5.21E+00	7.46E-01	4.48E+00	4.97E+00	5.43E+01	1.53E+01	1.52E+01		
	005	17	-2	6/27/2006	10:25	1.05E+04	8.55E+02	3.40E+02	9.57E+00	1.20E+00	7.87E-01	3.20E+00	6.92E+00	8.00E+00	-8.05E-01	6.94E+00	7.43E+00	NA	NA	NA		
	006	17	-2	9/29/2006	9:30	7.37E+03	1.22E+03	3.76E+02	1.42E+01	1.80E+00	9.01E-01	-3.84E-02	8.51E+00	9.49E+00	-1.03E+00	7.63E+00	7.69E+00	NA	NA	NA		
	007	17	-2	6/27/2007	10:50	4.05E+03	3.35E+02	1.94E+02	1.49E+01	2.13E+00	8.72E-01	-2.26E+00	4.88E+00	3.50E+00	-1.12E+00	3.24E+00	3.34E+00	NA	NA	NA		
	008	17	-2	3/7/2007	10:55	2.79E+03	2.69E+02	1.89E+02	1.83E+01	2.07E+00	8.57E-01	2.74E+00	3.93E+00	4.22E+00	4.23E-01	3.07E+00	3.54E+00	NA	NA	NA		
	009	17	-2	10/15/2007	14:30	2.26E+03	2.22E+02	1.69E+02	2.29E+01	2.28E+00	4.67E-01	1.33E+00	3.25E+00	3.78E+00	-1.42E+00	3.44E+00	3.44E+00	NA	NA	NA		
	010	17	-2	1/23/2008	10:42	6.52E+03	3.54E+02	1.71E+02	8.73E+00	1.27E+00	4.63E-01	-2.09E+00	2.96E+00	2.86E+00	2.34E-01	3.08E+00	3.49E+00	NA	NA	NA		
	011	17	-2	7/24/2008	11:20	4.33E+03	2.28E+02	1.95E+02	1.22E+01	1.25E+00	7.14E-01	4.32E-01	2.13E+00	3.66E+00	2.97E+00	2.57E+00	4.83E+00	NA	NA	NA		
	012	17	-2	11/10/2008	12:20	2.68E+03	3.92E+02	1.74E+02	1.80E+01	1.88E+00	4.08E-01	2.81E+00	4.96E+00	5.96E+00	-2.85E-01	4.53E+00	4.88E+00	NA	NA	NA		
	013	17	-2	1/21/2009	14:27	5.27E+03	5.36E+02	2.05E+02	8.81E+00	1.33E+00	6.79E-01	-3.12E-01	3.02E+00	3.27E+00	-2.03E+00	3.09E+00	2.82E+00	NA	NA	NA		
	014	17	-2	5/1/2009	12:16	3.85E+03	7.92E+02	4.73E+02	9.37E+00	1.37E+00	4.81E-01	1.09E+00	7.64E+00	5.09E+00	-8.00E-01	5.43E+00	5.74E+00	NA	NA	NA		
	015	17	-2	7/23/2009	14:40	4.70E+03	4.97E+02	2.27E+02	1.21E+01	1.56E+00	4.27E-01	4.22E-02	3.86E+00	4.38E+00	-1.57E+00	3.54E+00	3.56E+00	NA	NA	NA		
	016	17	-2	10/28/2009	11:39	4.56E+03	2.90E+02	1.62E+02	1.24E+01	1.51E+00	4.86E-01	-5.18E-02	5.66E+00	6.30E+00	-3.95E-01	6.42E+00	6.70E+00	NA	NA	NA		
	017	17	-2	1/29/2010	15:24	5.54E+03	9.63E+02	4.47E+02	1.22E+01	1.46E+00	4.07E-01	9.10E-01	3.98E+00	4.49E+00	-4.43E-01	4.51E+00	4.99E+00	NA	NA	NA		
	018	17	-2	4/27/2010	13:23	9.06E+03	4.26E+02	2.09E+02	1.29E+01	1.68E+00	6.44E-01	-1.08E+00	5.73E+00	5.64E+00	1.34E+00	4.41E+00	5.29E+00	NA	NA	NA		
	019	17	-2	8/5/2010	14:06	3.70E+03	3.26E+02	9.90E+01	5.19E+00	1.39E+00	9.19E-01	-1.60E+00	7.62E+00	8.20E+00	4.53E+00	7.13E+00	9.76E+00	NA	NA	NA		
MW-37-32	002	29	-14	2/28/2006	12:00	NA	NA	NA	1.82E+01	1.72E+00	2.28E+00	NA	NA	NA	NA	NA	NA	NA	NA	NA		MW-37-32
	002	29	-14	2/28/2006	12:00	2.86E+04	2.73E+03	1.32E+03	1.78E+01	1.49E+00	2.22E+00	1.27E+01	1.93E-01	2.17E+01	1.50E+01	1.90E+01	2.20E+01	3.41E+01	1.46E+01	1.48E+01		
	003	29	-14	3/10/2006	12:50	2.83E+04	2.79E+03	1.28E+03	1.52E+01	1.39E+00	1.90E+00	1.43E+01	1.59E-01	1.78E+01	1.51E+00	1.51E+01	1.65E+01	1.13E+01	1.26E+01	1.34E+01		
	004	29	-14	3/27/2006	11:10	1.39E+04	2.61E+03	1.72E+03	1.95E+01	1.59E+00	2.44E+00	1.10E+00	4.72E+00	5.25E+00	-8.50E-01	4.41E+00	4.80E+00	6.09E+00	1.40E+01	1.51E+01		
	005	29	-14	6/27/2006	9:15	7.92E+03	6.63E+02	2.99E+02	2.98E+01	2.64E+00	3.72E+00	-2.37E-01	5.24E+00	6.07E+00	-2.02E-01	4.75E+00	5.78E+00	NA	NA	NA		
	006	29	-14	9/29/2006	10:15	1.15E+04	1.88E+03	4.64E+02	1.53E+01	1.80E+00	1.91E+00	-3.21E+00	8.98E+00	8.67E+00	2.51E+00	8.73E+00	1.06E+01	NA	NA	NA		
	001	29	-14	2/24/2007	10:55	3.01E+04	9.93E+03	6.39E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	007	29	-14	6/27/2007	12:20	3.13E+03	3.05E+02	1.93E+02	1.85E+01	2.37E+00	2.31E+00	-1.49E+00	3.86E+00	3.38E+00	1.63E+00	3.38E+00	4.14E+00	NA	NA	NA		
	008	29	-14	3/7/2007	10:56	3.81E+03	2.97E+02	1.87E+02	1.89E+01	2.02E+00	2.36E+00	1.99E+00	3.18E+00	3.88E+00	1.88E+00	3.19E+00	4.01E+00	NA	NA	NA		
	009	29	-14	10/15/2007	14:36	2.49E+03	2.30E+02	1.69E+02	2.13E+01	2.19E+00	2.66E+00	8.79E-01	4.61E+00	4.81E+00	2.53E+00	3.75E+00	4.70E+00	NA	NA	NA		
	010	29	-14	1/23/2008	11:03	6.76E+03	3.57E+02	1.70E+02	1.52E+01	1.59E+00	3.65E-01	1.09E+00	2.70E+00	3.16E+00	-5.32E-02	2.72E+00	2.55E+00	NA	NA	NA		
	011	29	-14	7/24/2008	12:28	5.16E+03	2.45E+02	1.95E+02	2.06E+01	1.51E+00	8.63E-01	-4.08E-01	1.58E+00	2.18E+00	-1.46E-01	2.04E+00	2.58E+00	NA	NA	NA		

IPEC00263589

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-37-32	012	29	-14	11/10/2008	12:20	2.89E+03	4.01E+02	1.71E+02	1.86E+01	1.95E+00	3.99E-01	1.71E+00	5.33E+00	6.24E+00	4.09E-01	5.37E+00	6.14E+00	NA	NA	NA	MW-37-32
	013	29	-14	1/21/2009	14:30	3.76E+03	4.61E+02	2.04E+02	1.11E+01	1.49E+00	6.27E-01	1.59E+00	2.84E+00	3.40E+00	-7.12E-01	3.32E+00	3.49E+00	NA	NA	NA	
	014	29	-14	5/1/2009	12:13	4.83E+03	8.66E+02	4.72E+02	1.72E+01	1.80E+00	6.64E-01	-2.55E+00	7.43E+00	4.95E+00	1.24E-01	3.66E+00	4.12E+00	NA	NA	NA	
	015	29	-14	7/23/2009	15:07	5.48E+03	5.28E+02	2.25E+02	2.38E+01	2.17E+00	6.75E-01	-6.60E-01	3.35E+00	3.66E+00	-1.22E+00	3.10E+00	3.12E+00	NA	NA	NA	
	016	29	-14	10/28/2009	11:37	4.56E+03	2.88E+02	1.61E+02	2.20E+01	2.04E+00	7.01E-01	-3.69E+00	7.75E+00	7.99E+00	2.12E-01	4.67E+00	5.38E+00	NA	NA	NA	
	017	29	-14	1/29/2010	15:43	5.69E+03	1.05E+03	6.73E+02	2.03E+01	1.89E+00	4.73E-01	1.04E+00	3.51E+00	3.99E+00	-5.67E-01	3.75E+00	4.02E+00	NA	NA	NA	
	018	29	-14	4/27/2010	17:25	7.24E+03	3.90E+02	2.10E+02	1.87E+01	2.28E+00	6.59E-01	6.85E-01	5.87E+00	6.72E+00	-2.27E+00	4.88E+00	4.69E+00	NA	NA	NA	
	019	29	-14	3/5/2010	14:00	4.80E+03	3.69E+02	9.97E+01	1.41E+01	1.85E+00	5.42E-01	-5.90E+00	8.89E+00	8.07E+00	-3.93E-01	8.67E+00	9.54E+00	NA	NA	NA	
MW-37-40	001	39.2	-24.2	2/24/2006	11:35	1.68E+04	7.41E+03	6.39E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-37-40
	002	39.2	-24.2	2/28/2006	11:40	1.47E+04	2.13E+03	1.32E+03	3.86E+00	1.23E+00	1.19E+00	1.79E+01	1.71E+01	1.96E+01	1.53E+00	1.64E+01	1.81E+01	5.65E+01	1.65E+01	1.61E+01	
	002	39.2	-24.2	2/28/2006	11:40	NA	NA	NA	4.91E+00	1.23E+00	1.08E+00	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	39.2	-24.2	3/10/2006	10:25	1.70E+04	2.30E+03	1.29E+03	1.35E+01	1.32E+00	7.28E-01	5.51E+00	1.45E+01	1.62E+01	1.99E+00	1.47E+01	1.62E+01	1.24E+01	1.35E+01	1.44E+01	
	004	39.2	-24.2	3/27/2006	11:55	1.56E+04	2.82E+03	1.82E+03	1.11E+01	1.12E+00	5.90E-01	3.34E+00	6.14E+00	5.43E+00	4.03E+00	4.71E+00	5.39E+00	6.37E+00	1.35E+01	1.47E+01	
	006	39.2	-24.2	6/27/2006	10:15	1.42E+04	1.13E+03	3.89E+02	2.44E+01	1.71E+00	7.03E-01	8.68E+00	7.68E+00	9.25E+00	-4.36E+00	6.70E+00	6.60E+00	NA	NA	NA	
	007	39.2	-24.2	6/27/2007	11:00	6.35E+03	3.99E+02	1.93E+02	4.69E+00	1.14E+00	8.47E-01	5.92E-01	3.36E+00	3.91E+00	-1.07E+00	3.15E+00	3.22E+00	NA	NA	NA	
	008	39.2	-24.2	3/7/2007	13:45	5.85E+03	3.50E+02	1.88E+02	9.76E+00	1.51E+00	6.27E-01	1.10E+00	3.12E+00	3.71E+00	-2.48E-01	3.36E+00	3.70E+00	NA	NA	NA	
	009	39.2	-24.2	10/15/2007	15:00	5.69E+03	3.03E+02	1.69E+02	5.98E+00	1.28E+00	7.48E-01	7.63E-01	2.91E+00	3.38E+00	5.99E-01	2.82E+00	3.32E+00	NA	NA	NA	
	010	39.2	-24.2	2/1/2008	17:20	6.73E+03	3.17E+02	1.33E+02	9.48E-01	8.54E-01	8.45E-01	3.09E-01	2.63E+00	2.95E+00	-3.70E-01	2.75E+00	2.94E+00	-4.35E+00	1.46E+01	1.76E+01	
	011	39.2	-24.2	7/24/2008	13:12	5.24E+03	2.43E+02	1.91E+02	1.31E+00	4.41E-01	5.07E-01	-1.10E+00	1.52E+00	2.48E+00	-1.35E+00	2.11E+00	2.70E+00	NA	NA	NA	
	012	39.2	-24.2	11/10/2008	16:17	5.49E+03	5.45E+02	1.76E+02	1.13E+00	5.31E-01	3.83E-01	3.61E-01	6.03E+00	6.83E+00	5.04E+00	7.42E+00	9.22E+00	NA	NA	NA	
	013	39.2	-24.2	1/22/2009	13:05	4.91E+03	5.13E+02	2.00E+02	3.47E+00	8.85E-01	5.69E-01	-2.64E+00	3.78E+00	3.27E+00	2.67E+00	3.14E+00	4.08E+00	NA	NA	NA	
	014	39.2	-24.2	5/1/2009	14:15	4.38E+03	8.33E+02	4.73E+02	1.11E+00	5.15E-01	3.77E-01	-2.89E-01	7.70E+00	5.13E+00	2.74E+00	5.21E+00	6.44E+00	NA	NA	NA	
	015	39.2	-24.2	7/23/2009	14:16	4.22E+03	4.74E+02	2.26E+02	1.19E+01	1.39E+00	3.48E-01	-1.35E-01	3.99E+00	4.50E+00	-3.89E-01	3.12E+00	3.38E+00	NA	NA	NA	
	016	39.2	-24.2	10/28/2009	13:48	4.52E+03	2.88E+02	1.62E+02	1.69E+01	1.75E+00	7.12E-01	2.63E+00	6.40E+00	7.65E+00	3.10E+00	6.72E+00	8.29E+00	NA	NA	NA	
	017	39.2	-24.2	1/29/2010	12:52	4.70E+03	8.82E+02	4.33E+02	1.25E+01	1.44E+00	4.29E-01	7.58E-01	5.10E+00	5.66E+00	-1.29E+00	4.93E+00	5.38E+00	NA	NA	NA	
	018	39.2	-24.2	4/27/2010	12:43	5.37E+03	3.45E+02	2.07E+02	1.71E+01	1.81E+00	6.52E-01	-2.56E+00	4.54E+00	4.41E+00	-7.35E-02	5.03E+00	5.51E+00	NA	NA	NA	
	019	39.2	-24.2	3/5/2010	14:25	7.00E+03	4.43E+02	9.99E+01	1.43E+01	1.74E+00	4.81E-01	3.15E-01	7.86E+00	9.00E+00	3.82E+00	7.44E+00	9.31E+00	NA	NA	NA	
MW-37-57	001	53.2	-38.2	2/24/2006	10:30	1.60E+04	7.22E+03	6.39E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-37-57
	002	53.2	-38.2	2/28/2006	13:35	NA	NA	NA	2.27E+01	2.00E+00	1.02E+00	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	002	53.2	-38.2	2/28/2006	13:35	1.33E+04	2.06E+00	1.32E+03	2.22E+01	1.75E+00	1.05E+00	1.81E+00	2.14E-01	2.44E+01	5.22E+00	1.82E+01	2.14E+01	2.91E+01	1.50E+01	1.54E+01	
	003	53.2	-38.2	3/10/2006	11:45	1.91E+04	2.40E+03	1.29E+03	2.29E+01	1.74E+00	7.68E-01	1.46E+00	1.76E-01	1.77E+01	7.74E+00	1.53E+01	1.73E+01	1.04E+01	1.33E+01	1.43E+01	
	004	53.2	-38.2	3/27/2006	13:55	1.59E+04	2.84E+03	1.81E+03	1.65E+01	1.38E+00	6.60E-01	2.52E+00	5.25E+00	5.80E+00	3.94E+00	4.86E+00	5.53E+00	3.71E+00	1.37E+01	1.49E+01	
	005	53.2	-38.2	6/27/2006	9:35	4.48E+04	3.42E+03	6.83E+02	2.73E+01	1.89E+00	8.18E-01	NA	NA	NA	2.04E+00	5.77E+00	6.52E+00	NA	NA	NA	
	006	53.2	-38.2	9/29/2006	10:40	1.05E+04	1.74E+03	4.52E+02	1.81E+01	1.88E+00	7.87E-01	-3.39E+00	8.04E+00	7.81E+00	2.60E+00	8.86E+00	1.07E+01	NA	NA	NA	
	007	53.2	-38.2	6/27/2007	12:20	5.89E+03	3.89E+02	1.95E+02	2.42E+01	3.03E+00	8.84E-01	2.45E+00	3.51E+00	4.32E+00	-9.58E-02	4.67E+00	4.84E+00	NA	NA	NA	
	008	53.2	-38.2	3/7/2007	12:55	6.68E+03	3.68E+02	1.88E+02	2.33E+01	2.15E+00	5.01E-01	-1.35E+00	3.27E+00	3.42E+00	-3.64E-02	3.86E+00	4.33E+00	NA	NA	NA	
	009	53.2	-38.2	10/15/2007	15:00	4.88E+03	2.85E+02	1.68E+02	2.78E+01	2.49E+00	5.53E-01	3.62E-01	2.67E+00	2.72E+00	1.20E-01	2.40E+00	2.77E+00	NA	NA	NA	
	010	53.2	-38.2	2/1/2008	16:31	6.63E+03	3.14E+02	1.33E+02	2.89E+01	3.20E+00	9.62E-01	-9.11E-01	3.72E+00	3.68E+00	-2.93E-01	3.12E+00	3.45E+00	8.47E-01	1.46E+01	1.71E+01	
	011	53.2	-38.2	7/24/2008	13:20	5.33E+03	2.47E+02	1.94E+02	2.12E+01	1.46E+00	5.27E-01	-7.11E-01	1.88E+00	3.07E+00	-1.17E+00	2.10E+00	3.24E+00	NA	NA	NA	
	012	53.2	-38.2	11/10/2008	11:04	4.27E+03	4.77E+02	1.71E+02	2.40E+01	2.29E+00	6.36E-01	-1.57E-01	6.08E+00	6.80E+00	9.78E-01	7.18E+00	8.14E+00	NA	NA	NA	
	013	53.2	-38.2	1/21/2009	14:22	5.04E+03	5.21E+02	2.02E+02	1.99E+01	1.97E+00	6.68E-01	3.77E-02	3.41E+00	3.80E+00	1.05E+00	3.71E+00	4.35E+00	NA	NA	NA	
	014	53.2	-38.2	5/1/2009	12:39	5.94E+03	5.24E+02	1.61E+02	2.49E+01	2.15E+00	5.69E-01	-2.83E-02	7.56E+00	5.04E+00	5.79E-01	4.89E+00	5.60E+00	NA	NA	NA	
	015	53.2	-38.2	7/23/2009	15:12	4.05E+03	4.61E+02	2.22E+02	3.17E+01	2.46E+00	6.47E-01	9.63E-01	3.07E+00	3.68E+00	3.34E-01	3.17E+00	3.55E+00	NA	NA	NA	
	016	53.2	-38.2	10/28/2009	12:00	4.20E+03	2.81E+02	1.62E+02	2.88E+01	2.58E+00	8.87E-01	1.78E+00	5.84E+00	6.92E+00	-1.29E-01	6.51E+00	7.24E+00	NA	NA	NA	
	017	53.2	-38.2	1/29/2010	15:43	5.07E+03	9.08E+02	4.31E+02	1.76E+01	1.80E+00	4.25E-01	1.11E+00	4.16E+00	4.74E+00	5.45E-01	3.90E+00	4.50E+00	NA	NA	NA	
	018	53.2	-38.2	4/27/2010	17:28	5.20E+03	3.50E+02	2.16E+02	1.90E+01	2.15E+00	6.60E-01	-5.08E+00	7.63E+00	7.24E+00	1.71E+00	6.43E+00	7.85E+00	NA	NA	NA	
	019	53.2	-38.2	3/5/2010	13:59	7.30E+03	4.52E+02	9.94E+01	1.73E+01	1.69E+00	5.57E-01	-2.16E+00	7.37E+00	7.75E+00	-6.93E-01	8.96E+00	9.77E+00	NA	NA	NA	
MW-38	002	25.4	-11.1	12/8/2005	10:30	9.85E+02	4.38E+02	4.54E+02	-4.38E+00	9.29E+00	1.25E+01	2.93E+00	8.80E+00	6.57E+00	2.99E+00	8.98E+00	7.06E+00	NA	NA	NA	MW-38
	003	25.4	-11.1	12/30/2005	11:50	2.50E+02	4.29E+02	4.71E+02	NA	NA	NA	2.84E+00	8.51E+00	6.39E+00	2.81E+00	8.43E+00	6.71E+00	NA	NA	NA	
	004	25.4	-11.1	1/10/2006	13:50	1.01E+03	4.50E+02	4.66E+02	NA	NA	NA	3.71E+00	1.11E+01	8.02E+00	3.55E+00	1.06E+01	8.02E+00	NA	NA	NA	
	005	25.4	-11.1	1/19/2006	13:15	7.58E+02	4.29E+02	4.61E+02	NA	NA	NA	3.13E+00	9.38E+00	7.14E+00	3.71E+00	1.11E+01	8.77E+00	NA	NA	NA	
	006	25.4	-11.1	1/25/2006	12:15	1.44E+03	4.59E+02	4.61E+02	NA	NA	NA	3.67E+00	1.10E+01	8.21E+00	4.18E+00	1.25E+01	9.71E+00	NA	NA	NA	
	007	25.4	-11.1	2/1/2006	13:50	3.39E+02	4.23E+02	4.60E+02	NA	NA	NA	3.06E+00	9.19E+00	6.91E+00	3.03E+00	9.09E+00	7.30E+00	NA	NA	NA	
	008	25.4	-11.1	2/8/2006	11:15	1.88E+02	3.30E+02	3.46E+02	1.35E-01	4.34E-01	5.15E-01	5.29E+00	1.16E+01	1.31E+01	2.41E+00	1.17E+01	1.31E+01	NA	NA	NA	
	009	25.4	-11.1	2/16/2006	10:05	1.47E+02	4.11E+02	4.54E+02	NA	NA	NA	2.91E+00	8.74E+00	6.54E+00	2.48E+00	7.44E+00	6.05E+00	NA	NA	NA	
	010	25.4	-11.1	2/23/2006	13:25	2.63E+03	4.98E+02	4.61E+02	NA	NA	NA	1.97E+00	5.90E+00	4.22E+00	1.88E+00	5.63E+00	4.19E+00	NA	NA	NA	
	011	25.4	-11.1	3/3/2006	8:50	3.70E+02	4.71E+02	4.66E+02	NA	NA	NA	2.65E+00	7.94E+00	6.38E+00	4.53E+00	1.36E+01	1.08E+01	NA	NA	NA	
	013	25.4	-11.1	5/22/2006	9:20	7.59E+02	4.11E+02	4.46E+02	1.52E-01	2.88E-01	3.20E-01	3.42E+00	1.03E+01	7.57E+00	3.40E+00	1.02E+01	7.93E+00	NA	NA	NA	
	014	25.4	-11.1	6/21/2006	9:48	9.16E+02	4.38E+02	4.60E+02	-2.66E+00	2.16E+00	2.40E+00	2.52E+00	7.56E+00	5.45E+00	2.50E+00	7.49E+00	5.59E+00	1.10E+00	5.70E+00	6.40E+00	
	014	25.4	-11.1	6/21/2006	9:48	7.62E+02	1.77E+02	1.70E+02	NA	NA	NA	5.90E-01	2.10E+00	2.40E+00	1.20E+00	2.07E+00	2.20E+00	NA	NA	NA	
	015	25.4	-11.1	7/6/2006	12:00	5.93E+02	4.20E+02	4.52E+02	-3.70E-01	4.50E-01	5.20E-01	3.40E+00	1.02E+01	7.70E+00	2.98E+00	8.95E+00	7.41E+00	NA	NA	NA	
	016	25.4	-11.1	8/7/2006	13:23	2.15E+02	1.80E+02	1.74E+02	5.00E-02	6.30E-01	7.10E-01	2.29E+00	6.47E+00	9.51E+00	-7.22E-01	6.90E+00	9.33E+00	2.75E+01	2.94E+01	3.13E+01	
	017	25.4	-11.1	9/5/2006	11:30	3.53E+02	1.86E+02	1.67E+02	-5.30E-01	7.80E-01	8.70E-01	3.81E-01	7.68E+00	8.63E+00	-4.48E-01	6.20E+00	6.42E+00	NA	NA	NA	
	018	25.4	-11.1	11/22/2006	10:38	1.78E+02	4.08E+02	4.50E+02	-7.00E-02	6.60E-01	7.30E-01	3.13E+00	9.38E+00	7.14E+00	3.08E+00	9.25E+00	7.53E+00	NA	NA	NA	
	019	25.4	-11.1	2/12/2007	9:58	2.24E+03	6.00E+02	5.30E+02	-5.10E-01	1.32E+00	1.50E+00	2.73E+00	1.92E+00	2.00E+00	-1.03E+00	1.41E+00	1.80E+00	NA	NA	NA	
	020	25.4	-11.1	8/16/2007	11:30	6.04E+02	1.53E+02	1.44E+02	-9.21E-02	6.92E-01	8.85E-01	1.21E+00	3.07E+00	3.65E+00	2.48E+00	3.01E+00	3.98E+00	NA	NA	NA	
	021	25.4	-11.1	4/22/2009	10:45	2.74E+02	1.67E+02	1.77E+02	3.53E-01	7.50E-01	8.49E-01	-2.57E-01	4.41E+00	2.94E+00	6.51E-01	2.55E+00	2.94E+00	NA	NA	NA	

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-39-67	001	67	13	5/22/2007	9:53	4.73E+02	1.77E+02	1.31E+02	2.76E+00	8.57E-01	5.71E-01	1.23E-01	1.67E+00	1.85E+00	1.84E+00	1.88E+00	2.08E+00	-3.11E+00	1.06E+01	1.23E+01	MW-39-67
	002	67	13	3/7/2007	16:30	3.25E+02	1.86E+02	1.95E+02	4.78E+00	1.13E+00	6.32E-01	2.59E+00	4.62E+00	3.57E+00	2.62E-01	2.55E+00	2.96E+00	NA	NA	NA	
	003	67	13	1/17/2008	14:35	3.57E+02	1.95E+02	1.83E+02	3.52E+00	1.29E+00	8.53E-01	-1.28E-01	3.17E+00	3.57E+00	1.76E+00	3.63E+00	4.25E+00	NA	NA	NA	
	004	67	13	5/1/2008	13:48	3.18E+02	1.24E+02	1.96E+02	2.21E+00	6.17E-01	6.78E-01	-3.01E-01	1.58E+00	2.53E+00	3.64E-01	1.80E+00	3.11E+00	NA	NA	NA	
	005	67	13	10/23/2008	12:53	4.15E+02	2.01E+02	1.99E+02	3.31E+00	1.12E+00	7.74E-01	-1.28E+00	5.46E+00	5.95E+00	-1.22E-01	5.38E+00	6.06E+00	NA	NA	NA	
	006	67	13	4/9/2009	14:55	3.38E+02	1.67E+02	1.50E+02	3.35E+00	9.68E-01	6.51E-01	-8.08E-01	5.12E+00	3.41E+00	9.19E-01	3.60E+00	4.21E+00	NA	NA	NA	
	007	67	13	11/5/2009	15:11	4.41E+02	1.20E+02	9.84E+01	2.37E+00	7.72E-01	5.02E-01	-6.24E-01	5.07E+00	5.46E+00	2.05E+00	5.21E+00	6.29E+00	NA	NA	NA	
	008	67	13	5/4/2010	15:23	3.79E+02	2.01E+02	2.13E+02	1.26E+00	6.60E-01	6.33E-01	4.66E-01	5.42E+00	6.14E+00	1.30E+00	6.75E+00	7.87E+00	NA	NA	NA	
	009	67	13	7/22/2010	14:26	2.86E+02	1.19E+02	9.90E+01	1.73E+00	6.00E-01	3.90E-01	2.94E+00	6.33E+00	7.80E+00	-5.65E+00	7.25E+00	5.04E+00	NA	NA	NA	
MW-39-84	001	83.5	-3.5	5/22/2007	10:38	5.91E+02	1.89E+02	1.29E+02	1.72E+00	7.22E-01	5.57E-01	-9.07E-02	1.53E+00	1.69E+00	5.61E-01	1.58E+00	1.81E+00	-1.68E+00	9.99E+00	1.15E+01	MW-39-84
	002	83.5	-3.5	3/7/2007	15:30	2.52E+02	1.77E+02	1.91E+02	7.97E-01	7.18E-01	7.30E-01	3.55E-01	3.07E+00	3.44E+00	-1.11E+00	3.59E+00	3.76E+00	NA	NA	NA	
	003	83.5	-3.5	1/17/2008	13:25	1.43E+02	1.70E+02	1.84E+02	1.78E+00	9.47E-01	7.24E-01	-2.74E+00	2.99E+00	2.86E+00	8.36E-01	2.94E+00	3.50E+00	NA	NA	NA	
	004	83.5	-3.5	5/1/2008	14:10	1.50E+02	1.18E+02	1.96E+02	2.23E+00	7.07E-01	8.93E-01	-2.12E-01	2.24E+00	3.67E+00	-2.12E-01	2.24E+00	3.67E+00	NA	NA	NA	
	005	83.5	-3.5	10/23/2008	12:56	2.34E+02	1.88E+02	1.99E+02	1.04E+00	6.90E-01	5.86E-01	1.74E+00	5.88E+00	6.93E+00	1.12E+00	6.98E+00	8.05E+00	NA	NA	NA	
	006	83.5	-3.5	4/9/2009	15:25	1.85E+02	1.48E+02	1.50E+02	2.05E+00	7.71E-01	6.01E-01	-3.09E-01	4.19E+00	2.79E+00	1.63E+00	2.67E+00	3.42E+00	NA	NA	NA	
	007	83.5	-3.5	11/5/2009	15:14	2.42E+02	1.02E+02	9.56E+01	1.11E+00	6.78E-01	6.28E-01	-1.25E+00	1.06E-01	1.16E+01	3.13E+00	6.23E+00	7.74E+00	NA	NA	NA	
	008	83.5	-3.5	5/4/2010	15:32	2.25E+02	1.95E+02	2.12E+02	1.26E+00	6.00E-01	5.62E-01	1.07E+00	5.85E+00	6.81E+00	-2.75E+00	5.78E+00	5.93E+00	NA	NA	NA	
	009	83.5	-3.5	7/22/2010	14:42	3.70E+02	1.30E+02	1.01E+02	8.43E-01	6.21E-01	5.85E-01	-3.32E+00	6.79E+00	6.90E+00	2.43E+00	6.95E+00	8.54E+00	NA	NA	NA	
MW-39-102	001	101.5	-21.5	5/22/2007	10:40	8.05E+02	2.13E+02	1.29E+02	1.32E+00	7.17E-01	6.21E-01	-3.99E-02	1.81E+00	1.99E+00	6.54E-01	1.78E+00	2.11E+00	6.39E-02	1.15E+01	1.32E+01	MW-39-102
	002	101.5	-21.5	3/7/2007	14:25	3.21E+02	1.79E+02	1.88E+02	4.71E-01	5.61E-01	5.95E-01	-7.63E-01	3.35E+00	3.60E+00	-2.47E+00	4.70E+00	4.22E+00	NA	NA	NA	
	003	101.5	-21.5	1/17/2008	13:32	1.54E+02	1.67E+02	1.79E+02	9.88E-01	8.36E-01	7.97E-01	7.42E-01	2.37E+00	2.83E+00	7.91E-01	3.45E+00	2.98E+00	NA	NA	NA	
	004	101.5	-21.5	4/30/2008	14:56	5.03E+02	1.69E+02	2.44E+02	8.83E-01	5.43E-01	7.95E-01	-1.02E+00	2.63E+00	4.00E+00	4.88E-01	1.90E+00	3.34E+00	-1.07E+01	1.40E+01	2.48E+01	
	005	101.5	-21.5	10/22/2008	13:56	1.68E+02	1.83E+02	2.00E+02	1.23E+00	7.18E-01	5.92E-01	6.57E-01	6.18E+00	6.75E+00	-1.90E+00	5.47E+00	5.53E+00	NA	NA	NA	
	006	101.5	-21.5	4/9/2009	15:38	2.20E+02	1.53E+02	1.51E+02	2.40E+00	8.22E-01	6.31E-01	-8.17E-02	5.07E+00	3.38E+00	1.30E+00	3.12E+00	3.80E+00	NA	NA	NA	
	007	101.5	-21.5	11/5/2009	15:12	2.67E+02	1.08E+02	9.93E+01	1.24E+00	1.02E+00	1.05E+00	-2.19E+00	6.51E+00	5.89E+00	-4.22E+00	7.20E+00	6.76E+00	NA	NA	NA	
	008	101.5	-21.5	5/4/2010	15:27	3.93E+02	2.01E+02	2.13E+02	4.15E-01	6.36E-01	6.97E-01	-2.40E+00	5.49E+00	5.72E+00	-5.18E-01	6.30E+00	6.91E+00	NA	NA	NA	
	009	101.5	-21.5	7/22/2010	14:52	2.39E+02	1.49E+02	1.49E+02	4.05E+00	9.93E-01	4.71E-01	-1.08E+00	6.35E+00	6.98E+00	-3.68E+00	5.55E+00	4.42E+00	NA	NA	NA	
MW-39-124	001	124	-44	5/22/2007	9:50	2.61E+02	1.49E+02	1.31E+02	9.26E-01	9.70E-01	1.00E+00	-1.15E-01	1.64E+00	1.80E+00	-5.31E-01	1.54E+00	1.63E+00	3.55E+00	1.17E+01	1.33E+01	MW-39-124
	002	124	-44	3/7/2007	13:40	1.92E+02	1.73E+02	1.88E+02	5.90E-01	8.57E-01	9.43E-01	-1.14E+00	2.94E+00	3.06E+00	4.97E-01	3.17E+00	3.61E+00	NA	NA	NA	
	003	124	-44	1/17/2008	15:40	1.67E+02	1.64E+02	1.73E+02	1.48E+00	9.71E-01	8.60E-01	6.55E-01	2.61E+00	3.00E+00	9.85E-01	2.03E+00	2.55E+00	NA	NA	NA	
	004	124	-44	4/30/2008	15:24	2.15E+02	9.50E+01	1.53E+02	1.79E+00	6.60E-01	8.91E-01	-1.23E+00	2.13E+00	3.40E+00	5.87E-01	2.19E+00	3.89E+00	-1.13E+01	1.42E+01	2.52E+01	
	005	124	-44	10/22/2008	14:00	2.31E+02	1.88E+02	2.00E+02	9.42E-01	6.47E-01	5.64E-01	1.03E+00	6.64E+00	7.61E+00	1.63E+00	6.98E+00	8.11E+00	NA	NA	NA	
	006	124	-44	4/9/2009	11:46	1.98E+02	1.50E+02	1.50E+02	9.16E-01	6.33E-01	6.09E-01	-9.45E-02	5.16E+00	3.44E+00	-1.55E-01	3.30E+00	3.67E+00	NA	NA	NA	
	007	124	-44	11/5/2009	12:56	2.68E+02	1.09E+02	1.00E+02	1.87E+00	8.68E-01	7.66E-01	-6.47E-01	5.88E+00	6.55E+00	4.43E+00	7.04E+00	8.98E+00	NA	NA	NA	
	008	124	-44	5/4/2010	12:32	3.08E+02	1.92E+02	2.06E+02	5.90E-01	8.18E-01	8.96E-01	-2.76E-02	5.43E+00	5.45E+00	1.35E-02	5.05E+00	5.58E+00	NA	NA	NA	
	009	124	-44	7/22/2010	11:39	1.12E+02	1.34E+02	1.46E+02	2.25E+00	7.71E-01	5.01E-01	-1.11E+00	8.32E+00	9.28E+00	-4.37E-01	9.75E+00	1.10E+01	NA	NA	NA	
MW-39-183	001	182.5	-102.5	5/22/2007	10:08	2.47E+02	1.45E+02	1.29E+02	6.51E-01	8.82E-01	9.53E-01	6.42E-01	1.88E+00	1.89E+00	3.09E-02	1.58E+00	1.79E+00	0.00E+00	1.09E+01	1.25E+01	MW-39-183
	002	182.5	-102.5	3/7/2007	12:40	1.88E+02	1.73E+02	1.89E+02	7.11E-01	8.02E-01	8.32E-01	1.38E+00	5.12E+00	5.12E+00	2.34E+00	4.56E+00	5.46E+00	NA	NA	NA	
	003	182.5	-102.5	1/17/2008	11:55	4.65E+01	1.56E+02	1.82E+02	8.29E-01	6.17E-01	5.82E-01	-3.72E-01	3.51E+00	3.92E+00	0.00E+00	2.03E+00	2.20E+00	NA	NA	NA	
	004	182.5	-102.5	4/30/2008	15:03	1.12E+02	1.06E+02	1.77E+02	1.12E+00	5.66E-01	7.83E-01	1.45E-01	2.45E+00	4.14E+00	7.95E-01	2.60E+00	4.48E+00	1.83E+00	1.46E+01	2.50E+01	
	005	182.5	-102.5	10/22/2008	14:07	5.39E+01	1.73E+02	1.97E+02	3.15E-01	7.29E-01	8.35E-01	-4.16E+00	6.88E+00	7.09E+00	-3.08E+00	7.77E+00	7.39E+00	NA	NA	NA	
	006	182.5	-102.5	1/9/2009	11:45	2.60E+01	1.26E+02	1.50E+02	2.13E-01	6.65E-01	7.61E-01	3.94E-01	6.71E+00	4.47E+00	6.05E-01	3.77E+00	4.33E+00	NA	NA	NA	
	007	182.5	-102.5	11/5/2009	12:57	9.85E+01	9.25E+01	9.87E+01	3.71E-01	7.14E-01	8.05E-01	1.63E+00	9.42E+00	6.01E+00	1.94E+00	6.13E+00	7.46E+00	NA	NA	NA	
	008	182.5	-102.5	5/4/2010	12:51	1.34E+02	1.89E+02	2.10E+02	8.20E-02	5.44E-01	6.90E-01	2.11E+00	6.52E+00	7.73E+00	-2.38E+00	7.59E+00	6.99E+00	NA	NA	NA	
	009	182.5	-102.5	7/22/2010	11:38	1.07E+02	1.12E+02	1.19E+02	2.08E-01	4.19E-01	4.79E-01	-4.62E+00	8.88E+00	9.01E+00	-5.09E+00	9.62E+00	8.98E+00	NA	NA	NA	
MW-39-195	001	195	-115	5/22/2007	12:45	2.55E+02	1.50E+02	1.33E+02	1.30E+00	6.90E-01	5.69E-01	0.00E+00	7.67E+00	4.34E+00	3.54E-01	4.16E+00	4.82E+00	-2.52E+00	9.95E+00	1.15E+01	MW-39-195
	002	195	-115	3/7/2007	12:00	2.00E+02	1.70E+02	1.85E+02	5.92E-01	6.23E-01	6.55E-01	-4.08E-02	4.14E+00	4.06E+00	-2.76E-01	4.56E+00	4.30E+00	NA	NA	NA	
	003	195	-115	1/17/2008	17:28	9.63E+01	1.64E+02	1.84E+02	8.97E-01	8.51E-01	8.38E-01	7.57E-01	4.08E+00	4.05E+00	8.15E-01	3.42E+00	4.01E+00	NA	NA	NA	
	004	195	-115	4/30/2008	16:10	2.74E+02	1.50E+02	2.36E+02	1.21E+00	5.52E-01	8.29E-01	-1.17E+00	2.28E+00	3.71E+00	2.23E-02	2.48E+00	4.21E+00	-2.59E+00	1.45E+01	2.51E+01	
	005	195	-115	10/22/2008	14:26	1.72E+02	1.83E+02	2.00E+02	8.81E-01	7.23E-01	6.88E-01	4.14E+00	5.57E+00	6.90E+00	1.81E+00	6.76E+00	7.96E+00	NA	NA	NA	
	006	195	-115	4/9/2009	12:08	7.46E+01	1.32E+02	1.48E+02	6.89E-01	6.60E-01	7.11E-01	-2.41E-01	8.63E+00	5.75E+00	-1.04E+00	4.80E+00	5.07E+00	NA	NA	NA	
	007	195	-115	11/5/2009	13:03	1.09E+02	9.35E+01	9.86E+01	4.36E-01	7.60E-01	8.53E-01	-2.05E+00	7.00E+00	7.38E+00	-1.01E+00	8.71E+00	9.45E+00	NA	NA	NA	
	008	195	-115	5/4/2010	13:14	6.99E+01	1.64E+02	1.84E+02	6.21E-01	6.54E-01	6.82E-01	-1.56E+00	6.42E+00	6.86E+00	-1.59E-01	6.84E+00	7.63E+00	NA	NA	NA	
	009	195	-115	7/22/2010	12:10	9.26E+01	1.11E+02	1.20E+02	5.61E-01	5.70E-01	5.97E-01	7.86E-01	8.64E+00	9.43E+00	-9.78E-01	8.93E+00	9.62E+00	NA	NA	NA	
MW-40-27	001	26.7	46.5	6/5/2007	11:00	1.56E+02	1.58E+02	1.63E+02	-7.82E-04	6.48E-01	8.50E-01	2.70E-02	3.04E+00	3.39E+00	1.48E+00	2.90E+00	3.17E+00	NA	NA	NA	MW-40-27
	002	26.7	46.5	7/23/2007	12:35	1.62E+02	1.59E+02	1.69E+02	3.32E-01	5.90E-01	6.62E-01	2.52E+00	3.39E+00	3.88E+00	-5.97E-02	3.45E+00	3.83E+00	NA	NA	NA	
	003	26.7	46.5	1/7/2008	16:28	1.44E+02	1.70E+02	1.82E+02	-4.39E-01	4.49E-01	7.84E-01	-4.17E-01	1.74E+00	1.87E+00	6.09E-01	1.70E+00	1.99E+00	NA	NA	NA	
	004	26.7	46.5	8/11/2008	13:19	2.22E+02	1.06E+02	1.72E+02	3.66E-01	4.20E-01	7.05E-01	6.08E-01	2.28E+00	4.00E+00	-3.72E-01	2.56E+00	3.83E+00	-7.57E+00	1.15E+01	2.05E+01	
	005	26.7	46.5	10/28/2008	14:58	1.42E+02	1.80E+02	1.95E+02	4.78E-01	5.84E-01	6.10E-01	-1.55E+00	5.73E+00	6.22E+00	-1.46E+00	6.86E+00	7.41E+00	6.28E+00	1.64E+01	1.85E+01	
MW-40-27	006	26.7	46.5	1/19/2009	14:29	1.20E+02	1.34E+02	1.48E+02	4.82E-01	6.36E-01	6.82E-01	6.25E-01	3.41E+00	3.86E+00	1.46E+00	2.90E+00	3.58E+00	-1.86E+00	1.80E+01	2.09E+01	MW-40-27
	007	26.7	46.5	4/13/2009	14:17	1.98E+02	1.45E+02	1.36E+02	-5.35E-01	7.85E-01	9.65E-01	-1.14E-01	6.86E+00	4.57E+00	-6.04E-02	3.42E+00	3.81E+00	-2.30E+00	1.82E+01	2.12E+01	
	008	26.7	46.5	7/20/2009	14:50	1.54E+02	1.94E+02	2.14E+02	2.47E-01	4.05E-01	4.49E-01	4.50E+00	8.49E+00	5.96E+00	-1.64E+00	5.54E+00	5.88E+00	NA	NA	NA	
	009	26.7	46.5	11/19/2009	14:57	1.17E+02	9.33E+01	9.75E+01	-6.51E-01	7.14E-01	8.71E-01	1.06E+00	4.59E+00	5.44E+00	-2.53E+00	5.33E+00	5.10E+00	NA	NA	NA	
	010	26.7	46.5	2/4/2010	14:40	1.30E+02	1.65E+02	1.83E+02	1.10E-01	4.58E-01	5.59E-01	-1.62E+00	7.83E+00	6.98E+00	2.86E+00	6.71E+00	8.30E+00	NA	NA	NA	
	011	26.7	46.5	4/15/2010	16:00	1.48E+02	1.74E+02	1.93E+02	1.05E-01	6.29E-01	7.95E-01	-1.30E+00	4.02E+00	4.36E+00	-2.98E+00	5.64E+00	4.86E+00	NA	NA	NA	
	012	26.7	46.5	8/26/2010	14:42	1.93E+02	1.26E+02	1.24E+02	2.23E-01	6.54E-01	7.73E-01	1.95E+00	4.50E+00	5.46E+00	-1.03E+00	4.72E+00	5.12E+00	NA	NA	NA	
MW-40-46	001	46.2	27	6/5/2007	11:50	1.42E+02	1.58E+02	1.66E+02	-3.17E-01	5.82E-01	8.88E-01	7.90E-01	3.59E+00	3.39E+00	-2.35E+00	2.70E+00	2.27E+00	NA	NA	NA	MW-40-46

See Page 29 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-40-46	002	46.2	27	7/23/2007	12:15	9.48E+01	1.53E+02	1.71E+02	3.50E-01	5.61E-01	6.28E-01	-9.08E-01	3.79E+00	4.09E+00	-1.72E+00	3.07E+00	2.90E+00	NA	NA	NA	MW-40-46
	003	46.2	27	10/12/2007	14:45	-1.59E-01	1.52E+02	1.74E+02	-2.14E-02	5.10E-01	6.85E-01	-3.80E-01	3.72E+00	3.59E+00	4.94E-01	3.72E+00	4.26E+00	NA	NA	NA	
	004	46.2	27	1/7/2008	14:42	-1.96E-01	1.45E+02	1.80E+02	8.04E-01	8.55E-01	8.75E-01	-1.21E+00	2.84E+00	3.00E+00	1.16E+00	2.58E+00	2.82E+00	NA	NA	NA	
	005	46.2	27	8/11/2008	13:35	1.68E+02	1.04E+02	1.71E+02	-3.25E-01	3.77E-01	8.09E-01	1.25E-01	1.99E+00	3.31E+00	1.09E+00	2.05E+00	3.64E+00	4.04E+00	1.17E+01	2.01E+01	
	006	46.2	27	10/28/2008	15:30	8.80E+01	1.74E+02	1.98E+02	6.53E-01	7.02E-01	7.20E-01	2.82E-01	6.58E+00	7.49E+00	1.83E+00	6.30E+00	7.48E+00	9.34E-01	1.71E+01	1.96E+01	
	007	46.2	27	1/19/2009	14:28	7.76E+01	1.33E+02	1.48E+02	2.69E-01	5.01E-01	5.67E-01	8.08E-01	2.88E+00	3.39E+00	-1.19E+00	2.78E+00	2.88E+00	-5.63E+00	1.89E+01	2.22E+01	
	008	46.2	27	4/13/2009	14:40	1.52E+02	1.37E+02	1.36E+02	-1.51E-01	5.21E-01	7.12E-01	-1.13E+00	6.89E+00	4.59E+00	-2.72E-01	4.01E+00	4.40E+00	-5.37E+00	1.97E+01	2.32E+01	
	009	46.2	27	7/20/2009	15:11	1.48E+02	1.92E+02	2.13E+02	5.87E-01	5.81E-01	6.03E-01	-1.03E+00	7.61E+00	7.32E+00	-1.38E+00	6.32E+00	6.66E+00	NA	NA	NA	
	010	46.2	27	11/19/2009	15:07	5.74E+01	8.82E+01	9.82E+01	9.58E-02	5.13E-01	5.92E-01	-9.97E-01	4.25E+00	4.70E+00	1.09E+00	4.54E+00	5.35E+00	NA	NA	NA	
	011	46.2	27	2/4/2010	14:59	9.28E+01	1.62E+02	1.82E+02	6.20E-01	7.56E-01	7.95E-01	2.03E+00	4.53E+00	5.36E+00	1.37E+00	4.96E+00	5.86E+00	NA	NA	NA	
	012	46.2	27	4/15/2010	16:18	2.35E+02	1.38E+02	1.45E+02	3.98E-01	7.23E-01	8.15E-01	2.73E+00	3.30E+00	4.08E+00	1.19E+00	3.40E+00	3.95E+00	NA	NA	NA	
	013	46.2	27	8/26/2010	14:56	1.24E+02	1.22E+02	1.29E+02	-1.83E-01	5.11E-01	7.19E-01	7.02E-01	6.01E+00	6.90E+00	5.48E+00	6.17E+00	8.30E+00	NA	NA	NA	
MW-40-81	001	80.7	-7.5	6/5/2007	12:37	1.63E+02	1.59E+02	1.63E+02	-2.93E-02	6.98E-01	9.11E-01	-1.00E+00	3.09E+00	3.22E+00	-4.70E-03	3.79E+00	3.62E+00	NA	NA	NA	MW-40-81
	002	80.7	-7.5	7/23/2007	13:00	6.95E+01	1.52E+02	1.72E+02	2.45E-01	6.00E-01	6.94E-01	-7.08E-01	4.95E+00	5.20E+00	2.31E+00	3.81E+00	4.95E+00	NA	NA	NA	
	003	80.7	-7.5	10/12/2007	10:52	6.99E+01	1.53E+02	1.73E+02	-9.65E-02	5.05E-01	7.10E-01	5.47E-01	4.00E+00	4.48E+00	7.73E-01	4.02E+00	4.64E+00	NA	NA	NA	
	004	80.7	-7.5	1/7/2008	14:35	1.09E+02	1.64E+02	1.81E+02	2.87E-01	7.05E-01	8.26E-01	-7.49E-01	2.51E+00	2.38E+00	-2.66E-01	1.77E+00	1.95E+00	NA	NA	NA	
	005	80.7	-7.5	8/11/2008	9:43	2.42E+02	1.06E+02	1.71E+02	1.68E-01	3.65E-01	6.52E-01	-7.84E-02	1.69E+00	2.78E+00	2.60E-01	1.92E+00	3.25E+00	-2.96E+00	1.10E+01	1.92E+01	
	006	80.7	-7.5	10/28/2008	11:20	3.04E+01	1.61E+02	1.93E+02	-1.84E-01	4.17E-01	6.28E-01	2.04E+00	5.28E+00	6.24E+00	-8.66E-01	6.75E+00	7.32E+00	-2.38E+00	2.33E+01	2.69E+01	
	007	80.7	-7.5	1/19/2009	10:38	1.61E+02	1.37E+02	1.48E+02	2.92E-01	5.76E-01	6.54E-01	-4.67E-01	3.62E+00	4.01E+00	-1.41E+00	3.77E+00	3.92E+00	-7.55E+00	1.77E+01	2.09E+01	
	008	80.7	-7.5	4/13/2009	11:06	2.31E+02	1.50E+02	1.35E+02	-3.34E-02	6.47E-01	8.17E-01	-1.98E+00	7.17E+00	4.78E+00	3.78E+00	4.67E+00	6.06E+00	-1.26E+01	2.01E+01	2.42E+01	
	009	80.7	-7.5	7/20/2009	11:28	2.13E+02	1.95E+02	2.14E+02	-2.23E-02	4.35E-01	5.48E-01	-7.78E-01	4.98E+00	5.50E+00	-1.11E+00	5.54E+00	5.96E+00	NA	NA	NA	
	010	80.7	-7.5	11/17/2009	13:51	9.11E+01	8.83E+01	9.45E+01	-1.58E-01	6.63E-01	8.17E-01	-4.31E+00	6.09E+00	5.16E+00	2.83E+00	3.76E+00	4.81E+00	NA	NA	NA	
	011	80.7	-7.5	2/4/2010	10:56	1.47E+02	1.65E+02	1.83E+02	3.99E-02	6.37E-01	8.18E-01	1.42E+00	4.00E+00	4.69E+00	-7.18E-03	4.86E+00	5.42E+00	NA	NA	NA	
	012	80.7	-7.5	4/15/2010	12:15	1.92E+02	1.37E+02	1.47E+02	4.25E-01	7.02E-01	7.79E-01	1.72E+00	4.20E+00	4.93E+00	1.08E-01	3.82E+00	4.36E+00	NA	NA	NA	
	013	80.7	-7.5	8/26/2010	11:05	9.08E+01	1.14E+02	1.24E+02	2.45E-01	5.25E-01	6.06E-01	-3.95E+00	5.24E+00	4.96E+00	-2.64E+00	4.68E+00	4.20E+00	NA	NA	NA	
MW-40-100	001	100.2	-27	6/5/2007	11:15	1.76E+02	1.61E+02	1.64E+02	3.40E-01	6.16E-01	6.94E-01	-1.92E+00	3.06E+00	3.04E+00	-1.98E+00	3.87E+00	3.59E+00	NA	NA	NA	MW-40-100
	002	100.2	-27	7/23/2007	13:20	8.12E+01	1.55E+02	1.75E+02	2.91E-01	6.18E-01	6.96E-01	-4.67E-01	1.91E+00	2.10E+00	1.78E-01	1.94E+00	2.20E+00	NA	NA	NA	
	003	100.2	-27	10/12/2007	11:03	5.95E+01	1.53E+02	1.73E+02	-7.39E-02	5.75E-01	7.69E-01	1.93E+00	3.57E+00	3.87E+00	8.90E-01	3.30E+00	3.61E+00	NA	NA	NA	
	004	100.2	-27	1/7/2008	11:55	1.98E+01	1.52E+02	1.81E+02	-7.69E-02	5.85E-01	8.00E-01	3.13E-01	2.27E+00	2.60E+00	8.84E-02	2.75E+00	2.86E+00	NA	NA	NA	
	006	100.2	-27	5/30/2008	12:45	1.16E+02	9.84E+01	1.60E+02	1.16E-01	5.60E-01	9.81E-01	-7.43E-01	2.12E+00	3.48E+00	-8.73E-01	2.00E+00	3.15E+00	NA	NA	NA	
	007	100.2	-27	8/11/2008	10:10	1.93E+02	1.05E+02	1.71E+02	-3.44E-02	2.85E-01	5.83E-01	-1.18E-01	1.59E+00	2.68E+00	6.38E-01	1.52E+00	2.70E+00	0.00E+00	1.09E+01	1.89E+01	
	008	100.2	-27	10/28/2008	11:30	8.66E+01	1.73E+02	1.95E+02	1.13E-01	6.37E-01	7.83E-01	-1.25E+00	6.50E+00	7.11E+00	3.92E+00	7.02E+00	8.63E+00	-7.70E-01	1.79E+01	2.06E+01	
	009	100.2	-27	1/19/2009	11:52	4.24E+01	1.30E+02	1.48E+02	1.06E-01	6.03E-01	7.25E-01	6.13E-01	5.97E+00	3.85E+00	1.26E-01	3.15E+00	3.61E+00	-9.80E+00	1.89E+01	2.24E+01	
	010	100.2	-27	4/13/2009	11:07	2.62E+02	1.56E+02	1.35E+02	6.63E-02	5.52E-01	6.82E-01	-2.19E+00	6.60E+00	4.40E+00	-2.09E+00	4.40E+00	4.45E+00	-3.13E-01	1.86E+01	2.17E+01	
	011	100.2	-27	7/20/2009	11:31	1.65E+02	1.97E+02	2.18E+02	-1.75E-01	5.63E-01	7.24E-01	4.36E-01	5.52E+00	6.32E+00	7.15E-01	5.75E+00	6.65E+00	NA	NA	NA	
	012	100.2	-27	11/17/2009	14:34	7.32E+01	9.03E+01	9.89E+01	9.08E-02	6.51E-01	7.90E-01	-1.00E+00	3.72E+00	4.12E+00	-4.90E-01	4.50E+00	4.99E+00	NA	NA	NA	
	013	100.2	-27	2/4/2010	11:10	1.47E+02	1.65E+02	1.82E+02	7.06E-01	7.83E-01	8.05E-01	-7.58E-01	4.26E+00	4.60E+00	-3.34E+00	4.75E+00	4.53E+00	NA	NA	NA	
	014	100.2	-27	4/15/2010	12:16	1.39E+02	1.33E+02	1.46E+02	-1.08E-01	5.37E-01	7.48E-01	-2.83E-01	3.54E+00	3.96E+00	-2.16E+00	5.12E+00	4.80E+00	NA	NA	NA	
	015	100.2	-27	8/26/2010	11:09	1.24E+02	1.37E+02	1.45E+02	-2.33E-01	3.95E-01	6.21E-01	8.87E-01	6.15E+00	7.12E+00	6.51E-01	5.61E+00	6.53E+00	NA	NA	NA	
MW-40-127	001	127.2	-54	6/5/2007	12:55	1.87E+02	1.62E+02	1.63E+02	2.60E-01	5.05E-01	5.71E-01	7.57E-01	2.98E+00	3.41E+00	-5.59E-03	2.94E+00	3.26E+00	NA	NA	NA	MW-40-127
	002	127.2	-54	7/23/2007	15:15	4.26E+01	1.44E+02	1.68E+02	3.83E-01	5.15E-01	5.73E-01	-1.17E+00	1.67E+00	1.76E+00	2.04E-01	1.59E+00	1.77E+00	NA	NA	NA	
	003	127.2	-54	10/12/2007	11:30	2.83E+01	1.44E+02	1.64E+02	1.01E-01	4.97E-01	6.24E-01	-2.32E+00	3.90E+00	4.06E+00	-1.51E+00	3.72E+00	3.79E+00	NA	NA	NA	
	004	127.2	-54	1/7/2008	12:30	9.75E+00	1.48E+02	1.79E+02	5.17E-01	6.83E-01	7.23E-01	6.45E-01	2.42E+00	2.77E+00	3.24E-01	2.28E+00	2.59E+00	NA	NA	NA	
	006	127.2	-54	5/30/2008	13:00	3.27E+01	9.16E+01	1.63E+02	-4.84E-01	5.30E-01	9.68E-01	6.92E-01	2.23E+00	3.43E+00	1.36E+00	2.00E+00	3.62E+00	NA	NA	NA	
	007	127.2	-54	8/11/2008	10:34	1.68E+02	1.04E+02	1.70E+02	1.65E-01	2.41E-01	4.19E-01	1.24E-01	1.65E+00	2.81E+00	7.30E-03	1.49E+00	2.51E+00	-8.77E+00	1.13E+01	2.01E+01	
	008	127.2	-54	10/28/2008	12:10	7.53E+01	1.70E+02	1.95E+02	4.36E-01	7.10E-01	7.87E-01	-2.53E+00	6.46E+00	6.88E+00	-4.33E+00	8.23E+00	7.68E+00	0.00E+00	1.66E+01	1.93E+01	
	009	127.2	-54	1/19/2009	11:25	9.22E+01	1.33E+02	1.48E+02	-7.90E-02	7.19E-01	9.00E-01	-1.20E+00	3.75E+00	3.94E+00	1.68E+00	3.66E+00	4.45E+00	-3.34E+00	1.85E+01	2.16E+01	
	010	127.2	-54	4/13/2009	11:24	1.52E+02	1.37E+02	1.36E+02	5.56E-02	6.11E-01	7.66E-01	-1.08E+00	7.16E+00	4.77E+00	-1.39E+00	4.58E+00	4.79E+00	-9.13E+00	1.86E+01	2.22E+01	
	011	127.2	-54	7/20/2009	12:09	1.77E+02	1.98E+02	2.18E+02	3.38E-01	6.30E-01	7.11E-01	-3.30E-02	6.03E+00	6.40E+00	1.15E+00	5.50E+00	6.38E+00	NA	NA	NA	
	012	127.2	-54	11/17/2009	14:32	1.04E+02	9.33E+01	9.89E+01	2.64E-01	6.96E-01	7.95E-01	1.35E+00	5.58E+00	6.40E+00	-5.95E-01	6.08E+00	6.66E+00	NA	NA	NA	
	013	127.2	-54	2/4/2010	11:12	8.56E+01	1.62E+02	1.82E+02	4.26E-01	6.79E-01	7.49E-01	-4.37E+00	6.12E+00	5.32E+00	1.98E+00	4.21E+00	5.14E+00	NA	NA	NA	
	014	127.2	-54	4/15/2010	13:13	1.26E+02	1.34E+02	1.47E+02	-5.12E-03	3.50E-01	4.61E-01	-2.40E+00	9.29E+00	9.96E+00	2.32E+00	9.72E+00	1.18E+01	NA	NA	NA	
	015	127.2	-54	8/26/2010	11:16	1.36E+02	1.40E+02	1.47E+02	2.23E-02	2.78E-01	3.67E-01	-5.02E+00	7.95E+00	8.28E+00	6.43E-01	6.48E+00	7.48E+00	NA	NA	NA	
MW-40-162	001	161.7	-88.5	6/5/2007	14:45	1.40E+02	1.56E+02	1.64E+02	2.94E-01	4.53E-01	5.04E-01	-1.67E+00	5.33E+00	4.95E+00	3.85E-01	4.68E+00	4.53E+00	NA	NA	NA	MW-40-162
	002	161.7	-88.5	7/23/2007	17:40	2.59E+01	1.46E+02	1.73E+02	1.19E-01	4.45E-01	5.07E-01	-2.51E-01	2.81E+00	1.75E+00	7.27E-01	1.45E+00	1.69E+00	NA	NA	NA	
	003	161.7	-88.5	10/12/2007	12:54	4.45E+01	1.49E+02	1.69E+02	-5.48E-02	6.20E-01	8.19E-01	-1.11E+00	4.47E+00	4.05E+00	-1.01E+00	3.31E+00	3.47E+00	NA	NA	NA	
	004	161.7	-88.5	1/7/2008	13:10	4.96E+01	1.56E+02	1.82E+02	7.93E-02	3.63E-01	4.48E-01	4.17E-01	2.52E+00	2.87E+00	3.63E-01	2.40E+00	2.72E+00	NA	NA	NA	
	005	161.7	-88.5	8/11/2008	11:44	2.30E+02	1.08E+02	1.75E+02	7.70E-02	4.19E-01	7.81E-01	6.25E-01	2.43E+00	4.16E+00	3.15E+00	2.07E+00	4.11E+00	-5.27E+00	1.22E+01	2.16E+01	
MW-40-162	006	161.7	-88.5	10/28/2008	13:15	1.12E+02	1.77E+02	1.96E+02	2.80E-01	6.35E-01	7.35E-01	-2.00E+00	5.84E+00	6.26E+00	2.11E+00	6.08E+00	7.29E+00	3.75E+00	1.79E+01	2.04E+01	MW-40-162
	007	161.7	-88.5	1/19/2009	11:47	1.07E+02	1.33E+02	1.48E+02	1.32E-01	5.16E-01	6.16E-01	-3.98E-01	3.32E+00	3.67E+00	4.22E-01	2.96E+00	3.41E+00	-9.17E+00	1.85E+01	2.20E+01	
	008	161.7	-88.5	4/13/2009	12:25	1.42E+02	1.37E+02	1.38E+02	3.28E-01	4.94E-01	5.46E-01	-2.83E+00	5.84E+00	3.89E+00	-6.45E-01	3.81E+00	4.06E+00	-2.90E+00	1.85E+01	2.17E+01	
	009	161.7	-88.5	7/20/2009	12:57	1.24E+02	1.92E+02	2.14E+02	7.42E-02	4.26E-01	5.17E-01	-2.20E-01	5.75E+00	6.31E+00	1.54E+00	5.64E+00	6.56E+00	NA	NA	NA	
	010	161.7	-88.5	11/17/2009	15:15	2.87E+01	8.52E+01	9.80E+01	-4.58E-01	6.48E-01	8.27E-01	9.75E-01	5.70E+00	6.47E+00	3.59E+00	5.43E+00	6.97E+00	NA	NA	NA	
	011	161.7	-88.5	2/4/2010	11:57	2.20E+01	1.59E+02	1.82E+02	8.54E-02	5.94E-01	7.58E-01	4.31E-01	4.82E+00	5.46E+00	9.30E-01	4.44E+00	5.12E+00	NA	NA	NA	
	012	161.7	-88.5	4/15/2010	14:50	1.03E+02	1.32E+02	1.46E+02	9.77E-02	6.63E-01	8.18E-01	-2.73E+00	8.36E+00	8.61E+00	2.35E+00	8.63E+00	1.05E+01	NA	NA	NA	
	013	161.7	-88.5	8/26/2010	12:29	1.02E+02	1.36E+02	1.48E+02	5.09E-01	7.23E-01	7.75E-01	7.14E-01	6.23E+00	7.08E+00	3.52E+00	6.78E+00	8.38E+00	NA	NA	NA	
MW-41-40	002	34.4	20.5	4/12/2006	15:00	7.26E+02	2.07E+02	1.56E+02	2.63E+00	1.74E+00	1.58E+00	2.91E+00	2.62E+00	3.03E+00	-7.58E-01	2.55E+00	2.74E+00	NA	NA	NA	MW-41-40

See Page 29 for Notes

IPEC00263592

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-41-40	003	34.4	20.5	5/25/2006	10:00	6.07E+02	2.22E+02	1.88E+02	5.18E+00	1.46E+00	1.07E+00	4.35E+00	1.06E-01	1.24E+01	-1.16E+00	1.07E+01	1.14E+01	NA	NA	NA	MW-41-40
	004	34.4	20.5	6/12/2006	9:50	6.76E+02	2.00E+02	1.51E+02	3.58E+00	6.83E-01	5.31E-01	5.30E+00	1.02E-01	1.19E+01	9.42E-02	9.32E+00	1.02E+01	NA	NA	NA	
	005	34.4	20.5	7/14/2006	8:45	9.83E+02	2.64E+02	2.07E+02	7.02E+00	2.83E+00	2.09E+00	3.44E+00	1.29E-01	1.63E+01	-2.31E+00	1.07E+01	1.29E+01	NA	NA	NA	
	006	34.4	20.5	8/16/2006	13:15	4.47E+02	1.95E+02	1.68E+02	NA	NA	NA	7.39E-01	6.84E-00	8.78E+00	1.70E-01	5.46E+00	7.51E+00	NA	NA	NA	
	007	34.4	20.5	11/13/2006	12:55	4.25E+02	1.38E+02	1.30E+02	4.64E+00	8.70E-01	6.90E-01	5.00E-01	5.70E-00	6.90E+00	1.30E+00	6.90E+00	8.20E+00	3.10E+00	5.70E+00	6.40E+00	
	008	34.4	20.5	6/19/2007	14:45	3.91E+03	7.32E+02	3.60E+02	5.99E+00	1.15E+00	7.49E-01	-3.09E+00	4.42E-00	3.28E+00	-3.47E-01	2.81E+00	3.01E+00	2.21E-01	1.27E+01	1.49E+01	
	009	34.4	20.5	8/14/2007	14:35	3.80E+02	1.97E+02	2.00E+02	5.96E+00	1.17E+00	7.45E-01	0.00E+00	3.52E-00	3.31E+00	1.40E+00	4.08E+00	4.00E+00	NA	NA	NA	
	010	34.4	20.5	1/24/2008	16:28	2.15E+02	1.80E+02	1.93E+02	3.05E+00	1.07E+00	7.54E-01	2.67E+00	2.55E-00	2.21E+00	-5.18E-01	2.00E+00	2.16E+00	NA	NA	NA	
	011	34.4	20.5	10/22/2008	14:49	2.21E+03	7.26E+02	5.92E+02	5.91E+00	1.10E+00	4.21E-01	3.07E+00	6.33E-00	7.66E+00	-3.60E+00	8.64E+00	8.40E+00	NA	NA	NA	
	012	34.4	20.5	4/7/2009	15:56	5.71E+02	1.91E+02	1.50E+02	5.38E+00	1.14E+00	6.38E-01	4.26E+00	7.29E-00	4.86E+00	4.60E-01	3.27E+00	3.76E+00	NA	NA	NA	
	013	34.4	20.5	7/24/2009	15:33	6.17E+02	2.51E+02	2.25E+02	4.30E+00	1.05E+00	7.04E-01	-1.73E-01	3.21E-00	3.51E+00	4.32E-01	3.57E+00	3.93E+00	NA	NA	NA	
	014	34.4	20.5	11/10/2009	13:08	3.15E+02	1.11E+02	9.85E+01	4.00E+00	1.10E+00	8.06E-01	1.79E+00	4.50E-00	5.18E+00	-2.03E+00	4.62E+00	4.72E+00	NA	NA	NA	
	015	34.4	20.5	3/1/2010	17:28	9.35E+02	1.91E+02	1.68E+02	4.01E+00	8.98E-01	4.46E-01	-3.97E+00	8.45E-00	8.76E+00	1.01E+00	6.81E+00	6.59E+00	NA	NA	NA	
	016	34.4	20.5	4/19/2010	14:09	4.32E+02	1.79E+02	1.50E+02	2.09E+00	1.05E+00	8.40E-01	-2.56E+00	8.09E-00	8.29E+00	-6.83E-01	8.55E+00	9.32E+00	NA	NA	NA	
	017	34.4	20.5	7/21/2010	13:41	2.79E+03	3.02E+02	1.47E+02	4.37E+00	1.02E+00	6.33E-01	1.59E+00	5.82E-00	7.07E+00	-6.50E-01	7.18E+00	7.61E+00	NA	NA	NA	
MW-41-63	001	59.5	-4.6	4/12/2006	14:45	7.01E+02	2.03E+02	1.53E+02	5.49E+00	2.21E+00	1.60E+00	6.98E-01	2.27E-00	2.52E+00	-3.89E-02	2.68E+00	2.78E+00	NA	NA	NA	MW-41-63
	002	59.5	-4.6	5/25/2006	10:20	3.61E+02	2.07E+02	1.92E+02	5.22E+00	1.53E+00	1.10E+00	7.91E-02	9.63E-00	1.15E+01	3.51E+00	7.87E+00	1.07E+01	NA	NA	NA	
	003	59.5	-4.6	6/12/2006	10:05	2.68E+02	1.67E+02	1.52E+02	8.45E-01	5.28E-01	5.86E-01	8.20E-01	8.70E-00	9.55E+00	2.12E+00	7.05E+00	8.29E+00	NA	NA	NA	
	004	59.5	-4.6	7/18/2006	13:04	2.43E+02	1.95E+02	1.92E+02	2.17E+00	9.90E-01	8.04E-01	3.04E+00	9.49E-00	1.11E+01	1.73E-01	8.00E+00	8.75E+00	NA	NA	NA	
	005	59.5	-4.6	8/16/2006	13:00	3.56E+02	1.89E+02	1.70E+02	NA	NA	NA	3.69E+00	8.12E-00	1.03E+01	-1.55E+00	7.58E+00	7.11E+00	NA	NA	NA	
	006	59.5	-4.6	11/13/2006	13:10	1.57E+02	1.35E+02	1.30E+02	2.06E+00	6.60E-01	6.60E-01	-1.60E+00	4.50E-00	5.70E+00	0.00E+00	5.40E+00	6.60E+00	3.00E+00	6.60E+00	7.30E+00	
	007	59.5	-4.6	6/20/2007	11:05	5.52E+02	1.97E+02	1.86E+02	7.08E+00	1.28E+00	6.27E-01	-3.10E-01	2.37E-00	2.65E+00	-1.06E-02	2.33E+00	2.65E+00	-4.39E-01	1.26E+01	1.48E+01	
	008	59.5	-4.6	8/14/2007	16:10	5.47E+02	2.04E+02	1.99E+02	3.55E+00	9.02E-01	5.31E-01	-2.83E+00	3.40E-00	3.20E+00	1.32E-01	3.48E+00	3.87E+00	NA	NA	NA	
	009	59.5	-4.6	1/25/2008	10:05	3.03E+02	2.79E+02	2.93E+02	3.76E+00	1.13E+00	8.22E-01	0.00E+00	3.33E-00	1.89E+00	5.24E-02	1.64E+00	1.88E+00	NA	NA	NA	
	010	59.5	-4.6	10/22/2008	12:34	6.91E+02	5.73E+02	5.92E+02	5.69E+00	1.13E+00	4.41E-01	2.60E+00	5.59E-00	6.71E+00	9.04E-01	6.08E+00	7.02E+00	NA	NA	NA	
	011	59.5	-4.6	4/23/2009	11:57	5.26E+02	1.85E+02	1.83E+02	4.08E+00	8.84E-01	3.37E-01	4.19E-01	6.80E-00	4.53E+00	1.22E+00	4.19E+00	4.93E+00	NA	NA	NA	
	012	59.5	-4.6	7/24/2009	14:13	4.40E+02	2.34E+02	2.26E+02	2.67E+00	8.02E-01	4.63E-01	-8.28E-01	3.60E-00	3.85E+00	-5.58E-01	3.12E+00	3.31E+00	NA	NA	NA	
	013	59.5	-4.6	11/10/2009	13:30	4.50E+02	1.21E+02	9.90E+01	3.88E+00	9.58E-01	5.92E-01	1.07E+00	3.63E-00	4.24E+00	-4.65E-01	4.35E+00	4.80E+00	NA	NA	NA	
	014	59.5	-4.6	3/1/2010	16:00	2.48E+02	1.59E+02	1.68E+02	2.01E+00	6.78E-01	4.19E-01	3.00E+00	4.84E-00	5.86E+00	-1.07E+00	5.37E+00	5.79E+00	NA	NA	NA	
	015	59.5	-4.6	4/19/2010	14:03	4.36E+02	1.77E+02	1.49E+02	3.66E+00	1.22E+00	7.70E-01	-4.51E+00	1.22E-01	1.52E+01	-7.27E-02	6.99E+00	7.76E+00	NA	NA	NA	
	016	59.5	-4.6	7/21/2010	13:41	5.18E+02	1.68E+02	1.43E+02	4.79E+00	1.09E+00	6.23E-01	-2.71E+00	8.29E-00	8.77E+00	1.61E+00	7.93E+00	9.59E+00	NA	NA	NA	
MW-42-49	001	42.6	27.1	3/23/2006	11:15	2.63E+03	6.60E+02	5.89E+02	5.19E+01	1.72E+00	4.88E-01	1.02E+05	7.14E-02	1.00E+02	1.94E+02	2.78E+01	2.32E+01	NA	NA	NA	MW-42-49
	002	42.6	27.1	3/31/2006	9:29	2.49E+03	4.49E+02	2.37E+02	2.10E+01	9.96E-01	3.67E-01	6.55E+03	1.24E-02	2.76E+01	2.29E+01	2.10E+01	2.50E+01	NA	NA	NA	
	003	42.6	27.1	4/7/2006	17:52	2.51E+03	7.88E+02	7.37E+02	1.09E+02	2.16E+00	4.09E-01	8.11E+04	7.08E-02	1.01E+02	8.81E+01	2.52E+01	1.97E+01	2.22E+03	1.76E+02	5.84E+01	
	004	42.6	27.1	6/18/2007	15:00	1.34E+03	5.00E+02	3.74E+02	7.73E+01	4.04E+00	6.07E-01	1.90E+04	1.85E-03	1.31E+01	4.29E+00	3.71E+00	4.82E+00	1.03E+03	4.53E+01	1.44E+01	
	007	42.6	27.1	10/4/2007	12:40	2.46E+03	2.87E+02	1.93E+02	4.65E+01	3.12E+00	6.02E-01	3.69E+04	3.14E-03	1.83E+01	1.59E+01	6.25E+00	3.61E+00	1.17E+03	4.94E+01	1.88E+01	
	008	42.6	27.1	1/21/2008	16:11	1.32E+03	5.25E+02	4.15E+02	3.34E+01	3.18E+00	9.11E-01	3.38E+04	2.93E-03	2.02E+01	0.00E+00	4.13E+00	5.42E+00	5.01E+02	5.01E+01	2.68E+01	
	010	42.6	27.1	5/13/2008	13:20	3.24E+03	2.56E+02	1.44E+02	2.36E+01	1.54E+00	5.48E-01	1.41E+04	7.89E-02	1.47E+01	1.69E+01	4.47E+00	4.67E+00	7.34E+02	2.85E+01	2.19E+01	
	011	42.6	27.1	8/4/2008	14:24	3.16E+03	2.65E+02	1.91E+02	3.56E+01	1.72E+00	5.59E-01	1.06E+04	6.13E-02	1.20E+01	-8.47E-03	2.69E+00	4.52E+00	3.13E+02	2.60E+01	2.61E+01	
	012	42.6	27.1	9/5/2008	12:52	1.32E+04	8.36E+02	5.08E+02	2.96E+02	4.98E+00	4.02E-01	2.21E+04	1.38E-03	1.58E+01	NA	NA	NA	4.62E+02	2.17E+01	2.03E+01	
	013	42.6	27.1	10/31/2008	13:27	2.60E+03	3.77E+02	1.63E+02	9.61E+01	4.34E+00	4.16E-01	1.78E+04	1.58E-03	1.83E+01	5.88E-01	6.96E+00	7.78E+00	2.71E+02	2.73E+01	1.99E+01	
	014	42.6	27.1	11/17/2008	14:56	1.12E+03	2.01E+02	1.73E+02	1.02E+02	6.96E+00	1.28E+00	1.54E+04	1.16E-03	1.74E+01	3.26E+00	5.21E+00	6.76E+00	2.14E+02	3.00E+01	2.25E+01	
	015	42.6	27.1	1/26/2009	16:16	1.28E+03	3.03E+02	2.06E+02	6.77E+02	1.13E+01	7.44E-01	8.05E+04	8.01E-03	2.66E+01	0.00E+00	5.24E+00	5.56E+00	9.12E+02	4.50E+01	1.90E+01	
	016	42.6	27.1	3/16/2009	14:50	7.22E+04	1.03E+03	1.60E+02	5.88E+02	8.57E+00	7.24E-01	1.40E+05	3.00E-01	2.00E+01	5.23E+00	3.54E+00	2.17E+00	1.16E+03	4.95E+01	2.06E+01	
	017	42.6	27.1	4/17/2009	11:03	2.22E+03	3.29E+02	1.89E+02	2.58E+02	6.63E+00	5.69E-01	8.63E+04	4.86E-01	3.24E+01	2.68E+00	4.67E+00	5.75E+00	9.16E+02	4.11E+01	2.19E+01	
	018	42.6	27.1	8/10/2009	12:00	1.47E+03	2.25E+02	1.79E+02	4.83E+00	1.06E+00	5.30E-01	5.42E+03	4.31E-02	9.57E+00	-1.12E+00	4.84E+00	4.60E+00	7.46E+01	2.37E+01	2.35E+01	
	019	42.6	27.1	10/27/2009	15:34	1.75E+03	2.21E+02	1.67E+02	1.91E+01	2.00E+00	7.46E-01	2.44E+04	1.83E-03	1.64E+01	-1.66E-01	4.70E+00	5.17E+00	1.84E+02	3.04E+01	2.44E+01	
	020	42.6	27.1	2/16/2010	16:49	9.79E+02	1.76E+02	1.53E+02	1.24E+02	5.92E+00	7.03E-01	6.52E+04	7.07E-03	3.33E+01	-9.83E-01	6.81E+00	6.79E+00	7.10E+02	4.05E+01	2.18E+01	
	021	42.6	27.1	4/16/2010	12:59	1.30E+03	4.25E+02	3.71E+02	2.40E+01	2.31E+00	8.23E-01	2.37E+04	2.85E-03	2.92E+01	8.37E-01	1.06E+01	1.23E+01	2.36E+02	2.88E+01	2.07E+01	
	022	42.6	27.1	7/30/2010	11:38	1.69E+03	2.34E+02	1.24E+02	1.39E+01	1.53E+00	3.90E-01	1.87E+04	2.46E-03	2.50E+01	7.33E-01	6.64E+00	7.77E+00	1.77E+02	2.97E+01	2.18E+01	
MW-42-78	001	74	-4.3	3/24/2006	9:45	1.28E+03	5.87E+02	5.75E+02	3.09E-01	3.90E-01	4.08E-01	4.46E+03	1.36E-02	2.22E+01	1.08E+01	1.71E+01	2.08E+01	NA	NA	NA	MW-42-78
	002	74	-4.3	4/7/2006	17:58	7.92E+02	7.04E+02	7.30E+02	1.03E-01	3.68E-01	3.98E-01	1.98E+03	1.19E-02	3.13E+01	-2.34E+00	2.35E+01	2.51E+01	3.66E+01	1.39E+01	1.43E+01	
	003	74	-4.3	6/18/2007	14:40	3.78E+02	1.88E+02	1.88E+02	3.83E-01	5.34E-01	5.78E-01	6.28E+01	1.21E-01	4.11E+00	2.31E+00	3.40E+00	4.00E+00	2.48E+00	1.32E+01	1.52E+01	
	006	74	-4.3	10/4/2007	13:25	4.34E+02	1.94E+02	1.94E+02	2.33E-01	3.09E-01	3.43E-01	3.04E+02	3.44E-01	4.71E+00	3.10E+00	4.04E+00	5.18E+00	6.86E-01	1.53E+01	1.77E+01	
	007	74	-4.3	1/21/2008	15:33	3.46E+02	1.89E+02	1.96E+02	-2.51E-01	6.81E-01	9.32E-01	1.08E+02	1.52E-01	3.35E+00	1.71E-01	3.33E+00	3.61E+00	9.73E+00	2.42E+01	2.75E+01	
	009	74	-4.3	8/4/2008	12:07	6.18E+02	1.50E+02	1.91E+02	3.91E-01	2.57E-01	3.76E-01	2.71E+00	2.02E-00	3.75E+00	-6.44E-01	2.10E+00	3.29E+00	-7.57E-01	1.52E+01	2.68E+01	
	010	74	-4.3	10/31/2008	13:34	5.62E+02	2.12E+02	1.65E+02	4.17E-02	3.01E-01	3.87E-01	3.31E-01	5.68E-00	6.34E+00	8.32E-01	6.72E+00	7.68E+00	3.69E+00	1.77E+01	2.02E+01	
MW-42-78	011	74	-4.3	1/30/2009	11:22	3.65E+02	2.18E+02	2.00E+02	4.40E-01	6.45E-01	7.03E-01	6.70E-01	3.32E-00	3.88E+00	-1.89E-01	3.57E+00	3.99E+00	NA	NA	NA	MW-42-78
	012	74	-4.3	4/17/2009	10:49	2.74E+02	1.88E+02	1.89E+02	4.67E-01	6.74E-01	7.47E-01	1.61E+00	5.85E-00	3.90E+00	5.31E-01	3.60E+00	4.14E+00	6.58E+00	1.91E+01	2.16E+01	
	013	74	-4.3	8/10/2009	12:40	5.19E+02	1.82E+02	1.78E+02	5.90E-01	6.39E-01	6.73E-01	6.07E-01	3.40E-00	3.94E+00	8.71E-01	3.31E+00	3.94E+00	-7.92E+00	1.98E+01	2.32E+01	
	014	74	-4.3	10/27/2009	14:06	5.51E+02	1.73E+02	1.66E+02	9.06E-02	5.20E-01	6.23E-01	1.19E+00	3.54E-00	4.06E+00	-1.12E+00	3.62E+00	3.74E+00	-8.49E-01	1.94E+01	2.25E+01	
	015	74	-4.3	2/16/2010	16:19	3.57E+02	1.49E+02	1.52E+02	-1.14E-01	4.87E-01	6.80E-01	3.92E+00	5.46E-00	6.70E+00	-1.84E-01	4.93E+00	5.52E+00	-9.55E+00	1.76E+01	2.08E+01	
	016	74	-4.3	4/16/2010	13:29	3.93E+02	2.91E+02	3.10E+02	1.81E-01	7.86E-01	9.23E-01	2.22E+00	8.67E-00	1.03E+01	-6.97E+00	9.24E+00	7.54E+00	-6.55E+00	1.76E+01	2.08E+01	
	017	74	-4.3	7/30/2010	12:23	6.31E+02	1.71E+02	1.31E+02	2.78E-02	3.03E-01	3.85E-01	-1.17E-01	7.56E-00	8.30E+00	-7.43E-01	7.04E+00	7.42E+00	1.96E+00	1.31E+01	1.52E+01	
MW-43-28	002	23.5	25.3	4/12/2006	12:45	3.46E+02	1.79E+02	1.59E+02	9.40E-02	7.40E-01	8.06E-01	-1.44E+00	2.52E-00	2.54E+00	1.56E+00	2.24E+00	2.56E+00	NA	NA	NA	MW-43-28
	003	23.5	25.3	5/25/2006	12:10	1.20E+02	1.83E+02	1.89E+02	2.65E+00	1.89E+00	1.77E+00	-8.64E-01	9.47E-00	1.03E+01	-1.33E-01	9.42E+00	1.06E+01	NA	NA	NA	
	004	23.5	25.3	6/12/2006	12:45	2.30E+02	1.62E+02	1.52E+02	1.39E-01	4.27E-01	5.27E-01	2.85E+00	6.93E-00	7.82E+00	-7.55E-01	5.93E+00	6.39E+00	NA	NA	NA	

See Page 29 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-43-28	005	23.5	25.3	7/12/2006	9:40	1.09E+02	1.88E+02	1.95E+02	1.10E+00	1.69E+00	1.72E+00	2.41E+00	9.87E+00	1.11E+01	-7.95E-01	8.58E+00	9.11E+00	NA	NA	NA	MW-43-28
	006	23.5	25.3	8/16/2006	12:10	2.60E+02	1.83E+02	1.72E+02	NA	NA	NA	5.47E-01	8.43E-01	9.56E-01	-5.16E-01	7.70E-01	8.30E-01	NA	NA	NA	
	007	23.5	25.3	6/18/2007	13:30	2.78E+02	1.70E+02	1.74E+02	1.07E+00	5.97E-01	4.86E-01	-3.68E-01	3.13E+00	3.39E+00	-3.72E-01	3.31E+00	3.46E+00	3.58E+00	1.50E+01	1.73E+01	
	008	23.5	25.3	8/13/2007	11:35	9.56E+01	1.71E+02	1.93E+02	-6.25E-01	7.50E-01	1.02E+00	-7.36E-01	3.57E+00	3.68E+00	2.77E-01	2.70E+00	3.12E+00	NA	NA	NA	
	009	23.5	25.3	1/25/2008	11:11	3.06E+02	2.82E+02	2.96E+02	1.46E-01	6.06E-01	7.38E-01	1.88E+00	2.16E+00	2.66E+00	1.46E+00	2.51E+00	3.03E+00	8.44E+00	1.76E+01	1.99E+01	
	010	23.5	25.3	10/31/2008	14:17	2.65E+02	1.58E+02	1.66E+02	-1.08E-01	3.95E-01	5.66E-01	4.07E+00	5.19E+00	6.44E+00	-1.16E+00	6.21E+00	6.63E+00	NA	NA	NA	
	011	23.5	25.3	4/7/2009	12:14	3.14E+02	1.65E+02	1.51E+02	-1.43E-01	5.66E-01	7.05E-01	5.41E-01	5.93E+00	3.95E+00	-1.31E-01	3.45E+00	3.77E+00	NA	NA	NA	
	012	23.5	25.3	7/31/2009	13:10	1.30E+02	1.44E+02	1.56E+02	-2.45E-02	4.13E-01	5.46E-01	1.19E+00	6.04E+00	7.03E+00	-1.16E+00	6.23E+00	6.64E+00	NA	NA	NA	
	013	23.5	25.3	11/10/2009	14:10	1.73E+02	9.72E+01	9.64E+01	1.57E-02	5.19E-01	6.53E-01	-5.72E-02	3.86E+00	4.25E+00	2.17E+00	4.13E+00	4.96E+00	NA	NA	NA	
	014	23.5	25.3	3/2/2010	17:30	2.13E+02	1.56E+02	1.68E+02	1.48E-01	3.81E-01	4.50E-01	-9.17E-01	5.10E+00	5.60E+00	2.29E+00	5.80E+00	6.91E+00	NA	NA	NA	
	015	23.5	25.3	4/19/2010	13:38	2.25E+02	1.39E+02	1.47E+02	-7.48E-02	5.52E-01	7.63E-01	-2.66E-01	5.61E+00	6.36E+00	-1.90E-01	5.61E+00	6.33E+00	NA	NA	NA	
	016	23.5	25.3	7/20/2010	13:48	9.11E+01	1.33E+02	1.47E+02	-6.43E-02	3.80E-01	5.33E-01	5.80E+00	7.53E+00	9.76E+00	-1.44E+00	9.49E+00	1.01E+01	NA	NA	NA	
MW-43-62	002	51	-2.2	4/12/2006	11:55	2.00E+02	1.65E+02	1.58E+02	4.34E-01	4.63E-01	4.83E-01	3.27E+00	4.04E+00	3.73E+00	1.82E+00	3.09E+00	3.47E+00	NA	NA	NA	MW-43-62
	003	51	-2.2	5/25/2006	12:30	1.24E+02	1.77E+02	1.82E+02	3.23E-01	1.64E+00	1.77E+00	-1.21E+00	1.26E-01	1.36E+01	-2.10E+00	9.81E+00	1.02E+01	NA	NA	NA	
	004	51	-2.2	6/12/2006	12:40	1.29E+02	1.40E+02	1.38E+02	1.25E+00	5.58E-01	5.86E-01	4.97E+00	7.02E+00	7.98E+00	-6.81E-01	7.19E+00	7.85E+00	NA	NA	NA	
	005	51	-2.2	7/12/2006	10:05	2.04E+01	1.53E+02	1.65E+02	4.76E-01	1.46E+00	1.54E+00	1.34E+01	1.10E-01	1.36E+01	3.73E-01	1.01E+01	1.11E+01	NA	NA	NA	
	006	51	-2.2	8/16/2006	11:55	1.08E+02	1.67E+02	1.70E+02	NA	NA	NA	2.23E-01	9.10E-01	1.01E+00	-1.95E-01	8.33E-01	9.13E-01	NA	NA	NA	
	007	51	-2.2	6/19/2007	9:36	1.97E+02	1.88E+02	2.02E+02	8.55E-01	6.58E-01	6.40E-01	-6.77E-01	3.21E+00	3.42E+00	-8.52E-01	3.10E+00	3.26E+00	1.38E+00	1.33E+01	1.55E+01	
	008	51	-2.2	8/13/2007	12:42	1.14E+02	1.73E+02	1.92E+02	1.29E-01	6.90E-01	8.27E-01	-1.18E+00	3.65E+00	3.89E+00	1.53E-01	3.31E+00	3.80E+00	NA	NA	NA	
	009	51	-2.2	1/25/2008	10:57	1.23E+02	1.74E+02	1.93E+02	1.00E+00	6.47E-01	5.52E-01	4.31E-01	2.42E+00	2.39E+00	-1.11E+00	2.07E+00	2.10E+00	3.76E+00	1.67E+01	1.91E+01	
	010	51	-2.2	10/31/2008	13:16	2.25E+02	1.56E+02	1.66E+02	1.97E-01	4.13E-01	4.74E-01	-3.65E-03	6.45E+00	6.96E+00	2.59E+00	6.30E+00	7.60E+00	NA	NA	NA	
	011	51	-2.2	4/7/2009	13:59	1.34E+02	1.43E+02	1.52E+02	6.85E-01	5.88E-01	5.94E-01	1.18E+01	6.15E+00	4.10E+00	-4.55E-01	3.89E+00	4.22E+00	NA	NA	NA	
	012	51	-2.2	7/31/2009	12:52	1.18E+02	1.46E+02	1.59E+02	8.83E-01	4.79E-01	3.54E-01	-8.49E-01	5.09E+00	5.49E+00	-2.26E-01	7.25E+00	6.57E+00	NA	NA	NA	
	013	51	-2.2	11/10/2009	12:02	1.96E+02	1.01E+02	9.84E+01	1.24E+00	7.10E-01	6.57E-01	3.69E-01	5.16E+00	5.74E+00	-4.87E-01	5.54E+00	5.94E+00	NA	NA	NA	
	014	51	-2.2	3/2/2010	14:46	1.31E+02	1.52E+02	1.68E+02	3.51E-01	3.93E-01	4.05E-01	1.64E+00	4.61E+00	5.43E+00	1.35E+00	4.75E+00	5.61E+00	NA	NA	NA	
	015	51	-2.2	4/19/2010	13:17	2.16E+02	1.39E+02	1.47E+02	6.35E-01	7.10E-01	7.15E-01	-1.08E+00	4.44E+00	4.90E+00	1.30E+00	4.68E+00	5.52E+00	NA	NA	NA	
	016	51	-2.2	7/20/2010	15:07	5.97E+01	1.33E+02	1.51E+02	4.41E-01	4.75E-01	4.94E-01	-1.11E+00	7.96E+00	8.85E+00	-2.40E+00	8.22E+00	8.59E+00	NA	NA	NA	
MW-44-66	001	62.4	31.1	3/28/2006	14:05	3.38E+02	1.91E+02	1.73E+02	7.38E-02	1.53E+00	1.67E+00	6.54E-01	1.05E-01	1.17E+01	-2.87E+00	1.02E+01	1.09E+01	NA	NA	NA	MW-44-66
	002	62.4	31.1	5/24/2006	9:05	2.37E+02	1.97E+02	1.92E+02	7.41E-01	4.11E-01	4.45E-01	-3.07E-01	8.97E+00	9.69E+00	4.85E+00	9.06E+00	1.11E+01	NA	NA	NA	
	003	62.4	31.1	7/20/2006	11:15	8.92E+02	2.27E+02	1.63E+02	7.55E-01	1.22E+00	1.31E+00	3.54E+01	1.74E-01	9.59E+00	6.24E-01	7.37E+00	8.48E+00	NA	NA	NA	
	004	62.4	31.1	6/29/2007	15:00	2.68E+02	1.73E+02	1.84E+02	-4.25E-01	7.28E-01	9.04E-01	2.64E-01	3.03E+00	3.47E+00	7.78E-01	3.40E+00	3.98E+00	NA	NA	NA	
	005	62.4	31.1	8/14/2007	13:10	4.17E+02	1.98E+02	2.00E+02	9.30E-02	4.72E-01	5.75E-01	-8.93E-01	2.91E+00	3.08E+00	-3.39E-01	3.40E+00	3.11E+00	NA	NA	NA	
	006	62.4	31.1	10/31/2007	13:30	5.13E+02	1.82E+02	1.81E+02	3.77E-01	4.10E-01	4.21E-01	2.76E+00	4.29E+00	4.81E+00	1.91E+00	3.90E+00	4.71E+00	NA	NA	NA	
	007	62.4	31.1	1/24/2008	12:55	2.91E+02	2.00E+02	2.12E+02	2.85E-01	4.53E-01	4.99E-01	1.73E+01	4.35E+00	2.31E+00	1.40E+00	3.17E+00	2.43E+00	NA	NA	NA	
	008	62.4	31.1	4/30/2008	15:38	1.61E+02	1.19E+02	1.96E+02	4.11E-02	4.06E-01	7.89E-01	-8.72E-02	2.06E+00	3.38E+00	9.13E-01	2.44E+00	4.27E+00	NA	NA	NA	
	009	62.4	31.1	7/25/2008	12:18	5.50E+02	2.55E+02	3.75E+02	3.07E-01	3.66E-01	6.17E-01	-2.33E+00	2.53E+00	3.03E+00	-2.09E-01	1.74E+00	2.85E+00	NA	NA	NA	
	010	62.4	31.1	10/23/2008	13:17	3.18E+02	1.61E+02	1.66E+02	3.23E-01	3.83E-01	3.92E-01	-3.20E+00	5.21E+00	5.30E+00	-1.59E+00	5.73E+00	6.02E+00	NA	NA	NA	
	011	62.4	31.1	2/3/2009	9:40	2.06E+02	1.92E+02	1.97E+02	4.52E-01	7.98E-01	8.95E-01	1.96E+00	3.53E+00	4.18E+00	3.09E+00	3.06E+00	4.12E+00	NA	NA	NA	
	012	62.4	31.1	4/28/2009	13:32	3.10E+02	1.98E+02	2.06E+02	2.20E-01	4.85E-01	5.59E-01	-7.47E-01	6.38E+00	4.25E+00	-1.51E-01	4.49E+00	4.97E+00	NA	NA	NA	
	013	62.4	31.1	7/29/2009	12:56	7.44E+02	2.00E+02	1.88E+02	6.54E-01	7.67E-01	8.08E-01	8.84E-02	6.04E+00	6.70E+00	1.80E+00	5.58E+00	6.69E+00	NA	NA	NA	
	014	62.4	31.1	11/5/2009	16:27	7.15E+02	1.37E+02	9.71E+01	3.23E-01	6.00E-01	6.79E-01	-4.93E+00	8.65E+00	7.60E+00	8.01E-01	4.83E+00	5.53E+00	NA	NA	NA	
	015	62.4	31.1	2/23/2010	16:08	4.37E+02	1.70E+02	1.70E+02	4.84E-02	3.00E-01	3.79E-01	2.33E+00	4.32E+00	5.12E+00	-7.78E-01	4.49E+00	4.87E+00	NA	NA	NA	
	016	62.4	31.1	6/10/2010	15:30	4.75E+02	1.89E+02	1.92E+02	2.16E-01	6.77E-01	7.93E-01	-1.54E+00	5.91E+00	6.37E+00	-1.91E+00	6.06E+00	6.25E+00	NA	NA	NA	
	017	62.4	31.1	7/22/2010	15:47	1.75E+02	1.41E+02	1.47E+02	2.76E-01	5.63E-01	6.43E-01	-3.76E+00	6.86E+00	6.84E+00	1.20E+00	8.52E+00	9.73E+00	NA	NA	NA	
MW-44-102	001	80	13.5	6/13/2006	10:35	2.53E+02	2.01E+02	1.96E+02	3.53E-01	9.93E-01	1.26E+00	-3.22E+00	8.26E+00	8.67E+00	-7.71E-01	7.99E+00	8.52E+00	NA	NA	NA	MW-44-102
	002	80	13.5	7/20/2006	10:50	3.16E+02	1.82E+02	1.64E+02	-3.39E-01	1.05E+00	1.29E+00	-2.99E+00	9.39E+00	9.83E+00	-2.34E+00	9.50E+00	9.39E+00	NA	NA	NA	
	003	80	13.5	8/4/2006	9:40	7.61E+02	2.30E+02	1.81E+02	NA	NA	NA	-4.04E+00	8.10E+00	7.76E+00	-2.00E+00	7.01E+00	6.82E+00	NA	NA	NA	
	004	80	13.5	9/13/2006	11:30	2.67E+02	1.94E+02	2.00E+02	NA	NA	NA	7.19E+00	9.68E+00	1.12E+01	-4.76E-01	8.18E+00	8.99E+00	NA	NA	NA	
	005	80	13.5	6/19/2007	17:46	2.98E+02	1.76E+02	1.83E+02	-1.33E-01	4.81E-01	6.39E-01	1.88E+00	2.15E+00	2.63E+00	6.41E-01	2.02E+00	2.38E+00	-4.92E+00	1.31E+01	1.58E+01	
	006	80	13.5	8/14/2007	14:55	2.84E+02	1.89E+02	1.99E+02	1.97E-01	7.63E-01	8.99E-01	-1.46E+00	2.76E+00	2.77E+00	-1.35E+00	2.79E+00	2.73E+00	NA	NA	NA	
	007	80	13.5	10/31/2007	12:01	3.54E+02	1.76E+02	1.82E+02	-2.58E-01	7.75E-01	9.60E-01	-6.60E-01	2.88E+00	3.11E+00	-1.23E+00	3.60E+00	3.11E+00	NA	NA	NA	
	008	80	13.5	1/24/2008	13:05	4.17E+02	2.94E+02	2.96E+02	2.06E-01	5.16E-01	6.04E-01	1.18E+01	4.64E+00	3.19E+00	-4.44E-03	2.85E+00	3.11E+00	NA	NA	NA	
	009	80	13.5	4/30/2008	15:28	2.56E+02	1.22E+02	1.96E+02	7.90E-02	3.71E-01	7.13E-01	1.03E+00	2.03E+00	3.63E+00	-2.07E+00	3.04E+00	4.52E+00	NA	NA	NA	
	010	80	13.5	7/25/2008	12:18	4.37E+02	2.46E+02	3.75E+02	-2.83E-02	1.83E-01	3.21E-01	-4.07E-01	1.78E+00	2.88E+00	1.35E+00	1.87E+00	3.41E+00	NA	NA	NA	
	011	80	13.5	10/23/2008	13:48	4.75E+02	1.68E+02	1.65E+02	2.01E-01	4.65E-01	5.44E-01	1.72E+00	6.24E+00	7.28E+00	2.39E+00	8.12E+00	8.47E+00	NA	NA	NA	
	012	80	13.5	2/2/2009	12:06	2.57E+02	1.94E+02	1.93E+02	4.66E-01	6.12E-01	6.71E-01	9.83E-01	3.39E+00	4.02E+00	-9.65E-01	3.53E+00	3.74E+00	NA	NA	NA	
MW-44-102	013	80	13.5	4/28/2009	13:34	5.14E+02	1.82E+02	1.80E+02	3.70E-01	7.10E-01	8.03E-01	9.60E-01	8.27E+00	5.51E+00	-2.67E-01	5.18E+00	5.85E+00	NA	NA	NA	MW-44-102
	014	80	13.5	7/29/2009	12:08	4.50E+02	1.86E+02	1.89E+02	4.34E-01	6.99E-01	7.73E-01	-4.62E-02	6.13E+00	6.76E+00	-3.58E-01	5.05E+00	5.49E+00	NA	NA	NA	
	015	80	13.5	11/5/2009	15:23	5.15E+02	1.25E+02	9.78E+01	7.80E-01	7.47E-01	8.12E-01	1.01E+00	5.22E+00	4.51E+00	-4.18E+00	5.71E+00	4.65E+00	NA	NA	NA	
	016	80	13.5	2/17/2010	16:35	5.12E+02	1.71E+02	1.69E+02	2.24E-01	3.57E-01	3.93E-01	-3.93E+00	6.67E+00	5.43E+00	1.47E+00	3.56E+00	4.34E+00	NA	NA	NA	
	017	80	13.5	6/10/2010	13:13	4.94E+02	1.79E+02	1.83E+02	-1.79E-01	5.13E-01	6.74E-01	-2.41E+00	7.89E+00	8.11E+00	-5.22E+00	7.37E+00	6.86E+00	NA	NA	NA	
	018	80	13.5	7/21/2010	13:20	2.76E+02	1.49E+02	1.45E+02	4.11E-01	4.70E-01	4.80E-01	2.38E+00	1.02E-01	1.18E+01	-1.83E+00	8.85E+00	9.25E+00	NA	NA	NA	
MW-45-42	001	37	16.6	4/4/2006	17:20	5.18E+02	2.22E+02	2.17E+02	8.83E-01	5.94E-01	5.95E-01	1.41E+01	1.35E-01	1.54E+01	-4.38E-02	1.22E+01	1.34E+01	NA	NA	NA	MW-45-42
	002	37	16.6	5/25/2006	9:25	1.82E+03	3.74E+02	2.45E+02	9.78E-01	1.14E+00	1.18E+00	-7.92E+00	1.21E-01	1.17E+01	-3.97E+00	1.21E+01	1.23E+01	NA	NA	NA	
	003	37	16.6	6/12/2006	10:45	2.27E+03	4.13E+02	2.15E+02	1.02E+00	6.80E-01	7.49E-01	9.06E-02	5.68E+00	6.29E+00	2.61E+00	5.68E+00	6.70E+00	NA	NA	NA	
	004	37	16.6	7/14/2006	9:30	4.19E+02	2.18E+02	2.00E+02	0.00E+00	1.45E+00	1.59E+00	1.22E+00	8.17E+00	9.27E+00	2.33E+00	9.82E+00	1.13E+01	NA	NA	NA	
	005	37	16.6	8/11/2006	10:00	3.16E+03	5.51E+02	2.71E+02	NA	NA	NA	-1.16E-01	1.51E+00	1.64E+00	-4.26E-01	1.40E+00	1.54E+00	NA	NA	NA	

See Page 29 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-45-42	006	37	16.6	9/13/2006	11:50	4.15E+03	7.32E+02	3.27E+02	NA	NA	NA	-1.58E+00	5.85E+00	6.00E+00	-1.46E+00	5.39E+00	5.27E+00	NA	NA	NA	MW-45-42
	007	37	16.6	11/13/2006	13:20	5.25E+02	1.38E+02	1.40E+02	-7.10E-01	7.50E-01	8.50E-01	3.70E+00	5.40E+00	5.60E+00	5.00E-01	6.90E+00	8.30E+00	3.00E-01	3.60E+00	4.10E+00	
	008	37	16.6	6/21/2007	15:05	2.32E+03	6.27E+02	4.36E+02	-6.08E-02	6.25E-01	7.76E-01	1.31E-01	4.14E+00	4.59E+00	2.51E+00	2.82E+00	4.08E+00	3.58E+00	1.30E+01	1.49E+01	
	009	37	16.6	8/15/2007	11:30	1.16E+03	1.80E+02	1.47E+02	-3.79E-01	7.74E-01	9.47E-01	1.92E+00	2.76E+00	3.41E+00	1.19E+00	2.60E+00	3.23E+00	NA	NA	NA	
	010	37	16.6	10/5/2007	11:05	2.22E+03	3.05E+02	1.50E+02	3.55E-01	5.10E-01	5.56E-01	0.00E+00	4.13E+00	1.99E+00	3.65E-01	1.94E+00	2.21E+00	NA	NA	NA	
	011	37	16.6	1/25/2008	12:15	1.44E+03	3.90E+02	2.96E+02	2.08E-01	5.15E-01	6.03E-01	1.60E+00	2.43E+00	2.88E+00	5.96E-01	2.31E+00	2.66E+00	NA	NA	NA	
	012	37	16.6	5/1/2008	15:15	1.13E+03	1.51E+02	1.96E+02	-4.10E-02	3.11E-01	6.29E-01	6.65E-01	1.99E+00	3.47E+00	-1.17E+00	3.62E+00	4.55E+00	NA	NA	NA	
	013	37	16.6	7/25/2008	16:40	2.32E+03	3.77E+02	3.74E+02	3.02E-01	2.75E-01	4.42E-01	-1.77E+00	1.76E+00	2.53E+00	1.09E+00	1.76E+00	3.19E+00	NA	NA	NA	
	014	37	16.6	10/22/2008	14:55	3.14E+03	8.03E+02	5.91E+02	4.62E-01	5.15E-01	5.29E-01	-1.64E+00	5.07E+00	5.26E+00	-3.00E+00	4.93E+00	4.36E+00	NA	NA	NA	
	015	37	16.6	2/2/2009	18:02	1.41E+03	3.27E+02	1.97E+02	-1.78E-01	4.41E-01	6.64E-01	-1.41E+00	2.57E+00	2.67E+00	-1.27E+00	2.55E+00	2.57E+00	NA	NA	NA	
	016	37	16.6	4/23/2009	15:20	5.99E+03	9.50E+02	4.08E+02	2.63E-01	5.33E-01	6.08E-01	-4.68E-01	4.41E+00	2.94E+00	-1.42E+00	2.49E+00	2.48E+00	NA	NA	NA	
	017	37	16.6	7/24/2009	14:30	1.90E+03	3.50E+02	2.31E+02	5.09E-02	7.67E-01	9.17E-01	4.63E-01	5.25E+00	5.40E+00	1.22E+00	3.69E+00	4.48E+00	NA	NA	NA	
	018	37	16.6	11/10/2009	14:49	2.50E+03	2.24E+02	1.04E+02	6.11E-02	6.16E-01	7.60E-01	4.83E-01	4.44E+00	5.17E+00	-8.72E-01	5.57E+00	5.86E+00	NA	NA	NA	
	019	37	16.6	2/17/2010	15:55	3.86E+03	2.88E+02	1.68E+02	6.43E-01	5.02E-01	4.78E-01	2.03E+00	4.29E+00	5.10E+00	-9.48E-01	4.35E+00	4.74E+00	NA	NA	NA	
	020	37	16.6	4/20/2010	16:13	2.02E+03	3.05E+02	1.51E+02	2.96E-01	6.27E-01	7.22E-01	2.94E+00	6.79E+00	7.62E+00	-7.47E+00	8.46E+00	5.97E+00	NA	NA	NA	
	021	37	16.6	7/19/2010	15:38	3.69E+03	3.35E+02	1.43E+02	5.08E-01	6.10E-01	6.47E-01	1.04E+00	7.75E+00	8.85E+00	-1.87E+00	7.10E+00	7.11E+00	NA	NA	NA	
MW-45-61	001	58	-4.4	4/4/2006	17:00	2.98E+02	2.18E+02	2.23E+02	1.82E-01	5.03E-01	5.39E-01	8.62E+00	1.14E+01	1.32E+01	1.40E+00	1.02E+01	1.17E+01	NA	NA	NA	MW-45-61
	002	58	-4.4	5/25/2006	9:10	1.71E+03	3.57E+02	2.37E+02	5.63E-01	9.81E-01	1.03E+00	7.76E-01	9.14E+00	1.02E+01	5.35E+00	1.06E+01	1.31E+01	NA	NA	NA	
	003	58	-4.4	6/12/2006	11:00	1.02E+03	2.31E+02	1.56E+02	4.81E-01	5.85E-01	6.90E-01	-4.60E+00	6.63E+00	7.11E+00	9.35E-02	6.22E+00	7.59E+00	NA	NA	NA	
	004	58	-4.4	7/20/2006	12:50	3.72E+02	1.88E+02	1.66E+02	0.00E+00	1.36E+00	1.59E+00	-3.98E-01	5.08E+00	5.30E+00	1.33E+00	3.96E+00	5.02E+00	NA	NA	NA	
	005	58	-4.4	8/11/2006	9:45	1.35E+03	2.88E+02	1.91E+02	NA	NA	NA	6.43E+00	9.17E+00	1.16E+01	-8.33E-01	9.00E+00	9.75E+00	NA	NA	NA	
	006	58	-4.4	9/13/2006	9:30	1.45E+03	3.09E+02	2.04E+02	NA	NA	NA	-6.55E+00	7.21E+00	5.92E+00	-3.06E+00	7.35E+00	6.87E+00	NA	NA	NA	
	007	58	-4.4	11/13/2006	11:20	9.57E+02	1.44E+02	1.40E+02	1.73E+00	7.50E-01	7.60E-01	-3.00E-01	4.50E+00	5.30E+00	-3.20E+00	4.50E+00	6.30E+00	2.50E+00	6.60E+00	7.30E+00	
	008	58	-4.4	6/21/2007	12:55	1.47E+03	5.42E+02	4.34E+02	-7.02E-02	7.47E-01	9.67E-01	3.52E+00	4.72E+00	3.52E+00	-7.21E-01	3.56E+00	3.69E+00	3.35E+00	1.49E+01	1.71E+01	
	009	58	-4.4	8/15/2007	11:55	1.50E+03	1.88E+02	1.41E+02	4.74E-02	7.90E-01	9.41E-01	3.33E+00	4.25E+00	4.03E+00	-6.51E-01	3.86E+00	3.59E+00	NA	NA	NA	
	010	58	-4.4	10/5/2007	11:30	2.15E+03	3.03E+02	1.52E+02	4.87E-01	5.23E-01	5.36E-01	-1.73E-01	1.43E+00	1.56E+00	6.59E-02	1.46E+00	1.62E+00	NA	NA	NA	
	011	58	-4.4	1/25/2008	11:55	2.66E+03	4.80E+02	2.96E+02	4.26E-01	5.76E-01	6.21E-01	2.42E+00	3.60E+00	2.52E+00	-2.05E-01	2.88E+00	3.19E+00	NA	NA	NA	
	012	58	-4.4	5/1/2008	10:16	2.21E+03	1.80E+02	1.95E+02	6.93E-01	4.96E-01	7.66E-01	3.16E-01	2.07E+00	3.59E+00	-1.29E+00	2.25E+00	3.53E+00	NA	NA	NA	
	013	58	-4.4	7/25/2008	13:51	1.80E+03	3.46E+02	3.76E+02	2.36E-01	2.45E-01	4.05E-01	-1.88E+00	1.91E+00	2.80E+00	7.83E-01	1.91E+00	3.40E+00	NA	NA	NA	
	014	58	-4.4	10/22/2008	9:33	1.27E+03	6.35E+02	5.90E+02	1.99E-01	5.82E-01	6.91E-01	-1.52E+00	5.07E+00	5.32E+00	1.04E+00	5.73E+00	6.58E+00	NA	NA	NA	
	015	58	-4.4	2/2/2009	13:13	1.36E+03	3.24E+02	1.99E+02	-1.47E-01	7.61E-01	9.47E-01	9.93E-01	3.59E+00	4.20E+00	2.30E-01	3.23E+00	3.66E+00	NA	NA	NA	
	016	58	-4.4	4/23/2009	10:20	1.46E+03	5.45E+02	4.05E+02	-1.37E-01	6.17E-01	8.06E-01	-4.72E-01	4.17E+00	2.78E+00	1.13E+00	2.54E+00	3.01E+00	NA	NA	NA	
	017	58	-4.4	7/24/2009	11:56	1.11E+03	2.93E+02	2.29E+02	1.01E-01	8.04E-01	9.62E-01	-5.29E-01	3.33E+00	3.69E+00	6.08E-01	3.24E+00	3.82E+00	NA	NA	NA	
	018	58	-4.4	11/9/2009	12:53	1.37E+03	1.77E+02	1.05E+02	3.44E-01	5.20E-01	5.74E-01	-4.63E-01	5.99E+00	6.70E+00	-3.73E+00	7.04E+00	6.99E+00	NA	NA	NA	
	019	58	-4.4	2/17/2010	12:55	1.44E+03	2.10E+02	1.68E+02	3.08E-01	3.80E-01	3.95E-01	-8.12E-01	3.86E+00	4.17E+00	-2.61E+00	4.37E+00	4.43E+00	NA	NA	NA	
	020	58	-4.4	4/20/2010	11:13	9.89E+02	2.25E+02	1.45E+02	2.71E-01	7.70E-01	8.89E-01	-8.78E-02	7.91E+00	8.84E+00	-3.82E+00	8.70E+00	8.72E+00	NA	NA	NA	
	021	58	-4.4	7/19/2010	13:28	1.00E+03	2.07E+02	1.48E+02	4.07E-01	5.04E-01	5.30E-01	-2.93E+00	8.29E+00	8.61E+00	-2.24E+00	8.88E+00	9.24E+00	NA	NA	NA	
MW-46	002	10.5	7.6	4/12/2006	17:15	1.38E+03	2.81E+02	1.76E+02	6.24E-01	4.82E-01	4.89E-01	9.28E-01	2.98E+00	3.31E+00	-5.36E-01	2.67E+00	2.88E+00	NA	NA	NA	MW-46
	003	10.5	7.6	5/24/2006	12:55	9.00E+02	1.71E+03	6.33E+02	3.07E-01	6.15E-01	7.47E-01	-7.06E-02	9.87E+00	1.18E+01	5.38E+00	8.80E+00	1.21E+01	NA	NA	NA	
	003	10.5	7.6	5/24/2006	12:55	6.23E+02	2.24E+02	1.87E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	10.5	7.6	6/13/2006	13:10	6.79E+01	1.80E+02	1.91E+02	3.46E-01	1.04E+00	1.33E+00	2.58E+00	7.28E+00	8.29E+00	-9.79E-01	8.23E+00	8.81E+00	NA	NA	NA	
	005	10.5	7.6	7/12/2006	13:23	7.86E+02	2.36E+02	1.92E+02	5.77E-01	1.21E+00	1.23E+00	3.98E+00	9.37E+00	1.09E+01	1.49E+00	8.68E+00	1.06E+01	NA	NA	NA	
	006	10.5	7.6	8/4/2006	8:40	1.15E+03	2.75E+02	1.98E+02	NA	NA	NA	1.15E+00	5.05E+00	6.52E+00	-3.50E+00	5.84E+00	5.97E+00	NA	NA	NA	
	007	10.5	7.6	9/13/2006	13:15	1.47E+03	3.30E+02	2.19E+02	NA	NA	NA	3.73E-01	6.01E+00	6.95E+00	2.75E+00	7.27E+00	6.27E+00	NA	NA	NA	
	008	10.5	7.6	6/14/2007	13:50	3.43E+03	5.64E+02	2.95E+02	2.15E-01	4.65E-01	5.35E-01	3.08E-01	3.92E+00	4.37E+00	8.52E-02	3.65E+00	4.09E+00	-1.05E+00	1.52E+01	1.78E+01	
	009	10.5	7.6	8/1/2007	11:35	6.62E+02	3.50E+02	2.44E+02	7.89E-02	3.66E-01	4.49E-01	6.63E-01	3.52E+00	3.80E+00	6.33E-02	2.43E+00	2.77E+00	NA	NA	NA	
	010	10.5	7.6	10/22/2007	14:20	1.67E+03	5.27E+02	4.01E+02	2.17E-01	4.72E-01	5.44E-01	4.68E-01	2.97E+00	3.34E+00	-7.20E-01	2.94E+00	3.09E+00	NA	NA	NA	
	011	10.5	7.6	1/22/2008	12:19	5.49E+02	1.74E+02	1.70E+02	5.30E-01	7.71E-01	8.47E-01	-3.99E-01	2.64E+00	2.84E+00	1.73E+00	2.61E+00	3.31E+00	NA	NA	NA	
	012	10.5	7.6	4/29/2008	16:00	5.21E+02	1.53E+02	2.20E+02	4.10E-01	3.51E-01	5.64E-01	7.87E-01	2.12E+00	3.75E+00	4.57E-01	2.24E+00	3.90E+00	NA	NA	NA	
	013	10.5	7.6	7/24/2008	16:56	7.71E+02	2.75E+02	3.77E+02	2.74E-01	3.07E-01	5.10E-01	6.05E-01	1.96E+00	3.38E+00	-1.89E+00	2.10E+00	3.09E+00	NA	NA	NA	
	014	10.5	7.6	10/20/2008	15:27	1.38E+03	6.44E+02	5.89E+02	9.33E-01	5.85E-01	5.11E-01	-2.27E+00	5.88E+00	5.91E+00	-5.88E-01	5.63E+00	6.09E+00	NA	NA	NA	
	015	10.5	7.6	2/5/2009	13:46	1.00E+03	2.88E+02	1.96E+02	-1.30E-01	6.23E-01	7.82E-01	-1.68E+00	2.78E+00	2.71E+00	7.02E-01	2.82E+00	3.28E+00	NA	NA	NA	
	016	10.5	7.6	4/10/2009	12:31	7.56E+02	2.07E+02	1.48E+02	-7.29E-02	5.46E-01	6.63E-01	9.83E-04	5.58E+00	3.72E+00	1.54E+00	3.68E+00	4.40E+00	NA	NA	NA	
	017	10.5	7.6	7/14/2009	13:57	8.32E+02	2.72E+02	2.30E+02	5.25E-01	7.99E-01	8.88E-01	-1.07E-01	3.07E+00	3.40E+00	2.37E+00	4.07E+00	4.55E+00	NA	NA	NA	
	018	10.5	7.6	11/6/2009	13:24	1.10E+03	1.67E+02	1.07E+02	8.60E-01	5.09E-01	4.14E-01	2.85E+00	6.25E+00	7.40E+00	-3.06E+00	6.12E+00	5.78E+00	NA	NA	NA	
MW-46	019	10.5	7.6	2/12/2010	12:44	1.13E+03	2.12E+02	1.82E+02	5.09E-01	5.69E-01	5.98E-01	1.41E+00	3.98E+00	4.64E+00	-1.64E+00	5.68E+00	4.98E+00	NA	NA	NA	MW-46
	020	10.5	7.6	4/12/2010	11:32	7.62E+02	1.92E+02	1.77E+02	8.57E-01	7.68E-01	7.39E-01	-2.73E+00	1.08E+01	1.14E+01	-2.57E+00	1.05E+01	1.13E+01	NA	NA	NA	
	021	10.5	7.6	7/23/2010	13:10	1.92E+03	2.58E+02	1.46E+02	1.80E-01	5.63E-01	6.59E-01	1.28E-01	7.65E+00	8.12E+00	-1.36E+00	7.96E+00	8.34E+00	NA	NA	NA	
MW-47-56	002	53.2	17.1	4/13/2006	12:05	7.60E+02	2.22E+02	1.67E+02	2.27E+00	7.65E-01	7.30E-01	8.27E-02	5.45E+00	5.95E+00	-4.55E-01	5.30E+00	5.77E+00	NA	NA	NA	MW-47-56
	003	53.2	17.1	7/18/2006	10:13	1.54E+02	1.95E+02	1.99E+02	1.91E-01	1.47E+00	1.59E+00	3.70E+00	7.80E+00	9.34E+00	2.47E+00	1.04E+01	1.29E+01	NA	NA	NA	
	004	53.2	17.1	6/20/2007	10:07	5.29E+02	1.95E+02	1.85E+02	5.93E-01	5.25E-01	5.10E-01	0.00E+00	6.66E+00	3.37E+00	3.57E+00	3.71E+00	4.73E+00	NA	NA	NA	
	004	53.2	17.1	6/20/2007	10:07	NA	NA	NA	NA	NA	NA	0.00E+00	4.28E+00	3.79E+00	1.63E+00	3.17E+00	3.79E+00	3.81E+00	1.32E+01	1.51E+01	
	005	53.2	17.1	8/10/2007	11:00	2.70E+02	1.88E+02	2.02E+02	5.07E-01	8.04E-01	8.91E-01	-3.84E-01	3.48E+00	3.75E+00	1.49E-01	2.94E+00	3.37E+00	NA	NA	NA	
MW-47-80	001	74	-3.7	4/13/2006	11:45	2.33E+03	4.28E+02	2.29E+02	2.73E+00	7.35E-01	6.53E-01	-5.82E-01	4.48E+00	5.14E+00	2.25E-01	3.91E+00	4.76E+00	NA	NA	NA	MW-47-80
	002	74	-3.7	7/18/2006	8:51	1.87E+03	3.87E+02	2.58E+02	2.86E+00	1.43E+00	1.14E+00	1.67E+00	1.05E+01	1.19E+01	2.39E+00	9.21E+00	1.09E+01	NA	NA	NA	
	003	74	-3.7	6/19/2007	11:00	2.36E+03	5.94E+02	3.58E+02	3.27E+00	8.98E-01	5.28E-01	2.05E+00	3.81E+00	4.58E+00	-2.27E+00	4.82E+00	3.92E+00	4.08E-01	1.18E+01	1.38E+01	
	004	74	-3.7	8/10/2007	12:21	3.51E+03	7.25E+02	4.52E+02	3.55E+00	1.21E+00	9.05E-01	-9.39E-02	3.21E+00	3.56E+00	-8.20E-02	3.18E+00	3.50E+00	NA	NA	NA	

J:\17,000-18,999\17369\17369-92 MG\Q3-2010\FINAL\Tables\,
Table 5-Historic Groundwater Analytical Results.xlsx,
Table5

See Page 29 for Notes

IPEC00263596

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-48-23	001	20.4	-5	2/8/2006	10:10	1.66E+02	3.26E+02	3.42E+02	1.93E-01	5.04E-01	5.94E-01	-2.14E-01	1.04E-01	1.13E+01	1.46E+00	9.95E+00	1.12E+01	NA	NA	NA	MW-48-23
	002	20.4	-5	4/12/2006	9:58	1.24E+02	4.08E+02	4.52E+02	-1.10E-01	3.90E-01	4.40E-01	3.25E+00	9.75E-00	7.26E+00	2.49E+00	7.17E+00	6.18E+00	NA	NA	NA	
	003	20.4	-5	4/27/2006	13:42	2.38E+02	1.94E+02	2.03E+02	-2.50E-02	4.58E-01	5.04E-01	-1.88E+00	5.06E-00	5.65E+00	-1.19E-01	4.40E+00	5.27E+00	NA	NA	NA	
	004	20.4	-5	5/22/2006	10:30	7.55E+02	4.26E+02	4.46E+02	2.42E-01	2.88E-01	3.10E-01	3.22E+00	9.67E-00	7.12E+00	4.29E+00	1.29E+01	9.62E+00	NA	NA	NA	
	005	20.4	-5	6/9/2006	11:15	7.37E+02	2.09E+02	1.56E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	20.4	-5	6/9/2006	11:15	6.03E+01	4.39E+02	6.24E+02	3.70E-01	3.60E-01	4.00E-01	2.59E+00	7.76E+00	5.90E+00	3.25E+00	9.74E+00	7.61E+00	1.60E+01	1.53E+01	1.62E+01	
	005	20.4	-5	6/9/2006	11:15	2.95E+02	4.14E+02	4.53E+02	3.10E-01	9.88E-01	1.26E+00	1.09E+00	5.21E+00	5.80E+00	3.08E+00	5.41E+00	5.96E+00	NA	NA	NA	
	006	20.4	-5	7/6/2006	12:00	4.21E+02	4.17E+02	4.52E+02	-2.20E-01	4.20E-01	4.90E-01	2.55E+00	7.64E+00	5.49E+00	2.60E+00	7.79E+00	5.78E+00	NA	NA	NA	
	007	20.4	-5	3/8/2006	10:30	1.04E+02	1.68E+02	1.72E+02	7.00E-02	6.30E-01	7.00E-01	1.93E+00	4.76E+00	5.56E+00	1.99E+00	4.41E+00	5.37E+00	NA	NA	NA	
	008	20.4	-5	9/5/2006	10:05	2.44E+01	1.59E+02	1.72E+02	-6.00E-02	7.80E-01	8.60E-01	-2.90E+00	7.82E+00	8.12E+00	1.05E-01	8.58E+00	1.02E+01	NA	NA	NA	
	009	20.4	-5	11/22/2006	9:23	1.67E+02	4.08E+02	4.50E+02	-7.00E-02	6.30E-01	7.10E-01	3.91E+00	1.17E-01	8.71E+00	3.22E+00	9.67E+00	7.76E+00	NA	NA	NA	
	010	20.4	-5	2/9/2007	10:54	2.72E+02	1.68E+02	1.70E+02	-1.60E-01	1.53E+00	1.70E+00	3.70E-01	1.80E-00	2.00E+00	8.30E-01	2.07E+00	2.30E+00	NA	NA	NA	
	011	20.4	-5	8/16/2007	11:00	3.93E+02	1.64E+02	1.61E+02	-3.94E-01	5.69E-01	8.47E-01	1.66E+00	4.92E-00	3.58E+00	5.36E-01	3.03E+00	3.55E+00	NA	NA	NA	
MW-48-37	001	36	-20.6	2/10/2006	14:10	1.00E+01	4.26E+02	4.73E+02	NA	NA	NA	1.18E+00	3.54E-00	2.53E+00	2.07E+00	6.21E+00	4.39E+00	NA	NA	NA	MW-48-37
	002	36	-20.6	4/12/2006	10:00	-5.40E-01	4.02E+02	4.52E+02	2.10E-01	3.90E-01	4.30E-01	1.70E+00	5.09E-00	3.53E+00	3.34E+00	1.00E+01	6.89E+00	NA	NA	NA	
	003	36	-20.6	4/27/2006	13:20	-2.15E-02	1.77E+02	2.04E+02	-4.96E-02	3.79E-01	4.20E-01	7.95E+00	9.91E-00	1.01E+01	-3.17E-01	8.42E+00	9.20E+00	NA	NA	NA	
	004	36	-20.6	5/22/2006	10:00	1.39E+02	4.02E+02	4.46E+02	-1.20E-01	3.60E-01	4.10E-01	1.35E+00	4.05E-00	2.94E+00	2.31E+00	6.94E+00	5.00E+00	NA	NA	NA	
	005	36	-20.6	6/9/2006	11:30	1.66E+02	4.11E+02	4.53E+02	2.08E+00	4.50E-01	4.00E-01	2.40E+00	7.20E-00	4.95E+00	4.14E+00	1.24E+01	8.50E+00	4.58E+00	1.35E+01	1.46E+01	
	005	36	-20.6	6/9/2006	11:30	1.43E+02	1.67E+02	1.66E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	36	-20.6	6/9/2006	11:30	5.96E+02	1.38E+03	6.24E+02	1.05E-01	7.89E-01	1.03E+00	1.50E+00	5.71E-00	6.44E+00	-1.58E+00	5.25E+00	5.52E+00	NA	NA	NA	
	006	36	-20.6	7/6/2006	8:45	1.47E+02	4.08E+02	4.52E+02	1.70E-01	8.10E-01	8.80E-01	2.10E+00	6.31E-00	4.44E+00	4.21E+00	1.26E+01	8.77E+00	NA	NA	NA	
	007	36	-20.6	3/8/2006	10:20	1.09E+01	1.55E+02	1.69E+02	6.00E-02	6.90E-01	7.80E-01	1.86E+00	5.68E-00	6.65E+00	2.95E-01	5.29E+00	5.93E+00	NA	NA	NA	
	008	36	-20.6	9/5/2006	10:20	5.73E+02	2.12E+02	1.75E+02	0.00E+00	6.90E-01	7.70E-01	-2.86E-01	5.59E-00	6.04E+00	1.60E+00	5.35E+00	6.37E+00	NA	NA	NA	
	009	36	-20.6	11/22/2006	9:34	2.62E+02	4.11E+02	4.50E+02	0.00E+00	6.30E-01	7.00E-01	1.60E+00	4.80E-00	3.39E+00	3.58E+00	1.07E+01	7.47E+00	NA	NA	NA	
	010	36	-20.6	2/9/2007	10:59	2.70E+01	1.65E+02	1.70E+02	-1.40E-01	1.38E+00	1.50E+00	-6.10E-01	1.26E-00	1.50E+00	-4.70E-01	1.38E+00	1.60E+00	NA	NA	NA	
	011	36	-20.6	8/16/2007	11:07	1.29E+02	1.59E+02	1.75E+02	4.11E-02	6.27E-01	7.94E-01	1.78E+00	4.35E-00	4.53E+00	-4.00E-01	4.51E+00	5.01E+00	NA	NA	NA	
MW-49-26	001	19.1	-4.4	3/22/2006	16:50	1.54E+04	2.81E+03	1.82E+03	1.84E+01	9.96E-01	4.29E-01	-5.28E-01	9.40E-00	1.02E+01	-1.35E+00	8.98E+00	9.69E+00	NA	NA	NA	MW-49-26
	003	19.1	-4.4	5/19/2006	14:55	1.42E+04	6.75E+03	6.29E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	19.1	-4.4	5/19/2006	14:55	9.40E+03	1.50E+03	4.96E+02	9.03E+00	9.40E-01	5.45E-01	2.65E+00	7.87E-00	9.09E+00	1.15E+00	5.99E+00	6.92E+00	NA	NA	NA	
	004	19.1	-4.4	6/6/2006	9:55	1.40E+04	2.16E+03	4.95E+02	1.41E+01	1.17E+00	5.80E-01	6.14E+00	1.18E-01	1.41E+01	2.42E+00	1.02E+01	1.21E+01	NA	NA	NA	
	005	19.1	-4.4	7/7/2006	9:15	1.00E+04	2.06E+03	1.51E+03	1.26E+01	2.67E+00	1.51E+00	1.38E+00	8.45E-00	9.49E+00	-1.98E+00	8.42E+00	8.90E+00	NA	NA	NA	
	006	19.1	-4.4	3/1/2006	9:28	1.37E+04	1.13E+03	6.16E+02	NA	NA	NA	-5.93E+00	6.06E-00	4.56E+00	-3.09E+00	5.14E+00	4.31E+00	3.67E+01	3.09E+01	3.26E+01	
	007	19.1	-4.4	8/28/2006	12:30	1.10E+04	1.12E+03	7.68E+02	NA	NA	NA	-2.69E+00	5.42E-00	5.50E+00	-3.57E+00	4.78E+00	3.71E+00	NA	NA	NA	
	008	19.1	-4.4	11/15/2006	11:28	6.39E+03	1.38E+03	1.00E+03	1.55E+01	1.95E+00	7.70E-01	8.00E-01	3.00E-00	3.40E+00	-3.00E-01	4.20E+00	5.00E+00	8.40E+00	2.04E+01	2.20E+01	
	009	19.1	-4.4	6/26/2007	12:30	7.76E+03	3.48E+02	1.79E+02	1.27E+01	1.40E+00	7.13E-01	1.36E+00	2.55E-00	2.83E+00	-8.28E-01	2.23E+00	2.31E+00	-1.92E+00	1.28E+01	1.50E+01	
	010	19.1	-4.4	3/9/2007	11:17	6.72E+03	9.50E+02	4.62E+02	1.43E+01	2.16E+00	9.06E-01	4.09E-01	3.72E-00	4.23E+00	2.50E+00	3.51E+00	4.54E+00	7.93E-01	2.07E+01	2.42E+01	
	011	19.1	-4.4	1/28/2008	16:28	4.21E+03	5.76E+02	2.98E+02	2.29E+01	2.40E+00	8.52E-01	-1.19E+00	1.95E-00	2.07E+00	4.31E-01	1.97E+00	2.29E+00	5.16E+00	1.53E+01	1.75E+01	
	012	19.1	-4.4	4/25/2008	12:45	5.00E+03	3.13E+02	1.44E+02	1.81E+01	1.32E+00	5.69E-01	2.68E+00	2.36E-00	4.34E+00	2.08E+00	2.22E+00	4.14E+00	1.76E+00	1.19E+01	2.05E+01	
	013	19.1	-4.4	7/30/2008	15:03	3.96E+03	1.73E+02	1.30E+02	1.62E+01	1.27E+00	8.36E-01	-9.75E-01	1.74E-00	2.74E+00	1.31E+00	2.17E+00	3.93E+00	-2.81E+00	1.64E+01	2.92E+01	
	014	19.1	-4.4	11/5/2008	15:54	3.47E+03	4.55E+02	1.91E+02	1.53E+01	2.06E+00	6.10E-01	-1.36E+00	5.03E-00	5.26E+00	-3.17E-01	4.65E+00	5.18E+00	2.96E+00	1.77E+01	2.02E+01	
	015	19.1	-4.4	2/6/2009	13:03	3.10E+03	2.66E+02	1.69E+02	1.38E+01	1.91E+00	8.59E-01	1.77E+00	4.34E-00	4.54E+00	1.26E+00	3.56E+00	4.24E+00	2.31E+01	2.21E+01	2.42E+01	
	016	19.1	-4.4	5/6/2009	10:46	3.20E+03	4.05E+02	1.80E+02	1.50E+01	1.85E+00	4.90E-01	2.93E+00	7.91E-00	5.27E+00	2.01E-01	3.78E+00	4.33E+00	7.21E-01	1.67E+01	1.91E+01	
	017	19.1	-4.4	3/7/2009	10:50	3.56E+03	2.97E+02	1.79E+02	1.23E+01	1.64E+00	6.79E-01	-9.22E-01	3.27E-00	3.47E+00	-1.44E+00	3.66E+00	3.60E+00	4.77E+00	1.95E+01	2.22E+01	
	018	19.1	-4.4	10/29/2009	13:14	3.17E+03	2.91E+02	1.88E+02	1.33E+01	1.71E+00	8.20E-01	7.51E-01	6.13E-00	6.91E+00	0.00E+00	5.38E+00	5.96E+00	-4.26E+00	1.77E+01	2.06E+01	
	019	19.1	-4.4	2/22/2010	14:35	2.82E+03	2.70E+02	1.74E+02	1.36E+01	1.92E+00	8.62E-01	2.49E+00	5.76E+00	6.86E+00	-1.91E-01	5.78E+00	6.41E+00	-6.01E+00	1.84E+01	2.16E+01	
	020	19.1	-4.4	4/23/2010	14:42	3.00E+03	3.30E+02	1.38E+02	1.55E+01	2.44E+00	8.19E-01	2.82E+00	7.32E+00	8.92E+00	-2.28E-01	9.12E+00	1.01E+01	-7.28E+00	1.95E+01	2.26E+01	
	021	19.1	-4.4	8/11/2010	11:27	3.03E+03	3.03E+02	1.27E+02	1.28E+01	1.44E+00	3.66E-01	-7.91E-01	1.14E+01	1.15E+01	-1.86E+00	1.10E+01	1.19E+01	3.27E-01	1.64E+01	1.92E+01	
MW-49-42	001	38.1	-23.4	3/22/2006	16:45	1.13E+04	2.55E+03	1.83E+03	1.94E+01	1.04E+00	4.30E-01	3.30E+00	1.19E-01	1.32E+01	-4.57E+00	1.11E+01	1.14E+01	NA	NA	NA	MW-49-42
	003	38.1	-23.4	5/19/2006	15:07	8.83E+03	5.33E+03	6.29E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	38.1	-23.4	5/19/2006	15:07	9.39E+03	1.49E+03	4.90E+02	1.20E+01	9.57E-01	4.54E-01	2.16E+00	1.39E-01	1.56E+01	3.96E+00	1.40E+01	1.63E+01	NA	NA	NA	
	004	38.1	-23.4	6/6/2006	10:10	8.28E+03	1.32E+03	3.86E+02	1.63E+01	1.27E+00	5.67E-01	2.88E+00	1.37E-01	1.58E+01	-1.26E+00	1.07E+01	1.13E+01	NA	NA	NA	
	005	38.1	-23.4	7/7/2006	9:15	5.85E+03	1.82E+03	1.52E+03	1.92E+01	3.23E+00	1.49E+00	2.01E+00	1.14E-01	1.30E+01	-1.61E+00	1.06E+01	1.11E+01	NA	NA	NA	
	006	38.1	-23.4	3/1/2006	9:40	8.80E+03	9.68E+02	6.16E+02	NA	NA	NA	-4.22E+00	9.33E-00	8.64E+00	-1.94E+00	8.78E+00	8.99E+00	8.06E+00	9.86E+00	1.05E+01	
	007	38.1	-23.4	8/28/2006	12:40	8.69E+03	9.57E+02	6.10E+02	NA	NA	NA	-8.31E-02	1.05E-01	1.16E+01	-6.74E+00	9.40E+00	6.18E+00	NA	NA	NA	
	008	38.1	-23.4	11/15/2006	14:21	6.19E+03	1.38E+03	1.00E+03	2.11E+01	2.46E+00	8.10E-01	-6.60E-01	2.25E-00	2.60E+00	1.18E+00	2.34E+00	2.60E+00	2.60E+00	5.70E+00	6.20E+00	
	009	38.1	-23.4	6/26/2007	12:30	4.44E+03	2.90E+02	1.86E+02	2.08E+01	1.65E+00	6.22E-01	-3.62E-01	4.56E-00	4.32E+00	-2.09E+00	3.66E+00	3.54E+00	-5.19E+00	1.30E+01	1.54E+01	
	010	38.1	-23.4	3/9/2007	12:05	4.30E+03	7.91E+02	4.59E+02	2.56E+01	2.77E+00	8.29E-01	-1.17E+00	3.27E-00	3.37E+00	2.77E+00	3.52E+00	4.56E+00	4.03E-01	2.10E+01	2.46E+01	
	011	38.1	-23.4	1/28/2008	15:49	2.81E+03	4.92E+02	2.98E+02	2.94E+01	2.57E+00	5.58E-01	8.68E-01	2.10E-00	2.43E+00	8.96E-01	2.13E+00	2.52E+00	5.79E+00	1.73E+01	1.97E+01	
	012	38.1	-23.4	4/25/2008	12:38	3.20E+03	2.54E+02	1.44E+02	2.33E+01	1.49E+00	5.24E-01	4.07E-01	1.82E-00	3.18E+00	5.91E-01	2.37E+00	4.13E+00	-1.03E+00	1.17E+01	2.04E+01	
	013	38.1	-23.4	7/30/2008	15:06	2.52E+03	1.45E+02	1.30E+02	2.16E+01	1.41E+00	6.09E-01	4.49E-01	1.59E-00	2.79E+00	7.96E-01	1.70E+00	3.09E+00	-2.73E+00	1.59E+01	2.84E+01	
	014	38.1	-23.4	11/5/2008	14:31	2.54E+03	4.04E+02	1.97E+02	2.16E+01	2.50E+00	7.01E-01	-1.27E+00	6.33E-00	6.92E+00	-1.93E+00	8.10E+00	7.46E+00	4.70E+00	1.84E+01	2.09E+01	
	015	38.1	-23.4	2/6/2009	9:57	2.25E+03	2.40E+02	1.70E+02	2.07E+01	2.37E+00	9.73E-01	1.38E+00	3.51E-00	4.09E+00	-2.43E+00	3.38E+00	3.11E+00	-2.15E+00	2.15E+01	2.48E+01	
	016	38.1	-23.4	5/6/2009	14:27	2.50E+03	3.63E+02	1.79E+02	1.75E+01	2.04E+00	4.71E-01	1.31E+00	7.25E-00	4.83E+00	1.78E-01	4.17E+00	4.49E+00	-7.29E+00	1.67E+01	1.94E+01	
	017	38.1	-23.4	3/7/2009	10:55	2.68E+03	2.69E+02	1.79E+02	1.75E+01	1.92E+00	6.96E-01	-3.65E-01	3.48E-00	3.79E+00	9.35E-01	3.35E+00	3.95E+00	-7.87E+00	1.49E+01	1.75E+01	
	018	38.1	-23.4	10/29/2009	13:04	2.51E+03	2.70E+02	1.88E+02	1.74E+01	1.91E+00	7.50E-01	6.14E-01	6.27E-00	7.22E+00	-9.32E-02	7.29E+00	8.25E+00	-9.33E+00	1.73E+01	2.03E+01	
	019	38.1	-23.4	2/22/2010	14:43	2.20E+03	2.49E+02	1.75E+02	1.85E+01	2.42E+00	7.57E-01	-2.91E-01	5.17E-00	5.65E+00	1.19E+00	5.75E+00	6.62E+00	1.66E-01	1.95E+01	2.25E+01	
	020	38.1	-23.4	4/23/2010	14:39	2.76E+03	3.26E+02	1.43E+02	1.75E+01	2.28E+00	7.01E-01	-5.63E+00	6.62E-00	6.01E+00	-1.68E+00	7.58E+00	7.64E+00	-3.23E+00	2.18E+01	2.51E+01	

IPEC00263597

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-49-42	021	38.1	-23.4	8/11/2010	11:00	2.27E+03	2.72E+02	1.30E+02	1.85E+01	1.67E+00	3.91E-01	4.80E+00	7.88E+00	9.85E+00	-2.34E+00	8.76E+00	9.06E+00	-1.91E+00	1.65E+01	1.96E+01	MW-49-42
MW-49-65	001	60	-45.4	3/22/2006	16:55	5.43E+03	2.13E+03	1.82E+03	1.85E+01	1.01E+00	4.13E-01	1.36E+00	1.43E-01	1.72E+01	5.51E+00	1.37E+01	1.81E+01	NA	NA	NA	MW-49-65
	003	60	-45.4	5/19/2006	15:55	5.70E+03	9.38E+02	3.84E+02	1.13E+01	8.98E-01	4.28E-01	-2.86E+00	8.51E+00	8.67E+00	-1.43E-01	9.39E+00	1.03E+01	NA	NA	NA	
	003	60	-45.4	5/19/2006	15:55	5.75E+03	4.30E+03	6.29E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	60	-45.4	6/6/2006	10:40	4.32E+03	7.20E+02	2.88E+02	1.72E+01	1.30E+00	6.17E-01	4.52E+00	1.41E-01	1.63E+01	4.24E+00	1.28E+01	1.52E+01	NA	NA	NA	
	005	60	-45.4	7/7/2006	9:10	4.63E+03	1.73E+03	1.52E+03	1.56E+01	3.24E+00	1.86E+00	-2.76E+00	6.49E+00	6.88E+00	1.84E+00	6.45E+00	7.36E+00	NA	NA	NA	
	006	60	-45.4	3/1/2006	10:00	5.76E+03	8.48E+02	6.14E+02	NA	NA	NA	-1.20E+00	6.84E+00	7.48E+00	-6.55E-01	8.18E+00	9.78E+00	5.75E+00	1.06E+01	1.15E+01	
	007	60	-45.4	8/28/2006	12:35	5.54E+03	8.40E+02	6.16E+02	NA	NA	NA	-4.07E+00	9.28E+00	9.08E+00	-1.27E+00	7.42E+00	7.60E+00	NA	NA	NA	
	008	60	-45.4	11/15/2006	13:46	3.04E+03	1.20E+03	1.00E+03	1.92E+01	2.31E+00	8.40E-01	2.12E+00	2.61E+00	2.80E+00	3.00E-01	2.07E+00	2.40E+00	-1.80E+00	6.90E+00	7.70E+00	
	009	60	-45.4	6/26/2007	12:30	2.62E+03	2.45E+02	1.85E+02	1.58E+01	1.58E+00	8.28E-01	-1.36E-03	3.06E+00	3.38E+00	-3.59E+00	4.30E+00	2.75E+00	-7.43E+00	1.41E+01	1.68E+01	
	010	60	-45.4	8/9/2007	11:20	2.41E+03	6.42E+02	4.60E+02	2.08E+01	2.40E+00	9.11E-01	3.44E-01	2.76E+00	3.13E+00	1.65E+00	3.03E+00	3.73E+00	3.50E+00	2.14E+01	2.49E+01	
	011	60	-45.4	1/28/2008	16:52	1.85E+03	4.22E+02	2.95E+02	2.73E+01	2.79E+00	6.29E-01	2.83E+00	3.72E+00	3.81E+00	-1.63E+00	3.17E+00	3.09E+00	1.01E+01	1.95E+01	2.20E+01	
	012	60	-45.4	4/25/2008	13:13	1.93E+03	1.86E+02	1.96E+02	1.90E+01	6.62E-01	3.64E-01	-8.45E-02	1.93E+00	3.28E+00	-1.40E-01	2.29E+00	3.84E+00	6.81E+00	9.59E+00	1.62E+01	
	013	60	-45.4	7/30/2008	13:58	1.56E+03	1.23E+02	1.30E+02	1.78E+01	1.29E+00	5.51E-01	-4.77E-01	2.20E+00	3.63E+00	8.42E-02	2.02E+00	3.39E+00	-6.53E+00	1.67E+01	2.96E+01	
	014	60	-45.4	11/5/2008	14:43	1.26E+03	3.02E+02	1.92E+02	1.72E+01	2.23E+00	5.97E-01	-4.96E+00	6.60E+00	6.62E+00	2.51E+00	6.11E+00	7.41E+00	8.42E-01	1.80E+01	2.06E+01	
	015	60	-45.4	2/6/2009	9:59	1.42E+03	2.10E+02	1.70E+02	1.73E+01	2.10E+00	9.15E-01	-9.15E-01	2.96E+00	3.20E+00	7.61E-01	2.64E+00	3.21E+00	2.70E+00	2.22E+01	2.54E+01	
	016	60	-45.4	5/6/2009	15:18	1.34E+03	2.85E+02	1.80E+02	1.28E+01	1.79E+00	7.13E-01	1.40E-01	4.37E+00	2.91E+00	-3.07E-01	2.99E+00	3.02E+00	-1.93E+00	1.79E+01	2.05E+01	
	017	60	-45.4	3/7/2009	12:48	1.64E+03	2.33E+02	1.80E+02	1.24E+01	1.62E+00	7.16E-01	5.00E-01	3.13E+00	3.54E+00	5.17E-01	3.29E+00	3.76E+00	-3.28E+00	1.86E+01	2.15E+01	
	018	60	-45.4	10/29/2009	13:15	1.66E+03	2.39E+02	1.88E+02	1.14E+01	1.58E+00	8.16E-01	1.01E+00	9.45E+00	8.96E+00	1.59E+00	8.58E+00	8.81E+00	-6.66E+00	1.71E+01	2.00E+01	
	019	60	-45.4	2/22/2010	13:57	1.42E+03	2.19E+02	1.74E+02	1.55E+01	2.34E+00	7.71E-01	-6.73E-01	5.14E+00	5.79E+00	1.50E+00	4.53E+00	5.47E+00	-6.53E+00	1.81E+01	2.13E+01	
	020	60	-45.4	4/23/2010	15:17	1.55E+03	2.63E+02	1.50E+02	1.04E+01	1.85E+00	6.37E-01	6.11E+00	1.36E-01	9.18E+00	-2.53E-01	1.17E+01	1.35E+01	-1.29E+01	1.96E+01	2.32E+01	
	021	60	-45.4	8/11/2010	11:19	1.32E+03	2.16E+02	1.28E+02	1.24E+01	1.44E+00	4.49E-01	-1.12E+01	1.22E-01	1.43E+01	-2.58E-01	9.88E+00	1.11E+01	-6.74E-01	1.80E+01	2.13E+01	
MW-50-42	001	42	-27.1	3/22/2006	14:25	9.75E+03	5.78E+02	2.14E+02	1.93E+01	1.12E+00	4.76E-01	-1.36E+00	9.90E+00	1.13E+01	-5.74E-01	8.55E+00	1.02E+01	4.01E+00	1.34E+01	1.46E+01	MW-50-42
	003	42	-27.1	5/19/2006	13:55	4.59E+03	7.74E+02	3.53E+02	1.95E+01	1.25E+00	4.77E-01	4.84E+00	8.95E+00	1.18E+01	-4.07E-01	8.17E+00	1.02E+01	NA	NA	NA	
	003	42	-27.1	5/19/2006	13:55	4.58E+03	3.84E+03	6.30E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	42	-27.1	6/7/2006	9:00	1.79E+02	1.89E+02	1.56E+02	3.94E+00	7.62E-01	6.06E-01	1.15E-01	7.81E+00	8.62E+00	-1.70E+00	7.37E+00	7.69E+00	NA	NA	NA	
	005	42	-27.1	7/3/2006	11:35	3.98E+02	2.18E+02	2.02E+02	3.45E+00	2.00E+00	1.65E+00	6.90E+00	1.38E-01	1.65E+01	4.75E+00	1.04E+01	1.30E+01	NA	NA	NA	
	006	42	-27.1	3/1/2006	11:20	1.41E+03	6.42E+02	6.14E+02	NA	NA	NA	8.99E+00	1.01E-01	1.33E+01	6.21E+00	9.26E+00	1.24E+01	1.12E+01	1.53E+01	1.64E+01	
	007	42	-27.1	8/28/2006	11:50	3.11E+02	1.89E+02	1.76E+02	NA	NA	NA	1.97E+00	5.84E+00	6.74E+00	3.49E+00	6.36E+00	7.93E+00	NA	NA	NA	
	008	42	-27.1	11/15/2006	11:50	1.70E+03	1.11E+03	1.00E+03	1.13E+01	1.56E+00	8.30E-01	7.20E+00	4.20E+00	4.30E+00	-9.00E-01	3.00E+00	3.80E+00	-1.20E+00	6.00E+00	6.70E+00	
	009	42	-27.1	6/26/2007	14:30	2.15E+02	1.71E+02	1.86E+02	1.16E+01	1.35E+00	7.64E-01	1.91E+00	4.44E+00	5.12E+00	-1.64E+00	4.29E+00	3.94E+00	-6.30E+00	1.84E+01	2.19E+01	
	010	42	-27.1	7/26/2007	11:20	1.45E+02	1.74E+02	1.93E+02	1.94E+01	1.81E+00	5.31E-01	-5.50E+00	4.71E+00	3.68E+00	2.53E+00	3.39E+00	4.32E+00	4.92E+00	1.91E+01	2.19E+01	
	011	42	-27.1	10/18/2007	14:08	1.01E+02	1.76E+02	1.97E+02	2.45E+01	2.52E+00	5.74E-01	3.02E-01	3.38E+00	3.87E+00	6.26E-01	3.75E+00	3.81E+00	-9.14E-01	1.62E+01	1.87E+01	
	013	42	-27.1	2/26/2008	12:19	6.13E+02	2.94E+02	2.87E+02	2.40E+00	8.61E-01	7.34E-01	-1.95E+00	4.80E+00	4.66E+00	1.77E+00	3.90E+00	4.68E+00	1.71E+01	2.40E+01	2.67E+01	
	014	42	-27.1	7/31/2008	15:43	3.73E+02	1.34E+02	1.91E+02	9.28E+00	8.66E-01	4.39E-01	-9.40E-01	1.99E+00	3.20E+00	9.53E-01	1.91E+00	3.44E+00	1.58E+01	1.76E+01	2.96E+01	
	015	42	-27.1	11/6/2008	10:44	1.29E+02	1.76E+02	1.92E+02	2.56E+00	9.87E-01	6.85E-01	1.65E+00	4.98E+00	5.77E+00	5.18E-01	5.36E+00	6.17E+00	0.00E+00	1.76E+01	2.03E+01	
	016	42	-27.1	1/22/2009	15:23	2.15E+02	1.38E+02	1.48E+02	1.96E+00	8.06E-01	6.31E-01	-1.74E+00	2.48E+00	2.37E+00	-5.18E-01	2.31E+00	2.39E+00	-3.34E+00	1.74E+01	2.03E+01	
	017	42	-27.1	5/5/2009	14:11	3.92E+02	1.95E+02	1.72E+02	2.38E+00	8.93E-01	6.96E-01	5.89E-01	9.20E+00	6.13E+00	-2.50E+00	5.75E+00	5.71E+00	-9.99E+00	2.07E+01	2.42E+01	
	018	42	-27.1	3/7/2009	13:13	1.06E+03	2.09E+02	1.79E+02	5.33E+00	1.25E+00	7.23E-01	-7.54E-02	3.66E+00	4.14E+00	3.08E-01	3.27E+00	3.73E+00	-1.25E+01	1.64E+01	1.94E+01	
	019	42	-27.1	10/26/2009	14:41	4.09E+02	1.83E+02	1.88E+02	6.73E+00	1.09E+00	4.53E-01	-3.87E+00	1.01E-01	1.12E+01	2.52E-01	6.62E+00	7.45E+00	-1.40E+01	1.86E+01	2.22E+01	
	020	42	-27.1	2/19/2010	12:52	3.73E+02	1.71E+02	1.74E+02	5.56E+00	1.42E+00	8.15E-01	2.91E+00	5.42E+00	6.46E+00	3.03E+00	6.13E+00	7.39E+00	-1.37E+01	1.88E+01	2.23E+01	
	021	42	-27.1	4/30/2010	12:34	1.36E+03	2.46E+02	1.68E+02	4.36E+00	1.33E+00	8.88E-01	8.49E-01	7.56E+00	8.38E+00	-1.97E+00	5.09E+00	5.04E+00	-1.48E+01	2.25E+01	2.61E+01	
	022	42	-27.1	3/4/2010	13:11	1.61E+02	1.25E+02	1.28E+02	8.43E+00	1.42E+00	5.63E-01	-1.94E+00	8.65E+00	9.25E+00	1.30E-01	8.05E+00	9.05E+00	0.00E+00	1.59E+01	1.88E+01	
MW-50-66	001	60	-45.1	3/22/2006	14:50	6.81E+03	4.94E+02	2.13E+02	2.55E+01	1.21E+00	4.90E-01	-7.67E+00	1.60E-01	1.66E+01	-2.18E+00	1.68E+01	1.81E+01	5.33E+00	1.35E+01	1.47E+01	MW-50-66
	003	60	-45.1	5/19/2006	15:20	9.61E+03	1.52E+03	4.94E+02	1.95E+01	1.22E+00	5.16E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	60	-45.1	5/19/2006	15:20	1.08E+04	5.90E+03	6.30E+02	NA	NA	NA	3.23E+00	1.06E-01	1.23E+01	7.78E-01	1.12E+01	1.25E+01	NA	NA	NA	
	004	60	-45.1	6/7/2006	9:20	1.05E+04	1.65E+03	4.29E+02	1.98E+01	1.18E+00	4.66E-01	-1.97E+00	8.71E+00	9.38E+00	2.49E+00	8.98E+00	1.04E+01	NA	NA	NA	
	005	60	-45.1	7/3/2006	11:00	8.62E+03	2.00E+03	1.52E+03	2.53E+01	3.79E+00	1.67E+00	-2.04E+00	9.54E+00	1.02E+01	4.40E-01	8.34E+00	9.23E+00	NA	NA	NA	
	006	60	-45.1	3/1/2006	9:28	7.93E+03	9.36E+02	6.16E+02	NA	NA	NA	5.59E-01	5.98E+00	6.68E+00	-4.31E+00	6.18E+00	5.00E+00	1.06E+01	1.06E+01	1.13E+01	
	007	60	-45.1	8/28/2006	12:05	6.77E+03	1.59E+03	1.30E+03	NA	NA	NA	7.66E-02	4.67E+00	5.86E+00	1.34E+00	4.23E+00	5.88E+00	NA	NA	NA	
	008	60	-45.1	11/15/2006	10:37	5.05E+03	1.32E+03	1.00E+03	2.15E+01	2.34E+00	8.10E-01	2.00E-01	3.30E+00	3.70E+00	2.60E+00	3.30E+00	3.50E+00	1.50E+00	5.70E+00	6.30E+00	
	009	60	-45.1	6/26/2007	14:02	4.21E+03	2.85E+02	1.86E+02	2.93E+01	1.86E+00	5.25E-01	-2.19E+00	2.64E+00	2.49E+00	1.63E-01	2.36E+00	2.74E+00	-6.05E-01	1.50E+01	1.74E+01	
	010	60	-45.1	7/26/2007	11:25	4.50E+03	3.39E+02	2.04E+02	3.10E+01	2.50E+00	5.78E-01	-1.12E+00	4.54E+00	4.18E+00	1.08E-02	3.46E+00	3.94E+00	1.93E+01	1.86E+01	2.02E+01	
	011	60	-45.1	10/18/2007	14:38	3.85E+03	6.53E+02	3.62E+02	4.74E+01	3.72E+00	7.97E-01	-2.28E+00	4.61E+00	4.36E+00	1.65E+00	4.20E+00	4.96E+00	-3.71E+00	1.58E+01	1.83E+01	
	013	60	-45.1	2/26/2008	13:46	3.74E+03	7.98E+02	5.31E+02	3.58E+01	2.36E+00	7.40E-01	7.87E-01	2.69E+00	3.18E+00	2.54E-01	2.54E+00	2.96E+00	4.87E+00	1.86E+01	2.12E+01	
	015	60	-45.1	5/12/2008	15:40	2.80E+03	2.39E+02	1.44E+02	3.38E+01	1.85E+00	7.01E-01	7.08E-01	2.24E+00	3.87E+00	1.23E+00	2.13E+00	3.83E+00	7.86E+00	1.28E+01	2.17E+01	
	016	60	-45.1	7/31/2008	17:02	2.71E+03	2.48E+02	1.91E+02	3.30E+01	1.59E+00	4.02E-01	2.31E+00	1.82E+00	3.43E+00	6.64E-01	1.46E+00	2.68E+00	3.58E+00	1.40E+01	2.43E+01	
	017	60	-45.1	9/8/2008	16:21	2.08E+03	4.17E+02	5.04E+02	3.23E+01	1.66E+00	4.88E-01	-8.81E-01	2.69E+00	3.96E+00	NA	NA	NA	1.22E+01	1.23E+01	2.06E+01	
	018	60	-45.1	11/6/2008	12:38	2.73E+03	4.17E+02	1.98E+02	3.20E+01	3.00E+00	7.41E-01	-8.66E-01	5.97E+00	6.56E+00	-2.52E+00	8.96E+00	8.45E+00	-1.63E+00	2.07E+01	2.39E+01	
	019	60	-45.1	11/19/2008	16:29	2.43E+03	2.49E+02	1.73E+02	4.99E+01	3.75E+00	8.66E-01	2.50E+00	5.26E+00	2.61E+00	5.13E-01	2.70E+00	3.17E+00	-5.06E-01	1.98E+01	2.29E+01	
	020	60	-45.1	1/22/2009	16:01	2.30E+03	2.16E+02	1.48E+02	2.75E+01	2.28E+00	4.07E-01	-1.68E+00	4.20E+00	3.99E+00	-1.97E-01	3.32E+00	3.66E+00	-9.33E+00	1.88E+01	2.23E+01	
	021	60	-45.1	3/18/2009	15:16	3.13E+03	7.02E+02	3.88E+02	2.42E+01	2.58E+00	9.13E-01	1.95E-02	5.75E+00	3.83E+00	-9.37E-01	3.56E+00	3.65E+00	1.55E+00	1.70E+01	1.94E+01	
	022	60	-45.1	5/5/2009	16:33	3.45E+03	4.35E+02	1.74E+02	2.82E+01	2.33E+00	6.13E-01	-4.57E+00	8.96E+00	5.97E+00	-6.21E-03	5.87E+00	6.54E+00	-1.93E+00	1.85E+01	2.13E+01	
	023	60	-45.1	3/7/2009	16:12	3.00E+03	2.79E+02	1.79E+02	2.91E+01	2.54E+00	9.11E-01	2.03E-01	3.35E+00	3.82E+00	7.02E-01	3.51E+00	4.14E+00	-1.36E+01	1.83E+01	2.19E+01	
	024	60	-45.1	10/26/2009	14:49	2.86E+03	2.82E+02	1.89E+02	3.00E+01	2.34E+00	5.34E-01	4.11E-01	5.89E+00	6.75E+00	2.56E+00	6.03E+00	7.46E+00	-6.44E+00	1.86E+01	2.17E+01	
	025	60	-45.1	2/19/2010	15:51	2.84E+03	2.72E+02	1.74E+02	2.50E+01	3.04E+00	8.16E-01	-6.04E-01	4.68E+00	5.20E+00	-1.03E+00	5.01E+00	5.41E+00	-3.76E+00	1.91E+01	2.21E+01	
	026	60	-45.1	4/30/2010	14:25	2.76E+03	3.21E+02	1.68E+02	2.99E+01	3.01E+00	8.81E-01	-1.86E+00	5.84E+00	6.18E+00	3.85E-01	5.38E+00	6.13E+00	-1.14E+01	2.19E+01	2.52E+01	

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-50-66	027	60	-45.1	3/4/2010	16:38	3.51E+03	3.33E+02	1.34E+02	2.65E+01	2.28E+00	4.80E-01	3.52E+00	8.29E+00	9.99E+00	9.22E-01	9.18E+00	1.06E+01	2.07E+00	1.56E+01	1.81E+01	MW-50-66
MW-51-40	001	39.7	28	5/30/2007	11:45	1.98E+02	1.65E+02	1.68E+02	-5.30E-01	6.73E-01	9.82E-01	1.04E-01	3.48E+00	3.77E+00	1.61E+00	3.23E+00	3.77E+00	NA	NA	NA	MW-51-40
	002	39.7	28	7/24/2007	15:30	2.23E+02	1.59E+02	1.60E+02	7.09E-02	4.71E-01	5.38E-01	1.65E-02	3.39E+00	3.85E+00	-1.32E+00	4.02E+00	4.13E+00	NA	NA	NA	
	004	39.7	28	11/9/2007	15:40	1.47E+02	1.55E+02	1.70E+02	-8.16E-02	3.87E-01	4.52E-01	1.68E+00	2.96E+00	3.52E+00	-5.71E-02	3.15E+00	3.49E+00	NA	NA	NA	
	005	39.7	28	1/8/2008	10:47	5.86E+01	1.56E+02	1.79E+02	1.57E-01	6.77E-01	8.32E-01	1.83E-02	2.66E+00	2.93E+00	7.71E-01	2.75E+00	2.87E+00	NA	NA	NA	
	007	39.7	28	5/30/2008	10:27	1.41E+02	1.01E+02	1.60E+02	3.71E-01	5.67E-01	9.67E-01	3.19E-01	2.03E+00	3.41E+00	2.18E+00	2.36E+00	3.50E+00	NA	NA	NA	
	008	39.7	28	3/8/2008	14:40	3.29E+02	1.60E+02	2.03E+02	3.74E-01	4.02E-01	6.70E-01	1.59E+00	2.19E+00	3.98E+00	-1.99E-01	1.79E+00	2.99E+00	-8.33E+00	1.02E+01	1.83E+01	
	009	39.7	28	10/27/2008	13:11	1.68E+02	1.85E+02	1.95E+02	1.84E-02	4.26E-01	5.67E-01	4.51E-01	4.28E+00	4.88E+00	-1.93E+00	6.35E+00	6.59E+00	-5.03E+00	2.11E+01	2.46E+01	
	010	39.7	28	1/20/2009	14:50	2.37E+01	1.68E+02	1.92E+02	1.92E-01	7.95E-01	9.70E-01	9.89E-01	2.81E+00	3.26E+00	1.05E+00	2.75E+00	3.30E+00	8.95E+00	1.67E+01	1.87E+01	
	011	39.7	28	5/7/2009	14:27	2.03E+02	1.76E+02	1.81E+02	1.02E-01	6.81E-01	8.27E-01	1.18E+00	7.08E+00	4.72E+00	-1.14E+00	5.00E+00	5.08E+00	-1.06E+00	1.83E+01	2.11E+01	
	012	39.7	28	8/12/2009	13:42	2.67E+02	1.70E+02	1.79E+02	6.39E-02	5.69E-01	6.89E-01	2.93E-01	3.35E+00	3.41E+00	1.00E+00	3.01E+00	3.56E+00	-5.55E+00	1.95E+01	2.27E+01	
	013	39.7	28	11/18/2009	14:26	1.55E+02	1.32E+02	1.41E+02	-2.16E-01	6.35E-01	8.09E-01	-1.42E+00	5.66E+00	6.00E+00	-1.14E+00	6.45E+00	6.92E+00	-5.68E+00	1.98E+01	2.30E+01	
	014	39.7	28	2/5/2010	14:31	7.54E+01	1.74E+02	1.98E+02	-5.43E-02	6.58E-01	8.64E-01	1.75E+00	4.09E+00	4.72E+00	-2.91E+00	5.31E+00	4.42E+00	NA	NA	NA	
	015	39.7	28	4/8/2010	13:58	9.55E+01	1.32E+02	1.44E+02	-1.04E-01	7.30E-01	8.98E-01	8.94E-01	8.25E+00	9.56E+00	-1.94E+00	9.18E+00	9.55E+00	NA	NA	NA	
	016	39.7	28	8/25/2010	16:29	1.70E+02	1.07E+02	1.03E+02	-4.31E-02	3.11E-01	4.19E-01	-2.48E+00	6.17E+00	6.53E+00	1.46E+00	5.21E+00	6.37E+00	NA	NA	NA	
MW-51-79	001	78.7	-11	5/30/2007	12:42	9.89E+01	1.55E+02	1.72E+02	-2.36E-01	6.98E-01	9.58E-01	2.20E+00	3.63E+00	3.90E+00	3.52E-01	3.31E+00	3.76E+00	NA	NA	NA	MW-51-79
	002	78.7	-11	7/24/2007	17:00	4.24E+01	1.43E+02	1.67E+02	8.02E-03	5.35E-01	6.15E-01	-6.37E-01	3.88E+00	4.21E+00	-2.83E-01	4.51E+00	4.93E+00	NA	NA	NA	
	004	78.7	-11	11/9/2007	16:18	5.00E+01	1.50E+02	1.71E+02	-4.97E-02	2.99E-01	3.52E-01	2.66E+00	2.97E+00	3.56E+00	-2.43E-01	4.02E+00	4.45E+00	NA	NA	NA	
	005	78.7	-11	1/8/2008	10:08	9.26E+01	1.59E+02	1.79E+02	-4.64E-01	7.01E-01	9.74E-01	-7.91E-01	2.22E+00	2.42E+00	2.58E-01	2.37E+00	2.70E+00	NA	NA	NA	
	007	78.7	-11	5/30/2008	10:55	6.70E+01	9.41E+01	1.61E+02	2.46E-02	4.94E-01	9.94E-01	-1.14E+00	3.43E+00	4.80E+00	-5.13E-01	2.70E+00	4.31E+00	NA	NA	NA	
	008	78.7	-11	3/8/2008	12:55	1.61E+02	1.31E+02	2.01E+02	2.03E-01	2.99E-01	5.18E-01	9.63E-01	2.17E+00	3.82E+00	5.64E-01	2.30E+00	3.98E+00	-1.07E+01	1.07E+01	1.93E+01	
	009	78.7	-11	10/27/2008	13:30	1.14E+01	1.62E+02	1.99E+02	3.14E-03	6.14E-01	7.85E-01	8.42E-01	5.07E+00	5.75E+00	2.41E+00	5.21E+00	6.37E+00	3.72E+00	1.77E+01	2.02E+01	
	010	78.7	-11	1/20/2009	15:21	1.01E+02	1.33E+02	1.48E+02	-1.71E-01	3.15E-01	5.02E-01	5.93E-01	5.57E+00	3.65E+00	-2.94E-01	3.21E+00	3.56E+00	1.58E+01	1.73E+01	1.90E+01	
	011	78.7	-11	5/7/2009	15:10	6.19E+01	1.58E+02	1.81E+02	6.97E-01	7.58E-01	8.29E-01	5.17E-01	7.68E+00	5.12E+00	2.33E+00	5.79E+00	6.97E+00	-6.40E+00	1.73E+01	2.00E+01	
	012	78.7	-11	8/12/2009	11:11	1.99E+02	1.67E+02	1.80E+02	7.34E-02	4.50E-01	5.53E-01	-4.76E-01	4.82E+00	4.34E+00	-1.34E+00	4.29E+00	4.21E+00	-1.73E+01	1.83E+01	2.19E+01	
	013	78.7	-11	11/18/2009	14:31	1.15E+02	1.86E+02	2.08E+02	-4.50E-02	6.87E-01	8.44E-01	-8.05E-01	5.79E+00	6.45E+00	2.78E+00	6.58E+00	8.07E+00	2.96E-01	1.68E+01	1.94E+01	
	014	78.7	-11	2/5/2010	14:40	1.37E+02	1.80E+02	1.99E+02	-1.36E-01	6.10E-01	8.44E-01	3.61E-02	3.39E+00	3.74E+00	7.57E-01	3.57E+00	4.08E+00	NA	NA	NA	
	015	78.7	-11	4/8/2010	14:21	6.44E+01	1.33E+02	1.51E+02	4.88E-01	8.07E-01	9.02E-01	4.35E+00	8.89E+00	1.11E+01	4.52E+00	1.00E+01	1.28E+01	NA	NA	NA	
	016	78.7	-11	8/25/2010	16:47	1.10E+02	9.84E+01	1.01E+02	5.81E-01	8.23E-01	8.92E-01	5.29E+00	6.13E+00	7.76E+00	1.58E+00	6.71E+00	7.88E+00	NA	NA	NA	
MW-51-104	001	103.7	-36	5/30/2007	11:05	5.71E+01	1.48E+02	1.71E+02	-6.74E-02	7.59E-01	9.90E-01	1.25E+00	3.27E+00	3.35E+00	7.70E-02	3.25E+00	3.62E+00	NA	NA	NA	MW-51-104
	002	103.7	-36	7/24/2007	17:06	9.07E+01	1.47E+02	1.64E+02	3.62E-01	4.86E-01	5.41E-01	-4.20E+00	4.62E+00	3.92E+00	1.42E+00	4.44E+00	5.33E+00	NA	NA	NA	
	004	103.7	-36	11/9/2007	14:35	5.17E+01	1.50E+02	1.70E+02	-2.40E-01	3.18E-01	3.86E-01	-1.26E+00	2.85E+00	2.92E+00	1.15E+00	2.61E+00	3.18E+00	NA	NA	NA	
	005	103.7	-36	1/8/2008	12:15	-4.84E+00	1.45E+02	1.78E+02	-6.19E-02	7.22E-01	9.34E-01	-9.37E-01	2.09E+00	2.26E+00	-3.84E-01	2.54E+00	2.50E+00	NA	NA	NA	
	006	103.7	-36	3/8/2008	10:50	2.82E+02	1.55E+02	2.08E+02	-2.66E-01	4.00E-01	7.92E-01	1.56E+00	2.03E+00	3.60E+00	-1.21E-01	2.07E+00	3.38E+00	-4.19E+00	1.34E+01	2.36E+01	
	007	103.7	-36	10/27/2008	10:07	1.21E+02	1.39E+02	1.49E+02	1.19E-01	4.97E-01	6.13E-01	5.61E+00	6.81E+00	8.52E+00	-5.72E+00	8.93E+00	8.26E+00	-1.01E+00	1.84E+01	2.12E+01	
	008	103.7	-36	1/20/2009	10:46	9.95E+01	1.33E+02	1.48E+02	9.07E-03	3.78E-01	5.04E-01	-1.33E+00	2.87E+00	3.03E+00	-1.01E+00	2.37E+00	2.42E+00	-2.06E+00	2.00E+01	2.33E+01	
	009	103.7	-36	5/7/2009	11:48	1.11E+02	1.61E+02	1.78E+02	-1.53E-01	6.36E-01	7.99E-01	-8.75E-01	5.79E+00	3.86E+00	4.67E-01	3.51E+00	4.01E+00	-1.35E+01	2.36E+01	2.71E+01	
	010	103.7	-36	8/12/2009	11:14	2.91E+02	1.71E+02	1.80E+02	1.27E-01	3.65E-01	4.36E-01	8.06E-01	6.58E+00	3.82E+00	1.09E-01	3.93E+00	4.36E+00	-2.40E+00	1.86E+01	2.16E+01	
	011	103.7	-36	11/18/2009	11:34	1.44E+02	1.33E+02	1.43E+02	5.67E-01	7.29E-01	7.97E-01	-9.34E+00	1.07E+01	1.08E+01	-7.19E-01	6.11E+00	6.60E+00	3.03E+00	1.62E+01	1.84E+01	
	012	103.7	-36	2/5/2010	11:44	-1.96E-01	1.70E+02	1.99E+02	3.73E-03	6.18E-01	8.24E-01	3.36E-03	7.17E+00	6.23E+00	1.95E+00	5.38E+00	6.49E+00	NA	NA	NA	
	013	103.7	-36	1/8/2010	10:42	1.10E+02	1.34E+02	1.45E+02	1.26E-01	7.62E-01	8.99E-01	-5.36E-01	8.43E+00	9.34E+00	2.15E+00	7.96E+00	9.79E+00	NA	NA	NA	
	014	103.7	-36	8/25/2010	13:18	1.33E+02	1.37E+02	1.44E+02	7.62E-01	8.15E-01	8.20E-01	8.90E-01	5.75E+00	6.63E+00	-2.70E-01	4.96E+00	5.47E+00	NA	NA	NA	
MW-51-135	001	135.2	-67.5	5/30/2007	13:00	8.24E+01	1.50E+02	1.70E+02	-4.68E-01	5.53E-01	8.40E-01	-4.01E-01	3.62E+00	4.03E+00	2.56E+00	3.84E+00	4.48E+00	NA	NA	NA	MW-51-135
	002	135.2	-67.5	7/24/2007	12:40	9.51E+01	1.43E+02	1.59E+02	5.33E-02	5.04E-01	5.76E-01	-4.56E-01	4.07E+00	4.36E+00	3.42E-01	3.30E+00	3.84E+00	NA	NA	NA	
	004	135.2	-67.5	11/9/2007	11:55	9.83E+01	1.53E+02	1.72E+02	-2.42E-01	2.54E-01	3.18E-01	-7.27E-01	3.46E+00	3.70E+00	-3.14E-01	3.29E+00	3.66E+00	NA	NA	NA	
	005	135.2	-67.5	1/8/2008	13:20	4.91E+01	1.55E+02	1.80E+02	3.47E-02	7.04E-01	8.79E-01	6.30E-02	1.88E+00	2.09E+00	1.43E-02	1.71E+00	1.90E+00	NA	NA	NA	
	006	135.2	-67.5	3/8/2008	11:50	2.09E+02	1.39E+02	1.99E+02	5.09E-02	2.40E-01	4.57E-01	-1.03E+00	2.08E+00	3.29E+00	1.01E-02	2.01E+00	3.34E+00	-6.78E+00	1.14E+01	2.02E+01	
	007	135.2	-67.5	10/27/2008	10:05	7.68E+01	1.73E+02	1.99E+02	2.72E-04	5.05E-01	6.63E-01	-1.74E+00	5.26E+00	5.63E+00	3.92E+00	6.09E+00	7.69E+00	-2.05E-01	1.74E+01	2.01E+01	
	008	135.2	-67.5	1/20/2009	11:02	1.31E+02	1.35E+02	1.48E+02	-3.04E-01	3.41E-01	5.84E-01	-6.92E-01	3.89E+00	4.31E+00	9.34E-01	3.06E+00	3.66E+00	-1.08E+01	1.76E+01	2.10E+01	
	009	135.2	-67.5	5/7/2009	11:53	2.44E+01	1.43E+02	1.71E+02	8.54E-02	4.71E-01	5.79E-01	3.06E+00	7.04E+00	4.69E+00	-7.33E-01	3.77E+00	4.00E+00	-2.11E+01	2.24E+01	2.60E+01	
	010	135.2	-67.5	8/12/2009	11:22	9.84E+01	1.61E+02	1.79E+02	-1.62E-01	4.93E-01	6.57E-01	-1.17E+00	3.75E+00	3.74E+00	2.68E+00	3.30E+00	4.29E+00	-1.50E+01	1.81E+01	2.17E+01	
	011	135.2	-67.5	11/18/2009	11:35	1.30E+02	1.32E+02	1.43E+02	-5.62E-01	6.06E-01	8.17E-01	-1.52E-01	4.53E+00	5.17E+00	2.08E+00	5.09E+00	6.12E+00	1.08E+00	1.64E+01	1.88E+01	
	012	135.2	-67.5	2/5/2010	11:48	4.89E+00	1.71E+02	1.98E+02	7.14E-02	6.50E-01	8.21E-01	-1.07E-02	3.90E+00	4.35E+00	-4.54E-02	4.51E+00	5.10E+00	NA	NA	NA	
	013	135.2	-67.5	4/8/2010	11:06	5.86E+01	1.31E+02	1.50E+02	-2.09E-02	5.99E-01	7.85E-01	-7.04E-03	8.73E+00	9.88E+00	-4.95E-01	1.04E+01	1.19E+01	NA	NA	NA	
	014	135.2	-67.5	8/25/2010	13:21	1.36E+02	1.41E+02	1.47E+02	-2.33E-01	4.44E-01	6.70E-01	-6.64E-01	6.15E+00	6.80E+00	1.74E+00	6.62E+00	7.77E+00	NA	NA	NA	
MW-51-163	001	162.7	-95	5/30/2007	14:40	1.18E+02	1.56E+02	1.69E+02	3.29E-01	1.16E+00	1.36E+00	-2.81E-01	3.09E+00	3.45E+00	1.77E-01	2.82E+00	3.20E+00	NA	NA	NA	MW-51-163
	002	162.7	-95	7/24/2007	14:05	4.98E+01	1.44E+02	1.66E+02	1.05E-01	4.58E-01	5.21E-01	-2.43E-01	3.44E+00	3.78E+00	8.64E-02	3.25E+00	3.63E+00	NA	NA	NA	
	004	162.7	-95	11/9/2007	13:32	7.30E+01	1.52E+02	1.71E+02	2.08E-01	2.82E-01	3.12E-01	1.41E-01	3.54E+00	3.51E+00	-1.11E+00	3.01E+00	3.11E+00	NA	NA	NA	
	005	162.7	-95	1/8/2008	13:57	-1.99E-01	1.47E+02	1.82E+02	4.40E-01	8.22E-01	9.29E-01	-1.74E+00	2.66E+00	2.46E+00	8.69E-02	2.15E+00	2.44E+00	NA	NA	NA	
	006	162.7	-95	3/8/2008	11:16	6.92E+01	8.27E+01	1.40E+02	-1.22E-01	2.63E-01	5.44E-01	-1.54E+00	2.25E+00	3.56E+00	3.78E-01	1.97E+00	3.39E+00	4.33E+00	1.26E+01	2.15E+01	
	007	162.7	-95	10/27/2008	10:20	5.58E+01	1.67E+02	1.95E+02	2.55E-01	5.76E-01	6.67E-01	-1.70E+00	6.18E+00	6.74E+00	5.42E-01	5.38E+00	6.25E+00	2.11E+00	1.88E+01	2.14E+01	
	008	162.7	-95	1/20/2009	11:44	4.60E+01	1.30E+02	1.48E+02	-1.98E-01	4.97E-01	6.98E-01	-9.70E-01	3.14E+00	3.27E+00	-7.70E-02	3.24E+00	3.54E+00	-1.01E+01	1.80E+01	2.14E+01	
	009	162.7	-95	5/7/2009	12:09	5.68E+01	1.56E+02	1.81E+02	-5.45E-02	4.61E-01	6.13E-01	-7.96E-01	5.09E+00	3.39E+00	1.08E+00	3.63E+00	3.83E+00	4.18E+00	1.89E+01	2.15E+01	
	010	162.7	-95	8/12/2009	11:28	1.41E+02	1.62E+02	1.79E+02	7.24E-02	5.76E-01	6.99E-01	7.50E-01	3.74E+00	4.26E+00	-2.23E+00	3.23E+00	3.06E+00	-3.79E+00	1.80E+01	2.08E+01	
	011	162.7	-95	11/18/2009	11:33	9.48E+01	1.29E+02	1.43E+02	6.98E-02	6.64E-01	7.96E-01	-2.63E+00	5.89E+00	6.04E+00	2.61E+00	5.33E+00	6.54E+00	-2.21E+00	1.66E+01	1.93E+01	
	012	162.7	-95	2/5/2010	11:46	6.10E+01	1.74E+02	1.98E+02	-1.82E-01	5.76E-01	8.21E-01	-8.29E-01	8.12E+00	7.94E+00	-1.95E+00	6.88E+00	6.07E+00	NA	NA	NA	
	013	162.7	-95	4/8/2010	11:31	5.35E+01	1.27E+02	1.46E+02	-7.65E-02	6.06E-01	8.13E-01	-2.95E+00	8.55E+00	8.74E+00	-1.50E+00	1.04E+01	1.10E+01	NA	NA	NA	

See Page 29 for Notes

IPEC00263599

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-51-163	014	162.7	-95	8/25/2010	13:51	8.26E+01	9.75E+01	1.05E+02	-1.08E-01	3.98E-01	5.31E-01	3.91E+00	6.72E+00	8.11E+00	8.67E-01	6.32E+00	7.26E+00	NA	NA	NA	MW-51-163
MW-51-189	001	189.2	-121.5	5/30/2007	14:00	1.87E+02	1.67E+02	1.71E+02	-2.88E-02	8.90E-01	1.11E+00	-3.62E-02	3.98E+00	3.82E+00	1.56E+00	3.57E+00	4.63E+00	NA	NA	NA	MW-51-189
	002	189.2	-121.5	7/24/2007	13:15	9.49E+01	1.46E+02	1.63E+02	3.93E-01	4.08E-01	4.48E-01	-8.87E-01	4.11E+00	3.58E+00	1.57E+00	4.02E+00	4.31E+00	NA	NA	NA	
	003	189.2	-121.5	10/2/2007	12:20	8.45E+00	1.70E+02	1.96E+02	-5.06E-02	2.16E-01	2.58E-01	1.38E+01	5.45E+00	2.92E+00	-4.14E-01	2.79E+00	3.04E+00	NA	NA	NA	
	004	189.2	-121.5	11/9/2007	13:05	-6.26E+00	1.48E+02	1.71E+02	1.93E-01	3.61E-01	4.08E-01	3.04E+00	3.27E+00	4.07E+00	-8.07E-02	3.65E+00	4.05E+00	NA	NA	NA	
	005	189.2	-121.5	1/8/2008	13:10	-4.82E+00	1.44E+02	1.77E+02	-3.17E-02	7.01E-01	8.92E-01	1.35E+00	2.13E+00	2.49E+00	1.42E+00	1.98E+00	2.41E+00	NA	NA	NA	
	006	189.2	-121.5	3/8/2008	11:17	1.10E+02	8.97E+01	1.43E+02	-1.43E-01	3.38E-01	6.60E-01	-2.27E+00	2.13E+00	3.12E+00	-1.79E+00	2.70E+00	3.57E+00	-5.89E+00	1.15E+01	2.04E+01	
	007	189.2	-121.5	10/27/2008	10:11	7.69E+01	1.74E+02	1.99E+02	5.61E-01	7.16E-01	7.51E-01	6.11E-01	6.38E+00	7.30E+00	3.04E+00	6.13E+00	7.60E+00	-6.95E+00	1.84E+01	2.17E+01	
	008	189.2	-121.5	1/20/2009	11:33	3.32E+01	1.30E+02	1.48E+02	-2.14E-01	3.45E-01	5.59E-01	-2.05E+00	3.48E+00	3.62E+00	1.91E+00	3.32E+00	4.20E+00	-8.33E+00	1.79E+01	2.11E+01	
	009	189.2	-121.5	5/7/2009	11:55	2.06E+01	1.52E+02	1.81E+02	1.44E-01	5.33E-01	6.41E-01	1.70E+00	9.39E+00	6.26E+00	-1.22E+00	5.79E+00	6.11E+00	-3.36E+00	1.86E+01	2.14E+01	
	010	189.2	-121.5	8/12/2009	11:11	2.75E+01	1.39E+02	1.60E+02	7.76E-01	8.83E-01	9.41E-01	9.35E-01	3.82E+00	4.47E+00	1.47E+00	3.84E+00	4.60E+00	-1.98E+00	2.14E+01	2.47E+01	
	011	189.2	-121.5	11/18/2009	11:31	8.88E+01	1.35E+02	1.51E+02	3.60E-01	5.90E-01	6.58E-01	2.96E+00	5.58E+00	6.76E+00	-2.88E-01	5.82E+00	6.43E+00	-9.17E+00	1.92E+01	2.26E+01	
	012	189.2	-121.5	2/5/2010	11:35	3.42E+01	1.73E+02	1.98E+02	3.21E-01	6.03E-01	6.83E-01	1.25E+00	5.70E+00	6.64E+00	-2.35E+00	6.75E+00	6.51E+00	NA	NA	NA	
	013	189.2	-121.5	4/8/2010	11:16	5.35E+01	1.27E+02	1.46E+02	3.25E-01	7.35E-01	8.47E-01	-2.07E+00	8.19E+00	8.51E+00	3.45E-01	7.39E+00	8.29E+00	NA	NA	NA	
	014	189.2	-121.5	8/25/2010	13:13	5.86E+01	9.38E+01	1.04E+02	4.40E-02	5.97E-01	7.65E-01	2.87E+00	5.64E+00	6.69E+00	-8.01E-01	5.85E+00	6.25E+00	NA	NA	NA	
MW-52-11	001	10	6.8	6/20/2007	12:35	1.47E+02	1.68E+02	1.84E+02	-3.58E-01	6.33E-01	8.33E-01	1.96E+00	2.54E+00	2.99E+00	6.12E-01	2.29E+00	2.65E+00	-4.56E+00	1.28E+01	1.54E+01	MW-52-11
	002	10	6.8	3/6/2007	16:18	7.71E+01	1.73E+02	1.94E+02	-5.43E-01	6.12E-01	9.38E-01	-2.16E+00	3.42E+00	3.23E+00	3.39E-02	2.79E+00	3.12E+00	NA	NA	NA	
	003	10	6.8	4/28/2008	13:23	1.13E+03	1.53E+02	1.96E+02	1.97E-01	4.73E-01	8.46E-01	5.19E-01	1.93E+00	3.36E+00	-2.15E+00	3.52E+00	4.08E+00	NA	NA	NA	
	004	10	6.8	4/30/2009	14:27	5.19E+02	4.61E+02	4.72E+02	4.52E-02	5.64E-01	7.17E-01	2.98E-01	7.52E+00	5.01E+00	1.41E+00	5.07E+00	6.04E+00	NA	NA	NA	
	005	10	6.8	5/5/2010	12:26	3.73E+02	1.74E+02	1.83E+02	1.89E-01	4.77E-01	5.62E-01	2.14E+00	5.99E+00	6.97E+00	-2.04E+00	5.91E+00	6.08E+00	NA	NA	NA	
MW-52-18	001	17.5	-2.6	5/24/2007	10:44	1.62E+02	1.52E+02	1.65E+02	-2.20E-01	4.98E-01	7.30E-01	6.53E-01	3.19E+00	3.74E+00	3.13E+00	3.30E+00	4.22E+00	-1.09E+00	9.82E+00	1.14E+01	MW-52-18
	002	17.5	-2.6	3/6/2007	13:45	6.73E+01	1.74E+02	1.96E+02	-7.91E-02	6.92E-01	8.93E-01	-1.43E+00	3.54E+00	3.67E+00	1.11E-01	3.15E+00	3.54E+00	NA	NA	NA	
	004	17.5	-2.6	4/30/2009	16:15	2.29E+02	2.01E+02	2.17E+02	-6.52E-02	5.55E-01	7.37E-01	-1.47E-02	7.89E+00	5.26E+00	8.60E-01	4.49E+00	5.24E+00	NA	NA	NA	
	005	17.5	-2.6	5/5/2010	16:19	3.01E+02	1.71E+02	1.83E+02	8.08E-02	4.19E-01	5.26E-01	1.60E+00	5.61E+00	6.44E+00	9.40E-01	5.42E+00	6.22E+00	NA	NA	NA	
MW-52-48	001	48	-33.1	5/24/2007	11:35	7.02E+01	1.48E+02	1.67E+02	-3.61E-01	7.44E-01	1.01E+00	3.66E-01	2.94E+00	3.39E+00	-9.91E-01	3.03E+00	3.11E+00	-2.74E+00	8.16E+00	9.55E+00	MW-52-48
	002	48	-33.1	3/6/2007	14:00	1.15E+02	1.76E+02	1.96E+02	-5.59E-01	4.83E-01	7.33E-01	7.85E-01	3.24E+00	3.75E+00	4.31E-01	3.29E+00	3.75E+00	NA	NA	NA	
	004	48	-33.1	5/1/2009	11:35	1.43E+02	9.84E+01	1.00E+02	4.55E-02	6.02E-01	7.02E-01	1.19E+00	7.61E+00	5.07E+00	-2.32E+00	4.41E+00	4.29E+00	NA	NA	NA	
	005	48	-33.1	5/5/2010	16:43	1.60E+02	1.65E+02	1.82E+02	6.40E-01	6.58E-01	6.90E-01	-6.17E-01	6.04E+00	6.70E+00	-1.90E-01	5.13E+00	5.67E+00	NA	NA	NA	
MW-52-64	001	64	-49.1	5/24/2007	14:44	3.82E+00	1.70E+02	1.98E+02	-3.20E-01	7.68E-01	9.77E-01	-1.03E+00	3.25E+00	3.45E+00	8.00E-01	3.54E+00	4.11E+00	-2.85E+00	9.12E+00	1.07E+01	MW-52-64
	002	64	-49.1	3/6/2007	15:50	3.72E+01	1.71E+02	1.96E+02	-1.70E-02	7.22E-01	9.23E-01	5.10E-01	3.50E+00	3.68E+00	1.80E+00	6.08E+00	4.12E+00	NA	NA	NA	
	004	64	-49.1	5/1/2009	13:50	-1.02E-01	8.27E+01	1.00E+02	4.33E-01	7.01E-01	7.72E-01	1.82E+00	6.54E+00	4.36E+00	1.24E+00	4.25E+00	4.80E+00	NA	NA	NA	
	005	64	-49.1	5/5/2010	12:52	7.62E+01	1.61E+02	1.81E+02	-2.23E-01	7.02E-01	9.13E-01	-1.12E+00	5.21E+00	4.96E+00	1.49E+00	4.05E+00	4.98E+00	NA	NA	NA	
MW-52-118	004			4/30/2009	12:03	1.15E+02	1.00E+02	1.06E+02	-3.34E-01	4.29E-01	6.89E-01	2.00E+00	8.58E+00	5.72E+00	1.27E+00	4.68E+00	5.65E+00	NA	NA	NA	MW-52-118
MW-52-122	001	122	-107.1	5/24/2007	14:55	6.78E+01	1.47E+02	1.66E+02	-4.24E-01	6.62E-01	9.64E-01	2.52E+00	3.59E+00	3.62E+00	-1.76E+00	3.38E+00	3.29E+00	-1.94E+00	9.68E+00	1.13E+01	MW-52-122
	002	122	-107.1	3/6/2007	12:05	4.42E+01	1.71E+02	1.96E+02	-4.19E-01	7.10E-01	9.60E-01	1.99E+00	4.09E+00	4.34E+00	2.10E-01	4.13E+00	4.70E+00	NA	NA	NA	
	003	122	-107.1	4/28/2008	15:23	8.87E+01	8.60E+01	1.44E+02	1.21E-01	2.92E-01	5.22E-01	-1.25E+00	2.05E+00	3.24E+00	2.72E+00	2.38E+00	4.52E+00	NA	NA	NA	
	005	122	-107.1	5/5/2010	14:57	6.46E+01	1.64E+02	1.84E+02	1.59E-01	4.66E-01	5.60E-01	3.04E-02	5.33E+00	6.01E+00	-3.25E+00	6.25E+00	6.14E+00	NA	NA	NA	
MW-52-162	001	161.5	-146.6	5/24/2007	11:55	2.82E+02	1.95E+02	2.03E+02	-5.15E-01	4.87E-01	8.12E-01	-5.80E-01	3.59E+00	3.29E+00	1.59E+00	3.15E+00	3.88E+00	-7.54E-01	9.75E+00	1.13E+01	MW-52-162
	002	161.5	-146.6	3/6/2007	11:30	2.11E+02	1.80E+02	1.95E+02	1.53E-02	4.79E-01	6.03E-01	3.61E-02	3.44E+00	3.77E+00	-3.73E-02	3.12E+00	3.52E+00	NA	NA	NA	
	003	161.5	-146.6	4/28/2008	10:22	1.45E+02	8.73E+01	1.43E+02	1.03E+00	3.62E-01	4.43E-01	-9.14E-01	2.03E+00	3.31E+00	2.33E+00	2.13E+00	4.14E+00	NA	NA	NA	
	004	161.5	-146.6	4/30/2009	12:06	4.92E+02	4.58E+02	4.73E+02	-1.49E-01	5.60E-01	7.37E-01	-5.43E-01	8.54E+00	5.69E+00	-1.26E+00	5.06E+00	5.17E+00	NA	NA	NA	
	005	161.5	-146.6	5/5/2010	12:39	2.60E+02	1.70E+02	1.83E+02	-7.86E-02	4.15E-01	5.66E-01	-1.54E+00	5.52E+00	5.96E+00	3.03E+00	5.68E+00	7.13E+00	NA	NA	NA	
MW-52-181	001	181	-166.1	5/24/2007	12:06	2.48E+02	1.94E+02	2.04E+02	-3.19E-01	5.07E-01	7.58E-01	-5.99E-01	3.30E+00	3.52E+00	-2.81E-01	3.74E+00	4.19E+00	-2.23E-01	1.01E+01	1.17E+01	MW-52-181
	002	181	-166.1	3/6/2007	11:40	1.19E+02	1.77E+02	1.97E+02	5.84E-02	5.56E-01	6.77E-01	-1.21E+00	2.87E+00	2.97E+00	1.28E+00	2.96E+00	3.57E+00	NA	NA	NA	
	003	181	-166.1	4/29/2008	10:24	1.56E+02	8.77E+01	1.44E+02	1.62E-01	2.46E-01	4.28E-01	1.08E+00	2.25E+00	3.96E+00	4.11E-01	2.12E+00	3.63E+00	NA	NA	NA	
	004	181	-166.1	4/30/2009	12:07	1.47E+02	9.95E+01	1.01E+02	-4.95E-02	5.36E-01	7.43E-01	-2.57E+00	5.82E+00	3.88E+00	-1.51E+00	4.17E+00	4.27E+00	NA	NA	NA	
	005	181	-166.1	5/5/2010	12:47	2.18E+02	1.70E+02	1.84E+02	2.80E-01	4.29E-01	4.67E-01	-2.64E-01	5.64E+00	6.37E+00	-2.38E+00	6.40E+00	6.61E+00	NA	NA	NA	
MW-53-82	001	75	-4.7	8/23/2006	12:50	1.32E+04	1.11E+03	6.12E+02	NA	NA	NA	9.35E-01	5.78E+00	6.37E+00	1.36E+00	5.70E+00	6.30E+00	NA	NA	NA	MW-53-82
	001	75	-4.7	8/23/2006	12:50	1.18E+04	1.85E+03	5.02E+02	6.68E+00	3.10E+00	2.74E+00	-3.52E+00	7.20E+00	6.64E+00	1.30E+00	1.02E+01	1.16E+01	4.44E+00	9.39E+00	1.02E+01	
	002	75	-4.7	11/9/2006	11:15	4.54E+02	1.38E+02	1.40E+02	8.00E-02	8.10E-01	9.00E-01	-1.20E+00	3.00E+00	3.60E+00	-1.30E+00	3.30E+00	4.00E+00	1.30E+00	4.20E+00	4.60E+00	
	003	75	-4.7	6/22/2007	15:30	8.68E+03	1.05E+03	4.31E+02	3.98E+00	1.45E+00	1.04E+00	3.81E+00	3.78E+00	4.53E+00	1.95E+00	3.62E+00	4.63E+00	4.53E+00	1.54E+01	1.77E+01	
	004	75	-4.7	3/9/2007	11:31	7.76E+02	2.06E+02	2.04E+02	-3.41E-02	6.87E-01	8.82E-01	6.29E-01	2.33E+00	2.76E+00	-1.05E+00	2.17E+00	2.17E+00	-2.21E+00	1.99E+01	2.36E+01	
	005	75	-4.7	10/24/2007	13:53	1.11E+03	4.71E+02	4.03E+02	2.35E-01	3.11E-01	3.43E-01	3.07E-01	2.71E+00	3.05E+00	-1.06E+00	2.44E+00	2.38E+00	-1.59E+00	2.09E+01	2.41E+01	
	006	75	-4.7	1/21/2008	12:52	9.42E+02	1.86E+02	1.71E+02	2.19E-01	4.28E-01	4.87E-01	0.00E+00	5.42E+00	3.23E+00	-1.36E+00	2.84E+00	2.84E+00	3.84E+00	1.85E+01	2.11E+01	
	008	75	-4.7	3/4/2008	12:25	1.21E+03	1.84E+02	1.91E+02	6.95E-01	3.04E-01	3.94E-01	2.79E+00	2.26E+00	4.16E+00	2.55E-02	2.14E+00	3.58E+00	1.15E+01	1.24E+01	2.09E+01	
	009	75	-4.7	10/30/2008	15:52	7.94E+02	2.37E+02	1.65E+02	-4.79E-02	2.99E-01	4.19E-01	3.66E+00	6.21E+00	7.56E+00	-1.78E+00	6.33E+00	6.63E+00	-4.83E+00	1.65E+01	1.92E+01	
	010	75	-4.7	1/26/2009	12:00	4.26E+03	3.06E+02	1.92E+02	2.30E+00	1.07E+00	9.76E-01	1.10E+00	3.96E+00	4.51E+00	-2.25E-01	3.59E+00	3.88E+00	8.04E+00	1.64E+01	1.84E+01	
	011	75	-4.7	4/14/2009	14:58	1.75E+03	3.14E+02	1.36E+02	-3.03E-01	7.29E-01	8.97E-01	7.76E+00	6.60E+00	4.40E+00	1.28E-01	4.34E+00	4.84E+00	-1.09E+00	1.85E+01	2.16E+01	
	012	75	-4.7	7/21/2009	16:26	9.82E+02	2.67E+02	2.04E+02	1.67E-01	8.37E-01	9.81E-01	3.71E+00	3.87E+00	4.87E+00	3.14E+00	4.38E+00	5.53E+00	-9.93E-01	1.81E+01	2.07E+01	
	013	75	-4.7	10/27/2009	12:01	6.64E+02	1.95E+02	1.87E+02	-1.89E-01	3.36E-01	4.96E-01	1.31E+00	2.90E+00	3.49E+00	2.42E+00	4.13E+00	4.89E+00	-9.46E+00	1.79E+01	2.10E+01	
	014	75	-4.7	2/16/2010	12:04	7.14E+03	3.41E+02	1.53E+02	2.23E+00	9.77E-01	7.74E-01	0.00E+00	5.43E+00	7.23E+00	-9.98E-01	4.75E+00	4.91E+00	-1.24E+01	1.76E+01	2.09E+01	
	015	75	-4.7	4/15/2010	15:14	4.71E+03	6.56E+02	3.96E+02	4.06E-01	7.37E-01	8.29E-01	4.40E+00	1.27E-01	1.51E+01	-4.95E+00	1.13E+01	1.13E+01	1.39E+00	1.89E+01	2.19E+01	
	016	75	-4.7	7/30/2010	12:32	2.25E+03	2.66E+02	1.27E+02	3.34E-01	3.83E-01	4.00E-01	-3.03E+00	8.36E+00	8.46E+00	-1.90E+00	8.00E+00	8.03E+00	-1.45E+01	1.77E+01	2.23E+01	
MW-53-120	001	109.8	-39.5	8/30/2006	11:30	4.42E+03	1.25E+03	1.12E+03	NA	NA	NA	-6.13E+00	9.49E+00	9.40E+00	4.98E-01	8.96E+00	9.83E+00	NA	NA	NA	MW-53-120
	002	109.8	-39.5	11/9/2006	11:20	7.90E+03	1.47E+03	1.00E+03	2.47E+01	1.83E+00	7.90E-01	-4.60E-01	2.70E+00	3.10E+00	-3.50E-01	2.76E+00	3.30E+00	2.71E+01	1.32E+01	1.30E+01	
	003	109.8	-39.5	6/22/2007	14:22	9.61E+03	1.10E+03	4.32E+02	3.57E+01	3.69E+00	1.04E+00	7.93E+00	5.09E+00	2.84E+00	9.47E-01	3.15E+00	3.72E+00	1.73E+01	1.38E+01	1.47E+01	
	004	109.8	-39.5	3/9/2007	12:45	8.05E+03	1.02E+03	4.59E+02	3.70E+01	3.18E+00	9.24E-01	1.37E+00	3.62E+00	4.27E+00	-1.59E-01	3.74E+00	4.17E+00	1.95E+01	2.14E+01	2.35E+01	

See Page 29 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-53-120	005	109.8	-39.5	10/24/2007	13:38	7.40E+03	9.29E+02	4.02E+02	3.81E+01	2.27E+00	4.82E-01	-5.34E-01	3.51E+00	3.29E+00	-2.23E-01	3.35E+00	3.72E+00	7.06E+00	2.10E+01	2.38E+01	MW-53-120
	006	109.8	-39.5	1/21/2008	10:43	7.48E+03	3.48E+02	1.72E+02	3.12E+01	2.40E+00	6.46E-01	1.38E+00	3.02E+00	3.18E+00	1.14E-01	3.30E+00	3.71E+00	1.71E+01	1.85E+01	2.02E+01	
	008	109.8	-39.5	5/13/2008	10:10	5.91E+03	3.38E+02	1.43E+02	3.11E+01	1.73E+00	6.73E-01	-1.39E+00	1.98E+00	3.10E+00	1.33E+00	2.15E+00	3.99E+00	2.22E+01	1.28E+01	2.08E+01	
	009	109.8	-39.5	8/4/2008	10:15	5.80E+03	3.46E+02	1.91E+02	3.03E+01	1.52E+00	3.11E-01	-9.74E-01	1.93E+00	3.02E+00	-1.15E-01	2.33E+00	3.20E+00	2.65E+01	1.30E+01	2.11E+01	
	010	109.8	-39.5	9/5/2008	10:55	5.76E+03	5.90E+02	5.07E+02	3.10E+01	1.59E+00	4.10E-01	-3.34E-01	2.41E+00	3.94E+00	NA	NA	NA	1.94E+01	1.19E+01	3.88E-01	
	011	109.8	-39.5	10/30/2008	13:00	5.57E+03	5.39E+02	1.66E+02	2.53E+01	2.04E+00	3.80E-01	2.73E+00	4.75E+00	5.74E+00	0.00E+00	9.13E+00	9.26E+00	5.82E+00	1.69E+01	1.93E+01	
	012	109.8	-39.5	11/17/2008	10:31	5.04E+03	3.23E+02	1.72E+02	4.25E+01	3.63E+00	6.74E-01	3.25E-01	4.72E+00	5.28E+00	-1.96E-02	4.09E+00	4.49E+00	2.12E+01	2.03E+01	2.21E+01	
	013	109.8	-39.5	1/26/2009	12:43	5.06E+03	3.26E+02	1.92E+02	2.64E+01	2.37E+00	7.50E-01	-3.60E-01	4.53E+00	5.10E+00	2.32E+00	4.34E+00	5.39E+00	1.27E+01	2.22E+01	2.49E+01	
	014	109.8	-39.5	3/16/2009	9:40	5.07E+03	8.51E+02	3.81E+02	2.37E+01	2.07E+00	7.32E-01	-9.24E-02	2.48E+00	1.65E+00	-7.85E-01	1.86E+00	1.58E+00	1.34E+01	1.73E+01	1.91E+01	
	015	109.8	-39.5	4/14/2009	13:08	5.65E+03	5.40E+02	1.36E+02	2.96E+01	2.19E+00	5.66E-01	-2.26E+00	6.15E+00	4.10E+00	-6.33E-01	3.86E+00	4.10E+00	8.66E+00	1.83E+01	2.07E+01	
	016	109.8	-39.5	7/21/2009	13:18	5.40E+03	5.18E+02	2.07E+02	4.00E-01	5.46E-01	5.93E-01	-1.68E+00	3.42E+00	3.59E+00	3.12E+00	3.86E+00	5.03E+00	4.59E+00	1.66E+01	1.88E+01	
	017	109.8	-39.5	10/27/2009	11:57	5.05E+03	3.47E+02	1.88E+02	3.10E+01	2.44E+00	7.18E-01	-1.77E-01	5.80E+00	6.55E+00	-2.13E+00	6.67E+00	7.01E+00	6.81E+00	1.86E+01	2.10E+01	
	018	109.8	-39.5	2/16/2010	11:51	4.66E+03	2.87E+02	1.53E+02	3.94E+01	3.39E+00	7.41E-01	-4.00E-01	5.82E+00	6.54E+00	-3.20E-01	6.23E+00	6.98E+00	6.73E+00	1.91E+01	2.16E+01	
	019	109.8	-39.5	4/15/2010	14:36	4.10E+03	6.14E+02	3.86E+02	3.32E+01	2.69E+00	9.06E-01	-6.92E+00	8.73E+00	8.19E+00	2.24E-01	8.74E+00	9.97E+00	7.53E+00	1.96E+01	2.22E+01	
	020	109.8	-39.5	7/30/2010	14:36	3.81E+03	3.38E+02	1.28E+02	2.97E+01	2.22E+00	4.77E-01	2.09E+00	1.27E+01	1.37E+01	-4.76E-01	8.04E+00	8.95E+00	3.59E+00	1.91E+01	2.21E+01	
MW-54-37	001	36.5	-23.4	5/3/2007	16:19	8.01E+02	3.14E+02	3.02E+02	1.25E+01	2.12E+00	7.94E-01	2.44E+00	3.63E+00	4.42E+00	-1.43E+00	2.71E+00	2.51E+00	6.09E+00	1.98E+01	2.27E+01	MW-54-37
	002	36.5	-23.4	7/31/2007	10:30	8.88E+02	4.14E+02	2.68E+02	5.30E+00	1.11E+00	6.26E-01	1.46E+00	2.54E+00	3.03E+00	-2.64E-02	2.82E+00	3.13E+00	-4.74E+00	1.83E+01	2.14E+01	
	003	36.5	-23.4	10/19/2007	13:25	1.04E+03	4.26E+02	3.66E+02	6.19E+00	1.37E+00	6.14E-01	6.04E-01	3.30E+00	3.84E+00	6.61E-01	3.54E+00	4.19E+00	1.04E+01	1.59E+01	1.77E+01	
	004	36.5	-23.4	1/15/2008	13:18	1.07E+03	4.97E+02	4.18E+02	5.79E+00	1.47E+00	7.26E-01	7.48E-02	2.81E+00	3.11E+00	1.03E+00	2.79E+00	3.00E+00	-1.88E-01	2.06E+01	2.43E+01	
	005	36.5	-23.4	5/2/2008	13:59	8.70E+02	1.47E+02	1.43E+02	5.08E+00	7.44E-01	5.59E-01	-9.28E-01	2.12E+00	3.29E+00	-8.38E-01	2.56E+00	4.06E+00	3.37E+00	1.24E+01	2.12E+01	
	006	36.5	-23.4	7/22/2008	17:00	9.50E+02	1.08E+02	1.31E+02	6.20E+00	7.50E-01	4.63E-01	1.34E+00	2.22E+00	3.94E+00	-4.43E-01	2.09E+00	3.34E+00	1.42E+00	1.68E+01	2.95E+01	
	007	36.5	-23.4	11/11/2008	13:16	1.25E+03	2.07E+02	1.73E+02	7.33E+00	1.45E+00	5.76E-01	-2.50E+00	6.27E+00	6.87E+00	2.81E+00	5.14E+00	6.50E+00	2.49E+00	1.92E+01	2.21E+01	
	008	36.5	-23.4	2/3/2009	15:34	1.16E+03	1.86E+02	1.64E+02	5.93E+00	1.16E+00	6.66E-01	1.70E+00	3.33E+00	3.92E+00	-1.15E+00	3.24E+00	3.14E+00	-3.14E+00	2.16E+01	2.50E+01	
	009	36.5	-23.4	5/6/2009	11:51	1.24E+03	2.78E+02	1.81E+02	6.35E+00	1.20E+00	4.75E-01	-1.81E-02	4.22E+00	2.81E+00	-1.16E+00	2.75E+00	2.61E+00	4.33E+00	1.91E+01	2.16E+01	
	010	36.5	-23.4	8/4/2009	14:35	1.42E+03	3.26E+02	2.37E+02	5.53E+00	1.18E+00	6.88E-01	-3.76E-01	3.94E+00	4.29E+00	8.01E-01	4.42E+00	4.53E+00	5.80E+00	2.11E+01	2.41E+01	
	011	36.5	-23.4	11/13/2009	14:35	1.60E+03	2.99E+02	2.00E+02	5.77E+00	1.09E+00	4.66E-01	-6.22E-01	5.64E+00	6.28E+00	-2.24E+00	6.15E+00	6.31E+00	1.36E+01	1.80E+01	1.99E+01	
	012	36.5	-23.4	2/11/2010	11:16	1.31E+03	1.89E+02	1.53E+02	5.17E+00	1.43E+00	7.17E-01	-8.12E-01	5.16E+00	5.56E+00	-1.85E+00	5.78E+00	5.93E+00	-5.60E-01	1.86E+01	2.15E+01	
	013	36.5	-23.4	5/3/2010	14:09	1.18E+03	2.25E+02	1.38E+02	4.71E+00	1.26E+00	6.67E-01	-3.67E+00	8.43E+00	8.56E+00	1.69E+00	9.49E+00	1.14E+01	3.61E+00	2.07E+01	2.36E+01	
	014	36.5	-23.4	8/4/2010	14:32	1.21E+03	2.10E+02	1.30E+02	4.00E+00	8.07E-01	3.32E-01	-4.96E-01	7.38E+00	8.14E+00	-3.97E+00	9.63E+00	9.58E+00	-3.50E+00	1.50E+01	1.80E+01	
MW-54-58	001	57.5	-44.4	5/3/2007	16:45	7.60E+02	3.11E+02	3.02E+02	2.22E+00	9.99E-01	7.02E-01	-3.77E-01	2.81E+00	3.07E+00	1.15E-01	2.71E+00	3.09E+00	7.50E+00	1.88E+01	2.12E+01	MW-54-58
	002	57.5	-44.4	7/31/2007	9:55	6.93E+02	3.72E+02	2.62E+02	1.76E+00	8.53E-01	7.52E-01	-1.32E+00	3.12E+00	3.23E+00	8.17E-03	3.01E+00	3.35E+00	1.97E-01	1.80E+01	2.08E+01	
	003	57.5	-44.4	10/19/2007	13:35	5.61E+02	2.00E+02	1.94E+02	4.38E-01	8.43E-01	9.56E-01	-2.08E-01	3.03E+00	3.40E+00	3.56E-01	2.96E+00	3.39E+00	2.09E+00	1.59E+01	1.81E+01	
	004	57.5	-44.4	1/15/2008	13:45	6.47E+02	4.40E+02	4.18E+02	2.32E+00	1.09E+00	8.13E-01	2.16E+00	4.59E+00	3.18E+00	-7.34E-01	3.06E+00	3.27E+00	4.41E+00	2.34E+01	2.71E+01	
	005	57.5	-44.4	5/2/2008	14:15	7.33E+02	1.39E+02	1.43E+02	1.69E+00	4.97E-01	5.77E-01	8.65E-01	2.13E+00	3.75E+00	1.63E+00	2.46E+00	4.54E+00	9.78E-01	1.27E+01	2.20E+01	
	006	57.5	-44.4	7/22/2008	17:05	5.78E+02	9.64E+01	1.31E+02	1.71E+00	5.24E-01	6.47E-01	3.78E-01	2.07E+00	3.59E+00	-1.41E-01	2.67E+00	4.23E+00	1.37E+01	1.69E+01	2.85E+01	
	007	57.5	-44.4	11/11/2008	13:02	6.98E+02	1.85E+02	1.74E+02	9.02E+00	1.65E+00	5.87E-01	-7.43E-01	3.71E+00	3.89E+00	-1.72E+00	3.50E+00	3.31E+00	3.01E+00	1.91E+01	2.18E+01	
	008	57.5	-44.4	2/3/2009	14:53	6.82E+02	1.71E+02	1.66E+02	1.98E+00	8.52E-01	7.24E-01	9.58E-01	2.78E+00	3.29E+00	4.22E-01	2.94E+00	3.39E+00	-3.05E+00	1.95E+01	2.27E+01	
	009	57.5	-44.4	5/6/2009	12:13	6.58E+02	2.24E+02	1.78E+02	2.00E+00	8.60E-01	6.94E-01	2.19E+00	6.09E+00	4.06E+00	-2.90E+00	3.63E+00	3.32E+00	-1.92E+01	2.15E+01	2.50E+01	
	010	57.5	-44.4	8/4/2009	14:30	7.81E+02	2.73E+02	2.34E+02	1.41E+00	8.04E-01	7.44E-01	-1.71E+00	3.25E+00	3.37E+00	-9.96E-01	3.62E+00	3.83E+00	8.34E-01	2.26E+01	2.60E+01	
	011	57.5	-44.4	11/13/2009	14:54	8.38E+02	2.48E+02	2.03E+02	1.91E+00	7.62E-01	6.03E-01	3.24E+00	5.67E+00	6.89E+00	-1.36E+00	5.29E+00	5.52E+00	7.05E+00	1.83E+01	2.07E+01	
	012	57.5	-44.4	2/11/2010	11:48	9.04E+02	1.74E+02	1.53E+02	1.38E+00	8.76E-01	7.99E-01	3.86E-01	5.50E+00	6.29E+00	1.08E+00	7.15E+00	7.82E+00	-1.32E+01	1.88E+01	2.23E+01	
	013	57.5	-44.4	5/3/2010	14:23	1.11E+03	2.25E+02	1.42E+02	1.44E+00	8.33E-01	6.81E-01	6.00E-01	1.10E+01	1.30E+01	-4.85E-01	8.46E+00	9.38E+00	6.55E+00	1.99E+01	2.26E+01	
	014	57.5	-44.4	8/4/2010	14:35	7.67E+02	1.79E+02	1.28E+02	1.36E+00	6.88E-01	6.20E-01	-3.95E+00	9.51E+00	9.85E+00	8.15E-01	1.14E+01	1.32E+01	-5.38E-01	1.44E+01	1.70E+01	
MW-54-123	001	123	-109.9	5/3/2007	14:18	1.11E+03	3.75E+02	3.36E+02	2.19E+01	2.71E+00	8.06E-01	4.21E+00	3.50E+00	3.67E+00	-2.65E+00	7.07E+00	3.31E+00	7.45E+00	1.79E+01	2.03E+01	MW-54-123
	002	123	-109.9	7/31/2007	11:10	9.63E+02	4.29E+02	3.69E+02	1.35E+01	1.47E+00	8.87E-01	0.00E+00	4.68E+00	4.49E+00	2.96E+00	4.02E+00	5.06E+00	-3.63E+00	1.86E+01	2.17E+01	
	003	123	-109.9	10/19/2007	12:09	7.01E+02	3.87E+02	3.62E+02	1.16E+01	1.88E+00	8.13E-01	4.02E-02	3.51E+00	3.88E+00	-1.72E+00	3.65E+00	3.68E+00	-4.31E-01	2.19E+01	2.51E+01	
	004	123	-109.9	1/15/2008	10:52	5.33E+02	4.23E+02	4.18E+02	9.56E+00	1.92E+00	7.51E-01	8.25E-01	3.48E+00	3.94E+00	4.41E-01	3.00E+00	3.42E+00	6.86E+00	2.25E+01	2.58E+01	
	005	123	-109.9	5/2/2008	10:06	6.98E+02	1.34E+02	1.39E+02	6.45E+00	8.46E-01	5.98E-01	-1.28E+00	2.22E+00	3.42E+00	4.12E+00	2.63E+00	5.24E+00	-3.04E+00	1.19E+01	2.08E+01	
	006	123	-109.9	7/22/2008	15:30	6.12E+02	9.77E+01	1.32E+02	6.52E+00	8.15E-01	5.56E-01	-2.82E-01	2.22E+00	3.72E+00	-2.93E+00	2.52E+00	3.55E+00	4.33E+00	1.57E+01	2.73E+01	
	007	123	-109.9	11/11/2008	11:03	5.80E+02	1.77E+02	1.71E+02	1.26E+01	2.10E+00	7.26E-01	-6.72E-01	5.14E+00	5.51E+00	2.63E+00	4.29E+00	5.62E+00	-4.68E+00	1.83E+01	2.15E+01	
	008	123	-109.9	2/3/2009	11:55	5.31E+02	1.64E+02	1.64E+02	5.91E+00	1.15E+00	5.70E-01	9.03E-01	3.03E+00	3.59E+00	5.33E-02	3.09E+00	3.52E+00	9.09E-01	2.00E+01	2.30E+01	
	009	123	-109.9	5/6/2009	12:40	6.94E+02	2.28E+02	1.78E+02	3.94E+00	1.00E+00	5.36E-01	-1.73E+00	5.94E+00	3.96E+00	2.06E+00	3.18E+00	3.94E+00	2.67E-01	1.86E+01	2.13E+01	
	010	123	-109.9	8/4/2009	14:10	6.29E+02	2.63E+02	2.38E+02	4.53E+00	1.24E+00	7.76E-01	6.28E-01	3.50E+00	4.06E+00	2.36E-01	3.27E+00	3.76E+00	1.79E+00	2.11E+01	2.41E+01	
	011	123	-109.9	11/13/2009	14:59	7.49E+02	2.40E+02	2.04E+02	3.77E+00	1.13E+00	8.78E-01	1.12E-01	1.25E+01	7.48E+00	6.15E+00	9.53E+00	7.53E+00	-1.31E+01	2.18E+01	2.59E+01	
	012	123	-109.9	2/11/2010	11:32	8.57E+02	1.71E+02	1.53E+02	3.40E+00	1.13E+00	7.64E-01	1.87E+00	5.45E+00	6.32E+00	8.01E-01	5.33E+00	6.09E+00	-3.75E+00	1.77E+01	2.06E+01	
	013	123	-109.9	5/3/2010	15:08	9.16E+02	2.04E+02	1.37E+02	2.25E+00	1.12E+00	8.35E-01	-3.24E+00	8.00E+00	8.03E+00	5.74E-01	9.62E+00	1.09E+01	-6.51E+00	1.94E+01	2.25E+01	
	014	123	-109.9	8/4/2010	14:49	7.83E+02	1.80E+02	1.28E+02	2.98E+00	7.55E-01	4.15E-01	1.53E+00	9.99E+00	1.16E+01	-9.37E-01	8.21E+00	8.72E+00	-5.12E+00	1.64E+01	1.97E+01	
MW-54-144	001	144	-130.9	5/3/2007	14:31	1.34E+03	5.64E+02	4.68E+02	1.61E+01	2.42E+00	6.97E-01	-1.34E+00	3.62E+00	3.78E+00	5.23E-01	3.36E+00	3.84E+00	4.64E+00	1.68E+01	1.93E+01	MW-54-144
	002	144	-130.9	7/31/2007	13:33	1.89E+03	5.67E+02	2.66E+02	1.92E+01	1.98E+00	6.71E-01	-1.19E+00	2.90E+00	3.03E+00	5.02E-02	3.33E+00	3.77E+00	-6.13E+00	1.89E+01	2.23E+01	
	003	144	-130.9	10/19/2007	12:12	1.54E+03	4.73E+02	3.62E+02	1.58E+01	2.15E+00	7.69E-01	8.53E-01	2.85E+00	3.35E+00	-4.41E-01	3.18E+00	3.39E+00	4.35E-01	1.54E+01	1.78E+01	
	004	144	-130.9	1/15/2008	11:22	1.40E+03	5.34E+02	4.16E+02	1.53E+01	2.34E+00	8.48E-01	3.67E+00	5.04E+00	4.39E+00	4.86E-02	3.96E+00	4.34E+00	9.81E+00	2.24E+01	2.54E+01	
	005	144	-130.9	5/2/2008	10:20	1.15E+03	1.64E+02	1.43E+02	1.59E+01	1.31E+00	7.05E-01	-9.63E-01	2.26E+00	3.61E+00	-1.06E+00	2.37E+00	3.65E+00	-2.00E+00	1.21E+01	2.11E+01	
	006	144	-130.9	7/22/2008	15:35	1.13E+03	1.13E+02	1.31E+02	1.69E+01	1.23E+00	5.01E-01	1.57E+00	1.91E+00	3.48E+00	-4.98E-01	2.43E+00	3.49E+00	1.11E+01	1.69E+01	2.87E+01	
	007	144	-130.9	11/11/2008	11:06	1.14E+03	2.03E+02	1.72E+02	2.02E+01	2.27E+00	4.69E-01	-6.18E-01	3.90E+00	4.30E+00	5.67E-01	5.17E+00	5.96E+00	4.08E+00	2.09E+01	2.39E+01	
	008	144	-130.9	2/3/2009	12:41	1.13E+03	2.03E+02	1.77E+02	1.44E+01	1.76E+00	6.51E-01	-5.38E-03	3.15E+00	3.46E+00	-2.00E-02	2.91E+00	3.20E+00	2.21E+00	2.37E+01	2.76E+01	
	009	144	-130.9	5/6/2009	10:23	1.45E+03	2.91E+02	1.78E+02	1.46E+01	1.89E+00	5.95E-01	-1.95E+00	4.97E+00	3.31E+00	9.27E-01	3.35E+00	3.90E+00	-5.83E+00	1.91E+01	2.21E+01	
	010	144	-130.9	8/4/2009	11:10	1.29E+03	3.18E+02	2.39E+02	1.43E+01	1.74E+00	7.92E-01	6.70E-01	2.91E+00	3.33E+00	-1.51E+00	3.72E+00	3.66E+00	1.41E+01	2.24E+01	2.50E+01	

See Page 29 for Notes

IPEC00263601

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-54-144	011	144	-130.9	11/13/2009	12:13	1.40E+03	2.88E+02	2.03E+02	1.51E+01	1.83E+00	7.72E-01	-1.68E+00	4.38E+00	4.54E+00	-1.71E+00	3.12E+00	2.42E+00	-5.64E+00	1.92E+01	2.24E+01	MW-54-144
	012	144	-130.9	2/10/2010	10:37	1.20E+03	1.85E+02	1.53E+02	1.44E+01	2.07E+00	7.00E-01	-5.02E-01	9.22E+00	1.01E+01	-1.77E+00	7.62E+00	7.26E+00	-1.11E+01	1.88E+01	2.23E+01	
	013	144	-130.9	5/3/2010	11:41	1.28E+03	2.40E+02	1.45E+02	1.37E+01	2.04E+00	6.93E-01	-3.08E+00	7.11E+00	7.03E+00	-4.60E+00	8.03E+00	6.97E+00	-6.93E+00	2.11E+01	2.46E+01	
	014	144	-130.9	3/4/2010	11:44	1.44E+03	2.28E+02	1.33E+02	1.17E+01	1.42E+00	4.70E-01	8.96E+00	1.13E-01	1.44E+01	1.72E+00	8.79E+00	1.06E+01	1.78E+00	1.89E+01	2.21E+01	
MW-54-173	001	172.5	-159.4	5/3/2007	14:43	1.90E+03	6.27E+02	4.71E+02	2.09E+01	2.64E+00	8.31E-01	-4.52E-01	3.82E+00	4.16E+00	1.92E+00	3.46E+00	4.27E+00	5.00E+00	1.94E+01	2.21E+01	MW-54-173
	002	172.5	-159.4	7/31/2007	13:40	2.08E+03	5.94E+02	2.68E+02	1.45E+01	1.85E+00	8.29E-01	7.90E-01	2.63E+00	3.10E+00	7.75E-01	2.22E+00	2.74E+00	3.92E+00	1.81E+01	2.07E+01	
	003	172.5	-159.4	10/19/2007	12:14	1.91E+03	5.07E+02	3.63E+02	1.49E+01	2.07E+00	6.21E-01	1.05E+00	3.29E+00	3.79E+00	-3.08E-01	2.87E+00	3.18E+00	1.37E+00	1.49E+01	1.70E+01	
	004	172.5	-159.4	1/15/2008	11:15	1.84E+03	5.84E+02	4.16E+02	1.41E+01	1.80E+00	9.29E-01	-3.68E-01	2.81E+00	3.08E+00	5.21E-01	3.00E+00	3.49E+00	4.79E+00	2.30E+01	2.65E+01	
	005	172.5	-159.4	5/2/2008	10:35	2.11E+03	2.10E+02	1.42E+02	1.22E+01	1.18E+00	9.06E-01	-6.44E-01	2.22E+00	3.66E+00	1.71E+00	2.10E+00	4.01E+00	4.47E+00	1.23E+01	2.10E+01	
	006	172.5	-159.4	7/22/2008	15:51	2.05E+03	1.35E+02	1.30E+02	1.29E+01	1.08E+00	5.25E-01	-6.92E-02	2.07E+00	3.52E+00	-1.62E+00	2.11E+00	3.15E+00	7.86E+00	1.59E+01	2.72E+01	
	007	172.5	-159.4	11/11/2008	11:07	1.66E+03	2.24E+02	1.75E+02	1.61E+01	2.12E+00	7.21E-01	1.51E-01	4.23E+00	4.77E+00	-5.84E-01	3.93E+00	4.19E+00	3.04E+00	1.92E+01	2.20E+01	
	008	172.5	-159.4	2/3/2009	12:19	1.98E+03	5.45E+02	3.85E+02	1.02E+01	1.45E+00	5.93E-01	-1.52E+00	3.03E+00	3.08E+00	-2.37E+00	3.20E+00	2.94E+00	4.01E+00	2.37E+01	2.76E+01	
	009	172.5	-159.4	5/6/2009	10:24	1.57E+03	3.03E+02	1.80E+02	8.59E+00	1.46E+00	7.75E-01	3.40E-01	5.16E+00	3.44E+00	1.02E+00	2.63E+00	3.14E+00	-1.38E+00	1.92E+01	2.20E+01	
	010	172.5	-159.4	8/4/2009	11:15	1.87E+03	3.56E+02	2.34E+02	9.19E+00	1.51E+00	7.94E-01	1.49E+00	3.33E+00	3.92E+00	-6.51E-01	2.98E+00	3.14E+00	3.69E+00	2.19E+01	2.49E+01	
	011	172.5	-159.4	11/13/2009	12:04	1.83E+03	3.15E+02	2.03E+02	7.42E+00	1.29E+00	7.36E-01	7.30E-01	6.35E+00	7.30E+00	-1.25E+00	7.27E+00	6.86E+00	-1.70E+00	1.91E+01	2.20E+01	
	012	172.5	-159.4	2/10/2010	10:34	1.61E+03	2.00E+02	1.53E+02	7.51E+00	1.53E+00	7.44E-01	2.09E+00	5.21E+00	6.19E+00	1.33E+00	5.76E+00	6.72E+00	-9.09E+00	2.13E+01	2.50E+01	
	013	172.5	-159.4	5/3/2010	11:47	2.03E+03	2.84E+02	1.42E+02	6.28E+00	1.42E+00	5.94E-01	-3.87E-01	8.87E+00	9.74E+00	2.77E+00	7.82E+00	9.75E+00	-1.68E+00	2.03E+01	2.33E+01	
	014	172.5	-159.4	3/4/2010	12:09	1.53E+03	2.31E+02	1.30E+02	5.97E+00	1.02E+00	3.24E-01	-7.48E+00	8.07E+00	7.10E+00	4.86E-01	9.46E+00	1.08E+01	-1.31E+00	1.68E+01	1.99E+01	
MW-54-190	001	190	-176.9	5/3/2007	15:00	1.87E+03	6.23E+02	4.71E+02	1.95E+01	2.56E+00	7.00E-01	1.82E+00	3.23E+00	3.90E+00	3.32E-01	2.90E+00	3.30E+00	1.54E+00	1.88E+01	2.18E+01	MW-54-190
	002	190	-176.9	7/31/2007	13:45	2.25E+03	6.12E+02	2.66E+02	1.79E+01	2.15E+00	7.59E-01	-2.13E+00	3.35E+00	3.12E+00	9.32E-01	3.09E+00	3.67E+00	-3.07E+00	1.66E+01	1.94E+01	
	003	190	-176.9	10/19/2007	12:20	2.13E+03	5.24E+02	3.60E+02	2.04E+01	2.46E+00	7.97E-01	-1.04E+00	3.45E+00	3.07E+00	7.41E-01	4.05E+00	3.33E+00	-3.38E+00	1.71E+01	1.97E+01	
	004	190	-176.9	1/15/2008	11:37	2.24E+03	6.26E+02	4.16E+02	1.93E+01	2.54E+00	8.15E-01	6.45E-01	2.64E+00	3.11E+00	-3.88E-01	2.28E+00	2.50E+00	9.23E+00	2.42E+01	2.75E+01	
	005	190	-176.9	5/2/2008	10:30	1.84E+03	1.98E+02	1.43E+02	1.95E+01	1.40E+00	7.88E-01	8.19E-01	1.98E+00	3.46E+00	8.81E-01	1.95E+00	3.51E+00	6.07E+00	1.25E+01	2.13E+01	
	006	190	-176.9	7/22/2008	15:50	1.25E+03	1.15E+02	1.30E+02	2.13E+01	1.37E+00	5.60E-01	8.45E-01	1.98E+00	3.41E+00	-1.64E+00	2.06E+00	3.02E+00	-8.42E+00	1.61E+01	2.92E+01	
	007	190	-176.9	11/11/2008	11:09	1.44E+03	2.10E+02	1.69E+02	3.38E+01	3.12E+00	6.14E-01	-5.41E-01	5.00E+00	5.54E+00	-6.47E-01	3.54E+00	3.63E+00	4.86E-01	1.91E+01	2.20E+01	
	008	190	-176.9	2/3/2009	12:35	1.43E+03	4.88E+02	3.80E+02	1.90E+01	1.85E+00	3.85E-01	-1.18E+00	3.48E+00	3.74E+00	7.39E-01	3.08E+00	3.70E+00	-5.10E+00	2.37E+01	2.84E+01	
	009	190	-176.9	5/6/2009	10:27	1.60E+03	3.05E+02	1.80E+02	1.98E+01	2.07E+00	4.19E-01	2.31E+00	7.22E+00	4.81E+00	-8.94E-01	3.86E+00	4.04E+00	-2.80E+00	1.94E+01	2.23E+01	
	010	190	-176.9	3/4/2009	11:20	1.94E+03	3.62E+02	2.36E+02	1.98E+01	2.00E+00	6.71E-01	-7.49E-01	3.31E+00	3.53E+00	9.28E-01	3.99E+00	4.59E+00	-1.51E+00	2.14E+01	2.47E+01	
	011	190	-176.9	11/13/2009	12:17	2.01E+03	3.27E+02	2.03E+02	1.98E+01	1.94E+00	4.40E-01	1.55E+00	8.64E+00	5.62E+00	3.18E+00	5.42E+00	7.03E+00	1.33E+00	1.96E+01	2.26E+01	
	012	190	-176.9	2/10/2010	10:32	1.57E+03	1.98E+02	1.54E+02	2.35E+01	2.67E+00	6.73E-01	2.84E+00	4.98E+00	6.01E+00	1.64E-01	5.19E+00	5.77E+00	-9.59E+00	1.68E+01	1.99E+01	
	013	190	-176.9	5/3/2010	12:01	1.71E+03	2.67E+02	1.44E+02	2.22E+01	2.61E+00	6.32E-01	3.80E+00	1.05E-01	1.25E+01	-3.30E+00	1.11E+01	1.14E+01	-6.89E+00	2.24E+01	2.60E+01	
	014	190	-176.9	3/4/2010	12:34	1.60E+03	2.33E+02	1.28E+02	1.57E+01	1.51E+00	2.87E-01	-1.62E+00	8.25E+00	8.88E+00	-1.20E+00	8.80E+00	9.41E+00	-3.22E+00	1.84E+01	2.21E+01	
MW-55-24	001	16	2.3	11/9/2006	13:20	2.00E+03	1.11E+03	1.00E+03	1.66E+01	2.40E+00	1.90E+00	-7.00E-01	4.50E+00	5.80E+00	4.00E-01	5.40E+00	6.70E+00	1.10E+00	5.40E+00	6.00E+00	MW-55-24
	002	16	2.3	6/28/2007	11:20	3.08E+03	2.96E+02	1.87E+02	3.25E+01	3.51E+00	1.06E+00	0.00E+00	4.00E+00	3.70E+00	1.16E+00	3.81E+00	4.60E+00	NA	NA	NA	
	003	16	2.3	3/2/2007	11:17	2.71E+03	7.28E+02	5.47E+02	2.31E+01	2.67E+00	9.19E-01	-4.91E-01	2.79E+00	3.02E+00	1.40E+00	2.94E+00	3.47E+00	-7.94E+00	1.91E+01	2.31E+01	
	004	16	2.3	10/16/2007	10:15	2.20E+03	5.36E+02	3.68E+02	2.29E+01	2.61E+00	8.43E-01	6.26E-01	3.63E+00	4.21E+00	7.46E-01	3.29E+00	3.47E+00	NA	NA	NA	
	005	16	2.3	1/28/2008	12:57	1.14E+03	3.65E+02	2.96E+02	2.26E+01	2.46E+00	9.24E-01	3.33E+00	3.26E+00	2.50E+00	1.04E+00	1.55E+00	2.51E+00	1.44E+01	1.82E+01	2.00E+01	
	006	16	2.3	4/25/2008	14:15	1.05E+03	1.59E+02	1.44E+02	2.55E+01	1.57E+00	4.89E-01	1.08E+00	2.31E+00	4.02E+00	-9.33E-01	2.55E+00	4.02E+00	1.25E+00	1.14E+01	1.97E+01	
	007	16	2.3	3/1/2008	13:15	1.40E+03	1.93E+02	1.91E+02	2.22E+01	1.36E+00	5.73E-01	-7.37E-03	2.19E+00	3.69E+00	2.85E+00	2.34E+00	4.16E+00	6.11E+00	1.24E+01	2.11E+01	
	008	16	2.3	10/21/2008	13:19	7.82E+02	2.57E+02	1.93E+02	1.08E+01	1.80E+00	5.55E-01	1.30E+00	5.13E+00	5.92E+00	-3.49E+00	6.66E+00	6.59E+00	4.77E+00	1.79E+01	2.03E+01	
	009	16	2.3	2/11/2009	12:55	1.04E+03	4.49E+02	3.84E+02	1.69E+01	1.74E+00	3.85E-01	1.90E+00	2.88E+00	3.50E+00	1.35E+00	3.14E+00	3.76E+00	-1.21E+01	2.45E+01	2.99E+01	
	010	16	2.3	4/29/2009	11:28	1.14E+03	2.69E+02	1.80E+02	1.55E+01	1.88E+00	6.50E-01	-1.81E-01	1.02E-01	6.77E+00	-9.81E-01	4.91E+00	5.14E+00	4.88E+00	1.95E+01	2.22E+01	
	011	16	2.3	3/5/2009	13:52	1.59E+03	3.39E+02	2.37E+02	3.07E+01	2.52E+00	7.22E-01	-7.90E-01	3.74E+00	3.61E+00	1.05E+00	2.92E+00	3.52E+00	4.83E+00	2.28E+01	2.59E+01	
	012	16	2.3	11/2/2009	13:01	1.38E+03	2.27E+02	1.88E+02	1.93E+01	1.95E+00	7.59E-01	1.03E+01	9.51E+00	5.59E+00	3.87E+00	5.63E+00	7.18E+00	-7.44E+00	1.53E+01	1.80E+01	
	013	16	2.3	2/18/2010	14:01	2.21E+03	2.49E+02	1.74E+02	2.06E+01	2.46E+00	7.08E-01	4.99E+00	4.18E+00	5.27E+00	7.07E-01	4.32E+00	4.92E+00	-8.06E+00	1.86E+01	2.18E+01	
	014	16	2.3	4/21/2010	14:08	1.62E+03	4.65E+02	3.90E+02	1.94E+01	2.09E+00	8.38E-01	-1.91E+00	7.13E+00	7.46E+00	6.66E-01	9.22E+00	1.03E+01	-7.52E-01	1.79E+01	2.07E+01	
	015	16	2.3	3/6/2010	13:11	1.21E+03	2.12E+02	1.30E+02	8.64E+00	1.22E+00	4.51E-01	1.13E+00	8.94E+00	1.04E+01	8.02E-01	8.22E+00	9.59E+00	1.17E+01	1.64E+01	1.81E+01	
MW-55-35	001	32	-13.8	11/9/2006	13:40	9.04E+03	1.50E+03	1.00E+03	4.04E+01	4.80E+00	3.30E+00	-1.10E+00	3.30E+00	3.90E+00	-5.00E-01	3.30E+00	4.10E+00	4.30E+00	5.40E+00	5.80E+00	MW-55-35
	002	32	-13.8	6/28/2007	11:50	3.09E+03	2.93E+02	1.84E+02	3.25E+01	3.31E+00	9.74E-01	-4.64E-01	3.46E+00	3.78E+00	-1.00E+00	3.62E+00	3.75E+00	NA	NA	NA	
	003	32	-13.8	3/2/2007	11:20	3.68E+03	7.91E+02	5.33E+02	3.40E+01	3.45E+00	8.95E-01	9.35E-01	3.19E+00	3.24E+00	7.69E-01	2.23E+00	2.70E+00	2.90E+00	1.96E+01	2.28E+01	
	004	32	-13.8	10/16/2007	10:02	5.09E+03	7.34E+02	3.63E+02	3.16E+01	3.04E+00	1.04E+00	2.62E+00	3.36E+00	3.58E+00	1.44E+00	3.44E+00	4.20E+00	NA	NA	NA	
	005	32	-13.8	1/28/2008	11:46	2.33E+03	4.59E+02	2.97E+02	2.64E+01	2.60E+00	5.21E-01	-5.28E-01	2.12E+00	2.26E+00	-6.90E-01	2.19E+00	2.32E+00	1.12E+01	1.76E+01	1.96E+01	
	006	32	-13.8	4/25/2008	12:07	1.60E+03	1.86E+02	1.42E+02	3.44E+01	1.86E+00	6.11E-01	1.46E+00	2.26E+00	4.06E+00	2.34E+00	2.40E+00	4.61E+00	5.22E+00	1.25E+01	2.14E+01	
	007	32	-13.8	3/1/2008	10:47	1.73E+03	2.08E+02	1.91E+02	2.54E+01	1.42E+00	4.28E-01	3.51E-01	2.17E+00	3.74E+00	2.59E-01	2.33E+00	3.99E+00	1.26E+01	1.23E+01	2.05E+01	
	008	32	-13.8	2/4/2009	13:46	8.53E+02	4.28E+02	3.84E+02	1.71E+01	1.82E+00	4.39E-01	1.01E+00	3.14E+00	3.69E+00	1.58E-01	2.78E+00	3.15E+00	8.49E-01	2.30E+01	2.69E+01	
	009	32	-13.8	4/29/2009	11:26	2.70E+03	3.77E+02	1.80E+02	3.51E+01	2.79E+00	6.05E-01	-4.06E+00	6.72E+00	4.48E+00	7.97E-01	4.28E+00	5.04E+00	7.31E+00	2.03E+01	2.28E+01	
	010	32	-13.8	3/5/2009	13:40	2.83E+03	4.19E+02	2.38E+02	4.14E+01	2.88E+00	7.28E-01	-1.22E+00	3.52E+00	3.46E+00	2.68E-01	3.35E+00	3.79E+00	-2.68E+00	2.26E+01	2.61E+01	
	011	32	-13.8	11/2/2009	12:34	2.37E+03	2.64E+02	1.88E+02	2.86E+01	2.40E+00	7.17E-01	6.51E-01	4.23E+00	4.96E+00	2.97E+00	4.46E+00	5.72E+00	-9.10E+00	1.73E+01	2.02E+01	
	012	32	-13.8	2/18/2010	14:03	2.49E+03	2.60E+02	1.74E+02	3.10E+01	3.29E+00	7.35E-01	-2.47E+00	4.86E+00	5.03E+00	1.05E+00	4.83E+00	5.63E+00	-5.22E+00	1.83E+01	2.13E+01	
	013	32	-13.8	4/21/2010	14:31	2.01E+03	4.92E+02	3.90E+02	2.63E+01	2.44E+00	7.84E-01	-4.26E+00	8.04E+00	7.79E+00	2.77E+00	7.27E+00	9.17E+00	-4.98E-01	1.77E+01	2.06E+01	
	014	32	-13.8	3/6/2010	13:15	1.89E+03	2.46E+02	1.25E+02	1.66E+01	1.65E+00	3.57E-01	-4.27E-01	8.60E+00	9.69E+00	4.31E+00	9.66E+00	1.22E+01	9.65E+00	1.62E+01	1.81E+01	
MW-55-54	001	47	-28.8	11/9/2006	13:30	1.31E+04	1.68E+03	1.00E+03	2.28E+01	1.35E+00	8.10E-01	1.00E+00	3.30E+00	3.80E+00	-3.20E+00	4.50E+00	5.70E+00	1.70E+00	4.80E+00	5.40E+00	MW-55-54
	002	47	-28.8	6/28/2007	11:40	1.04E+04	4.79E+02	1.84E+02	2.47E+01	2.88E+00	9.85E-01	1.30E-01	3.09E+00	3.43E+00	-4.69E-01	3.27E+00	3.48E+00	NA	NA	NA	
	003	47	-28.8	3/2/2007	12:00	9.91E+03	1.19E+03	5.51E+02	2.22E+01	2.38E+00	9.10E-01	-1.09E+00	3.69E+00	3.80E+00	1.46E+00	2.87E+00	3.56E+00	6.13E+00	1.99E+01	2.28E+01	
	004	47	-28.8	10/16/2007	10:05	1.03E+04	9.96E+02	3.61E+02	2.23E+01	2.49E+00	6.15E-01	-9.80E-01	2.82E+00	3.02E+00	8.80E-01	3.65E+00	2.99E+00	NA	NA	NA	
	005	47	-28.8	1/28/2008	11:42	7.48E+03	7.35E+02	2.97E+02	2.28E+01	2.40E+00	5.39E-01	-8.47E-01	2.16E+00	2.30E+00	-1.29E+00	2.81E+00	2.20E+00	1.09E+01	1.86E+01	2.09E+01	
	006	47	-28.8	4/25/2008	10:35	5.96E+03	3.39E+02	1.44E+02	2.67E+01	1.62E+00	6.56E-01	1.74E+00	2.35E+00	4.25E+00	1.63E+00	2.59E+00	4.75E+00	7.69E+00	1.25E+01	2.13E+01	

See Page 29 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-55-54	007	47	-28.8	3/1/2008	10:38	6.31E+03	3.59E+02	1.91E+02	2.32E+01	1.30E+00	3.56E-01	6.53E-01	2.07E+00	3.52E+00	1.29E+00	1.79E+00	3.30E+00	1.82E+01	1.26E+01	2.08E+01	MW-55-54
	008	47	-28.8	10/21/2008	10:21	7.76E+03	6.65E+02	1.96E+02	1.94E+01	2.37E+00	6.25E-01	-3.17E+00	5.29E+00	5.27E+00	-1.63E+00	5.43E+00	5.54E+00	-9.99E+00	1.69E+01	2.01E+01	
	009	47	-28.8	2/4/2009	12:42	7.33E+03	9.09E+02	3.82E+02	2.11E+01	2.01E+00	3.69E-01	-3.34E-01	3.11E+00	3.46E+00	-3.64E-01	3.35E+00	3.69E+00	5.24E+00	2.34E+01	2.70E+01	
	010	47	-28.8	4/29/2009	10:55	7.00E+03	5.76E+02	1.80E+02	3.27E+01	2.55E+00	6.48E-01	3.95E-01	6.93E+00	4.62E+00	-1.58E+00	4.23E+00	4.33E+00	2.56E+00	1.79E+01	2.04E+01	
	011	47	-28.8	8/5/2009	13:25	5.47E+03	5.45E+02	2.35E+02	2.85E+01	2.43E+00	6.15E-01	-1.05E-01	2.76E+00	3.04E+00	-1.85E+00	3.19E+00	3.17E+00	8.36E+00	2.34E+01	2.65E+01	
	012	47	-28.8	11/2/2009	12:33	5.82E+03	3.65E+02	1.87E+02	2.33E+01	2.12E+00	4.76E-01	1.23E+00	5.73E+00	6.54E+00	2.82E+00	6.20E+00	7.55E+00	-2.77E+00	1.91E+01	2.20E+01	
	013	47	-28.8	2/18/2010	14:05	8.23E+03	4.13E+02	1.74E+02	1.67E+01	2.22E+00	7.61E-01	-1.16E+00	3.60E+00	3.94E+00	6.65E-01	4.04E+00	4.57E+00	-1.58E+01	1.80E+01	2.15E+01	
	014	47	-28.8	4/21/2010	13:56	1.13E+04	9.27E+02	3.88E+02	2.32E+01	2.31E+00	8.38E-01	-5.23E+00	1.21E+01	1.49E+01	-4.30E+00	1.11E+01	1.10E+01	-3.67E+00	1.79E+01	2.09E+01	
	015	47	-28.8	8/6/2010	12:50	9.74E+03	5.22E+02	1.28E+02	1.93E+01	1.88E+00	3.96E-01	-1.51E+00	7.77E+00	8.26E+00	1.82E+00	7.26E+00	8.71E+00	-1.77E-01	1.41E+01	1.65E+01	
MW-56-53	001	52	18.3	1/4/2007	9:39	7.80E+02	5.40E+02	5.10E+02	-9.00E-02	7.80E-01	8.80E-01	1.36E+01	4.80E+00	4.20E+00	2.00E+00	3.60E+00	3.80E+00	-3.70E+00	6.60E+00	7.80E+00	MW-56-53
	002	52	18.3	6/26/2007	10:51	2.89E+02	1.70E+02	1.82E+02	-4.49E-02	5.50E-01	6.66E-01	-5.30E-01	4.46E+00	4.11E+00	2.93E+00	4.88E+00	4.84E+00	1.30E+00	1.41E+01	1.62E+01	
	003	52	18.3	8/10/2007	12:25	2.16E+02	1.86E+02	2.03E+02	-5.66E-01	6.10E-01	9.04E-01	8.31E-01	2.79E+00	3.21E+00	3.99E-02	2.56E+00	2.85E+00	NA	NA	NA	
	004	52	18.3	1/31/2008	12:30	2.63E+02	1.27E+02	1.31E+02	5.70E-01	8.81E-01	9.77E-01	3.38E-01	3.69E+00	3.87E+00	5.97E-01	3.48E+00	3.99E+00	1.74E+00	1.55E+01	1.80E+01	
	005	52	18.3	10/24/2008	12:21	3.99E+02	1.64E+02	1.65E+02	5.40E-01	5.47E-01	5.45E-01	-7.92E-02	5.88E+00	6.64E+00	-5.42E+00	7.44E+00	6.23E+00	NA	NA	NA	
	006	52	18.3	4/16/2009	11:43	5.00E+02	1.95E+02	1.96E+02	-8.46E-02	6.21E-01	7.53E-01	6.63E-01	6.14E+00	4.09E+00	2.86E+00	3.41E+00	4.34E+00	NA	NA	NA	
	007	52	18.3	11/4/2009	14:09	6.86E+02	1.38E+02	1.03E+02	2.94E-01	6.00E-01	6.81E-01	5.47E-01	6.74E+00	7.50E+00	2.77E+00	6.21E+00	7.63E+00	NA	NA	NA	
	008	52	18.3	4/20/2010	15:23	2.58E+02	1.65E+02	1.75E+02	-1.49E-01	5.35E-01	7.58E-01	3.61E+00	7.63E+00	9.44E+00	-1.55E+00	8.91E+00	9.68E+00	NA	NA	NA	
MW-56-83	001	74	-3.7	9/8/2006	11:15	5.40E+02	1.62E+02	1.26E+02	2.70E+00	1.12E+00	9.59E-01	1.82E+00	6.51E+00	8.45E+00	-2.15E-01	5.23E+00	6.87E+00	NA	NA	NA	MW-56-83
	002	74	-3.7	11/9/2006	10:20	1.65E+02	1.35E+02	1.40E+02	7.00E-02	7.20E-01	8.10E-01	7.70E-01	2.70E+00	3.10E+00	-2.20E-01	2.91E+00	3.50E+00	3.30E+00	5.40E+00	5.80E+00	
	003	74	-3.7	1/4/2007	13:20	1.28E+03	5.70E+02	5.20E+02	2.30E+00	9.00E-01	8.90E-01	1.18E+01	4.80E+00	4.40E+00	1.00E-01	3.00E+00	3.60E+00	-7.00E-01	7.80E+00	8.80E+00	
	004	74	-3.7	6/22/2007	10:44	1.85E+03	5.76E+02	4.30E+02	1.87E+00	1.15E+00	1.09E+00	1.47E-01	3.39E+00	3.85E+00	-1.87E+00	2.82E+00	2.46E+00	3.95E+00	1.27E+01	1.46E+01	
	005	74	-3.7	8/10/2007	11:10	1.49E+03	5.52E+02	4.55E+02	2.43E+00	1.05E+00	9.23E-01	-9.15E-01	3.86E+00	4.02E+00	1.87E-01	2.75E+00	3.15E+00	NA	NA	NA	
	006	74	-3.7	1/31/2008	9:30	1.94E+03	1.97E+02	1.34E+02	3.56E+00	1.34E+00	9.49E-01	-8.03E-01	3.69E+00	3.23E+00	1.60E+00	2.78E+00	3.51E+00	6.57E-01	1.59E+01	1.85E+01	
	007	74	-3.7	10/24/2008	12:22	2.98E+03	7.91E+02	5.91E+02	2.13E+00	7.32E-01	4.94E-01	-1.15E+00	4.62E+00	4.98E+00	3.29E+00	5.58E+00	8.07E+00	NA	NA	NA	
	008	74	-3.7	4/16/2009	11:49	3.24E+03	7.61E+02	4.34E+02	2.71E+00	7.59E-01	4.21E-01	6.03E-03	5.39E+00	3.59E+00	1.38E+00	4.11E+00	4.92E+00	NA	NA	NA	
	009	74	-3.7	11/4/2009	15:47	3.15E+03	2.46E+02	1.02E+02	2.78E+00	8.12E-01	4.70E-01	2.01E+00	5.22E+00	6.13E+00	-1.15E+00	5.96E+00	6.35E+00	NA	NA	NA	
	010	74	-3.7	4/20/2010	14:51	1.93E+03	2.96E+02	1.48E+02	1.99E+00	1.05E+00	8.74E-01	2.04E+00	8.03E+00	9.48E+00	-1.05E+00	8.71E+00	9.04E+00	NA	NA	NA	
MW-57-11	001	10	5	6/22/2007	12:17	4.61E+03	8.10E+02	4.36E+02	4.55E+01	3.96E+00	7.97E-01	2.29E+00	6.04E+00	4.31E+00	3.69E-02	3.87E+00	4.37E+00	2.24E+01	1.79E+01	1.91E+01	MW-57-11
	002	10	5	8/6/2007	12:30	4.09E+03	3.21E+06	1.97E+02	3.79E+01	2.77E+00	5.36E-01	1.15E+00	3.78E+00	4.16E+00	3.95E-03	3.01E+00	3.41E+00	-5.75E-01	2.16E+01	2.50E+01	
	003	10	5	5/5/2008	12:43	2.17E+03	2.29E+02	2.65E+02	2.27E+01	1.95E+00	9.08E-01	8.71E-01	2.21E+00	3.83E+00	2.87E+00	2.26E+00	4.47E+00	-1.12E+00	1.35E+01	2.34E+01	
	004	10	5	11/12/2008	10:55	3.28E+03	2.76E+02	1.73E+02	4.16E+01	3.39E+00	7.64E-01	3.34E+00	7.25E+00	4.76E+00	1.81E+00	3.78E+00	5.03E+00	-5.18E-01	2.03E+01	2.35E+01	
	005	10	5	4/21/2009	12:08	4.22E+03	4.29E+02	1.90E+02	4.72E+01	2.97E+00	5.57E-01	3.89E+00	6.71E+00	4.47E+00	1.11E+00	2.76E+00	3.35E+00	4.47E+00	1.98E+01	2.25E+01	
	006	10	5	5/4/2010	12:36	3.27E+03	3.48E+02	1.72E+02	2.46E+01	3.00E+00	8.46E-01	8.07E-01	6.20E+00	6.51E+00	1.85E-01	5.09E+00	5.67E+00	-1.79E+01	2.21E+01	2.56E+01	
MW-57-20	001	19	-4	6/22/2007	12:30	1.65E+03	5.58E+02	4.32E+02	1.96E+00	1.07E+00	9.67E-01	-1.33E+00	3.69E+00	3.90E+00	-9.51E-01	3.65E+00	3.84E+00	4.77E-01	1.36E+01	1.59E+01	MW-57-20
	002	19	-4	8/6/2007	12:15	9.96E+02	2.15E+02	1.96E+02	1.23E+00	6.67E-01	5.78E-01	1.21E+00	3.59E+00	3.64E+00	6.05E-01	2.75E+00	3.22E+00	-1.19E+01	2.06E+01	2.46E+01	
	003	19	-4	5/5/2008	13:18	7.27E+02	1.45E+02	1.97E+02	1.23E+00	2.16E-01	2.85E-01	-2.17E+00	1.99E+00	2.84E+00	-9.61E-01	3.60E+00	4.56E+00	-6.89E+00	9.27E+00	1.62E+01	
	004	19	-4	11/12/2008	11:30	1.51E+03	2.16E+02	1.72E+02	3.06E+00	1.30E+00	1.14E+00	-1.91E+00	3.94E+00	3.82E+00	-4.35E-01	3.52E+00	3.67E+00	-5.58E-01	1.94E+01	2.25E+01	
	005	19	-4	4/21/2009	12:22	1.52E+03	2.87E+02	1.90E+02	2.77E+00	1.02E+00	8.57E-01	-2.08E+00	5.76E+00	3.84E+00	2.32E+00	3.15E+00	4.06E+00	1.34E+01	2.16E+01	2.41E+01	
	006	19	-4	5/4/2010	12:45	8.07E+02	2.04E+02	1.61E+02	1.12E+00	9.05E-01	8.77E-01	-2.11E+00	7.95E+00	8.24E+00	-2.23E-01	7.54E+00	8.56E+00	-6.07E+00	2.19E+01	2.51E+01	
MW-57-45	001	40	-25	8/24/2006	9:30	4.00E+03	6.98E+02	3.17E+02	1.88E+01	3.51E+00	2.11E+00	-5.40E-01	6.75E+00	7.36E+00	1.19E+00	6.35E+00	7.50E+00	8.29E+00	9.09E+00	9.70E+00	MW-57-45
	001	40	-25	8/24/2006	9:30	4.06E+03	8.82E+02	7.71E+02	NA	NA	NA	-2.85E-01	4.41E+00	4.80E+00	-1.81E-01	3.89E+00	4.37E+00	NA	NA	NA	
	002	40	-25	6/22/2007	12:55	9.55E+02	4.85E+02	4.35E+02	1.90E+00	1.05E+00	8.65E-01	-1.97E-01	3.40E+00	3.82E+00	-8.51E-01	3.50E+00	3.65E+00	6.46E-01	1.23E+01	1.43E+01	
	003	40	-25	8/6/2007	12:17	7.40E+02	2.07E+02	1.98E+02	2.55E+00	8.77E-01	6.09E-01	-3.91E-01	3.15E+00	3.42E+00	-1.89E-01	3.59E+00	3.35E+00	-1.15E+01	2.09E+01	2.49E+01	
	004	40	-25	5/5/2008	14:59	5.65E+02	1.38E+02	1.97E+02	2.26E+00	2.91E-01	3.68E-01	-1.35E-01	1.68E+00	2.84E+00	-4.61E-01	1.66E+00	2.69E+00	-3.60E+00	9.38E+00	1.62E+01	
	005	40	-25	11/12/2008	13:22	1.13E+03	2.01E+02	1.73E+02	1.20E+00	6.79E-01	5.97E-01	1.72E-01	3.63E+00	4.05E+00	9.15E-01	4.42E+00	5.17E+00	-2.81E+00	1.91E+01	2.22E+01	
	006	40	-25	4/21/2009	13:34	1.19E+03	2.64E+02	1.90E+02	2.25E+00	8.36E-01	6.44E-01	1.80E-01	5.64E+00	3.76E+00	-1.30E+00	3.95E+00	4.12E+00	8.26E+00	2.09E+01	2.35E+01	
	007	40	-25	5/4/2010	13:24	8.79E+02	2.19E+02	1.72E+02	1.30E+00	9.43E-01	8.65E-01	6.16E-02	5.31E+00	5.86E+00	-2.99E-01	4.77E+00	5.16E+00	7.57E-01	2.26E+01	2.58E+01	
MW-58-26	001	20	-5.4	11/16/2006	13:25	-2.60E-01	1.59E+02	1.60E+02	3.70E-01	7.50E-01	8.20E-01	7.27E+01	8.40E+00	4.50E+00	-9.00E-01	3.30E+00	4.30E+00	-3.20E+00	5.70E+00	6.40E+00	MW-58-26
	002	20	-5.4	1/5/2007	8:57	2.60E+02	1.80E+02	1.80E+02	-8.00E-02	7.50E-01	8.50E-01	2.34E+00	2.97E+00	3.20E+00	9.50E-01	2.73E+00	3.10E+00	-3.90E+00	6.30E+00	7.40E+00	
	003	20	-5.4	6/21/2007	11:10	5.97E+02	2.00E+02	1.86E+02	1.04E+00	6.09E-01	5.25E-01	1.62E+00	2.42E+00	2.86E+00	-3.94E-01	2.42E+00	2.60E+00	1.07E+00	1.24E+01	1.45E+01	
	004	20	-5.4	7/31/2007	11:00	8.56E+02	3.99E+02	2.58E+02	1.02E+00	6.33E-01	5.78E-01	1.18E+00	3.31E+00	3.83E+00	4.20E-01	3.01E+00	3.51E+00	NA	NA	NA	
	005	20	-5.4	1/22/2008	13:20	2.95E+02	1.62E+02	1.70E+02	-1.43E-01	4.65E-01	6.60E-01	9.19E-01	2.31E+00	2.67E+00	-5.41E-02	2.57E+00	2.61E+00	NA	NA	NA	
	006	20	-5.4	11/7/2008	13:39	2.38E+02	1.55E+02	1.63E+02	2.31E-01	6.60E-01	7.90E-01	-3.38E+00	6.24E+00	5.49E+00	-3.23E-01	4.58E+00	4.84E+00	NA	NA	NA	
	007	20	-5.4	2/3/2009	12:49	5.19E+02	2.36E+02	1.98E+02	-8.35E-03	5.27E-01	6.83E-01	1.40E+00	2.76E+00	3.29E+00	1.45E-01	3.09E+00	3.31E+00	NA	NA	NA	
	008	20	-5.4	4/24/2009	12:21	4.13E+02	1.48E+02	1.47E+02	-5.74E-02	4.53E-01	5.97E-01	1.26E+00	4.28E+00	2.85E+00	1.02E-01	2.31E+00	2.57E+00	NA	NA	NA	
	009	20	-5.4	10/23/2009	13:10	4.23E+02	1.67E+02	1.68E+02	4.74E-01	6.36E-01	6.95E-01	1.68E+00	5.05E+00	5.98E+00	2.49E+00	5.68E+00	6.94E+00	NA	NA	NA	
	010	20	-5.4	4/30/2010	14:12	5.75E+02	1.80E+02	1.82E+02	2.92E-01	5.47E-01	6.20E-01	4.25E-01	5.59E+00	6.27E+00	9.40E-01	5.75E+00	6.68E+00	NA	NA	NA	
MW-58-65	001	54	-39.4	11/16/2006	13:18	-9.60E-01	1.59E+02	1.60E+02	-6.00E-02	7.20E-01	8.10E-01	2.20E+00	3.00E+00	3.30E+00	-9.00E-01	4.20E+00	4.90E+00	-3.40E+00	6.90E+00	7.80E+00	MW-58-65
	002	54	-39.4	1/5/2007	9:25	5.50E+02	5.40E+02	5.20E+02	1.60E-01	8.10E-01	8.80E-01	-1.95E+00	2.52E+00	3.00E+00	-1.30E-01	2.73E+00	3.20E+00	-1.40E+00	7.80E+00	8.70E+00	
	003	54	-39.4	6/21/2007	11:10	3.15E+02	1.77E+02	1.81E+02	-1.90E-01	3.96E-01	5.60E-01	-2.19E-01	2.37E+00	2.65E+00	-2.89E+00	3.17E+00	2.36E+00	2.80E+00	1.26E+01	1.45E+01	
	004	54	-39.4	7/31/2007	11:00	3.42E+02	3.02E+02	2.72E+02	6.20E-03	5.19E-01	6.52E-01	2.18E+00	3.39E+00	3.37E+00	1.02E+00	3.24E+00	3.39E+00	NA	NA	NA	
	005	54	-39.4	1/22/2008	12:00	3.13E+02	1.62E+02	1.69E+02	1.21E-01	5.85E-01	7.22E-01	5.54E-01	3.93E+00	3.92E+00	-1.23E-01	3.29E+00	3.05E+00	NA	NA	NA	
	006	54	-39.4	11/7/2008	13:55	2.81E+02	1.55E+02	1.62E+02	8.19E-01	8.77E-01	8.82E-01	9.13E-02	3.38E+00	3.86E+00	-1.58E+00	3.21E+00	2.98E+00	NA	NA	NA	
	007	54	-39.4	2/3/2009	12:05	2.75E+02	2.03E+02	1.98E+02	6.60E-01	8.00E-01	8.56E-01	-8.45E-01	3.21E+00	3.41E+00	1.91E+00	3.09E+00	3.89E+00	NA	NA	NA	
	008	54	-39.4	4/24/2009	11:52	2.33E+02	1.67E+02	1.78E+02	-2.36E-01	4.62E-01	6.58E-01	9.67E-02	3.86E+00	2.57E+00	-1.84E-01	2.46E+00	2.72E+00	NA	NA	NA	
	009	54	-39.4	10/23/2009	12:53	2.37E+02	1.56E+02	1.65E+02	6.33E-01	6.12E-01	6.29E-01	7.13E-01	5.70E+00	6.42E+00	2.46E+00	5.97E+00	7.18E+00	NA	NA	NA	
	010	54	-39.4	4/30/2010	13:51	3.59E+02	1.64E+02	1.72E+02	7.38E-02	5.17E-01	6.40E-01	1.50E+00	8.09E+00	9.07E+00	3.34E-01	5.75E+00	6.60E+00	NA	NA	NA	

See Page 29 for Notes

IPEC00263602

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-59-32	001	27	-12.5	11/16/2006	11:05	2.80E+01	1.77E+02	1.80E+02	-6.00E-02	7.20E-01	7.90E-01	8.60E-01	2.91E+00	3.30E+00	3.00E-01	4.20E+00	4.90E+00	-2.60E+00	6.60E+00	7.50E+00	MW-59-32
	002	27	-12.5	1/5/2007	9:41	1.35E+02	1.77E+02	1.80E+02	3.00E-01	7.50E-01	8.20E-01	1.50E+00	3.60E+00	4.10E+00	1.30E+00	3.90E+00	4.40E+00	-1.90E+00	6.90E+00	8.10E+00	
	003	27	-12.5	6/21/2007	15:25	4.67E+02	4.23E+02	4.36E+02	-6.68E-02	6.78E-01	9.11E-01	6.01E-01	3.96E+00	4.59E+00	-4.19E-01	4.16E+00	4.71E+00	-4.37E-01	1.24E+01	1.45E+01	
	004	27	-12.5	7/31/2007	14:35	1.69E+02	1.59E+02	1.63E+02	2.00E-01	6.72E-01	7.96E-01	2.26E-01	3.30E+00	3.73E+00	7.97E-01	3.19E+00	3.75E+00	NA	NA	NA	
MW-59-45	001	42	-27.5	11/16/2006	11:18	5.50E+01	1.74E+02	1.70E+02	2.40E-01	7.20E-01	8.00E-01	3.74E+01	8.70E+00	6.20E+00	2.60E+00	4.20E+00	4.50E+00	-1.60E+00	5.70E+00	6.60E+00	MW-59-45
	002	42	-27.5	1/5/2007	9:48	8.80E+01	1.80E+02	1.80E+02	0.00E+00	7.80E-01	8.70E-01	1.49E+02	1.26E+01	4.90E+00	2.00E-01	3.90E+00	4.60E+00	-2.50E+00	7.50E+00	8.60E+00	
	003	42	-27.5	6/21/2007	15:25	7.54E+02	4.59E+02	4.34E+02	-2.74E-01	6.86E-01	9.10E-01	-1.10E-01	2.50E+00	2.83E+00	8.14E-02	2.16E+00	2.49E+00	7.74E-01	1.47E+01	1.71E+01	
	004	42	-27.5	7/31/2007	13:58	2.49E+02	1.74E+02	1.65E+02	1.64E-01	5.90E-01	7.05E-01	4.48E-01	3.52E+00	3.70E+00	7.64E-01	3.35E+00	3.94E+00	NA	NA	NA	
MW-59-68	001	58	-43.5	11/16/2006	11:30	3.50E+01	1.74E+02	1.80E+02	1.20E-01	7.20E-01	8.10E-01	1.15E+02	1.11E+01	5.60E+00	1.00E+00	3.00E+00	3.60E+00	-2.30E+00	5.70E+00	6.40E+00	MW-59-68
	002	58	-43.5	1/5/2007	10:05	1.56E+02	1.83E+02	1.80E+02	3.30E-01	8.10E-01	8.90E-01	6.76E+01	6.60E+00	4.10E+00	-8.00E-01	3.60E+00	4.10E+00	1.90E+00	7.50E+00	8.40E+00	
	003	58	-43.5	6/21/2007	15:25	5.90E+02	4.41E+02	4.39E+02	2.97E-01	8.79E-01	1.03E+00	6.26E-01	3.50E+00	3.80E+00	1.27E+00	2.91E+00	3.62E+00	-4.23E+00	1.30E+01	1.56E+01	
	004	58	-43.5	7/31/2007	13:58	8.19E+02	4.02E+02	2.68E+02	3.66E-01	7.08E-01	7.98E-01	9.02E-01	2.88E+00	2.95E+00	3.72E-01	2.77E+00	3.17E+00	NA	NA	NA	
MW-60-35	001	34.9	-22.4	5/8/2007	13:27	-9.12E+00	1.49E+02	1.79E+02	-1.79E-01	5.28E-01	7.62E-01	1.41E+00	4.84E+00	3.30E+00	2.45E+00	3.72E+00	4.67E+00	0.00E+00	1.81E+01	2.12E+01	MW-60-35
	002	34.9	-22.4	7/27/2007	13:07	7.61E+02	2.40E+02	1.78E+02	6.48E-02	3.80E-01	4.66E-01	5.95E-01	4.26E+00	3.23E+00	-3.31E-01	3.07E+00	3.39E+00	NA	NA	NA	
	003	34.9	-22.4	10/9/2007	13:20	1.84E+02	1.48E+02	1.51E+02	3.01E-01	5.97E-01	6.78E-01	1.51E+00	6.06E+00	3.54E+00	0.00E+00	2.64E+00	2.61E+00	NA	NA	NA	
	004	34.9	-22.4	1/14/2008	17:05	7.78E+01	1.58E+02	1.78E+02	5.05E-01	8.10E-01	8.98E-01	1.11E+00	3.21E+00	3.79E+00	-9.16E-01	3.36E+00	3.54E+00	NA	NA	NA	
	005	34.9	-22.4	4/24/2008	15:30	5.51E+01	1.14E+02	1.95E+02	3.45E-01	4.83E-01	8.34E-01	-8.41E-01	2.06E+00	3.37E+00	-8.73E-01	1.68E+00	2.56E+00	NA	NA	NA	
	006	34.9	-22.4	7/30/2008	16:10	1.95E+02	1.21E+02	1.91E+02	2.85E-01	3.50E-01	5.92E-01	1.81E+00	1.93E+00	3.50E+00	-1.19E+00	2.07E+00	3.20E+00	NA	NA	NA	
	007	34.9	-22.4	11/5/2008	15:03	1.42E+02	1.80E+02	1.99E+02	1.62E-01	5.01E-01	6.09E-01	-2.38E+00	5.87E+00	6.17E+00	-3.83E+00	8.52E+00	7.56E+00	NA	NA	NA	
	008	34.9	-22.4	2/9/2009	16:12	2.00E+02	1.83E+02	1.98E+02	3.81E-01	8.27E-01	9.42E-01	-1.20E+00	3.09E+00	3.19E+00	-3.23E-01	3.00E+00	3.22E+00	-3.26E+00	2.39E+01	2.82E+01	
	009	34.9	-22.4	5/5/2009	14:06	1.54E+02	1.64E+02	1.71E+02	2.06E-01	6.48E-01	7.50E-01	1.11E+00	8.76E+00	5.84E+00	7.57E-01	5.60E+00	6.58E+00	NA	NA	NA	
	010	34.9	-22.4	8/11/2009	14:41	2.60E+02	1.49E+02	1.53E+02	3.16E-01	4.41E-01	4.71E-01	2.47E+00	5.67E+00	6.63E+00	3.46E+00	6.18E+00	7.58E+00	5.77E+00	1.79E+01	2.03E+01	
	011	34.9	-22.4	10/30/2009	15:10	2.29E+02	1.52E+02	1.61E+02	2.24E-01	6.33E-01	7.51E-01	-3.67E+00	1.00E-01	1.12E+01	4.15E+00	6.72E+00	8.44E+00	NA	NA	NA	
	012	34.9	-22.4	3/1/2010	11:18	2.48E+02	1.64E+02	1.74E+02	5.08E-01	6.83E-01	7.32E-01	-1.38E+00	6.15E+00	5.99E+00	-1.00E+00	3.76E+00	4.07E+00	-1.11E+01	1.88E+01	2.21E+01	
	013	34.9	-22.4	5/10/2010	15:58	2.85E+02	1.46E+02	1.35E+02	2.89E-02	5.05E-01	6.56E-01	-1.78E+00	7.56E+00	8.03E+00	-1.43E+00	9.12E+00	9.76E+00	4.12E-01	2.24E+01	2.56E+01	
	014	34.9	-22.4	8/16/2010	14:43	2.35E+02	1.42E+02	1.41E+02	3.19E-01	6.48E-01	7.39E-01	3.02E-01	5.73E+00	6.47E+00	-1.36E+00	6.23E+00	6.68E+00	-4.52E+00	2.14E+01	2.52E+01	
MW-60-53	001	53.4	-40.9	5/8/2007	11:52	5.32E+01	1.58E+02	1.82E+02	-4.92E-01	5.52E-01	8.96E-01	-2.83E+00	4.86E+00	4.07E+00	2.15E-01	3.59E+00	4.12E+00	3.58E+00	1.84E+01	2.12E+01	MW-60-53
	002	53.4	-40.9	7/27/2007	12:50	1.25E+02	1.71E+02	1.87E+02	-4.72E-01	5.26E-01	7.31E-01	1.46E-01	3.01E+00	3.34E+00	7.87E-01	3.25E+00	3.79E+00	NA	NA	NA	
	003	53.4	-40.9	10/9/2007	12:22	1.13E+02	1.44E+02	1.56E+02	6.19E-01	6.50E-01	6.79E-01	-2.11E+00	3.39E+00	3.51E+00	3.62E-01	2.79E+00	3.21E+00	NA	NA	NA	
	004	53.4	-40.9	1/14/2008	15:40	5.35E+01	1.55E+02	1.78E+02	-1.69E-01	5.28E-01	7.59E-01	-1.10E+00	2.78E+00	2.88E+00	-1.89E+00	2.94E+00	2.76E+00	NA	NA	NA	
	005	53.4	-40.9	4/24/2008	12:18	-1.77E-01	1.12E+02	1.96E+02	5.27E-01	5.19E-01	8.52E-01	-4.84E-01	2.47E+00	4.13E+00	-1.36E+00	2.50E+00	3.95E+00	NA	NA	NA	
	006	53.4	-40.9	7/30/2008	13:23	1.28E+02	9.80E+01	1.63E+02	6.53E-01	5.33E-01	8.58E-01	-1.68E-01	2.09E+00	3.43E+00	1.05E+00	2.04E+00	3.65E+00	NA	NA	NA	
	007	53.4	-40.9	11/5/2008	14:32	1.38E+02	1.80E+02	1.99E+02	-1.95E-01	5.82E-01	8.17E-01	8.77E-01	4.58E+00	5.22E+00	1.30E+00	5.78E+00	6.68E+00	NA	NA	NA	
	008	53.4	-40.9	2/9/2009	11:28	1.31E+02	1.79E+02	1.98E+02	4.81E-01	8.09E-01	9.06E-01	-1.28E+00	3.80E+00	3.55E+00	5.34E-01	2.78E+00	3.22E+00	-1.24E+00	2.43E+01	2.85E+01	
	009	53.4	-40.9	5/5/2009	10:08	4.99E+02	2.12E+02	1.75E+02	6.40E-02	6.75E-01	8.02E-01	7.73E-01	1.18E-01	7.89E+00	-3.04E+00	8.30E+00	7.85E+00	0.00E+00	2.39E+01	2.81E+01	
	010	53.4	-40.9	8/11/2009	14:26	2.03E+02	1.56E+02	1.69E+02	1.35E-01	7.18E-01	8.69E-01	1.11E+00	4.86E+00	5.53E+00	4.62E-02	4.88E+00	5.44E+00	-3.23E+00	1.71E+01	2.00E+01	
	011	53.4	-40.9	10/30/2009	14:19	1.47E+02	1.47E+02	1.61E+02	1.24E-01	4.95E-01	6.12E-01	-2.86E-01	6.88E+00	7.53E+00	-3.34E-02	6.96E+00	7.65E+00	NA	NA	NA	
	012	53.4	-40.9	3/1/2010	11:07	1.37E+02	1.59E+02	1.75E+02	1.14E-01	5.66E-01	7.00E-01	-1.22E+00	4.51E+00	4.92E+00	-8.72E-01	4.93E+00	5.33E+00	-5.31E+00	1.95E+01	2.27E+01	
	013	53.4	-40.9	5/10/2010	16:31	3.45E+02	1.58E+02	1.41E+02	-9.87E-02	4.95E-01	6.82E-01	8.10E-01	7.58E+00	8.81E+00	-2.08E+00	8.49E+00	9.02E+00	-5.02E+00	2.07E+01	2.40E+01	
	014	53.4	-40.9	8/16/2010	15:34	2.58E+02	1.50E+02	1.60E+02	-2.84E-02	4.87E-01	6.04E-01	-8.42E+00	7.92E+00	7.70E+00	-2.64E+00	6.03E+00	6.02E+00	-8.48E+00	1.98E+01	2.37E+01	
MW-60-72	001	72.4	-59.9	5/8/2007	12:17	-9.26E+00	1.52E+02	1.82E+02	2.87E-01	8.13E-01	9.71E-01	1.61E+00	4.72E+00	3.33E+00	9.40E-01	3.21E+00	3.82E+00	8.28E-01	1.69E+01	1.97E+01	MW-60-72
	002	72.4	-59.9	7/27/2007	13:22	1.10E+02	1.64E+02	1.81E+02	-3.27E-01	4.92E-01	5.76E-01	4.79E-01	3.96E+00	4.51E+00	-1.10E+00	3.94E+00	4.17E+00	NA	NA	NA	
	003	72.4	-59.9	10/9/2007	14:15	1.24E+02	1.43E+02	1.54E+02	1.64E-01	6.00E-01	7.12E-01	7.48E-01	3.78E+00	4.27E+00	6.12E-01	3.76E+00	4.33E+00	NA	NA	NA	
	004	72.4	-59.9	1/14/2008	14:12	1.36E+02	1.65E+02	1.78E+02	1.58E-01	5.93E-01	7.23E-01	5.42E-03	3.33E+00	3.56E+00	8.47E-01	2.97E+00	3.54E+00	NA	NA	NA	
	005	72.4	-59.9	4/24/2008	12:20	1.65E+02	1.17E+02	1.93E+02	3.08E-01	4.82E-01	8.38E-01	-5.33E-01	2.37E+00	3.92E+00	1.80E-01	2.23E+00	3.75E+00	NA	NA	NA	
	006	72.4	-59.9	7/30/2008	13:25	8.27E+01	9.69E+01	1.63E+02	1.73E-01	1.41E-01	2.33E-01	-8.79E-01	2.39E+00	3.91E+00	-1.11E+00	2.47E+00	3.96E+00	NA	NA	NA	
	007	72.4	-59.9	11/5/2008	14:58	1.94E+02	1.64E+02	1.78E+02	2.09E-01	6.54E-01	7.78E-01	-9.53E-01	5.68E+00	6.09E+00	-1.43E+00	5.36E+00	5.64E+00	NA	NA	NA	
	008	72.4	-59.9	2/9/2009	11:25	1.67E+02	1.55E+02	1.69E+02	-4.16E-01	7.19E-01	9.60E-01	-6.54E-01	3.00E+00	3.30E+00	7.83E-01	3.09E+00	3.69E+00	-9.25E+00	2.24E+01	2.66E+01	
	009	72.4	-59.9	5/5/2009	10:32	1.57E+02	1.67E+02	1.75E+02	6.32E-02	6.66E-01	7.71E-01	2.29E+00	1.10E-01	7.32E+00	1.75E+00	6.02E+00	7.24E+00	NA	NA	NA	
	010	72.4	-59.9	8/11/2009	10:40	1.73E+02	1.55E+02	1.69E+02	6.31E-02	5.38E-01	6.80E-01	2.68E+00	3.88E+00	4.62E+00	4.36E+00	6.15E+00	5.86E+00	-2.42E+00	1.76E+01	2.04E+01	
	011	72.4	-59.9	10/30/2009	11:08	1.73E+02	1.48E+02	1.61E+02	4.02E-02	3.89E-01	4.83E-01	-3.13E+00	5.89E+00	5.96E+00	2.57E+00	7.02E+00	8.35E+00	NA	NA	NA	
	012	72.4	-59.9	2/25/2010	11:31	1.27E+02	1.58E+02	1.74E+02	-5.98E-02	5.52E-01	7.30E-01	-6.83E+00	8.12E+00	7.73E+00	-1.09E+00	4.88E+00	5.26E+00	-4.85E+00	1.94E+01	2.26E+01	
	013	72.4	-59.9	5/10/2010	12:11	3.01E+02	1.52E+02	1.40E+02	1.57E-02	5.49E-01	7.10E-01	-3.66E+00	1.29E-01	1.58E+01	-7.77E+00	1.16E+01	1.10E+01	-6.97E+00	2.07E+01	2.41E+01	
	014	72.4	-59.9	8/17/2010	11:59	2.33E+01	1.23E+02	1.44E+02	1.97E-01	5.90E-01	6.91E-01	-5.91E-01	5.40E+00	6.06E+00	-1.59E+00	6.08E+00	6.57E+00	1.19E+00	2.04E+01	2.37E+01	
MW-60-135	001	134.9	-122.4	5/8/2007	12:03	2.54E+01	1.55E+02	1.81E+02	3.35E-01	6.77E-01	7.74E-01	-1.05E+00	3.50E+00	3.08E+00	1.74E-01	3.12E+00	3.52E+00	4.54E+00	1.77E+01	2.02E+01	MW-60-135
	002	134.9	-122.4	7/27/2007	16:00	3.92E+02	2.03E+02	1.81E+02	-2.13E-01	3.09E-01	4.69E-01	2.78E-02	2.70E+00	3.07E+00	1.78E-01	2.63E+00	3.04E+00	NA	NA	NA	
	003	134.9	-122.4	10/9/2007	14:20	5.20E+02	1.83E+02	1.50E+02	-2.59E-01	4.46E-01	6.31E-01	-1.55E+00	3.40E+00	3.52E+00	-8.88E-02	3.57E+00	3.94E+00	NA	NA	NA	
	004	134.9	-122.4	1/14/2008	14:19	3.79E+02	1.89E+02	1.74E+02	-1.70E-01	6.17E-01	8.52E-01	-1.33E+00	3.14E+00	3.25E+00	4.22E-01	3.17E+00	3.59E+00	NA	NA	NA	
	005	134.9	-122.4	4/24/2008	12:31	5.85E+02	1.33E+02	1.93E+02	-1.98E-02	3.17E-01	6.59E-01	1.16E+00	2.24E+00	3.93E+00	-1.70E+00	2.67E+00	3.93E+00	NA	NA	NA	
	006	134.9	-122.4	7/30/2008	13:33	4.91E+02	1.42E+02	1.91E+02	1.70E-01	3.44E-01	6.18E-01	-4.68E-01	1.79E+00	2.88E+00	1.43E+00	2.00E+00	3.61E+00	NA	NA	NA	
	007	134.9	-122.4	11/6/2008	10:49	4.25E+02	2.01E+02	1.99E+02	-1.71E-01	5.01E-01	7.18E-01	-2.18E-02	5.71E+00	6.40E+00	-3.93E+00	6.25E+00	5.99E+00	NA	NA	NA	
	008	134.9	-122.4	2/9/2009	12:04	3.83E+02	1.67E+02	1.69E+02	5.52E-01	5.96E-01	6.39E-01	1.42E+00	2.96E+00	3.48E+00	4.24E-01	3.05E+00	3.35E+00	3.74E+00	2.27E+01	2.58E+01	
	009	134.9	-122.4	5/5/2009	10:54	3.17E+02	1.85E+02	1.71E+02	-1.77E-01	6.12E-01	7.45E-01	-3.22E+00	1.31E-01	8.76E+00	3.12E-01	6.81E+00	7.64E+00	NA	NA	NA	
	010	134.9	-122.4	8/11/2009	10:52	3.46E+02	1.64E+02	1.69E+02	4.65E-01	5.88E-01	6.16E-01	1.76E+00	3.36E+00	4.03E+00	4.56E-01	3.51E+00	3.93E+00	-3.72E+00	1.77E+01	2.07E+01	
	011	134.9	-122.4	10/30/2009	10:55	3.17E+02	1.55E+02	1.61E+02	-1.77E-01	5.93E-01	7.61E-01	1.75E+00	6.83E+00	7.81E+00	-2.32E+00	6.58E+00	6.63E+00	NA	NA	NA	
	012	134.9	-122.4	2/25/2010	11:43	3.14E+02	1.68E+02	1.75E+02	1.21E-01	5.95E-01	7.32E-01	6.09E-01	4.11E+00	4.72E+00	-5.16E+00	7.25E+00	5.27E+00	-1.29E+00	1.89E+01	2.18E+01	
	013	134.9	-122.4	5/10/2010	12:21	4.18E+02	1.80E+02	1.65E+02	-9.46E-02	6.05E-01	8.55E-01	1.55E+00	7.70E+00	9.03E+00	6.68E-03	8.37E+00	9.36E+00	-8.62E+00	2.04E+01	2.38E+01	

See Page 29 for Notes

IPEC00263603

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-60-135	014	134.9	-122.4	8/17/2010	12:09	1.87E+02	1.39E+02	1.43E+02	-2.74E-01	5.38E-01	7.27E-01	-3.46E+00	8.41E+00	9.07E+00	-1.52E+00	6.30E+00	6.70E+00	8.77E-01	2.11E+01	2.45E+01	MW-60-135
MW-60-154	001	154.4	-141.9	5/8/2007	12:33	4.13E+01	1.55E+02	1.80E+02	3.06E-01	8.13E-01	9.50E-01	1.97E-01	3.46E+00	3.86E+00	1.46E+00	3.75E+00	4.46E+00	5.52E-01	1.68E+01	1.97E+01	MW-60-154
	002	154.4	-141.9	7/27/2007	16:18	4.62E+02	2.09E+02	1.79E+02	-1.53E-01	3.46E-01	4.09E-01	8.09E-01	4.23E+00	4.60E+00	3.71E+00	2.42E+00	3.80E+00	NA	NA	NA	
	003	154.4	-141.9	10/9/2007	14:23	5.80E+02	1.88E+02	1.50E+02	-1.92E-02	4.98E-01	6.33E-01	-1.63E+00	3.50E+00	3.68E+00	2.20E-01	3.30E+00	3.76E+00	NA	NA	NA	
	004	154.4	-141.9	1/14/2008	12:35	5.59E+02	2.13E+02	1.79E+02	1.10E+00	1.17E+00	1.24E+00	1.59E+00	3.84E+00	4.46E+00	2.92E-01	4.35E+00	4.82E+00	NA	NA	NA	
	005	154.4	-141.9	4/24/2008	12:36	4.53E+02	1.28E+02	1.94E+02	-2.44E-01	3.65E-01	7.77E-01	-1.25E+00	2.37E+00	3.69E+00	1.29E+00	2.06E+00	3.79E+00	NA	NA	NA	
	006	154.4	-141.9	7/30/2008	13:35	5.16E+02	1.44E+02	1.91E+02	5.10E-01	2.50E-01	3.30E-01	-8.80E-01	2.67E+00	3.58E+00	4.30E-01	1.89E+00	3.25E+00	NA	NA	NA	
	007	154.4	-141.9	11/6/2008	11:19	6.87E+02	4.16E+02	3.86E+02	4.32E-01	6.57E-01	7.19E-01	2.47E+00	4.96E+00	5.91E+00	5.49E-01	5.87E+00	6.61E+00	NA	NA	NA	
	008	154.4	-141.9	2/9/2009	12:23	4.15E+02	1.65E+02	1.67E+02	4.63E-01	7.98E-01	8.96E-01	7.14E-01	3.02E+00	3.45E+00	1.01E+00	3.54E+00	4.13E+00	-3.74E+00	2.09E+01	2.42E+01	
	009	154.4	-141.9	5/5/2009	11:15	4.39E+02	2.01E+02	1.72E+02	7.36E-02	5.70E-01	6.88E-01	-2.52E-01	6.89E+00	4.59E+00	-1.47E+00	5.07E+00	5.42E+00	NA	NA	NA	
	010	154.4	-141.9	8/11/2009	11:14	5.13E+02	1.71E+02	1.69E+02	-3.52E-01	7.18E-01	9.69E-01	-3.93E-01	5.04E+00	5.67E+00	-2.99E+00	6.06E+00	5.34E+00	1.97E+00	1.80E+01	2.08E+01	
	011	154.4	-141.9	10/30/2009	10:56	4.09E+02	1.59E+02	1.61E+02	4.48E-01	8.40E-01	9.50E-01	1.34E+01	7.70E+00	6.69E+00	-1.32E-01	6.27E+00	7.01E+00	NA	NA	NA	
	012	154.4	-141.9	2/25/2010	11:45	3.78E+02	1.71E+02	1.74E+02	1.97E-01	6.63E-01	7.90E-01	1.32E+00	4.72E+00	5.42E+00	-4.38E-04	4.86E+00	5.45E+00	-1.32E+01	1.84E+01	2.19E+01	
	013	154.4	-141.9	5/10/2010	12:32	4.38E+02	1.85E+02	1.69E+02	3.52E-01	6.25E-01	7.01E-01	-1.33E+00	8.40E+00	9.22E+00	1.61E-01	7.65E+00	8.61E+00	-5.15E+00	2.13E+01	2.46E+01	
	014	154.4	-141.9	8/17/2010	12:18	2.93E+02	1.50E+02	1.45E+02	-2.33E-01	5.00E-01	6.61E-01	-4.41E-01	6.04E+00	6.67E+00	1.95E+00	6.78E+00	8.02E+00	-1.16E+00	2.13E+01	2.48E+01	
MW-60-176	001	175.9	-163.4	5/8/2007	15:16	5.30E+02	2.01E+02	1.80E+02	6.88E-02	5.66E-01	7.29E-01	3.49E-01	4.54E+00	4.38E+00	1.14E+00	3.90E+00	3.98E+00	7.69E+00	1.73E+01	1.96E+01	MW-60-176
	002	175.9	-163.4	7/27/2007	17:35	8.49E+02	2.49E+02	1.78E+02	-4.60E-01	5.84E-01	7.87E-01	2.00E+00	3.29E+00	4.00E+00	-1.76E+00	3.15E+00	3.03E+00	NA	NA	NA	
	003	175.9	-163.4	10/9/2007	14:57	7.02E+02	2.01E+02	1.53E+02	-5.93E-02	5.11E-01	6.64E-01	-2.68E-01	2.63E+00	2.85E+00	3.91E-01	2.71E+00	3.09E+00	NA	NA	NA	
	004	175.9	-163.4	1/14/2008	12:25	6.68E+02	2.25E+02	1.83E+02	-7.68E-02	7.89E-01	1.04E+00	2.22E-01	3.99E+00	4.52E+00	5.49E-01	3.54E+00	4.09E+00	NA	NA	NA	
	005	175.9	-163.4	4/24/2008	13:10	7.77E+02	2.04E+02	2.73E+02	2.68E-01	4.91E-01	8.54E-01	-1.81E+00	2.70E+00	4.00E+00	-9.94E-01	2.53E+00	3.95E+00	NA	NA	NA	
	006	175.9	-163.4	7/30/2008	14:08	8.95E+02	1.67E+02	1.91E+02	-2.08E-02	2.96E-01	5.88E-01	-3.15E-01	2.12E+00	3.44E+00	-2.05E-01	2.03E+00	3.34E+00	NA	NA	NA	
	007	175.9	-163.4	11/6/2008	11:55	8.32E+02	4.35E+02	3.86E+02	2.17E-01	4.71E-01	5.45E-01	-2.63E+00	5.09E+00	5.07E+00	-1.06E-01	5.66E+00	6.33E+00	NA	NA	NA	
	008	175.9	-163.4	2/9/2009	13:08	9.16E+02	1.91E+02	1.70E+02	4.25E-01	6.80E-01	7.58E-01	-2.42E-01	3.27E+00	3.56E+00	5.10E-01	3.29E+00	3.74E+00	-1.22E+01	2.06E+01	2.44E+01	
	009	175.9	-163.4	5/5/2009	11:18	1.04E+03	2.64E+02	1.72E+02	2.40E-01	6.00E-01	6.90E-01	-4.10E+00	8.45E+00	5.63E+00	1.23E+00	5.69E+00	6.59E+00	NA	NA	NA	
	010	175.9	-163.4	8/11/2009	11:49	1.03E+03	1.94E+02	1.69E+02	-2.36E-02	3.44E-01	4.63E-01	1.75E+00	4.84E+00	5.71E+00	2.25E+00	4.89E+00	5.91E+00	-2.65E+00	1.77E+01	2.07E+01	
	011	175.9	-163.4	10/30/2009	11:26	1.02E+03	1.83E+02	1.61E+02	-2.27E-01	4.68E-01	6.97E-01	8.58E-01	5.25E+00	5.95E+00	2.31E+00	5.37E+00	6.52E+00	NA	NA	NA	
	012	175.9	-163.4	2/25/2010	12:24	9.90E+02	2.01E+02	1.74E+02	7.56E-02	3.36E-01	4.10E-01	2.82E+00	6.03E+00	6.92E+00	-3.93E-01	7.93E+00	7.20E+00	-1.79E+00	1.99E+01	2.30E+01	
	013	175.9	-163.4	5/10/2010	13:29	9.93E+02	2.24E+02	1.63E+02	-3.09E-01	4.52E-01	6.99E-01	-5.66E-01	8.13E+00	9.07E+00	9.92E-01	8.25E+00	9.76E+00	0.00E+00	2.04E+01	2.34E+01	
	014	175.9	-163.4	8/17/2010	12:51	8.13E+02	1.91E+02	1.44E+02	-6.59E-01	6.48E-01	9.01E-01	1.23E-01	6.43E+00	7.32E+00	1.35E+00	5.80E+00	6.97E+00	0.00E+00	2.13E+01	2.48E+01	
MW-62-18	001	13.5	1.2	5/17/2007	13:10	4.52E+02	1.83E+02	1.55E+02	2.98E-02	5.53E-01	7.27E-01	-5.10E-01	2.61E+00	2.89E+00	1.00E-01	2.79E+00	3.19E+00	4.61E+00	1.52E+01	1.74E+01	MW-62-18
	002	13.5	1.2	7/26/2007	15:45	5.08E+02	2.13E+02	1.78E+02	4.68E-01	4.93E-01	5.35E-01	9.04E-01	3.75E+00	4.35E+00	-2.80E+00	4.88E+00	3.80E+00	NA	NA	NA	
	003	13.5	1.2	10/10/2007	13:50	3.76E+02	1.73E+02	1.55E+02	1.80E+00	6.67E-01	4.87E-01	0.00E+00	3.39E+00	1.87E+00	-7.14E-02	1.71E+00	1.92E+00	NA	NA	NA	
	004	13.5	1.2	1/31/2008	15:15	3.50E+02	1.34E+02	1.34E+02	4.95E-01	7.55E-01	8.27E-01	1.18E+00	4.23E+00	4.46E+00	5.24E-01	3.38E+00	3.96E+00	NA	NA	NA	
	006	13.5	1.2	3/6/2008	12:55	2.69E+02	1.41E+02	2.25E+02	5.31E-01	3.30E-01	4.89E-01	9.69E-02	1.67E+00	2.82E+00	-1.26E-01	1.99E+00	3.33E+00	NA	NA	NA	
	007	13.5	1.2	10/29/2008	13:20	4.08E+02	1.65E+02	1.66E+02	5.23E-01	6.03E-01	6.37E-01	-3.09E-02	5.10E+00	5.60E+00	-3.91E+00	5.25E+00	4.70E+00	NA	NA	NA	
	008	13.5	1.2	1/23/2009	11:55	4.64E+02	1.39E+02	1.07E+02	1.09E+00	6.47E-01	6.00E-01	9.88E-01	2.55E+00	3.06E+00	-3.42E-01	2.48E+00	2.74E+00	NA	NA	NA	
	009	13.5	1.2	4/15/2009	13:18	4.56E+02	1.85E+02	1.36E+02	1.76E-01	5.99E-01	7.14E-01	-3.54E-01	5.81E+00	3.87E+00	1.91E+00	3.29E+00	4.20E+00	-1.88E+00	1.86E+01	2.17E+01	
	010	13.5	1.2	7/22/2009	14:24	2.36E+02	2.16E+02	2.29E+02	1.04E-01	6.42E-01	7.94E-01	-8.49E-01	2.94E+00	3.08E+00	-2.70E+00	3.66E+00	3.28E+00	NA	NA	NA	
	011	13.5	1.2	11/12/2009	15:36	2.83E+02	1.13E+02	1.05E+02	3.30E-01	7.05E-01	8.04E-01	-1.84E+00	6.40E+00	5.80E+00	-4.63E+00	7.20E+00	6.68E+00	NA	NA	NA	
	012	13.5	1.2	2/9/2010	15:19	2.87E+02	1.88E+02	1.98E+02	5.26E-01	6.40E-01	6.64E-01	-1.57E+00	5.87E+00	6.19E+00	-2.90E+00	7.82E+00	7.61E+00	NA	NA	NA	
	013	13.5	1.2	4/13/2010	15:17	2.04E+02	1.34E+02	1.42E+02	2.74E-02	6.16E-01	7.97E-01	-1.48E+00	4.05E+00	4.37E+00	6.69E-01	5.38E+00	4.96E+00	NA	NA	NA	
	014	13.5	1.2	3/3/2010	13:00	1.14E+02	1.32E+02	1.44E+02	6.60E-01	6.55E-01	6.80E-01	3.08E+00	8.40E+00	1.03E+01	5.07E+00	1.02E+01	1.32E+01	NA	NA	NA	
MW-62-37	001	34.5	-19.8	5/17/2007	11:10	2.97E+02	1.70E+02	1.59E+02	3.30E-01	8.28E-01	9.66E-01	9.81E-01	2.00E+00	2.37E+00	-1.12E+00	2.25E+00	2.31E+00	1.01E+01	1.81E+01	2.04E+01	MW-62-37
	002	34.5	-19.8	7/26/2007	15:35	2.50E+02	1.79E+02	1.75E+02	-2.57E-01	4.14E-01	5.18E-01	-6.88E-02	2.64E+00	2.94E+00	-4.23E-01	2.60E+00	2.81E+00	NA	NA	NA	
	003	34.5	-19.8	10/10/2007	14:50	3.02E+02	1.58E+02	1.47E+02	-1.67E-01	4.44E-01	6.10E-01	2.12E-01	1.81E+00	2.02E+00	-7.67E-01	1.74E+00	1.83E+00	NA	NA	NA	
	004	34.5	-19.8	1/10/2008	13:55	3.97E+02	1.68E+02	1.71E+02	1.34E-01	6.05E-01	7.24E-01	8.35E-01	4.43E+00	4.62E+00	-2.10E-01	3.87E+00	4.19E+00	NA	NA	NA	
	006	34.5	-19.8	3/6/2008	12:00	3.94E+02	1.19E+02	1.45E+02	2.23E-01	2.69E-01	4.54E-01	-2.55E+00	1.52E+00	2.06E+00	-1.08E+00	1.56E+00	2.38E+00	NA	NA	NA	
	007	34.5	-19.8	10/29/2008	13:57	5.35E+02	1.71E+02	1.66E+02	1.36E+00	6.57E-01	5.24E-01	4.20E-01	4.77E+00	5.33E+00	-2.20E+00	5.19E+00	5.20E+00	NA	NA	NA	
	008	34.5	-19.8	1/23/2009	12:20	4.87E+02	1.42E+02	1.08E+02	1.28E-01	7.41E-01	9.02E-01	-7.69E-01	3.12E+00	3.43E+00	-6.49E-01	3.14E+00	3.36E+00	NA	NA	NA	
	009	34.5	-19.8	4/15/2009	13:13	4.39E+02	1.82E+02	1.35E+02	-3.16E-01	6.68E-01	8.49E-01	-1.73E-01	5.94E+00	3.96E+00	-6.46E-01	4.44E+00	4.81E+00	-1.65E+01	1.74E+01	2.14E+01	
	010	34.5	-19.8	7/22/2009	16:02	2.82E+02	2.22E+02	2.30E+02	-3.68E-01	6.77E-01	8.81E-01	-1.79E+00	3.66E+00	3.82E+00	-1.61E+00	3.56E+00	3.57E+00	NA	NA	NA	
	011	34.5	-19.8	11/12/2009	15:27	2.17E+02	1.07E+02	1.05E+02	-3.41E-01	7.05E-01	8.68E-01	-8.33E+00	1.00E-01	1.01E+01	-1.08E+00	7.15E+00	7.72E+00	NA	NA	NA	
	012	34.5	-19.8	2/9/2010	15:40	3.93E+02	1.95E+02	1.98E+02	-1.80E-01	4.98E-01	6.66E-01	-2.99E+00	4.96E+00	4.83E+00	-2.54E-01	5.97E+00	6.51E+00	NA	NA	NA	
	013	34.5	-19.8	4/13/2010	15:22	2.59E+02	2.07E+02	2.26E+02	5.46E-01	7.33E-01	7.81E-01	-2.42E+00	3.86E+00	4.07E+00	1.34E+00	4.04E+00	4.80E+00	NA	NA	NA	
	014	34.5	-19.8	3/3/2010	12:52	1.91E+02	1.43E+02	1.47E+02	-1.52E-02	5.47E-01	6.85E-01	-9.69E-01	8.78E+00	9.70E+00	-5.33E+00	9.12E+00	7.92E+00	NA	NA	NA	
MW-62-53	001	53.1	-40.3	5/10/2007	15:00	3.93E+02	1.91E+02	1.72E+02	4.41E-01	7.97E-01	8.96E-01	6.50E-01	3.40E+00	3.86E+00	-9.12E-01	3.52E+00	3.74E+00	-5.00E+00	1.40E+01	1.68E+01	MW-62-53
	002	53.1	-40.3	7/26/2007	15:34	3.45E+02	1.94E+02	1.78E+02	3.56E-01	6.98E-01	7.85E-01	0.00E+00	4.62E+00	2.53E+00	-8.44E-01	2.77E+00	2.45E+00	NA	NA	NA	
	003	53.1	-40.3	1/10/2008	15:37	3.48E+02	1.67E+02	1.71E+02	4.45E-02	6.72E-01	8.15E-01	-7.91E-01	2.75E+00	2.93E+00	7.68E-01	2.88E+00	3.43E+00	NA	NA	NA	
	005	53.1	-40.3	3/6/2008	12:35	3.52E+02	1.54E+02	2.41E+02	9.52E-03	2.54E-01	4.95E-01	1.38E+00	2.24E+00	3.98E+00	3.02E-01	2.30E+00	3.87E+00	NA	NA	NA	
	006	53.1	-40.3	10/29/2008	13:51	4.08E+02	1.67E+02	1.67E+02	6.63E-02	3.87E-01	4.94E-01	-3.99E-01	5.85E+00	6.51E+00	-2.87E+00	8.09E+00	7.19E+00	NA	NA	NA	
	007	53.1	-40.3	1/23/2009	12:44	3.56E+02	2.16E+02	2.08E+02	4.53E-01	7.68E-01	8.60E-01	2.27E-01	3.30E+00	3.77E+00	-1.27E+00	3.56E+00	3.71E+00	NA	NA	NA	
	008	53.1	-40.3	4/15/2009	13:29	4.33E+02	1.82E+02	1.36E+02	-5.89E-01	6.65E-01	9.09E-01	-4.92E-01	5.30E+00	3.53E+00	2.83E-01	2.82E+00	3.31E+00	-6.14E+00	1.79E+01	2.12E+01	
	009	53.1	-40.3	7/22/2009	14:01	2.40E+02	2.21E+02	2.33E+02	7.09E-01	7.95E-01	8.34E-01	3.00E-02	3.13E+00	3.55E+00	3.78E-01	3.24E+00	3.73E+00	NA	NA	NA	
	010	53.1	-40.3	11/12/2009	13:38	2.81E+02	1.09E+02	1.01E+02	3.54E-01	6.45E-01	7.27E-01	2.51E-01	2.88E+00	3.32E+00	-6.92E-01	3.25E+00	3.51E+00	NA	NA	NA	
	011	53.1	-40.3	2/9/2010	14:00	3.46E+02	1.92E+02	1.98E+02	-1.50E-01	4.35E-01	6.61E-01	-9.19E-01	5.87E+00	6.39E+00	1.34E+00	6.06E+00	7.13E+00	NA	NA	NA	
	012	53.1	-40.3	4/13/2010	15:27	3.25E+02	1.44E+02	1.47E+02	-1.84E-02	5.67E-01	7.67E-01	1.33E+00	3.35E+00	3.87E+00	-1.52E+00	5.03E+00	4.08E+00	NA	NA	NA	
	013	53.1	-40.3	3/3/2010	12:20	1.59E+02	1.40E+02	1.47E+02	3.13E-01	5.61E-01	6.32E-01	2.99E+00	1.11E-01	1.33E+01	2.39E-01	7.18E+00	8.24E+00	NA	NA	NA	

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-62-71	001	71.1	-58.3	5/10/2007	11:35	5.02E+02	2.00E+02	1.71E+02	6.16E-01	8.34E-01	8.92E-01	-8.78E-01	3.51E+00	3.75E+00	1.37E-01	3.21E+00	3.59E+00	4.93E+00	1.29E+01	1.48E+01	MW-62-71
	002	71.1	-58.3	7/26/2007	12:20	1.51E+02	1.65E+02	1.74E+02	2.15E-01	7.26E-01	8.29E-01	1.11E+00	3.36E+00	3.91E+00	-2.39E-01	3.48E+00	3.90E+00	NA	NA	NA	
	003	71.1	-58.3	10/10/2007	12:23	2.69E+02	1.61E+02	1.55E+02	1.15E-01	5.22E-01	6.30E-01	1.18E+00	2.43E+00	2.45E+00	1.54E+00	2.10E+00	2.55E+00	NA	NA	NA	
	004	71.1	-58.3	1/10/2008	14:04	3.53E+02	1.89E+02	1.94E+02	3.78E-01	5.85E-01	6.46E-01	-7.82E-01	2.51E+00	2.72E+00	3.78E-02	2.22E+00	2.55E+00	NA	NA	NA	
	006	71.1	-58.3	3/6/2008	11:42	4.64E+02	1.66E+02	2.53E+02	3.31E-01	2.60E-01	3.94E-01	5.85E-01	2.01E+00	3.53E+00	-4.96E-01	2.23E+00	3.66E+00	NA	NA	NA	
	007	71.1	-58.3	10/29/2008	12:00	5.12E+02	1.70E+02	1.66E+02	3.70E-01	4.81E-01	5.03E-01	-2.34E+00	5.97E+00	6.37E+00	-1.31E+00	6.46E+00	7.00E+00	NA	NA	NA	
	008	71.1	-58.3	1/23/2009	12:12	2.99E+02	2.07E+02	2.04E+02	2.47E-01	7.35E-01	8.56E-01	1.92E+00	3.53E+00	4.25E+00	-4.84E-01	3.87E+00	4.22E+00	NA	NA	NA	
	009	71.1	-58.3	4/15/2009	12:06	4.78E+02	1.89E+02	1.38E+02	2.78E-01	6.38E-01	7.30E-01	1.27E+00	6.32E+00	4.21E+00	1.21E+00	3.48E+00	4.20E+00	-3.18E+00	1.88E+01	2.20E+01	
	010	71.1	-58.3	7/22/2009	12:52	3.52E+02	2.31E+02	2.32E+02	5.54E-01	7.87E-01	8.69E-01	-1.08E+00	3.46E+00	3.75E+00	8.91E-01	3.86E+00	4.50E+00	NA	NA	NA	
	011	71.1	-58.3	11/12/2009	12:40	4.68E+02	1.24E+02	1.02E+02	3.02E-01	6.66E-01	7.57E-01	2.35E+00	5.28E+00	6.35E+00	-1.57E+00	6.35E+00	6.71E+00	NA	NA	NA	
	012	71.1	-58.3	2/9/2010	13:20	4.56E+02	2.00E+02	1.99E+02	4.07E-01	4.74E-01	4.89E-01	4.29E+00	5.40E+00	6.65E+00	-2.86E+00	5.37E+00	5.09E+00	NA	NA	NA	
	013	71.1	-58.3	4/13/2010	13:45	3.77E+02	2.16E+02	2.30E+02	-2.24E-01	5.64E-01	8.12E-01	-6.51E-01	4.44E+00	4.86E+00	-3.24E+00	5.89E+00	4.62E+00	NA	NA	NA	
	014	71.1	-58.3	3/3/2010	11:30	3.25E+02	1.70E+02	1.77E+02	2.44E-01	3.75E-01	4.12E-01	-2.03E+00	8.37E+00	8.99E+00	1.86E+00	9.87E+00	1.16E+01	NA	NA	NA	
MW-62-92	001	91.6	-78.8	5/10/2007	11:18	7.00E+02	2.16E+02	1.68E+02	7.11E-01	9.21E-01	9.85E-01	-1.58E+00	4.63E+00	3.30E+00	7.45E-01	3.12E+00	3.72E+00	-7.73E+00	1.30E+01	1.65E+01	MW-62-92
	002	91.6	-78.8	7/26/2007	12:35	4.37E+02	2.07E+02	1.80E+02	-2.28E-02	3.39E-01	3.94E-01	6.50E-01	3.15E+00	3.63E+00	8.32E-01	3.38E+00	3.95E+00	NA	NA	NA	
	003	91.6	-78.8	10/10/2007	12:15	4.28E+02	1.73E+02	1.50E+02	-1.91E-01	4.77E-01	6.54E-01	6.23E-01	1.88E+00	2.01E+00	1.85E+00	1.80E+00	2.21E+00	NA	NA	NA	
	004	91.6	-78.8	1/10/2008	11:09	3.94E+02	1.92E+02	1.94E+02	1.38E-01	6.59E-01	7.90E-01	3.75E-01	2.94E+00	3.39E+00	9.37E-01	3.47E+00	3.62E+00	NA	NA	NA	
	006	91.6	-78.8	3/6/2008	11:49	4.95E+02	1.59E+02	2.38E+02	2.43E-01	3.29E-01	5.64E-01	1.51E+00	2.29E+00	4.11E+00	5.16E+00	2.59E+00	5.35E+00	NA	NA	NA	
	007	91.6	-78.8	10/29/2008	12:10	4.82E+02	1.68E+02	1.66E+02	-4.52E-02	5.40E-01	7.12E-01	1.64E+00	6.57E+00	7.61E+00	2.71E+00	6.33E+00	7.68E+00	NA	NA	NA	
	008	91.6	-78.8	1/23/2009	12:28	5.25E+02	2.33E+02	2.05E+02	-1.59E-01	6.86E-01	8.73E-01	2.90E-01	4.58E+00	4.83E+00	1.88E+00	3.83E+00	4.74E+00	NA	NA	NA	
	009	91.6	-78.8	4/15/2009	12:15	6.08E+02	2.06E+02	1.38E+02	1.09E-01	5.42E-01	6.60E-01	3.15E-01	6.21E+00	4.14E+00	-9.11E-01	3.36E+00	3.56E+00	-1.28E+01	1.83E+01	2.22E+01	
	010	91.6	-78.8	7/22/2009	11:37	2.80E+02	2.24E+02	2.32E+02	3.44E-02	6.37E-01	8.10E-01	8.43E-01	3.39E+00	3.96E+00	-9.42E-01	3.40E+00	3.57E+00	NA	NA	NA	
	011	91.6	-78.8	11/12/2009	12:43	4.83E+02	1.25E+02	1.02E+02	3.91E-01	7.75E-01	8.76E-01	6.13E-01	5.25E+00	5.91E+00	2.98E-01	5.25E+00	5.86E+00	NA	NA	NA	
	012	91.6	-78.8	2/9/2010	13:20	5.27E+02	2.03E+02	1.98E+02	4.06E-01	6.20E-01	6.83E-01	-2.81E+00	7.35E+00	6.45E+00	2.57E+00	6.50E+00	7.81E+00	NA	NA	NA	
	013	91.6	-78.8	4/13/2010	13:38	5.96E+02	1.55E+02	1.44E+02	1.77E-01	6.88E-01	8.34E-01	1.16E+00	3.72E+00	4.24E+00	7.23E-03	3.75E+00	4.13E+00	NA	NA	NA	
	014	91.6	-78.8	3/3/2010	11:32	3.18E+02	1.68E+02	1.76E+02	4.11E-01	5.37E-01	5.80E-01	-3.42E+00	8.13E+00	8.38E+00	-4.99E-01	7.59E+00	8.36E+00	NA	NA	NA	
MW-62-138	001	138.1	-125.3	5/10/2007	10:22	4.55E+02	1.98E+02	1.74E+02	8.19E-01	8.16E-01	8.00E-01	1.73E+00	4.17E+00	3.28E+00	-1.40E+00	3.42E+00	3.55E+00	-4.93E+00	1.32E+01	1.64E+01	MW-62-138
	002	138.1	-125.3	7/26/2007	15:55	5.38E+02	2.19E+02	1.82E+02	5.26E-01	5.79E-01	6.09E-01	6.88E-02	3.51E+00	3.98E+00	6.39E-01	3.93E+00	4.54E+00	NA	NA	NA	
	003	138.1	-125.3	10/10/2007	14:46	7.78E+02	2.09E+02	1.54E+02	8.37E-01	8.30E-01	8.69E-01	0.00E+00	2.67E+00	2.90E+00	-1.19E+00	2.44E+00	2.50E+00	NA	NA	NA	
	004	138.1	-125.3	1/10/2008	10:05	7.69E+02	1.82E+02	1.74E+02	7.34E-01	4.32E-01	3.52E-01	4.30E-01	3.36E+00	3.88E+00	1.05E-01	3.47E+00	3.91E+00	NA	NA	NA	
	006	138.1	-125.3	3/6/2008	11:41	5.33E+02	1.55E+02	2.28E+02	1.21E+00	4.18E-01	5.01E-01	8.24E-01	2.44E+00	4.27E+00	3.85E-01	2.41E+00	4.20E+00	NA	NA	NA	
	007	138.1	-125.3	10/29/2008	12:25	7.50E+02	1.82E+02	1.66E+02	1.24E+00	5.53E-01	3.58E-01	1.40E+00	6.06E+00	7.05E+00	2.04E+00	8.28E+00	8.60E+00	NA	NA	NA	
	008	138.1	-125.3	1/23/2009	12:50	6.26E+02	2.43E+02	2.04E+02	2.46E+00	8.27E-01	6.23E-01	-4.23E-01	2.40E+00	2.67E+00	5.99E-01	2.24E+00	2.64E+00	NA	NA	NA	
	009	138.1	-125.3	4/15/2009	12:38	7.72E+02	2.18E+02	1.32E+02	1.78E+00	8.70E-01	7.93E-01	-7.43E-01	6.18E+00	4.12E+00	4.95E-01	3.20E+00	3.73E+00	1.23E+00	1.83E+01	2.12E+01	
	010	138.1	-125.3	7/22/2009	16:55	6.31E+02	2.54E+02	2.29E+02	1.31E+00	7.83E-01	7.15E-01	1.86E+00	3.81E+00	4.50E+00	3.36E-01	3.63E+00	4.18E+00	NA	NA	NA	
	011	138.1	-125.3	11/12/2009	15:11	5.76E+02	1.35E+02	1.07E+02	2.83E+00	7.98E-01	4.82E-01	1.05E+00	7.42E+00	8.36E+00	7.24E-02	7.92E+00	8.71E+00	NA	NA	NA	
	012	138.1	-125.3	2/9/2010	15:54	7.81E+02	2.18E+02	1.99E+02	8.78E-01	6.50E-01	6.24E-01	2.22E+00	5.03E+00	6.09E+00	-3.56E+00	4.79E+00	4.02E+00	NA	NA	NA	
	013	138.1	-125.3	4/13/2010	18:02	6.54E+02	1.59E+02	1.46E+02	1.28E+00	7.41E-01	6.91E-01	-7.33E-01	6.39E+00	5.98E+00	-2.36E+00	6.71E+00	5.83E+00	NA	NA	NA	
	014	138.1	-125.3	3/3/2010	14:09	5.91E+02	1.82E+02	1.76E+02	1.47E+00	7.40E-01	6.56E-01	3.83E+00	7.26E+00	8.95E+00	-1.73E+00	7.35E+00	7.39E+00	NA	NA	NA	
MW-62-182	001	182.1	-169.3	5/10/2007	10:43	5.41E+02	2.09E+02	1.76E+02	1.22E-01	7.18E-01	8.90E-01	3.74E-02	3.50E+00	3.33E+00	-2.40E-01	3.23E+00	3.53E+00	-1.76E+00	1.24E+01	1.50E+01	MW-62-182
	002	182.1	-169.3	7/26/2007	16:20	4.17E+02	2.06E+02	1.82E+02	-9.56E-02	2.73E-01	3.26E-01	-1.16E+00	3.10E+00	3.25E+00	6.21E-01	2.70E+00	3.15E+00	NA	NA	NA	
	003	182.1	-169.3	10/10/2007	14:42	4.94E+02	1.83E+02	1.54E+02	-1.48E-01	4.40E-01	5.99E-01	6.04E-01	1.91E+00	1.91E+00	5.45E-01	1.92E+00	2.23E+00	NA	NA	NA	
	004	182.1	-169.3	1/10/2008	11:15	4.70E+02	1.68E+02	1.71E+02	8.15E-02	5.13E-01	6.33E-01	-1.17E-01	2.96E+00	2.99E+00	9.22E-01	1.31E+00	2.33E+00	NA	NA	NA	
	006	182.1	-169.3	3/6/2008	13:54	3.99E+02	1.52E+02	2.34E+02	5.30E-02	3.33E-01	6.16E-01	8.48E-01	2.19E+00	3.85E+00	-2.67E-01	2.40E+00	3.97E+00	NA	NA	NA	
	007	182.1	-169.3	10/29/2008	15:52	4.98E+02	1.70E+02	1.66E+02	4.40E-02	7.13E-01	9.16E-01	1.60E+00	6.21E+00	6.92E+00	2.99E-01	5.82E+00	6.54E+00	NA	NA	NA	
	008	182.1	-169.3	1/23/2009	13:49	4.98E+02	2.28E+02	2.03E+02	-1.85E-01	4.56E-01	6.98E-01	-1.91E+00	2.55E+00	2.68E+00	-1.03E+00	2.43E+00	2.55E+00	NA	NA	NA	
	009	182.1	-169.3	4/15/2009	14:53	7.36E+02	2.21E+02	1.37E+02	-6.26E-01	7.43E-01	9.46E-01	2.06E-01	6.32E+00	4.21E+00	2.09E-01	4.55E+00	5.11E+00	-6.59E+00	1.83E+01	2.17E+01	
	010	182.1	-169.3	7/22/2009	17:00	4.66E+02	2.43E+02	2.33E+02	2.73E-01	8.22E-01	9.71E-01	5.02E-01	2.96E+00	3.47E+00	-9.12E-01	2.73E+00	2.70E+00	NA	NA	NA	
	011	182.1	-169.3	11/12/2009	15:15	5.10E+02	1.27E+02	1.03E+02	1.53E-01	5.44E-01	6.32E-01	-3.06E+00	7.80E+00	8.09E+00	2.77E+00	6.00E+00	7.53E+00	NA	NA	NA	
	012	182.1	-169.3	2/9/2010	16:07	4.69E+02	2.10E+02	2.10E+02	-2.03E-01	3.12E-01	4.91E-01	9.56E-01	5.40E+00	6.26E+00	-2.02E-01	5.46E+00	6.05E+00	NA	NA	NA	
	013	182.1	-169.3	4/13/2010	18:18	4.77E+02	1.52E+02	1.46E+02	2.86E-01	6.55E-01	7.61E-01	9.81E-01	3.93E+00	4.57E+00	3.69E-01	4.09E+00	4.65E+00	NA	NA	NA	
	014	182.1	-169.3	3/3/2010	14:02	2.78E+02	1.65E+02	1.75E+02	2.87E-01	7.05E-01	8.30E-01	-5.53E+00	1.24E-01	1.51E+01	-9.25E-01	8.00E+00	8.64E+00	NA	NA	NA	
MW-63-18	001	14.9	0.7	5/18/2007	10:35	2.30E+02	1.59E+02	1.57E+02	4.75E-02	5.37E-01	6.95E-01	8.56E-01	2.44E+00	2.67E+00	1.11E+00	2.65E+00	2.74E+00	7.36E+00	1.61E+01	1.82E+01	MW-63-18
	002	14.9	0.7	7/30/2007	13:10	2.00E+02	1.74E+02	1.89E+02	-2.18E-01	3.91E-01	4.68E-01	1.98E+00	2.65E+00	3.03E+00	-1.31E+00	2.50E+00	2.53E+00	NA	NA	NA	
	003	14.9	0.7	10/11/2007	12:43	1.49E+02	1.56E+02	1.71E+02	3.08E-01	6.23E-01	7.12E-01	1.52E+00	2.63E+00	3.16E+00	-1.41E-01	2.52E+00	2.74E+00	NA	NA	NA	
	004	14.9	0.7	1/9/2008	14:55	1.23E+02	1.56E+02	1.73E+02	-6.34E-02	5.55E-01	7.38E-01	2.55E+00	3.29E+00	3.42E+00	1.97E+00	2.94E+00	3.75E+00	NA	NA	NA	
	005	14.9	0.7	4/23/2008	14:50	2.57E+02	1.53E+02	2.43E+02	2.31E-02	4.68E-01	8.62E-01	8.04E-01	2.35E+00	4.03E+00	7.68E-01	2.06E+00	3.69E+00	8.53E+00	1.43E+01	2.42E+01	
	006	14.9	0.7	7/30/2008	11:13	1.79E+02	1.20E+02	1.91E+02	3.29E+00	5.61E-01	4.68E-01	-1.71E-02	1.75E+00	2.97E+00	-1.16E+00	2.04E+00	2.49E+00	NA	NA	NA	
	007	14.9	0.7	11/5/2008	10:53	3.20E+02	1.59E+02	1.65E+02	3.25E-01	6.20E-01	7.03E-01	1.31E-01	5.91E+00	6.75E+00	-1.52E+00	5.73E+00	6.04E+00	NA	NA	NA	
	008	14.9	0.7	1/29/2009	13:46	1.54E+02	1.85E+02	1.98E+02	-2.22E-01	6.74E-01	8.57E-01	9.78E-02	2.64E+00	3.01E+00	1.02E+00	3.20E+00	3.87E+00	NA	NA	NA	
	009	14.9	0.7	5/4/2009	12:29	1.97E+02	1.62E+02	1.64E+02	1.26E-01	6.00E-01	6.93E-01	-2.37E+00	6.86E+00	4.57E+00	8.34E-01	4.26E+00	4.94E+00	NA	NA	NA	
	010	14.9	0.7	7/30/2009	14:26	3.80E+02	1.83E+02	1.89E+02	-2.47E-01	2.76E-01	4.70E-01	2.06E+00	5.42E+00	6.37E+00	4.32E-01	5.99E+00	6.85E+00	NA	NA	NA	
	011	14.9	0.7	11/3/2009	12:19	1.24E+02	1.46E+02	1.61E+02	-2.75E-02	5.64E-01	7.37E-01	-6.29E-01	5.29E+00	5.78E+00	1.74E+00	7.20E+00	8.06E+00	NA	NA	NA	
	012	14.9	0.7	2/8/2010	13:40	3.38E+02	1.68E+02	1.78E+02	5.39E-01	7.74E-01	8.34E-01	5.09E+00	4.35E+00	5.44E+00	4.46E-01	4.41E+00	5.00E+00	NA	NA	NA	
	013	14.9	0.7	4/26/2010	13:22	3.16E+02	1.55E+02	1.47E+02	-7.37E-02	6.62E-01	8.66E-01	3.73E-01	5.22E+00	5.91E+00	3.24E+00	6.03E+00	7.50E+00	NA	NA	NA	
	014	14.9	0.7	8/10/2010	12:08	1.62E+02	1.58E+02	1.73E+02	-1.55E-02	3.48E-01	4.72E-01	-6.04E-01	7.20E+00	8.11E+00	-2.17E+00	6.42E+00	6.45E+00	NA	NA	NA	
MW-63-34	001	31.5	-17.3	5/18/2007	13:03	2.28E+02	1.58E+02	1.55E+02	-1.62E-01	5.43E-01	7.77E-01	4.10E-01	2.21E+00	2.51E+00	-3.25E-01	2.65E+00	2.44E+00	1.57E+00	1.54E+01	1.80E+01	MW-63-34

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS: TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			Well ID[1]
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-63-34	002	31.5	-17.3	7/30/2007	13:28	2.80E+02	1.77E+02	1.90E+02	-1.64E-01	3.36E-01	4.03E-01	1.73E-01	3.66E+00	3.56E+00	3.98E-01	3.66E+00	4.24E+00	NA	NA	NA	MW-63-34
	003	31.5	-17.3	10/11/2007	12:50	2.31E+02	1.61E+02	1.74E+02	-2.75E-01	4.44E-01	6.73E-01	-6.24E-01	3.60E+00	3.58E+00	3.81E-01	2.65E+00	3.10E+00	NA	NA	NA	
	004	31.5	-17.3	1/9/2008	14:20	3.26E+02	1.65E+02	1.71E+02	1.24E-01	5.57E-01	6.84E-01	1.83E+00	3.63E+00	4.44E+00	3.53E-01	3.90E+00	4.35E+00	NA	NA	NA	
	005	31.5	-17.3	4/23/2008	13:55	4.90E+02	1.68E+02	2.45E+02	3.82E-01	5.68E-01	9.89E-01	1.71E+00	2.05E+00	3.78E+00	-1.77E+00	3.53E+00	4.19E+00	5.77E+00	1.46E+01	2.49E+01	
	006	31.5	-17.3	7/30/2008	11:12	4.41E+02	1.39E+02	1.91E+02	1.15E+00	4.60E-01	6.45E-01	-1.48E-02	2.26E+00	3.87E+00	-7.91E-01	2.52E+00	3.65E+00	NA	NA	NA	
	007	31.5	-17.3	11/5/2008	11:03	4.14E+02	3.77E+02	3.85E+02	3.15E-01	6.77E-01	7.78E-01	5.73E-01	5.43E+00	6.10E+00	-1.40E-01	5.17E+00	5.67E+00	NA	NA	NA	
	008	31.5	-17.3	1/29/2009	12:22	4.20E+02	2.22E+02	1.96E+02	2.20E-01	6.87E-01	8.13E-01	1.41E+00	2.91E+00	3.45E+00	-2.64E-01	2.96E+00	3.23E+00	NA	NA	NA	
	009	31.5	-17.3	5/4/2009	12:10	3.23E+02	1.76E+02	1.59E+02	2.16E-01	6.03E-01	6.89E-01	6.53E-01	7.29E+00	4.86E+00	1.92E+00	3.42E+00	4.32E+00	NA	NA	NA	
	010	31.5	-17.3	7/30/2009	14:00	3.37E+02	1.80E+02	1.88E+02	2.57E-01	5.50E-01	6.37E-01	6.62E-01	5.50E+00	5.65E+00	1.70E+00	5.49E+00	6.42E+00	NA	NA	NA	
	011	31.5	-17.3	11/3/2009	11:02	3.10E+02	1.55E+02	1.62E+02	-3.73E-01	4.06E-01	6.81E-01	-6.69E-02	8.31E+00	9.16E+00	8.03E-01	5.76E+00	6.76E+00	NA	NA	NA	
	012	31.5	-17.3	2/8/2010	13:19	3.96E+02	1.70E+02	1.78E+02	2.26E-01	6.78E-01	8.09E-01	-6.36E-01	3.94E+00	4.33E+00	-8.85E-01	4.26E+00	4.66E+00	NA	NA	NA	
	013	31.5	-17.3	4/26/2010	13:21	2.89E+02	1.53E+02	1.47E+02	-3.04E-01	7.18E-01	9.93E-01	-5.64E-01	5.55E+00	5.88E+00	-1.09E+00	5.19E+00	5.37E+00	NA	NA	NA	
	014	31.5	-17.3	8/10/2010	11:44	1.89E+02	1.64E+02	1.78E+02	2.21E-01	3.59E-01	3.95E-01	2.60E+00	9.29E+00	1.06E+01	3.10E+00	7.21E+00	9.27E+00	NA	NA	NA	
MW-63-50	001	49.5	-37.2	5/15/2007	11:48	3.26E+02	1.83E+02	1.73E+02	-9.70E-02	6.15E-01	8.32E-01	-1.33E-01	5.28E+00	5.01E+00	6.64E-01	4.23E+00	4.81E+00	-2.41E+00	1.24E+01	1.51E+01	MW-63-50
	002	49.5	-37.2	7/25/2007	14:00	2.25E+02	1.80E+02	1.95E+02	1.29E-01	6.03E-01	6.84E-01	2.08E+00	3.18E+00	3.90E+00	-1.58E-01	3.19E+00	3.54E+00	NA	NA	NA	
	003	49.5	-37.2	10/11/2007	11:10	2.89E+02	1.62E+02	1.73E+02	-3.41E-01	5.10E-01	7.67E-01	6.21E-01	2.98E+00	3.39E+00	1.56E+00	3.17E+00	3.86E+00	NA	NA	NA	
	004	49.5	-37.2	1/9/2008	12:32	3.56E+02	1.67E+02	1.72E+02	4.48E-01	7.41E-01	8.26E-01	3.37E-01	2.66E+00	3.02E+00	-1.42E+00	3.14E+00	3.20E+00	NA	NA	NA	
	005	49.5	-37.2	4/23/2008	13:04	2.70E+02	1.63E+02	2.65E+02	4.27E-01	5.45E-01	9.26E-01	-1.10E+00	1.85E+00	2.93E+00	9.01E-01	1.75E+00	3.27E+00	2.43E+00	1.40E+01	2.41E+01	
	006	49.5	-37.2	7/30/2008	10:29	3.35E+02	1.32E+02	1.91E+02	6.10E-01	4.97E-01	8.02E-01	-1.77E+00	1.83E+00	2.66E+00	-1.22E+00	1.91E+00	2.80E+00	NA	NA	NA	
	007	49.5	-37.2	11/5/2008	9:39	3.17E+02	1.94E+02	1.99E+02	5.67E-01	6.58E-01	6.79E-01	1.26E+00	6.36E+00	7.04E+00	-7.21E-01	6.52E+00	7.08E+00	NA	NA	NA	
	008	49.5	-37.2	1/29/2009	14:06	2.98E+02	2.04E+02	1.96E+02	5.67E-01	8.00E-01	8.76E-01	8.89E-02	3.09E+00	3.51E+00	1.37E+00	3.41E+00	4.19E+00	NA	NA	NA	
	009	49.5	-37.2	5/4/2009	11:31	3.30E+02	1.80E+02	1.65E+02	1.58E-01	5.73E-01	6.59E-01	1.22E+00	6.27E+00	4.18E+00	-2.49E-01	3.98E+00	4.34E+00	NA	NA	NA	
	010	49.5	-37.2	7/30/2009	11:05	3.35E+02	1.80E+02	1.87E+02	5.40E-01	5.84E-01	5.81E-01	2.00E+00	6.27E+00	7.39E+00	1.36E+00	6.63E+00	7.71E+00	NA	NA	NA	
	011	49.5	-37.2	11/3/2009	10:42	3.60E+02	1.58E+02	1.61E+02	-5.37E-03	5.31E-01	6.94E-01	2.14E-01	6.81E+00	7.54E+00	-1.30E+00	7.20E+00	7.57E+00	NA	NA	NA	
	012	49.5	-37.2	2/8/2010	12:45	3.34E+02	1.67E+02	1.77E+02	5.42E-01	7.40E-01	7.92E-01	-1.46E+00	3.25E+00	3.55E+00	7.99E-01	3.33E+00	3.81E+00	NA	NA	NA	
	013	49.5	-37.2	4/26/2010	12:06	4.13E+02	1.62E+02	1.45E+02	2.38E-01	5.82E-01	6.82E-01	-5.57E+00	1.01E-01	1.12E+01	-4.30E+00	6.74E+00	6.45E+00	NA	NA	NA	
	014	49.5	-37.2	8/10/2010	14:32	2.72E+02	1.65E+02	1.75E+02	-2.47E-02	5.47E-01	6.90E-01	-1.32E+00	7.10E+00	7.82E+00	7.73E-01	7.74E+00	8.96E+00	NA	NA	NA	
MW-63-93	001	93	-80.7	10/2/2006	13:10	5.16E+02	1.95E+02	5.70E+01	7.81E-02	6.73E-01	7.32E-01	5.46E-01	1.43E-01	1.59E+01	-4.42E+00	1.67E+01	2.03E+01	-5.31E+00	1.23E+01	1.54E+01	MW-63-93
	002	93	-80.7	5/15/2007	12:45	2.81E+02	1.80E+02	1.75E+02	8.20E-02	7.29E-01	9.24E-01	1.87E-01	4.80E+00	4.60E+00	9.57E-01	4.54E+00	4.51E+00	NA	NA	NA	
	003	93	-80.7	7/25/2007	14:34	2.37E+02	1.82E+02	1.97E+02	-4.43E-01	4.41E-01	5.29E-01	1.24E+00	3.31E+00	3.90E+00	9.28E-03	3.75E+00	4.16E+00	NA	NA	NA	
	004	93	-80.7	10/11/2007	11:17	1.15E+02	1.55E+02	1.72E+02	8.19E-01	8.90E-01	9.47E-01	-6.98E-01	2.97E+00	3.16E+00	-1.77E+00	3.33E+00	3.23E+00	NA	NA	NA	
	005	93	-80.7	1/9/2008	12:46	2.15E+02	1.59E+02	1.71E+02	1.86E-01	7.08E-01	8.45E-01	7.74E-01	3.06E+00	3.56E+00	1.05E-01	3.20E+00	3.58E+00	NA	NA	NA	
	005	93	-80.7	4/23/2008	11:23	3.02E+02	1.65E+02	2.65E+02	2.93E-01	5.46E-01	9.39E-01	3.49E-01	2.27E+00	3.88E+00	7.04E-01	2.41E+00	4.14E+00	-3.72E+00	1.41E+01	2.46E+01	
	007	93	-80.7	7/29/2008	14:17	2.38E+02	1.25E+02	1.92E+02	2.28E-03	2.21E-01	3.86E-01	-4.02E-01	2.01E+00	3.36E+00	-3.19E-01	1.96E+00	3.23E+00	NA	NA	NA	
	008	93	-80.7	11/5/2008	10:14	3.90E+02	3.75E+02	3.86E+02	-9.77E-02	1.94E-01	2.36E-01	1.53E+00	5.10E+00	5.92E+00	2.80E+00	6.24E+00	7.60E+00	NA	NA	NA	
	009	93	-80.7	1/29/2009	14:20	3.40E+02	2.09E+02	1.93E+02	1.18E-01	6.33E-01	7.75E-01	-9.44E-01	3.17E+00	3.42E+00	-8.17E-01	3.63E+00	3.88E+00	NA	NA	NA	
	010	93	-80.7	5/4/2009	12:00	1.66E+02	1.59E+02	1.64E+02	5.44E-01	5.13E-01	5.53E-01	2.00E+00	6.72E+00	4.48E+00	-1.69E+00	3.63E+00	3.63E+00	NA	NA	NA	
	011	93	-80.7	7/30/2009	11:30	2.64E+02	1.77E+02	1.88E+02	1.81E-01	3.63E-01	4.15E-01	2.45E+00	5.54E+00	6.51E+00	3.68E-01	5.66E+00	6.36E+00	NA	NA	NA	
	012	93	-80.7	11/3/2009	10:55	3.01E+02	1.53E+02	1.61E+02	7.11E-01	7.17E-01	7.57E-01	-2.46E+00	4.82E+00	5.00E+00	5.40E-01	4.70E+00	5.26E+00	NA	NA	NA	
	013	93	-80.7	2/8/2010	13:00	2.90E+02	1.65E+02	1.77E+02	1.78E-01	6.63E-01	8.06E-01	-1.10E+00	4.41E+00	4.71E+00	5.93E-01	4.54E+00	5.11E+00	NA	NA	NA	
	014	93	-80.7	4/26/2010	12:42	3.03E+02	1.55E+02	1.47E+02	-2.90E-02	5.61E-01	7.42E-01	-6.91E-01	5.55E+00	6.23E+00	-3.69E+00	5.52E+00	5.35E+00	NA	NA	NA	
	015	93	-80.7	8/10/2010	15:10	1.95E+02	1.61E+02	1.74E+02	-1.91E-01	4.38E-01	6.16E-01	1.24E+00	6.64E+00	7.70E+00	2.61E-01	7.58E+00	8.46E+00	NA	NA	NA	
MW-63-112	001	111.5	-99.2	5/15/2007	13:10	4.24E+02	1.95E+02	1.75E+02	-5.27E-02	7.50E-01	9.42E-01	2.58E+00	3.90E+00	3.59E+00	9.59E-01	3.72E+00	4.19E+00	-5.14E+00	1.34E+01	1.55E+01	MW-63-112
	002	111.5	-99.2	7/25/2007	14:52	2.69E+02	1.83E+02	1.97E+02	6.32E-02	3.46E-01	3.99E-01	6.92E-01	4.14E+00	4.19E+00	-6.35E-01	3.94E+00	4.34E+00	NA	NA	NA	
	003	111.5	-99.2	10/11/2007	13:45	2.78E+02	1.62E+02	1.72E+02	-7.94E-02	6.73E-01	8.71E-01	-3.04E+00	5.49E+00	4.52E+00	7.65E-01	3.50E+00	4.15E+00	NA	NA	NA	
	004	111.5	-99.2	1/9/2008	10:20	4.69E+02	1.73E+02	1.72E+02	2.19E-01	5.07E-01	5.92E-01	3.90E-01	3.30E+00	3.34E+00	2.87E-01	3.56E+00	3.75E+00	NA	NA	NA	
	005	111.5	-99.2	4/23/2008	11:08	3.72E+02	1.68E+02	2.65E+02	-3.90E-02	3.96E-01	7.94E-01	4.77E-01	2.30E+00	3.89E+00	1.75E+00	2.78E+00	4.52E+00	-5.00E-01	1.43E+01	2.48E+01	
	006	111.5	-99.2	7/29/2008	14:20	2.07E+02	1.01E+02	1.63E+02	7.08E-01	5.39E-01	8.66E-01	6.61E-01	2.23E+00	3.89E+00	1.07E+00	2.46E+00	4.41E+00	NA	NA	NA	
	007	111.5	-99.2	11/4/2008	12:41	2.75E+02	1.92E+02	2.01E+02	4.72E-01	5.88E-01	6.17E-01	1.89E-01	5.68E+00	6.43E+00	-2.75E+00	8.34E+00	7.58E+00	NA	NA	NA	
	008	111.5	-99.2	1/30/2009	14:39	4.37E+02	2.21E+02	1.97E+02	2.43E-02	7.80E-01	9.24E-01	-1.10E+00	2.81E+00	2.86E+00	1.77E+00	3.41E+00	4.13E+00	NA	NA	NA	
	009	111.5	-99.2	5/4/2009	14:30	4.42E+02	1.94E+02	1.64E+02	1.54E-01	5.99E-01	7.38E-01	-2.30E+00	6.18E+00	4.12E+00	1.38E+00	3.93E+00	4.71E+00	NA	NA	NA	
	010	111.5	-99.2	7/30/2009	13:54	4.64E+02	1.88E+02	1.89E+02	1.50E-01	5.70E-01	6.78E-01	-5.23E+00	7.61E+00	7.36E+00	4.44E+00	6.98E+00	8.68E+00	NA	NA	NA	
	011	111.5	-99.2	11/3/2009	11:17	4.96E+02	1.62E+02	1.61E+02	5.07E-01	8.31E-01	9.25E-01	4.38E-01	6.15E+00	6.86E+00	-4.82E+00	7.04E+00	6.72E+00	NA	NA	NA	
	012	111.5	-99.2	2/8/2010	13:14	3.80E+02	1.70E+02	1.79E+02	6.50E-01	7.23E-01	7.33E-01	-6.93E-01	3.86E+00	4.28E+00	-2.22E+00	5.70E+00	4.89E+00	NA	NA	NA	
	013	111.5	-99.2	4/26/2010	12:39	4.47E+02	1.64E+02	1.42E+02	4.81E-01	5.84E-01	6.06E-01	4.15E+00	6.75E+00	8.37E+00	4.44E+00	7.86E+00	9.87E+00	NA	NA	NA	
	014	111.5	-99.2	8/10/2010	14:52	3.71E+02	1.73E+02	1.78E+02	2.83E-01	4.37E-01	4.78E-01	-3.00E+00	7.68E+00	7.90E+00	-5.28E+00	9.73E+00	9.11E+00	NA	NA	NA	
MW-63-121	001	121	-108.7	5/15/2007	13:42	3.11E+02	1.83E+02	1.75E+02	3.00E-01	7.97E-01	9.37E-01	6.30E-01	4.25E+00	4.20E+00	-1.19E+00	3.65E+00	3.87E+00	2.29E+00	1.52E+01	1.77E+01	MW-63-121
	002	121	-108.7	7/25/2007	11:50	2.96E+02	1.82E+02	1.94E+02	3.19E-01	5.31E-01	5.93E-01	-1.31E+00	3.29E+00	3.46E+00	1.70E-01	3.46E+00	3.87E+00	NA	NA	NA	
	003	121	-108.7	10/11/2007	13:51	4.62E+02	1.70E+02	1.74E+02	2.39E-01	6.25E-01	7.37E-01	2.48E+00	4.51E+00	4.94E+00	1.54E+00	4.00E+00	4.54E+00	NA	NA	NA	
	004	121	-108.7	1/9/2008	10:42	5.40E+02	1.74E+02	1.71E+02	2.06E-02	4.70E-01	6.09E-01	2.54E+00	3.38E+00	4.15E+00	1.09E+00	3.41E+00	4.02E+00	NA	NA	NA	
	005	121	-108.7	4/23/2008	11:17	4.54E+02	1.34E+02	1.98E+02	5.36E-01	4.94E-01	8.04E-01	-3.56E-01	9.40E-01	1.55E+00	-1.33E+00	2.71E+00	1.81E+00	-3.22E+00	1.41E+01	2.46E+01	
	006	121	-108.7	7/29/2008	14:30	3.44E+02	1.04E+02	1.61E+02	7.60E-01	3.83E-01	5.73E-01	2.86E-01	2.08E+00	3.57E+00	1.23E+00	2.30E+00	4.11E+00	NA	NA	NA	
	007	121	-108.7	11/4/2008	12:43	4.95E+02	2.06E+02	1.98E+02	3.81E-01	7.52E-01	8.55E-01	-7.97E-01	5.42E+00	5.97E+00	1.20E+00	6.38E+00	7.41E+00	NA	NA	NA	
	008	121	-108.7	1/30/2009	14:41	6.23E+02	2.42E+02	1.97E+02	7.30E-01	5.09E-01	4.47E-01	1.91E+00	3.18E+00	3.92E+00	9.14E-01	2.84E+00	3.45E+00	NA	NA	NA	
	009	121	-108.7	5/4/2009	14:35	5.38E+02	2.04E+02	1.65E+02	7.71E-01	8.55E-01	9.23E-01	-6.65E-02	8.16E+00	5.44E+00	2.35E+00	4.29E+00	5.35E+00	NA	NA	NA	
	010	121	-108.7	7/30/2009	14:03	4.66E+02	1.88E+02	1.89E+02	5.21E-01	5.49E-01	5.66E-01	1.05E+00	4.89E+00	5.53E+00	-2.66E+00	6.67E+00	5.19E+00	NA	NA	NA	
	011	121	-108.7	11/3/2009	11:46	5.01E+02	1.64E+02	1.61E+02	5.66E-01	8.73E-01	9.67E-01	-5.33E+00	9.88E+00	8.44E+00	-2.07E+00	9.35E+00	8.77E+00	NA	NA	NA	

See Page 29 for Notes

IPEC00263607

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS																	Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-63-121	012	121	-108.7	2/8/2010	13:18	5.15E+02	1.74E+02	1.77E+02	3.18E-01	6.45E-01	7.40E-01	-2.07E-01	3.92E+00	4.30E+00	-2.48E-01	5.33E+00	4.92E+00	NA	NA	NA	MW-63-121
	013	121	-108.7	4/26/2010	12:59	6.06E+02	1.80E+02	1.46E+02	4.17E-01	6.09E-01	6.57E-01	3.57E+00	6.06E+00	7.40E+00	1.16E+00	6.13E+00	7.15E+00	NA	NA	NA	
	014	121	-108.7	8/10/2010	11:28	5.39E+02	1.80E+02	1.77E+02	3.67E-01	5.93E-01	6.58E-01	-9.48E-01	8.12E+00	8.95E+00	-6.58E-01	8.76E+00	9.58E+00	NA	NA	NA	
MW-63-163	001	162.5	-150.2	5/15/2007	11:38	5.78E+02	2.10E+02	1.73E+02	-6.43E-02	6.50E-01	8.74E-01	-8.04E-01	2.84E+00	2.59E+00	9.51E-01	2.25E+00	2.64E+00	-9.58E-01	1.44E+01	1.73E+01	MW-63-163
	002	162.5	-150.2	7/25/2007	12:13	4.79E+02	1.91E+02	1.96E+02	-7.20E-01	3.46E-01	6.26E-01	-3.18E+00	5.16E+00	4.39E+00	-4.54E-01	3.75E+00	3.99E+00	NA	NA	NA	
	003	162.5	-150.2	10/11/2007	14:18	3.49E+02	1.65E+02	1.73E+02	7.93E-03	7.98E-01	9.60E-01	-4.46E-01	3.00E+00	3.28E+00	-1.91E-02	2.94E+00	3.30E+00	NA	NA	NA	
	004	162.5	-150.2	1/9/2008	10:51	5.68E+02	1.77E+02	1.72E+02	3.19E-03	5.55E-01	7.17E-01	-4.52E-01	3.50E+00	3.89E+00	2.23E+00	6.11E+00	4.38E+00	NA	NA	NA	
	005	162.5	-150.2	4/23/2008	11:23	4.44E+02	1.70E+02	2.65E+02	1.82E-01	4.33E-01	7.87E-01	8.04E-01	1.06E+00	1.84E+00	6.60E-01	1.13E+00	1.94E+00	5.30E+00	1.52E+01	2.60E+01	
	006	162.5	-150.2	7/29/2008	14:56	4.48E+02	1.07E+02	1.63E+02	-8.79E-02	2.50E-01	4.37E-01	-2.09E+00	2.34E+00	3.61E+00	9.03E-01	2.59E+00	4.48E+00	NA	NA	NA	
	007	162.5	-150.2	11/4/2008	12:45	6.85E+02	1.86E+02	1.76E+02	-1.44E-01	5.53E-01	7.46E-01	1.77E-01	5.37E+00	6.12E+00	7.78E-01	6.21E+00	7.23E+00	NA	NA	NA	
	008	162.5	-150.2	1/29/2009	11:57	5.81E+02	2.40E+02	1.95E+02	2.86E-01	5.64E-01	6.42E-01	5.82E+00	7.23E+00	3.42E+00	-1.73E-01	2.81E+00	3.03E+00	NA	NA	NA	
	009	162.5	-150.2	5/4/2009	14:39	4.36E+02	1.94E+02	1.66E+02	-1.10E-02	6.03E-01	7.41E-01	-2.88E-01	5.57E+00	3.71E+00	-4.47E+00	4.50E+00	3.64E+00	NA	NA	NA	
	010	162.5	-150.2	7/30/2009	13:45	6.96E+02	1.98E+02	1.89E+02	-1.33E-01	3.60E-01	5.06E-01	-2.87E+00	5.47E+00	5.52E+00	-1.49E-01	5.80E+00	6.40E+00	NA	NA	NA	
	011	162.5	-150.2	11/3/2009	13:47	5.22E+02	1.64E+02	1.61E+02	4.30E-01	8.28E-01	9.38E-01	5.72E-01	4.56E+00	5.33E+00	6.80E+00	4.98E+00	7.07E+00	NA	NA	NA	
	012	162.5	-150.2	2/8/2010	15:36	5.94E+02	1.77E+02	1.78E+02	-1.49E-01	5.64E-01	7.92E-01	-8.47E-02	6.87E+00	5.81E+00	9.37E-01	4.95E+00	5.83E+00	NA	NA	NA	
	013	162.5	-150.2	4/26/2010	14:30	5.29E+02	1.70E+02	1.43E+02	1.98E-01	5.64E-01	6.75E-01	-1.45E+00	7.71E+00	8.86E+00	-2.98E+00	6.17E+00	5.91E+00	NA	NA	NA	
	014	162.5	-150.2	8/10/2010	11:21	4.13E+02	1.74E+02	1.78E+02	2.45E-01	4.43E-01	4.98E-01	-6.87E-01	8.55E+00	9.17E+00	-5.25E-01	8.23E+00	9.24E+00	NA	NA	NA	
MW-63-174	001	174	-161.7	5/15/2007	11:54	5.93E+02	2.12E+02	1.73E+02	2.64E-01	7.62E-01	9.04E-01	-6.91E-01	2.52E+00	2.70E+00	8.16E-03	2.49E+00	2.76E+00	1.30E+00	1.28E+01	1.51E+01	MW-63-174
	002	174	-161.7	7/25/2007	12:00	5.28E+02	1.94E+02	1.97E+02	-2.78E-01	4.41E-01	6.59E-01	6.28E-01	3.98E+00	4.55E+00	-3.03E-01	3.45E+00	3.80E+00	NA	NA	NA	
	003	174	-161.7	10/11/2007	14:22	3.70E+02	1.65E+02	1.72E+02	-2.85E-01	7.14E-01	9.39E-01	1.94E+00	2.90E+00	2.70E+00	-8.59E-01	2.56E+00	2.71E+00	NA	NA	NA	
	004	174	-161.7	1/9/2008	10:45	6.23E+02	1.79E+02	1.72E+02	6.16E-01	6.95E-01	7.24E-01	-1.24E+00	3.14E+00	3.33E+00	1.48E+00	3.03E+00	3.77E+00	NA	NA	NA	
	005	174	-161.7	4/23/2008	11:21	4.89E+02	1.72E+02	2.65E+02	-6.82E-02	3.65E-01	7.48E-01	-5.74E-01	2.01E+00	3.30E+00	3.66E-01	2.43E+00	4.19E+00	-2.14E+00	1.44E+01	2.50E+01	
	006	174	-161.7	7/29/2008	14:40	4.49E+02	1.40E+02	1.92E+02	6.56E-02	2.76E-01	4.80E-01	-3.76E-01	2.23E+00	3.71E+00	-1.72E+00	2.65E+00	3.79E+00	NA	NA	NA	
	007	174	-161.7	11/4/2008	12:44	4.77E+02	2.04E+02	1.99E+02	-2.76E-01	5.52E-01	7.83E-01	-2.68E+00	4.83E+00	4.74E+00	1.18E+00	5.45E+00	6.30E+00	NA	NA	NA	
	008	174	-161.7	1/29/2009	11:55	4.92E+02	2.28E+02	1.97E+02	4.27E-01	5.96E-01	6.57E-01	-4.53E-01	3.81E+00	3.67E+00	-1.34E+00	3.29E+00	3.32E+00	NA	NA	NA	
	009	174	-161.7	5/4/2009	14:28	4.57E+02	1.94E+02	1.63E+02	-2.15E-01	6.62E-01	7.87E-01	1.98E-01	4.58E+00	3.05E+00	-2.66E+00	3.11E+00	2.63E+00	NA	NA	NA	
	010	174	-161.7	7/30/2009	13:05	4.22E+02	1.86E+02	1.89E+02	-1.74E-01	5.20E-01	6.82E-01	1.48E-01	5.52E+00	6.18E+00	1.22E+00	5.79E+00	6.83E+00	NA	NA	NA	
	011	174	-161.7	11/3/2009	13:53	4.98E+02	1.64E+02	1.61E+02	-1.04E-02	7.92E-01	9.91E-01	1.30E+00	6.69E+00	7.80E+00	5.41E+00	6.04E+00	8.21E+00	NA	NA	NA	
	012	174	-161.7	2/8/2010	15:32	5.05E+02	1.74E+02	1.78E+02	3.28E-02	6.25E-01	8.03E-01	-9.48E-02	3.76E+00	4.18E+00	-2.02E+00	3.76E+00	3.88E+00	NA	NA	NA	
	013	174	-161.7	4/26/2010	14:28	4.98E+02	1.71E+02	1.46E+02	-1.69E-02	5.53E-01	7.24E-01	2.68E+00	4.74E+00	5.86E+00	-4.68E+00	5.26E+00	4.32E+00	NA	NA	NA	
	014	174	-161.7	8/10/2010	11:40	3.33E+02	1.65E+02	1.71E+02	3.54E-01	5.43E-01	6.01E-01	-3.32E+00	7.07E+00	6.89E+00	-1.41E+00	7.84E+00	8.11E+00	NA	NA	NA	
MW-65-48	001	43.3	26.356	1/4/2007	12:00	2.08E+02	1.83E+02	1.80E+02	0.00E+00	7.80E-01	8.60E-01	1.60E+00	3.60E+00	3.90E+00	-5.00E-01	3.00E+00	3.70E+00	-2.20E+00	6.30E+00	7.30E+00	MW-65-48
MW-65-80	001	71.4	-1.659	9/8/2006	9:40	3.29E+01	1.62E+02	1.74E+02	4.72E-01	9.80E-01	1.04E+00	-5.15E-01	1.99E+00	2.18E+00	-2.34E-01	1.81E+00	1.98E+00	NA	NA	NA	MW-65-80
	002	71.4	-1.659	1/4/2007	12:35	1.83E+02	1.80E+02	1.80E+02	1.60E-01	7.80E-01	8.70E-01	-2.50E-01	2.22E+00	2.50E+00	-1.13E+00	2.31E+00	2.80E+00	-1.90E+00	6.60E+00	7.40E+00	
MW-66-21	001	14.1	0	7/30/2007	13:45	3.57E+03	2.91E+02	1.96E+02	1.79E+00	7.08E-01	2.08E+03	1.77E-01	3.07E+00	3.51E+00	2.21E+00	3.27E+00	4.20E+00	NA	NA	NA	MW-66-21
	002	14.1	0	10/15/2007	10:45	1.04E+03	2.24E+02	1.95E+02	2.42E+00	7.97E-01	5.30E-01	-8.32E-01	3.03E+00	2.74E+00	1.01E-01	2.79E+00	3.18E+00	1.48E+01	2.06E+01	2.28E+01	
	003	14.1	0	1/14/2008	11:33	8.18E+02	4.62E+02	4.16E+02	1.09E+00	8.96E-01	8.19E-01	1.68E+00	3.14E+00	3.77E+00	2.35E+00	3.86E+00	4.26E+00	-5.07E+00	2.12E+01	2.55E+01	
	004	14.1	0	4/21/2008	14:10	9.53E+02	1.51E+02	1.93E+02	1.01E+00	2.05E-01	2.82E-01	6.53E-01	2.36E+00	4.07E+00	1.86E-02	2.26E+00	3.74E+00	-7.28E+00	8.88E+00	1.55E+01	
	005	14.1	0	7/29/2008	11:48	7.83E+02	1.02E+02	1.30E+02	9.07E-01	3.56E-01	4.39E-01	-1.01E+00	1.88E+00	2.92E+00	1.71E+00	2.17E+00	3.99E+00	-6.26E+00	1.66E+01	2.99E+01	
	006	14.1	0	11/4/2008	10:30	5.34E+02	2.07E+02	1.64E+02	1.03E+00	6.96E-01	6.69E-01	1.44E+00	4.67E+00	5.42E+00	2.98E+00	5.17E+00	6.47E+00	-5.68E+00	1.79E+01	2.09E+01	
	007	14.1	0	1/27/2009	13:52	4.61E+02	1.74E+02	1.75E+02	2.91E-01	7.50E-01	8.72E-01	1.60E-01	5.45E+00	3.11E+00	-1.87E+00	2.90E+00	2.71E+00	1.29E+01	1.74E+01	1.93E+01	
	008	14.1	0	3/17/2009	12:00	4.29E+02	3.80E+02	3.81E+02	3.49E-01	6.45E-01	7.29E-01	1.60E-01	6.36E+00	4.24E+00	1.72E+00	3.84E+00	4.65E+00	-4.98E+00	1.70E+01	1.99E+01	
	009	14.1	0	4/20/2009	17:00	8.28E+01	1.65E+02	1.87E+02	1.93E-01	5.55E-01	6.50E-01	1.27E+00	7.23E+00	4.82E+00	9.73E-01	4.11E+00	4.84E+00	-1.86E+00	1.94E+01	2.22E+01	
	010	14.1	0	7/28/2009	14:10	8.23E+02	2.52E+02	2.01E+02	4.51E-01	6.90E-01	7.54E-01	-4.32E-01	4.04E+00	4.51E+00	8.39E-01	3.65E+00	4.34E+00	8.48E+00	2.07E+01	2.33E+01	
	011	14.1	0	11/11/2009	13:46	9.51E+02	2.57E+02	2.04E+02	3.59E-01	8.07E-01	9.17E-01	-2.53E-01	5.70E+00	6.26E+00	1.12E+00	5.73E+00	6.68E+00	-1.49E-01	1.65E+01	1.90E+01	
	012	14.1	0	2/22/2010	14:36	9.60E+02	2.00E+02	1.75E+02	8.97E-01	7.30E-01	7.14E-01	4.96E-01	4.72E+00	5.31E+00	-1.35E+00	5.07E+00	5.41E+00	-5.33E+00	1.96E+01	2.28E+01	
	013	14.1	0	4/9/2010	15:27	9.50E+02	4.07E+02	3.82E+02	1.12E-02	4.34E-01	5.44E-01	3.09E+00	6.75E+00	8.43E+00	3.15E+00	5.19E+00	7.18E+00	-2.25E+00	1.92E+01	2.25E+01	
	014	14.1	0	8/9/2010	12:30	1.07E+03	2.01E+02	1.29E+02	1.17E+00	5.52E-01	4.41E-01	-5.85E+00	9.45E+00	9.34E+00	-9.97E-01	8.07E+00	8.65E+00	3.11E+00	1.19E+01	1.37E+01	
MW-66-36	001	33.6	-19.5	7/30/2007	12:49	9.10E+03	4.13E+02	1.94E+02	6.20E+00	1.19E+00	6.05E-01	-9.84E-01	2.67E+00	2.76E+00	-5.59E-01	2.90E+00	3.06E+00	NA	NA	NA	MW-66-36
	002	33.6	-19.5	10/15/2007	10:16	8.95E+03	4.61E+02	1.92E+02	1.12E+01	1.61E+00	5.63E-01	0.00E+00	8.34E+00	4.32E+00	-2.92E-01	4.34E+00	4.68E+00	1.17E+01	1.88E+01	2.09E+01	
	003	33.6	-19.5	1/14/2008	11:40	7.26E+03	1.01E+03	4.16E+02	1.51E+01	2.40E+00	8.34E-01	2.34E+00	3.38E+00	4.14E+00	-1.08E+00	3.78E+00	3.39E+00	7.19E+00	2.36E+01	2.71E+01	
	004	33.6	-19.5	4/21/2008	13:25	6.09E+03	2.89E+02	1.97E+02	1.32E+01	5.27E-01	3.65E-01	-2.89E-01	2.09E+00	3.46E+00	-2.09E+00	3.54E+00	4.13E+00	-3.35E-01	8.98E+00	1.54E+01	
	005	33.6	-19.5	7/29/2008	12:05	5.01E+03	1.91E+02	1.30E+02	1.20E+01	1.06E+00	6.20E-01	2.07E-01	1.66E+00	2.82E+00	-1.05E+00	1.93E+00	3.00E+00	-1.00E+00	1.69E+01	2.98E+01	
	006	33.6	-19.5	11/4/2008	10:40	5.44E+03	5.34E+02	1.67E+02	1.38E+01	1.71E+00	5.23E-01	6.91E-01	4.32E+00	4.90E+00	1.78E+00	5.24E+00	6.23E+00	9.57E-01	1.64E+01	1.88E+01	
	007	33.6	-19.5	1/27/2009	13:07	3.65E+03	7.62E+02	4.41E+02	1.22E+01	1.56E+00	6.15E-01	-1.04E+00	2.88E+00	3.06E+00	6.35E-02	3.27E+00	3.72E+00	1.45E+01	1.70E+01	1.87E+01	
	008	33.6	-19.5	4/20/2009	15:26	4.39E+03	4.34E+02	1.87E+02	1.07E+01	1.42E+00	5.97E-01	5.54E-02	6.44E+00	4.29E+00	-1.13E+00	4.05E+00	4.20E+00	8.95E+00	1.97E+01	2.21E+01	
	009	33.6	-19.5	7/28/2009	13:41	3.05E+03	4.10E+02	2.10E+02	7.51E+00	1.21E+00	3.95E-01	3.19E+00	6.23E+00	3.54E+00	-6.56E-01	3.65E+00	3.98E+00	6.22E+00	1.92E+01	2.16E+01	
	010	33.6	-19.5	11/11/2009	13:18	4.32E+03	4.44E+02	2.04E+02	6.82E+00	1.24E+00	6.70E-01	3.75E+00	6.95E+00	8.31E+00	-8.32E-01	7.47E+00	7.95E+00	-3.91E+00	1.77E+01	2.08E+01	
	011	33.6	-19.5	2/22/2010	14:04	3.43E+03	2.91E+02	1.75E+02	7.03E+00	1.53E+00	7.17E-01	4.16E-01	4.70E+00	5.29E+00	4.35E-01	5.42E+00	6.09E+00	-8.21E+00	1.94E+01	2.26E+01	
	012	33.6	-19.5	4/9/2010	15:17	3.64E+03	5.90E+02	3.87E+02	7.05E+00	1.36E+00	7.54E-01	1.79E+00	7.65E+00	9.10E+00	6.63E+00	8.54E+00	1.20E+01	-7.64E+00	1.69E+01	2.02E+01	
	013	33.6	-19.5	8/9/2010	11:47	3.08E+03	3.06E+02	1.24E+02	6.40E+00	1.07E+00	3.74E-01	-1.53E+00	8.82E+00	9.41E+00	4.62E+00	7.61E+00	1.02E+01	4.59E+00	1.58E+01	1.80E+01	
MW-67-39	001	38.3	-25.8	8/31/2007	12:05	4.86E+03	4.34E+02	1.92E+02	1.86E+01	1.86E+00	4.73E-01	-1.93E-01	2.02E+00	2.24E+00	-9.45E-01	2.00E+00	2.09E+00	NA	NA	NA	MW-67-39
	002	38.3	-25.8	10/1/2007	11:30	5.07E+03	3.75E+02	1.95E+02	2.71E+01	2.44E+00	6.21E-01	1.02E+01	4.11E+00	1.98E+00	3.69E-01	2.07E+00	2.39E+00	2.51E+00	1.68E+01	1.93E+01	
	004	38.3	-25.8	2/25/2008	15:38	4.17E+03	8.28E+02	5.29E+02	2.05E+01	1.77E+00	6.97E-01	-1.15E+00	3.44E+00	3.73E+00	1.99E+00	4.39E+00	3.98E+00	-5.41E-01	2.26E+01	2.63E+01	
	005	38.3	-25.8	7/28/2008	14:07	3.87E+03	1.72E+02	1.30E+02	1.37E+01	1.11E+00	3.97E-01	-1.03E+00	2.60E+00	3.42E+00	4.47E-01	2.15E+00	3.68E+00	6.34E+00	1.67E+01	2.88E+01	
	007	38.3	-25.8	12/18/2008	11:30	3.18E+03	2.66E+02	1.71E+02	1.62E+01	1.69E+00	1.00E+00	1.18E+00	4.61E+00	5.40E+00	7.33E-01	5.04E+00	5.81E+00	8.37E-01	1.68E+01	1.94E+01	
	008	38.3	-25.8	1/27/2009	16:15	3.67E+03	2.91E+02	1.92E+02	1.42E+01	1.71E+00	7.62E-01	-8.03E-01	2.04E+00	2.15E+00	-1.11E-01	2.06E+00	2.25E+00	1.12E+01	1.68E+01	1.87E+01	

See Page 29 for Notes

IPEC00263608

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-67-39	009	38.3	-25.8	4/20/2009	15:02	3.88E+03	4.14E+02	1.90E+02	1.13E+01	1.56E+00	5.49E-01	-2.66E-01	7.17E+00	4.78E+00	1.31E-01	3.74E+00	4.21E+00	1.36E+01	2.06E+01	2.29E+01	MW-67-39
	010	38.3	-25.8	7/28/2009	15:04	2.69E+03	3.87E+02	2.08E+02	6.37E+00	1.11E+00	3.98E-01	1.90E-01	3.01E+00	3.45E+00	2.33E-01	3.24E+00	3.70E+00	-3.64E+00	1.79E+01	2.06E+01	
	011	38.3	-25.8	11/11/2009	14:09	2.80E+03	2.43E+02	1.65E+02	1.35E+01	1.83E+00	7.82E-01	-1.20E+00	8.07E+00	8.84E+00	-1.94E+00	1.00E+01	1.07E+01	-3.83E+00	1.49E+01	1.73E+01	
	012	38.3	-25.8	3/3/2010	13:54	2.55E+03	2.63E+02	1.75E+02	1.24E+01	1.89E+00	6.63E-01	-9.37E-01	5.29E+00	5.81E+00	2.05E+00	6.38E+00	7.62E+00	-9.06E+00	2.03E+01	2.37E+01	
	013	38.3	-25.8	5/6/2010	15:38	3.30E+03	3.60E+02	1.70E+02	9.77E+00	1.69E+00	5.74E-01	-1.53E+00	9.44E+00	1.08E+01	-1.11E+00	7.71E+00	8.22E+00	-1.04E+01	2.13E+01	2.48E+01	
	014	38.3	-25.8	8/9/2010	10:43	3.37E+03	3.15E+02	1.22E+02	8.52E+00	1.21E+00	5.69E-01	-9.27E+00	1.08E+01	1.30E+01	-1.39E+00	8.28E+00	8.77E+00	-2.31E+00	1.43E+01	1.69E+01	
MW-67-105	001	104.8	-92.3	8/31/2007	12:35	1.86E+03	5.16E+02	3.34E+02	1.11E+00	6.12E-01	5.26E-01	2.26E-01	2.00E+00	2.00E+00	-3.08E-01	1.68E+00	1.86E+00	NA	NA	NA	MW-67-105
	002	104.8	-92.3	10/1/2007	11:40	2.64E+03	2.96E+02	1.95E+02	4.12E-01	8.28E-01	9.46E-01	0.00E+00	6.11E+00	3.77E+00	-4.57E-01	3.63E+00	3.96E+00	1.05E+01	1.58E+01	1.76E+01	
	003	104.8	-92.3	1/11/2008	15:15	2.43E+03	6.42E+02	4.15E+02	7.58E-01	9.98E-01	1.07E+00	9.32E+00	5.13E+00	2.83E+00	7.44E-01	3.60E+00	3.70E+00	1.81E+01	2.42E+01	2.67E+01	
	004	104.8	-92.3	2/25/2008	13:44	2.38E+03	6.89E+02	5.30E+02	1.13E+00	7.89E-01	8.12E-01	-1.27E+00	3.25E+00	3.38E+00	-4.79E-02	2.97E+00	3.25E+00	1.24E+01	1.74E+01	1.93E+01	
	005	104.8	-92.3	7/28/2008	14:25	2.16E+03	1.40E+02	1.37E+02	9.63E-01	3.54E-01	4.16E-01	4.17E-01	1.59E+00	2.78E+00	7.65E-01	1.51E+00	2.78E+00	7.25E+00	1.65E+01	2.85E+01	
	006	104.8	-92.3	11/3/2008	14:21	2.93E+03	4.02E+02	1.66E+02	1.11E+00	5.60E-01	4.64E-01	-2.48E-01	6.36E+00	7.11E+00	7.75E-02	6.87E+00	7.59E+00	6.32E+00	1.68E+01	1.90E+01	
	007	104.8	-92.3	1/27/2009	16:45	1.96E+03	2.42E+02	1.92E+02	4.08E-01	8.30E-01	9.49E-01	-1.13E+00	3.32E+00	2.71E+00	-3.40E-02	2.39E+00	2.66E+00	1.21E+01	1.64E+01	1.81E+01	
	008	104.8	-92.3	4/20/2009	16:00	1.98E+03	3.15E+02	1.88E+02	6.38E-01	6.92E-01	7.12E-01	-1.78E+00	4.89E+00	3.26E+00	3.61E-01	3.35E+00	3.92E+00	1.01E+01	1.97E+01	2.20E+01	
	009	104.8	-92.3	7/28/2009	15:15	1.77E+03	3.30E+02	2.09E+02	5.33E-01	4.15E-01	3.68E-01	1.59E+00	2.85E+00	3.42E+00	-7.22E-01	3.54E+00	3.64E+00	1.17E+01	1.83E+01	2.04E+01	
	010	104.8	-92.3	11/11/2009	14:31	2.12E+03	3.32E+02	2.03E+02	8.49E-01	5.43E-01	4.85E-01	1.63E-01	5.89E+00	6.71E+00	4.21E-01	7.59E+00	7.67E+00	-2.17E+00	1.71E+01	1.99E+01	
	011	104.8	-92.3	3/3/2010	14:01	1.59E+03	2.28E+02	1.79E+02	5.90E-01	7.56E-01	8.05E-01	-2.99E-01	4.00E+00	4.38E+00	-1.50E+00	4.14E+00	4.26E+00	-4.08E+00	1.91E+01	2.23E+01	
	012	104.8	-92.3	5/6/2010	15:46	1.54E+03	2.60E+02	1.64E+02	1.77E+00	1.01E+00	7.88E-01	4.33E-01	8.65E+00	9.84E+00	3.51E+00	1.01E+01	1.24E+01	-6.18E+00	2.07E+01	2.40E+01	
	013	104.8	-92.3	8/9/2010	10:37	1.26E+03	2.10E+02	1.24E+02	2.61E+00	8.16E-01	6.26E-01	1.46E+00	6.24E+00	7.48E+00	1.75E+00	5.78E+00	7.28E+00	9.56E+00	1.69E+01	1.90E+01	
MW-67-173	001	172.3	-159.8	8/31/2007	13:04	1.05E+03	4.28E+02	3.37E+02	3.73E-01	3.77E-01	4.12E-01	-1.46E+00	3.56E+00	3.68E+00	1.19E-02	3.75E+00	4.15E+00	NA	NA	NA	MW-67-173
	002	172.3	-159.8	10/1/2007	12:30	1.01E+03	2.25E+02	1.95E+02	1.48E-01	8.62E-01	1.07E+00	-1.34E+00	3.79E+00	4.01E+00	2.82E+00	3.25E+00	3.77E+00	4.12E+00	1.71E+01	1.96E+01	
	004	172.3	-159.8	2/25/2008	14:00	9.51E+02	5.51E+02	5.30E+02	-4.12E-01	6.06E-01	7.76E-01	6.65E-01	2.82E+00	3.23E+00	-3.63E-01	2.54E+00	2.70E+00	-5.95E+00	2.37E+01	2.82E+01	
	005	172.3	-159.8	7/28/2008	14:42	9.12E+02	1.09E+02	1.36E+02	1.05E-01	2.66E-01	4.85E-01	-1.22E+00	2.06E+00	3.19E+00	-3.63E-01	2.14E+00	3.49E+00	5.88E+00	1.64E+01	2.84E+01	
	006	172.3	-159.8	11/3/2008	14:37	9.93E+02	2.58E+02	1.66E+02	-3.48E-02	2.59E-01	3.02E-01	-1.41E+00	6.69E+00	6.32E+00	1.49E+00	6.66E+00	7.65E+00	-1.40E+00	1.69E+01	1.97E+01	
	007	172.3	-159.8	1/27/2009	16:33	7.57E+02	2.00E+02	1.92E+02	4.35E-01	5.94E-01	6.32E-01	-1.51E+00	3.86E+00	3.90E+00	-1.24E+00	2.58E+00	2.73E+00	1.48E+01	1.79E+01	1.96E+01	
	008	172.3	-159.8	3/17/2009	14:00	6.73E+02	4.19E+02	3.81E+02	-5.07E-01	5.72E-01	6.95E-01	-1.51E+00	5.85E+00	3.90E+00	8.14E-01	3.41E+00	4.00E+00	-3.42E+00	1.71E+01	2.00E+01	
	009	172.3	-159.8	4/20/2009	15:50	7.47E+02	2.28E+02	1.87E+02	2.33E-01	6.84E-01	7.84E-01	-2.70E+00	7.05E+00	4.70E+00	9.39E-01	3.60E+00	4.24E+00	8.40E+01	2.45E+01	2.47E+01	
	010	172.3	-159.8	7/28/2009	15:24	1.05E+03	2.76E+02	2.07E+02	1.59E-01	5.58E-01	6.83E-01	6.46E-01	2.91E+00	3.45E+00	-6.41E-01	3.06E+00	3.17E+00	7.63E-01	1.74E+01	1.99E+01	
	011	172.3	-159.8	11/11/2009	14:50	8.10E+02	2.46E+02	2.04E+02	1.67E-01	6.98E-01	8.18E-01	2.06E-01	9.81E+00	6.60E+00	-1.52E+00	6.95E+00	7.53E+00	-2.17E+00	1.86E+01	2.16E+01	
	012	172.3	-159.8	3/3/2010	14:21	8.70E+02	1.98E+02	1.80E+02	-5.05E-01	5.66E-01	9.10E-01	-3.74E+00	5.84E+00	5.23E+00	3.45E-01	3.84E+00	4.42E+00	-1.67E+00	1.95E+01	2.26E+01	
	013	172.3	-159.8	5/6/2010	16:03	6.78E+02	2.03E+02	1.66E+02	-1.35E-01	4.87E-01	7.07E-01	-3.30E+00	9.64E+00	1.02E+01	-8.48E-01	1.00E+01	1.11E+01	-7.30E+00	2.01E+01	2.37E+01	
	014	172.3	-159.8	8/9/2010	11:07	6.72E+02	1.71E+02	1.27E+02	7.70E-02	4.44E-01	5.35E-01	-7.06E-01	1.34E-01	1.68E+01	6.44E-01	8.97E+00	1.04E+01	-1.44E+00	1.14E+01	1.34E+01	
MW-67-219	001	218.8	-206.3	8/31/2007	13:43	1.25E+03	4.46E+02	3.30E+02	3.27E-02	3.00E-01	3.47E-01	-1.58E-01	3.04E+00	3.32E+00	9.02E-01	3.09E+00	3.68E+00	NA	NA	NA	MW-67-219
	002	218.8	-206.3	10/1/2007	12:53	9.46E+02	2.22E+02	1.95E+02	-2.27E-01	7.50E-01	1.03E+00	1.48E-01	2.60E+00	2.90E+00	1.38E-01	2.37E+00	2.65E+00	1.21E+01	2.64E+01	2.99E+01	
	004	218.8	-206.3	2/25/2008	11:43	1.23E+03	5.81E+02	5.31E+02	-7.61E-02	4.93E-01	6.12E-01	-1.33E+00	3.03E+00	3.18E+00	1.08E+00	3.15E+00	3.78E+00	1.23E+01	1.81E+01	2.03E+01	
	005	218.8	-206.3	7/28/2008	11:00	1.17E+03	1.16E+02	1.36E+02	-7.49E-02	2.34E-01	4.85E-01	-2.91E-01	1.98E+00	3.33E+00	-2.64E-01	1.92E+00	3.18E+00	5.99E+00	1.68E+01	2.90E+01	
	006	218.8	-206.3	11/3/2008	11:31	1.37E+03	2.93E+02	1.68E+02	8.78E-02	1.69E-01	1.91E-01	1.32E+00	4.93E+00	5.86E+00	4.00E+00	6.30E+00	8.05E+00	2.30E+00	1.65E+01	1.88E+01	
	007	218.8	-206.3	1/27/2009	12:34	9.68E+02	2.81E+02	2.50E+02	-7.56E-02	5.30E-01	7.13E-01	-3.58E-01	1.89E+00	2.10E+00	7.86E-02	1.83E+00	2.09E+00	1.14E+01	2.16E+01	2.43E+01	
	008	218.8	-206.3	4/20/2009	12:09	1.18E+03	2.63E+02	1.89E+02	3.27E-01	6.63E-01	7.50E-01	-2.03E+00	6.20E+00	4.13E+00	4.77E-01	4.26E+00	4.84E+00	9.52E+00	1.85E+01	2.08E+01	
	009	218.8	-206.3	7/28/2009	11:11	9.22E+02	2.61E+02	2.03E+02	1.81E-01	8.09E-01	9.66E-01	2.89E+00	3.99E+00	4.97E+00	1.63E+00	3.76E+00	4.67E+00	1.14E+01	1.66E+01	1.85E+01	
	010	218.8	-206.3	11/11/2009	11:16	1.44E+03	2.88E+02	2.00E+02	-1.39E-01	6.37E-01	7.86E-01	1.78E+00	4.86E+00	5.82E+00	-4.94E-01	6.25E+00	6.90E+00	6.03E+00	1.74E+01	1.97E+01	
	011	218.8	-206.3	3/3/2010	11:23	1.09E+03	2.07E+02	1.79E+02	3.26E-01	7.37E-01	8.53E-01	-2.20E+00	3.00E+00	3.18E+00	1.81E+00	3.13E+00	3.73E+00	4.96E+00	1.89E+01	2.15E+01	
	012	218.8	-206.3	5/6/2010	11:51	1.20E+03	2.40E+02	1.66E+02	1.78E-01	6.31E-01	7.71E-01	2.27E+00	8.87E+00	1.05E+01	2.35E+00	7.38E+00	9.29E+00	-7.98E+00	1.95E+01	2.31E+01	
	013	218.8	-206.3	8/9/2010	13:33	1.11E+03	2.01E+02	1.25E+02	9.94E-02	5.32E-01	6.41E-01	-7.99E-01	8.14E+00	9.12E+00	-6.19E+00	9.03E+00	8.33E+00	2.34E+00	1.21E+01	1.39E+01	
MW-67-276	001	275.3	-262.8	8/31/2007	12:20	6.79E+02	3.83E+02	3.41E+02	-3.34E-01	3.57E-01	4.29E-01	1.36E+00	3.82E+00	4.02E+00	-9.09E-01	3.75E+00	4.00E+00	NA	NA	NA	MW-67-276
	002	275.3	-262.8	10/1/2007	13:04	1.11E+03	2.30E+02	1.96E+02	3.82E-02	8.36E-01	9.91E-01	-3.32E+00	3.63E+00	3.34E+00	-3.17E-01	3.51E+00	3.31E+00	5.04E-01	1.59E+01	1.84E+01	
	004	275.3	-262.8	2/25/2008	11:48	1.07E+03	5.64E+02	5.29E+02	4.43E-01	7.06E-01	7.88E-01	2.00E+00	3.45E+00	4.21E+00	1.79E+00	4.11E+00	4.33E+00	1.08E+01	1.89E+01	2.11E+01	
	005	275.3	-262.8	7/28/2008	11:09	1.16E+03	1.16E+02	1.36E+02	-5.05E-02	2.76E-01	5.47E-01	-8.94E-01	1.98E+00	3.18E+00	5.92E-01	1.97E+00	3.45E+00	7.55E+00	1.62E+01	2.77E+01	
	006	275.3	-262.8	11/3/2008	11:39	1.18E+03	2.75E+02	1.66E+02	-5.08E-02	1.81E-01	2.16E-01	3.75E-01	5.63E+00	6.29E+00	-7.43E-01	6.00E+00	6.50E+00	7.29E+00	1.73E+01	1.95E+01	
	007	275.3	-262.8	1/27/2009	13:01	1.10E+03	5.12E+02	4.39E+02	3.32E-01	5.93E-01	6.66E-01	2.35E-01	3.24E+00	3.70E+00	-1.19E+00	3.74E+00	3.96E+00	1.15E+01	1.68E+01	1.87E+01	
	008	275.3	-262.8	4/20/2009	12:15	9.46E+02	2.43E+02	1.86E+02	7.29E-03	5.33E-01	6.74E-01	1.18E+00	5.45E+00	3.63E+00	-2.84E-01	3.63E+00	4.04E+00	2.21E+01	2.07E+01	2.28E+01	
	009	275.3	-262.8	7/28/2009	11:15	9.17E+02	2.63E+02	2.04E+02	2.23E-01	3.98E-01	4.46E-01	-6.84E-01	5.00E+00	4.61E+00	2.18E+00	3.71E+00	4.70E+00	7.04E+00	1.76E+01	1.99E+01	
	010	275.3	-262.8	11/11/2009	11:23	1.05E+03	1.88E+02	1.65E+02	2.35E-01	8.09E-01	9.59E-01	9.81E-01	8.21E+00	9.54E+00	4.26E+00	9.15E+00	1.17E+01	1.30E+00	1.66E+01	1.91E+01	
	011	275.3	-262.8	3/3/2010	11:25	1.11E+03	2.10E+02	1.80E+02	-1.30E-01	5.78E-01	8.23E-01	1.09E+00	3.92E+00	4.54E+00	-3.85E+00	6.67E+00	4.49E+00	1.73E+00	1.92E+01	2.21E+01	
	012	275.3	-262.8	5/6/2010	12:20	1.09E+03	2.33E+02	1.65E+02	-1.16E-01	5.38E-01	7.47E-01	-1.34E+00	7.98E+00	8.70E+00	2.02E+00	9.16E+00	1.09E+01	9.78E+00	2.03E+01	2.27E+01	
	013	275.3	-262.8	8/9/2010	13:36	9.33E+02	1.86E+02	1.22E+02	4.00E-01	4.66E-01	4.98E-01	2.56E+00	7.23E+00	8.80E+00	-2.39E+00	8.22E+00	8.27E+00	9.94E+00	1.28E+01	1.42E+01	
MW-67-323	001	322.3	-309.8	8/31/2007	13:20	3.13E+02	1.55E+02	1.57E+02	-2.41E-01	3.06E-01	3.74E-01	1.14E+00	3.71E+00	4.33E+00	1.29E-01	3.76E+00	4.32E+00	NA	NA	NA	MW-67-323
	002	322.3	-309.8	10/1/2007	14:08	1.29E+03	2.40E+02	1.96E+02	5.67E-01	8.58E-01	9.37E-01	-5.77E-01	3.04E+00	3.24E+00	-6.19E-01	3.35E+00	3.58E+00	5.25E-01	1.65E+01	1.92E+01	
	004	322.3	-309.8	2/25/2008	11:59	3.72E+02	2.75E+02	2.87E+02	3.61E-01	7.60E-01	8.62E-01	-2.08E-01	2.97E+00	3.32E+00	1.29E+00	3.50E+00	4.18E+00	6.85E+00	1.88E+01	2.13E+01	
	005	322.3	-309.8	7/28/2008	11:25	3.38E+02	9.08E+01	1.36E+02	-2.38E-01	3.66E-01	7.29E-01	8.29E-01	2.30E+00	3.99E+00	2.24E-01	2.04E+00	3.46E+00	-5.98E+00	1.59E+01	2.86E+01	
	006	322.3	-309.8	11/3/2008	11:44	6.84E+02	2.24E+02	1.64E+02	4.20E-02	3.40E-01	4.37E-01	-3.56E+00	5.21E+00	5.18E+00	4.29E-01	5.12E+00	5.87E+00	-7.38E+00	1.59E+01	1.87E+01	
	007	322.3	-309.8	1/27/2009	13:50	3.65E+02	1.70E+02	1.76E+02	-1.15E-01	4.05E-01	5.85E-01	4.74E-01	3.86E+00	4.42E+00	3.47E-01	3.38E+00	3.86E+00	9.84E+00	1.32E+01	1.47E+01	
	008	322.3	-309.8	4/20/2009	12:20	3.97E+02	1.98E+02	1.87E+02	2.21E-01	7.17E-01	8.23E-01	-5.22E-01	6.86E+00	4.57E+00	-2.70E+00	4.50E+00	4.33E+00	-5.56E+00	2.10E+01	2.43E+01	
	009	322.3	-309.8	7/28/2009	11:25	3.94E+02	2.16E+02	2.07E+02	5.31E-02	3.21E-01	4.07E-01	-1.54E+00	3.31E+00	3.45E+00	7.30E-01	3.72E+00	4.34E+00	2.93E-01	1.79E+01	2.04E+01	
	010	322.3	-309.8	11/11/2009	11:34	4.21E+02	1.62E+02	1.65E+02	-3.92E-01	4.86E-01	7.25E-01	-3.01E+00	8.12E+00	8.50E+00	-1.44E+00	8.10E+00	8.57E+00	2.91E+00	1.53E+01	1.74E+01	
	011	322.3	-309.8	3/3/2010	11:31	4.71E+02	1.80E+02	1.80E+02	3.29E-01	7.45E-01	8.63E-01	-5.78E-01	3.68E+00	4.08E+00	-1.86E-01	3.66E+00	4.06E+00	8.96E+00	1.96E+01	2.21E+01	
	012	322.3	-309.8	5/6/2010	12:30	4.44E+02	1.83E+02	1.67E+02	-1.63E-01	4.58E-01	6.67E-01	-2.50E+00	7.72E+00	7.87E+00	2.97E-01	8.21E+00	9.30E+00	-1.13E+01	1.96E+01	2.33E+01	

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MW-67-323	013	322.3	-309.8	3/9/2010	13:23	4.32E+02	1.48E+02	1.23E+02	6.38E-01	6.31E-01	6.53E-01	1.47E+00	6.88E+00	8.02E+00	3.28E-01	6.72E+00	7.56E+00	-4.51E+00	1.37E+01	1.63E+01	MW 67 323
MW-67-340	001	339.8	-327.3	8/31/2007	12:54	3.69E+02	1.61E+02	1.60E+02	1.69E-01	2.71E-01	3.04E-01	6.52E-01	4.61E+00	5.13E+00	4.53E+00	5.43E+00	5.20E+00	NA	NA	NA	MW 67 340
	002	339.8	-327.3	10/1/2007	14:00	3.90E+02	1.92E+02	1.96E+02	1.42E-01	3.71E-01	4.20E-01	7.29E-01	3.46E+00	3.96E+00	-1.22E+00	3.33E+00	3.50E+00	3.89E+00	1.54E+01	1.76E+01	
	004	339.8	-327.3	2/25/2008	12:00	4.78E+02	2.82E+02	2.86E+02	-2.17E-01	5.53E-01	6.94E-01	-1.58E+00	3.99E+00	3.94E+00	-7.62E-01	3.19E+00	3.43E+00	5.72E+00	1.83E+01	2.09E+01	
	005	339.8	-327.3	7/28/2008	11:18	5.11E+02	9.36E+01	1.30E+02	-3.39E-01	2.28E-01	5.49E-01	3.13E-01	2.21E+00	3.81E+00	9.03E-01	2.25E+00	3.68E+00	-6.94E+00	1.57E+01	2.78E+01	
	006	339.8	-327.3	11/3/2008	11:54	6.69E+02	2.22E+02	1.63E+02	8.08E-02	4.26E-01	5.43E-01	2.23E+00	6.25E+00	7.45E+00	3.65E+00	6.76E+00	8.47E+00	-8.34E+00	1.59E+01	1.88E+01	
	007	339.8	-327.3	1/27/2009	12:44	5.23E+02	4.37E+02	4.39E+02	2.57E-01	5.48E-01	6.31E-01	4.72E-01	3.72E+00	4.19E+00	-4.00E-01	3.41E+00	3.67E+00	7.78E+00	1.68E+01	1.90E+01	
	008	339.8	-327.3	4/20/2009	12:25	4.96E+02	2.07E+02	1.88E+02	4.35E-01	5.64E-01	6.05E-01	3.18E+00	7.19E+00	4.79E+00	-1.37E-01	3.53E+00	3.83E+00	8.03E+00	2.03E+01	2.29E+01	
	009	339.8	-327.3	7/28/2009	11:20	4.70E+02	2.25E+02	2.08E+02	2.02E-01	6.29E-01	7.30E-01	5.88E-01	3.75E+00	4.34E+00	-3.76E-01	3.06E+00	3.30E+00	-6.20E-01	1.89E+01	2.16E+01	
	010	339.8	-327.3	11/11/2009	11:28	5.37E+02	1.68E+02	1.65E+02	-2.77E-01	7.77E-01	9.54E-01	-3.00E-01	5.63E+00	6.15E+00	2.49E+00	6.63E+00	8.33E+00	-9.81E+00	1.49E+01	1.77E+01	
	011	339.8	-327.3	3/3/2010	11:49	5.97E+02	1.85E+02	1.79E+02	1.19E-01	5.07E-01	6.26E-01	4.02E-01	4.41E+00	5.05E+00	2.42E+00	4.80E+00	5.86E+00	2.20E+00	1.91E+01	2.19E+01	
	012	339.8	-327.3	5/6/2010	12:24	6.57E+02	2.00E+02	1.65E+02	-2.13E-01	4.66E-01	7.01E-01	-2.61E+00	7.77E+00	8.17E+00	3.62E-01	8.78E+00	1.00E+01	-5.47E+00	1.94E+01	2.28E+01	
	013	339.8	-327.3	3/9/2010	13:20	4.86E+02	1.55E+02	1.25E+02	-3.81E-02	5.00E-01	6.29E-01	1.20E+00	7.44E+00	8.75E+00	-2.42E+00	6.98E+00	7.06E+00	2.60E+00	1.45E+01	1.67E+01	
MW-107	004	32.7	110.1	9/28/2005	12:00	3.09E+02	3.87E+02	4.20E+02	NA	NA	NA	3.86E+00	1.16E-01	8.53E+00	NA	NA	NA	NA	NA	NA	MW-107
	001	32.7	110.1	12/8/2005	11:15	1.28E+02	4.11E+02	4.54E+02	7.65E+00	1.53E+01	1.33E+01	2.55E+00	7.64E+00	5.59E+00	4.11E+00	1.23E+01	8.97E+00	NA	NA	NA	
	002	32.7	110.1	4/18/2006	11:15	1.27E+02	4.11E+02	4.51E+02	0.00E+00	3.90E-01	4.40E-01	2.65E+00	7.94E+00	5.62E+00	4.36E+00	1.31E+01	9.21E+00	NA	NA	NA	
	003	32.7	110.1	6/6/2006	13:30	1.05E+02	1.53E+02	1.56E+02	-2.07E-01	5.43E-01	7.13E-01	1.65E+00	8.31E+00	9.24E+00	-3.66E-01	8.36E+00	9.05E+00	NA	NA	NA	
	005	32.7	110.1	7/23/2007	14:18	8.92E+01	1.52E+02	1.70E+02	1.66E-01	5.19E-01	5.87E-01	8.13E-01	2.73E+00	1.60E+00	1.03E-01	1.41E+00	1.60E+00	NA	NA	NA	
	006	32.7	110.1	4/24/2008	15:41	1.91E+02	8.90E+01	1.44E+02	-6.22E-02	2.21E-01	4.42E-01	-2.03E+00	2.78E+00	4.11E+00	-1.38E+00	2.12E+00	3.07E+00	NA	NA	NA	
	007	32.7	110.1	5/30/2008	15:25	4.62E+01	9.02E+01	1.58E+02	6.62E-02	5.51E-01	9.60E-01	1.22E+00	1.88E+00	3.36E+00	5.48E-01	2.20E+00	3.57E+00	NA	NA	NA	
	008	32.7	110.1	4/22/2009	12:30	1.96E+02	1.71E+02	1.86E+02	9.02E-03	4.34E-01	5.52E-01	-2.11E-01	3.86E+00	2.57E+00	1.54E+00	2.61E+00	3.19E+00	NA	NA	NA	
	009	32.7	110.1	4/22/2010	10:11	9.67E+01	1.64E+02	1.83E+02	-7.61E-02	5.23E-01	6.74E-01	9.25E-01	6.08E+00	6.99E+00	-1.88E+00	7.25E+00	7.56E+00	NA	NA	NA	
MW-108	003	8.3	6.2	9/29/2005	12:00	3.32E+02	3.84E+02	4.20E+02	NA	NA	NA	3.23E+00	9.70E+00	7.39E+00	3.21E+00	9.64E+00	7.84E+00	NA	NA	NA	MW-108
	004	8.3	6.2	11/3/2005	12:00	1.97E+02	4.26E+02	4.76E+02	NA	NA	NA	3.41E+00	1.02E-01	7.53E+00	2.65E+00	7.95E+00	6.39E+00	NA	NA	NA	
	002	8.3	6.2	5/13/2006	10:53	2.78E+02	1.82E+02	1.68E+02	6.89E-01	8.26E-01	8.08E-01	3.12E+00	8.86E+00	1.05E+01	-1.45E-01	1.23E+01	1.34E+01	NA	NA	NA	
MW-109	003	8.5	6.1	9/29/2005	12:00	1.54E+02	3.81E+02	4.20E+02	NA	NA	NA	3.74E+00	1.12E-01	8.45E+00	3.19E+00	9.57E+00	7.88E+00	NA	NA	NA	MW-109
	004	8.5	6.1	11/3/2005	12:00	1.01E+02	4.23E+02	4.76E+02	NA	NA	NA	3.59E+00	1.08E-01	7.89E+00	2.59E+00	7.78E+00	6.26E+00	NA	NA	NA	
	002	8.5	6.1	5/13/2006	10:10	3.39E+02	1.89E+02	1.70E+02	2.98E-01	8.24E-01	9.27E-01	2.00E-01	5.68E+00	6.24E+00	-2.50E+00	6.12E+00	6.08E+00	NA	NA	NA	
MW-111	001	16.5	2.4	9/29/2005	10:00	2.15E+05	2.26E+03	4.20E+02	NA	NA	NA	4.48E+00	1.34E-01	1.02E+01	1.81E+00	5.42E+00	5.57E+00	NA	NA	NA	MW-111
	001	16.5	2.4	9/29/2005	10:00	2.05E+05	2.56E+04	6.24E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	002	16.5	2.4	10/14/2005	10:00	6.81E+03	4.73E+03	6.41E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	16.5	2.4	10/21/2005	10:00	2.84E+05	3.05E+04	6.41E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	16.5	2.4	10/28/2005	8:30	2.18E+05	6.54E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	16.5	2.4	11/4/2005	9:00	3.02E+05	9.06E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	006	16.5	2.4	11/22/2005	10:00	1.80E+05	5.40E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	007	16.5	2.4	12/2/2005	10:15	1.25E+05	3.75E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	008	16.5	2.4	12/8/2005	16:50	2.71E+05	8.13E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	009	16.5	2.4	12/15/2005	11:00	2.96E+05	8.88E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	16.5	2.4	12/19/2005	9:45	1.92E+05	5.76E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	011	16.5	2.4	12/29/2005	10:00	2.12E+05	6.36E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	012	16.5	2.4	1/6/2006	10:45	1.13E+05	3.39E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	013	16.5	2.4	1/13/2006	10:30	1.99E+05	5.97E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	014	16.5	2.4	1/20/2006	9:30	1.19E+05	3.57E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	015	16.5	2.4	1/27/2006	10:05	5.78E+05	1.73E+02	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	016	16.5	2.4	2/3/2006	12:20	2.95E+05	3.09E+04	6.33E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	017	16.5	2.4	2/7/2006	16:10	2.38E+05	2.78E+04	6.37E+02	1.17E+00	6.03E-01	6.31E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	018	16.5	2.4	2/16/2006	13:40	2.94E+05	3.09E+04	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	019	16.5	2.4	3/3/2006	9:00	2.36E+05	7.08E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	020	16.5	2.4	4/7/2006	9:50	1.45E+05	4.35E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	021	16.5	2.4	5/17/2006	14:05	4.31E+04	6.51E+03	9.10E+02	2.49E+00	1.40E+00	1.24E+00	-2.32E-01	1.34E-01	1.51E+01	4.25E+00	1.30E+01	1.49E+01	NA	NA	NA	
	022	16.5	2.4	6/23/2006	8:35	2.62E+05	3.92E+04	2.35E+03	6.23E-01	1.07E+00	1.32E+00	-4.18E+00	1.40E-01	1.46E+01	-1.60E-01	1.38E+01	1.52E+01	NA	NA	NA	
	023	16.5	2.4	9/21/2006	10:25	1.59E+05	2.07E+04	1.42E+03	8.79E-01	1.25E+00	1.33E+00	9.50E-02	1.13E+00	1.26E+00	-6.26E-02	1.15E+00	1.24E+00	NA	NA	NA	
	024	16.5	2.4	6/15/2007	14:17	1.19E+05	3.69E+03	3.52E+02	9.74E-01	6.30E-01	5.76E-01	-7.53E-01	3.27E+00	3.00E+00	1.21E-01	2.79E+00	3.17E+00	6.34E+00	1.26E+01	1.43E+01	
	025	16.5	2.4	3/3/2007	9:53	9.88E+04	2.93E+03	3.68E+02	9.74E-01	6.73E-01	6.27E-01	4.24E-01	2.75E+00	3.15E+00	3.95E-01	2.60E+00	3.02E+00	NA	NA	NA	
	026	16.5	2.4	1/28/2008	11:38	4.77E+04	1.77E+03	2.97E+02	2.56E+00	9.45E-01	6.18E-01	2.60E+00	4.05E+00	3.90E+00	-6.32E-01	2.55E+00	2.63E+00	1.33E+01	1.58E+01	1.73E+01	
	027	16.5	2.4	9/4/2008	14:00	7.39E+04	1.89E+03	5.47E+02	1.02E+00	3.62E-01	4.21E-01	-8.16E-01	2.22E+00	3.61E+01	NA	NA	NA	NA	NA	NA	
	028	16.5	2.4	10/21/2008	14:20	6.64E+04	2.00E+03	2.60E+02	9.08E-01	9.32E-01	9.72E-01	-9.35E-01	3.60E+00	3.79E+00	5.10E-01	4.32E+00	5.03E+00	NA	NA	NA	
	029	16.5	2.4	4/30/2009	12:36	3.89E+04	1.38E+03	1.71E+02	2.17E+00	8.97E-01	7.67E-01	1.51E+00	1.04E-01	6.92E+00	-3.30E+00	6.45E+00	6.44E+00	NA	NA	NA	
	030	16.5	2.4	11/2/2009	15:48	2.26E+04	6.93E+02	1.80E+02	8.46E-01	5.72E-01	5.25E-01	5.61E-02	5.91E+00	6.73E+00	-1.39E-01	6.92E+00	7.69E+00	NA	NA	NA	
	031	16.5	2.4	2/2/2010	14:27	2.63E+04	1.94E+03	4.29E+02	1.07E+00	5.60E-01	4.40E-01	1.87E+00	3.62E+00	4.27E+00	-1.55E-01	3.90E+00	4.40E+00	NA	NA	NA	
	032	16.5	2.4	4/21/2010	14:48	3.35E+04	1.07E+03	1.91E+02	1.48E+00	7.26E-01	6.28E-01	6.79E+00	6.54E+00	4.32E+00	1.70E+00	4.37E+00	5.18E+00	NA	NA	NA	
	033	16.5	2.4	8/27/2010	15:21	3.86E+04	1.13E+03	1.28E+02	6.44E-01	8.07E-01	8.55E-01	-8.83E-01	6.30E+00	6.59E+00	1.88E+00	5.70E+00	6.84E+00	NA	NA	NA	
	034	16.5	2.4	9/10/2010	14:09	4.69E+04	1.37E+03	1.40E+02	1.80E+00	1.00E+00	8.02E-01	-5.04E+00	6.84E+00	6.88E+00	-5.62E-01	6.84E+00	7.62E+00	NA	NA	NA	
U3-4D	007	25.6	-10.8	10/16/2005	12:00	3.70E+02	4.05E+02	4.38E+02	NA	NA	NA	4.72E+00	1.41E-01	1.01E+01	3.72E+00	1.12E+01	8.50E+00	NA	NA	NA	U3-4D
	008	25.6	-10.8	10/21/2005	12:00	3.99E+02	3.90E+02	4.27E+02	NA	NA	NA	3.11E+00	9.34E+00	6.58E+00	2.98E+00	8.95E+00	6.58E+00	NA	NA	NA	
	009	25.6	-10.8	10/28/2005	12:00	4.05E+02	4.29E+02	4.72E+02	NA	NA	NA	3.91E+00	1.17E-01	8.54E+00	4.36E+00	1.31E+01	9.84E+00	NA	NA	NA	
	012	25.6	-10.8	11/18/2005	12:00	1.10E+02	4.35E+02	4.81E+02	NA	NA	NA	3.04E+00	9.13E+00	6.67E+00	2.04E+00	6.11E+00	4.97E+00	NA	NA	NA	

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
U3-4D	013	25.6	-10.8	12/2/2005	12:00	2.73E+02	4.23E+02	4.64E+02	NA	NA	NA	2.97E+00	8.92E+00	6.62E+00	2.00E+00	6.01E+00	5.05E+00	NA	NA	NA	U3-4D
	001	25.6	-10.8	12/15/2005	13:10	3.99E+02	4.32E+02	4.70E+02	NA	NA	NA	2.73E+00	8.20E+00	6.05E+00	2.88E+00	8.64E+00	6.66E+00	NA	NA	NA	
	002	25.6	-10.8	12/30/2005	9:25	4.42E+02	4.35E+02	4.71E+02	NA	NA	NA	3.53E+00	1.06E-01	7.76E+00	3.96E+00	1.19E+01	8.99E+00	NA	NA	NA	
	003	25.6	-10.8	1/12/2006	11:00	5.73E+02	4.38E+02	4.72E+02	NA	NA	NA	3.29E+00	9.86E+00	7.12E+00	3.42E+00	1.03E+01	7.75E+00	NA	NA	NA	
	004	25.6	-10.8	2/15/2006	13:45	2.71E+02	9.39E+02	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	006	25.6	-10.8	4/26/2006	14:20	5.75E+02	2.19E+02	1.87E+02	-1.48E-01	6.11E-01	7.91E-01	-3.01E-01	8.38E+00	9.11E+00	-3.10E+00	8.21E+00	8.71E+00	NA	NA	NA	
	014	25.6	-10.8	6/22/2006	10:20	7.10E+02	2.15E+02	1.68E+02	1.27E-01	5.73E-01	7.39E-01	-2.41E+00	1.15E+01	1.21E+01	-2.08E+00	8.42E+00	8.34E+00	NA	NA	NA	
	015	25.6	-10.8	2/1/2008	12:40	3.75E+02	1.36E+02	1.35E+02	-1.78E-01	7.83E-01	9.77E-01	2.83E-01	2.69E+00	3.10E+00	1.41E+00	3.26E+00	3.97E+00	NA	NA	NA	
	016	25.6	-10.8	4/29/2008	13:27	3.19E+02	1.43E+02	2.22E+02	1.44E-01	2.76E-01	4.94E-01	5.15E-01	1.91E+00	3.36E+00	-1.53E-01	1.73E+00	2.91E+00	NA	NA	NA	
	017	25.6	-10.8	7/28/2008	16:46	4.66E+02	2.50E+02	3.79E+02	-3.57E-01	4.96E-01	9.81E-01	2.89E-01	2.08E+00	3.62E+00	4.78E-01	2.36E+00	3.69E+00	NA	NA	NA	
	018	25.6	-10.8	10/20/2008	14:40	5.68E+02	1.71E+02	1.64E+02	-8.59E-02	8.61E-01	1.11E+00	3.53E-01	4.62E+00	5.17E+00	7.12E-01	4.13E+00	4.79E+00	NA	NA	NA	
	010	25.6	-10.8	11/4/2008	12:00	1.18E+02	4.23E+02	4.76E+02	NA	NA	NA	3.17E+00	9.51E+00	6.90E+00	3.34E+00	1.00E+01	7.54E+00	NA	NA	NA	
	011	25.6	-10.8	11/10/2008	12:00	3.16E+02	4.14E+02	4.61E+02	NA	NA	NA	4.10E+00	1.23E-01	8.95E+00	4.07E+00	1.22E+01	9.41E+00	NA	NA	NA	
	019	25.6	-10.8	2/10/2009	14:15	4.82E+02	2.31E+02	1.97E+02	1.00E-01	5.16E-01	6.41E-01	3.86E-01	2.66E+00	3.00E+00	7.53E-01	3.02E+00	3.39E+00	NA	NA	NA	
	020	25.6	-10.8	4/17/2009	15:57	3.82E+02	1.83E+02	1.89E+02	-1.17E-01	3.51E-01	5.11E-01	-9.67E-01	6.92E+00	4.61E+00	4.01E-01	3.32E+00	3.82E+00	NA	NA	NA	
	021	25.6	-10.8	8/5/2009	14:06	4.82E+02	1.88E+02	1.89E+02	-1.59E-01	5.17E-01	7.34E-01	-2.04E+00	5.43E+00	5.08E+00	1.93E+00	5.66E+00	6.65E+00	NA	NA	NA	
	022	25.6	-10.8	11/6/2009	13:15	4.73E+02	1.28E+02	1.06E+02	-8.06E-02	5.49E-01	6.68E-01	1.02E+00	5.84E+00	6.77E+00	3.35E-01	6.20E+00	7.03E+00	NA	NA	NA	
	023	25.6	-10.8	2/12/2010	14:15	8.65E+02	1.85E+02	1.77E+02	-1.60E-02	6.00E-01	7.86E-01	7.15E-01	3.15E+00	3.69E+00	1.91E+00	3.66E+00	4.34E+00	NA	NA	NA	
	024	25.6	-10.8	4/12/2010	12:49	1.07E+03	2.06E+02	1.77E+02	-4.68E-02	5.46E-01	7.39E-01	-5.85E+00	9.33E+00	8.95E+00	-2.13E+00	8.04E+00	7.89E+00	NA	NA	NA	
	025	25.6	-10.8	7/23/2010	13:21	6.84E+02	1.86E+02	1.77E+02	-1.56E-01	4.60E-01	6.46E-01	2.21E+00	7.56E+00	8.91E+00	-1.01E+00	7.61E+00	8.14E+00	NA	NA	NA	
U3-4S	001			7/23/2010	14:12	3.74E+02	1.74E+02	1.79E+02	3.76E-01	4.15E-01	4.21E-01	9.00E-01	8.51E+00	9.30E+00	1.89E+00	7.75E+00	9.37E+00	NA	NA	NA	U3-4S
U3-T1	007	5.7	2.8	10/7/2005	12:00	1.59E+03	4.20E+02	4.15E+02	NA	NA	NA	2.71E+00	8.14E+00	6.09E+00	2.77E+00	8.30E+00	6.55E+00	NA	NA	NA	U3-T1
	008	5.7	2.8	10/21/2005	12:00	3.09E+02	3.87E+02	4.27E+02	NA	NA	NA	3.92E+00	1.18E-01	8.66E+00	3.87E+00	1.16E+01	9.03E+00	NA	NA	NA	
	009	5.7	2.8	10/28/2005	12:00	3.40E+02	4.29E+02	4.72E+02	NA	NA	NA	3.55E+00	1.06E-01	8.06E+00	5.35E+00	1.61E+01	1.23E+01	NA	NA	NA	
	010	5.7	2.8	11/4/2005	12:00	1.97E+02	4.29E+02	4.76E+02	NA	NA	NA	4.01E+00	1.20E-01	8.86E+00	3.90E+00	1.17E+01	9.13E+00	NA	NA	NA	
	011	5.7	2.8	11/10/2005	12:00	5.63E+02	4.26E+02	4.61E+02	NA	NA	NA	3.11E+00	9.32E+00	6.89E+00	2.97E+00	8.92E+00	6.99E+00	NA	NA	NA	
	012	5.7	2.8	11/18/2005	12:00	0.00E+00	4.29E+02	4.81E+02	NA	NA	NA	3.90E+00	1.17E-01	8.39E+00	3.40E+00	1.02E+01	7.71E+00	NA	NA	NA	
	013	5.7	2.8	12/2/2005	12:00	4.98E+02	4.29E+02	4.64E+02	NA	NA	NA	2.80E+00	8.39E+00	6.23E+00	2.94E+00	8.83E+00	6.86E+00	NA	NA	NA	
	001	5.7	2.8	12/15/2005	13:15	3.40E+02	4.29E+02	4.70E+02	NA	NA	NA	2.53E+00	7.60E+00	5.63E+00	2.89E+00	8.67E+00	6.65E+00	NA	NA	NA	
	002	5.7	2.8	12/30/2005	10:40	5.29E+02	4.38E+02	4.71E+02	NA	NA	NA	4.02E+00	1.21E-01	8.71E+00	4.07E+00	1.22E+01	9.17E+00	NA	NA	NA	
	003	5.7	2.8	1/12/2006	9:50	7.87E+02	4.47E+02	4.72E+02	NA	NA	NA	3.10E+00	9.31E+00	6.88E+00	2.83E+00	8.49E+00	6.70E+00	NA	NA	NA	
	004	5.7	2.8	2/15/2006	13:15	8.35E+02	1.65E+03	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	5.7	2.8	3/16/2006	11:50	1.26E+03	2.79E+02	1.85E+02	6.55E-01	8.43E-01	8.29E-01	1.06E+00	5.49E+00	6.18E+00	-1.81E-01	5.63E+00	6.14E+00	NA	NA	NA	
	006	5.7	2.8	5/26/2006	13:30	7.32E+02	2.33E+02	1.89E+02	1.27E+00	1.02E+00	1.01E+00	1.21E+00	8.34E+00	9.42E+00	5.99E+00	8.98E+00	1.15E+01	NA	NA	NA	
	014	5.7	2.8	7/12/2006	12:50	6.84E+02	2.36E+02	1.98E+02	3.36E-01	1.36E+00	1.44E+00	1.15E+00	1.13E-01	1.18E+01	-1.14E+00	1.18E+01	1.26E+01	NA	NA	NA	
	015	5.7	2.8	8/15/2006	11:30	7.66E+02	2.25E+02	1.73E+02	NA	NA	NA	-4.04E+00	6.82E+00	6.33E+00	2.15E+00	6.84E+00	8.29E+00	NA	NA	NA	
	016	5.7	2.8	6/12/2007	12:54	5.06E+02	4.25E+02	4.39E+02	6.25E-01	8.75E-01	9.54E-01	-8.51E-02	2.94E+00	2.22E+00	7.17E-01	2.00E+00	2.33E+00	-1.46E+00	1.40E+01	1.63E+01	
	017	5.7	2.8	3/1/2007	13:20	4.90E+02	3.38E+02	2.73E+02	5.21E-02	5.13E-01	6.47E-01	8.49E-01	3.57E+00	4.15E+00	2.88E-01	3.42E+00	3.92E+00	NA	NA	NA	
	018	5.7	2.8	10/22/2007	16:13	5.30E+02	4.01E+02	4.01E+02	3.41E-01	5.49E-01	6.09E-01	-1.08E+00	3.44E+00	3.64E+00	-1.34E+00	3.52E+00	3.68E+00	NA	NA	NA	
	019	5.7	2.8	1/22/2008	16:11	7.29E+02	3.27E+02	2.96E+02	6.26E-01	7.26E-01	7.69E-01	1.21E+00	3.14E+00	3.76E+00	-1.79E-01	3.56E+00	3.93E+00	8.87E+00	1.85E+01	2.09E+01	
	019	5.7	2.8	1/22/2008	16:11	6.05E+02	3.15E+02	2.97E+02	6.43E-01	7.41E-01	7.79E-01	1.11E+00	2.75E+00	3.21E+00	2.38E-01	2.51E+00	2.75E+00	1.14E+01	1.65E+01	1.84E+01	
	020	5.7	2.8	5/2/2008	15:24	7.09E+02	1.63E+02	2.22E+02	7.24E-01	5.19E-01	8.26E-01	2.85E-01	1.84E+00	3.19E+00	-1.15E+00	1.87E+00	2.82E+00	NA	NA	NA	
	021	5.7	2.8	7/23/2008	11:16	5.56E+02	2.58E+02	3.79E+02	6.40E-01	5.19E-01	8.37E-01	2.41E+00	2.24E+00	4.18E+00	6.54E-01	2.44E+00	4.01E+00	NA	NA	NA	
	022	5.7	2.8	10/20/2008	10:19	5.99E+02	5.63E+02	5.91E+02	7.01E-01	5.47E-01	5.20E-01	2.51E+00	6.27E+00	7.46E+00	1.51E+00	6.24E+00	7.35E+00	NA	NA	NA	
	023	5.7	2.8	1/28/2009	12:00	6.75E+02	2.48E+02	2.04E+02	1.04E+00	7.47E-01	7.44E-01	-1.53E+00	3.59E+00	2.95E+00	-6.63E-01	2.30E+00	2.48E+00	NA	NA	NA	
	024	5.7	2.8	4/10/2009	15:22	3.28E+02	1.65E+02	1.49E+02	3.23E-01	6.69E-01	7.61E-01	1.68E-01	6.03E+00	4.02E+00	1.24E+00	3.39E+00	4.14E+00	NA	NA	NA	
	025	5.7	2.8	7/14/2009	11:08	3.99E+02	2.36E+02	2.32E+02	4.77E-02	7.47E-01	8.96E-01	2.51E+00	5.24E+00	5.65E+00	9.47E-01	3.72E+00	4.45E+00	NA	NA	NA	
	026	5.7	2.8	11/13/2009	16:35	3.79E+02	1.18E+02	1.03E+02	3.87E-01	5.95E-01	6.63E-01	-6.81E-01	5.33E+00	5.76E+00	1.33E+00	6.33E+00	7.37E+00	NA	NA	NA	
	027	5.7	2.8	2/10/2010	12:02	4.76E+02	1.73E+02	1.78E+02	2.19E-01	6.55E-01	7.88E-01	-1.28E+00	6.23E+00	5.80E+00	2.78E+00	3.74E+00	4.78E+00	NA	NA	NA	
	028	5.7	2.8	5/5/2010	16:54	5.00E+02	1.79E+02	1.84E+02	6.48E-02	4.95E-01	5.97E-01	-3.25E+00	8.98E+00	1.04E+01	-8.61E-01	6.62E+00	7.16E+00	NA	NA	NA	
	029	5.7	2.8	7/26/2010	12:15	3.84E+02	1.74E+02	1.78E+02	1.20E-02	3.91E-01	4.99E-01	5.07E+00	7.68E+00	9.77E+00	-6.61E-01	6.96E+00	7.49E+00	NA	NA	NA	
U3-T2	012	5.7	2.6	10/7/2005	12:00	7.03E+02	3.93E+02	4.15E+02	NA	NA	NA	3.67E+00	1.10E-01	8.06E+00	4.13E+00	1.24E+01	9.39E+00	NA	NA	NA	U3-T2
	013	5.7	2.6	10/21/2005	12:00	1.47E+03	3.63E+02	4.27E+02	NA	NA	NA	3.33E+00	1.00E-01	7.23E+00	3.00E+00	9.00E+00	6.90E+00	NA	NA	NA	
	014	5.7	2.6	10/28/2005	12:00	1.28E+03	4.56E+02	4.72E+02	NA	NA	NA	3.44E+00	1.03E-01	7.67E+00	4.28E+00	1.28E+01	9.89E+00	NA	NA	NA	
	015	5.7	2.6	11/4/2005	12:00	1.19E+03	4.59E+02	4.76E+02	NA	NA	NA	3.41E+00	1.02E-01	7.53E+00	3.86E+00	1.16E+01	8.81E+00	NA	NA	NA	
	016	5.7	2.6	11/10/2005	12:00	1.64E+03	4.59E+02	4.61E+02	NA	NA	NA	3.81E+00	1.14E-01	8.34E+00	3.98E+00	1.19E+01	9.09E+00	NA	NA	NA	
	017	5.7	2.6	11/18/2005	12:00	1.13E+03	4.65E+02	4.81E+02	NA	NA	NA	3.97E+00	1.19E-01	8.70E+00	4.15E+00	1.25E+01	9.55E+00	NA	NA	NA	
	018	5.7	2.6	12/2/2005	12:00	1.33E+03	4.56E+02	4.64E+02	NA	NA	NA	2.31E+00	6.92E+00	5.23E+00	2.58E+00	7.74E+00	6.11E+00	NA	NA	NA	
	001	5.7	2.6	12/15/2005	13:30	1.29E+03	4.62E+02	4.70E+02	NA	NA	NA	2.77E+00	8.30E+00	6.09E+00	2.85E+00	8.55E+00	6.57E+00	NA	NA	NA	
	002	5.7	2.6	12/30/2005	10:50	1.69E+03	4.74E+02	4.71E+02	NA	NA	NA	3.81E+00	1.14E-01	8.46E+00	3.49E+00	1.05E+01	8.31E+00	NA	NA	NA	
	003	5.7	2.6	1/6/2006	8:45	2.42E+03	4.92E+02	4.66E+02	NA	NA	NA	2.86E+00	8.57E+00	6.56E+00	4.04E+00	1.21E+01	9.38E+00	NA	NA	NA	
	004	5.7	2.6	1/13/2006	13:20	1.78E+03	4.77E+02	4.72E+02	NA	NA	NA	4.01E+00	1.20E-01	8.74E+00	3.41E+00	1.02E+01	7.94E+00	NA	NA	NA	
	005	5.7	2.6	1/20/2006	11:00	1.75E+03	4.56E+02	4.61E+02	NA	NA	NA	3.40E+00	1.02E-01	7.71E+00	3.27E+00	9.82E+00	7.99E+00	NA	NA	NA	
	006	5.7	2.6	1/25/2006	11:10	2.32E+03	4.86E+02	4.61E+02	NA	NA	NA	3.96E+00	1.19E-01	8.77E+00	3.17E+00	9.50E+00	7.64E+00	NA	NA	NA	
	007	5.7	2.6	2/1/2006	11:15	2.13E+03	4.80E+02	4.60E+02	NA	NA	NA	3.17E+00	9.51E+00	7.02E+00	3.47E+00	1.04E+01	7.99E+00	NA	NA	NA	
	009	5.7	2.6	2/17/2006	9:20	1.92E+03	2.50E+03	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	5.7	2.6	3/16/2006	12:00	1.69E+03	3.36E+02	2.04E+02	5.87E-01	9.21E-01	1.00E+00	-7.43E-01	6.36E+00	6.83E+00	-1.22E-01	6.33E+00	6.88E+00	NA	NA	NA	

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS																Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)				
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC		
U3-T2	011	5.7	2.6	5/26/2006	13:15	1.90E+03	3.86E+02	2.48E+02	1.49E+00	1.11E+00	1.01E+00	1.64E+00	1.01E-01	1.22E+01	5.67E+00	9.40E+00	1.25E+01	NA	NA	NA		U3-T2
	019	5.7	2.6	7/12/2006	12:25	1.83E+03	3.78E+02	2.54E+02	7.24E-01	1.72E+00	1.80E+00	2.58E+00	6.90E+00	8.07E+00	1.30E+00	6.69E+00	7.74E+00	NA	NA	NA		
	020	5.7	2.6	8/15/2006	10:30	1.58E+03	7.79E+02	7.72E+02	NA	NA	NA	-8.87E-01	7.17E+00	7.64E+00	3.29E+00	9.10E+00	1.14E+01	NA	NA	NA		
	021	5.7	2.6	6/12/2007	9:25	1.45E+03	5.19E+02	4.36E+02	-3.89E-01	7.05E-01	9.59E-01	2.03E-01	2.29E+00	2.54E+00	-1.00E-01	2.42E+00	2.74E+00	5.88E+00	1.39E+01	1.57E+01		
	022	5.7	2.6	3/1/2007	14:14	1.25E+03	4.62E+02	2.55E+02	-4.84E-02	5.37E-01	7.11E-01	-1.75E+00	3.23E+00	3.20E+00	1.99E-02	3.54E+00	4.00E+00	NA	NA	NA		
	023	5.7	2.6	10/22/2007	15:07	1.17E+03	4.76E+02	4.02E+02	2.36E-01	5.28E-01	6.08E-01	-7.13E-02	2.82E+00	3.11E+00	2.53E+00	3.50E+02	3.81E+00	NA	NA	NA		
	024	5.7	2.6	1/22/2008	16:16	1.33E+03	3.83E+02	2.97E+02	4.31E-01	8.54E-01	9.63E-01	7.39E-01	2.97E+00	3.39E+00	-1.14E+00	3.39E+00	2.86E+00	2.78E+00	1.62E+01	1.89E+01		
	025	5.7	2.6	5/2/2008	14:44	1.02E+03	1.77E+02	2.22E+02	6.52E-01	3.31E-01	4.70E-01	5.80E-01	2.06E+00	3.53E+00	7.90E-01	1.63E+00	3.00E+00	NA	NA	NA		
	026	5.7	2.6	7/23/2008	13:40	9.97E+02	2.85E+02	3.64E+02	5.90E-01	5.19E-01	8.44E-01	3.57E-02	1.72E+00	2.93E+00	-1.02E+00	2.44E+00	3.39E+00	NA	NA	NA		
	027	5.7	2.6	10/20/2008	10:36	9.28E+02	5.97E+02	5.90E+02	4.73E-01	4.95E-01	4.85E-01	-4.68E-01	4.82E+00	5.31E+00	-5.02E+00	6.54E+00	6.06E+00	NA	NA	NA		
	028	5.7	2.6	1/28/2009	11:40	1.11E+03	2.87E+02	2.04E+02	6.04E-01	6.41E-01	6.75E-01	7.10E-01	2.42E+00	2.74E+00	4.09E-01	2.30E+00	2.61E+00	NA	NA	NA		
	029	5.7	2.6	4/24/2009	11:24	1.03E+03	4.97E+02	4.14E+02	1.76E+00	6.54E-01	4.11E-01	1.62E+00	6.65E+00	4.43E+00	3.29E-01	4.16E+00	4.69E+00	NA	NA	NA		
	030	5.7	2.6	7/14/2009	13:04	1.12E+03	2.94E+02	2.30E+02	5.50E-01	8.61E-01	9.58E-01	1.31E-01	3.69E+00	4.23E+00	-6.32E-01	3.72E+00	4.05E+00	NA	NA	NA		
	031	5.7	2.6	11/16/2009	12:53	8.94E+02	1.52E+02	1.03E+02	3.24E-01	6.54E-01	7.43E-01	3.94E-01	6.63E+00	6.48E+00	-2.09E+00	6.95E+00	6.93E+00	NA	NA	NA		
	032	5.7	2.6	2/11/2010	12:43	9.41E+02	1.88E+02	1.78E+02	5.85E-01	7.72E-01	8.17E-01	-8.06E-01	3.38E+00	3.63E+00	7.20E-02	3.71E+00	4.10E+00	NA	NA	NA		
	033	5.7	2.6	5/7/2010	13:05	9.75E+02	1.95E+02	1.83E+02	6.31E-01	6.31E-01	6.58E-01	-2.27E+00	5.70E+00	5.99E+00	-1.66E+00	6.62E+00	6.97E+00	NA	NA	NA		
	034	5.7	2.6	7/26/2010	14:26	8.76E+02	1.92E+02	1.74E+02	5.34E-01	6.12E-01	6.47E-01	-2.12E+00	7.50E+00	7.69E+00	2.29E+00	7.21E+00	8.84E+00	NA	NA	NA		
U1-CSS	001	14	6.1	1/30/2007	11:45	1.76E+03	6.00E+02	5.70E+02	1.95E+01	2.19E+00	1.70E+00	7.00E-01	1.32E+00	1.40E+00	-3.20E-01	1.38E+00	1.60E+00	1.64E+01	2.67E+01	2.90E+01		U1-CSS
	002	14	6.1	2/27/2007	11:24	4.32E+03	6.90E+02	5.70E+02	1.38E+01	2.31E+00	2.10E+00	1.11E+00	1.95E+00	2.10E+00	7.00E-01	1.95E+00	2.20E+00	-1.30E+00	2.55E+01	2.90E+01		
	003	14	6.1	6/13/2007	11:39	1.53E+03	5.25E+02	4.35E+02	1.45E+01	1.91E+00	6.24E-01	8.50E-01	3.57E+00	4.15E+00	2.82E+00	4.28E+00	4.93E+00	4.42E+00	1.95E+01	2.22E+01		
	004	14	6.1	3/6/2007	15:55	2.80E+03	2.81E+02	1.95E+02	2.68E+01	2.33E+00	5.71E-01	2.53E+00	4.30E+00	4.61E+00	2.48E+00	6.84E+00	4.17E+00	NA	NA	NA		
	005	14	6.1	1/15/2008	14:54	4.95E+02	2.04E+02	1.76E+02	7.73E+00	1.31E+00	6.91E-01	2.85E+00	6.56E+00	3.36E+00	-6.88E-02	3.33E+00	3.71E+00	NA	NA	NA		
	006	14	6.1	4/23/2008	15:25	1.77E+03	1.96E+02	1.44E+02	6.74E+00	9.01E-01	7.19E-01	-1.36E+00	2.12E+00	3.20E+00	-7.61E-01	2.08E+00	3.16E+00	NA	NA	NA		
	007	14	6.1	5/12/2008	14:05	6.88E+02	1.35E+02	1.42E+02	4.83E+00	8.35E-01	9.25E-01	2.59E+00	2.30E+00	4.25E+00	3.09E-01	2.58E+00	3.96E+00	-2.18E+00	1.19E+01	2.08E+01		
	008	14	6.1	9/8/2008	10:24	1.45E+03	3.77E+02	4.98E+02	9.38E+00	9.40E-01	5.43E-01	1.90E+00	2.07E+00	3.76E+00	NA	NA	NA	NA	NA	NA		
	009	14	6.1	11/6/2008	14:48	2.66E+03	3.86E+02	1.66E+02	6.74E+00	1.20E+00	5.33E-01	3.52E+00	6.01E+00	7.29E+00	-1.94E+00	6.45E+00	6.67E+00	1.02E+01	1.65E+01	1.85E+01		
	010	14	6.1	11/19/2008	13:50	2.20E+03	2.33E+02	1.62E+02	9.08E+00	1.38E+00	5.80E-01	2.35E+00	4.04E+00	4.98E+00	8.56E-01	4.63E+00	5.37E+00	NA	NA	NA		
	011	14	6.1	3/18/2009	13:05	1.57E+03	5.36E+02	3.81E+02	1.41E+01	2.04E+00	9.24E-01	2.00E+00	5.93E+00	3.95E+00	2.86E-01	3.03E+00	3.42E+00	6.46E-01	1.94E+01	2.22E+01		
	012	14	6.1	4/21/2009	13:07	3.28E+03	3.87E+02	1.91E+02	3.56E+01	2.64E+00	7.19E-01	5.75E-01	5.28E+00	3.52E+00	1.36E+00	3.02E+00	3.74E+00	1.79E+01	1.92E+01	2.11E+01		
	013	14	6.1	10/26/2009	14:07	2.91E+03	2.81E+02	1.86E+02	1.75E+01	1.88E+00	5.38E-01	-1.10E-01	5.94E+00	6.71E+00	-4.96E+00	5.91E+00	5.17E+00	0.00E+00	2.04E+01	2.34E+01		
	014	14	6.1	5/3/2010	15:58	1.88E+03	2.79E+02	1.70E+02	8.95E+00	1.81E+00	8.92E-01	4.61E-01	5.87E+00	6.66E+00	3.94E+00	5.22E+00	6.88E+00	-1.79E+01	2.18E+01	2.53E+01		
U1-NCD	001			5/8/2008	9:45	9.50E+03	3.49E+02	1.96E+02	3.97E+02	2.58E+00	3.57E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA		U1-NCD
	002			10/15/2008	12:35	6.19E+03	3.71E+02	1.61E+02	4.35E+02	5.89E+00	3.33E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	003			1/12/2009	13:45	2.13E+03	2.48E+02	1.92E+02	4.64E+02	8.90E+00	6.61E-01	2.84E+04	2.63E-03	1.22E+01	7.66E-01	2.37E+00	2.80E+00	6.41E+02	4.11E+01	1.89E+01		
	004			4/13/2009	12:15	5.21E+03	5.18E+02	1.35E+02	3.22E+02	7.74E+00	8.42E-01	2.70E+04	2.66E-01	1.77E+01	2.70E+00	4.46E+00	5.13E+00	5.09E+02	6.05E+01	4.30E+01		
	005			7/13/2009	12:30	2.66E+03	3.86E+02	2.08E+02	1.30E+02	4.98E+00	5.04E-01	1.78E+04	1.36E-03	1.39E+01	7.71E-01	3.71E+00	4.30E+00	2.91E+02	2.72E+01	2.12E+01		
	006			10/12/2009	9:40	3.11E+03	2.90E+02	1.88E+02	8.37E+01	3.94E+00	5.22E-01	1.32E+04	9.90E-02	1.60E+01	1.87E+00	6.39E+00	7.72E+00	3.13E+02	3.09E+01	2.30E+01		
	007			1/4/2010	9:00	5.47E+03	3.48E+02	1.81E+02	6.40E+01	3.33E+00	4.39E-01	1.14E+04	1.58E-03	6.64E+00	8.50E-01	2.52E+00	2.89E+00	2.31E+02	2.85E+01	2.15E+01		
	008			7/15/2010	9:10	1.35E+04	4.41E+02	1.58E+02	5.06E+01	3.21E+00	7.59E-01	1.14E+04	1.42E-03	1.40E+01	7.51E-01	5.21E+00	6.03E+00	2.90E+02	3.39E+01	2.40E+01		
U1-SFDS	001			4/9/2008	8:55	6.28E+02	1.41E+02	1.97E+02	9.98E+00	4.86E-01	4.31E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA		U1-SFDS
	002			5/8/2008	9:10	8.81E+02	1.50E+02	1.96E+02	1.40E+01	5.18E-01	3.69E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	003			10/15/2008	12:45	1.09E+03	1.79E+02	1.67E+02	1.85E+01	1.26E+00	4.56E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	004			1/14/2009	9:15	3.11E+02	1.82E+02	1.93E+02	1.22E+01	1.67E+00	8.15E-01	6.39E+00	3.47E+00	2.22E+00	1.03E+00	1.91E+00	2.27E+00	7.26E+00	1.62E+01	1.83E+01		
	005			4/13/2009	12:30	1.52E+03	2.96E+02	1.37E+02	4.93E+01	3.03E+00	6.15E-01	8.09E+00	5.87E+00	3.91E+00	2.45E+00	3.80E+00	4.79E+00	-9.47E+00	1.92E+01	2.30E+01		
	006			7/15/2009	8:30	7.33E+02	2.73E+02	2.39E+02	3.54E+01	2.67E+00	4.79E-01	9.41E+00	7.41E+00	3.60E+00	-9.93E-02	4.44E+00	4.64E+00	5.10E+00	2.14E+01	2.44E+01		
	007			10/14/2009	9:50	7.04E+02	1.98E+02	1.88E+02	2.91E+01	2.31E+00	5.00E-01	1.22E+01	8.32E+00	6.38E+00	6.68E-01	5.80E+00	6.68E+00	-5.49E+00	1.69E+01	1.97E+01		
	008			1/6/2010	8:50	5.10E+02	1.83E+02	1.81E+02	1.25E+01	1.46E+00	4.47E-01	8.18E+00	4.07E+00	2.98E+00	-5.94E-01	2.91E+00	3.18E+00	-2.06E+00	1.84E+01	2.15E+01		
	009			7/7/2010	8:45	6.44E+02	1.80E+02	1.45E+02	1.88E+01	2.10E+00	6.82E-01	2.09E+01	1.26E-01	7.48E+00	1.64E+00	7.91E+00	9.44E+00	3.42E+00	2.24E+01	2.58E+01		
I-2	001			8/2/2010	14:39	6.21E+01	1.53E+02	1.73E+02	-2.56E-01	3.72E-01	5.25E-01	7.04E+00	7.80E+00	1.02E+01	9.34E-02	6.54E+00	7.19E+00	NA	NA	NA		I-2
RW-1	002	107.5	-30	10/25/2006	14:15	2.95E+04	2.28E+03	5.85E+02	3.10E-01	8.79E-01	9.23E-01	1.99E+00	5.23E+00	5.98E+00	4.31E-01	4.74E+00	5.22E+00	NA	NA	NA		RW-1
	001	107.5	-30	10/25/2006	11:37	6.41E+04	4.88E+03	8.52E+02	-8.44E-01	1.29E+00	1.52E+00	9.50E-01	4.75E+00	5.45E+00	8.01E-01	4.62E+00	5.32E+00	NA	NA	NA		
	005	107.5	-30	10/31/2006	20:00	1.89E+04	1.49E+03	4.73E+02	9.06E-01	1.15E+00	1.14E+00	5.93E-01	4.51E+00	5.21E+00	1.65E+00	5.31E+00	6.60E+00	NA	NA	NA		
	003	107.5	-30	10/31/2006	12:27	1.07E+05	8.06E+03	1.10E+03	-3.70E-01	9.51E-01	1.09E+00	7.18E-01	4.23E+00	4.71E+00	7.34E-01	3.04E+00	3.61E+00	NA	NA	NA		
	004	107.5	-30	10/31/2006	15:55	2.63E+04	2.04E+03	5.51E+02	-1.06E+00	1.15E+00	1.39E+00	-2.26E-01	3.86E+00	3.99E+00	-6.22E-03	2.86E+00	3.21E+00	NA	NA	NA		
	006	107.5	-30	11/1/2006	12:00	1.84E+04	1.45E+03	4.66E+02	3.64E-01	1.03E+00	1.08E+00	-3.39E+00	4.14E+00	3.90E+00	-5.25E-01	4.01E+00	4.19E+00	NA	NA	NA		
	007	107.5	-30	11/2/2006	12:00	2.40E+04	2.13E+03	1.00E+03	1.50E-01	6.00E-01	6.70E-01	1.12E+00	2.37E+00	2.60E+00	-8.50E-01	2.37E+00	2.90E+00	NA	NA	NA		
	008	107.5	-30	11/3/2006	9:00	3.06E+04	2.34E+03	1.00E+03	4.80E-01	7.20E-01	7.80E-01	-1.05E+00	2.19E+00	2.60E+00	8.20E-01	2.40E+00	2.70E+00	NA	NA	NA		
MH-5 VCFD[7]	001			6/29/2007	12:15	1.41E+03	2.33E+02	1.87E+02	-3.26E-01	6.21E-01	9.20E-01	-9.57E-01	3.40E+00	3.60E+00	6.39E-02	3.13E+00	3.49E+00	NA	NA	NA		MH-5 VCFD
	002			8/10/2007	15:15	1.17E+03	5.21E+02	4.56E+02	3.17E-02	7.84E-01	9.38E-01	-5.40E-01	3.17E+00	2.87E+00	-8.50E-01	2.84E+00	2.93E+00	NA	NA	NA		
	003			10/26/2007	13:30	1.62E+03	2.30E+02	1.84E+02	1.60E-01	6.06E-01	7.10E-01	2.15E-01	2.64E+00	2.95E+00	-6.20E-01	2.90E+00	3.06E+00	NA	NA	NA		
	004			1/16/2008	12:30	9.28E+02	2.45E+02	1.77E+02	4.62E-01	8.33E-01	9.37E-01	5.23E-01	2.78E+00	3.09E+00	5.97E-01	2.55E+00	2.90E+00	NA	NA	NA		
	005			6/3/2009	14:45	1.20E+03	1.95E+02	1.62E+02	-5.27E-01	6.72E-01	8.48E-01	3.34E+00	9.21E+00	6.14E+00	7.60E-01	4.83E+00	5.73E+00	NA	NA	NA		
	006			8/24/2009	10:15	1.50E+03	2.46E+02	2.18E+02	5.16E-01	5.64E-01	5.97E-01	8.69E-02	5.58E+00	6.23E+00	2.70E+00	6.51E+00	7.43E+00	NA	NA	NA		
	007			11/16/2009	11:10	6.28E+02	1.39E+02	1.07E+02	3.95E-01	6.57E-01	7.36E-01	-5.36E-01	1.07E-01	1.17E+01	2.75E+00	6.29E+00	7.70E+00	NA	NA	NA		
	008			2/18/2010	13:46	2.08E+02	1.59E+02	1.71E+02	6.25E-02	3.27E-01	4.08E-01	-1.18E+00	4.41E+00	4.80E+00	-1.81E+00	4.11E+00	4.15E+00	NA	NA	NA		
	009			5/17/2010	10:15	4.33E+02	1.73E+02	1.79E+02	3.66E-01	5.84E-01	6.48E-01	2.13E+00	6.00E+00	7.18E+00	4.52E-01	6.63E+00	7.65E+00	NA	NA	NA		
	010			8/5/2010	14:45	7.32E+02	1.89E+02	1.77E+02	5.37E-01	5.67E-01	5.84E-01	7.26E-01	7.72E+00	8.69E+00	-2.26E+00	6.93E+00	7.07E+00	NA	NA	NA		

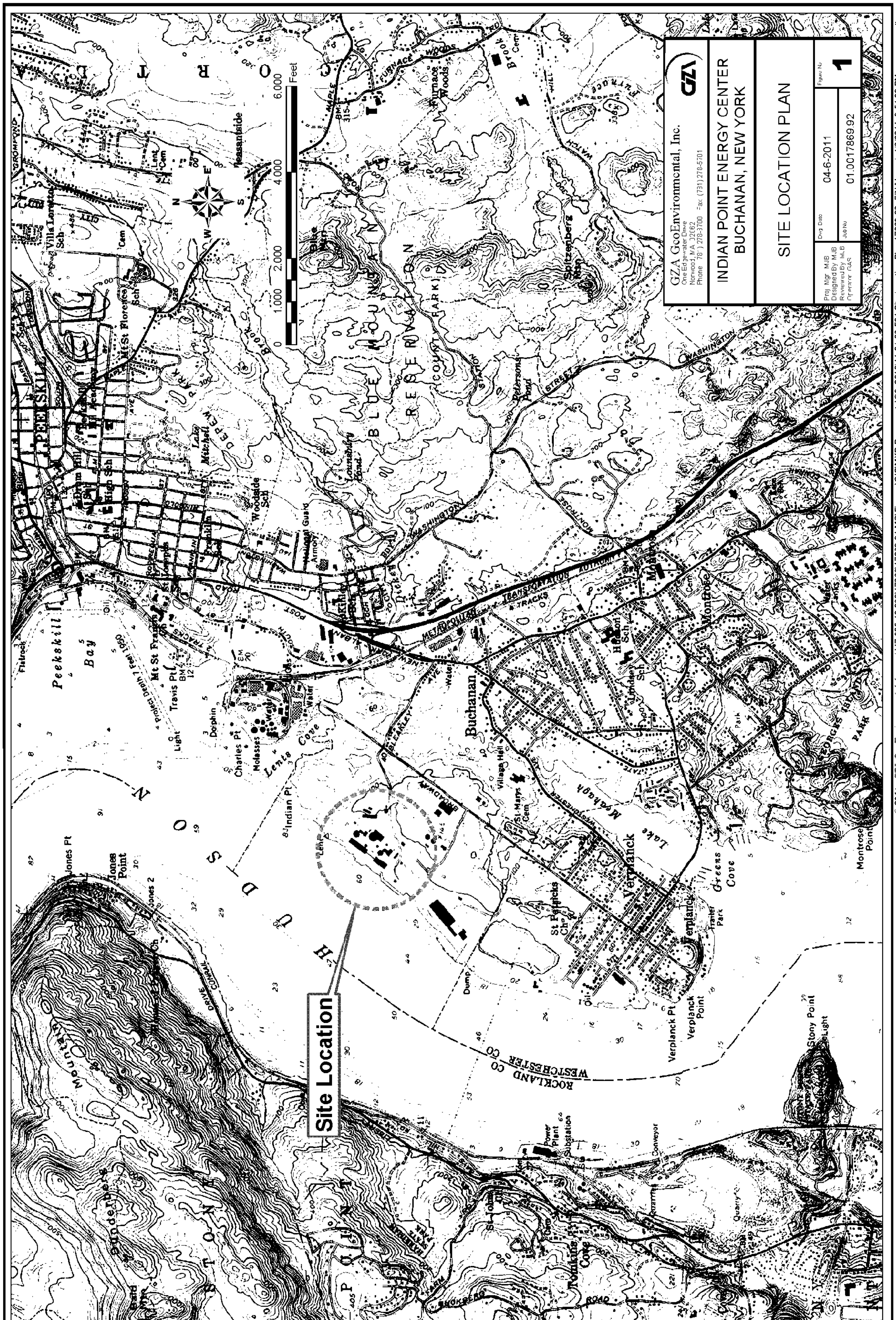
TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	Result	Std. Dev.	MDC	
MH-5 VCFD	011			8/30/2010	13:30	9.96E+03	5.48E+02	1.26E+02	1.25E-01	3.21E-01	3.81E-01	1.50E+00	5.58E+00	6.48E+00	8.08E-01	6.51E+00	7.50E+00	NA	NA	NA	MH-5 VCFD
	012			9/10/2010	15:30	8.80E+02	1.89E+02	1.25E+02	3.60E-01	6.35E-01	7.11E-01	7.21E-01	6.45E+00	7.44E+00	1.23E+00	5.71E+00	6.85E+00	NA	NA	NA	
LAF-002	001		-22.3	6/6/2006	12:47	5.20E+01	1.71E+02	1.83E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	LAF-002
	001		-22.3	6/6/2006	12:47	3.98E+01	3.60E+02	6.98E+02	1.38E+00	1.85E+00	1.93E+00	-3.88E+00	1.53E+00	1.59E+00	-2.24E+00	1.25E+01	1.34E+01	-2.84E-01	2.13E+01	2.34E+01	
	003		-22.3	9/19/2006	13:14	-4.71E-01	1.50E+02	1.70E+02	-5.08E-01	8.90E-01	1.07E+00	6.45E-02	9.05E+00	1.01E+00	-2.76E+00	6.35E+00	4.99E+00	NA	NA	NA	
	004		-22.3	12/4/2006	13:38	-1.20E 01	1.62E+02	1.60E+02	-1.20E-01	7.80E-01	8.50E-01	NA	NA	NA	9.00E-01	5.40E+00	6.30E+00	-2.50E+00	7.20E+00	8.10E+00	
	005		-22.3	3/7/2007	14:45	-8.30E 01	1.56E+02	1.60E+02	8.20E-01	1.50E+00	1.60E+00	3.10E+00	4.80E 00	5.10E+00	-1.20E+00	5.40E+00	7.30E+00	NA	NA	NA	
	006		-22.3	6/7/2007	13:18	-6.85E 00	1.33E+02	1.54E+02	3.19E-01	6.02E-01	6.79E-01	7.80E-01	2.63E 00	3.04E+00	6.55E-01	2.60E+00	3.04E+00	NA	NA	NA	
	007		-22.3	10/9/2007	9:35	7.46E+01	1.37E+02	1.55E+02	4.43E-01	4.98E-01	5.18E-01	-5.45E-01	2.10E 00	1.69E+00	-1.44E+00	1.78E+00	1.39E+00	NA	NA	NA	
	008		-22.3	12/4/2007	10:50	9.00E+01	1.46E+02	1.62E+02	4.89E-01	6.20E-01	6.62E-01	-6.91E-01	4.59E 00	4.37E+00	-2.35E+00	3.72E+00	3.39E+00	NA	NA	NA	
	009		-22.3	4/10/2008	0:00	4.65E+01	8.46E+01	1.44E+02	4.73E-01	3.02E-01	4.56E-01	1.91E+00	2.14E+00	3.95E+00	1.61E+00	2.46E+00	4.56E+00	NA	NA	NA	
	010		-22.3	10/17/2008	10:32	8.19E+01	1.55E+02	1.74E+02	4.05E-01	7.90E-01	9.01E-01	2.36E-01	2.76E+00	3.16E+00	-3.08E-02	3.09E+00	3.46E+00	-4.61E+00	2.01E+01	2.35E+01	
	011		-22.3	4/21/2009	14:24	1.80E+02	1.77E+02	1.89E+02	1.77E-01	5.70E-01	6.58E-01	-1.74E+00	5.94E+00	3.96E+00	3.37E-01	3.99E+00	4.50E+00	2.34E+00	1.92E+01	2.19E+01	
	012		-22.3	11/19/2009	12:35	-7.51E-01	1.40E+02	1.65E+02	-1.84E-02	5.43E-01	7.29E-01	4.01E-01	8.91E+00	1.02E+01	6.99E+00	9.51E+00	1.27E+01	2.20E+00	1.47E+01	1.68E+01	
	013		-22.3	5/11/2010	13:44	-4.21E-01	1.32E+02	1.63E+02	6.55E-01	7.37E-01	7.78E-01	-1.49E+00	6.90E+00	7.60E+00	1.64E+00	6.08E+00	7.34E+00	-6.88E+00	2.21E+01	2.54E+01	
B-1[7]	001			6/29/2007	12:35	7.93E+02	2.07E+02	1.89E+02	-3.83E-01	6.75E-01	9.80E-01	0.00E+00	7.04E+00	4.44E+00	-9.13E-01	3.30E+00	3.40E+00	NA	NA	NA	B-1
	002			8/14/2007	11:30	1.10E+03	2.25E+02	1.90E+02	1.29E-02	5.93E-01	7.38E-01	0.00E+00	6.71E+00	3.93E+00	9.94E-01	3.54E+00	4.16E+00	NA	NA	NA	
	003			10/22/2007	14:49	1.10E+03	4.68E+02	4.01E+02	-1.56E-01	3.72E-01	5.51E-01	1.68E+01	5.82E+00	3.82E+00	1.33E+00	3.23E+00	3.53E+00	NA	NA	NA	
	004			1/22/2008	13:08	2.27E+02	1.61E+02	1.71E+02	1.29E-01	5.00E-01	6.12E-01	3.13E-01	2.54E+00	2.83E+00	-9.46E-02	2.72E+00	3.01E+00	NA	NA	NA	
	005			4/18/2008	18:25	1.17E+03	1.57E+02	2.01E+02	-1.14E-01	3.81E-01	7.82E-01	2.00E+01	3.70E+00	3.07E+00	-2.48E-01	1.76E+00	2.97E+00	NA	NA	NA	
	006			6/3/2009	13:30	8.81E+02	1.83E+02	1.62E+02	7.01E-02	7.89E-01	9.15E-01	9.21E+00	1.11E-01	7.41E+00	-3.25E+00	6.23E+00	5.86E+00	NA	NA	NA	
	007			2/23/2010	14:10	1.49E+03	2.13E+02	1.69E+02	4.61E-02	3.00E-01	3.80E-01	4.53E+00	5.45E+00	6.44E+00	-6.69E-01	7.14E+00	5.88E+00	NA	NA	NA	
	008			4/23/2010	16:44	8.15E+02	1.91E+02	1.85E+02	2.22E-01	5.20E-01	6.03E-01	9.79E+00	7.91E+00	6.38E+00	5.59E-01	6.24E+00	7.21E+00	NA	NA	NA	
	009			8/17/2010	15:40	1.40E+04	6.48E+02	1.27E+02	1.25E-01	6.43E-01	7.91E-01	2.27E+01	1.06E-01	5.87E+00	2.96E+00	6.00E+00	7.45E+00	NA	NA	NA	
B-6[7]	001			7/5/2007	9:00	4.03E+02	1.67E+02	1.69E+02	1.01E-01	4.97E-01	5.67E-01	1.29E+00	3.46E+00	4.04E+00	1.09E+00	3.51E+00	4.15E+00	NA	NA	NA	B-6
	002			8/14/2007	8:30	5.46E+01	1.68E+02	1.92E+02	-3.06E-01	6.20E-01	8.32E-01	5.63E-01	2.97E+00	3.42E+00	-2.88E+00	3.31E+00	2.35E+00	NA	NA	NA	
	003			10/22/2007	11:30	1.07E+02	1.70E+02	1.90E+02	-7.54E-02	4.34E-01	5.83E-01	2.39E+00	2.33E+00	3.04E+00	1.04E+00	2.46E+00	3.05E+00	NA	NA	NA	
	004			1/16/2008	16:50	4.72E+02	2.04E+02	1.79E+02	1.05E-01	7.05E-01	8.83E-01	3.96E+00	4.41E+00	3.32E+00	1.29E+00	3.15E+00	3.66E+00	NA	NA	NA	
	005			4/25/2008	14:15	5.23E+01	8.45E+01	1.43E+02	-1.20E-01	2.59E-01	5.25E-01	-2.89E-01	1.96E+00	3.24E+00	-7.50E-01	3.43E+00	4.21E+00	NA	NA	NA	
	006			6/3/2009	9:40	1.08E+02	1.46E+02	1.63E+02	1.71E-01	7.08E-01	8.14E-01	1.50E-01	1.19E 01	7.94E+00	1.26E+00	5.79E+00	6.80E+00	NA	NA	NA	
	007			2/19/2010	9:56	3.78E+02	1.65E+02	1.68E+02	1.14E-02	3.57E-01	4.59E-01	1.43E+00	4.13E 00	4.84E+00	2.21E-01	3.96E+00	4.54E+00	NA	NA	NA	
	008			5/18/2010	9:40	4.48E+01	1.62E+02	1.84E+02	-1.02E-01	4.47E-01	5.71E-01	5.39E-01	5.58E 00	6.34E+00	2.39E-01	5.50E+00	6.27E+00	NA	NA	NA	
	009			3/5/2010	13:43	1.49E+02	1.62E+02	1.79E+02	1.12E-01	8.02E-01	9.78E-01	2.32E+00	6.57E+00	8.03E+00	-9.21E-02	8.23E+00	9.37E+00	NA	NA	NA	

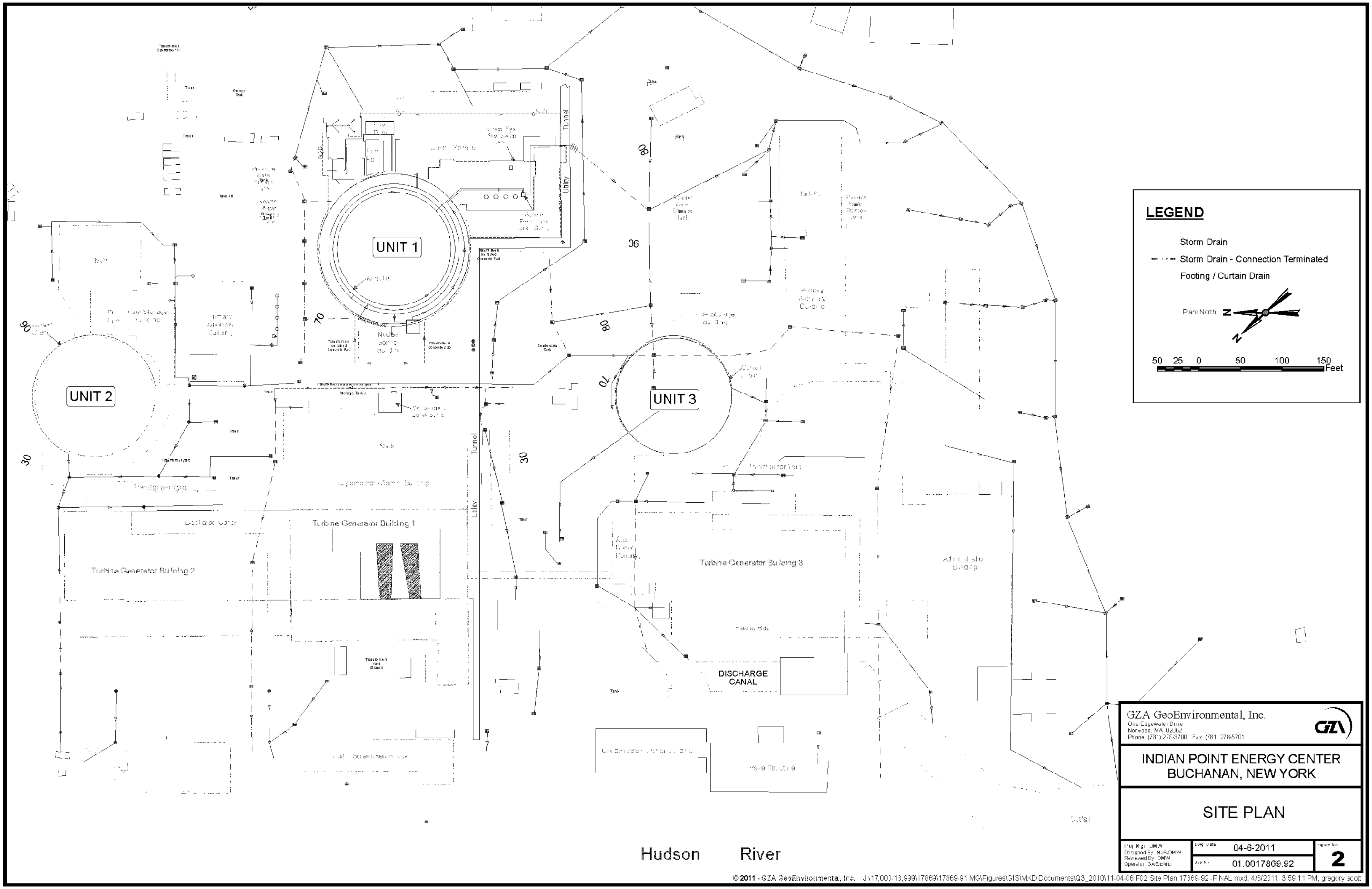
Notes:

1 For nested multi-level monitoring wells, suffix of well ID indicates depth (rounded to nearest foot) from reference point on casing to bottom of well screen. For Waterloo multi-level systems, suffix indicates depth (rounded to nearest foot) from reference point on casing to top of sampling port. Well IDs without a suffix are open bedrock wellbores
2 Sampling depths within sampling intervals (location of pump intake) have been established at location of most transmissive zone to the extent possible
3 NA indicates that the constituent was not analyzed
4 Current well identifications are shown for each location. Minor name changes have been made based on altered transducer installations
5 Dot pattern denotes sampling interval is positioned within overburden soils. Open box indicates sampling interval is in bedrock
6 At monitoring well U3-T1, sample IDs 019 E, 019 D, and 019 S were collected for laboratory and field QA/QC (B=Blind, D=Duplicate, S Spike). Only the duplicate sample results were included in the calculations for rolling averages
7 These locations are storm drains, not monitoring wells

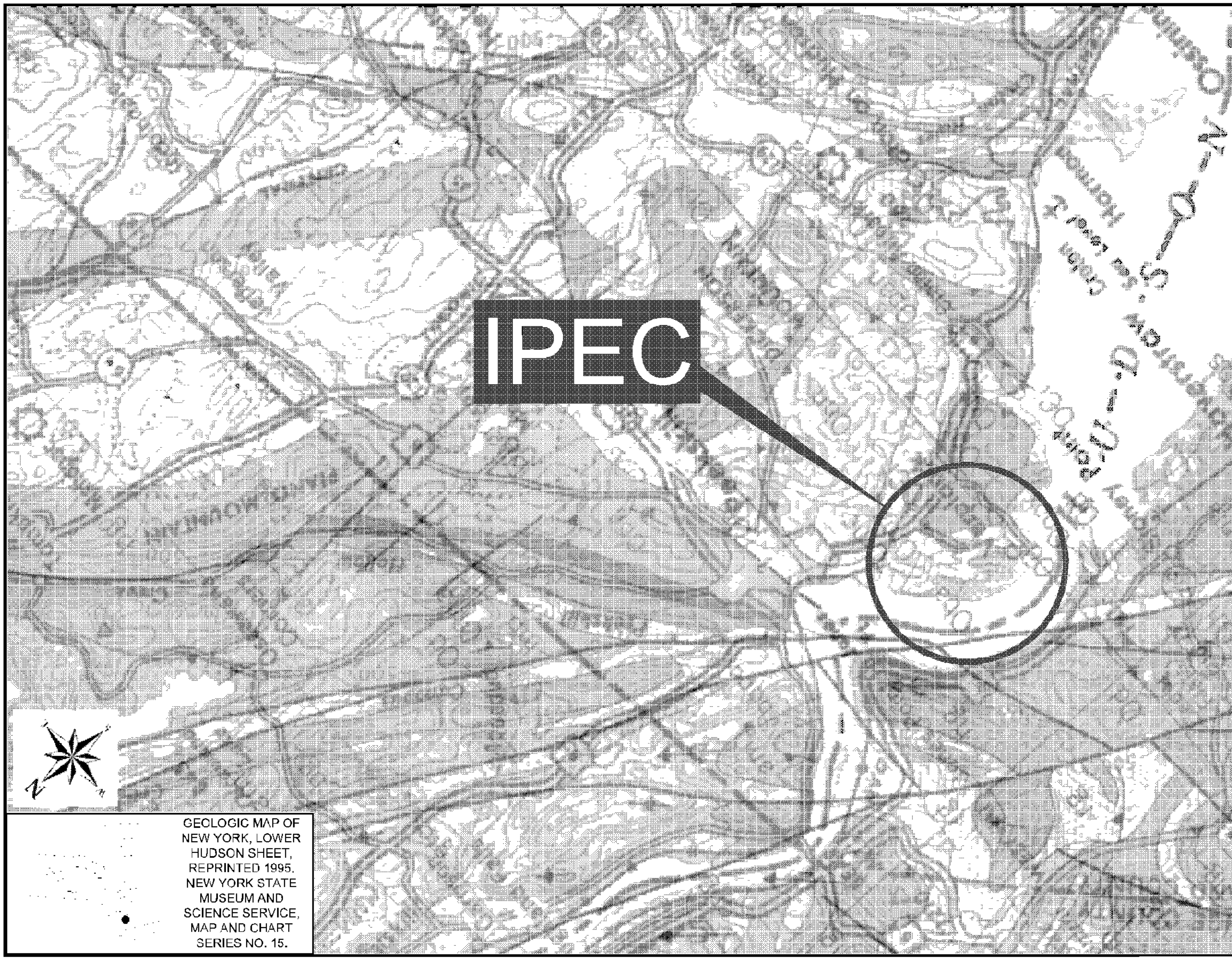
FIGURES



IPEC00263614



IPEC00263615



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INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

LOWER HUDSON VALLEY
GEOLOGIC MAP

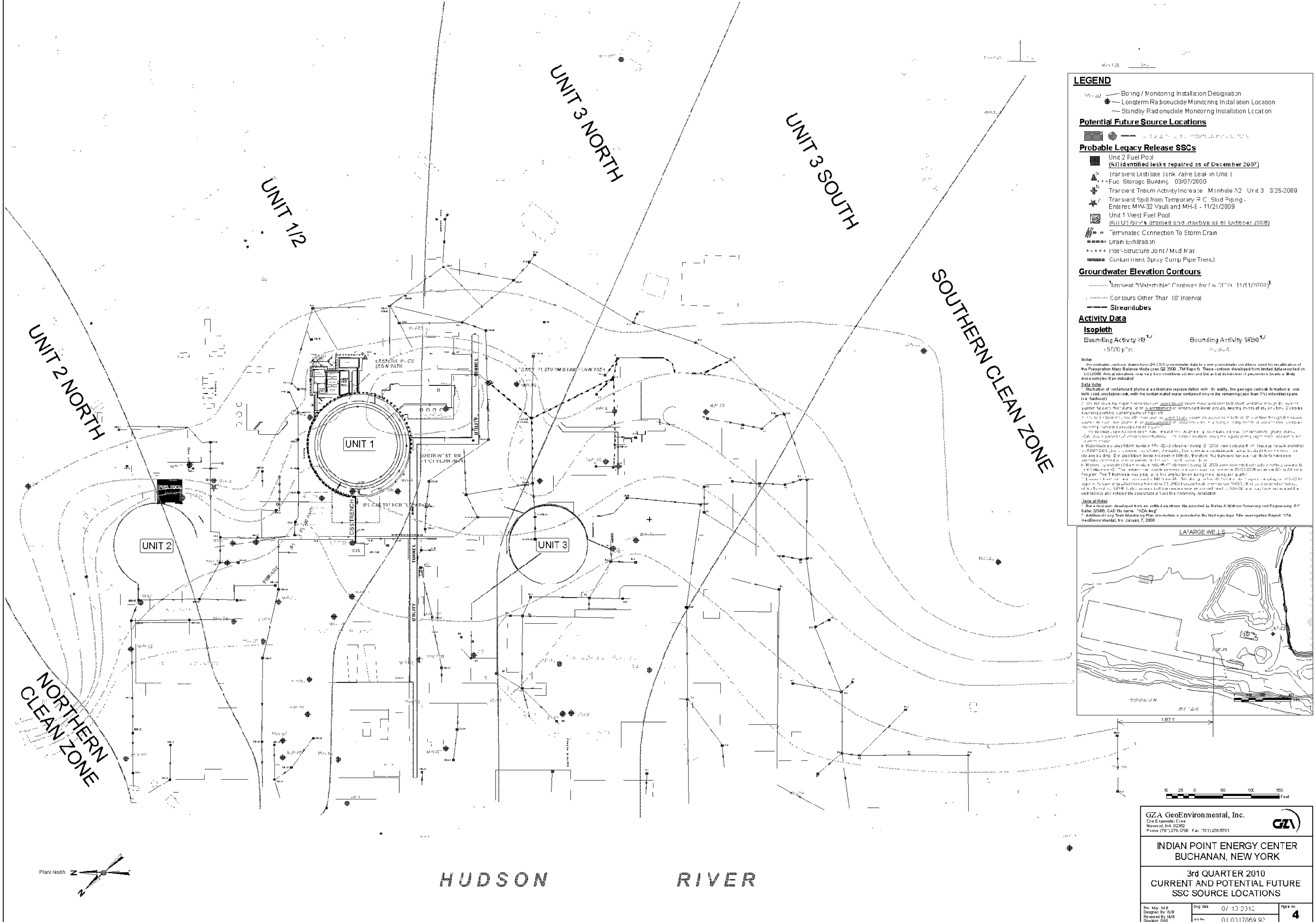
Proj. Mgr.: DMW
Designed By: SJC
Reviewed By: DMW
Operator: CAS/EMD

Dwg. Date: 07-10-2012
Job No.: 01.0017869.92

Figure No.: 3

GZA-J:\17,000-18,999\17869\17869-91.MG\Figures\CA00\3Q2010\12-07-10 F03 Lower Hudson Valley Geologic Map 17869-92.dwg [FIG-3] July 10, 2012 - 3:17pm elaine.donohue

3rd QUARTER 2010 CURRENT AND POTENTIAL FUTURE SSC SOURCE LOCATIONS



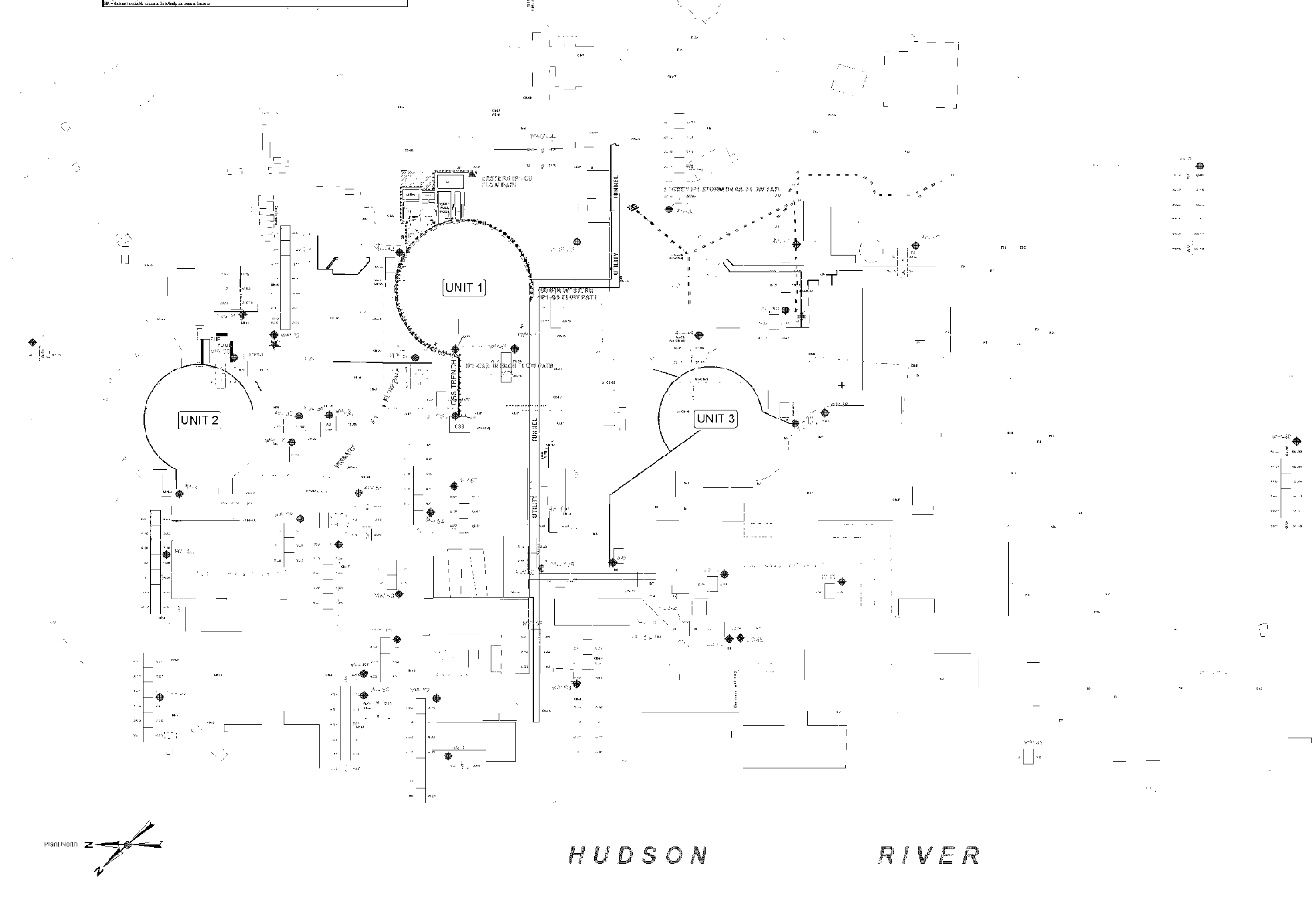
IPEC00263617

3rd QUARTER 2010 LONGTERM TRANSDUCER MONITORING EVALUATION MAP

Location	Minimum Low-River Tide Elevation Q2-2007 through Q2-2009 (feet msl)	(Quarter)	Maximum Low-River Tide Elevation Q2-2007 through Q2-2009 (feet msl)	(Quarter)	Low-River Tide Elevation Q3-10 (feet msl)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
I2	18.62	Q3-07	53.73	Q1-08	50.49
MW-30-69	11.33	Q3-07	12.33	Q1-09	NA
MW-30-84	12.36	Q4-08	13.13	Q1-09	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MW-40-1.2	36.67	Q3-07	50.49	Q1-08	38.96
MW-43-28	31.08	Q3-07	33.95	Q2-08	NA
MW-43-[illegible]	50.48	Q3-08	54.15	Q1-09	50.80
MW-4[illegible]	11.95	Q3-07	13.05	Q1-08	12.45
MW-51-40	15.15	Q2-09	52.35	Q2-08	NA
MW-51-180	29.33	Q3-07	31.79	Q2-08	[illegible]
MW-53-[illegible]	9.09	Q3-07	12.80	Q2-08	5.98
MW-53-120	9.18	Q3-07	11.19	Q2-08	6.60
MW-55-24	7.82	Q3-07	9.02	Q1-08	8.02
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MW-65-48	34.98	Q2-09	48.19	Q1-09	NA
MW-65-8	32.72	Q1-08	34.97	Q2-08	NA
MW-66-Z	-0.74	Q1-08	0.50	Q2-09	[illegible]
[illegible]	0.89	[illegible]	0.81	[illegible]	[illegible]
MW-67-39	-0.56	Q2-09	1.02	Q3-07	-0.09
MW-67-30	2.42	Q1-09	0.53	Q3-07	[illegible]97
U3-C1	0.34	Q1-09	5.08	Q4-07	NA

Notes:
1. Quarter 2, 2007 groundwater elevations were measured on [illegible] at [illegible] am.
2. Quarter 3, 2007 groundwater elevations were measured on 9/25/07 at 4:32 am.
3. Quarter 4, 2007 groundwater elevations were measured on 12/9/07 at 4:15 am.
4. Quarter 1, 2008 groundwater elevations were measured on 1/3/08 at [illegible]:14 am.
5. Quarter 2, 2008 groundwater elevations were measured on 4/6/08 at [illegible]:14 pm.
6. Quarter 3, 2008 groundwater elevations were measured on 7/10/08 at 11:35 am.
7. Quarter 4, 2008 groundwater elevations were measured on [illegible] at [illegible] am.
8. Quarter 1, 2009 groundwater elevations were measured on 1/9/09 at 2:42
9. Quarter 2, 2009 groundwater elevations were measured on [illegible] at 2:41 pm.
10. Quarter 3, 2009 groundwater elevations were measured on [illegible] at 8:18 am.
11. Quarter 4, 2009 groundwater elevations were measured on 11/28/09 at 3:45 pm.
12. Quarter 1, 2010 groundwater elevations were measured on 1/30/10 at [illegible]:00 am.
13. Quarter 2, 2010 groundwater elevations were measured on 4/09/10 at 12:06 pm.
14. Quarter 3, 2010 groundwater elevations were measured on 7/31/10 at 12:30 am.
NA – data not available or erratic data/likely instrument damage

Highlighted box indicates the data falls >[illegible]% outside of range between Q2-2007 and Q2-2009, inclusive.



LEGEND

Monitoring Installations

- Boring / Monitoring Installation Designation
- Longterm **Radionuclide** Monitoring Installation
- Standby **Radionuclide** Monitoring Installation

Multiple Screened Intervals w/ Depth

- **Transducer** Monitored Interval
- Interval no longer monitored with **Transducer**
- Single level monitoring location with duplicate **Transducers** for redundancy
- Maximum quarterly groundwater elevation at time of low-river tide measured between Q2 2007 and Q2 2009, inclusive
- Minimum quarterly groundwater elevation at time of low-river tide measured between Q2 2007 and Q2 2009, inclusive

Transducer Notes

1 - Reduced transducer data not available for Q3 2010

Potential Future Source Locations

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (**All identified leaks repaired as of December 2007**)
- Transient Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2009
- Transient Tritium Activity Increase - Manhole #2 - Unit 3 - 3/25/2009 and 7/7/2010
- Transient Spill from Temporary R.O. Skid Piping - Entered MW-31 Vault and MH-9 - 1/21/2009
- Unit 1 West Fuel Pool (All U1-SFPs drained and inactive as of October 2008)
- Terminated Connection To Storm Drain
- Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Pipe Trench

Activity Data

Isopleth

Bounding Activity H3[1,2]

Bounding Activity SR90[1,3]

General Notes

1. Base map was developed from an untitled electronic file provided by Bader and Watson Surveying and Engineering, P.C., Dated 2/2006, CAD file name "GZA.dwg".

50 25 0 50 100 150 Feet

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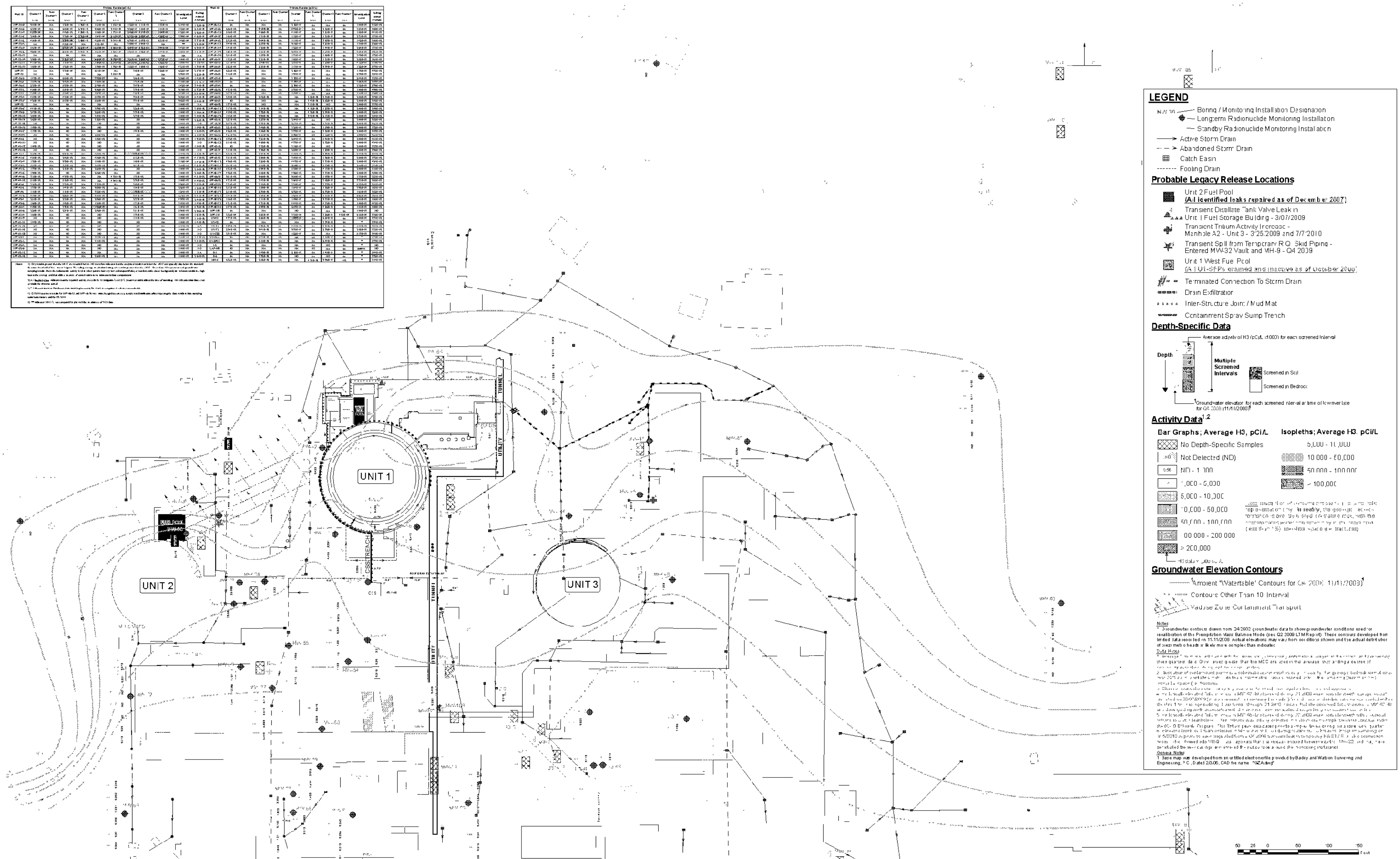
INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

3rd QUARTER 2010
LONGTERM TRANSDUCER
MONITORING EVALUATION MAP

Proj Mgr: MJB Designed by: MJB Reviewed by: MJB Operator: GAG	Dwg Date: 07.9.2012 Job No: 01.0017309.92	Figure No.: 5A

3rd QUARTER 2010 ROLLING AVERAGE[1] TRITIUM ACTIVITY MAP

Well ID	Quarter 4 2009	Post Quarter 4 2009	Quarter 1 2010	Post Quarter 1 2010	Quarter 2 2010	Post Quarter 2 2010	Quarter 3 2010	Post Quarter 3 2010	Investigation Level	Rolling Annual Average
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]



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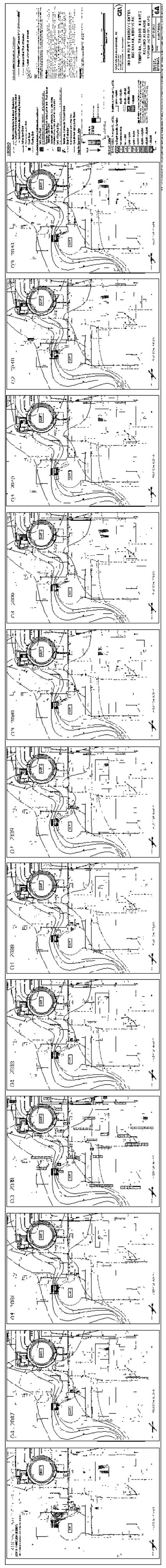
INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

3rd QUARTER 2010 ROLLING AVERAGE[1] TRITIUM ACTIVITY MAP

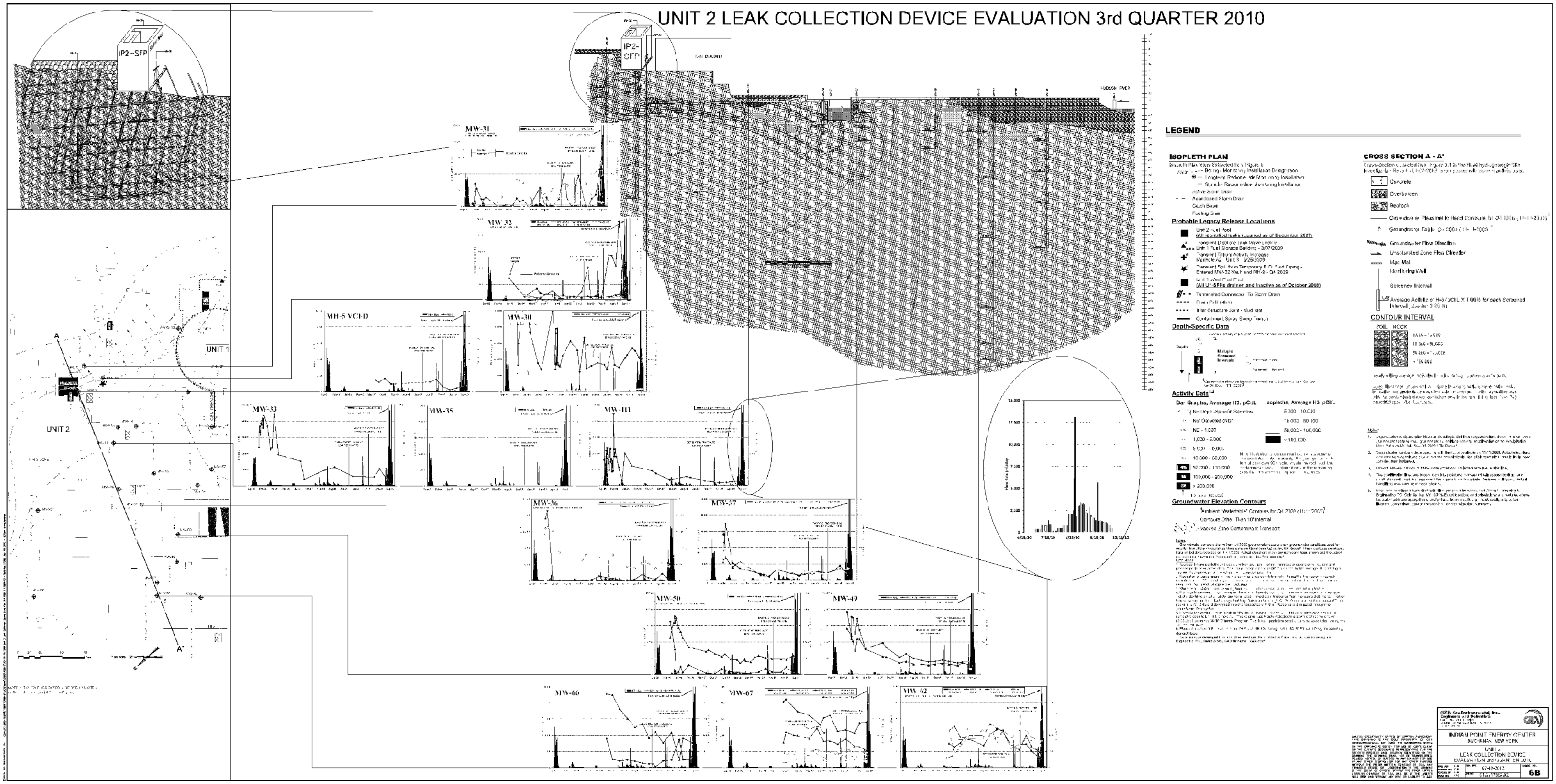
Proj Mgr: MJB Designed By: MJB Reviewed By: MJB Operator: GAS	Dwg Date: 07.10.2012 Job No: 01.0017869.92	Figure No. 6

IPEC00263619



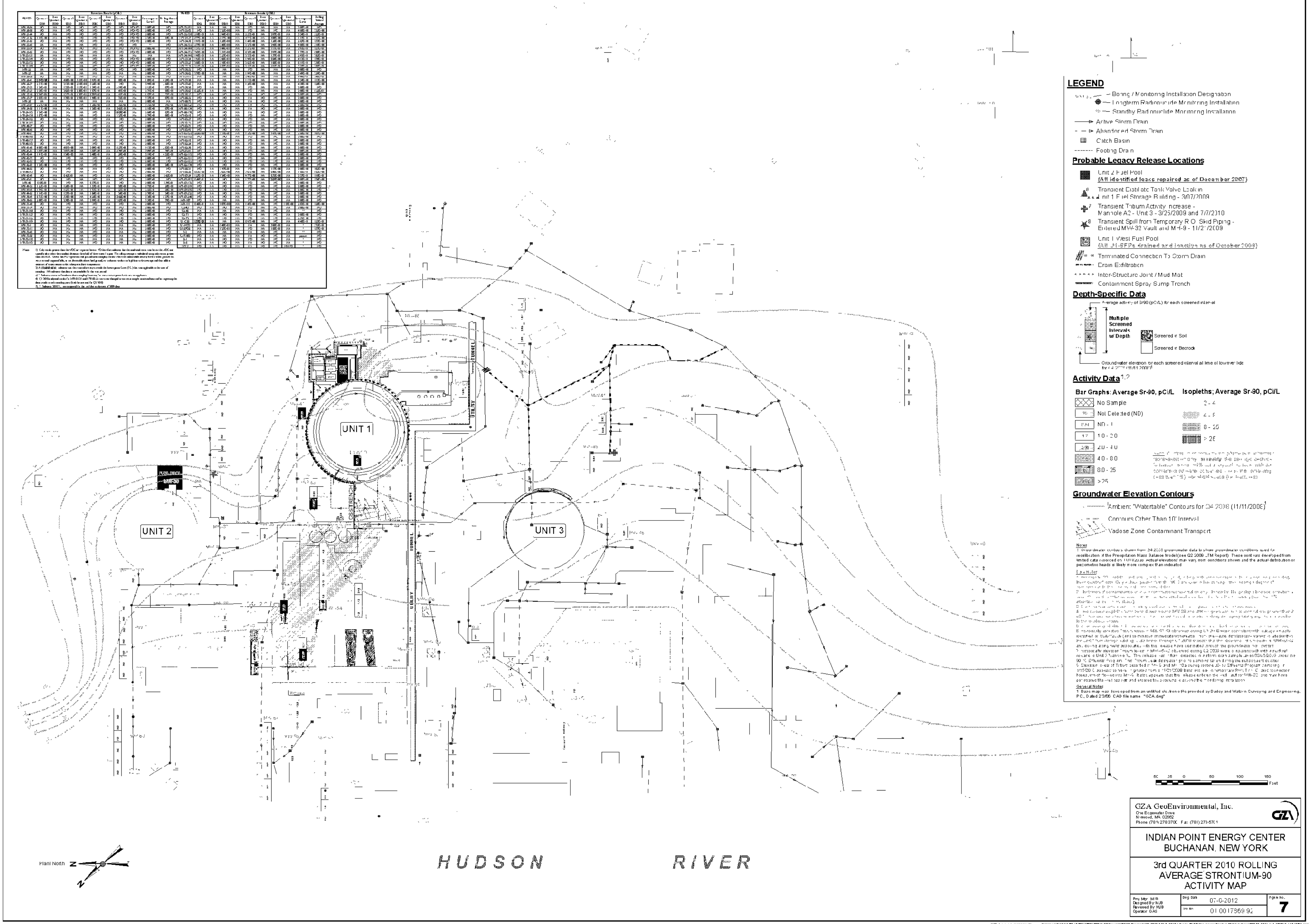
IPEC00263620

UNIT 2 LEAK COLLECTION DEVICE EVALUATION 3rd QUARTER 2010

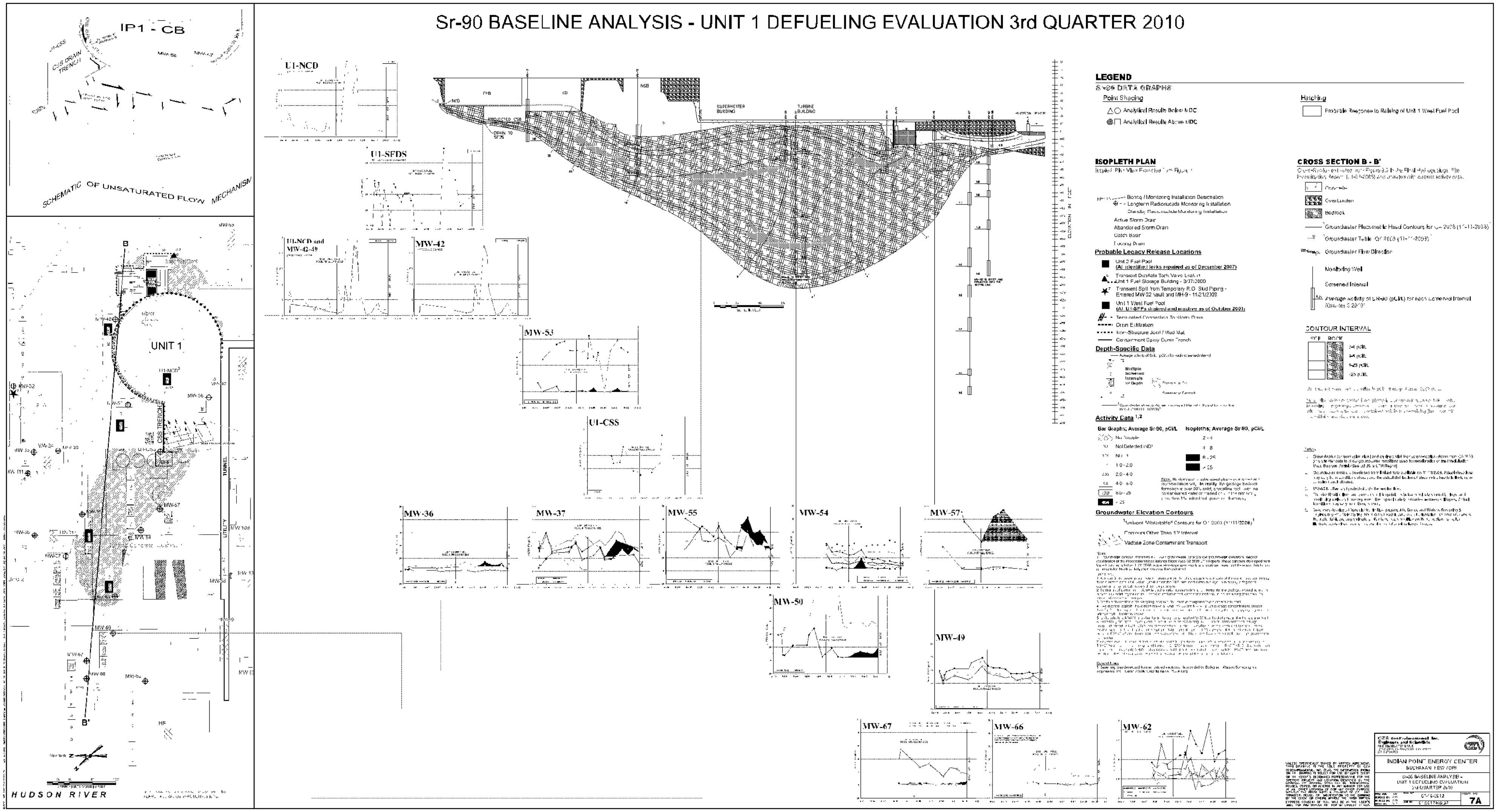


IPEC00263621

3rd QUARTER 2010 ROLLING AVERAGE[1] STRONTIUM-90 ACTIVITY MAP

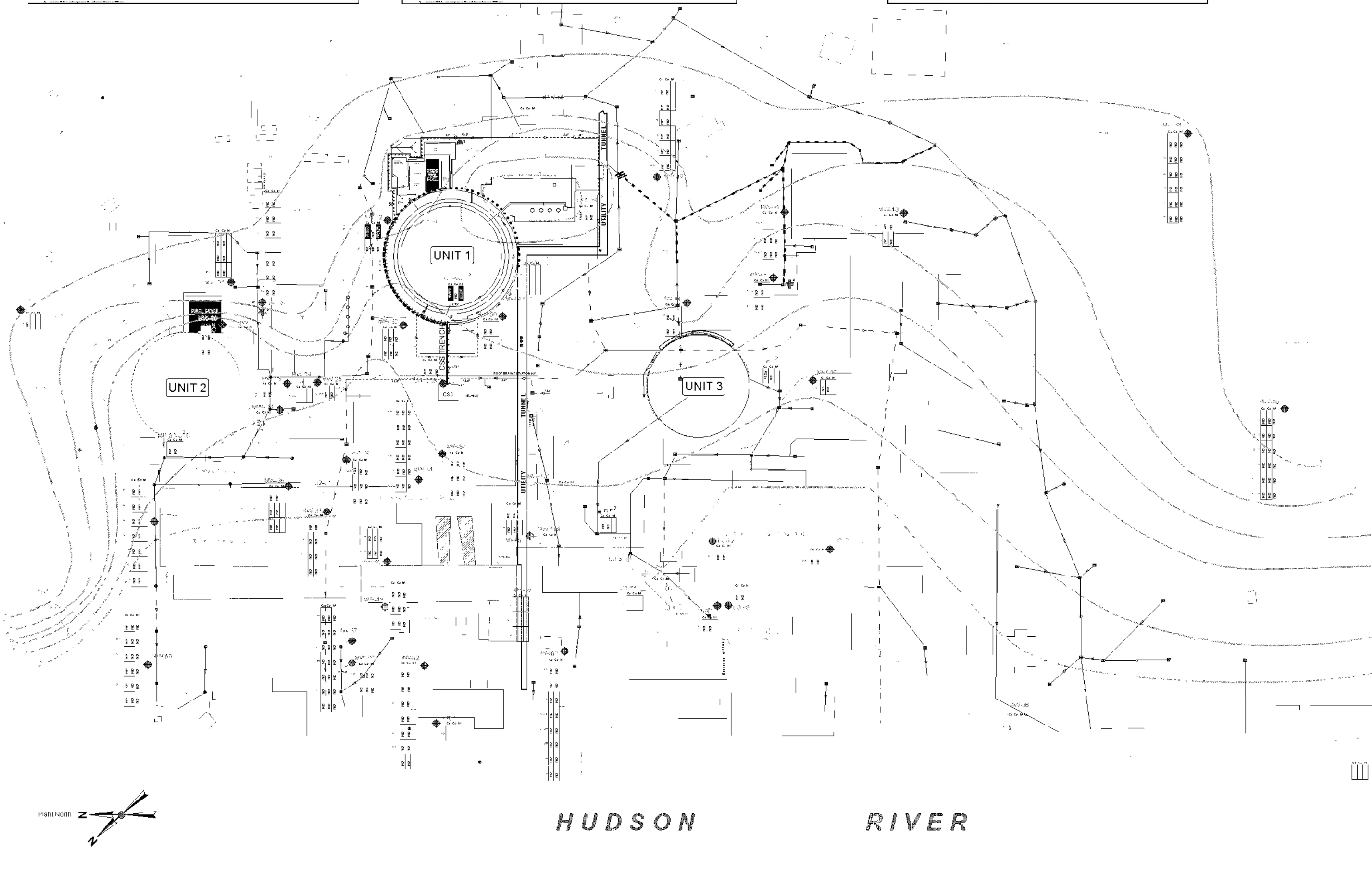


IPEC00263622



IPEC00263623

3rd QUARTER 2010 ROLLING AVERAGE[1] CESIUM, COBALT, AND NICKEL ACTIVITY MAP



LEGEND

- Boring / Monitoring Installation Designation
- Longterm Radionuclide Monitoring Installation
- Standby Radionuclide Monitoring Installation
- Active Storm Drain
- Abandoned Storm Drain
- Catch Basin
- Footing Drain

Probable Legacy Release Locations

- Unit 2 Fuel Pool (All identified leaks repaired as of December 2007)
- Transient Distillate Tank Valve Leak in Unit 1 Fuel Storage Building 3/07/2009
- Transient Tritium Activity Increase - Manhole A2 - Unit 3 - 3/25/2008 AND 7/7/2010
- Transient Spill from Temporary RC Sed Piping - Entered MW-32 Vault and MH-8 - 11/21/2009
- Unit 1 West Fuel Pool (All U1 SFPs drained and inactive as of October 2008)
- Terminated Connection to Storm Drain
- Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Trench

Depth-Specific Data

Average activity of Cs-137 (pCi/L) for each screened interval
Average activity of Co-60 (pCi/L) for each screened interval
Average activity of Ni-63 (pCi/L) for each screened interval

Multiple Screened Intervals w/ Depth

Screened in Soil
Screened in Bedrock

Groundwater elevation for each screened interval at time of low river tide (on 11/11/2008)

Cesium Data[1] Average Cs, pCi/L	Cobalt Data[1] Average Co, pCi/L	Nickel Data[1] Average Ni, pCi/L
No Depth-Specific Samples	No Depth-Specific Samples	No Depth-Specific Samples
Not Detected (ND)	Not Detected (ND)	Not Detected (ND)
ND - 10	ND - 25	ND - 12
10 - 50	25 - 100	12 - 25
50 - 500	100 - 200	25 - 50
500 - 1,000	200 - 300	50 - 100
1,000 - 5,000	300 - 500	100 - 250
> 5,000	> 500	250 - 500
		> 500

Groundwater Elevation Contours

Ambient "Watertable" Contours for C.I. 2008 (11/11/2008)[1]
Contours Other Than 10' Interval

Notes

General Notes
1. Base map was developed from an outline of structures provided by Bailey and Barber Surveying and Engineering, P.C. dated 2/3/06. CAD file name "IPZA.dwg"

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INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

3rd QUARTER 2010 ROLLING AVERAGE CESIUM, COBALT AND NICKEL ACTIVITY MAP

Proj. Mgr: MJE Designed By: MJB Reviewed By: MJB Operator: UAb	Dwg Date: 07.10.2012 Job No: 01.0017309.92	Figure No: 8

IPEC00263624

APPENDIX A LIMITATIONS

HYDROGEOLOGICAL LIMITATIONS

1. The conclusions and recommendations submitted in this report are based in part upon the radiological, chemical and physical data from water analyses. These data were obtained from specific sampling locations at specific times. The full nature and extent of variations in the data between these specific locations and times are not known. The conditions existing between these specific locations and times have only been inferred using interpolation and extrapolation based on judgment.

2. The subsurface profiles described in the text and presented in the report figures are intended to convey anticipated trends in subsurface conditions. The conditions shown are approximate and generalized and were developed, in part, based on judgment. For specific information at specific locations, refer to the individual subsurface investigation logs.

3. Water level readings (piezometric pressures) have been made in the specific borings, monitoring wells, and Waterloo installations at times and under conditions stated. These data have been reviewed and interpretations have been made in the text and on the figures of this report. However, it must be noted that temporal and spatial fluctuations in the level of the groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time and location measurements were made.

4. Where quantitative laboratory testing has been conducted by an outside laboratory, GZA has relied upon the validity of the data provided, and has not conducted an independent laboratory evaluation of the reliability of these data.

5. Radiological and chemical analyses have been performed for specific parameters during the course of this study, as summarized in the text. Additional constituents not searched for may be present in soil and groundwater at the site.

6. Variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past and current plant operational practices, the passage of time, and other factors. Should additional data (water analyses, water elevations, subsurface deposits, plant construction and operation, etc.) become available in the future, these data should be reviewed by GZA, and the conclusions and recommendations presented herein modified accordingly.

7. This monitoring report was developed by GZA GeoEnvironmental Inc for the exclusive of Entergy Nuclear Northeast (Entergy) at the Indian Point Energy Center. Any use of data or information provided in the report, by parties other than Entergy, is prohibitated without the prior written permission of Entergy and GZA.

APPENDIX B TRANSDUCER INSTALLATION LOGS

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID SHEET FILE NO. PROJECT LOCATION	U3-4Dn 1 of 1 01.0017869.92 Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	27.25	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.849	DATE	7/23/10
PSI CAPACITY	30	CASING ELEVATION (FT)	14.519		
SERIAL NUMBER	14301	CASING DIAMETER (INCH)	4		

C. Benmergui

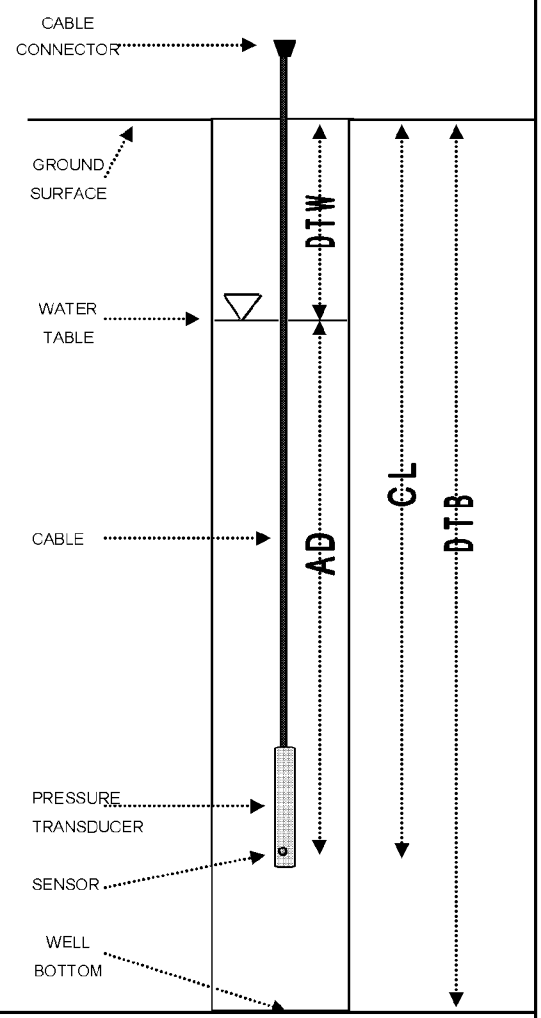
GZA ENGINEER S. Lee

STATIC GROUNDWATER TABLE ELEVATION (FT) 4.37

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		27.25	FT
GROUND ELEVATION:		14.849	FT M.S.L.
CASING ELEVATION:		14.519	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.330	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		10:06	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		10.15	FT
ACTUAL DEPTH:	+	50.874	FT
THEORETICAL CABLE LENGTH:	=	61.024	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		14.519	FT M.S.L.
DEPTH TO WATER:	-	10.15	FT
REFERENCE ELEVATION:	=	4.369	FT M.S.L.
TEST NAME:		U3-4Dn	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		10:06	HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

Difference 0.332. Reset.

GZA WELL ID : U3-4Dn

IPEC00263628

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK	Client	WELL ID: HR-1 #2n
440 NINTH AVENUE, 18th FLOOR	Entergy	SHEET: 1 of 1
NEW YORK, NEW YORK 10001	Indian Point Energy Center	FILE NO.: 01.0017869.92
SCIENTISTS AND ENGINEERS		PROJECT LOCATION: Indian Point

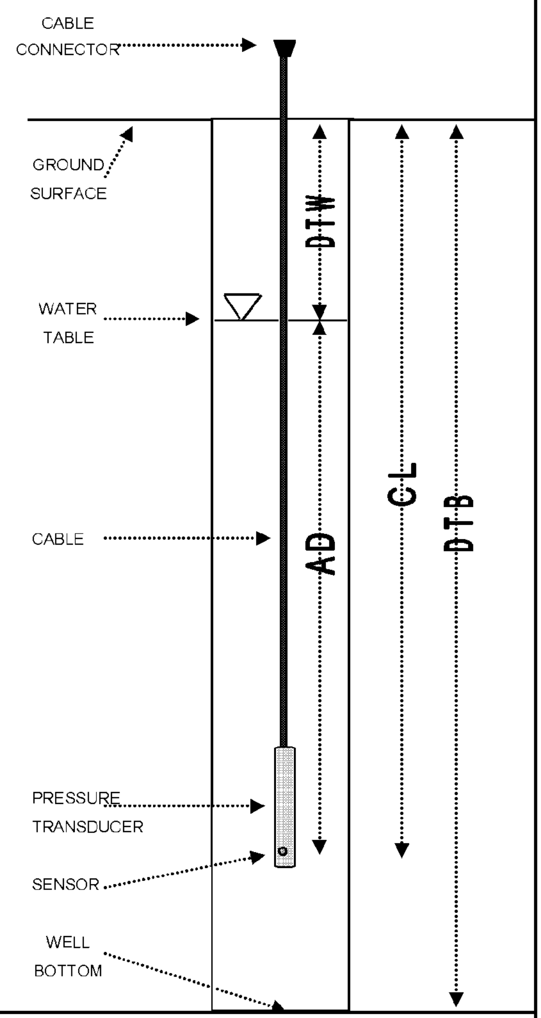
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	8/4/10
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	9401	CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	0.78
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		--	FT
GROUND ELEVATION:		14.99	FT M.S.L.
CASING ELEVATION:		18.50	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		3.50	FT
MEASURED CABLE LENGTH		--	FT
TIME OF MEASUREMENT:		14:17	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		17.72	FT
ACTUAL DEPTH:	+	-8.563	FT
THEORETICAL CABLE LENGTH:	=	9.157	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		18.50	FT M.S.L.
DEPTH TO WATER:	−	17.72	FT
REFERENCE ELEVATION:	=	0.78	FT M.S.L.
TEST NAME:		HR-1#2	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		14:18	HRS



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:
Difference -0.649. Reset.

GZA WELL ID : HR-1#2n

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID: HR-1 SHEET: 1 of 1 FILE NO.: 01.0017869.92 PROJECT LOCATION: Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	8/13/10
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	9401	CASING DIAMETER (INCH)	2		

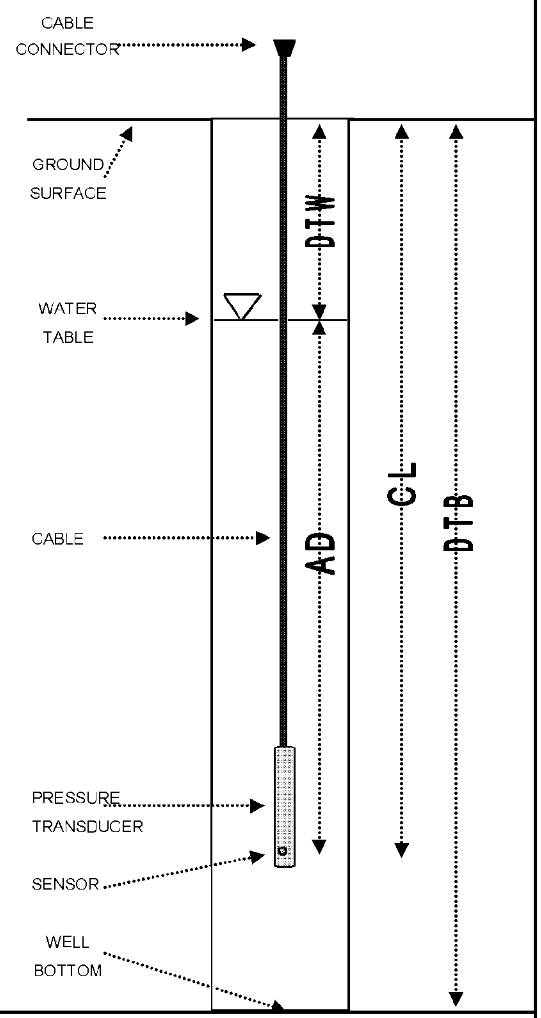
C. Benmergui — STATIC GROUNDWATER TABLE ELEVATION (FT): 3.85

GZA ENGINEER: M. Britos

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		--	FT
GROUND ELEVATION:		14.99	FT M.S.L.
CASING ELEVATION:		18.50	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		3.50	FT
MEASURED CABLE LENGTH		--	FT
TIME OF MEASUREMENT:		14:38	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		14.65	FT
ACTUAL DEPTH:	+	7.517	FT
THEORETICAL CABLE LENGTH:	=	22.167	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		18.50	FT M.S.L.
DEPTH TO WATER:	−	14.65	FT
REFERENCE ELEVATION:	=	3.85	FT M.S.L.
TEST NAME:		HR-1#2	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		14:38	HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

Pull out non-vented transducer, 16593.
Install transducer 9401, taken from U3-4S.
Install new batteries.
Start new test.

GZA — WELL ID : HR-1

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID SHEET FILE NO. PROJECT LOCATION	MW-36-24 1 of 1 01.0017869.92 Indian Point

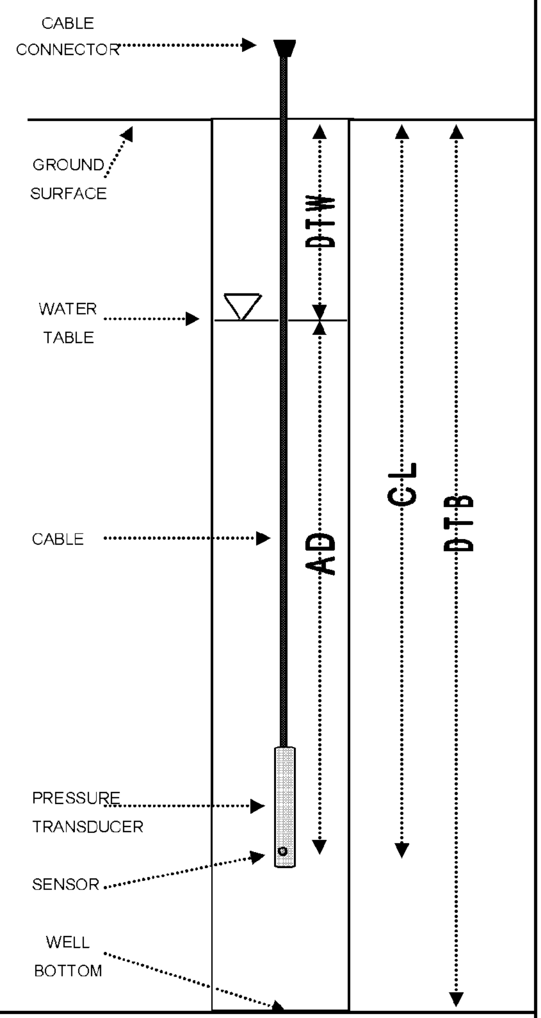
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	54.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	11.799	DATE	7/29/10
PSI CAPACITY	30	CASING ELEVATION (FT)	11.598		
SERIAL NUMBER		CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	11.60
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		24.00	FT
GROUND ELEVATION:		11.799	FT M.S.L.
CASING ELEVATION:		11.598	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.201	FT
		--	FT
TIME OF MEASUREMENT:			HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:			FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	0.000	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		11.598	FT M.S.L.
DEPTH TO WATER:	−	0.00	FT
REFERENCE ELEVATION:	=	11.598	FT M.S.L.
TEST NAME:		MW-36-24	
LOGGING INTERVAL:		20	MIN
TEST START TIME:			HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

GZA WELL ID : MW-36-24

IPEC00263631

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID SHEET FILE NO. PROJECT LOCATION	MW-41-40 1 of 1 01.0017869.92 Indian Point

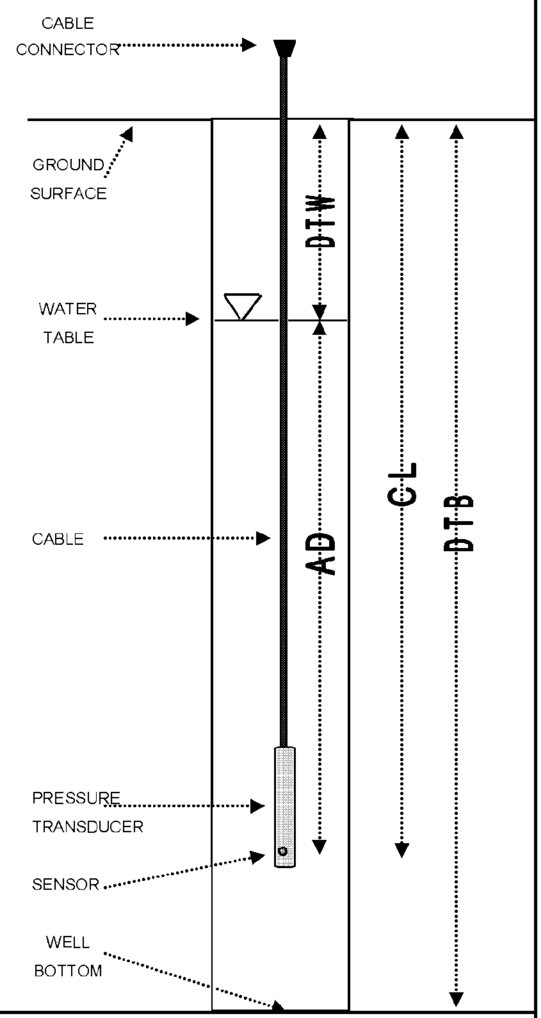
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	64.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	54.87	DATE	7/21/10
PSI CAPACITY	30	CASING ELEVATION (FT)	54.13		
SERIAL NUMBER	6321	CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	29.83
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		40.00	FT
GROUND ELEVATION:		54.87	FT M.S.L.
CASING ELEVATION:		54.13	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.74	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		08:56	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		24.30	FT
ACTUAL DEPTH:	+	41.584	FT
THEORETICAL CABLE LENGTH:	=	65.884	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		54.13	FT M.S.L.
DEPTH TO WATER:	−	24.30	FT
REFERENCE ELEVATION:	=	29.83	FT M.S.L.
TEST NAME:		MW-41-40	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		08:56	HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

GZA WELL ID : MW-41-40

IPEC00263632

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-41-40
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

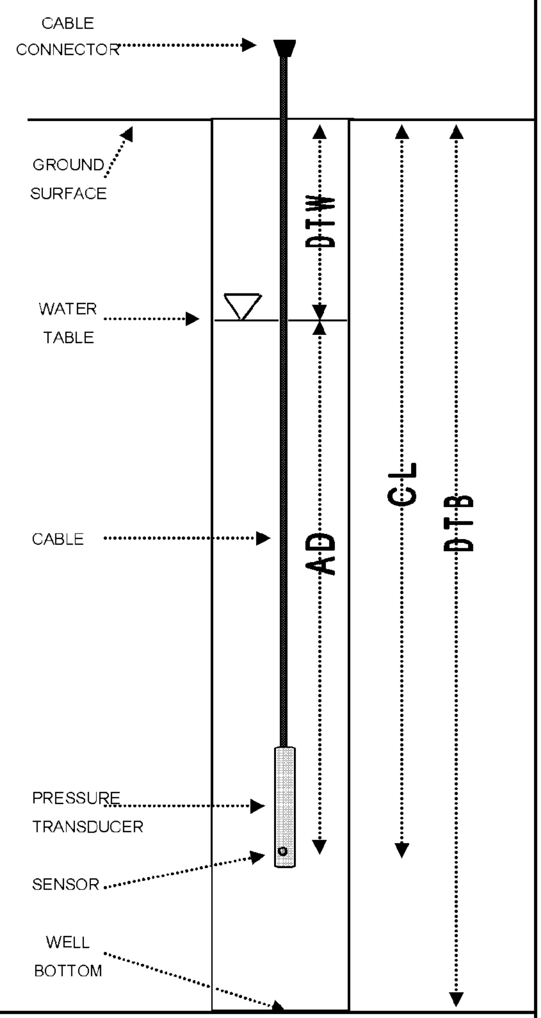
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	64.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	54.87	DATE	7/21/10
PSI CAPACITY	30	CASING ELEVATION (FT)	54.13		
SERIAL NUMBER	6321	CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	29.82
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		40.00	FT
GROUND ELEVATION:		54.87	FT M.S.L.
CASING ELEVATION:		54.13	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.74	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		09:11	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		24.31	FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	24.310	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		54.13	FT M.S.L.
DEPTH TO WATER:	−	24.31	FT
REFERENCE ELEVATION:	=	29.82	FT M.S.L.
TEST NAME:		MW-41-40	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		09:11	HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

GZA WELL ID : MW-41-40

IPEC00263633

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK	Client	WELL ID	MW-41-63
440 NINTH AVENUE, 18th FLOOR	Entergy	SHEET	1 of 1
NEW YORK, NEW YORK 10001	Indian Point Energy Center	FILE NO.	01.0017869.92
SCIENTISTS AND ENGINEERS		PROJECT LOCATION	Indian Point

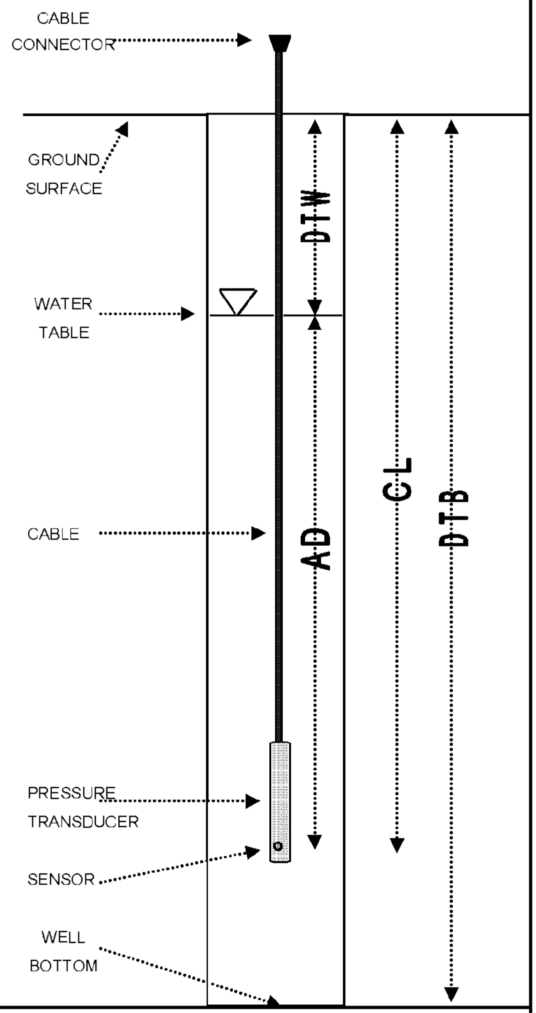
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	64.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	54.87	DATE	7/21/10
PSI CAPACITY	30	CASING ELEVATION (FT)	54.13		
SERIAL NUMBER	5977	CASING DIAMETER (INCH)	1		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	26.61
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		63.00	FT
GROUND ELEVATION:		54.87	FT M.S.L.
CASING ELEVATION:		54.13	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.74	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		08:39	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		27.52	FT
ACTUAL DEPTH:	+	13.879	FT
THEORETICAL CABLE LENGTH:	=	41.399	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		54.13	FT M.S.L.
DEPTH TO WATER:	−	27.52	FT
REFERENCE ELEVATION:	=	26.61	FT M.S.L.
TEST NAME:		MW-41-63	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		08:39	HRS



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

GZA WELL ID : MW-41-63

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID SHEET FILE NO. PROJECT LOCATION	MW-43-28 1 of 1 01.0017869.92 Indian Point

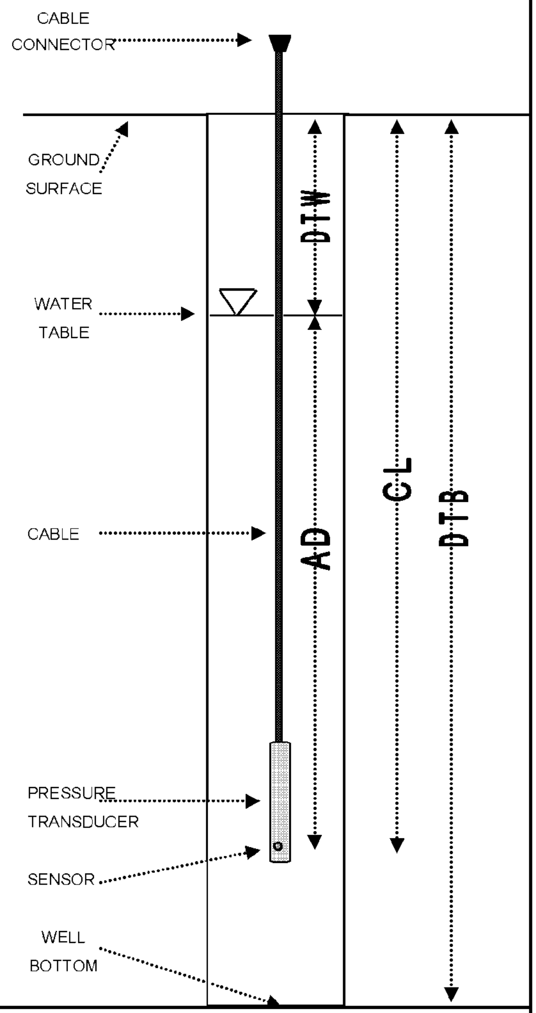
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	63.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	48.760	DATE	7/20/10
PSI CAPACITY	30	CASING ELEVATION (FT)	48.021		
SERIAL NUMBER	11331	CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	32.28
GZA ENGINEER	M Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		28.00	FT
GROUND ELEVATION:		48.760	FT M.S.L.
CASING ELEVATION:		48.021	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.739	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		10:01	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		15.74	FT
ACTUAL DEPTH:	+	22.965	FT
THEORETICAL CABLE LENGTH:	=	38.705	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		48.021	FT M.S.L.
DEPTH TO WATER:	−	15.74	FT
REFERENCE ELEVATION:	=	32.281	FT M.S.L.
TEST NAME:		MW-43-28	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		10:01	HRS



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

GZA WELL ID : MW-43-28

IPEC00263635

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID SHEET FILE NO. PROJECT LOCATION	MW-43-28 1 of 1 01.0017869.92 Indian Point

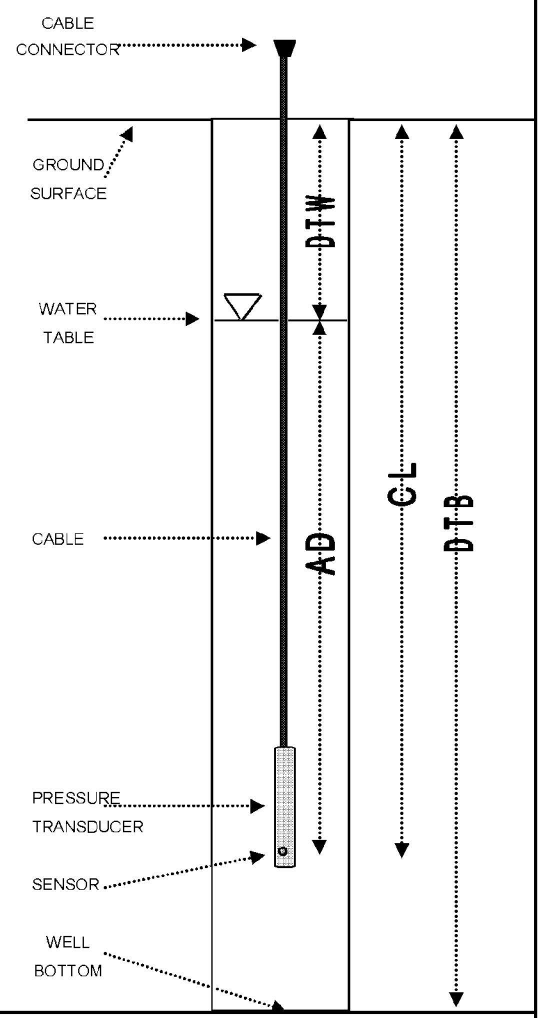
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	63.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	48.760	DATE	8/19/10
PSI CAPACITY	30	CASING ELEVATION (FT)	48.021		
SERIAL NUMBER	11331	CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	32.13
GZA ENGINEER	M Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		28.00	FT
GROUND ELEVATION:		48.760	FT M.S.L.
CASING ELEVATION:		48.021	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.739	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		12:12	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		15.89	FT
ACTUAL DEPTH:	+	22.973	FT
THEORETICAL CABLE LENGTH:	=	38.863	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		48.021	FT M.S.L.
DEPTH TO WATER:	−	15.89	FT
REFERENCE ELEVATION:	=	32.131	FT M.S.L.
TEST NAME:		MW-43-28	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		12:12	HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

Off by 2.902. Reset.

Test was ended at 11:57, transducer clock read 15:43:57 am

Reset clock.

GZA WELL ID : MW-43-28

IPEC00263636

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID SHEET FILE NO. PROJECT LOCATION	MW-43-62 1 of 1 01.0017869.92 Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	63.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	48.761	DATE	7/20/10
PSI CAPACITY	30	CASING ELEVATION (FT)	47.821		
SERIAL NUMBER	16236	CASING DIAMETER (INCH)	2		

C. Benmergui

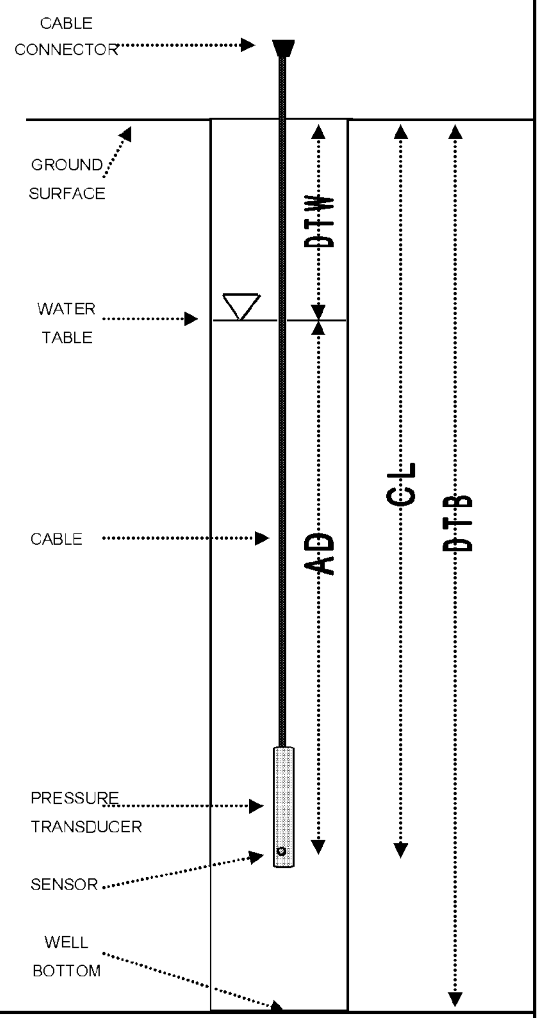
STATIC GROUNDWATER TABLE ELEVATION (FT) 29.83

GZA ENGINEER M Britos

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		63.00	FT
GROUND ELEVATION:		48.761	FT M.S.L.
CASING ELEVATION:		47.821	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.940	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		10:21	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		17.99	FT
ACTUAL DEPTH:	+	33.730	FT
THEORETICAL CABLE LENGTH:	=	51.720	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		47.821	FT M.S.L.
DEPTH TO WATER:	−	17.99	FT
REFERENCE ELEVATION:	=	29.831	FT M.S.L.
TEST NAME:		MW-43-62	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		10:21	HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

GZA WELL ID : MW-43-62

IPEC00263637

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID SHEET FILE NO. PROJECT LOCATION	MW-44-67 1 of 1 01.0017869.92 Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	105.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	93.52	DATE	7/22/10
PSI CAPACITY	30	CASING ELEVATION (FT)	93.02		
SERIAL NUMBER		CASING DIAMETER (INCH)	2		

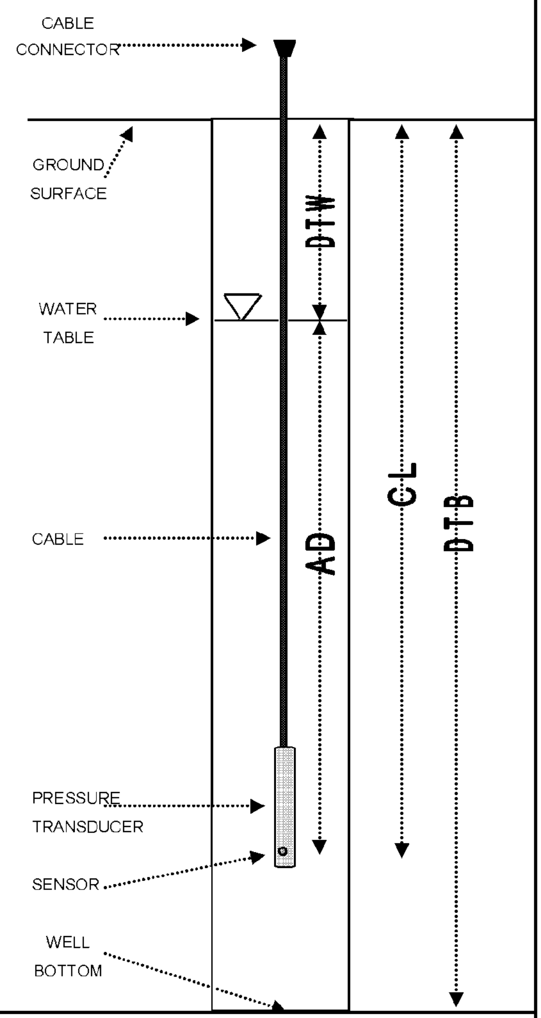
C. Benmergui — STATIC GROUNDWATER TABLE ELEVATION (FT): 33.30

GZA ENGINEER: M Britos

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		67.00	FT
GROUND ELEVATION:		93.52	FT M.S.L.
CASING ELEVATION:		93.02	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		0.50	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		09:54	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		59.72	FT
ACTUAL DEPTH:			FT
THEORETICAL CABLE LENGTH:	=	59.720	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		93.02	FT M.S.L.
DEPTH TO WATER:	−	59.72	FT
REFERENCE ELEVATION:	=	33.30	FT M.S.L.
TEST NAME:		MW-44-67	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		09:54	HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

GZA — WELL ID : MW-44-67

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-50-42
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

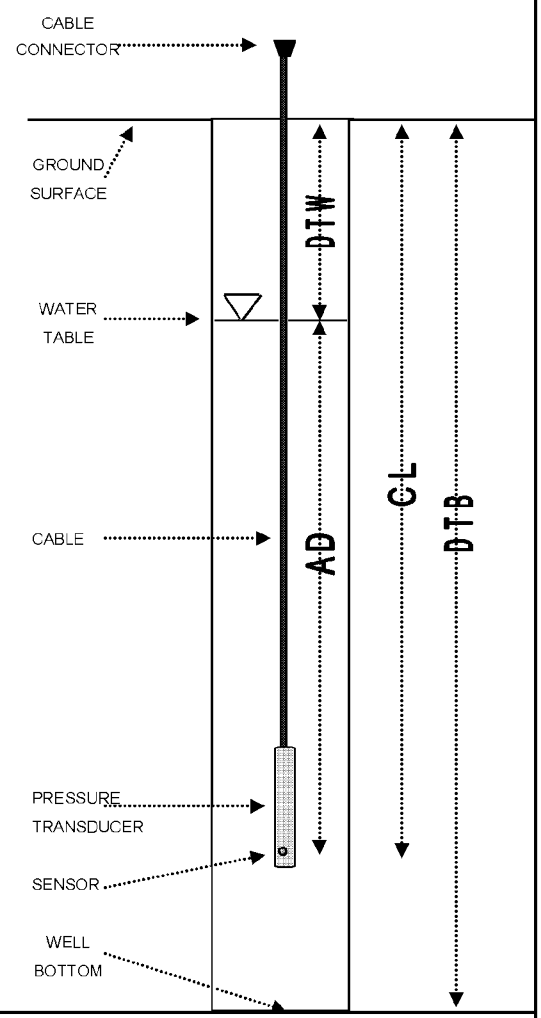
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	67.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.92	DATE	8/4/10
PSI CAPACITY	30	CASING ELEVATION (FT)	14.45		
SERIAL NUMBER		CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	6.05
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		42.00	FT
GROUND ELEVATION:		14.92	FT M.S.L.
CASING ELEVATION:		14.45	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.47	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		13:42	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		8.40	FT
ACTUAL DEPTH:	+	32.575	FT
THEORETICAL CABLE LENGTH:	=	40.975	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		14.45	FT M.S.L.
DEPTH TO WATER:	−	8.40	FT
REFERENCE ELEVATION:	=	6.05	FT M.S.L.
TEST NAME:		MW-50-42	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		13:42	HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:
no connection. Replaced batteries. New test started.

GZA WELL ID : MW-50-42

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW65-80
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

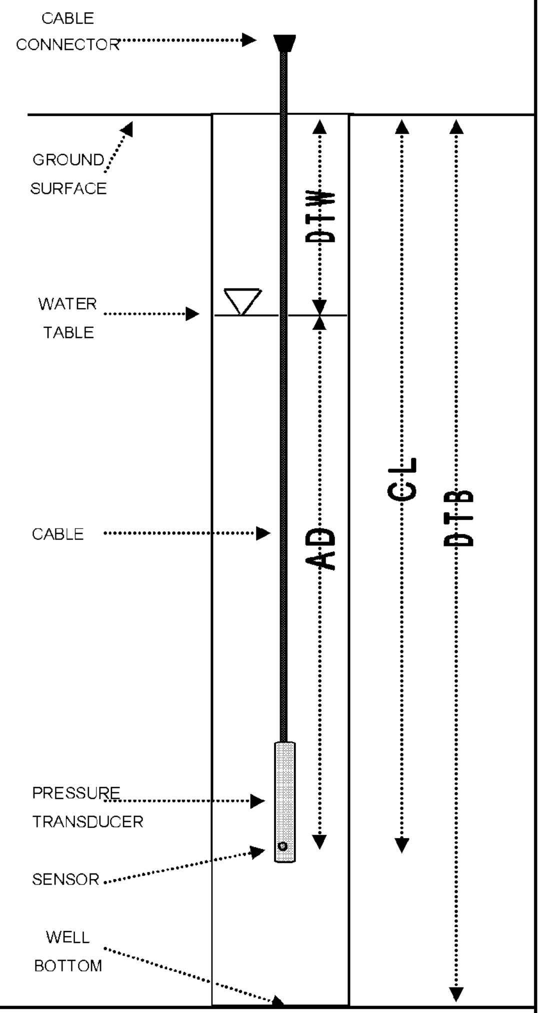
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	80.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	69.723	DATE	8/18/10
PSI CAPACITY	30	CASING ELEVATION (FT)	68.841		
SERIAL NUMBER	8264	CASING DIAMETER (INCH)	1		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	32.54
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		80.00	FT
GROUND ELEVATION:		69.723	FT M.S.L.
CASING ELEVATION:		68.841	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.882	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		13:59	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		36.30	FT
ACTUAL DEPTH:	+	19.375	FT
THEORETICAL CABLE LENGTH:	=	55.675	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		68.841	FT M.S.L.
DEPTH TO WATER:	−	36.30	FT
REFERENCE ELEVATION:	=	32.541	FT M.S.L.
TEST NAME:		MW65-80	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		13:59	HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

Off by 16.249. reset.

GZA WELL ID : MW65-80

IPEC00263640

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-66-21
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

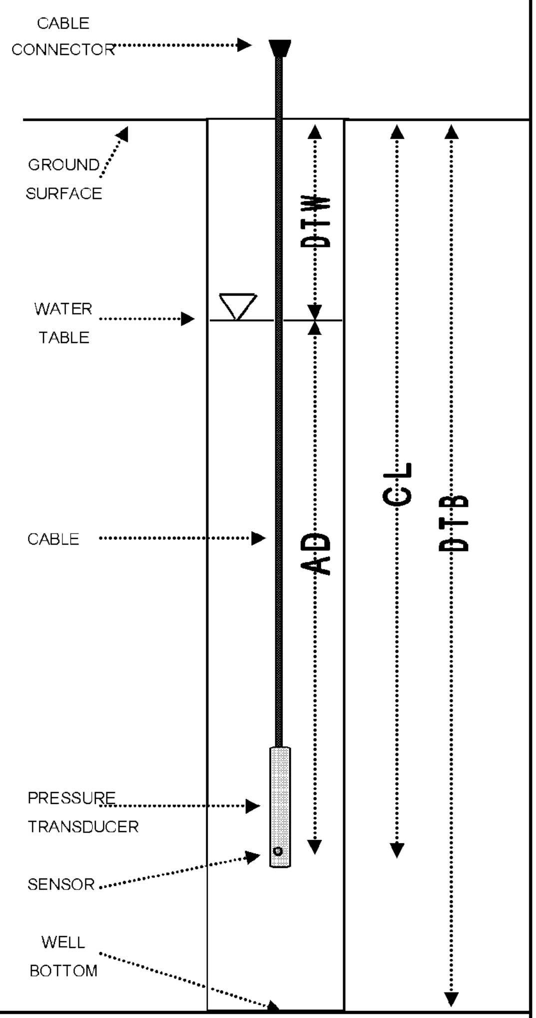
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	37.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.122	DATE	8/19/10
PSI CAPACITY	30	CASING ELEVATION (FT)	13.407		
SERIAL NUMBER	15849	CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	1.44
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		21.00	FT
GROUND ELEVATION:		14.122	FT M.S.L.
CASING ELEVATION:		13.407	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.72	FT
MEASURED CABLE LENGTH		--	FT
TIME OF MEASUREMENT:		13:21	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		11.97	FT
ACTUAL DEPTH:	+	8.05	FT
THEORETICAL CABLE LENGTH:	=	20.02	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		13.407	FT M.S.L.
DEPTH TO WATER:	−	11.97	FT
REFERENCE ELEVATION:	=	1.437	FT M.S.L.
TEST NAME:		MW-66-21	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		13:21	HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:
Off by 0.571.

GZA

WELL ID : MW-66-21

IPEC00263641

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID: OUT-1 SHEET: 1 of 1 FILE NO.: 01.0017869.92 PROJECT LOCATION: Indian Point

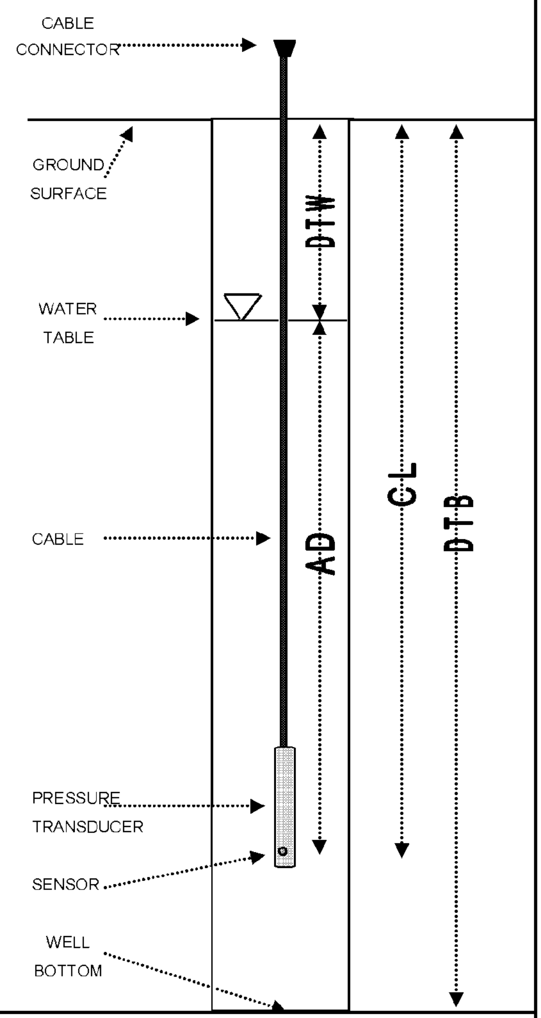
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	8.20	DATE	8/11/10
PSI CAPACITY	30	CASING ELEVATION (FT)	11.89		
SERIAL NUMBER		CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	2.95
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		--	FT
GROUND ELEVATION:		8.20	FT M.S.L.
CASING ELEVATION:		11.89	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		3.69	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		15:54	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		8.94	FT
ACTUAL DEPTH:	+	8.735	FT
THEORETICAL CABLE LENGTH:	=	17.675	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		11.891	FT M.S.L.
DEPTH TO WATER:	−	8.940	FT
REFERENCE ELEVATION:	=	2.951	FT M.S.L.
TEST NAME:		OUT-1-n	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		15:54	HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

GZA WELL ID : OUT-1

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID SHEET FILE NO. PROJECT LOCATION	U3-C1 1 of 1 01.0017869.92 Indian Point

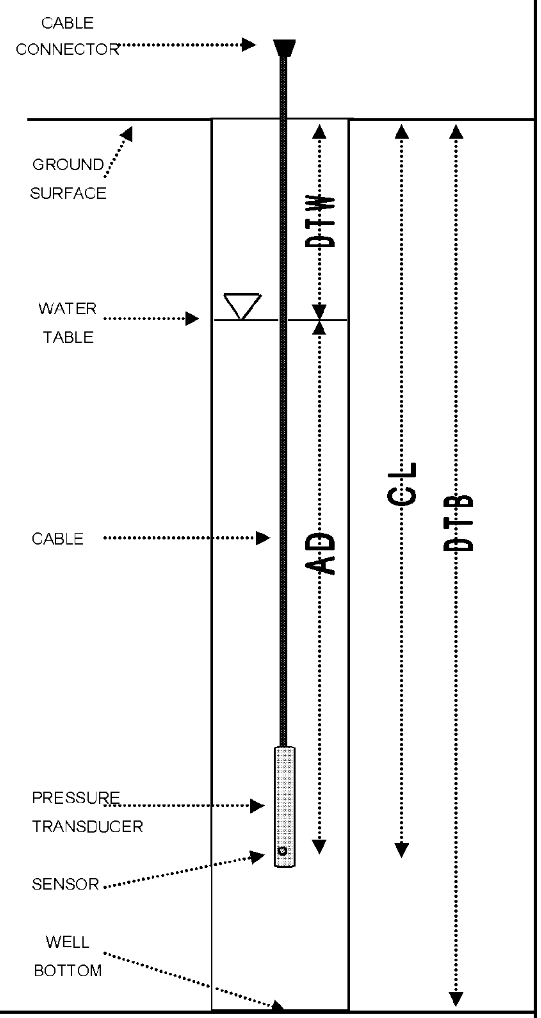
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	NA	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.003	DATE	8/19/10
PSI CAPACITY	30	CASING ELEVATION (FT)	18.060		
SERIAL NUMBER	5548	CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	2.76
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		NA	FT
GROUND ELEVATION:		15.003	FT M.S.L.
CASING ELEVATION:		18.060	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		3.057	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		14:47	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		15.30	FT
ACTUAL DEPTH:	+	11.314	FT
THEORETICAL CABLE LENGTH:	=	26.614	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		18.060	FT M.S.L.
DEPTH TO WATER:	−	15.30	FT
REFERENCE ELEVATION:	=	2.760	FT M.S.L.
TEST NAME:		U3-C1	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		14:47	HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

Off by -2.359. Reset.

GZA WELL ID : U3-C1

IPEC00263643

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID SHEET FILE NO. PROJECT LOCATION	U3-C1-2 1 of 1 01.0017869.92 Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	NA	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.003	DATE	8/19/10
PSI CAPACITY	30	CASING ELEVATION (FT)	18.060		
SERIAL NUMBER	11949	CASING DIAMETER (INCH)	2		

C. Benmergui

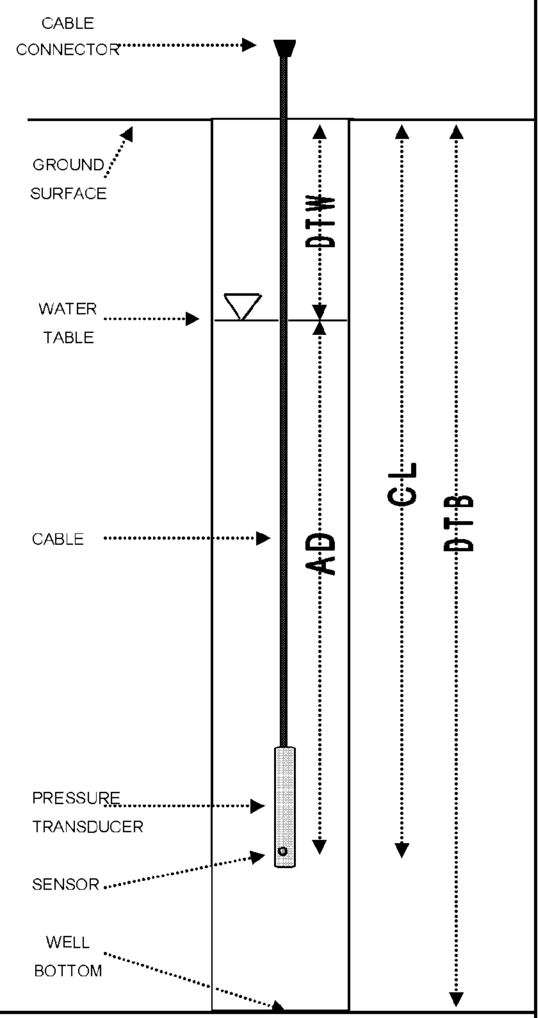
GZA ENGINEER M. Britos

STATIC GROUNDWATER TABLE ELEVATION (FT) 2.76

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		NA	FT
GROUND ELEVATION:		15.003	FT M.S.L.
CASING ELEVATION:		18.060	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		3.057	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		14:47	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		15.30	FT
ACTUAL DEPTH:	+	17.210	FT
THEORETICAL CABLE LENGTH:	=	32.510	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		18.060	FT M.S.L.
DEPTH TO WATER:	−	15.30	FT
REFERENCE ELEVATION:	=	2.760	FT M.S.L.
TEST NAME:		U3-C1-2	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		14:47	HRS



LEGEND: **DTW** - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

GZA WELL ID : U3-C1-2

IPEC00263644

APPENDIX C CHAINS OF CUSTODY

Page 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M Britos Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								Comments Note: extra sample is required for sample specific QC
																			<-- Preservative Type (6)
MW-45-42-(021)	07/19/10	1532	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-45-61-(021)	07/19/10	1328	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

TAT Requested: Normal: ✓ Rush: ___ Specify: ___ (Subject to Surcharge) Fax Results: Yes / No
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern Pacific Central Other ___ Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	7/21/10	1530	1 SECURED STORAGE	7/21/10	1530
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ___ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263646

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB/MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For comp sites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<-- Preservative Type (6) / Comments: Note: extra sample is required for sample specific QC
MW-43-28-(016)	07/20/10	1348	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-43 62-(016)	07/20/10	1507	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) — Fax Results: Yes / No (circled: No) — Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled), Central, Mountain, Pacific, Other ____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	7/21/10	1530	1 SECURED STORAGE	7/21/10	1530
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

1. Chain of Custody Number = Client Determined
2. QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3. Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4. Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5. Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6. Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY — YELLOW = FILE — PINK = CLIENT

IPEC00263647

IPEC00263648

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<-- Preservative Type (6) / Comments Note: extra sample is required for sample specific QC
MW-41-40-(017)	07/21/10	1341	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-41-63-(016)	07/21/10	0923	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)
Fax Results: Yes / No
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern, Pacific, Central, Other, Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	7/21/10	1530	1 SECURED STORAGE	7/21/10	1530
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY — YELLOW = FILE — PINK = CLIENT

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: MB/CB — Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

<-- Preservative Type (6)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								Comments: Note: extra sample is required for sample specific QC
MW-44-66-(017)	07/22/10	1547	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-44-102-(018)	07/21/10	1320	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) — Fax Results: Yes / No (circled)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled) / Pacific / Central / Other ____ / Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time		Received by (signed)	Date	Time
1	[signature]	7/22/10	1645	1	SECURED STORAGE	7/22/10	1645
2				2			
3				3			

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT

Method of Shipment: FEDEX — Date Shipped:

Airbill #:

Airbill #:

For Lab Receiving Use Only

Custody Seal Intact? YES NO

Cooler Temp: ____ C

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263649

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Comments (<-- Preservative Type (6)) Note: extra sample is required for sample specific QC
MW-39-67-(009)	07/22/10	1426	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-39-84-(009)	07/22/10	1442	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-39-102-(009)	07/22/10	1452	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-39-124-(009)	07/22/10	1139	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-39-183-(009)	07/22/10	1138	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-39-195-(009)	07/22/10	1210	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) — Fax Results: Yes / No — Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern / Pacific / Central / Other ____ / Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	7/22/10	1645	1 SECURE STORAGE	7/22/10	1645
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY — YELLOW = FILE — PINK = CLIENT

IPEC00263650

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							<-- Preservative Type (6) / Comments: Note: extra sample is required for sample specific QC
U3-4D-(025)	07/23/10	1321	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) — Fax Results: Yes / No

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern, Pacific, Central, Other ____, Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	7/23/10	1505	SECURED STORAGE	7/23/10	1505
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, MI=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY — **YELLOW = FILE** — **PINK = CLIENT**

IPEC00263651

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: C B, M B — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							Comments: Note: extra sample is required for sample specific QC
																		<-- Preservative Type (6)
U3-4S-(001)	07/23/10	1412	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)
Fax Results: Yes / No (circled)
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled) Pacific Central Other ____ Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	7/23/10	1505	1 SECURED STORAGE	7/23/10	1505
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263652

Page 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB/MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<-- Preservative Type (6) / Comments: Note: extra sample is required for sample specific QC
MW-46-(021)	07/23/10	1310	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) Fax Results: Yes / No (circled: No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled) Pacific Central Other ____ Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	7/23/10	1505	1 SECURED STORAGE	7/23/10	1505
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp. ____ C

WHITE = LABORATORY **YELLOW = FILE** **PINK = CLIENT**

IPEC00263653

IPEC00263654

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556 8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB/MB — Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)							<-- Preservative Type (6) / Comments: Note: extra sample is required for sample specific QC
U3-T1-(029)	07/26/10	1215	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
U3-T2-(034)	07/26/10	1426	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ Subject to Surcharge — Fax Results: Yes / No (circled) — Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled) Pacific Central Other ___ Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	7/27/10	1735	SECURE STORAGE	7/27/10	1735
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, ER = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY   YELLOW = FILE   PINK = CLIENT

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page 1 of 1
Project # Entergy GW Mon Prog
GEL Quote #
COC Number [1]
PO Number 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone (843) 556-8171
Fax (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

<-- Preservative Type (6)

Sample ID (* For composites - indicate start and stop date time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							Comments — Note: extra sample is required for sample specific QC
MW-32-48-(007)	07/26/10	1252	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-32-59-(019)	07/26/10	1300	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-32-85-(017)	07/26/10	1451	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-32-149-(019)	07/26/10	1534	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-32-173-(017)	07/26/10	1517	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-32-190-(022)	07/26/10	1541	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal ✓ Rush ___ Specify ___ (Subject to Surcharge) — Fax Results: Yes / No
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern / Pacific / Central / Other ___ / Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	08/05	1300	1 SECURED STORAGE	08/05/10	1300
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #
Airbill #

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, ML = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

WHITE = LABORATORY — YELLOW = FILE — PINK = CLIENT

IPEC00263655

Page 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB. — Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							<-- Preservative Type (6) / Comments: Note: extra sample is required for sample specific QC
MW-31-49-(025)	07/27/10	1443	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-31-63-(025)	07/27/10	1554	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-31-85-(025)	07/27/10	1522	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: Specify: ___ (Subject to Surcharge) — Fax Results: Yes / No (circled) — Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled) Pacific Central Other ___ Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	08/05/10	1305	SECURED STORAGE	08/05/10	1305
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, ML = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp C

WHITE = LABORATORY — YELLOW = FILE — PINK = CLIENT

IPEC00263656

Page 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB. — Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							Comments: Note: extra sample is required for sample specific QC
																		<-- Preservative Type (6)
MW-30-69-(033)	07/28/10	1233	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-30-84-(024)	07/28/10	1307	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: Specify: (Subject to Surcharge) Fax Results: Yes / No

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled) Pacific Central Other Mountain

Chain of Custody Signatures

	Relinquished by (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	07/28/10	1500	SECURED STORAGE	07/28/10	1500
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4.) Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, ML = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263657

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<-- Preservative Type (6) / Comments: Note: extra sample is required for sample specific QC
MW-36-24-(019)	07/29/10	1204	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-36-52-(018)	07/29/10	1224	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

TAT Requested: Normal: ✓ Rush: Specify: (Subject to Surcharge) — Fax Results: Yes / No (circled)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled) Central Mountain Pacific Other

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	08/05/10	1310	1 SECURED STORAGE	08/05/10	1310
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp C

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)	Comments: Note: extra sample is required for sample specific QC
MW-53-82-(016)	07/30/10	1232	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-53-120-(020)	07/30/10	1436	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly

(Should this sample be considered: Radioactive / TSCA Regulated) ← Preservative Type (6)

TAT Requested: Normal: ✓ Rush: ___ Specify: ___ (Subject to Surcharge) Fax Results: Yes / No (circled)

Circle Deliverable: C of A / QC Summary / Level 1 Level 2 Level 3 Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled) Pacific Central Other Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time		Received by (signed)	Date	Time
1	[signature]	08/05/10	1220	1	SECURED STORAGE	08/05/10	1220
2				2			
3				3			

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4) Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, ML = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263659

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)						**Comments** Note: extra sample is required for sample specific QC
																		← Preservative Type (6)
MW-42-49-(022)	07/30/10	1138	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-42-78-(017)	07/30/10	1223	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly

TAT Requested: Normal: ✓ Rush: Specify: (Subject to Surcharge) Fax Results: Yes / No

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern Pacific Central Other Mountain

Chain of Custody Signatures						
Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time	
1 [signature]	08/05/10	1225	1 SECURED STORAGE	08/05/10	1225	
2			2			
3			3			

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4.) Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, ML = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263660

Page 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M.B. — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)								<-- Preservative Type (6) Comments Note: extra sample is required for sample specific QC
I-2-(001)	08/02/10	1439	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

TAT Requested: Normal: ✓ Rush: ___ Specify: ___ (Subject to Surcharge) — Fax Results: Yes / No — Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern / Pacific / Central / Other / Mountain

Chain of Custody Signatures						Sample Shipping and Delivery Details
Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time	
1 [signature] M.B.	08/05/10	1205	1 SECURED STORAGE	08/05/10	1205	GEL PM: ERIN TRENT
						Method of Shipment: FEDEX — Date Shipped:
2			2			Airbill #
3			3			Airbill #

1.) Chain of Custody Number - Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, ML = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

WHITE = LABORATORY — YELLOW = FILE — PINK = CLIENT

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							← Preservative Type (6) Comments Note: extra sample is required for sample specific QC
MW-62-18-(014)	08/03/10	1300	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-62-37-(014)	08/03/10	1252	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-62-53-(013)	08/03/10	1220	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-62-71-(014)	08/03/10	1130	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-62-92-(014)	08/03/10	1132	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-62-138-(014)	08/03/10	1409	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-62-182-(014)	08/03/10	1402	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush Specify (Subject to Surcharge) Fax Results: Yes No Circle Deliverable: C of A QC Summary Level 1 Level 2 Level 3 Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern Pacific Central Other Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	08/05/10	1215	1 SECURED STORAGE	08/05/10	1215
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, ML = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp:

WHITE = LABORATORY **YELLOW = FILE** **PINK = CLIENT**

IPEC00263662

IPEC00263663

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)						Comments (Note: extra sample is required for sample specific QC)
MW-50-42-(022)	08/04/10	1311	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-50-66-(027)	08/04/10	1638	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly

< - Preservative Type (6)

TAT Requested: Normal: ✓ Rush: Specify: (Subject to Surcharge) Fax Results: Yes / No

Circle Deliverable: C of A / QC Summary / Level 1 Level 2 Level 3 Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern Pacific Central Other Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	08/05/10	1210	1 SECURED STORAGE	08/05/10	1210
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, ML = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263664

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (*For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)						Comments (Note: extra sample is required for sample specific QC)
																		<-- Preservative Type (6)
MW-54-37-(014)	08/04/10	1432	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-54-58-(014)	08/04/10	1435	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-54-123-(014)	08/04/10	1449	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-54-144-(014)	08/04/10	1144	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-54-173-(014)	08/04/10	1209	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-54-190-(014)	08/04/10	1234	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly

TAT Requested: Normal: ✓ Rush: Specify: (Subject to Surcharge) Fax Results: Yes / No

Circle Deliverable: C of A / QC Summary / Level 1 Level 2 Level 3 Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern Pacific Central Other Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	08/05/10	1200	1 SECURED STORAGE	08/05/10	1200
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal intact? YES NO
Cooler Temp: C

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, ML = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263665

Page 1 of 1
Project # Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

<-- Preservative Type (6)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							Comments: Note: extra sample is required for sample specific QC
B 6 (009)	08/05/10	1343	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) — Fax Results: Yes / No — Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern, Pacific, Central, Other ____, Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	08/11/10	1300	SECURED STORAGE	08/11/10	1300
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY — YELLOW = FILE — PINK = CLIENT

IPEC00263666

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							< Preservative Type (6) / Comments: Note: extra sample is required for sample specific QC
MH-5-(010)	08/05/10	1445	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: ___ Specify: ___ (Subject to Surcharge) Fax Results: Yes / No

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern, Pacific, Central, Other ___, Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	08/11/10	1305	1 SECURED STORAGE	08/11/10	1305
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ___ C

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

Page 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							<-- Preservative Type (6) / Comments Note: extra sample is required for sample specific QC
MW-37-22-(019)	08/05/10	1406	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-37-32-(019)	08/05/10	1400	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-37-40-(019)	08/05/10	1425	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-37-57-(019)	08/05/10	1359	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush Specify (Subject to Surcharge) — Fax Results: Yes / No — Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern, Pacific, Central, Other, Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	08/05/10	1600	1 SECURED STORAGE	08/05/10	1600
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4) Matrix Codes: DW = Drinking Water, CW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, ML = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY **YELLOW = FILE** **PINK = CLIENT**

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Page 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Work Order Number:

Client Name: Entergy   Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center   Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB   Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)							<-- Preservative Type (6) Comments Note: extra sample is required for sample specific QC
MW-55-24-(015)	08/06/10	1311	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-55-35-(014)	08/06/10	1315	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-55-54-(015)	08/06/10	1250	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: Specify: (Subject to Surcharge)   Fax Results: Yes No (circled)   Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled) Pacific Central Other Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	08/06/10	1600	SECURED STORAGE	08/06/10	1600
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX   Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp. C

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, MI = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

WHITE = LABORATORY   YELLOW = FILE   PINK = CLIENT

IPEC00263668

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy   Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center   Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

<-- Preservative Type (6)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)							Comments Note: extra sample is required for sample specific QC
MW-66-21-(014)	08/09/10	1230	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-66-36-(013)	8/9/10	1147	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
	~~08/09/10~~	~~1230~~	CG																

TAT Requested: Normal: ✓ Rush: Specify (Subject to Surcharge)   Fax Results: Yes / No
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern / Pacific / Central / Other ____ / Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	8/9/10	1500	1 SECURE STORAGE	8/9/10	1500
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX   Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY   **YELLOW = FILE**   **PINK = CLIENT**

IPEC00263669

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)						<-- Preservative Type (6) / Comments Note: extra sample is required for sample specific QC
MW-67-39-(014)	08/09/10	1043	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-67-105-(013)	08/09/10	1037	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-67-173-(014)	08/09/10	1107	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-67-219-(013)	08/09/10	1333	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-67-276-(013)	08/09/10	1336	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-67-323-(013)	08/09/10	1323	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-67-340-(013)	08/09/10	1320	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly

TAT Requested: Normal: ✓ Rush: Specify: (Subject to Surcharge) Fax Results: Yes / No (circled)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled) Pacific Central Other Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	8/9/10	1500	1 SECURE STORAGE	8/9/10	1500
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp C

WHITE = LABORATORY **YELLOW = FILE** **PINK = CLIENT**

IPEC00263670

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy   Phone #: (914) 736-8405
Project Site Name: Indian Point Energy Center   Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB   Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

<-- Preservative Type (6)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)							Comments Note: extra sample is required for sample specific QC
MW-63-18-(014)	08/10/10	1208	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-63-34-(014)	08/10/10	1144	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-63-50-(014)	08/10/10	1432	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-63-93-(015)	08/10/10	1510	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-63-112-(014)	08/10/10	1452	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-63-121-(014)	08/10/10	1128	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-63-163-(014)	08/10/10	1121	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-63-174-(014)	08/10/10	1140	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: Specify: (Subject to Surcharge)   Fax Results: Yes / No   Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern, Pacific, Central, Other ____, Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	8/10/10	1645	1 SECURE STORAGE	8/10/10	1645
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX   Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, ML = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

WHITE = LABORATORY   YELLOW = FILE   PINK = CLIENT

IPEC00263671

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: — Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)						Comments (Note: extra sample is required for sample specific QC) / <-- Preservative Type (6)
MW-49-26-(021)	08/11/10	1127	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-49-42-(021)	08/11/10	1100	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-49-65-(021)	08/11/10	1119	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly

TAT Requested: Normal: ✓ Rush: Specify: (Subject to Surcharge) — Fax Results: Yes / No (circled)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled), Pacific, Central, Other ____, Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	8/11/10	1310	SECURE STORAGE	8/11/10	1310
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW = Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy   Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center   Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M. Britos   Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)							<-- Preservative Type (6) / Comments: Note: extra sample is required for sample specific QC
MW-60-35-(014)	08/16/10	1443	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-60-53-(014)	08/16/10	1534	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-60-53-(014)-B	08/16/10	1535	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-60-53-(014)-D	08/16/10	1536	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-60-53-(014)-S	08/16/10	1537	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-60-72-(014)	08/17/10	1159	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-60-135-(014)	08/17/10	1209	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-60-154-(014)	08/17/10	1218	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-60-176-(014)	08/17/10	1251	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
	08/17/10																		

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)   Fax Results: Yes / No
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern Pacific Central Other Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time		Received by (signed)	Date	Time
1	[signature]	08/17/10	1600	1	SECURED STORAGE	08/17/10	1600
2				2			
3				3			

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX   Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, U=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY   YELLOW = FILE   PINK = CLIENT

IPEC00263673

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy | Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center | Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: M. Britos | Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<-- Preservative Type (6) **Comments** Note: extra sample is required for sample specific QC
B-1-(009)	08/17/10	1540	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge) | Fax Results: Yes / No | Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern / Pacific / Central / Other _____ / Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	08/17/10	1601	1 SECURED STORAGE	08/17/10	1601
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX | Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: _____ C

WHITE = LABORATORY   YELLOW = FILE   PINK = CLIENT

IPEC00263674

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy
Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center
Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M. Britos
Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

<-- Preservative Type (6)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)									Comments Note: extra sample is required for sample specific QC
MW-36-41-(013)	07/29/2010	1223	N	N	GW	Y	N	1	1	1	1									2 Liter Poly

TAT Requested: Normal: ✓ Rush: ______ Specify: ______ (Subject to Surcharge)
Fax Results: Yes / No
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
Eastern Pacific
Central Other ______
Mountain

Chain of Custody Signatures						Sample Shipping and Delivery Details	
Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time	GEL PM: ERIN TRENT	
1 [signature]	08/18/10	1030	1 SECURED STORAGE	08/18/10	1030	Method of Shipment: FEDEX	Date Shipped:
2			2			Airbill #:	
3			3			Airbill #:	

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? *YES* *NO*
Cooler Temp: ______ *C*

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263675

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M. Britos Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (CS)	Strontium 90 (Sr90)							<-- Preservative Type (6) **Comments** Note: extra sample is required for sample specific QC
MW-30-69-(034)	08/20/10	1508	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-30-84-(025)	08/20/10	1651	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)
Fax Results: Yes / No
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
Eastern Pacific
Central Other ____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	08/20/10	1730	1 SECURED STORAGE	08/20/10	1730
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp. ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263676

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766 1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: Miguel Britos — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Should this sample be considered:

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)							<-- Preservative Type (6) / Comments Note: extra sample is required for sample specific QC
MW-31-49-(026)	08/23/10	1211	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-31-63-(026)	08/23/10	1311	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-31-85-(026)	08/23/10	1210	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) — Fax Results: Yes / No — Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern, Pacific, Central, Other ____, Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	08/23/10	1450	1 SECURED STORAGE	08/23/10	1450
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263677

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: Miguel Britos Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<-- Preservative Type (6) **Comments** Note: extra sample is required for sample specific QC
MW-32-48-(008)	08/24/10	1403	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-32-59-(020)	08/24/10	1422	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-32-85-(023)	08/24/10	1103	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-32-149-(020)	08/24/10	1127	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-32-173-(018)	08/24/10	1123	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-32-190-(022)	08/24/10	1137	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

TAT Requested: Normal: ✓ Rush: ___ Specify: ___ (Subject to Surcharge) Fax Results: Yes / No

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern Pacific Central Other ___ Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	08/24/10	1535	1 SECURED STORAGE	08/24/10	1535
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ___ C

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY **YELLOW = FILE** **PINK = CLIENT**

IPEC00263678

IPEC00263679

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M. Britos — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<-- Preservative Type (6) / Comments: Note: extra sample is required for sample specific QC
MW-51-40-(016)	08/25/10	1629	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-51-79-(016)	08/25/10	1647	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-51-104-(014)	08/25/10	1318	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-51-135-(014)	08/25/10	1321	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-51-163-(014)	08/25/10	1351	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-51-189-(014)	08/25/10	1313	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) Fax Results: Yes / No (circled)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled) / Pacific / Central / Other / Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	08/27/10	0930	1 SECURED STORAGE	08/27/10	0930
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp C

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263680

Page 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: Miguel Britos Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							<-- Preservative Type (6) Comments Note: extra sample is required for sample specific QC
MW-40-27-(012)	08/26/10	1442	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-40-46-(013)	08/26/10	1456	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-40-81-(013)	08/26/10	1105	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-40-100-(015)	08/26/10	1109	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-40-127-(015)	08/26/10	1116	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-40-162-(013)	08/26/10	1229	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) Fax Results: Yes / No Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern Pacific Central Other ____ Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 Miguel Britos	08/27/10	0931	1 SECURED STORAGE	08/27/10	0931
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

1.) Chain of Custody Number: Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy | Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center | Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M. Britos | Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<-- Preservative Type (6) / Comments: Note: extra sample is required for sample specific QC
MW-111-(033)	08/27/10	1521	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) | Fax Results: Yes / No | Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern / Pacific / Central / Other ____ / Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	08/27/10	1530	SECURED STORAGE	08/27/10	1530
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX | Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp. ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263681

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M. Britos — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							Comments (Note: extra sample is required for sample specific QC) / <-- Preservative Type (6)
MW-33-(027)	08/30/10	1429	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) — Fax Results: Yes / No — Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern — Pacific — Central — Other ____ — Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[illegible]	08/30/10	1531	SECURED STORAGE	08/30/10	1531
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

WHITE = LABORATORY — YELLOW = FILE — PINK = CLIENT

IPEC00263682

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M. Britos — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							Comments: Note: extra sample is required for sample specific QC (<-- Preservative Type (6))
MH-5-(011)	08/30/10	1330	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)
Fax Results: Yes / No
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: *Are there any known hazards applicable to these samples? If so, please list the hazards*

Sample Collection Time Zone: Eastern Pacific Central Other ____ Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	08/30/10	1530	SECURED STORAGE	08/30/10	1530
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

1. Chain of Custody Number = Client Determined
2. QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3. Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4. Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5. Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6. Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263683

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M. Britos Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<-- Preservative Type (6) / **Comments** Note: extra sample is required for sample specific QC
MW-31-49-(027)	09/07/10	1349	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-31-63-(027)	09/07/10	1528	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-31-85-(027)	09/07/10	1414	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) Fax Results: Yes / No

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern Pacific Central Other ____ Mountain

Chain of Custody Signatures					
Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	09/09/10	0850	SECURED STORAGE	09/09/10	0850
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, FB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263684

IPEC00263685

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M. Britos — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							Comments (Note: extra sample is required for sample specific QC)
																		<-- Preservative Type (6)
MW 30 69-(035)	09/08/10	1235	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-30-84-(026)	09/08/10	1314	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush ______ Specify: ______ (Subject to Surcharge) Fax Results: Yes / No

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern Pacific Central Other ______ Mountain

Chain of Custody Signatures					
Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	09/08/10	1445	SECURED STORAGE	09/08/10	1445
2			2		
3			3		

Sample Shipping and Delivery Details	
GEL PM: ERIN TRENT	
Method of Shipment: FEDEX	Date Shipped:
Airbill #:	
Airbill #:	

1. Chain of Custody Number = Client Determined
2. QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3. Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4. Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5. Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
6. Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ______ C

WHITE = LABORATORY **YELLOW = FILE** **PINK = CLIENT**

IPEC00263686

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M. Britos — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							Comments: Note: extra sample is required for sample specific QC (<-- Preservative Type (6))
MW-32-59-(021)	09/09/10	1357	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-32-85-(024)	09/09/10	1529	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-32-149-(021)	09/09/10	1136	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-32-173-(019)	09/09/10	1129	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-32-190-(023)	09/09/10	1134	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) — Fax Results: Yes / No
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern Pacific Central Other ____ Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	09/09/10	1600	1 SECURED STORAGE	09/09/10	1600
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M. Britos Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

<-- Preservative Type (6)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Comments (Note: extra sample is required for sample specific QC)
MH-5-(012)	09/10/10	1530	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) Fax Results: Yes / No

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern / Pacific / Central / Other ____ / Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	09/10/10	1559	1 SECURED STORAGE	09/10/10	1559
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY **YELLOW = FILE** **PINK = CLIENT**

IPEC00263687

IPEC00263688

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M. Britos — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (CS)	Strontium 90 (Sr90)							<-- Preservative Type (6) / Comments: Note: extra sample is required for sample specific QC
MW-111-(034)	09/10/10	1409	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)
Fax Results: Yes / No (circled: No)
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled) Pacific Central Other ____ Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	09/10/10	1600	1 SECURED STORAGE	09/10/10	1600
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: M. Britos — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Comments (Note: extra sample is required for sample specific QC)
												<-- Preservative Type (6)
MW-33-(028)	09/11/10	1328	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) — Fax Results: Yes / No (circled: No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: Eastern (circled), Central, Mountain, Pacific, Other ____

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	09/11/10	1400	SECURED STORAGE	09/11/10	1400
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00263689

APPENDIX D 3RD QUARTER 2010 SAMPLING DATA SHEETS

WELL ID: MW-33
SAMPLE ID: 027

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 93°F

PROJECT NO: 01.0017869.92
DATE: 8/30/10
SAMPLER(S): M. BRITOS
PUMP DEPTH: 16 ft

MID QUARTER

WATER QUALITY: DTW = 8.04 Transducer Actual Depth : 17.427 Transd. reading = 10.683

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Purged H2O (gal) Notes
1047	17.422								
1100	17.333	NOT ENOUGH WATER IN FLOW CELL						0.20	
1105	17.323	27.88	0.368	5.73	7.35	266.1	—		0.10
1110	17.319	27.62	0.691	2.79	7.31	240.6	—		0.14
1115	17.319	27.51	0.653	2.15	7.29	210.5	12.06		0.15
1125	17.327	27.72	0.632	1.31	7.29	192.2	12.63		0.16
1130	17.325	27.92	0.625	1.88	7.27	197.0	12.46		0.17
1138	17.333	28.11	0.621	1.33	7.27	170.1	12.39		0.18
1148	17.335	28.34	0.612	1.44	7.29	151.7	12.58		0.20
1156	17.336	28.58	0.612	1.44	7.28	145.1	12.61		0.22
1201	17.336	28.63	0.611	1.39	7.27	143.6	12.53		0.25
1206	17.338	28.67	0.609	1.37	7.27	141.0	12.59		0.28
1207		START SAMPLE COLLECTION							
1429		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	3
turbidity meter	200701254

NOTES AND OBSERVATIONS: Total volume purged ________ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263691

WELL ID: MW-111
SAMPLE ID: 033

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80°F

MID QUARTER

PROJECT NO: 01.0017869.92
DATE: 8/27/10
SAMPLER(S): M. BRITOS
PUMP DEPTH: 16.5 ft

WATER QUALITY: DTW = 8.10 Transducer Actual Depth 7.546 Transd. reading = 10.454

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Purged H₂O (gal) Notes
1257	7.549		PUMP	ON					
1312	7.399		WATER	DID NOT	REACH	FLOW	CELL	YET	
1315	7.410	26.78	0.697	7.21	7.15	199.0	—		
1321	7.408	25.59	0.795	3.11	7.30	121.3			
1329	7.426	25.44	0.823	1.88	7.35	105.8	5.37		0.18
1338	7.421	25.61	0.824	1.44	7.30	105.5	5.76		0.23
1347	7.423	25.84	0.825	1.32	7.27	103.1	5.44		0.26
1356	7.411	25.86	0.828	1.30	7.27	103.6	5.50		0.31
1401	7.413	25.89	0.829	1.29	7.29	104.1	5.47		0.36
1402		START	SAMPLE	COLLEC	TION				
1521		SAMPLE	COMPLETED	: 2		L	IPEC		
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	1
turbidity meter	200701254

NOTES AND OBSERVATIONS: Total volume purged 0.36 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263692

WELL ID: MW 40.162

SAMPLE ID: 013

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's

PROJECT NO: 01.0017869.92
DATE: 8/26/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

158.7 to 190.3

SAMPLING PORT

162

TOTAL VOLUME PURGED: 0.60 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0910	0	PUMP ON						6/9	42
0920	0.01	21.34	1.310	2.29	6.26	-116.4	—	6/9	42
0930	0.02	21.54	1.305	0.73	6.28	-120.9	—	6/9	45
0940	0.05	21.58	1.303	0.49	6.30	-140.3	5.83		
0950	0.10	21.42	1.304	0.40	6.38	-150.7	7.60		
0957	0.15	21.29	1.302	0.35	6.45	-153.4	7.62		
1003	0.20	21.16	1.301	0.35	6.53	-156.3	6.62		
1013	0.25	21.15	1.299	0.30	6.67	-156.8	7.67		
1019	0.30	21.14	1.298	0.30	6.73	-154.6	6.50		
1028	0.35	21.11	1.299	0.27	6.83	-154.7	6.21		
1035	0.40	21.15	1.298	0.27	6.90	-155.6	6.14		
1042	0.45	21.07	1.303	0.27	6.91	-153.7	6.12		
1043		PUMP OFF							
1045		START SAMPLE COLLECTION							
1229		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

WELL ID: MW 40 . 127

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's

PROJECT NO: 01.0017869.92
DATE: 8/26/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

125.2 to 136.7

SAMPLING PORT

127

2

TOTAL VOLUME PURGED: 1.20 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0910	0	PUMP ON						6/9	42
0920	0.01	21.13	2.041	2.87	6.34	-110.1	—	6/9	42
0930	0.05	21.10	2.050	0.60	6.41	-125.1	—	6/9	45
0940	0.15	20.83	2.058	0.43	6.54	-131.7	4.71		
0950	0.25	20.25	2.065	0.29	6.78	-137.6	5.85		
0957	0.40	19.88	2.064	0.24	6.88	-142.9	6.15		
1003	0.55	19.72	2.065	0.21	6.92	-140.1	6.67		
1013	0.75	19.42	2.062	0.19	6.93	-143.5	6.36		
1019	0.85	19.34	2.061	0.18	6.94	-145.6	6.07		
1028	0.95	19.39	2.059	0.18	6.95	-146.7	6.10		
1035	1.05	19.36	2.057	0.17	6.95	-145.3	6.02		
1037		PUMP OFF							
1039		START SAMPLE COLLECTION							
1116		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	/
turbidity meter	200701254

NOTES AND OBSERVATIONS:

IPEC00263694

WELL ID: MW 40 . 100

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's

PROJECT NO: 01.0017869.92
DATE: 8/26/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

93.2 to 106.7

SAMPLING PORT

100

3

TOTAL VOLUME PURGED: 2.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0910	0	PUMP ON						6/9	42
0920	0.05	19.90	2.797	1.10	6.55	-104.5	—	6/9	42
0930	0.10	19.19	2.800	0.53	6.72	-101.3	—	6/9	45
0940	0.30	18.46	2.788	0.34	6.92	-76.2	14.16		
0950	0.50	18.05	2.781	0.30	6.98	-52.9	11.21		
0957	0.70	17.88	2.772	0.35	7.01	-41.7	14.02		
1003	0.95	17.73	2.766	0.35	7.02	-35.2	12.32		
1013	1.20	17.55	2.755	0.38	7.04	-24.1	11.70		
1019	1.45	17.51	2.753	0.40	7.05	-18.2	8.69		
1028	1.75	17.53	2.756	0.42	7.06	-9.3	10.99		
1035	2.00	17.25	2.745	0.47	7.06	+4.2	11.78		
1042	2.20	17.30	2.738	0.48	7.06	+5.9	11.69		
1047	2.35	17.34	2.734	0.50	7.07	+6.4	11.74		
1048		PUMP OFF							
1049		START SAMPLE COLLECTION							
1109		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200701254

NOTES AND OBSERVATIONS:

WELL ID: MW 40.81

SAMPLE ID: 013

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's

PROJECT NO: 01.0017869.92
DATE: 8/26/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

64.7 to 84.2

SAMPLING PORT

81

4

TOTAL VOLUME PURGED: 4.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0910	0	PUMP	ON					6/9	42
0920	0.10	18.71	5.903	2.01	6.62	-14.7	—	6/9	42
0930	0.30	18.36	5.958	1.66	6.57	-10.0	—	6/9	45
0940	0.50	17.75	5.989	1.50	6.56	-0.6	7.07		
0950	0.80	17.36	5.984	1.47	6.56	+7.4	4.44		
0957	1.10	17.23	5.973	1.46	6.56	12.7	6.89		
1003	1.40	17.11	5.966	1.46	6.57	17.1	6.22		
1013	1.80	17.00	5.957	1.43	6.62	23.7	5.91		
1019	2.05	16.97	5.959	1.43	6.64	26.5	5.80		
1028	2.50	16.99	5959	1.42	6.65	27.6	5.77		
1035	2.80	16.78	5.957	1.43	6.66	34.4	6.61		
1042	3.20	16.80	5.963	1.41	6.68	35.9	6.54		
1047	4.00	16.84	5.960	1.41	6.68	36.7	6.51		
1048		PUMP	OFF						
1049		START	SAMPLE	COLLECTION					
1105		SAMPLE	COMPLETED	: 2	L IPEC				
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200701254

NOTES AND OBSERVATIONS:

WELL ID: MW 40 46

SAMPLE ID: 013

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's

PROJECT NO: 01.0017869.92
DATE: 8/26/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing) 44.2 to 53.7

TOTAL VOLUME PURGED: 0.85 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT 46

5

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1327	0	PUMP	ON					6/6	25
1333	0.01	21.39	5.379	1.01	6.73	38.1	—	5/9	20
1340	0.05	22.07	5.370	0.50	6.74	39.8	6.37		
1348	0.10	22.78	5.358	0.35	6.78	44.4	5.95		
1355	0.20	22.67	5.377	0.27	6.84	49.1	5.83		
1400	0.30	21.99	5.387	0.22	6.88	51.9	4.83		
1405	0.40	20.86	5.388	0.18	6.89	53.2	5.32		
1415	0.55	22.10	5.412	0.18	6.90	55.2	5.19		
1420	0.60	22.07	5.425	0.18	6.90	56.4	5.27		
1425	0.70	22.00	5.430	0.18	6.90	57.4	5.18		
1426		PUMP	OFF						
1427		START	SAMPLE	COLLECTION					
		SAMPLE	COMPLETED	:	2 L	IPEC			
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	200701254

NOTES AND OBSERVATIONS:

WELL ID: MW 40.27

SAMPLE ID: 012

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/26/10
WEATHER:	Sunny, 80's	SAMPLER(S):	M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

18.2 to 35.2

SAMPLING PORT

27

6

TOTAL VOLUME PURGED: 1.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1327	0	PUMP ON						6/6	25
1333	0.01	21.48	2.310	6.41	7.22	2.2	—	5/9	20
1340	0.05	21.23	4.585	6.20	7.09	33.9	7.07		
1348	0.15	21.00	4.620	5.80	7.03	58.3	6.56		
1355	0.30	20.74	4.664	5.48	7.01	69.5	6.41		
1400	0.50	20.15	4.705	5.46	6.99	75.3	5.14		
1405	0.60	20.19	4.721	5.00	6.99	79.0	6.29		
1415	0.90	20.17	4.761	4.80	6.99	81.5	5.88		
1420	1.05	20.10	4.768	4.78	6.99	81.8	5.79		
1425	1.20	20.09	4.778	4.72	6.99	81.5	5.76		
1426		PUMP OFF							
1427		START SAMPLE COLLECTION							
1442		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF.							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200701254

NOTES AND OBSERVATIONS:

IPEC00263698

WELL ID: MW 51 . 189

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 70's

PROJECT NO: 01.0017869.92
DATE: 8/25/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

184.2 to 197.8

SAMPLING PORT

189

TOTAL VOLUME PURGED: 0.85 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1130	0	PUMP	ON					5.6/5.6	48
1140	0.01	17.94	0.798	2.37	6.36	-71.3	—		
1150	0.05	16.69	1.421	0.98	6.77	-129.5	8.48		
1200	0.15	16.34	1.524	0.46	6.93	-168.3	7.98		
1207	0.25	16.29	1.528	0.36	6.95	-230.9	6.92		
1213	0.35	16.14	1.538	0.29	6.98	-280.1	5.27		
1222	0.45	15.87	1.540	0.25	6.99	-283.5	4.36		
1227	0.50	15.85	1.539	0.21	7.00	-283.7	4.20		
1234	0.60	15.89	1.544	0.20	7.03	-282.3	4.17		
1239	0.70	15.91	1.547	0.19	7.03	-283.2	4.13		
1240		PUMP	OFF						
1241		START	SAMPLE	COLLECTION					
1313		SAMPLE	COMPLETED	: 2 L		IPEC			
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

WELL ID: MW 51-163

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/25/10
WEATHER:	Cloudy 70's	SAMPLER(S):	M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

154.7 to 166.2

TOTAL VOLUME PURGED: 0.75 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

163 2

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1130	0	PUMP	ON					5.6 / 5.6	48
1140	0.01	18.39	1.093	2.98	6.66	-69.6	—		
1150	0.02	17.68	2.104	1.12	6.57	-63.5	9.16		
1200	0.05	17.46	2.088	0.51	6.85	-71.7	7.18		
1207	0.10	17.34	2.074	0.46	6.94	-61.8	6.48		
1213	0.15	17.19	2.078	0.39	6.98	-51.6	6.51		
1222	0.25	16.80	2.084	0.26	7.00	-36.6	6.40		
1227	0.30	16.98	2.081	0.25	7.01	-30.0	6.27		
1234	0.40	16.97	2.087	0.25	7.03	-21.6	6.06		
1239	0.45	16.95	2.088	0.25	7.03	-21.7	6.00		
1247	0.50	16.99	2.088	0.26	7.04	-18.4	5.86		
1252	0.55	17.04	2.087	0.25	7.05	-17.7	5.90		
1257	0.60	17.08	2.087	0.24	7.05	-16.9	5.96		
1258		PUMP	OFF						
1259		START	SAMPLE	COLLECTION					
1351		SAMPLE	COMPLETED	: 2	L IPEC				
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	200701254

NOTES AND OBSERVATIONS:

IPEC00263700

WELL ID: MW 51 - 135

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 70's

PROJECT NO: 01.0017869.92
DATE: 8/25/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

130.2 to 143.7

SAMPLING PORT

135

3

TOTAL VOLUME PURGED: 1.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1130	0	PUMP	ON					5.6/5.6	48
1140	0.01	16.63	2.371	1.36	6.47	-85.5	—		
1150	0.10	15.92	2.446	0.59	6.86	-106.0	6.71		
1200	0.20	15.77	2.466	0.29	6.94	-67.6	5.67		
1207	0.40	15.70	2.470	0.26	6.97	-38.9	5.21		
1213	0.50	15.58	2.474	0.20	6.98	-20.9	5.06		
1222	0.65	15.35	2.472	0.15	6.99	-7.3	5.29		
1227	0.85	15.4	2.470	0.14	6.99	-2.2	4.87		
1234	1.00	15.4	2.475	0.10	7.00	+8.7	4.79		
1239	1.15	15.46	2.474	0.12	7.00	+8.9	5.10		
1247	1.30	15.51	2.467	0.10	7.00	13.2	4.90		
1252	1.40	15.59	2.471	0.10	7.01	14.7	4.82		
1257	1.50	15.61	2.472	0.09	7.01	15.2	4.89		
1258		PUMP	OFF						
1259		START	SAMPLE	COLLECTION					
1321		SAMPLE	COMPLETED	: 2 L		IPEC			
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200701254

NOTES AND OBSERVATIONS:

IPEC00263701

WELL ID: MW 51 - 104

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/25/10
WEATHER:	Cloudy 70's	SAMPLER(S):	M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

130.2 to 143.7

TOTAL VOLUME PURGED: 3.25 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

104 4

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1130	0	PUMP	ON					5.6/5.6	48
1140	0.05	15.29	2.582	2.00	6.52	-40.5	—		
1150	0.35	14.76	2.615	1.50	6.49	-24.0	7.08		
1200	0.60	14.62	2.624	1.48	6.53	-16.2	6.20		
1207	0.95	14.60	2.622	1.34	6.57	-11.3	5.38		
1213	1.30	14.43	2.625	1.24	6.65	-7.3	5.16		
1222	1.65	14.38	2.625	1.26	6.63	-2.0	5.07		
1227	1.90	14.44	2.628	1.29	6.65	-1.6	4.51		
1234	2.20	14.39	2.628	1.26	6.68	+2.	5.29		
1239	2.40	14.36	2.627	1.23	6.68	+3.4	5.17		
1247	2.60	14.4	2.623	1.23	6.69	6.6	5.00		
1252	2.80	14.50	2.632	1.26	6.72	8.6	4.71		
1257	2.95	14.49	2.630	1.23	6.74	9.0	4.66		
1302	3.10	14.53	2.630	1.21	6.74	9.9	4.73		
1303		PUMP	OFF						
1305		START	SAMPLE	COLLECTION					
1318		SAMPLE	COMPLETED	: 2	L IPEC				
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200701254

NOTES AND OBSERVATIONS:

WELL ID: MW 51-79

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 70's

PROJECT NO: 01.0017869.92
DATE: 8/25/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

63.2 to 81.2

SAMPLING PORT

79 6

TOTAL VOLUME PURGED: ______ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1455	0	PUMP	ON					6.5/8.4	25
1505	0.05	16.27	2.709	1.60	6.59	-214.0	—	6.5/8.4	24
1511	0.15	16.37	2.712	1.37	6.78	-199.6	13.99		
1520	0.30	16.61	2.718	1.21	6.93	-183.5	9.50		
1528	0.42	16.50	2.725	1.21	6.98	-176.8	6.15		
1533	0.50	16.48	2.720	1.21	7.00	-165.0	5.69		
1538	0.60	16.57	2.718	1.21	7.01	-161.4	4.81		
1545	0.70	16.62	2.719	1.19	7.02	-156.5	6.71		
1553	0.85	16.64	2.717	1.21	7.02	-153.1	4.33		
1600	0.95	16.60	2.718	1.22	7.02	-153.9	6.88		
1612	1.05	16.67	2.714	1.21	7.02	-150.1	6.93		
1617	1.15	16.69	2.712	1.21	7.03	-148.9	6.85		
1618		PUMP	OFF						
1619		START	SAMPLE	COLLECTION					
1647		SAMPLE	COMPLETED	:	2	4 IPEC			
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200701254

NOTES AND OBSERVATIONS:

WELL ID: MW 51 - 40

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 70's

PROJECT NO: 01.0017869.92
DATE: 8/25/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

29.7 to 44.2

SAMPLING PORT

40 7

TOTAL VOLUME PURGED: ______ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1455	0	PUMP ON						6.5/8.4	25
1505	0.05	15.83	2.733	4.86	6.96	-11.1	—	6.5/8.4	24
1511	0.15	15.28	2.764	5.07	6.98	+10.2	0.24		
1520	0.45	15.28	2.779	5.27	6.98	32.1	0.59		
1528	0.70	15.17	2.784	5.13	6.98	36.5	1.69		
1533	0.80	15.12	2.783	5.15	6.98	40.1	0.95		
1538	0.95	15.21	2.781	5.26	6.98	42.1	3.94		
1545	1.10	15.21	2.781	5.20	6.98	45.0	3.00		
1553	1.30	15.22	2.779	5.10	6.98	48.2	1.48		
1600	1.50	15.19	2.782	5.08	6.98	49.7	1.41		
1607	1.65	15.26	2.773	5.05	6.98	51.0	1.47		
1608		PUMP OFF							
1609		START SAMPLE COLLECTION							
1629		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	200701254

NOTES AND OBSERVATIONS:

IPEC00263704

WELL ID: MW 32 - 190

SAMPLE ID: 022

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, 70's

PROJECT NO: 01.0017869.92
DATE: 8/24/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

180.3 to 193.9

SAMPLING PORT

190

TOTAL VOLUME PURGED: 0.85 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

MID QUARTER

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressu (psi)
929	0	PUMP ON						10/12	49
940	0.01	21.33	1.755	0.28	6.87	-173.0	—		
950	0.05	21.47	1.746	0.28	6.88	-174.3	4.27		
1000	0.15	21.51	1.742	0.19	6.94	-172.6	4.09		
1010	0.25	21.37	1.743	0.12	7.04	-180.2	3.86		
1020	0.35	21.21	1.742	0.09	7.08	-174.8	2.23		
1027	0.45	21.03	1.742	0.08	7.10	-169.7	3.60		
1035	0.55	20.96	1.738	0.07	7.11	-146.4	4.39		
1040	0.60	20.93	1.737	0.06	7.12	-143.5	4.46		
1048	0.70	20.90	1.735	0.05	7.12	-140.2	4.50		
1049		PUMP OFF							
1052		START SAMPLE COLLECTION							
1137		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200704293

NOTES AND OBSERVATIONS:

IPEC00263705

WELL ID: MW 32 - 173

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, 70's

PROJECT NO: 01.0017369.92
DATE: 8/24/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

165.8 to 174.3

TOTAL VOLUME PURGED: 1.10 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

173

2

PURGE METHOD: Double Valve Pump

MID QUARTER

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressur (psi)
0929								10/12	49
0940	0.01	21.07	1.999	0.65	6.84	-148.1	—		
0950	0.05	21.35	1.981	0.55	6.84	-146.7	4.07		
1000	0.20	21.25	1.972	0.38	6.96	-153.1	3.86		
1010	0.40	21.01	1.977	0.26	7.06	-155.3	4.35		
1020	0.50	20.88	1.987	0.22	7.09	-154.2	3.93		
1027	0.65	20.74	1.996	0.21	7.10	-152.1	3.74		
1035	0.75	20.68	2.002	0.19	7.11	-144.1	3.29		
1040	0.80	20.64	2.006	0.19	7.11	-141.7	3.36		
1048	0.95	20.60	2.013	0.18	7.12	-139.6	3.27		
1049		PUMP	OFF						
1052		START	SAMPLE	COLLECTION					
1123		SAMPLE	COMPLETED		: 2	L IPEC			
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200704293

NOTES AND OBSERVATIONS:

IPEC00263706

WELL ID: MW 32-149

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, 70's

PROJECT NO: 01.0017869.92
DATE: 8/24/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

147.3 to 156.8

SAMPLING PORT

149 3

TOTAL VOLUME PURGED: 0.70 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

MID QUARTER

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressu (psi)
0929								10 | 12	49
0940	0.01	21.41	1.549	0.86	6.80	-187.0	—		
0950	0.02	21.57	1.555	0.64	6.82	-183.6	3.02		
1000	0.10	21.44	1.734	0.43	6.84	-176.1	2.78		
1010	0.20	21.25	1.896	0.27	6.99	-145.8	2.46		
1020	0.30	21.11	1.952	0.22	7.08	-131.2	2.45		
1027	0.40	20.94	1.978	0.18	7.09	-123.3	2.39		
1035	0.50	20.87	1.991	0.18	7.11	-120.1	2.43		
1040	0.55	20.85	1.996	0.18	7.12	-117.9	2.46		
1041		PUMP	OFF						
1043		START	SAMPLE	COLLECTION					
1127		SAMPLE	COMPLETED:		2 L	IPEC			
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070429B

NOTES AND OBSERVATIONS:

IPEC00263707

WELL ID: MW 32 - 85

SAMPLE ID: 023

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, 70's

PROJECT NO: 01.0017869.92
DATE: 8/24/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

79.3 to 92.8

TOTAL VOLUME PURGED: 1.65 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

85

5

PURGE METHOD: Double Valve Pump

MID QUARTER

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressu (psi)
0929								10/12	49
940	0.05	21.19	1.638	8.03	6.78	-51.6	—		
950	0.15	20.85	1.637	5.08	6.77	-37.3	5.96		
1000	0.45	20.46	1.627	2.39	6.76	-29.4	5.25		
1010	0.60	20.34	1.626	2.05	6.78	-21.6	4.74		
1020	0.85	20.26	1.632	1.90	6.81	-16.0	4.54		
1027	1.10	20.16	1.638	1.80	6.82	-9.8	4.61		
1035	1.40	20.12	1.638	1.76	6.83	-7.9	4.59		
1040	1.50	20.10	1.639	1.75	6.84	-7.6	4.66		
1041		PUMP	OFF						
1043		START	SAMPLE	COLL	ECTION				
1103		SAMPLE	COMPLE	TED	: 2	L IP	EC		
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 32 . 59

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, 70's

PROJECT NO: 01.0017869.92
DATE: 8/24/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

28.3 to 61.3

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

59

PURGE METHOD: Double Valve Pump

6

MID QUARTER

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressur (psi)
1244	0	PUMP	ON					8/8	26
1252	0.05	21.32	0.513	5.13	6.81	36.0	—		
1257	0.10	21.19	0.461	5.58	6.97	48.2	6.91		
1302	0.25	21.11	0.421	6.09	7.17	43.3	6.40		
1309	0.40	21.07	0.397	6.48	7.40	39.2	4.44		
1317	0.60	21.02	0.382	6.48	7.58	44.4	7.39		
1323	0.75	20.95	0.377	6.61	7.71	45.8	7.39		
1333	0.85	20.96	0.367	6.64	7.86	52.1	7.61		
1338	0.95	20.96	0.366	6.49	7.88	53.3	7.70		
1343	1.05	20.99	0.365	6.42	7.93	56.3	7.32		
1348	1.15	20.95	0.364	6.42	7.95	57.8	7.38		
1353	1.25	20.92	0.364	6.40	7.99	59.1	7.40		
1354		PUMP	OFF						
1356		START	SAMPLE	COLLECTION					
1422		SAMPLE	COMPLETED	:	2 L	IPEC			
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 48

SAMPLE ID: 008

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, 70's

PROJECT NO: 01.0017869.92
DATE: 8/24/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

28.3 to 61.3

SAMPLING PORT

48

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

7 MID QUARTER

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1244	0	PUMP	ON					8/8	26
1252	0.01	21.20	0.328	3.77	7.11	49.3	—		
1257	0.10	20.94	0.333	4.51	6.98	44.5	5.68		
1302	0.18	20.83	0.338	5.10	7.13	45.9	5.31		
1309	0.30	20.79	0.344	5.32	7.35	48.3	5.24		
1317	0.45	20.74	0.346	5.25	7.54	50.2	6.50		
1323	0.60	20.71	0.347	5.33	7.67	51.0	2.17		
1333	0.85	20.70	0.348	5.11	7.86	52.3	4.13		
1338	1.0	20.68	0.348	5.11	7.88	52.2	4.21		
1343	1.1	20.72	0.349	5.11	7.90	53.0	4.17		
1344		PUMP	OFF						
1345		START	SAMPLE	COLLECTION					
1403		SAMPLE	COMPLETED	:	2	4 IPEC			
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	)
turbidity meter	20070 4293

NOTES AND OBSERVATIONS:

WELL ID: MW 31 - 85

SAMPLE ID: 025

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/23/10
WEATHER:	Showers, 70's	SAMPLER(S):	M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

69.8 to 85.4

TOTAL VOLUME PURGED: 0.90 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

85 MID QUARTER

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1019	0	PUMP	ON					9/10	20
1029	0.01	21.79	1.789	7.14	7.16	-121.5	—		
1037	0.05	21.90	1.855	2.09	7.16	-109.4	0.81		
1044	0.10	21.82	1.918	2.27	7.16	-81.2	0.36		
1052	0.20	21.58	1.937	2.42	7.17	+9.9	0.00		
1059	0.30	21.44	1.939	2.45	7.17	31.9	0.00		
1108	0.45	21.22	1.939	2.39	7.18	45.5	0.00		
1115	0.55	21.10	1.939	2.35	7.18	50.5	0.00		
1120	0.60	21.06	1.939	2.33	7.18	52.0	0.00		
1125	0.70	21.04	1.939	2.31	7.19	52.9	0.00		
1130	0.75	20.98	1.939	2.31	7.19	52.2	0.00		
1131		PUMP	OFF						
1132		START	SAMPLE	COLLECTION					
1210		SAMPLE	COMPLETED	: 2 L		IPEC			
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 31 - 63

SAMPLE ID: 026

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/23/10
WEATHER:	Showers, 70's	SAMPLER(S):	M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

55.8 to 63.8

TOTAL VOLUME PURGED: 0.85 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

63

PURGE METHOD: Double Valve Pump

MID QUARTER

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1019	0	PUMP	ON					9/10	20
1029	0.01	21.53	1.432	3.91	6.94	-69.8	—		
1037	0.02	21.70	1.431	3.47	6.91	-62.7	1.01		
1044	0.05	21.83	1.421	2.50	6.88	-59.4	0.18		
1052	0.10	21.89	1.355	2.13	6.89	-51.8	0.00		
1059	0.15	21.86	1.296	2.13	6.90	-44.5	0.00		
1108	0.20	21.74	1.218	2.21	6.93	-29.8	0.00		
1115	0.25	21.65	1.186	2.30	6.96	-20.9	0.00		
1120	0.30	21.59	1.167	2.27	6.96	-13.5	0.00		
1125	0.33	21.53	1.150	2.26	6.96	-7.9	0.00		
1130	0.38	21.46	1.139	2.30	6.97	-3.7	0.00		
1135	0.42	21.43	1.126	2.28	6.98	+2.9	0.00		
1142	0.48	21.33	1.112	2.25	7.02	10.8	0.00		
1147	0.51	21.31	1.110	2.29	7.01	14.2	0.00		
1152	0.55	21.30	1.106	2.29	7.02	17.9	0.00		
1157	0.60	21.27	1.104	2.30	7.02	19.8	0.00		
1202	0.63	21.24	1.106	2.29	7.03	20.2	0.00		
1207	0.70	21.21	1.107	2.28	7.03	21.0	000		
1208		PUMP	OFF						
1210		START	SAMPLE	COLLECTION					
1311		SAMPLE	COMPLETED	: 2 L IPEC					
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 31 - 49

SAMPLE ID: 025

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/23/10
WEATHER:	Showers, 70's	SAMPLER(S):	M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

34.8 to 49.3

TOTAL VOLUME PURGED: 3.40 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

49 MID QUARTER

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1019	0	PUMP	ON					9/10	20
1029	0.2	21.25	2.356	2.41	6.88	208.8	—		
1037	0.4	21.09	2.382	1.56	6.87	212.2	2.01		
1044	0.6	20.79	2.391	1.21	6.86	202.0	1.24		
1052	0.8	20.63	2.272	1.90	6.91	190.4	0.43		
1059	1.1	20.50	2.190	2.24	6.92	186.1	0.93		
1108	1.4	20.34	2.139	2.41	6.93	181.8	0.00		
1115	1.7	20.25	2.107	2.63	6.95	179.2	0.00		
1120	1.9	20.21	2.068	2.87	6.96	177.2	0.00		
1125	2.05	20.19	2.004	3.96	6.99	174.9	0.00		
1130	2.25	20.17	1.550	6.08	7.13	168.4	0.00		
1135	2.50	20.11	1.221	7.24	7.25	168.1	0.00		
1142	2.70	20.04	1.073	7.81	7.32	166.5	0.00		
1147	2.90	20.02	1.047	8.17	7.33	166.1	0.00		
1152	3.10	20.00	1.031	8.20	7.34	165.7	0.00		
1157	3.25	20.01	1.023	8.23	7.34	165.2	0.00		
1158		PUMP	OFF						
1159		START	SAMPLE	COLLECTION					
1211		SAMPLE	COMPLETED	: 2	L IPEC				
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429З

NOTES AND OBSERVATIONS:

WELL ID: MW 30 - 69

SAMPLE ID: 034

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds, 80's

PROJECT NO: 01.0017869.92
DATE: 8/20/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

67.3 to 71.3

TOTAL VOLUME PURGED: 1.20 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

69 MID QUARTER

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1340	0	PUMP ON						6/12	33 → 41
1350	0.05	30.21	1.396	6.28	8.15	183.0	—	6/12	40
1400	0.20	30.16	1.371	8.44	8.26	154.3	—		
1408	0.30	30.06	1.365	9.28	8.28	126.4	—		
1415	0.45	30.01	1.378	9.42	8.29	117.1	—		
1423	0.75	29.90	1.388	9.54	8.29	107.9	—		
1429	0.85	29.81	1.366	9.58	8.30	104.0	—		
1434	0.95	29.76	1.381	9.76	8.29	100.8	—		
1439	1.05	29.72	1.385	9.77	8.30	100.1	—		
1440	PUMP OFF								
1441	START SAMPLE COLLECTION								
1508	SAMPLE COMPLETED : 2 L. IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	—

NOTES AND OBSERVATIONS:

WELL ID: MW 30 - 84

SAMPLE ID: 025

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds, 80's

PROJECT NO: 01.0017869.92
DATE: 8/20/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

77.3 to 85.4

TOTAL VOLUME PURGED: 0.35 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

84 MID QUARTER

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1340	0	PUMP ON						6/12	33
13.50	0.01	2991	1.742	2.74	7.17	63.5	—	6/12	40
1400	0.05	30.08	1.735	2.75	7.28	73.4	—		
1408	0.10	30.02	1.736	2.30	7.31	77.5	—		
1415	0.15	29.97	1.735	2.15	7.32	80.3	—		
1423	0.17	29.79	1.736	1.90	7.33	81.6			
1429	0.18	29.77	1.731	1.94	7.34	83.1			
1434	0.20	29.81	1.731	1.98	7.35	84.7			
1435		PUMP OFF							
1436		START SAMPLE COLLECTION							
1651		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	|
turbidity meter	—

NOTES AND OBSERVATIONS:

WELL ID: MW 60 - 35

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, Humid 80's

PROJECT NO: 01.0017869.92
DATE: 8/16/10
SAMPLER(S): M.B.

SAMPLING INTERVAL (depth in ft below top of casing)

24.9 to 39.4

SAMPLING PORT

35

TOTAL VOLUME PURGED: 1.70 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

7

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1249	0	PUMP ON						5 / 7	19
1256	0.05	21.42	2.200	2.94	6.76	-40.2	—	5 / 7	18
1301	0.15	22.00	2.161	1.11	7.01	-66.2	2.19		
1310	0.30	22.48	2.179	0.75	7.24	-60.5	1.98		
1318	0.45	22.56	2.275	0.64	7.45	-48.2	0.54		
1329	0.60	22.45	2.489	1.19	7.51	-22.6	0.32		
1340	0.80	22.40	2.640	1.34	7.54	5.7	0.00		
1345	0.90	22.24	2.681	1.60	7.55	12.5	0.00		
1353	1.0	21.85	2.702	1.75	7.56	21.6	0.00		
1358	1.05	21.78	2.711	1.84	7.57	27.4	0.00		
1403	1.15	21.69	2.720	1.97	7.57	31.3	0.00		
1408	1.20	21.50	2.725	2.01	7.57	35.0	0.00		
1413	1.35	21.45	2.730	2.15	7.57	40.8	0.00		
1418	1.45	21.40	2.735	2.17	7.57	42.1	0.00		
1423	1.55	21.38	2.733	2.19	7.57	44.4	0.00		
1424		PUMP OFF							
1435		START SAMPLE COLLECTION							
1443		SAMPLE COMPLETED : 2 L IPEC							
1443		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200704293

NOTES AND OBSERVATIONS:

IPEC00263716

WELL ID: MW 60 - 53

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017369.92
SITE:	Buchanan, NY	DATE:	8/16/10
WEATHER:	Cloudy, humid 80's	SAMPLER(S):	M.B.

SAMPLING INTERVAL (depth in ft below top of casing)

45.4 to 59.4

SAMPLING PORT

53

6

TOTAL VOLUME PURGED: 2.20 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1249	0	PUMP	ON					5/7	19
1256	0.05	22.20	2.827	2.73	6.51	-76.5	—	5/7	18
1304	0.10	22.37	2.771	1.30	6.70	-83.6	2.98		
1310	0.30	22.08	2.744	0.70	7.05	-69.4	2.17		
1318	0.45	21.34	2.731	0.58	7.24	-42.6	1.08		
1329	0.60	21.49	2.728	0.56	7.39	-21.7	0.10		
1340	0.80	20.72	2.725	0.54	7.42	-8.4	0.00		
1345	1.00	20.39	2.730	0.56	7.44	-1.9	0.00		
1353	1.20	20.17	2.723	0.55	7.46	+6.5	0.00		
1358	1.30	19.90	2.726	0.57	7.47	9.0	0.00		
1403	1.50	19.78	2.727	0.59	7.48	16.8	0.00		
1408	1.65	19.75	2.729	0.65	7.49	19.9	0.00		
1413	1.80	19.64	2.727	0.63	7.49	22.9	0.00		
1418	1.95	19.69	2.726	0.64	7.49	23.9	0.00		
1423	2.05	19.70	2.727	0.63	7.49	25.6	0.00		
1424		PUMP	OFF						
1425		START	SAMPLE	COLLECTION					
1534		SAMPLE	COMPLETED		: 2	L	IPEC	ROUTINE	
1536		"		"	: 2	L	IPEC	DUPLICATE	
1537		"		"	: 2	L	IPEC	SPIKE	
		PUMP	OFF.						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	200704293

NOTES AND OBSERVATIONS:

IPEC00263717

WELL ID: MW 60 - 72

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 90's

PROJECT NO: 01.0017869.92
DATE: 8/17/10
SAMPLER(S): M.B.

SAMPLING INTERVAL (depth in ft below top of casing)

66.4 to 78.2

TOTAL VOLUME PURGED: 3.40 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

72

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1020	0	PUMP ON						5/6	31
1033	0.1	18.96	4.548	1.62	6.83	18.6	—	6/5	30
1040	0.3	18.25	4.556	0.75	7.10	10.9	2.28		
1050	0.8	17.61	4.247	0.52	7.23	14.9	1.94		
1100	1.3	17.46	4.120	0.47	7.30	18.8	1.53		
1110	1.6	17.41	4.097	0.47	7.32	21.2	1.81		
1116	2.3	17.27	4.075	0.47	7.34	23.5	1.57		
1122	2.6	17.01	4.070	0.45	7.34	24.6	1.72		
1127	2.85	16.99	4.057	0.45	7.35	26.0	1.36		
1132	3.00	17.01	4.023	0.44	7.35	28.7	1.41		
1140	3.25	17.06	4.030	0.43	7.36	29.9	1.32		
1141		PUMP OFF							
1145		START SAMPLE COLLECTION							
1159		SAMPLE COMPLETED :				2 L IPEC			
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200704293

NOTES AND OBSERVATIONS:

IPEC00263718

WELL ID: MW 60 - 135

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/17/10
WEATHER:	Sun + clouds 90's	SAMPLER(S):	M.B.

SAMPLING INTERVAL (depth in ft below top of casing)

124.9 to 141.4

TOTAL VOLUME PURGED: 2.15 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

135

3

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1020	0	PUMP ON						5/6	31
1033	0.05	20.88	2.285	2.24	6.43	-134.0	—	6/5	30
1040	0.15	20.06	2.267	0.77	6.77	-158.8	2.41		
1050	0.35	18.76	2.270	0.42	7.21	-225.0	1.96		
1100	0.70	18.51	2.286	0.31	7.29	-236.2	1.64		
1110	0.90	18.48	2.292	0.28	7.30	-235.9	0.95		
1116	1.10	18.29	2.298	0.25	7.31	-239.6	1.25		
1122	1.35	18.12	2.300	0.23	7.31	-244.3	0.01		
1127	1.50	17.96	2.299	0.22	7.31	-246.7	0.01		
1132	1.70	17.91	2.302	0.21	7.31	-241.9	0.03		
1140	2.00	17.96	2.303	0.20	7.32	-239.6	0.02		
1141		PUMP OFF							
1145		START SAMPLE COLLECTION							
1209		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	/
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 60-154

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 90's

PROJECT NO: 01.0017869.92
DATE: 8/17/10
SAMPLER(S): M.B.

SAMPLING INTERVAL (depth in ft below top of casing)

147.4 to 164.9

SAMPLING PORT

154

2

TOTAL VOLUME PURGED: 2.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1020	0	PUMP ON						5/6	31
1033	0.05	21.69	2.060	2.50	6.39	16.2	—	6/5	30
1040	0.10	20.80	1.937	1.42	6.66	-61.1	3.01		
1050	0.30	19.28	1.825	0.68	7.14	-75.2	2.73		
1100	0.60	18.98	1.812	0.56	7.28	-81.6	2.53		
1110	0.75	19.11	1.809	0.50	7.32	-86.5	2.53		
1116	1.0	18.83	1.810	0.47	7.36	-89.6	1.91		
1122	1.15	18.55	1.811	0.46	7.38	-92.2	1.42		
1127	1.25	18.37	1.811	0.46	7.39	-93.3	1.29		
1132	1.50	18.30	1.811	0.44	7.40	-97.4	1.21		
1140	1.75	18.28	1.811	0.42	7.41	-99.2	1.27		
1146	2.0	18.26	1.816	0.41	7.42	-100.1	1.20	↓	↓
1147		PUMP	OFF						
1150		START	SAMPLE COLLECTION						
1218		SAMPLE COMPLETED:			2 L	IPEC			
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 60.176

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/17/10
WEATHER:	Sun + clouds 90's	SAMPLER(S):	M. B.

SAMPLING INTERVAL (depth in ft below top of casing)

170.9 to 200.4

TOTAL VOLUME PURGED: 1.10 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

176

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1020	0	PUMP ON						5/6	31
1033	0.1	23.60	0.742	0.50	6.36	-145.6	—	6/5	30
1040	0.15	24.59	0.743	0.22	6.50	-161.2	2.28		
1050	0.20	24.89	0.746	0.15	6.76	-196.2	1.84		
1100	0.30	24.86	0.747	0.12	7.02	-218.6	1.55		
1110	0.40	24.94	0.748	0.09	7.09	-224.1	1.31		
1116	0.45	24.75	0.751	0.09	7.17	-233.8	1.13		
1122	0.50	24.41	0.751	0.07	7.24	-244.0	1.04		
1127	0.60	24.23	0.751	0.06	7.26	-247.8	1.15		
1132	0.70	23.81	0.750	0.06	7.27	-251.6	1.19		
1140	0.80	23.70	0.750	0.05	7.28	-254.1	1.20		
1146	0.90	23.74	0.748	0.05	7.28	246.8	1.11		
1151	0.95	23.78	0.746	0.04	7.29	241.4	1.17		
1152		PUMP OFF							
1155		START SAMPLE COLLECTION							
1251		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW-49-26
SAMPLE ID: 021

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90'S

PROJECT NO: 01.0017869.92
DATE: 8/11/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = Transducer Actual Depth

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes (gal)
0934	13.73	PUMP	ON						
0955	13.57	24.99	2.327	1.02	6.97	139.3	—		0.15
1005	13.49	25.03	2.319	0.74	6.99	108.4	0.00		0.35
1015	13.41	25.11	2.312	0.65	7.03	88.0	0.00		0.55
1020	13.38	25.20	2.308	0.61	7.05	79.8	0.00		0.60
1025	13.35	25.23	2.306	0.55	7.07	73.2	0.00		0.65
1030	13.29	25.18	2.296	0.47	7.10	66.3	0.00		0.70
1035	13.27	25.33	2.296	0.43	7.09	60.6	0.00		0.75
1040	13.24	25.52	2.292	0.46	7.14	56.4	0.00		0.80
1045	13.20	25.46	2.296	0.56	7.15	51.4	0.00		0.85
1050	13.10	25.25	2.286	0.36	7.15	48.2	0.00		1.00
1055	12.98	25.21	2.286	0.38	7.19	41.7	0.00		1.10
1100	12.94	25.17	2.287	0.39	7.14	39.6	0.00		1.20
1102	START SAMPLE COLLECTION								
1127	END SAMPLE COLLECTION! 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	1
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 1.55 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-49-42
SAMPLE ID: 021

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90's

PROJECT NO: 01.0017869.92
DATE: 8/11/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = Transducer Actual Depth

Time	DTW or Actual Depth	Temp (^{0}C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes (gal)
0934	13.976								
0955	14.095	25.23	2.386	1.15	7.27	215.5	—		0.15
1005	14.150	25.07	2.415	0.65	7.30	201.4	0.00		0.35
1015	14.227	25.04	2.419	0.43	7.33	198.5	0.00		0.55
1020	14.272	24.95	2.425	0.39	7.33	185.4	0.00		0.60
1025	14.299	24.92	2.425	0.38	7.33	181.3	0.00		0.70
1030	14.352	24.89	2.427	0.37	7.34	176.6	0.00		0.80
1033	START SAMPLE COLLECTION								
1100	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	2
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 1.20 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-49-65
SAMPLE ID: 021

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 90's

PROJECT NO: 01.0017869.92
DATE: 8/11/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = Transducer Actual Depth

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
0934	12.574								
0955	12.655	25.90	2.158	2.79	7.30	208.9	—		0.01
1005	12.680	25.87	2.170	1.35	7.37	202.8	6.01		0.10
1015	12.717	25.65	2.201	1.28	7.40	195.2	0.00		0.20
1020	12.769	25.31	2.213	0.75	7.41	189.7	0.00		0.30
1025	12.779	25.31	2.217	0.66	7.41	185.8	0.00		0.35
1030	12.834	25.15	2.228	0.61	7.42	181.0	0.00		0.40
1035	12.873	25.14	2.230	0.58	7.42	178.2	0.00		0.45
1040	12.897	25.07	2.237	0.58	7.42	175.2	0.00		0.50
1045	12.953	25.10	2.240	0.60	7.43	171.7	0.00		0.55
1046	START SAMPLE COLLECTION								
1119	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	3
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 0.95 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl

IPEC00263724

WELL ID: MW-49-26
SAMPLE ID: 021

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90'S

PROJECT NO: 01.0017869.92
DATE: 8/11/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = Transducer Actual Depth

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes (gal)
0934	13.73	PUMP	ON						
0955	13.57	24.99	2.327	1.02	6.97	139.3	—		0.15
1005	13.49	25.03	2.319	0.74	6.99	108.4	0.00		0.35
1015	13.41	25.11	2.312	0.65	7.03	88.0	0.00		0.55
1020	13.38	25.20	2.308	0.61	7.05	79.8	0.00		0.60
1025	13.35	25.23	2.306	0.55	7.07	73.2	0.00		0.65
1030	13.29	25.18	2.296	0.47	7.10	66.3	0.00		0.70
1035	13.27	25.33	2.296	0.43	7.09	60.6	0.00		0.75
1040	13.24	25.52	2.292	0.46	7.14	56.4	0.00		0.80
1045	13.20	25.46	2.296	0.56	7.15	51.4	0.00		0.85
1050	13.10	25.25	2.286	0.36	7.15	48.2	0.00		1.00
1055	12.98	25.21	2.286	0.38	7.19	41.7	0.00		1.10
1100	12.94	25.17	2.287	0.39	7.14	39.6	0.00		1.20
1102	START SAMPLE	COLLECTION							
1127	END SAMPLE	COLLECTION: 7L IPEC							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	1
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 1.55 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263725

WELL ID: MW-49-42
SAMPLE ID: 021

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90's

PROJECT NO: 01.0017869.92
DATE: 8/4/10
SAMPLER(S): CG, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = Transducer Actual Depth

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes (gal)
0934	13.976								
0955	14.095	25.23	2.386	1.15	7.27	215.5	—		0.15
1005	14.150	25.07	2.415	0.65	7.30	201.4	0.00		0.35
1015	14.227	25.04	2.419	0.43	7.33	198.5	0.00		0.55
1020	14.272	24.95	2.425	0.39	7.33	185.4	0.00		0.60
1025	14.299	24.92	2.425	0.38	7.33	181.3	0.00		0.70
1030	14.352	24.89	2.427	0.37	7.34	176.6	0.00		0.80
1033	START SAMPLE COLLECTION								
1100	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	2
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Total volume purged 1.20 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263726

WELL ID: MW-49-65
SAMPLE ID: 021

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90's

PROJECT NO: 01.0017869.92
DATE: 8/11/10
SAMPLER(S): CB, MB
PUMP DEPTH: ft

WATER QUALITY: DTW = Transducer Actual Depth

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
0934	12.574								
0955	12.655	25.90	2.158	2.79	7.30	208.9	—		0.01
1005	12.630	25.87	2.170	1.35	7.37	202.8	6.01		0.10
1015	12.717	25.65	2.201	1.28	7.40	195.2	0.00		0.20
1020	12.769	25.31	2.213	0.75	7.41	189.7	0.00		0.30
1025	12.779	25.31	2.217	0.66	7.41	185.8	0.00		0.35
1030	12.834	25.15	2.228	0.61	7.42	181.0	0.00		0.40
1035	12.873	25.14	2.230	0.58	7.42	178.2	0.00		0.45
1040	12.877	25.07	2.237	0.58	7.42	175.2	0.00		0.50
1045	12.953	25.10	2.240	0.60	7.43	171.7	0.00		0.55
1040	START SAMPLE COLLECTION								
1119	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	3
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 0.95 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl

WELL ID: MW-63-18
SAMPLE ID: 014

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Breezy, 90s, Humid

PROJECT NO: 01.0017869.92
DATE: 8/10/10
SAMPLER(S): CB, MB
PUMP DEPTH: ft

WATER QUALITY: DTW = Transducer Actual Depth

Time	DTW or Actual Depth	Temp (^0C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes (gal)
1015	5.923	PUMP	ON						
1032	6.105	28.03	4.107	2.28	7.19	-80.8	15.49		0.01
1042	6.260	26.62	3.771	1.07	7.20	-96.8	12.42		0.15
1050	6.301	26.66	3.564	1.32	7.21	-87.1	0.00		0.25
1055	6.346	27.01	3.446	1.29	7.25	-86.1	1.27		0.35
1100	6.391	26.99	3.139	1.33	7.27	-89.1	1.40		0.45
1105	6.440	26.88	3.165	1.25	7.30	-90.0	1.19		0.50
1110	6.488	26.81	3.092	1.26	7.31	-90.1	0.95		0.60
1115	6.524	26.79	3.125	1.28	7.40	-89.3	0.83		0.65
1120	6.568	26.43	3.282	1.32	7.45	-82.6	1.12		0.75
1125	6.606	26.76	3.535	1.68	7.50	-78.5	2.01		0.80
1130	6.647	26.77	3.718	1.98	7.52	-75.5	1.41		0.85
1135	6.681	26.78	3.713	2.05	7.53	-73.2	1.43		0.90
1140	6.712	26.79	3.712	2.08	7.54	-70.7	1.40		0.95
1145	START SAMPLE COLLECTION								
1208	END SAMPLE COLLECTION 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	3
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 1.15 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-63-34
SAMPLE ID: 014

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90'S, HUMID

PROJECT NO: 01.0017869.92
DATE: 8/10/10
SAMPLER(S): CB, MB
PUMP DEPTH: ft

WATER QUALITY: DTW = Transducer Actual Depth

Time	DTW or Actual Depth	Temp (^{0}C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes (gal)
1015	13.322	PUMP ON							
1032	13.494	26.01	1.441	4.17	7.43	-144.3	4.77		0.01
1042	13.587	23.90	1.392	1.36	7.46	-145.2	0.93		0.20
1050	13.662	24.11	1.383	0.89	7.46	-148.5	0.00		0.30
1056	13.712	24.28	1.384	0.81	7.46	-146.0	0.00		0.40
1100	13.763	24.07	1.389	0.76	7.48	-162.0	0.00		0.45
1105	13.803	23.91	1.388	0.65	7.48	-163.6	0.00		0.55
1110	13.845	23.89	1.387	0.61	7.48	-165.4	0.00		0.65
1115	13.887	23.86	1.384	0.59	7.48	-164.2	0.00		0.70
1117	START SAMPLE COLLECTION								
1144	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	1
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Total volume purged 0.85 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263729

WELL ID: MW 63 . 174

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 90°F

PROJECT NO: 01.0017869.92
DATE: 8/10/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

168.0 to 191.1

SAMPLING PORT

174

TOTAL VOLUME PURGED: ______ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1015	0	PUMP	ON					8.2/8	40
1020	0.05	23.14	1.025	2.38	6.75	-138.4	—		↓
1025	0.20	22.33	1.003	0.86	6.42	-129.2			
1030	0.35	21.38	0.998	0.50	6.34	-120.9	4.55		35
1037	0.60	20.80	0.998	0.38	6.32	-94.4	5.67		
1043	0.70	20.63	0.997	0.34	6.32	-80.0	6.28		
1049	1.0	20.50	0.999	0.28	6.43	-57.2	0.00		
1056	1.2	20.42	1.001	0.26	6.54	-40.1	0.00		
1101	1.4	20.38	1.001	0.23	6.61	-48.3	0.00		
1108	1.7	20.12	1.000	0.21	6.70	-50.0	0.00		
1113	1.9	20.10	0.999	0.20	6.79	-49.6	0.00		
1118	2.0	20.07	0.998	0.20	6.81	-47.8	0.00		
1123	2.1	20.04	0.999	0.19	6.83	-45.9	0.00		
1123		PUMP	OFF						
1124		START	SAMPLE	COLLECTION					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 63 - 163

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/10/10
WEATHER:	Sun + clouds 90°F	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

150.5 to 165

SAMPLING PORT

163 2

TOTAL VOLUME PURGED: gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1015	0	PUMP ON						8.2/8.0	39
1020	0.2	22.96	1.074	1.45	7.32	-133.0	—		↓
1025	0.3	22.25	1.051	0.89	7.43	-151.1	5.27		
1030	0.4	21.50	1.038	0.61	7.40	-147.2	3.87		35
1037	0.5	20.74	1.040	0.60	7.40	-144.3	4.09		
1043	0.7	20.49	1.042	0.62	7.40	-138.5	4.24		
1049	1.0	20.39	1.041	0.66	7.41	-134.6	0.00		
1056	1.2	20.36	1.043	0.65	7.41	-130.0	0.00		
1101	1.3	20.31	1.042	0.65	7.41	-129.2	0.00		
1103		PUMP OFF							
1104		START SAMPLE COLLECTION							
1121		SAMPLE COMPLETED		: 2	L IPEC				
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

IPEC00263731

WELL ID: MW 63 - 121

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/10/10
WEATHER:	Sun + clouds 90°F	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

118 to 127.5

SAMPLING PORT

121 3

TOTAL VOLUME PURGED: ______ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1015	0	PUMP ON						8.2/8.0	39
1020	0.2	22.02	1.415	0.25	7.24	-182.5	—		↓
1025	0.3	21.30	1.394	0.17	7.32	-177.1	7.06		
1030	0.5	20.69	1.390	0.14	7.35	-172.8	5.84		35
1037	0.6	20.18	1.384	0.12	7.37	-172.4	3.90		
1043	0.95	20.03	1.385	0.13	7.38	-169.1	2.14		
1049	1.20	19.80	1.380	0.15	7.39	-150.1	0.00		
1056	1.50	19.74	1.377	0.13	7.39	-147.6	0.00		
1101	1.70	19.59	1.373	0.14	7.40	-148.6	0.00		
1108	1.90	19.51	1.373	0.15	7.40	-145.4	0.00		
1113	2.10	19.55	1.372	0.15	7.40	-143.6	0.00		
1114		PUMP OFF							
1115		START SAMPLE COLLECTION							
1128		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

IPEC00263732

WELL ID: MW 63-152

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/10/10
WEATHER:	Sun + clouds 90°F	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

106.5 to 152.0

TOTAL VOLUME PURGED: _______ gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

152 4

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1300	0	PUMP ON						7 / 7.4	22
1312	0.05	24.56	1.280	0.17	7.26	-177.3	—		22
1317	0.15	25.61	1.264	0.18	7.33	-126.2	0.00		20
1327	0.25	25.69	1.279	0.11	7.37	-134.8	0.00		
1333	0.35	25.13	1.290	0.10	7.37	-128.4	0.00		
1339	0.40	24.42	1.289	0.09	7.38	-117.5	0.00		
1350	0.70	23.94	1.288	0.08	7.39	-97.0	0.00		
1400	0.85	23.60	1.285	0.07	7.39	-103.7	0.00		
1406	0.90	23.47	1.282	0.06	7.39	-104.7	0.00		
1420	1.20	23.41	1.281	0.06	7.40	-103.9	0.00		
1421		PUMP OFF							
1423		START SAMPLE COLLECTION							
1452		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 63 - 93

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/10/10
WEATHER:	Sun + clouds 90°F	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

81.5 to 100.5

SAMPLING PORT

5D 5

TOTAL VOLUME PURGED: ______ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1300	0	PUMP ON						7/7.4	22
1312	0.05	24.26	1.049	0.88	6.41	-70.5	—		22
1317	0.10	25.54	1.060	0.44	6.49	-86.1	0.00		20
1327	0.25	25.69	1.072	0.31	6.84	-74.2	0.00		
1333	0.35	24.90	1.071	0.24	6.95	-75.5	0.00		
1339	0.40	24.42	1.060	0.20	6.95	-69.4	0.00		
1350	0.75	23.93	0.994	0.17	6.96	-53.2	0.00		
1400	1.00	23.53	0.963	0.16	6.98	-49.8	0.00		
1406	1.05	23.11	0.954	0.16	7.00	-49.0	0.00		
1420	1.30	23.24	0.940	0.16	7.09	-42.7	0.00		
1429	1.50	23.80	0.935	0.17	7.19	-45.7	0.00		
1438	1.70	23.75	0.934	0.18	7.21	-47.1	0.00		
1444	1.80	23.70	0.933	0.18	7.23	-47.0	0.00		
1445		PUMP OFF							
1446		START SAMPLE COLLECTION							
1510		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 63 - 50

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 90°F

PROJECT NO: 01.0017869.92
DATE: 8/10/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

4065 to 58.0

SAMPLING PORT

50

7

TOTAL VOLUME PURGED: ______ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1300	0	PUMP ON						7/7.4	22
1303		PUMP OFF							
1310		PUMP ON							
1312	0.01	25.10	1.361	6.26	7.24	-56.7	—		
1317	0.15	23.23	1.292	3.65	7.48	-53.9	0.00	7/7.4	20
1327	0.30	23.02	1.292	2.62	7.57	-54.9	0.00		
1333	0.50	22.39	1.296	2.54	7.60	-55.1	0.00		
1339	0.75	21.63	1.292	2.43	7.60	-54.5	0.00		
1350	1.10	21.46	1.292	2.15	7.62	-57.5	0.00		
1400	1.50	20.95	1.294	2.11	7.62	-55.5	0.00		
1406	1.70	20.89	1.295	2.09	7.62	-54.3	0.00		
1414	1.90	20.97	1.298	2.07	7.64	-53.9	0.00		
1415		PUMP OFF							
1416		START SAMPLE COLLECTION							
1432		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW-66-21
SAMPLE ID: 014

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 90°F

PROJECT NO: 01.0017869.92
DATE: 8/9/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 12.14 Transducer Actual Depth 8.554

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
0941	8.975	Pump	ON						
0954	9.094	23.48	5.092	2.50	6.98	-194.1	—		0.01
1015	9.329	24.79	5.044	0.39	7.06	-231.3			0.20
1023	9.389	25.15	5.040	0.37	7.06	-229.3	126.8		0.25
1029	9.407	26.02	5.045	0.47	7.07	-230.4	31.87		0.30
1035	9.467	26.61	5.047	0.41	7.08	-225.8	28.09		0.35
1041	9.523	27.26	5.053	0.33	7.08	-227.7	26.11		0.40
1050	9.578	27.60	5.055	0.19	7.09	-241.2	22.12		0.45
1056	9.620	27.89	5.060	0.17	7.09	-236.1	14.91		0.48
1101	9.646	27.79	5.100	0.14	7.07	-264.6	9.57		0.50
1106	9.747	27.82	5.098	0.14	7.06	-268.9	9.59		0.60
1111	9.712	28.02	5.098	0.12	7.06	-262.7	10.83		0.65
1116	9.767	28.29	5.100	0.11	7.07	-260.1	11.20		0.68
1121	9.759	28.98	5.106	0.12	7.07	-241.4	8.15		0.67
1126	9.780	29.05	5.108	0.12	7.08	-236.7	8.05		0.70
1131	9.803	29.09	5.109	0.12	7.09	-240.2	8.12		0.72
1134	START SAMPLE COLLECTION								
1230	SAMPLE COMPLETED : 2 L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	3
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 0.90 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263736

WELL ID: MW-66-36
SAMPLE ID: 013

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 90°F

PROJECT NO: 01.0017869.92
DATE: 8/9/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 11.50 Transducer Actual Depth 12.956

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
0941	13.134	PUMP	ON						
1015	13.323	28.02	2.481	3.08	7.23	-88.2	—		0.01
1023	13.353	26.17	2.446	1.89	7.38	-133.7	—		0.02
1029	13.373	25.78	2.424	1.21	7.37	-137.5	5.75		0.05
1035	13.381	25.15	2.429	1.01	7.40	-139.6	5.36		0.10
1041	13.405	24.60	2.416	0.71	7.41	-136.5	4.99		0.15
1050	13.489	24.55	2.402	0.52	7.40	-128.1	3.19		0.25
1056	13.499	24.67	2.404	0.49	7.40	-137.8	3.06		0.40
1101	13.519	24.60	2.409	0.46	7.41	-139.2	3.11		0.50
1106	13.538	24.63	2.405	0.45	7.42	-138.6	3.08		0.60
1111	START	SAMPLE	COLLECTION						
1147	END SAMPLE	COLLECTION:	2L IPEC						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	1
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 0.90 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 67 - 39

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/9/10
WEATHER:	Mostly Sunny 90°F	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

28.8 to 54.3

SAMPLING PORT

39 7

TOTAL VOLUME PURGED: 2.70 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
931	0	PUMP ON						8 / 8	20
940	0.1	21.17	2.322	0.79	6.68	-121.9	—		
945	0.2	20.76	2.317	0.36	7.08	-153.3	—		
950	0.35	20.60	2.317	0.33	7.28	-161.8	—		
955	0.60	20.45	2.333	0.32	7.48	-162.3	—		
1001	0.90	20.44	2.366	0.32	7.63	-160.3	—		
1006	1.20	20.44	2.369	0.29	7.68	-159.2	—		
1011	1.35	20.46	2.375	0.29	7.71	-158.6	—		
1016	1.50	20.51	2.378	0.27	7.74	-157.2	—		
1021	1.65	20.42	2.389	0.26	7.76	-161.4	—		
1026	1.90	20.43	2.396	0.25	7.76	-160.3	—		
1031	2.15	20.44	2.400	0.25	7.76	-159.2	—		
1033	START SAMPLE COLLECTION								
1043	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	—

NOTES AND OBSERVATIONS:

IPEC00263738

WELL ID: MW 67 - 105

SAMPLE ID: 013

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 90°F

PROJECT NO: 01.0017869.92
DATE: 8/9/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

90.3 to 110.8

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

105 6

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
931	0	PUMP ON						8/8	20
940	0.10	21.54	1.560	1.48	6.21	-96.5	–		
945	0.20	21.51	1.544	0.75	6.32	-132.4	–		
950	0.30	21.35	1.539	0.60	6.38	-154.2	–		
955	0.45	21.25	1.534	0.51	6.43	-167.1	–		
1001	0.65	21.15	1.535	0.40	6.51	-183.6	–		
1006	0.80	21.21	1.533	0.37	6.54	-190.9	–		
1011	0.90	21.21	1.532	0.35	6.56	-196.4	–		
1016	1.05	21.19	1.534	0.32	6.57	-205.6	–		
1018	START SAMPLE COLLECTION								
1037	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	

NOTES AND OBSERVATIONS:

IPEC00263739

WELL ID: MW 67 - 173

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 90°F

PROJECT NO: 01.0017869.92
DATE: 8/9/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

164.8 to 188.3

TOTAL VOLUME PURGED: ______ gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

173 5

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
931	0	PUMP ON						8 | 8	20
940	0.1	21.19	1.116	0.85	6.70	-96.7	—		
945	0.2	21.44	1.154	0.67	6.71	-111.7	—		
950	0.35	21.40	1.188	0.50	6.83	-140.2	—		
955	0.50	21.36	1.221	0.32	6.95	-191.7	—		
1001	0.60	21.28	1.226	0.23	7.00	-223.7	—		
1006	0.70	21.37	1.226	0.19	7.03	-254.2	—		
1011	0.80	21.26	1.223	0.19	7.08	-276.8	—		
1016	0.90	21.30	1.216	0.16	7.09	-269.9	—		
1021	1.00	21.32	1.207	0.14	7.13	-276.8	—		
1026	1.10	21.26	1.204	0.13	7.15	-268.1	—		
1031	1.20	21.33	1.190	0.12	7.16	-266.5	—		
1036	1.30	21.36	1.185	0.11	7.19	-287.4	—		
1041	1.40	21.29	1.182	0.12	7.21	-280.8	—		
1042	START SAMPLE COLLECTION								
1107	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	—

NOTES AND OBSERVATIONS: Turbidity meter not reading accurately.

WELL ID: MW 67 - 219

SAMPLE ID: 013

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/9/10
WEATHER:	Mostly sunny 90°F	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

209 to 229.8

TOTAL VOLUME PURGED: ______ gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

219 4

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1155	0	PUMP	ON					6/6	45
1200	0.10	21.61	1.451	3.85	6.67	-141.3	—		
1210	0.30	21.09	1.147	0.46	6.39	-62.6	3.65		
1217	0.50	21.49	1.146	0.31	6.47	-82.3	0.80		
1225	1.15	21.71	1.159	0.28	6.88	-100.8	0.00		
1235	1.50	20.57	1.148	0.21	6.68	-49.1	0.00		
1240	1.75	20.76	1.150	0.23	6.76	-44.3	0.00		
1245	1.90	20.57	1.147	0.19	6.83	-45.6	0.00		
1250	2.05	20.91	1.149	0.18	6.85	-57.1	0.00		
1255	2.25	21.33	1.148	0.18	6.98	-71.2	0.00		
1300	2.40	20.99	1.149	0.15	7.02	-62.8	0.00		
1305	2.60	21.12	1.145	0.14	6.98	-73.3	0.00		
1310	2.80	21.15	1.149	0.15	7.00	-71.8	0.00		
1315	3.0	21.14	1.147	0.14	7.02	-72.7	0.00		
1316		PUMP OFF							
1317		START SAMPLE COLLECTION							
1333		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 67 - 276

SAMPLE ID: D13

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 90°F

PROJECT NO: 01.0017869.92
DATE: 8/9/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

250.8 to 281.3

TOTAL VOLUME PURGED: ______ gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

276 3

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1155	0	PUMP	ON					6 / 6	45
1200	0.10	22.07	0.951	0.77	6.95	-130.8	—		
1210	0.30	21.99	0.945	0.37	7.11	-137.5	2.14		
1217	0.40	22.43	0.945	0.31	7.16	-131.1	0.49		
1225	0.75	22.52	0.951	0.30	7.20	-125.2	0.00		
1235	1.00	21.31	0.940	0.20	7.17	-128.0	0.00		
1240	1.25	21.54	0.942	0.22	7.20	-129.0	0.00		
1245	1.50	21.36	0.937	0.19	7.21	-130.0	0.00		
1250	1.65	21.73	0.935	0.20	7.22	-132.5	0.00		
1255	1.75	22.05	0.939	0.20	7.24	-137.1	0.00		
1300	1.90	21.75	0.941	0.16	7.22	-133.4	0.00		
1305	2.00	21.84	0.938	0.19	7.24	-140.0	0.00		
1310	2.10	21.79	0.941	0.18	7.25	-138.6	0.00		
1315	2.30	21.83	0.938	0.17	7.24	-137.0	0.00		
1316		PUMP	OFF						
1317		START	SAMPLE	COLLECTION					
1336		SAMPLE	COMPLETED :		2 L	IPEC			
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 07-323

SAMPLE ID: 013

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly Sunny 90°F

PROJECT NO: 01.0017869.92
DATE: 8/9/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

317.8 to 328.3

SAMPLING PORT

323 2

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1155	0	PUMP	ON					6/6	45
1200	0.10	23.47	0.921	0.59	7.07	-157.7	—		
1210	0.30	23.32	0.895	0.31	7.18	-195.3	7.15		
1217	0.40	23.89	0.898	0.28	7.13	-268.8	2.61		
1225	0.50	24.47	0.930	0.27	7.07	-316.3	0.00		
1235	0.75	22.67	0.921	0.14	7.02	-320.7	0.00		
1240	0.90	22.84	0.918	0.13	7.03	-308.5	0.00		
1245	1.00	22.60	0.914	0.12	7.03	-297.5	0.00		
1250	1.15	22.68	0.910	0.11	7.03	-283.4	0.00		
1255	1.25	22.72	0.911	0.11	7.04	-282.0	0.00		
1259	START SAMPLE COLLECTION								
1323	SAMPLE	COMPLETED		: 2	L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

IPEC00263743

WELL ID: MW 67 - 340

SAMPLE ID: D15

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 90°F

PROJECT NO: 01.0017869.92
DATE: 8/9/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing) 335.3 to 347.9

TOTAL VOLUME PURGED: 1.65 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT 340

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1155	0	PUMP ON						6/6	45
1200	0.10	23.00	0.774	0.22	7.22	-199.0	—		
1210	0.30	23.09	0.768	0.11	7.34	-265.6	6.41		
1217	0.40	23.65	0.762	0.10	7.32	-298.8	1.47		
1225	0.50	23.52	0.770	0.10	7.80	-307.7	0.00		
1235	1.00	22.46	0.760	0.07	7.24	-305.6	0.00		
1240	1.25	22.71	0.762	0.07	7.24	-303.9	0.00		
1245	1.25	22.47	0.762	0.06	7.23	-305.8	0.00		
1250	1.35	22.51	0.763	0.06	7.23	-301.4	0.00		
1255	1.50	22.48	0.764	0.06	7.24	-307.6	0.00		
1258	START SAMPLE COLLECTION								
1320	SAMPLE COMPLETED			: 2	L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

IPEC00263744

WELL ID: MW-55-24
SAMPLE ID: 015

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 80's

PROJECT NO: 01.0017869.92
DATE: 8/6/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 9.95 Transducer Actual Depth = 5.875 Transd. reading = 7.805

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1035	5.862	PUMP ON							
1102	5.679	31.15	0.585	2.11	7.90	24.0	—		0.10
1116	5.675	29.63	0.564	1.59	7.99	-131.0	2.30		0.15
1126	5.682	29.64	0.556	1.09	8.00	-125.8	1.82		0.25
1136	5.711	29.75	0.556	0.98	8.00	~~85.0~~	1.03		0.35
1145	5.671	29.69	0.558	0.93	8.01	-103.7	0.40		0.45
1150	5.674	29.37	0.564	0.91	8.01	-135.7	0.00		0.50
1155	5.657	29.41	0.566	0.93	8.02	-129.1	0.00		0.55
1200	5.666	29.47	0.566	0.88	8.02	-118.2	0.00		0.60
1205	START SAMPLE COLLECTION								
1311	END SAMPLE COLLECTION : 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	7
flow meter	3
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 1.00 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-55-35
SAMPLE ID: 014

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 80's

PROJECT NO: 01.0017869.92
DATE: 8/6/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 10.30 Transducer Actual Depth = 21.699 Transd reading = 7.501

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1035	21.685	pump on							
1102	21.618	32.24	0.070	7.63	7.31	87.3	—		0.01
1116	21.643	32.57	0.654	7.79	7.23	29.8	0—		0.05
1126	21.571	30.90	0.644	2.49	7.35	-38.1	21.43		0.08
1136	21.661	28.66	0.574	1.55	6.88	-89.9	0.00		0.10
1145	21.580	28.48	0.564	0.94	6.74	-59.2	0.00		0.15
1150	21.566	28.49	0.563	0.89	6.84	-64.4	0.00		0.18
1155	21.543	28.70	0.563	0.82	6.96	-55.2	0.00		0.20
1200	21.585	28.82	0.563	0.72	7.11	-52.5	0.00		0.25
1205	21.574	28.88	0.564	0.67	7.28	-58.3	0.00		0.30
1210	21.555	28.87	0.566	0.67	7.36	-65.1	0.00		0.35
1215	21.555	28.86	0.568	0.67	7.38	-69.7	0.00		0.40
1220	START SAMPLE COLLECTION								
1315	END SAMPLE COLLECTION: 22 IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	1
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 0.70 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-55-54
SAMPLE ID: 015

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 80's

PROJECT NO: 01.0017869.92
DATE: 8/6/10
SAMPLER(S): CB, MB
PUMP DEPTH: ________ ft

WATER QUALITY: DTW = 10.05 Transducer Actual Depth 39.304 Transd. reading = 7841

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
1035	1008	PUMP ON							
1102	10.09	27.17	2.135	3.31	7.48	170.8	—		0.15
1116	10.09	26.53	2.069	3.08	7.50	163.0	0.00		0.25
1126	10.09	26.37	2.096	2.98	7.51	156.2	0.00		0.50
1136	10.08	26.47	2.098	2.89	7.52	150.8	0.00		0.60
1145	10.07	26.30	2.094	2.95	7.52	145.3	0.00		0.65
1150	10.06	26.44	2.095	2.90	7.53	142.4	0.00		0.70
1155	10.05	26.51	2.096	2.82	7.54	139.3	0.00		0.75
1200	10.05	26.58	2.097	2.79	7.54	137.0	0.00		0.80
1203	START SAMPLE COLLECTION								
1250	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	2
turbidity meter	2007#4293

NOTES AND OBSERVATIONS: Total volume purged 1.25 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263747

WELL ID: MW-37-22
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, HUMID, 80's

PROJECT NO: 01.0017869.92
DATE: 8/5/10
SAMPLER(S): CB/MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = Transducer Actual Depth

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
1109	9.45	PUMP	ON						
1150	9.49	31.40	3.580	5.69	7.03	-27.3	—		0.01
1200	9.50	31.64	4.052	1.66	6.99	-34.9	0.00		0.1
1213	9.51	31.75	4.219	0.97	7.02	-122.5	0.00		0.25
1220	9.51	31.76	4.240	0.72	7.03	-132.5	0.00		0.30
1225	9.51	31.78	4.251	0.68	7.03	-137.0	0.00		0.35
1230	9.51	31.78	4.265	0.57	7.02	-139.8	0.00		0.40
1235	9.52	31.80	4.272	0.59	7.03	-141.9	0.00		0.45
1240	9.52	31.81	4.277	0.57	7.03	-142.9	0.00		0.50
1245	9.52	31.82	4.282	0.55	7.03	-145.3	0.00		0.55
1246	START	SAMPLE	COLLECTION:						
1406	END SAMPLE	COLLECTION: 2L	IPEC						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	1
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Total volume purged 0.85 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263748

WELL ID: MW-37-32
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, HUMID, 80'S

PROJECT NO: 01.0017869.92
DATE: 8/5/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = Transducer Actual Depth

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
1109	15.048	PUMP	ON						
1150	15.041	31.37	4.158	2.16	7.29	197.2	—		0.01
1200	15.024	31.51	4.176	1.65	7.34	186.8	0.00		0.1
1213	15.001	31.68	4.226	1.15	7.37	173.9	0.00		0.15
1220	14.999	31.67	4.245	1.05	7.37	167.8	0.00		0.20
1225	15.016	31.73	4.243	1.03	7.38	163.8	0.00		0.25
1230	15.002	31.75	4.270	0.94	7.38	161.1	0.00		0.30
1235	15.014	31.78	4.280	0.96	7.38	156.7	0.00		0.35
1240	15.008	31.80	4.278	0.93	7.39	154.0	0.00		0.40
1242	START SAMPLE COLLECTION								
1400	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	3
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 0.60 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263749

WELL ID: MW-37-57
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY HUMID, 80's

PROJECT NO: 01.0017869.92
DATE: 8/5/10
SAMPLER(S): CB, MR
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = Transducer Actual Depth

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
1109	42.471	PUMP ON							
1150	42.355	31.34	2.295	3.57	7.50	173.4	—		0.01
1200	42.338	31.41	2.305	2.58	7.53	157.1	0.00		0.10
1213	42.335	31.52	2.309	2.58	7.53	160.8	0.00		0.15
1220	42.338	31.60	2.310	2.46	7.53	157.7	0.00		0.20
1225	42.364	31.63	2.311	2.21	7.53	155.1	0.00		0.25
1230	42.328	31.67	2.311	2.14	7.53	152.9	0.00		0.30
1235	42.332	31.70	2.310	2.07	7.53	150.6	0.00		0.35
1237	START SAMPLE COLLECTION								
1359	END SAMPLE COLLECTION 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	2
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 0.60 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263750

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-37-40
SAMPLE ID: 019

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, HUMID, 80'S

PROJECT NO: 01.0017869.92
DATE: 8/5/10
SAMPLER(S): GB

WATER COLUMN HEIGHT (ft)

40 (DTB) - 8.50 (DTW) = 31.5 ft (Water Column Height)

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 31.5 x 0.041 (Multiplier) = 1.29 gal (Well Volume)

1.29 x 1.5 = 1.94 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 2.20 gal

WATER QUALITY: DTW = Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1327	0	29.254	PUMP	ON					
1337	0.25	29.479	28.42	2.345	0.62	7.22	-243.1	—	
1347	0.50	29.556	27.75	2.283	0.38	7.25	-220.3	151.0	
1348	0.75	29.421	27.38	2.237	0.31	7.24	-228.5	824.4	
1355	1.25	29.404	27.20	2.222	0.30	7.25	-210.0	839.0	
1358	1.50	29.390	27.21	2.709	0.32	7.26	-199.2	678.3	
1402	1.75	29.775	27.33	2.197	0.37	7.26	-176.2	639.2	
1410	2.00	30.125	27.63	2.190	0.38	7.29	-122.9	351.1	
1411	START	SAMPLE	COLLECTION						
1425	END	SAMPLE	COLLECTION: 2L IPEC						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-50-42
SAMPLE ID: 022

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly cloudy 80's

PROJECT NO: 01.0017869.92
DATE: 8/4/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 8.35 Transducer Actual Depth —

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	purged H2O (gal)
1109	8.35		PUMP	ON					
1118	8.35	28.55	5.022	3.10	7.05	-218.7	—	0.8	0.01
1124	8.35	28.64	6.782	1.41	7.07	-176.9	—		
1130	8.35	28.58	7.001	1.19	7.09	-148.0	—		0.10
1140	8.35	28.48	6.991	1.14	7.12	-159.9	—		0.25
1150	8.35	28.50	6.986	0.90	7.19	-154.1	—		0.35
1200	8.35	28.56	6.984	0.82	7.17	-140.2	—		0.50
1205	8.35	28.59	6.984	0.79	7.15	-134.8	—		0.55
1210	8.35	28.59	6.980	0.80	7.15	-133.1	—		0.65
1212		START	SAMPLE	COLLECTION					
1311		SAMPLE	COMPLETED :		2 L	IPEC			
1311		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	1
turbidity meter	—

NOTES AND OBSERVATIONS: Total volume purged 0.80 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

Turbidity meter not reading accuratly. Not used.

WELL ID: MW-50-66
SAMPLE ID: 027

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly cloudy 80's

PROJECT NO: 01.0017869.92
DATE: 8/4/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 11.24 Transducer Actual Depth = 87.917 transd. reading = 3.361

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	purged Notes H_2O (gal)
1109	87.904		PUMP	ON					
1118	87.435	27.81	1.152	8.89	7.20	213.9	—	0.02	0.01
1124	87.354	27.77	2.262	4.21	7.20	222.4	—		0.02
1130	87.735	27.73	2.263	2.15	7.21	207.9	—		0.03
1140	87.459	27.67	2.272	1.92	7.23	189.0	—		
1150	87.588	27.66	2.299	1.80	7.25	190.0	—		0.04
1200	87.555	27.71	2.342	1.68	7.25	177.9	—		0.05
1205	87.471	27.78	2.343	1.67	7.25	180.4	—		0.06
1210	87.794	27.80	2.345	1.72	7.25	179.9	—		0.06
1212		START	SAMPLE	COLLECTION					
1638		SAMPLE	COMPLETED:			2 L	IPEC		
1638		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	3
turbidity meter	—

rugged reader # 2

NOTES AND OBSERVATIONS: Total volume purged 0.20 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

Turbidity mete not reading accuratly. Not used.

WELL ID: MW 54 - 37

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/4/10
WEATHER:	SUNNY, HUMID, 80's	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

29.0 to 42.0

SAMPLING PORT

37

6

TOTAL VOLUME PURGED: 3.60 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1333	0	PUMP	ON					6/4	20
1340	0.25	22.90	2.056	0.83	7.01	-63.6	—		
1350	1.00	22.41	2.026	0.52	7.03	-47.7	4.71		
1400	2.00	22.21	2.023	0.47	7.09	-38.5	5.31		
1405	2.~~25~~	22.14	2.023	0.46	7.12	-35.1	2.14		
1410	2.50	22.09	2.024	0.45	7.14	-32.2	2.90		
1415	2.75	22.05	2.025	0.44	7.16	-29.9	2.87		
1420	3.00	22.02	2.027	0.45	7.17	-27.7	2.71		
1424	START	SAMPLE	COLLECTION						
1432	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200701254

NOTES AND OBSERVATIONS:

IPEC00263754

WELL ID: MW 54 - 58

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, HUMID, 80'S

PROJECT NO: 01.0017869.92
DATE: 8/4/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

51.5 to 64.0

SAMPLING PORT

58 5

TOTAL VOLUME PURGED: 3.00 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1333	0	PUMP ON						6/4	20
1340	0.25	23.07	1.811	2.09	6.68	-63.6	———		
1350	1.00	22.53	1.769	0.29	7.12	-98.2	4.62		
1400	1.50	22.27	1.800	0.33	7.22	-107.4	4.94		
1405	2.00	22.19	1.819	0.30	7.25	-108.9	2.44		
1410	2.25	22.14	1.838	0.30	7.27	-108.9	2.57		
1415	2.50	22.09	1.840	0.29	7.29	-109.4	2.47		
1420	2.75	22.08	1.846	0.30	7.30	-109.2	2.49		
1424	START SAMPLE COLLECTION								
1435	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	200701254

NOTES AND OBSERVATIONS:

IPEC00263755

WELL ID: MW 54 - 123

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/4/10
WEATHER:	SUNNY, HUMID, 80's	SAMPLER(S):	CD, MB

SAMPLING INTERVAL (depth in ft below top of casing)

116.0 to 126.0

SAMPLING PORT

123 4

TOTAL VOLUME PURGED: 1.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1333	0	PUMP	ON					6/4	20
1340	0.05	24.44	1.790	0.67	6.09	-133.9	—		
1350	0.25	23.92	1.793	0.21	6.44	-150.3	8.76		
1400	0.50	23.49	1.796	0.12	6.83	-157.9	6.68		
1405	0.60	23.41	1.797	0.11	6.92	-156.8	3.28		
1410	0.70	23.30	1.798	0.11	6.98	-156.7	2.11		
1415	0.80	23.21	1.798	0.09	7.01	-157.1	2.01		
1420	0.90	23.15	1.799	0.09	7.03	-148.7	1.94		
1425	1.00	23.12	1.800	0.09	7.04	-147.6	1.86		
1428	START	SAMPLE	COLLECTION						
1449	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	7
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

IPEC00263756

WELL ID: MW 54 - 144

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/4/10
WEATHER:	SUNNY, HUMID, 80's	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

135.0 to 155.5

TOTAL VOLUME PURGED: ______ gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

144 3

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1043	0	PUMP ON						8/4	35
1049	0.05	23.76	1.954	2.54	6.44	12.1	—		
1100	0.75	22.82	1.977	0.36	6.44	0.9	7.21		
1110	1.15	22.47	1.944	0.33	6.58	2.1	4.93		
1116	1.25	22.28	1.948	0.34	6.65	2.3	4.64		
1122	1.50	22.14	1.951	0.29	6.71	1.8	4.96		
1128	1.75	22.09	1.952	0.27	6.70	0.6	4.56		
1132	START SAMPLE	COLLECTION							
1144	END SAMPLE	COLLECTION: 2L	IPEC						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200701254

NOTES AND OBSERVATIONS:

IPEC00263757

WELL ID: MW 54 - 173

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, HUMID, 80's

PROJECT NO: 01.0017869.92
DATE: 8/4/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

170.5 to 182.0

SAMPLING PORT

173 2

TOTAL VOLUME PURGED: 2.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1043	0	PUMP ON						8/4	35
1049	0.05	23.59	1.950	2.83	6.03	6.3	—		
1100	0.50	22.66	1.996	0.44	6.70	-29.4	8.40		
1110	1.00	22.32	1.999	0.30	7.07	-25.7	5.33		
1116	1.25	22.15	1.999	0.23	7.19	-25.6	5.64		
1122	1.50	21.96	1.999	0.25	7.24	-27.7	3.68		
1128	1.75	21.81	1.999	0.24	7.27	-32.0	3.01		
1135	2.00	21.71	1.998	0.23	7.30	-40.3	5.13		
1140	2.25	21.67	1.999	0.20	7.32	-47.6	5.17		
1145	2.50	21.63	1.998	0.22	7.32	-52.9	5.19		
1148	START SAMPLE COLLECTION								
1209	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	200701254

NOTES AND OBSERVATIONS:

WELL ID: MW 54 - 190

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, HUMID, 80's

PROJECT NO: 01.0017869.92
DATE: 8/4/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

185.0 to 203.6

SAMPLING PORT

190

TOTAL VOLUME PURGED: 3.0 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1042	0	PUMP ON						8/4	35
1049	0.05	24.35	2.050	1.33	6.00	-47.2	—		
1100	0.45	23.48	2.074	0.29	6.40	-105.2	6.73		
1110	0.80	23.00	2.087	0.19	6.83	-81.0	7.90		
1116	1.05	22.74	2.091	0.16	6.97	-64.7	5.74		
1122	1.25	22.58	2.091	0.15	7.04	-44.9	5.98		
1128	1.50	22.38	2.092	0.15	7.09	-30.5	3.42		
1135	1.60	22.27	2.093	0.16	7.11	-17.0	5.36		
1140	1.75	22.22	2.093	0.16	7.13	-14.2	2.57		
1145	2.00	22.12	2.094	0.14	7.15	-11.7			
1150	PUMP OFF: REPLACED BATTERIES IN YSI								
1158	PUMP ON								
1201	2.25	22.61	2.103	0.33	7.17	-8.4	4.23		
1206	2.40	22.45	2.102	0.20	7.17	-8.0	2.76		
1211	2.50	22.45	2.100	0.17	7.16	-3.8	2.51		
1216	2.60	22.45	2.099	0.18	7.16	-1.3	2.64		
1218	START SAMPLE COLLECTION								
1234	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200701254

NOTES AND OBSERVATIONS:

IPEC00263759

WELL ID: MW-62-18
SAMPLE ID: 014

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80'S

PROJECT NO: 01.0017869.92
DATE: 8/3/10
SAMPLER(S): CB, MB
PUMP DEPTH: ft

WATER QUALITY: DTW = 11.84 Transducer Actual Depth 4.533

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1023	4.257	PUMP	ON						
1035	4.164	26.86	5.365	2.93	7.31	140.5	—		0.05
1045	4.103	26.51	5.382	3.58	7.42	99.3	6.14		0.20
1055	4.039	27.14	5.360	3.18	7.45	90.2	2.94		0.30
1105	3.997	28.09	5.336	3.50	7.48	62.3	4.14		0.35
1110	3.957	27.77	5.377	3.21	7.49	56.3	0.49		0.40
1115	3.947	27.73	5.354	3.03	7.49	8.6	0.00		0.45
1120	3.917	27.80	5.332	2.82	7.49	-12.8	0.00		0.50
1125	3.884	27.90	5.324	2.78	7.49	-5.9	0.00		0.55
1130	3.900	27.94	5.310	2.71	7.49	-4.9	0.00		0.60
1135	3.862	27.96	5.307	2.74	7.49	-3.4	0.00		0.65
1135	START	SAMPLE	COLLECTION						
1300	END SAMPLE		COLLECTION	2L IPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	1
turbidity meter	200701254

NOTES AND OBSERVATIONS: Total volume purged 0.90 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263760

WELL ID: MW 62-37
SAMPLE ID: 014

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80'S

PROJECT NO: 01.0017869.92
DATE: 8/3/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 11.70 Transducer Actual Depth 10.952

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1023	10.810	PUMP ON							
1035	10.714	27.47	1.543	0.87	7.39	-32.6	—		0.01
1045	10.689	28.59	1.541	0.64	7.46	33.7	3.95		0.10
1055	10.652	29.06	1.542	0.58	7.50	39.8	2.31		0.15
1105	10.625	29.63	1.543	0.66	7.53	38.1	3.55		0.20
1110	10.615	29.85	1.543	0.59	7.54	48.8	1.13		0.25
1115	10.611	29.98	1.544	0.61	7.55	10.5	0.29		0.30
1120	10.607	30.05	1.544	0.58	7.56	29.5	0.00		0.35
1125	10.599	30.08	1.546	0.57	7.55	40.0	0.00		0.40
1130	10.590	30.02	1.546	0.55	7.55	34.7	0.00		0.45
1132	START SAMPLE COLLECTION								
1252	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	3
turbidity meter	200701254

NOTES AND OBSERVATIONS: Total volume purged 0.65 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 62 - 53

SAMPLE ID: 013

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/3/10
WEATHER:	Sun + clouds 80's	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

49.6 to 54.1

SAMPLING PORT

53 6

TOTAL VOLUME PURGED: 0.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1020	0	PUMP	ON					5/6	25
1030	0.01	23.36	1.543	1.12	6.81	-81.8	—		
1035	0.05	24.01	1.550	0.85	6.92	-93.5	11.86		
1042	0.15	23.89	1.556	0.70	7.11	-77.9	11.02		
1052	0.30	24.22	1.556	0.60	7.23	-60.0	10.96		
1059	0.35	24.39	1.556	0.57	7.27	-58.6	9.95		
1104	0.40	24.65	1.557	0.59	7.30	-54.2	9.89		
1109	0.45	24.85	1.560	0.58	7.32	-51.2	9.97		
1119	0.50	24.76	1.565	0.56	7.37	-48.8	9.79		
1124	0.55	24.71	1.562	0.56	7.36	-47.0	9.74		
1129	0.60	24.69	1.560	0.55	7.36	-46.3	9.71		
1130		PUMP	OFF						
1131		START	SAMPLE	COLLECTION					
1220		SAMPLE	COMPLETED	:	2 L	IPEC			
1220		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 62-71

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/3/10
WEATHER:	Sun + clouds 80's	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

61.1 to 82.6

SAMPLING PORT

71 5

TOTAL VOLUME PURGED: 1.20 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1020	0	PUMP ON						5/6	25
1030	0.01	24.16	1.387	1.47	—	-218.1	—		
1035	0.25	23.26	1.400	1.07	—	-211.1	9.72		
1042	0.40	22.10	1.382	0.71	—	-200.6	9.21		
1052	0.60	21.52	1.382	0.50	—	-170.2	8.95		
1059	0.75	21.38	1.381	0.44	—	-161.2	7.78		
1104	0.90	21.37	1.381	0.43	—	-154.7	7.71		
1109	1.05	21.31	1.380	0.41	—	-151.6	7.76		
1110		PUMP OFF							
1111		START SAMPLE COLLECTION							
1130		SAMPLE COMPLETED : 2 L IPEC							
1130		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070429 3

NOTES AND OBSERVATIONS: PH sensor stopped working properly.

IPEC00263763

WELL ID: MW 62 - 92

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 80's

PROJECT NO: 01.0017869.92
DATE: 8/3/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

88.6 to 99.1

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

92 4

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (⁰C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1020	0	PUMP ON						5/6	25
1030	0.01	24.86	1.359	0.45	6.72	-116.9	—		
1035	0.25	24.26	1.364	0.40	6.95	-132.9	9.45		
1042	0.40	23.21	1.347	0.25	6.88	-126.6	9.41		
1052	0.60	22.36	1.350	0.19	6.87	-120.5	9.38		
1059	0.80	22.30	1.349	0.16	6.87	-116.1	9.01		
1004	0.95	22.28	1.352	0.17	6.90	-111.8	9.10		
1109	1.10	22.21	1.350	0.16	6.94	-109.9	9.06		
1110		PUMP	OFF						
1112		START	SAMPLE COLLECTION						
1132		SAMPLE COMPLETED : 2L IPEC							
1132		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 62 - 138

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	8/3/10
WEATHER:	Sun + clouds 80's	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

126.1 to 143.6

TOTAL VOLUME PURGED: ______ gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

138 3

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1225	0	PUMP		ON				6/4	30
1231	0.02	22.00	1.586	1.80	6.97	-108.4	—		
1236	0.20	21.58	1.626	0.40	7.18	-125.8	8.19		
1243	0.45	21.49	1.640	0.24	7.37	-125.5	8.58		
1254	0.70	21.26	1.646	0.22	7.43	-121.6	8.69		
1304	1.00	21.22	1.645	0.19	7.45	-120.6	7.87		
1314	1.25	21.25	1.645	0.21	7.46	-118.4	7.53		
1320	1.50	20.96	1.641	0.20	7.46	-117.9	6.38		
1326	1.75	20.87	1.636	0.20	7.46	-117.4	5.59		
1332	1.90	20.83	1.627	0.19	7.46	-115.8	5.27		
1337	2.00	20.90	1.620	0.20	7.47	-116.1	3.40		
1343	2.25	20.88	1.614	0.21	7.47	-115.9	3.15		
1348	2.50	20.82	1.612	0.20	7.48	-115.3	3.26		
1350	START SAMPLE COLLECTION								
1409	END SAMPLE COLLECTION								
1409	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 62 - 182

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 80's

PROJECT NO: 01.0017869.92
DATE: 8/3/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

177.6 to 198.7

SAMPLING PORT

182

TOTAL VOLUME PURGED: ______ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1225	0	PUMP ON						6/4	30
1231	0.01	22.82	1.269	2.20	6.95	-104.8	—		
1236	0.10	22.74	1.266	0.68	6.66	-113.7	8.86		
1243	0.25	22.56	1.265	0.24	6.69	-97.0	9.07		
1254	0.50	22.30	1.265	0.17	6.87	-85.1	10.71		
1304	0.75	22.26	1.265	0.14	6.96	-64.6	9.70		
1314	1.00	22.44	1.263	0.12	7.03	-63.9	8.65		
1320	1.25	22.03	1.265	0.11	7.06	-73.8	9.37		
1326	1.50	21.91	1.264	0.10	7.07	-72.4	6.52		
1332	1.55	21.73	1.264	0.10	7.07	-73.5	6.22		
1337	1.65	21.81	1.262	0.10	7.07	-75.7	5.97		
1342	START SAMPLE COLLECTION								
1402	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: I-2
SAMPLE ID:

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 80's

PROJECT NO: 01.0017869.92
DATE: 8/2/10
SAMPLER(S): MB
PUMP DEPTH: 38.28 ft

WATER QUALITY: DTW = Transducer Actual Depth

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes	Purged H_2O gal
1116	8.495	PUMP ON							42.390	
1125	8.207	22.33	1.253	7.49	7.12	134.9	—	0.25	42.104	
1130	8.147	22.77	1.221	7.07	6.62	117.9	9.07		4	0.05
1135	8.122	23.17	1.217	6.85	6.55	102.6	7.78		42.018	
1140	8.096	23.92	1.215	7.19	6.67	82.5	4.57		41.983	0.10
1147	8.086	25.00	1.216	7.86	6.83	63.2	5.78		41.972	
1152	8.084	25.72	1.217	7.78	6.87	55.1	4.37		41.966	0.20
1200	8.129	26.38	1.220	6.89	6.90	51.9	3.66		42.017	0.23
1208	8.173	26.67	1.222	6.30	6.90	47.5	3.01		42.052	0.24
1215	8.219	26.91	1.223	6.11	6.90	42.4	2.78		42.092	
1220	8.250	27.23	1.224	6.20	6.91	38.2	2.84		42.132	0.25
1225	8.258	27.37	1.224	6.22	6.90	37.6	2.78		42.132	
1232	8.246	27.98	1.225	6.00	6.92	43.7	2.71		42.132	0.28
1237	8.252	28.02	1.225	5.97	6.93	43.4	2.67		42.132	
1242	8.254	28.06	1.225	5.93	6.93	42.6	2.64		42.132	0.30
1244		START SAMPLE COLLECTION								
1439		SAMPLE COMPLETED : 2 L IPEC								
1439		PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	1
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 0.40 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

Use peristaltic pump for low flow sampling

WELL ID: MW-42-49
SAMPLE ID: 022

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/30/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 35.03 Transducer Actual Depth 34.304

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1033	13.418	PUMP	ON					5/10	27	0
1036	12.743	17.55	1.387	7.85	7.40	127.0	—			0.10
1046	12.134	16.80	0.865	8.40	8.02	126.8	0.00		25	1.00
1053	12.332	17.51	0.916	8.23	8.06	125.4	0.87		20	1.25
1100	12.444	17.55	0.926	8.20	8.05	122.7	2.14		25	1.75
1105	12.343	16.96	0.921	7.85	8.09	122.5	1.67			2.00
1110	12.257	16.89	0.933	7.75	8.10	121.3	0.00			2.25
1115	12.181	16.91	0.941	7.92	8.10	119.6	0.00			2.50
1120	12.139	16.88	0.946	8.00	8.09	117.9	0.00			2.85
1125	12.141	16.82	0.950	8.02	8.08	116.4	0.00			3.25
1130	12.099	16.86	0.953	8.03	8.07	114.9	0.00			
1131	START	SAMPLE COLLECTION								
1138	END SAMPLE	COLLECTION: 2L IPEC								
	PUMP	OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 3.45 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263768

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-42-78
SAMPLE ID: 017

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/30/10
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

78 (DTB) - 34.10 (DTW) = 43.90 ft (Water Column Height)

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 43.90 x 0.041 (Multiplier) = 1.80 gal (Well Volume)

1.80 x 1.5 = 2.70 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 3.00 gal

WATER QUALITY: DTW = 34.10 Transducer Actual Depth 35.361

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1201	0	—	PUMP	ON					N/A	N/A	
1204	0.15	—	21.76	1.983	10.80	7.28	162.8	21.54			
1207	0.50	—	17.60	2.020	5.49	7.11	151.5	137.7			
1209	1.00	—	17.34	2.042	4.92	7.09	145.2	188.4			
1212	1.75	—	17.34	2.049	4.61	7.09	138.0	212.2			
1215	2.15	—	17.24	2.051	4.52	7.10	134.4	194.6			
1217	2.50	—	17.18	2.052	4.29	7.11	131.3	192.5			
1219	2.70	—	17.08	2.052	4.30	7.12	129.3	171.5			
1220	START	SAMPLE	COLLECTION								
1223	END	SAMPLE	COLLECTION:	2L IPEC							
	PUMP	OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263769

WELL ID: MW-53-82
SAMPLE ID: 016

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80's

PROJECT NO: 01.0017869.92
DATE: 7/30/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 59.90 Transducer Actual Depth 21.643 Trans. reading = 10.007

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Purged H₂O (gal) Notes
10:33	21.643		PUMP	ON				5/9	40	
1041	21.440	21.16	2.583	5.47	7.01	140.4	7.51	5/11	40	0.01
1046	21.468	21.83	2.478	5.03	6.78	117.9	7.21	5/13	40	
1053	21.470	22.37	2.341	5.35	6.89	83.4	7.54	5/16	40	0.1
1058	21.471	22.17	2.326	5.83	7.00	67.8	7.81	5/16	40	0.15
1103	21.428	21.54	2.242	6.50	7.08	53.1	8.86			0.25
1110	21.423	21.15	2.199	6.45	7.13	44.7	8.84			0.35
1115	21.463	21.59	2.170	6.51	7.14	41.0	9.08			0.45
1120	21.478	21.99	2.167	6.55	7.27	36.1	9.79			0.50
1126	21.490	22.14	2.164	6.55	7.29	30.5	9.97			0.60
1133	21.487	22.17	2.166	6.58	7.31	28.4	10.02			0.70
1138	21.492	22.16	2.165	6.60	7.33	28.0	10.05			0.75
1143	21.484	22.13	2.171	6.62	7.35	27.6	10.09			0.85
1145	Start sample collection.									
1232	Sample completed :				2 L	IPEC				
1232	PUMP	OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200701254

NOTES AND OBSERVATIONS:

Total volume purged 1.0 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263770

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-53-120
SAMPLE ID: 020

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80's

PROJECT NO: 01.0017869.92
DATE: 7/30/10
SAMPLER(S): CB,

WATER COLUMN HEIGHT (ft)

120 (DTB) - 60.57 (DTW) = 59.43 ft (Water Column Height)

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 59.43 x 0.041 (Multiplier) = 2.44 gal (Well Volume)

2.44 x 1.5 = 3.66 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 3.85 gal

WATER QUALITY: DTW = Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1346	0	60.57	PUMP ON								
1349	0.1	—	22.44	1.567	5.84	7.36	44.1	18.79	—	—	
1351	0.3	—	20.54	1.571	3.47	7.02	57.5	49.44	—	—	
1355	0.7	—	19.63	1.608	1.88	6.93	63.6	92.76	—	—	
1358	1.0	—	19.60	1.638	1.48	6.85	64.1	120.1	—	—	
1402	1.3	—	20.10	1.661	1.29	7.03	50.5	138.6	—	—	
1406	1.6	—	19.77	1.678	1.53	7.05	48.2	171.5	—	—	
1410	1.9	—	19.49	1.693	1.77	6.99	49.0	172.5	—	—	
1415	2.5	—	19.54	1.704	1.17	6.96	48.1	178.4	—	—	
1420	2.8	—	19.64	1.712	1.45	6.99	46.1	161.8	—	—	
1425	3.3	—	19.50	1.720	1.56	7.05	44.6	153.0	—	—	
1430	3.7	—	19.46	1.725	1.80	7.01	45.0	140.9	—	—	
1430			START SAMPLE COLLECTION								
1436			SAMPLE COMPLETED : 2 L IPEC								
1436			PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200701254

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-36-52
SAMPLE ID: 018

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: HUMID, P.CLOUDY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/29/10
SAMPLER(S): CG, MB

WATER COLUMN HEIGHT (ft)

52 (DTB) - 4.94 (DTW) = 47.06 ft (Water Column Height)

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 47.06 x 0.041 (Multiplier) = 1.93 gal (Well Volume)

1.93 x 1.5 = 2.90 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 3.25 gal

WATER QUALITY: DTW = 4.94 Transducer Actual Depth 46.610

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1013	0	46.694	PUMP	ON					
1023	0.15	40.230	28.70	1.984	0.57	7.10	-118.3	—	
1040	0.50	37.917	27.65	1.819	0.29	7.10	-102.5	5.64	
1050	0.75	37.940	27.34	1.740	0.24	7.11	-87.2	2.09	
1100	1.00	37.613	27.06	1.694	0.20	7.12	-90.1	3.10	
1110	1.15	37.621	26.96	1.684	0.20	7.12	-86.0	2.50	
1115	1.25	37.729	26.92	1.682	0.20	7.12	-80.8	4.80	
1125	1.75	37.805	26.75	1.678	0.20	7.13	-79.0	3.57	
1144	2.15	37.610	26.76	1.683	0.18	7.15	-73.1	4.02	
1150	2.25	37.316	26.71	1.686	0.18	7.15	-73.3	3.39	
1156	2.50	37.114	26.49	1.690	0.18	7.14	-76.6	3.02	
1202	2.60	37.952	26.52	1.689	0.17	7.14	-77.3	3.72	
1209	2.90	34.186	24.88	1.721	0.18	7.14	-77.0	4.27	
1211	START SAMPLE COLLECTION								
1224	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263772

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-36-41
SAMPLE ID: 013

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	7/29/10
WEATHER:	HUMID, P-CLOUDY, 80'S	SAMPLER(S):	CB, MB

WATER COLUMN HEIGHT (ft)

41 (DTB) - 4.36 (DTW) = 36.64 ft (Water Column Height)

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 36.64 x 0.041 (**Multiplier**) = 1.5 gal (**Well Volume**)

1.5 x 1.5 = 2.25 gal (**Designed Purge Volume**)

TOTAL VOLUME PURGED: 2.60 gal

WATER QUALITY: DTW = 4.36 Transducer Actual Depth N/A

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (^{0}C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1013	0	4.36	PUMP	ON					
1023	0.15	14.67	29.09	8.092	0.53	8.09	-192.1	—	
1040	0.50	19.74	28.46	3.102	0.30	7.82	-189.2	4.83	
1050	0.75	25.27	27.82	2.776	0.44	7.77	-176.5	4.27	
1100	100	24.55	27.25	2.982	0.43	7.72	-170.1	3.99	
1110	1.25	25.20	27.06	3.297	0.60	7.71	-161.8	3.78	
1115	1.40	24.67	27.03	3.540	0.80	7.70	-153.0	3.29	
1125	1.75	24.82	27.03	3.747	1.14	7.69	-138.3	2.71	
1144	2.00	25.07	27.28	3.779	1.45	7.67	-127.0	3.37	
1150	2.25	27.00	27.22	3.811	1.52	7.67	-124.8	3.74	
1155	STAR	~~SAMPLE~~ SAMPLE	COLLECTION						
CB ~~1200~~ 1223	END	SAMPLE	COLLECTION	2L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-36-24
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: HUMID, P.CLOUDY, 80'S

PROJECT NO: 01.0017869.92
DATE: 7/29/10
SAMPLER(S): CB, MB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 4.15 Transducer Actual Depth 56.719

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
1013	56.719	PUMP	ON						0
1023	56.720	30.64	7.235	0.98	7.39	49.5	—		0.05
1040	56.723	30.66	7.342	0.53	7.64	3.6	8.92		0.35
1050	56.726	30.69	7.266	1.10	7.66	21.7	2.07		0.55
1100	56.726	30.71	7.184	0.87	7.67	27.2	1.78		0.70
1110	56.730	30.72	7.134	0.60	7.67	28.9	1.85		0.80
1115	56.724	30.72	7.133	0.46	7.67	30.2	2.56		0.90
1120	56.727	30.74	7.088	0.56	7.67	29.6	2.34		1.00
1125	56.720	30.73	7.078	0.52	7.67	29.8	2.18		1.05
1130	56.720	30.75	7.063	0.51	7.67	32.2	2.25		1.15
1134	START	SAMPLE	COLLECTION						
1204	END SA	MPLE	COLLECTION	: 2L	IPEC				
	PUMP O	FF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	1
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 1.65 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 30 - 69

SAMPLE ID: 033

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	7/28/10
WEATHER:	SUNNY, 80'S	SAMPLER(S):	CB/MB

SAMPLING INTERVAL (depth in ft below top of casing)

67.3 to 71.3

SAMPLING PORT

69

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	0	PUMP ON						6/12	33
1125	0.1	29.27	6337	7.97	8.20	69.1	—		
1135	0.25	29.23	6.354	7.96	8.25	74.1	—		
1145	0.50	28.99	1.336	7.90	8.27	76.8	—		
1150	0.60	28.94	1.331	7.91	8.28	77.4	—		
1155	0.70	28.90	1.332	7.87	8.28	77.8	—	7/10	33
1200	0.75	28.87	1.330	7.89	8.27	77.4	—	8/9	33
1205	0.85	28.85	1.330	7.90	8.26	76.6	—		
1207	START SAMPLE COLLECTION								
1233	END SAMPLE COLLECTION.			2L IPEC					
				0.5 L IPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	N/A

NOTES AND OBSERVATIONS:

WELL ID: MW 30 - 84

SAMPLE ID: D24

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80'S

PROJECT NO: 01 0017869.92
DATE: 7/28/10
SAMPLER(S): GB/MB

SAMPLING INTERVAL (depth in ft below top of casing)

77.3 to 85.4

SAMPLING PORT

84

TOTAL VOLUME PURGED: 0.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	0	PUMP	ON					6/12	33
1125	0.001	27.71	0.004	5.83	7.01	175.7	—		
1135	0.002	27.90	0.004	6.12	7.01	171.6	—		
1145	0.003	28.06	0.004	6.23	7.00	166.8	—		
1155	0.004	28.19	0.004	6.28	7.00	160.7	—	7/10	33
1205	0.005	28.29	0.004	6.14	7.00	143.2	—	8/9	33
1220	0.007	28.49	0.008	5.95	7.01	78.8	—	10/7.5	40
1227	0.015	28.76	1.825	4.65	7.23	50.4	—		
1235	0.05	28.84	1.837	4.42	7.31	38.4	—		
1240	0.10	28.88	1.840	4.38	7.33	36.3	—		
1245	0.15	28.89	1.842	4.30	7.34	37.0	—		
1250	0.20	28.90	1.844	4.29	7.36	38.1	—		
1251	START	SAMPLE	COLLECTION						
1307	END SAMPLE COLLECTION: 2L IPEC								
			0.5L	IPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	N/A

NOTES AND OBSERVATIONS:

IPEC00263776

WELL ID: MW 31 - 63

SAMPLE ID: 025

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	7/27/10
WEATHER:	SUNNY, 80'S	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

55.8 to 63.8

SAMPLING PORT

63

TOTAL VOLUME PURGED: 0.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1238	0	PUMP	ON					7/10	30
1258	0.01	31.17	1.675	1.18	6.72	-42.8	—	9/10	20
1310	0.05	33.18	1.640	0.42	6.80	-46.1	10.22		
1320	0.075	34.22	1.597	0.45	7.00	-46.3	7.78		
1330	0.10	35.28	1.548	0.48	7.09	-37.0	5.70		
1338	0.12	35.81	1.529	0.52	7.10	-32.8	8.57		
1344	0.14	36.34	1.505	0.54	7.11	-28.5	4.79		
1355	0.15	36.87	1.473	0.55	7.11	-22.6	5.11		
1402	0.20	36.87	1.480	0.57	7.12	-20.9	4.48		
1415	0.25	36.86	1.485	0.58	7.13	-19.5	3.70		
1423	0.28	36.84	1.481	0.56	7.14	-19.3	3.41		
1430	0.30	36.86	1.482	0.52	7.13	-14.8	3.52		
1433	START	SAMPLE	COLLECTION						
1554	END SAMPLE COLLECTION: 2L IPEC								
				0.5 L IPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200701254

NOTES AND OBSERVATIONS:

WELL ID: MW 31 - 85

SAMPLE ID: 025

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	7/27/10
WEATHER:	SUNNY, 80's	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

69.8 to 85.4

TOTAL VOLUME PURGED: 1.0 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

85

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH* (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1238	0	PUMP ON						7/10	30
1258	0.15	28.60	2.217	1.31	32.00*	-86.5	—	9/10	20
1310	0.25	30.27	2.223	1.90	31.32*	-49.7	8.90		
1320	0.25	31.13	2.182	2.00	29.91*	-70.7	6.41		
1330	0.35	31.68	2.159	2.30	29.59	-5.5	4.27		
1338	0.45	32.23	2.127	2.25	29.91	7.7	3.95		
1344	0.50	32.73	2.123	2.42	30.33	15.9	3.76		
1355	0.60	32.74	2.103	2.62	30.03	48.2	3.79		
1402	0.70	32.35	2.093	2.76	30.18	50.5	3.82		
1415	0.80	32.28	2.086	2.78	30.07	66.8	3.77		
1423	0.90	32.25	2.077	2.76	~~30.~~ 29.98	70.8	3.81		
1430	START	SAMPLE	COLLECTION						
1522	END	SAMPLE	COLLECTION:	2L	IPEC				
				0.5 L	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200701254

NOTES AND OBSERVATIONS:

*pH SENSOR NOT WORKING PROPERLY.

IPEC00263778

WELL ID: MW 31 - 49

SAMPLE ID: 025

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/27/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

34.8 to 49.3

SAMPLING PORT

49

TOTAL VOLUME PURGED: 2.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1238	0	PUMP ON						7/10	30
1258	0.80	23.51	1.919	5.89	6.97	43.9	—	9/10	20
1310	1.15	23.31	1.819	2.65	6.88	108.7	8.29		
1320	1.25	23.63	1.766	3.63	6.89	71.2	10.71		
1330	1.50	23.67	1.733	3.67	6.84	86.8	8.65		
1338	1.75	23.75	1.712	3.71	6.83	98.2	6.58		
1344	2.00	23.69	1.683	3.80	6.82	108.5	8.89		
1355	2.35	23.42	1.653	3.98	6.79	116.2	6.23		
1402	2.5	23.31	1.644	4.03	6.79	120.1	5.47		
1415	2.75	23.29	1.639	4.07	6.78	124.9	5.80		
1423	START	SAMPLE	COLLECTION						
1443	END SAMPLE		COLLECTION: 2L IPEC						
				0.5L IPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	200702504

NOTES AND OBSERVATIONS:

IPEC00263779

WELL ID: MW 32 - 59

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 90's

PROJECT NO: 01.0017869.92
DATE: 7/27/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

28.3 to 61.3

TOTAL VOLUME PURGED: 1.05 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

59

6

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1140	0	PUMP	ON					8 / 8	26
1147	0.01	23.92	0.768	1.71	6.72	82.9	—		
1153	0.1	23.26	0.692	4.75	7.04	65.8	9.13		
1200	0.25	23.05	0.674	5.12	7.25	69.8	12.05		
1206	0.35	22.98	0.668	5.22	7.36	72.8	11.91		
1214	0.50	23.08	0.662	5.16	7.49	75.5	10.74		
1222	0.70	22.95	0.660	5.01	7.53	75.8	10.82		
1227	0.80	23.01	0.659	5.00	7.55	76.4	10.90		
1232	0.90	23.03	0.659	5.07	7.58	75.1	10.91		
1233		PUMP	OFF						
1235		START	SAMPLE	COLLECTION					
1300		SAMPLE	COMPLETED		: 2	L IPEC			
					0.5	L IPEC			
1300		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070254

NOTES AND OBSERVATIONS:

IPEC00263780

WELL ID: MW 32 - 48

SAMPLE ID: 008

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 90's

PROJECT NO: 01.0017869.92
DATE: 7/27/08
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)
28.3 to 61.3

TOTAL VOLUME PURGED: 1.35 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT
48

7

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1140	0	PUMP ON						8 8	26
1147	0.1	22.83	0.330	6.18	7.00	168.3	—		
1153	0.2	22.32	0.304	6.07	7.34	162.8	14.50		
1200	0.4	22.22	0.288	6.11	7.56	156.2	10.16		
1206	0.5	22.18	0.283	6.16	7.77	148.7	12.63		
1214	0.7	22.21	0.280	6.21	8.00	142.2	11.08		
1222	0.9	22.12	0.280	6.27	8.09	132.0	11.16		
1227	1.1				8.11	129.9	11.19		
1232	1.2	22.20	0.282	6.32	8.16	128.2	11.24		
1233		PUMP OFF							
1235		START SAMPLE COLLECTION							
1252		SAMPLE COMPLETED			: 2	L IPEC			
					0.5	L IPEC			
1252		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

IPEC00263781

WELL ID: MW 32 - 190

SAMPLE ID: 021

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	7/26/10
WEATHER:	Sun + clouds 80's	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

180.3 to 193.9

TOTAL VOLUME PURGED: 0.70 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

190

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressur (psi)
1311	0	PUMP	ON					8/8	49
1320	0.05	26.63	1.748	0.61	6.88	-169.5	—	10/9	47
1340	0.10	27.48	1.750	0.42	6.91	-199.7	13.21	10/12	49
1350	0.13	27.50	1.753	0.30	6.95	-195.0	12.05		
1400	0.15	27.51	1.764	0.22	7.04	-196.9	11.14		
1410	0.20	27.29	1.759	0.15	7.07	-188.1	9.01		
1420	0.25	27.40	1.755	0.13	7.08	-184.0	8.99		
1428	0.30	27.37	1.755	0.12	7.09	-181.2	8.96		
1434	0.40	27.39	1.755	0.11	7.10	-180.1	9.09		
1442	0.45	27.41	1.755	0.10	7.10	-178.6	9.11		
1450	0.55	27.34	1.754	0.10	7.09	-179.5	9.04		
1451		PUMP	OFF						
1453		START	SAMPLE	COLLECTION					
1541		SAMPLE	COMPLETED	:	2	L	I PEC		
					0.5	L	IPEC		
1541		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070I254

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 173

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	7/26/10
WEATHER:	Sun + clouds 80's	SAMPLER(S):	C.B, MB

SAMPLING INTERVAL (depth in ft below top of casing)

165.8 to 174.3

SAMPLING PORT

173

2

TOTAL VOLUME PURGED: 1.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1311	0	PUMP ON						8/8	49
1320	0.15	25.62	2.066	0.49	6.98	-199.2	—	10/9	47
1340	0.25	25.88	2.062	0.43	7.03	-206.0	15.91	10/12	49
1350	0.35	25.62	2.069	0.35	7.12	-212.8	16.20		
1400	0.45	25.18	2.083	0.32	7.15	-212.5	15.78		
1410	0.60	25.11	2.097	0.30	7.16	-212.2	11.54		
1420	0.70	25.12	2.099	0.29	7.16	-212.3	11.39		
1429	0.80	25.15	2.103	0.29	7.16	-211.9	11.45		
1434	0.90	25.17	2.107	0.29	7.16	-211.6	11.37		
1435		PUMP OFF							
1436		START SAMPLE COLLECTION							
1517		SAMPLE COMPLETED:				2 L	IPEC		
						0.5 L	IPEC		
1517		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	200701254

NOTES AND OBSERVATIONS:

WELL ID: MW 32-149

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 80's

PROJECT NO: 01.0017869.92
DATE: 7/26/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

147.3 to 156.8

TOTAL VOLUME PURGED: 0.80 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

149 3

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1311	0	PUMP ON						8/8	49
1320	0.10	26.80	1.556	0.61	8.25	-152.2	—	10/9	47
1340	0.13	27.47	1.602	0.46	9.28	-183.8	12.36	10/12	49
1350	0.15	27.53	1.671	0.33	9.92	-225.9	12.12		
1400	0.20	27.64	1.743	0.27	10.67	-220.2	11.77		
1410	0.30	27.63	1.760	0.21	11.16	-197.5	9.01		
1420	0.40	27.56	1.758	0.20	11.18	-192.1	9.06		
1429	0.50	27.53	1.760	0.18	11.27	-191.0	9.13		
1434	0.55	27.50	1.762	0.17	11.29	-189.1	9.15		
1442	0.65	27.51	1.764	0.17	11.36	-191.3	9.09		
1443		PUMP OFF							
1444		START SAMPLE COLLECTION							
1534		SAMPLE COMPLETED			{ 2 L IPEC				
					{ 0.5 L IPEC				
1534		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200701254

NOTES AND OBSERVATIONS: Check pH. (11.36 w/YSI #6)
* pH readings with YSI #3 = 7.25
* pH sensor in YSI #6 may not be working properly

IPEC00263784

WELL ID: MW 32 - 85

SAMPLE ID: 022

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	7/26/10
WEATHER:	Sun + clouds 80's	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

79.3 to 92.8

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

85

5

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1311	0	PUMP ON						8/8	49
1320	0.20	23.42	1.626	3.00	6.62	-68.5	—	10/9	47
1340	0.40	23.11	1.627	1.64	6.70	-71.4	12.21	10/12	49
1350	0.60	22.99	1.635	1.25	6.84	-67.6	11.76		
1400	0.80	22.92	1.638	1.25	6.87	-61.2	11.15		
1410	0.95	22.87	1.643	1.28	6.91	-60.0	9.21		
1420	1.05	22.89	1.645	1.28	6.93	-59.3	9.09		
1425	1.15	22.91	1.645	1.28	6.93	-58.8	9.01		
1430	1.25	22.93	1.645	1.28	6.94	-56.9	9.07		
1430		PUMP OFF							
1431		START SAMPLE COLLECTION							
1451		SAMPLE COMPLETED:			2 L	IPEC			
1451		PUMP OFF			0.5 L	IPEC			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070254

NOTES AND OBSERVATIONS:

IPEC00263785

WELL ID: U3-T1
SAMPLE ID: 029

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80'S

PROJECT NO: 01.0017869.92
DATE: 7/26/10
SAMPLER(S): CB, D
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 4.30 Transducer Actual Depth 2.781

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
095	2.781								
1030	2.834	PUMP	ON						
1036	2.837	27.24	1.174	2.10	7.54	2384	—		0.01
1045	2.845	27.42	1.162	1.13	7.73	204.2	5.68		0.15
1051	2.847	27.54	1.160	1.07	7.79	181.4	4.80		0.20
1055	2.854	27.59	1.159	0.69	7.82	169.1	1.97		0.25
1100	2.854	27.57	1.160	0.65	7.82	157.9	2.01		0.30
1105	2.856	27.59	1.158	0.63	7.83	154.4	1.78		0.35
1110	2.860	27.69	1.158	0.87	7.84	152.3	2.50		0.40
1115	2.862	27.83	1.156	0.81	7.85	148.2	2.83		0.50
1120	2.865	27.94	1.157	0.76	7.86	143.4	2.04		0.55
1125	2.867	28.01	1.158	0.65	7.86	141.9	1.96		0.70
1130	2.871	28.05	1.158	0.57	7.86	137.8	1.79		0.75
1135	2.877	28.06	1.157	0.60	7.86	129.8	1.84		0.80
1140	2.881	28.10	1.157	0.56	7.86	124.1	1.86		0.95
1143	START	SAMPLE	COLLECTION						
1215	END SAMPLE		COLLECTION. 2L IPEC						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	1
turbidity meter	200704293

BATTERY #5

NOTES AND OBSERVATIONS: Total volume purged 1.20 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: U3-T2
SAMPLE ID: 034

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80'S

PROJECT NO: 01.0017869.92
DATE: 7/26/10
SAMPLER(S): CB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 4.21 Transducer Actual Depth 2.618

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1313	2.754	PUMP	ON						
1323	2.717	34.97	1.628	1.37	7.69	-74.7	—		0.01
1333	2.717	35.30	1.645	0.64	7.77	-101.2	6.45		0.25
1340	2.721	35.50	1.659	0.47	7.77	-136.7	3.36		0.40
1345	2.725	35.58	1.662	0.44	7.77	-144.5	3.31		0.60
1350	2.722	35.69	1.661	0.39	7.76	-144.1	2.36		0.75
1355	2.720	35.74	1.660	0.37	7.76	-155.6	2.53		1.00
1400	2.718	35.79	1.659	0.36	7.76	-157.3	2.45		1.15
1405	2.712	35.84	1.657	0.34	7.76	-158.5	2.38		1.25
1407	START	SAMPLE	COLLECTION						
1426	END SAMPLE	COLLECTION	2L IPEC						
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	3
turbidity meter	200704293

BATTERY #5

NOTES AND OBSERVATIONS: Total volume purged 1.45 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263787

WELL ID: U3-4S
SAMPLE ID: 001

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain 80's

PROJECT NO: 01.0017869.92
DATE: 7/23/10
SAMPLER(S): CB, MB
PUMP DEPTH: 15.0 ft

WATER QUALITY: DTW = 9.45 Transducer Actual Depth —

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Purged gal. Notes
12.20	9.45	PUMP ON							
1227	9.58	30.10	1.330	2.40	7.42	-120.7	—	0.5	
1236	9.58	29.94	1.333	1.06	7.38	-121.5	16.06		
1241	9.58	27.36	1.335	1.50	7.25	-119.8	15.17		
1249	9.58	26.42	1.320	0.70	7.29	-118.9	14.51		
1258	9.58	27.91	1.321	0.61	7.32	-124.8	11.57		0.4
1307	9.58	26.52	1.329	0.47	7.31	-130.0	11.37		
1312	9.58	25.63	1.326	0.45	7.31	-128.9	11.26		0.5
1317	9.58	25.67	1.321	0.43	7.30	-126.9	11.19		
1322	9.58	25.71	1.318	0.42	7.30	-125.4	11.17		0.8
1323		START SAMPLING COLLECTION							
1412		SAMPLE COMPLETED : 2 L IPEC							
1412		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	#1
turbidity meter	20070 1254

NOTES AND OBSERVATIONS: Total volume purged 0.95 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: U3-4D
SAMPLE ID: 025

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly cloudy, showers 80's

PROJECT NO: 01.0017869.92
DATE: 07/23/10
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

27.25 (DTB) - 10.15 (DTW) = 17.10 ft (**Water Column Height**)

Well Diameter: 4 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 17.10 x 0.653 (**Multiplier**) = 11.17 gal (**Well Volume**)

11.17 x 1.5 = 16.75 gal (**Designed Purge Volume**)

TOTAL VOLUME PURGED: 8.25 gal

WATER QUALITY: DTW = Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (^{0}C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1008	0	—	PUMP ON						
1013	0.2+0.2		32.27	1.685	0.88	8.67	104.1	10.39	
1020	0.9+0.5		32.57	1.612	0.84	8.75	100.0	6.22	
1025	1.5+0.8		32.65	1.595	1.11	8.75	99.8	6.12	
1030	2.2+1.3		32.91	1.555	1.37	8.72	102.6	6.48	
1037	3.2+2.2		33.33	1.379	2.09	8.51	90.4	7.16	
1043	3.8+2.8		33.33	1.358	2.17	8.45	81.5	7.59	
1049	4.2+3.4 = 7.6		32.89	1.364	2.12	8.44	79.4	6.63	
1055	7.9		32.71	1.369	2.04	8.43	66.2	7.36	
1058	8.1		32.59	1.385	2.43	8.43	60.0	—	
1058			Well dry. Let recharge						
1058			PUMP OFF						
1258			START SAMPLE COLLECTION						
1321			SAMPLE COMPLETED : 2 L. IPEC						
1321			PUMP OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-46
SAMPLE ID: 021

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, HUMID, 88°F

PROJECT NO: 01.0017869.92
DATE: 7/23/10
SAMPLER(S): CB

WATER COLUMN HEIGHT (ft)

29.7 (DTB) - 4.49 (DTW) = 25.21 ft (Water Column Height)

Well Diameter: 4 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 25.21 x 0.653 (Multiplier) = 16.46 gal (Well Volume)

16.46 x 1.5 = 24.69 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: gal

WATER QUALITY: DTW = 4.49 Transducer Actual Depth 23.400

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
0944		23.400							
1013	0	23.403	PUMP ON						
1020	1.50	21.289	21.46	1.346	0.59	6.52	-101.0	13.50	
1032	2.50	20.281	21.99	1.354	0.33	6.85	-79.1	10.36	
1044	4.00	19.301	21.71	1.355	0.28	6.97	-95.9	9.53	
1100	6.00	18.723	21.65	1.353	0.24	7.05	-87.1	8.65	
1112	7.75	17.557	21.19	1.351	0.19	7.04	-93.4	7.44	
1125	9.00	18.129	21.64	1.352	0.22	7.15	-105.3	6.24	
1135	10.50	18.063	21.59	1.351	0.21	7.17	-108.3	7.18	
1145	12.00	17.371	21.45	1.350	0.17	7.18	-98.0	6.03	
1157	14.50	16.074	21.30	1.302	0.17	7.20	-102.5	5.76	
1220	16.25	17.697	21.25	1.121	1.14	7.19	-77.3	7.97	
1231	19.50	17.001	21.33	1.093	2.64	7.21	-51.0	10.73	
1243	22.00	15.799	21.20	1.000	4.95	7.23	-19.6	10.99	
1255	23.50	13.624	21.01	0.994	5.15	7.22	-15.1	13.73	
1300	24.70	13.651	21.06	0.951	5.70	7.24	-19.3	14.13	

1301 START SAMPLE COLLECTION
1310 END SAMPLE COLLECTION: 2L IPEC
PUMP OFF

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263790

WELL ID: MW 39 - 67

SAMPLE ID: 009

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	7/22/10
WEATHER:	Mostly sunny 90°F	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

65.0 to 70.5

TOTAL VOLUME PURGED: 2.55 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

67 7

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1224	0	PUMP	ON					6/8	40
1232	0.50	17.04	2.296	9.25	7.75	-85.0	—		
1240	0.75	16.81	2.456	10.12	7.81	-54.1	8.77		
1246	1.00	17.47	2.488	9.95	7.82	-37.9		6/15	34
1247		PUMP OFF							
1300		PUMP	ON					6/18	36
1305	1.20	22.57	2.522	8.57	7.61	-6.2	8.67	6/16	36
1311	1.25	22.63	2.523	8.33	7.57	-4.3	8.87	6/14	36
1318	1.40	22.80	2.528	7.60	7.45	+0.9	5.58		
1326	1.65	21.	2.559	7.50	7.36	1.4	7.44		
1332	1.95	20.86	2.559	7.06	7.32	3.1	5.82		
1340	2.10	20.78	2.541	6.65	7.30	5.4	3.77		
1345	2.20	20.78	2.547	6.53	7.30	6.7	3.46		
1350	2.30	20.72	2.544	6.41	7.29	8.0	3.44		
1355	2.40	20.67	2.548	6.32	7.29	9.4	3.40		
1400	START	SAMPLE	COLLECTION						
1426	END SAMPLE COLLECTION								
1426	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 39 - 84

SAMPLE ID: 009

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	7/22/10
WEATHER:	Mostly sunny 90°F	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

76.5 to 85.0

TOTAL VOLUME PURGED: 1.30 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

84 6

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1224	0	PUMP	ON					6/8	40
1232	0.08	20.66	2.407	2.33	6.69	-192.1	——		
1240	0.25	20.17	2.344	3.44	7.03	-130.4	6.88		
1246	0.30	21.10	2.322	3.61	7.07	-135.1		6/15	34
1247		PUMP OFF							
1300		PUMP	ON					6/18	36
1305	0.35	23.99	2.332	3.41	7.11	-112.4	7.43	6/16	36
1311	0.37	24.39	2.335	3.20	7.11	-109.7	7.51	6/14	36
1318	0.39	24.00	2.352	3.27	7.13	-102.5	5.39		
1326	0.50	22.70	2.396	3.75	7.17	-87.0	5.46		
1332	0.60	21.53	2.377	3.85	7.18	-77.7	5.04		
1340	0.70	21.33	2.377	3.84	7.18	-71.2	2.42		
1345	0.80	21.48	2.377	3.82	7.19	-67.0	3.77		
1350	0.90	21.36	2.380	3.91	7.18	-62.7	3.18		
1355	0.95	21.20	2.386	3.87	7.18	-58.9	2.73		
1400	1.05	21.22	2.384	3.84	7.19	-56.2	2.52		
1405	1.10	21.24	2.388	3.86	7.19	-53.1	2.56		
1410	1.15	21.24	2.389	3.82	7.19	-52.0	2.51		
1413	START	SAMPLE	COLLECTION						
1442	SAMPLE	COMPLETED :		2 L	IPEC				
1442	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	200704293

NOTES AND OBSERVATIONS:

IPEC00263792

WELL ID: MW 39-102

SAMPLE ID: 009

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 90°F

PROJECT NO: 01.0017869.92
DATE: 07/22/10
SAMPLER(S): CB, M.B

SAMPLING INTERVAL (depth in ft below top of casing)

93.0 to 103.0

TOTAL VOLUME PURGED: 1.45 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

102 4

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1224	0	PUMP ON						6/8	40
1232	0.05	21.32	2.624	1.49	6.60	-178.0	—		
1240	0.20	20.81	2.565	2.34	6.89	-133.6	6.83		
1246	0.25	21.55	2.545	2.43	6.97	-97.6		6/15	34
1247		PUMP OFF							
1300		PUMP	ON					6/18	36
1305	0.30	24.31	2.551	2.08	7.04	-61.2	6.43	6/16	36
1311	0.35	24.40	2.557	2.00	7.04	-64.2	8.74	6/14	36
1318	0.50	24.47	2.560	2.01	7.05	-62.8	6.22		
1326	0.70	22.41	2.580	2.32	7.07	-51.6	5.02		
1332	0.75	21.83	2.555	2.31	7.06	-46.9	4.97		
1340	0.80	21.82	2.552	2.22	7.06	-42.8	3.87		
1345	0.85	21.84	2.553	2.20	7.06	-39.7	3.55		
1350	0.95	21.88	2.553	2.24	7.07	-36.7	3.08		
1355	1.05	21.89	2.553	2.26	7.07	-37.0	2.54		
1400	1.10	21.82	2.552	2.23	7.07	-32.9	2.38		
1405	1.15	21.82	2.554	2.28	7.08	-32.2	2.68		
1410	1.20	21.86	2.551	2.27	7.08	-29.1	2.51		
1415	1.30	21.81	2.552	2.27	7.08	-27.5	2.49		
1420	START	SAMPLE	COLLECTION						
1452	SAMPLE	COMPLETED	: 2 L	IPEC					
1452	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 39 - 195

SAMPLE ID: 009

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 90°F

PROJECT NO: 01.0017869.92
DATE: 7/22/10
SAMPLER(S): MB, CB

SAMPLING INTERVAL (depth in ft below top of casing)

193.0 to 198.6

TOTAL VOLUME PURGED: 0.75 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

195

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1027	0	PUMP	ON					8/10	70
1040	0.01	25.11	1.354	1.12	6.71	-267.8	10.02	↓	↓
1047	0.05	25.20	1.351	0.44	6.89	-284.2	9.71		
1053	0.10	24.67	1.352	0.25	7.03	-295.4	9.60		
1058	0.15	23.97	1.346	0.18	7.08	-300.5	9.39		
1106	0.30	23.20	1.329	0.10	7.11	-303.6	8.89		
1114	0.50	23.17	1.327	0.10	7.12	-303.7	8.80		
1119	0.60	23.12	1.327	0.11	7.11	-306.1	8.87		
1120		PUMP	OFF						
1121		START	SAMPLE	COLLECTION					
1210		SAMPLE	COMPLETED	: 2		L IPEC			
1210		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200704293

NOTES AND OBSERVATIONS:

IPEC00263794

WELL ID: MW 39 . 183

SAMPLE ID: 009

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	7/22/10
WEATHER:	Mostly sunny 90°F	SAMPLER(S):	CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

169.5 to 186.0

SAMPLING PORT

183 2

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1027	0	PUMP ON						8/10	70
1040	0.1	20.80	1.166	1.05	6.88	-293.8	9.08		
1047	0.3	20.31	1.166	0.51	7.09	-288.6	8.69		
1053	0.5	19.77	1.158	0.40	7.16	-276.5	8.58		
1058	0.8	19.22	1.148	0.37	7.19	-273.1	8.56		
1106	1.1	18.76	1.130	0.34	7.17	-269.9	7.64		
1114	1.4	18.70	1.122	0.33	7.17	-272.2	7.57		
1119	1.6	18.70	1.112	0.32	7.18	-271.1	7.61		
1120		PUMP OFF							
1121		START SAMPLE COLLECTION							
1138		SAMPLE COMPLETED : 2 L IPEC							
1138		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	200704293

NOTES AND OBSERVATIONS:

IPEC00263795

WELL ID: MW 39 . 124

SAMPLE ID: 009

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly sunny 90°F

PROJECT NO: 01.0017869.92
DATE: 7/22/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

115.0 to 126.5

SAMPLING PORT

124 3

TOTAL VOLUME PURGED: 3.55 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1027	0	PUMP ON						8/10	70
1040	0.3	18.45	2.763	1.24	6.61	-286.3	17.10		
1047	0.6	17.91	2.762	0.84	6.66	-280.0	15.71		
1053	1.0	17.52	2.753	0.60	6.68	-270.6	15.05		
1058	1.8	17.17	2.744	0.83	6.69	-250.0	11.66		
1106	2.3	16.89	2.671	1.42	6.80	-180.4	10.26		
1114	2.5	16.78	2.610	1.50	6.79	-146.9	9.71		
1119	3.0	16.73	2.596	1.56	6.79	-153.1	9.85		
1127	3.4	16.69	2.595	1.54	6.78	-148.8	9.66		
1128		PUMP OFF							
1130		START SAMPLE COLLECTION							
1139		SAMPLE COMPLETED : 2 L IPEC							
1139		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-44-66
SAMPLE ID: ~~010~~ 017

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 88°F

PROJECT NO: 01.0017869.92
DATE: 7/22/10
SAMPLER(S): CB

WATER COLUMN HEIGHT (ft)

67 (DTB) - 59.73 (DTW) = 7.27 ft (Water Column Height)

Well Diameter: 2 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 7.27 x 0.163 (Multiplier) = 1.185 gal (Well Volume)

1.185 x 1.5 = 1.78 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: gal

WATER QUALITY: DTW = 59.73 Transducer Actual Depth 4.926

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (^{0}C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes DRIVE/VENT	Drive PRES
1035	0	PUMP	ON						10/9	88
1050	0.75	~~4.9~~ 1.776	18.19	1.628	7.60	6.42	64.3	—		
1055	1.00	1.771	19.44	1.629	6.06	6.56	57.9	—	10/15	
1100	1.05	1.771	20.61	1.636	5.46	6.76	45.4	107.5		
1105	1.15	1.776	21.79	1.642	4.81	6.94	36.3	87.40		
1110	1.25	1.764	23.24	1.640	4.36	7.03	30.7	93.18		
1115	1.30	1.761	23.81	1.650	4.83	7.04	19.7	—		
1120	1.35	1.759 WELL	DRY.	LET REC	HARGE	BEFORE	SAMP	LING.		
1538		START S	AMPLE	COLLEC	TION					
1547		END SA	MPLE	COLLECTI	ON: 2L	IPEC				
		PUMP O	FF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200701254

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-41-40
SAMPLE ID: O17

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: WARM, 88°F, HUMID

PROJECT NO: 01.0017869.92
DATE: 7/21/10
SAMPLER(S): CB
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 24.31 Transducer Actual Depth 29.82 SURFACE READING 41.547

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal.
1135	41.547	PUMP	ON						
1149	41.391	25.90	2.339	5.09	6.82	75.9	—		0.01
1157	41.376	26.02	2.324	4.41	6.74	82.7	533		0.10
1207	41.361	25.65	2.326	5.33	6.84	91.7	3.40		0.25
1215	41.344	25.90	2.328	5.02	6.93	91.3	4.48		0.35
1220	41.327	25.20	2.317	5.15	6.97	93.0	4.82		0.40
1225	41.333	25.17	2.312	4.85	6.96	96.0	5.14		0.45
1230	41.342	25.11	2.315	4.76	6.99	97.5	3.60		0.50
1235	41.355	25.13	2.313	4.68	7.00	98.1	3.83		0.55
1240	41.358	25.12	2.314	4.57	7.01	98.9	3.81		0.60
1245	41.367	25.13	2.312	4.56	7.01	98.3	3.84		0.65
1250	41.371	25.12	2.313	4.53	7.01	98.1	3.82		0.70
1251	START	SAMPLE	COLLECTION						
1341	END SAMPLE	COLLECTION-	2L IPEC						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	3
turbidity meter	200701254

NOTES AND OBSERVATIONS: Total volume purged 1.05 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-41-63
SAMPLE ID: 016

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, HUMID, 80'S

PROJECT NO: 01.0017869.92
DATE: 7/21/10
SAMPLER(S): CB/MB

WATER COLUMN HEIGHT (ft)

63 (DTB) - 27.52 (DTW) = 35.48 ft (Water Column Height)

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 35.48 x 0.041 (**Multiplier**) = 1.45 gal (**Well Volume**)

1.45 x 1.5 = 2.175 gal (**Designed Purge Volume**)

TOTAL VOLUME PURGED: 2.4 gal

WATER QUALITY: DTW = Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (^0C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
0852	0	PUMP	ON						
0857	0.4	~~1895~~	1895	2.078	5.38	6.82	222.0	23.88	
0900	0.9	—	18.30	2.044	4.89	6.56	198.6	26.77	
0904	1.5	—	18.20	2.097	4.69	6.32	173.6	—	
0905	PUMP OFF								
0909	PUMP ON								
0912	2.0	—	20.63	2.432	4.36	6.47	139.2	20.8	
0916	2.2	—	19.87	2.151	4.33	6.39	130.0	20.16	
0916	START SAMPLE COLLECTION								
0923	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-44-102
SAMPLE ID: ~~017~~ 018

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Hot, humid

PROJECT NO: 01.0017869.92
DATE: 7/21/10
SAMPLER(S): MB/CB

WATER COLUMN HEIGHT (ft)

102 (DTB) - 69.17 (DTW) = 32.83 ft (Water Column Height)

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 32.83 x 0.041 (Multiplier) = 1.35 (Well Volume) gal

1.35 x 1.5 = 2.01 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: gal

WATER QUALITY: DTW = 69.17 Transducer Actual Depth = 29.563 Transd. read = 23.915

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (^{0}C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1255	0		PUMP ON						
1259	0.15	—	22.31	1.261	6.78	7.28	130.7	149.0	
1304	0.80	—	20.28	1.300	7.09	7.13	129.6	224.0	
1309	1.50	—	19.02	1.285	6.76	7.11	119.0	280.0	
1312	2.0	—	19.07	1.277	6.99	7.07	115.3	460.0	
1314	2.2		19.33	1.277	6.99	7.08	111.9	621.0	
1314			PUMP OFF						
1315			START SAMPLE COLLECTION						
1320			SAMPLE COMPLETED : 2 L IPEC						
1320			PUMP OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-43-28
SAMPLE ID: 016

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: WARM, 88°F, HUMID, SUNNY

PROJECT NO: 01.0017869.92
DATE: 7/20/10
SAMPLER(S): CB/MB
PUMP DEPTH: ft

WATER QUALITY: DTW = 15.74 Transducer Actual Depth 25.971 TRANSDUCER SURFACE: 32.286

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1003	25.971	PUMP ON						5.5/22	16	
1023	25.772	28.43	4.865	4.55	7.28	207.6	—			0.01
1035	25.723	29.16	4.919	1.69	7.25	109.4	—			0.05
1045	25.662	29.77	4.933	1.35	7.24	78.6	11.98			0.10
1055	25.623	30.14	4.942	1.20	7.21	105.8	9.51			0.15
1105	25.589	30.25	4.973	1.08	7.09	63.7	10.19			0.20
1115	25.560	29.57	4.989	1.03	7.18	62.1	8.25			0.25
1125	25.515	29.45	4.973	0.73	7.16	54.1	7.65			0.30
1130	25.508	29.26	4.973	0.66	7.16	51.6	5.49			0.35
1136	25.493	29.21	4.963	0.64	7.13	49.8	6.44			0.35
1140	25.490	28.85	4.971	1.03	7.12	54.1	5.42			0.38
1145	25.481	28.83	4.958	1.00	7.15	56.5	5.55			0.42
1150	25.468	28.84	4.949	0.73	7.11	51.8	4.31			0.45
1155	25.461	28.76	4.953	0.65	7.12	49.4	5.67			0.47
1200	25.459	28.75	4.949	0.59	7.10	46.7	5.47			0.50
1205	25.447	28.73	4.946	0.55	7.08	45.0	5.26			0.52
1209	START SAMPLE COLLECTION									0.65
1348	END SAMPLE COLLECTION: 2L IPEC									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	2007012S4

NOTES AND OBSERVATIONS: Total volume purged 0.85 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-43-62
SAMPLE ID: O16

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: HUMID, 88 °F

PROJECT NO: 01.0017869.92
DATE: 7/20/10
SAMPLER(S): CB/MR
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 17.99 Transducer ~~Actual Depth~~ SURFACE 29.826 TRANSDUCER ACTUAL DEPTH 33.882

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1325	33.882	PUMP	ON					6/6	32	
1335	33.219	19.89	2.846	10.51	6.98	72.4	—			0.10
1345	33.116	20.02	2.829	3.87	6.94	68.0	7.57			0.30
1355	33.102	20.13	2.834	3.34	6.96	66.7	9.77			0.55
1400	33.109	20.00	2.832	3.27	6.98	66.3	10.44			0.75
1405	33.024	19.94	2.834	3.24	6.98	66.1	10.55		30	0.85
~~1410~~ 1412	32.990	20.41	2.832	3.11	6.98	65.8	15.67			1.05
1420	32.992	20.01	2.834	3.12	6.98	65.5	14.33			1.25
1425	32.985	20.05	2.830	2.99	6.94	64.1	11.78			1.35
1430	32.969	19.89	2.826	2.98	6.98	63.8	11.99			1.45
1435	32.970	19.81	2.826	2.99	6.97	63.5	10.96			1.55
1440	32.992	19.83	2.825	2.98	6.97	63.2	10.63			1.65
1445	32.965	19.85	2.821	2.97	6.97	63.1	10.89			1.75
1449	START	SAMPLE COLLECTION								2.15
1507	END SAMPLE COLLECTION: 2L IPEC									
	PUMP	OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070l254

NOTES AND OBSERVATIONS: Total volume purged 2.35 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-45-42
SAMPLE ID: 021

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Thunderstorms, 90's

PROJECT NO: 01.0017869.92
DATE: 7/19/10
SAMPLER(S): M. Britos

WATER COLUMN HEIGHT (ft)

42 (DTB) - 26.39 (DTW) = 15.61 ft (Water Column Height)

Well Diameter: ______ in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 15.61 x 0.163 (Multiplier) = 2.54 gal (Well Volume)

2.54 x 1.5 = 3.82 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 2.95 gal

WATER QUALITY: DTW = 26.39 Transducer Actual Depth = 14.681

Time	Volume Purged (gal)	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1049	0	14.680	PUMP ON						5.5/7	30	
1053	0.01	13.800	20.13	1.453	3.21	7.14	150.0	—	5.5/7	26	
1056	0.10	13.652	19.83	1.497	2.70	7.40	144.4				
1100	0.30	12.863	19.45	1.517	1.71	7.52	134.3	7.78			
1104	0.50	11.758	19.34	1.524	1.35	7.55	125.3	5.69			
1110	1.0	10.456	19.18	1.517	1.05	7.58	112.0	7.11	5.5/7	28	
1116	1.5	8.757	19.03	1.422	1.54	7.65	99.8	12.96			
1121	1.8	7.488	19.05	1.436	1.39	7.64	92.3	13.68			
1127	2.2	5.777	19.05	1.479	1.00	7.63	85.2	10.41			
1131	2.5	4.441	19.10	1.496	0.83	7.62	81.1	11.26			
1136	2.8	3.541	19.50	1.514	1.59	7.59	76.4	—			
		Well dry. Let well recharge									
1530		Start sample collection									
1538		Sample completed 2 L IPEC									
1538		Pump off									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

Excavation in MW-41/MW-45 area overflown after heavy rain earlier in the morning.

IPEC00263803

GZA GeoEnvironmental of New York
Modified Traditional Purge Sampling Data Sheet

WELL ID: MW-45-61
SAMPLE ID: 021

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Thunderstorms 90's

PROJECT NO: 01.0017869.92
DATE: 7/19/10
SAMPLER(S): M. Britos

WATER COLUMN HEIGHT (ft)

61 (DTB) - 26.44 (DTW) = 34.06 ft (Water Column Height)

Well Diameter: ______ in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 34.06 x 0.041 (Multiplier) = 1.40 gal (Well Volume)

1.40 x 1.5 = 2.10 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 2.25 gal

WATER QUALITY: DTW = 26.44 Transducer Actual Depth - 44.724

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (^{0}C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1246	0	—	PUMP ON						
1250	0.1	—	21.76	0.601	7.02	5.31	112.7		
1255	0.15	—	22.00	0.969	5.51	5.25	102.5	40.40	
1300	0.50	—	21.26	1.046	4.00	5.43	96.9	40.46	
1305	0.85	—	21.15	1.150	2.67	5.65	92.3	41.47	
1310	1.40	—	21.05	1.204	1.94	5.80	87.8	78.64	
1315	1.80	—	21.09	1.238	1.66	6.02	79.6	94.42	
1320	2.10	—	21.25	1.251	1.67	6.21	76.4	87.63	
1321			PUMP OFF						
1322			START SAMPLE COLLECTION						
1328			SAMPLE COMPLETED : 24 IPEC						
1328			PUMP OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

APPENDIX E POST-Q3 2010 MID-QUARTER SAMPLING DATA SHEETS

WELL ID: MW-33
SAMPLE ID: 028

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70's
2nd MID QUARTER

PROJECT NO: 01.0017869.92
DATE: 9/11/10
SAMPLER(S): M. BRITOS
PUMP DEPTH: ______ ft

WATER QUALITY: DTW = 8.800 Transducer Actual Depth 16.668 transd. read - 9.924

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
0930	16.729		PUMP	ON					
0944	16.633	21.67	0.315	6.21	7.28	-18.6	—	0.2	
0952	16.630	21.71	0.596	4.40	7.28	-54.4	—		0.12
0957	16.627	21.70	0.603	3.15	7.29	-60.1	—		
1004	16.651	21.76	0.603	2.69	7.26	-26.2	20.7		0.15
1010	16.662	21.77	0.598	2.73	7.28	-19.8	21.3		0.16
1017	16.657	21.77	0.600	2.68	7.27	-17.8	21.1		0.17
1023	16.651	21.77	0.601	2.73	7.26	-18.2	20.8		0.18
1025		START SAMPLE COLLECTION							
1328		SAMPLE COMPLETED				2	L IPEC		
						0.5	L IPEC		
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	1
turbidity meter	LaMotte 2020 2533-1701

NOTES AND OBSERVATIONS: Total volume purged 0.20 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

IPEC00263806

WELL ID: MW-111
SAMPLE ID: 034

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 70's

PROJECT NO: 01.0017869.92
DATE: 9/10/10
SAMPLER(S): M. Britos
PUMP DEPTH: 16.5 ft

WATER QUALITY: DTW = 9.10 Transducer Actual Depth 6.634 transd read – 9.543

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	purged Notes H_2O (gal)
1043	6.636		PUMP	ON					
1053	6.493	20.98	0.754	8.71	7.30	-36.8	—		
1058	6.568	20.75	0.850	2.92	7.27	-27.1	1.70		0.10
1105	6.591	20.75	0.851	1.72	7.29	-25.7	0.34		
1111	6.568	20.78	0.850	1.89	7.31	-41.2	1.07		
1116	6.584	20.78	0.848	2.06	7.31	-30.3	2.19	0.	0.16
1121	6.571	20.78	0.846	2.09	7.33	-34.9	5.34		0.17
1127	6.603	20.76	0.847	2.09	7.34	-33.6	4.91		0.18
1132	6.589	20.78	0.848	2.14	7.34	-29.2	5.07		0.19
1137	6.609	20.80	0.848	2.10	7.34	-27.8	5.21		0.20
1143	6.616	20.81	0.848	2.12	7.34	-28.8	5.14		0.21
1149	6.575	20.83	0.849	2.15	7.34	-28.1	5.18		0.22
1152		START	SAMPLE		COLLECTION				
1409		SAMPLES	COMPLETED			: 2	L	IPEC	
						0.5	L	IPEC	
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	2
turbidity meter	LaMotte 2020 2533-1701

NOTES AND OBSERVATIONS: Total volume purged ________ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 32 - 190

SAMPLE ID: 023

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 70's

PROJECT NO: 01.0017869.92
DATE: 9/9/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

180.3 to 193.9

SAMPLING PORT

190

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY: 2nd MID QUARTER

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Press (psi)
1010	0	PUMP ON						10/12	49
1017	0.05	21.62	1.761	5.01	6.70	-100.2	—	10/12	56
1027	0.20	20.87	1.752	0.29	6.91	-149.6	1.28	10/12	58
1035	0.30	20.51	1.749	0.21	7.02	-137.5	0.00		
1042	0.40	20.37	1.746	0.13	7.06	-127.9	0.00		
1047	0.50	20.29	1.744	0.14	7.08	-116.4	0.00		
1052	0.65	20.19	1.742	0.12	7.10	-114.6	0.00		
1057	0.80	20.12	1.740	0.10	7.10	-115.0	0.00		
1102	0.95	20.06	1.737	0.10	7.11	-120.0	0.00		
1107	1.10	20.09	1.735	0.09	7.11	-114.7	0.00		
1109		PUMP OFF							
1110		START SAMPLE COLLECTION							
1134		SAMPLE COMPLETED :			2	L IPEC			
					0.5	L IPEC			
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 556J Sonde	2
turbidity meter	LaMotte 2020 / 2530-1701

NOTES AND OBSERVATIONS:

IPEC00263808

WELL ID: MW 32 - 173

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70's

PROJECT NO: 01.0017869.92
DATE: 9/9/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

165.8 to 174.3

SAMPLING PORT

173

2

TOTAL VOLUME PURGED: 1.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY: 2nd MID QUARTER

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1010	0	PUMP	ON					10/12	49
1017	0.05	21.17	1.995	1.36	6.78	-135.8	—	10/12	56
1027	0.30	20.29	1.952	0.52	7.03	-95.9	0.81	10/12	58
1035	0.70	19.99	1.951	0.38	7.13	-87.0	0.00		
1042	0.85	19.88	1.961	0.34	7.15	-83.7	0.00		
1047	1.00	19.82	1.969	0.33	7.16	-80.8	0.00		
1052	1.15	19.75	1.979	0.29	7.16	-75.7	0.00		
1057	1.30	19.71	1.982	0.26	7.17	-73.5	0.00		
1102	1.40	19.68	1.987	0.25	7.17	-70.9	0.00		
1107	1.50	19.67	1.989	0.24	7.17	-68.8	0.00		
1109		PUMP	OFF						
1110		START	SAMPLE	COLLECTION					
1129		SAMPLE	COMPLETED	:		2 L	IPEC		
						0.5 L	IPEC		
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	
Turbidity meter	LaMotte 2020 / 2530-1701

NOTES AND OBSERVATIONS:

WELL ID: MW 32-149

SAMPLE ID: 021

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	9/9/10
WEATHER:	Sunny 70's	SAMPLER(S):	M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

147.3 to 156.8

TOTAL VOLUME PURGED: 1.35 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

149 3

PURGE METHOD: Double Valve Pump

WATER QUALITY: 2nd MID QUARTER

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Press (psi)
1010	0	PUMP	ON					10/12	49
1017	0.05	21.45	2060	1.99	6.93	-197.4	—	10/12	56
1027	0.20	20.71	2.129	0.54	7.08	-164.0	0.98	10/12	58
1035	0.50	20.36	2.153	0.40	7.10	-143.3	0.00		
1042	0.65	20.27	2.152	0.37	7.10	-139.8	0.00		
1047	0.75	20.21	2.151	0.36	7.11	-141.1	0.00		
1052	0.85	20.16	2.146	0.35	7.11	-142.3	0.00		
1057	1.00	20.05	2.146	0.35	7.11	-141.2	0.00		
1102	1.10	20.06	2.139	0.33	7.11	-135.1	0.00		
1107	1.20	20.07	2.137	0.34	7.11	-138.1	0.00		
1109		PUMP	OFF						
11[illegible]		START	SAMPLE	COLLECTION					
1136		SAMPLE	COMPLETED		:	2 L	IPEC		
						0.5 L	IPEC		
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	
turbidity meter	LaMotte 2020 / 2530-1701

NOTES AND OBSERVATIONS:

IPEC00263810

WELL ID: MW 32 - 85

SAMPLE ID: 024

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	9/9/10
WEATHER:	Sunny 70's	SAMPLER(S):	M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

79.3 to 92.8

TOTAL VOLUME PURGED: 0.70 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

85

5

PURGE METHOD: Double Valve Pump

WATER QUALITY: 2nd MID QUARTER

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Press (psi)
1242	0		PUMP	ON				10 / 12	49
1256	0.01	20.94	1.611	0.80	7.06	-88.2	—	8 / 14	39
1302	0.03	21.18	1.615	0.65	7.05	-75.0	0.87		
1309	0.07	21.36	1.614	0.76	7.06	-68.7	0.49		
1314	0.10	21.55	1.615	0.75	7.05	-60.5	1.21		
1320	0.15	21.91	1.616	0.71	7.06	-51.3	0.64		
1325	0.20	22.11	1.616	0.65	7.08	-45.2	0.15		
1331	0.24	22.18	1.616	0.59	7.09	-34.2	0.11		
1338	0.30	22.16	1.617	0.54	7.11	-27.3	0.26		
1343	0.32	22.08	1.617	0.52	7.11	-19.1	0.04		
1348	0.35	21.99	1.616	0.49	7.12	-7.0	0.06		
1353	0.40	22.00	1.615	0.46	7.13	0.0	0.01		
1358	0.44	22.06	1.614	0.45	7.13	+8.2	0.00		
1403	0.50	22.04	1.614	0.45	7.13	10.1	0.00		
1408	0.54	22.04	1.614	0.44	7.13	11.4	0.00		
1410		PUMP	OFF						
1411		START	SAMPLE	COLLECTION					
1529		SAMPLE	COMPLETED			2 L	IPEC		
						0.5 L	IPEC		
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	
turbidity meter	LaMotte 2020 / 2530-1701

NOTES AND OBSERVATIONS:

WELL ID: MW 32 . 59

SAMPLE ID: 021

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70's

PROJECT NO: 01.0017869.92
DATE: 9/9/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

28.3 to 61.3

SAMPLING PORT

59

6

TOTAL VOLUME PURGED: 2.55 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY: 2nd MID QUARTER

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressu (psi)
1242	0		PUMP	ON				8 / 8	26
1256	0.10	21.00	0.533	3.71	6.83	43.9	—	8 / 14	39
1302	0.30	20.32	0.658	6.19	7.22	36.2	0.00		
1309	0.70	20.28	0.669	6.36	7.36	38.6	0.00		
1314	1.0	20.38	0.672	6.44	7.44	41.9	0.00		
1320	1.30	20.56	0.674	6.54	7.50	44.0	0.00		
1325	1.55	20.42	0.674	6.61	7.53	46.6	0.00		
1331	1.80	20.41	0.673	6.77	7.55	49.0	0.00		
1338	2.10	20.37	0.673	6.85	7.57	51.5	0.00		
1343	2.40	20.3	0.673	6.78	7.58	52.3	0.00		
1345		PUMP	OFF						
1346		START	SAMPLE	COLLECTION					
1357		SAMPLE	COMPLETED		: 2	L	IPEC		
					0.5	L	IPEC		
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	La Motte 2020 / 2530-1701

NOTES AND OBSERVATIONS:

WELL ID: MW 30 - 69

SAMPLE ID: 035

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: M Sunny 80's

PROJECT NO: 01.0017869.92
DATE: 9/8/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

67.3 to 71.3

TOTAL VOLUME PURGED: 1.00 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

69 2nd MID QUARTER

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1105	0	PUMP	ON					6/12	40
1110	0.01	29.49	1.313	6.84	7.32	97.0	—		
1118	0.10	29.78	1.284	7.77	7.45	64.4	—		
1128	0.40	29.76	1.289	8.40	7.63	37.4	—		
1138	0.65	29.69	1.282	8.48	7.68	34.3	—		
1145	0.75	29.57	1.291	8.66	7.74	32.4	—		
1150	0.80	29.52	1.293	8.64	7.77	32.0	—		
1155	0.85	29.49	1.295	8.62	7.78	31.8	—		
1157		PUMP	OFF						
1159		START	SAMPLE	COLLECTION					
1235		SAMPLE	COMPLETED	:	2	L	IPEC		
					0.5	L	IPEC		
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	—

NOTES AND OBSERVATIONS:

Bott 93%
time 1021
away 1358

IPEC00263813

WELL ID: MW 30 - 84

SAMPLE ID: 026

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: M. Sunny 80's

PROJECT NO: 01.0017869.92
DATE: 9/8/10
SAMPLER(S): M BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

77.3 to 85.4

TOTAL VOLUME PURGED: 0.50 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

84 2nd MID QUARTER

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1105	0	PUMP ON						6/12	40
1110	0.01	29.63	0.914	5.10	6.81	-12.7	—		
1118	0.05	29.75	1.766	2.59	7.05	-37.3	—		
1128	0.10	29.86	1.766	2.77	7.18	-11.9	—		
1138	0.20	29.86	1.777	2.76	7.21	-8.6	—		
1145	0.25	29.75	1.781	2.60	7.23	-13.8	—		
1150	0.30	29.73	1.781	2.63	7.24	-12.9	—		
1155	0.35	29.73	1.782	2.69	7.25	-12.2	—		
1157		PUMP OFF							
1159		START SAMPLE		COLLECTION					
1314		SAMPLE COMPLETED !			2 L	IPEC			
					0.5 L	IPEC			
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	—

NOTES AND OBSERVATIONS:

Batt - 88%
Time - 1025
arrays - 1357

IPEC00263814

WELL ID: MW 31 - 85

SAMPLE ID: 027

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: M. Sunny 80's

PROJECT NO: 01.0017869.92
DATE: 9/7/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

69.8 to 85.4

TOTAL VOLUME PURGED: 1.20 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

85 2nd MID QUARTER

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1212	0	PUMP	ON					9/10	20
1229		PUMP	OFF	YSI # 3	not	working			
1233		PUMP	ON	REPLACED	YSI	# 3 with	YSI # 6		
1239	0.1	25.67	1.621	3.61	7.28	-5.5	—	8/10	28
1245	0.2	25.38	1.568	3.93	7.28	+20.3	0.00		
1252	0.3	25.13	1.541	4.26	7.27	49.9	0.00		
1300	0.45	24.75	1.530	4.36	7.26	65.7	0.00		
1310	0.65	24.56	1.526	4.33	7.25	75.9	0.00		
1320	0.85	24.40	1.529	4.34	7.24	81.8	0.00		
1325	1.0	24.44	1.527	4.34	7.24	82.7	0.00		
1330	1.05	24.48	1.526	4.29	7.24	83.1	0.00		
1333		START	SAMPLE	COLLECTION					
1414		SAMPLE	COMPLETED		: 2	L IPEC			
					0.5	L IPEC			
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3 → replaced w/ 6
turbidity meter	La Motte 2020 / 2533-1701

NOTES AND OBSERVATIONS:

IPEC00263815

WELL ID: MW 31 - 49

SAMPLE ID: 027

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	9/7/10
WEATHER:	M. Sunny 80's	SAMPLER(S):	M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

34.8 to 49.3

TOTAL VOLUME PURGED: 1.95 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

49 2nd MID QUARTER

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1212	0	PUMP	ON					9/10	20
1229		PUMP	OFF	YSI #3	not	working			
1233		PUMP	ON	"	" replaced	with	YSI #6		
1239	0.1	22.40	1.390	5.18	7.10	70.4	—	8/10	28
1245	0.35	22.02	1.413	4.12	7.11	72.3	0.00		
1252	0.60	21.80	1.416	3.76	7.10	72.0	0.00		
1300	0.80	21.61	1.415	3.58	7.12	73.1	0.00		
1310	1.15	21.50	1.415	3.63	7.15	74.3	0.00		
1320	1.50	21.35	1.416	3.65	7.16	75.4	0.00		
1325	1.70	21.40	1.416	3.62	7.16	75.8	0.00		
1330	1.80	21.33	1.418	3.67	7.17	75.9	0.00		
1333		START	SAMPLE	COLLECTION					
1349		SAMPLE	COMPLETED :		2 L	IPEC			
					0.5 L	IPEC			
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	
turbidity meter	La Motte 2020/2533-1701

NOTES AND OBSERVATIONS:

WELL ID: MW 31 - 63

SAMPLE ID: 027

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT:	Entergy - IPEC	PROJECT NO:	01.0017869.92
SITE:	Buchanan, NY	DATE:	9/7/10
WEATHER:	M. Sunny 80's	SAMPLER(S):	M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

55.8 to 63.8

TOTAL VOLUME PURGED: 0.80 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

63 2nd MID QUARTER

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1212	0	PUMP	ON					9/10	20
1229		PUMP	OFF	YSI #	3 not	working			
1233		PUMP	ON	"	" replaced	with	YSI #6		
1239	0.05	26.81	1.250	0.61	7.09	-44.6	—	8/10	28
1245	0.10	26.86	1.250	0.58	7.13	-42.5	0.00		
1252	0.15	26.77	1.219	0.93	7.15	-31.3	0.00		
1300	0.20	26.36	1.143	1.54	7.17	-9.8	0.00		
1310	0.30	26.11	1.089	2.23	7.20	+7.1	0.00		
1320	0.35	26.03	1.074	2.44	7.21	11.8	0.00		
1325	0.40	26.02	1.076	2.46	7.22	12.8	0.00		
1330	0.45	26.06	1.077	2.45	7.22	14.1	0.00		
1337	0.50	25.98	1.095	2.49	7.16	26.6	0.00		
1342	0.55	25.97	1.107	2.48	7.19	23.3	0.00		
1347	0.58	25.89	1.125	2.49	7.20	20.7	0.00		
1354	0.60	25.87	1.136	2.45	7.22	19.6	0.00		
1359	0.65	25.88	1.142	2.48	7.21	18.9	0.00		
1401		START	SAMPLING	COLLECTION					
1528		SAMPLE	COMPLETED	:	2	L	IPEC		
					0.5	L	IPEC		
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	La Motte 2020/2533-1701

NOTES AND OBSERVATIONS:

APPENDIX F DOSE CALCULATIONS

GZA

Site Indian Point
Job No. 17869.92

Prepared By: JAS
Reviewed By: mjb

Parameter Values:

year
2010

Totals				
	Total Catchment Zone (ft^2)	Total Improved Zone (ft^2)	Recharge (ft/yr)	Precipitation (ft/yr)
	3,969,765	1,432,972	0.81	3.10

Surface Area

Northern Clean Zone Improved (ft^2)	Unit 2 North Improved Zone (ft^2)	Unit 1/2 Improved Zone (ft^2)	Unit 3 North Improved Zone (ft^2)	Unit 3 South Improved Zone (ft^2)	Southern Clean Improved Zone (ft^2)
0	148,214	433,904	316,210	321,290	213,354
Northern Clean Unimproved Zone (ft^2)	**Unit 2 North Unimproved Zone (ft^2)**	**Unit 1/2 Unimproved Zone (ft^2)**	**Unit 3 North Unimproved Zone (ft^2)**	**Unit 3 South Unimproved Zone (ft^2)**	**Southern Clean Zone Unimproved (ft^2)**
106,429	204,317	438,221	323,116	268,862	585,600
Discounted Area Within Zone	**Discounted Area Within Zone**	**Discounted Area Within Zone**	**Discounted Area Within Zone**	**Discounted Area Within Zone**	**Discounted Area Within Zone**
50,265	0	291,186	106,718	17,730	144,347
Northern Clean Zone Catchment (ft^2)	**Unit 2 North Catchment Zone (ft^2)**	**Unit 1/2 Catchment Zone (ft^2)**	**Unit 3 North Catchment Zone (ft^2)**	**Unit 3 South Zone (ft^2)**	**Southern Clean Zone (ft^2)**
156,694	352,531	1,163,311	746,044	607,882	943,302

Activity (pCi/L)

Groundwater

	Northern Clean Zone Catchment	Unit 2 North	Unit 1/2	Unit 3 North	Unit 3 South Zone	Southern Clean Zone
Upper Zone Before Canal	150	337	4,018	399	678	159
Lower Zone Before Canal	150	239	3,376	1,307	545	147
	Northern Clean Zone	**Unit 2 North**	**Unit 1/2**	**Unit 3 North**	**Unit 3 South Zone**	**Southern Clean Zone**
Upper Zone After Canal	150	249	3,228	306	678	159
Lower Zone After Canal	150	478	942	500	545	147

Stormwater Discharging to Canal (pCi/L)

Storm Water for Northern Clean Zone	Storm Water for Unit 2 North	Storm Water for Unit 1/2	Storm Water for Unit 3 North	Storm Water for Unit 3 South	Storm Water for Southern Clean Zone
	1,531		0	1,172	283
NA	*Avg MH-4a*	*NA*	*Avg CB-14 and CB-34*	*Avg U3-CB-B8*	*Avg D1, C3, E6, & E10*

Stormwater Discharging to River (pCi/L)

Storm Water for Northern Clean Zone	Storm Water for Unit 2 North	Storm Water for Unit 1/2	Storm Water for Unit 3 North	Storm Water for Unit 3 South	Storm Water for Southern Clean Zone
	129	0	0		201
NA	*Avg. MH-1 and MH-12*	*Avg MH-14*	*Avg CB-15*	*NA*	*Avg E13,CB-C2*

Potential Water Received by Storm Drain System

=(Improved Area) x Precipitation

Northern Clean Area	Unit 2 North	Unit 1/2	Unit 3 North	Unit 3 South	Southern Clean Zone	Units
0	459,463	1,345,103	980,252	995,998	661,399	ft^3/yr
0	1,259	3,685	2,686	2,729	1,812	ft^3/day
0.00	6.54	19.14	13.95	14.18	9.41	GPM
0	13,010,545	38,089,071	27,757,643	28,203,511	18,728,730	L/Yr

The total amount of water available to be received by the storm system is computed as the combined area of buildings and paved areas in the catchment multiplied by the annual precipitation rate. Note this conservatively assumes that the amount of water lost to the atmosphere or other sinks after precipitation has fallen on paved or built up surfaces is zero.

Water Directly Recharged to Aquifer from Precipitation

=Unimproved Area x Recharge

Northern Clean Area	Unit 2 North	Unit 1/2	Unit 3 North	Unit 3 South	Southern Clean Zone	Units
85,782	164,680	353,206	260,431	216,703	471,994	ft^3/yr
235	451	968	714	594	1,293	ft^3/day
1.22	2.34	5.03	3.71	3.08	6.72	GPM
2,429,073	4,663,211	10,001,688	7,374,588	6,136,349	13,365,375	L/Yr

Note that this calculation reflects recharge to the aquifer in non-paved areas. The Recharge value listed above and used in this calculation reflects only that portion of precipitation that actually recharges the aquifer.

Site Indian Point
Job No. 17869.92

Prepared By: JAS
Reviewed By: mjb

Water Recharged to Aquifer (Direct Recharge Plus Storm Water Leakage Minus Building Drain Removal)

=(Direct Recharge + X% Water Received by Storm System) - (Y% x Water Removed by Building Drains)

Total Water Discharged to Aquifer

	[Northern Clean Area Catchment + (0% Storm Drain Water)][1]	[Unit 2 North + (50% Storm Drain Water)]-[5gpm]	[Unit 1/2 Area Catchment + (30% Storm Drain Water)]-[7.5 gpm]	[Unit 3 North Area Catchment + (60% Storm Drain Water)]-[7.5gpm]	[Unit 3 South Area + (10% Storm Drain Water)]	[Southern Clean Zone Area + (40% Storm Drain Water)]	Units
Upper and Lower Zone	85,782	43,099	229,768	321,614	316,303	736,553	ft^3/yr
	235	118	630	881	867	2,018	ft^3/day
	1.22	0.61	3.27	4.58	4.50	10.48	GPM
	2,429,073	1,220,421	6,506,317	9,107,080	8,956,700	20,856,867	L/Yr

[1] There are no improved surfaces in Northern Clean Zone.

Groundwater Discharged to Canal

=Water Recharged to Aquifer x X% flowing to Canal

	Northern Clean Area Catchment x 0%	Unit 2 North x 15.2%	Unit 1/2 Area Catchment 24.2%	Unit 3 North Area Catchment x 22.9%	Unit 3 South Area x68.4%	Southern Clean Zone Area x 0%	Units
Upper and Lower Zone	0	6,551	55,604	73,649	216,351	0	ft^3/yr
	0	18	152	202	593	0	ft^3/day
	0.00	0.09	0.79	1.05	3.08	0.00	GPM
	0	185,504	1,574,529	2,085,521	6,126,383	0	L/Yr

Groundwater Discharged to River

=Water Recharged to Aquifer x X% flowing to River x Y% Flowing in Appropriate Vertical Zone

	Northern Clean Area Catchment x 100% x 59.3%	Unit 2 North x 84.8% x 15.1%	Unit 1/2 Area Catchment x 75.8% x 11.7%	Unit 3 North Area Catchment x 77.1% x 47.9%	Unit 3 South Area x 31.6% x 31.3%	Southern Clean Zone Area x 100% x 55.2%	Units
Upper Zone	50,869	5,519	20,377	118,775	31,285	406,577	ft^3/yr
	139	15	56	325	86	1,114	ft^3/day
	0.72	0.08	0.29	1.69	0.45	5.79	GPM
	1,440,440	156,273	577,019	3,363,327	885,889	11,512,991	L/Yr

	Northern Clean Area Catchment x 100% x 40.7%	Unit 2 North x 84.8% x 84.9%	Unit 1/2 Area Catchment 75.8% x 88.3%	Unit 3 North Area Catchment x 77.1% x 52.1%	Unit 3 South Area x 31.6% x 68.7%	Southern Clean Zone Area x 100% x 44.8%	Units
Lower Zone	34,913	31,029	153,787	129,189	68,667	329,976	ft^3/yr
	96	85	421	354	188	904	ft^3/day
	0.50	0.44	2.19	1.84	0.98	4.70	GPM
	988,633	878,645	4,354,769	3,658,232	1,944,428	9,343,877	L/Yr

Water Remaining in Storm Drains and Discharged to Canal

=Storm Drain Water x X% Not Leaking to Groundwater and Not Discharging to River

Northern Clean Area Catchment (0% Storm Drain Water)	Unit 2 North (45% Unit 2 North and 30% of Unit 1/2 Storm Drain Water). Plus 5 gpm (351k cf/yr) from U2 footing drain.	Unit 1/2 Area Catchment (0% Storm Drain Water)	Unit 3 North Area Catchment (3% Unit 3 North Storm Drain Water)	Unit 3 South Area (3% Unit 3 North and 42% Unit 3 South Storm Drain Water)	Southern Clean Zone Area (30% Unit 1/2, 27% Unit 3 North, 43% Unit 3 South, and 55% Southern Clean Zone Storm Drain Water)	Units
0	961,289	0	29,408	447,727	1,460,247	ft^3/yr
0	2,634	0	81	1,227	4,001	ft^3/day
0	13.68	0.00	0.42	6.37	20.78	GPM
0	27,221,998	0	832,729	12,678,204	41,349,597	L/Yr

Water Remaining in Storm Drains and Discharged to River

Northern Clean Area Catchment (0% Storm Drain Water)	Unit 2 North (5% Storm Drain Water)	Unit 1/2 Area Catchment (10% Storm Drain Water)	Unit 3 North Area Catchment (7% Storm Drain Water)	Unit 3 South Area (5% Storm Drain Water)	Southern Clean Zone Area (5% Storm Drain Water)	Units
0	22,973	134,510	68,618	49,800	33,070	ft^3/yr
0	63	369	188	136	91	ft^3/day
0	0.33	1.91	0.98	0.71	0.47	GPM
0	650,527	3,808,907	1,943,035	1,410,176	936,437	L/Yr

Facility Groundwater Flux Calculation

Site Indian Point
Job No. 17869.92

Prepared By: JAS
Reviewed By: mjb

Flux Calculations

Conceptual Model: Migration Pathway Summary

	Northern Clean Area	Unit 2 North	Unit 1/2	Unit 3 North	Unit 3 South	Southern Clean Zone
GW	100% Upper and Lower Zone To River	84.8% Upper Zone and Lower Zone Flow To River. 15.2% Upper Zone and Lower Zone Flow to Canal	75.8% Upper Zone and Lower Zone To River. 24.2% Upper Zone and Lower Zone to Canal	77.1% Upper Zone and Lower Zone To River. 22.9% Upper Zone and Lower Zone to Canal	31.6% Upper Zone and Lower Zone To River. 68.4% Upper Zone and Lower Zone to Canal	100% Upper and Lower Zone To River
SW	NA	To Canal (Storm Water Considered Clean; Estimated at 5.5 GPM) and To River (5% Storm Water)	To Canal (60% Storm Water) and To River (10% Storm Water)	To Canal (33% Storm Water) and To River (7% Storm Water)	To Canal (85% Storm Water) and To River (5% Storm Water)	To Canal (55% Storm Water) and To River (5% Storm Water)

Flux (pCi/Yr)

	North Clean Area	Unit 2 North	Unit 1/2	Unit 3 North	Unit 3 South	South Clean Zone	Total
GW to River-Upper Zone	2.16E+08	3.90E+07	1.86E+09	1.03E+09	6.01E+08	1.83E+09	**5.57E+09**
GW to River-Lower Zone	1.48E+08	4.20E+08	4.10E+09	1.83E+09	1.06E+09	1.37E+09	**8.93E+09**
GW to Canal	0.00E+00	6.25E+07	6.33E+09	8.31E+08	4.15E+09	0.00E+00	**1.14E+10**
SW to Canal	NA	4.17E+10	0.00E+00	0.00E+00	1.49E+10	1.17E+10	**6.82E+10**
SW to River	NA	8.40E+07	0.00E+00	0.00E+00	0.00E+00	1.89E+08	**2.73E+08**
						Curies/Yr ==>	**0.09**

Notes:

The recharge rate used herein, 26% of precipitation (~10 in/yr), is within the range of values discussed in the USGS modeling report[1]. The reported recharge ranged from 3.6 inches/year to 7.5 inches/year for a till to 20 inches per year for coarse grained glacially stratified deposits. A yearly rolling average precipitation value measured at the Facility meteorological station is also used in the computations. The catchment area was defined using an AutoCAD topo map for the Site and surrounding area. The catchment was defined by starting at the area marked "line of water grant" and tracking east, away from the River, to define portions of the land surface contributing water to the selected discharge zone. Calculations assume that run-off or overland flow in unimproved areas of the Site is negligible, there are no changes in storage and the Hudson River is a gaining stream.

1. USGS. Water Use, Ground-Water Recharge and Availability, and Quality of Water in the Greenwich Area, Fairfield County, Connecticut and Westchester County, New York, 2000-2002

APPENDIX G UNIT 2 TRITIUM PLUME TREND ANALYSES

TABLE G1
MANN-KENDALL TREND EVALUATION SUMMARY
TRITIUM IN GROUNDWATER NEAR UNIT 2
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID	Number of Data Points	Number of Times below MDC	Minimum Tritium Activity (pCi/L)	Maximum Tritium Activity (pCi/L)	Mann-Kendall Statistic (S)	Normalized Test Statistic (Z)	Probability	Trend at 95% Level of Significance
MW-30-69	39	0	7.36E+04	6.01E+05	-164	-1.97	0.976	decreasing
MW-30-84	26	0	3.78E+03	1.25E+04	92	2.01	0.978	increasing
MW-31-49	38	0	2.98E+02	1.04E+05	63	0.78	0.782	no trend
MW-31-63	26	0	5.00E+03	7.35E+04	124	2.71	0.997	increasing
MW-31-85	26	0	3.17E+02	2.25E+04	128	2.80	0.997	increasing
MW-32-59	25	0	4.13E+02	1.55E+05	54	1.24	0.892	no trend
MW-32-85	24	0	5.42E+03	1.44E+04	94	2.31	0.989	increasing
MW-32-149	21	0	1.99E+02	1.05E+04	-2	-0.03	0.512	no trend
MW-32-173	19	0	4.31E+02	5.89E+03	-9	-0.28	0.610	no trend
MW-32-190	23	0	1.58E+03	1.13E+04	-175	-4.60	1.000	decreasing
MW-33	26	0	3.69E+03	2.64E+05	-167	-3.66	1.000	decreasing
MW-35	20	0	1.04E+03	1.19E+05	-88	-2.82	0.998	decreasing
MW-36-24	17	2	1.54E+02	3.42E+04	16	0.62	0.732	no trend
MW-36-41	12	0	6.11E+03	5.52E+04	-33	-2.19	0.986	decreasing
MW-36-52	17	0	5.97E+03	2.68E+04	-94	-3.83	1.000	decreasing
MW-37-22	19	0	2.26E+03	3.49E+04	-55	-1.89	0.971	decreasing
MW-37-32	19	0	2.49E+03	3.01E+04	-61	-2.10	0.982	decreasing
MW-37-40	18	0	4.22E+03	1.70E+04	-93	-3.48	1.000	decreasing
MW-37-57	19	0	4.05E+03	4.48E+04	-87	-3.01	0.999	decreasing
MW-42-49	19	0	1.12E+03	7.22E+04	-45	-1.54	0.938	no trend
MW-42-78	14	0	3.46E+02	1.28E+03	-17	-0.88	0.809	no trend
MW-49-26	21	0	2.82E+03	1.54E+04	-174	-5.22	1.000	decreasing
MW-49-42	21	0	2.20E+03	1.13E+04	-164	-4.92	1.000	decreasing
MW-49-65	21	0	1.26E+03	5.76E+03	-147	-4.41	1.000	decreasing
MW-50-42	22	4	1.01E+02	9.75E+03	-57	-1.58	0.943	no trend
MW-50-66	26	0	2.08E+03	1.08E+04	-201	-4.41	1.000	decreasing
MW-53-82	16	0	4.54E+02	1.32E+04	-2	-0.05	0.518	no trend
MW-53-120	19	0	3.81E+03	9.61E+03	-111	-3.85	1.000	decreasing
MW-55-24	15	0	7.82E+02	3.08E+03	-18	-0.84	0.800	no trend
MW-55-35	14	0	8.53E+02	9.04E+03	-35	-1.86	0.969	decreasing
MW-55-54	15	0	5.47E+03	1.31E+04	-27	-1.29	0.901	no trend
MW-111	35	0	6.81E+03	5.78E+05	-264	-3.74	1.000	decreasing
DOWNGRADIENT WELLS								
MW-66-21	14	0	8.28E+01	3.57E+03	-7	-0.33	0.629	no trend
MW-66-36	13	0	3.05E+03	9.10E+03	-62	-3.72	1.000	decreasing
MW-67-39	12	0	2.55E+03	5.07E+03	-36	-2.40	0.992	decreasing
MW-67-105	13	0	1.26E+03	2.93E+03	-46	-2.75	0.997	decreasing
MW-67-173	13	0	6.72E+02	1.05E+03	-41	-2.44	0.993	decreasing
MW-67-219	12	0	9.22E+02	1.44E+03	-4	-0.21	0.581	no trend
MW-67-276	12	0	6.79E+02	1.18E+03	-7	-0.41	0.660	no trend
MW-67-323	12	0	3.13E+02	1.29E+03	20	1.30	0.904	no trend
MW-67-340	12	0	3.69E+02	6.69E+02	28	1.85	0.968	increasing

Notes: Calculations based on Mann-Kendall trend evaluations as presented in U.S. EPA Practical Methods for Data Analysis, U.S. EPA QA/G-9 QA00 UPDATE, July 2000, Section 4.3.4

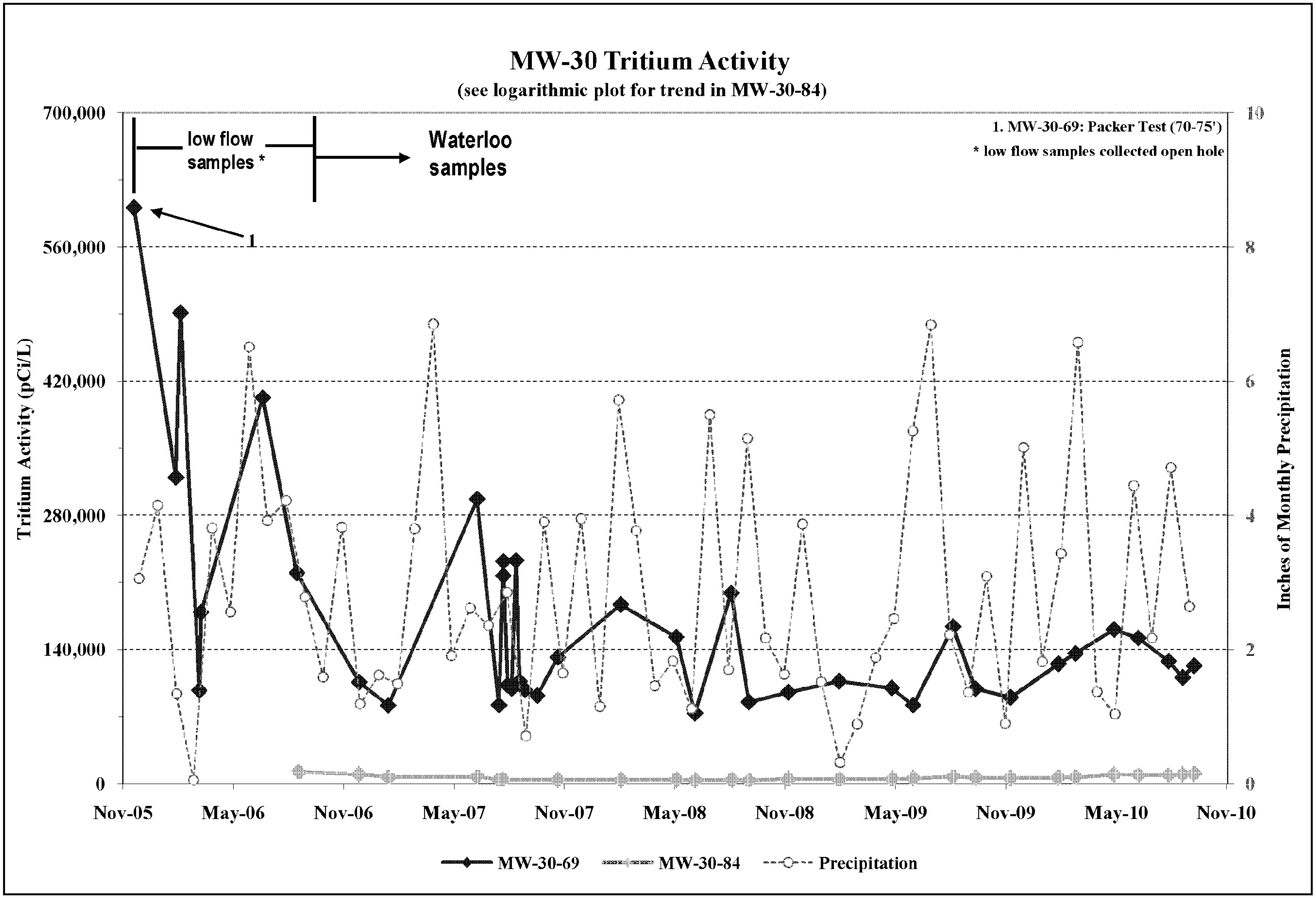

MW-30 Tritium Activity
(see logarithmic plot for trend in MW-30-84)
Tritium Activity (pCi/L)
Inches of Monthly Precipitation
700,000
560,000
420,000
280,000
140,000
0
10
8
6
4
2
0
low flow samples *
Waterloo samples
1
1. MW-30-69: Packer Test (70-75')
* low flow samples collected open hole
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
MW-30-69
MW-30-84
Precipitation

FIGURE G1

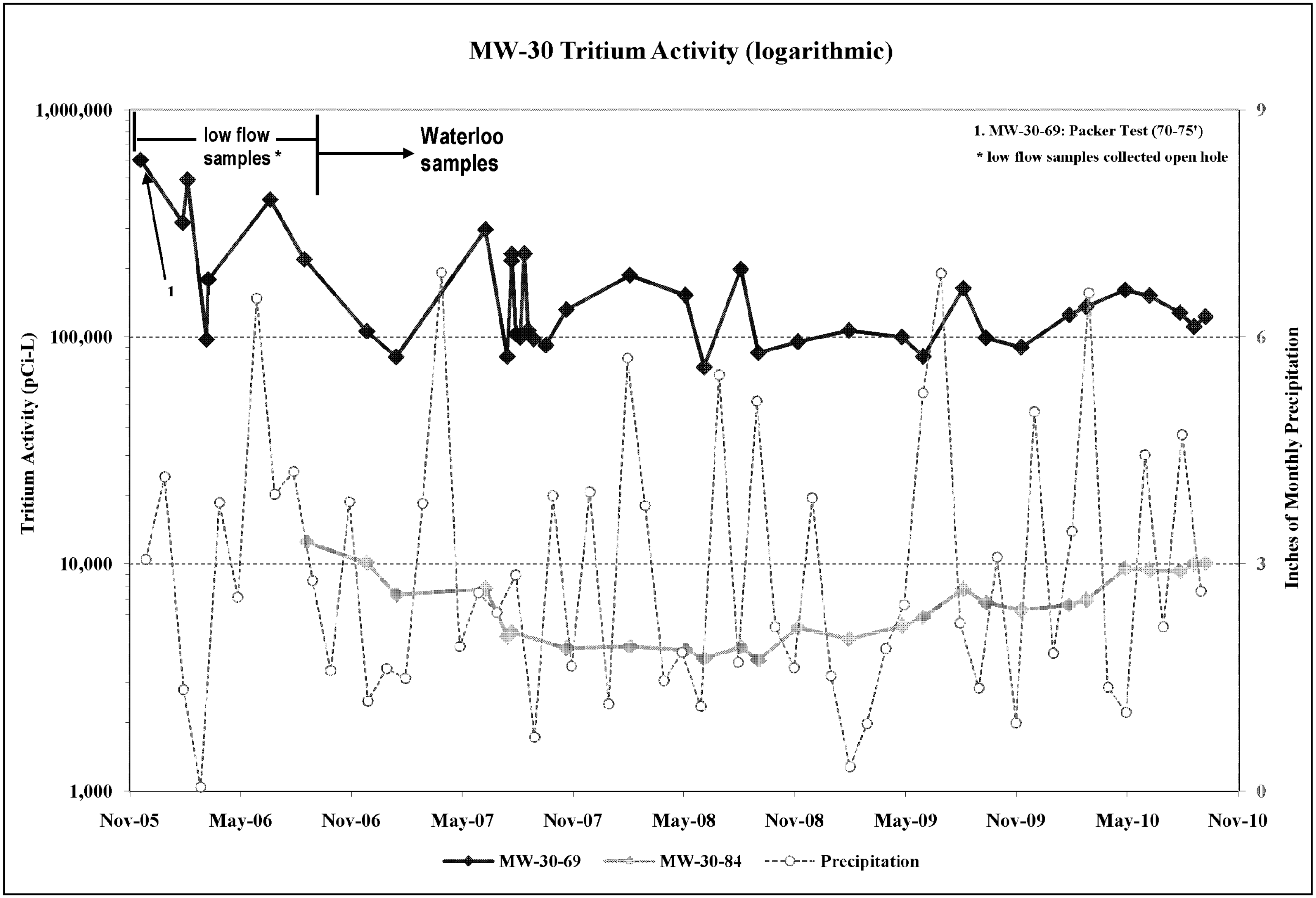

MW-30 Tritium Activity (logarithmic)
low flow samples *
Waterloo samples
1
1. MW-30-69: Packer Test (70-75')
* low flow samples collected open hole
Tritium Activity (pCi-L)
1,000,000
100,000
10,000
1,000
Inches of Monthly Precipitation
9
6
3
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
MW-30-69
MW-30-84
Precipitation

FIGURE G1a

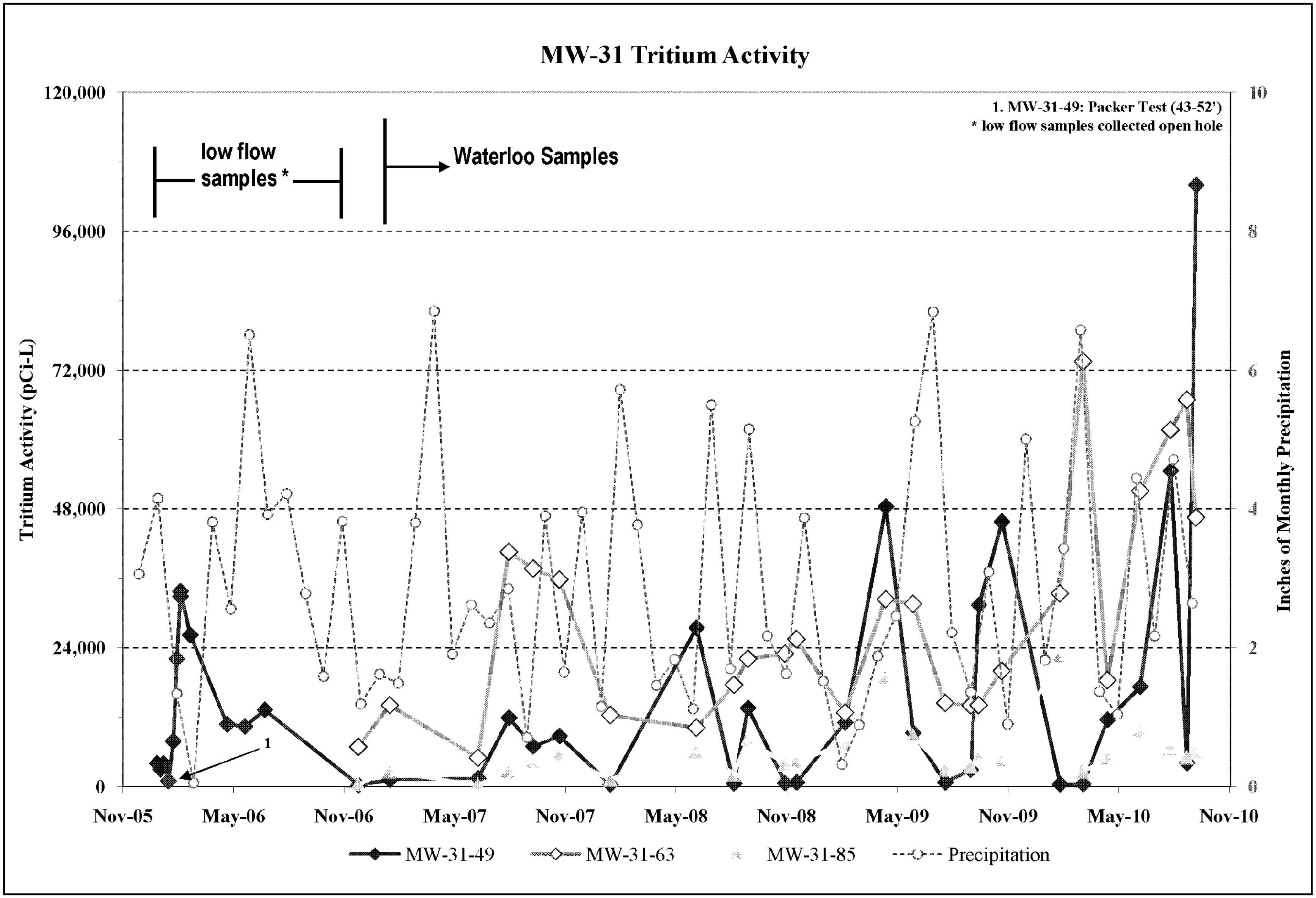


FIGURE G2

IPEC00263826

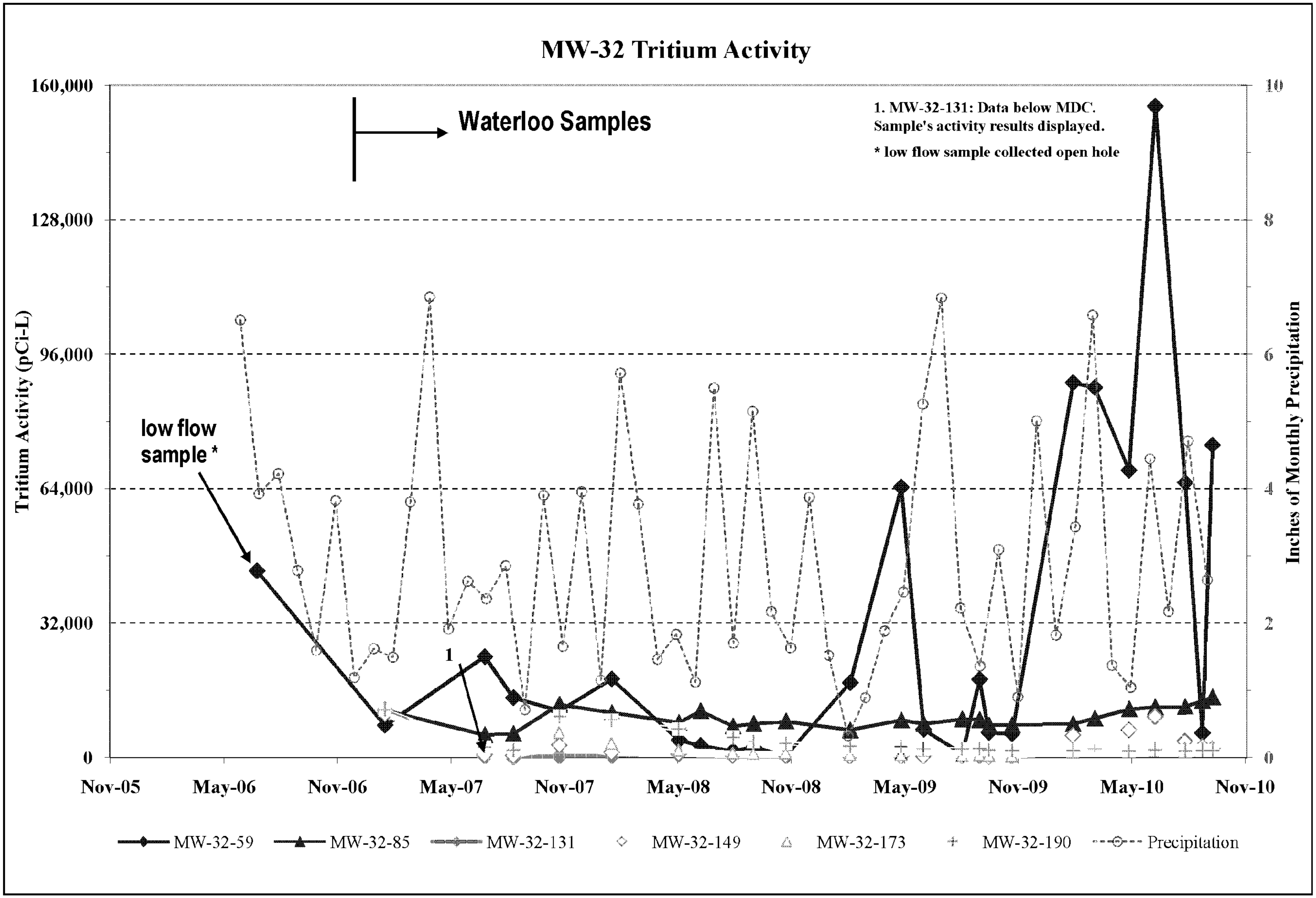

MW-32 Tritium Activity
Waterloo Samples
1. MW-32-131: Data below MDC. Sample's activity results displayed.
* low flow sample collected open hole
low flow sample *
1
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
160,000
128,000
96,000
64,000
32,000
0
10
8
6
4
2
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
MW-32-59
MW-32-85
MW-32-131
MW-32-149
MW-32-173
MW-32-190
Precipitation

FIGURE G3

MW-33 Tritium Activity

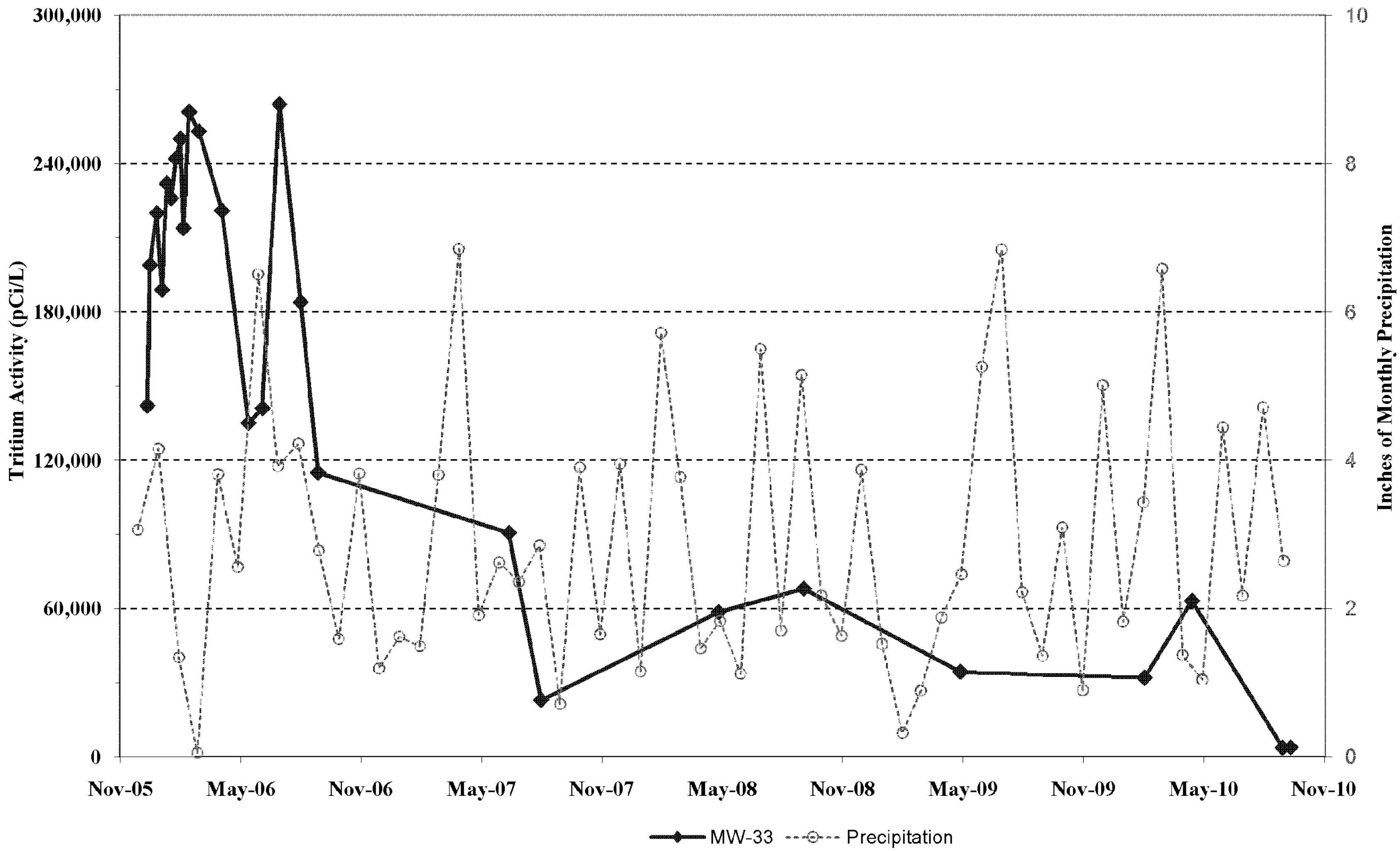
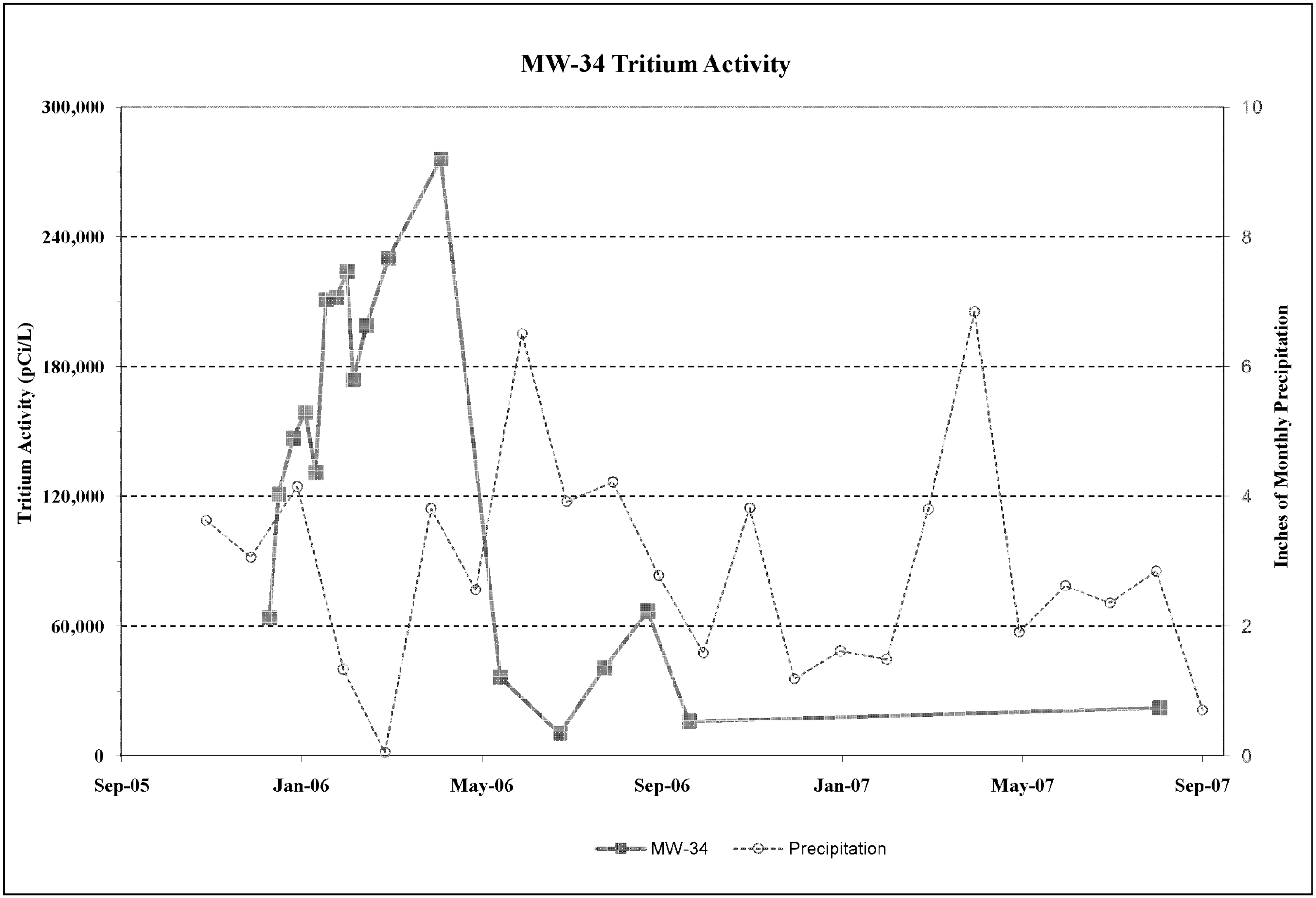


FIGURE G4



MW-34 Tritium Activity
Tritium Activity (pCi/L)
300,000
240,000
180,000
120,000
60,000
0
Inches of Monthly Precipitation
10
8
6
4
2
0
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
MW-34
Precipitation

FIGURE G5

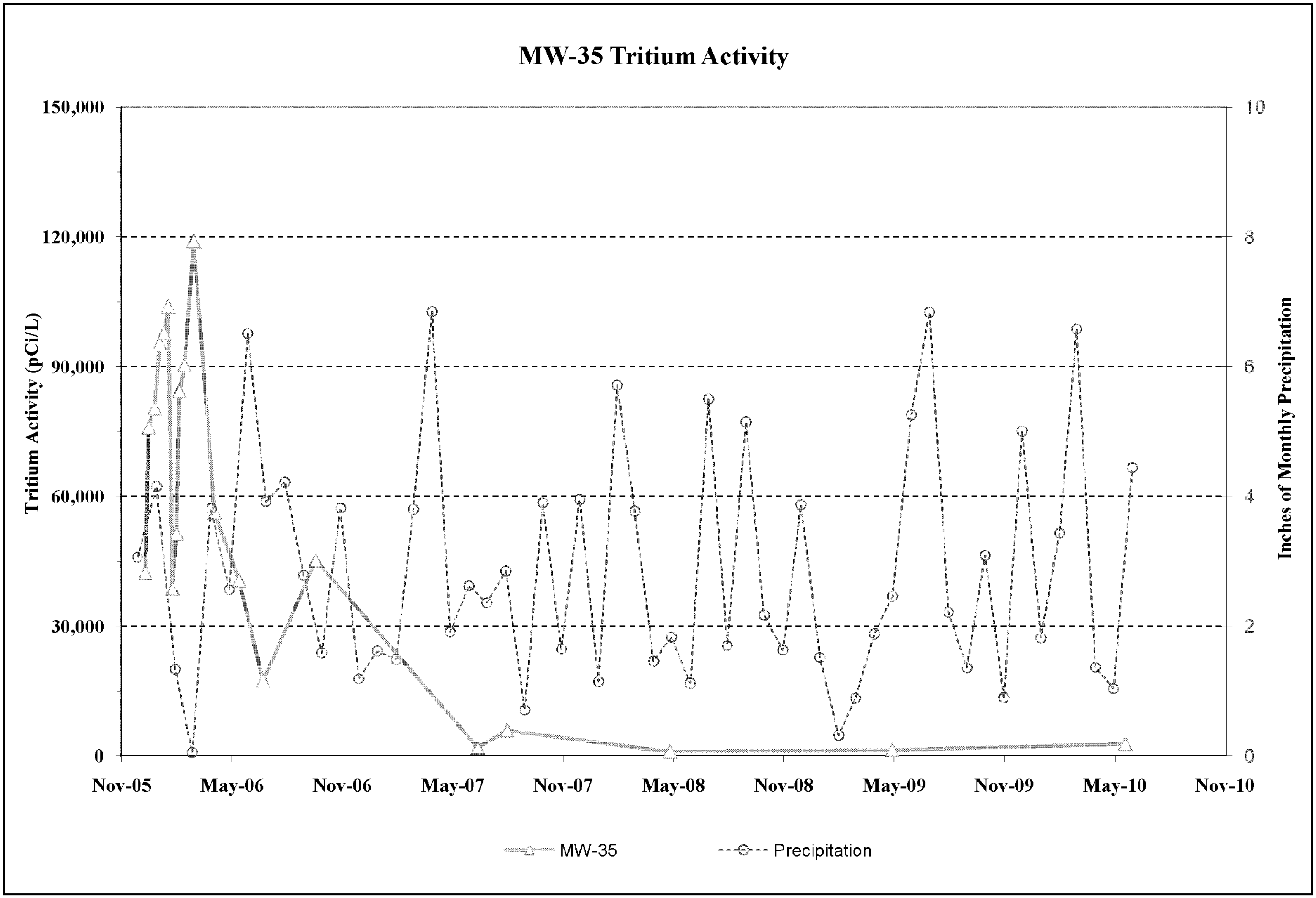


FIGURE G6

IPEC00263830

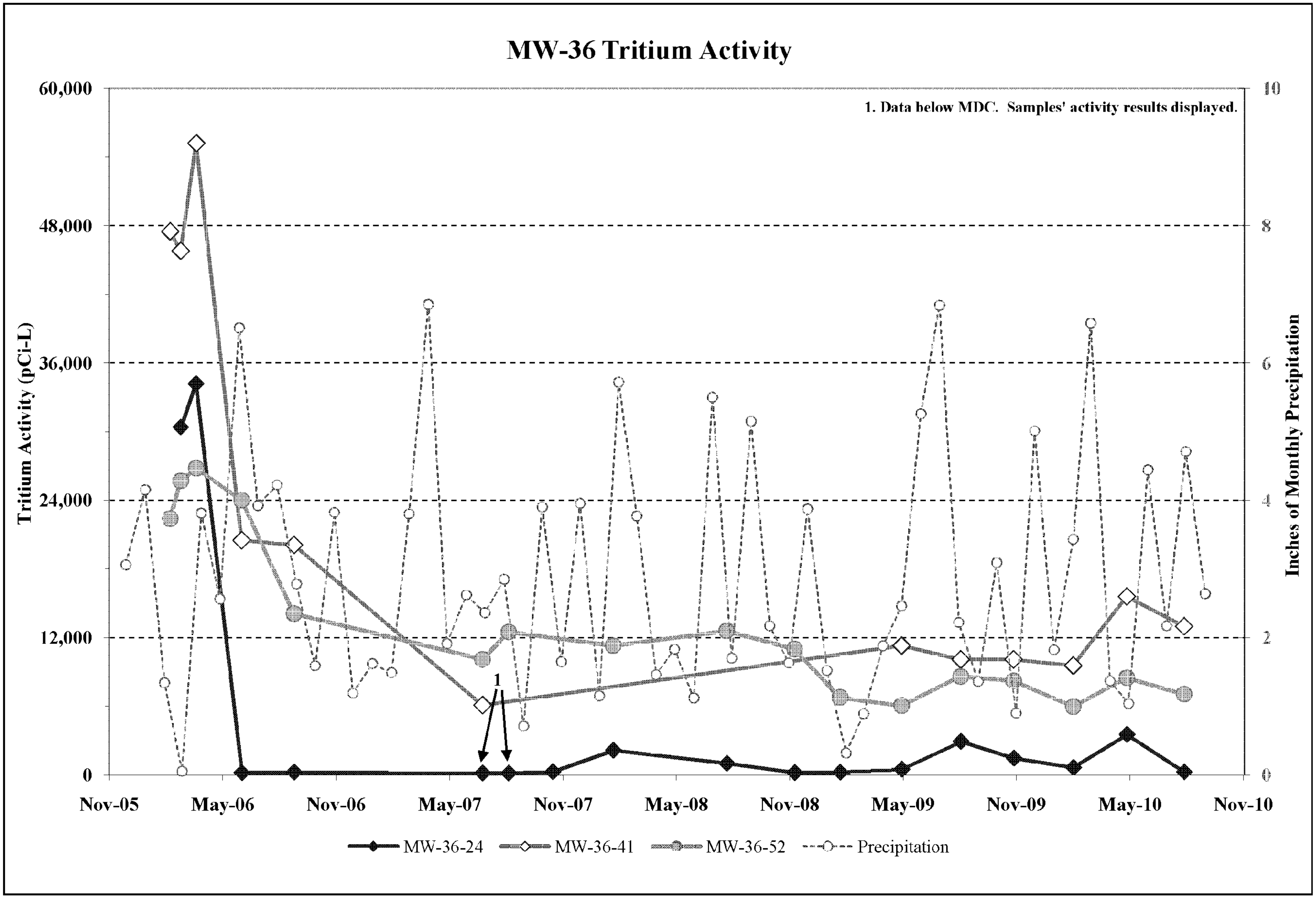

MW-36 Tritium Activity
1. Data below MDC. Samples' activity results displayed.
Tritium Activity (pCi-L)
60,000
48,000
36,000
24,000
12,000
0
Inches of Monthly Precipitation
10
8
6
4
2
0
1
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
MW-36-24
MW-36-41
MW-36-52
Precipitation

FIGURE G7

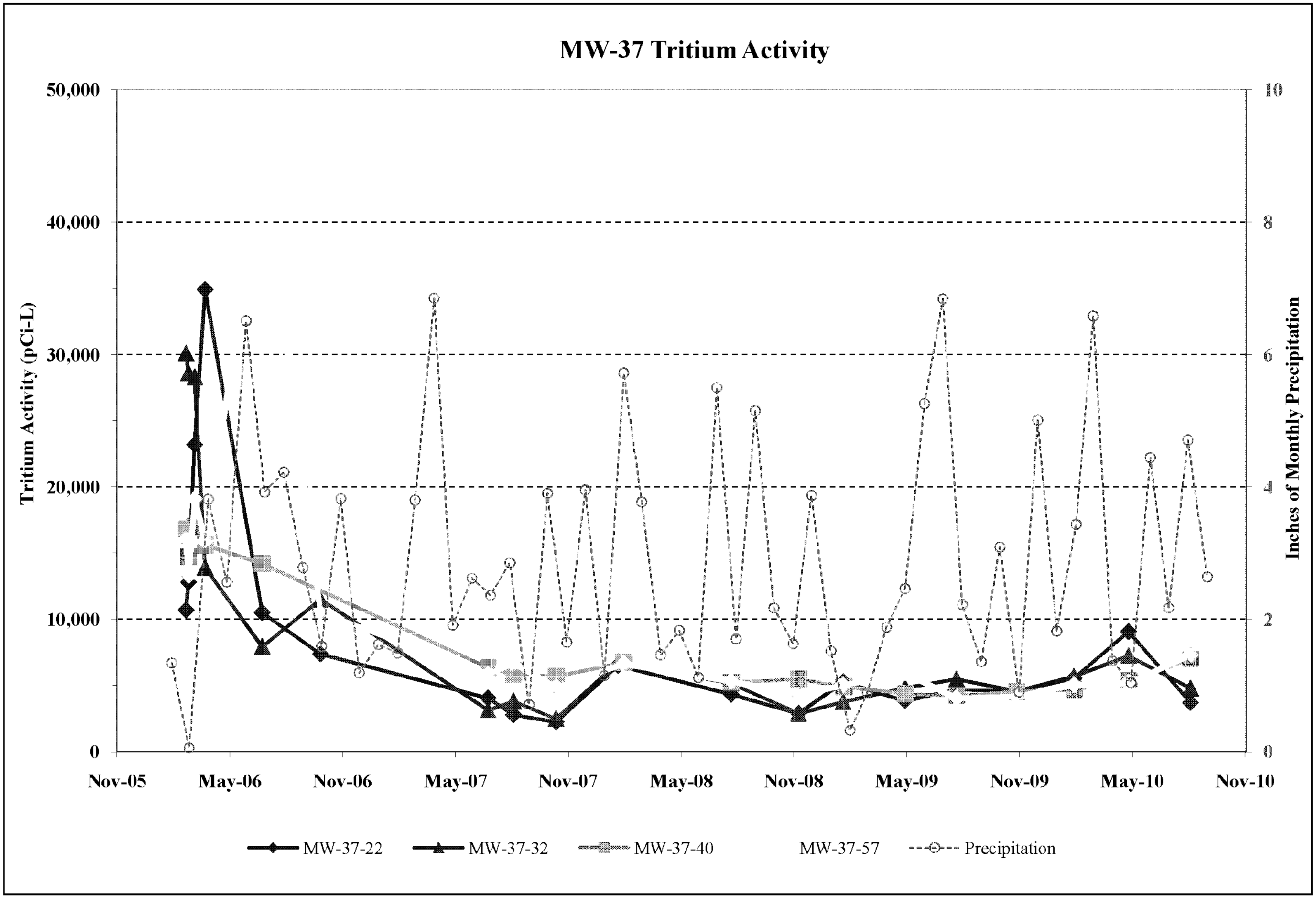

MW-37 Tritium Activity
Tritium Activity (pCi-L)
50,000
40,000
30,000
20,000
10,000
0
Inches of Monthly Precipitation
10
8
6
4
2
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
MW-37-22
MW-37-32
MW-37-40
MW-37-57
Precipitation

FIGURE G8

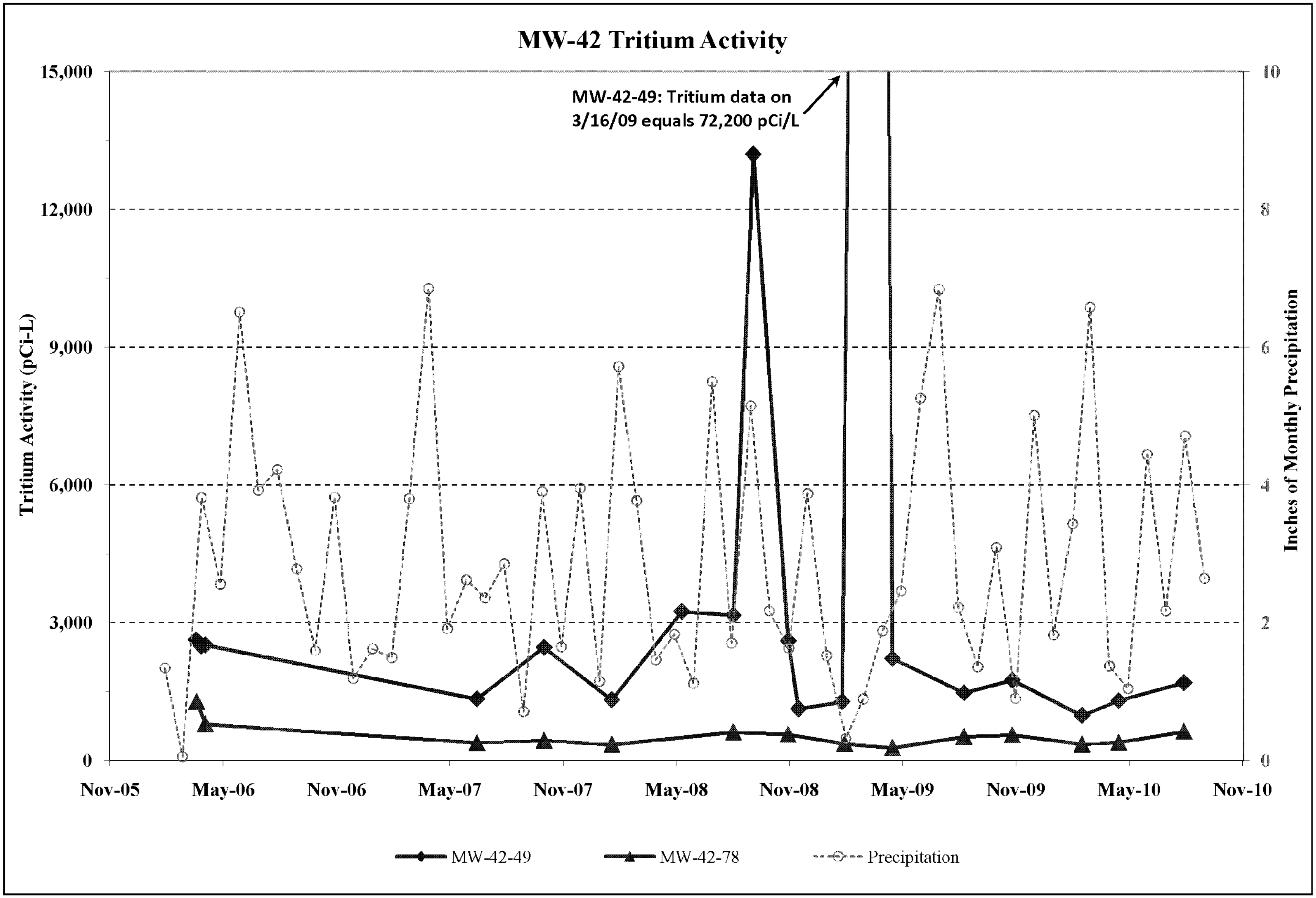

MW-42 Tritium Activity
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
15,000
12,000
9,000
6,000
3,000
0
10
8
6
4
2
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
MW-42-49: Tritium data on 3/16/09 equals 72,200 pCi/L
MW-42-49
MW-42-78
Precipitation

FIGURE G9

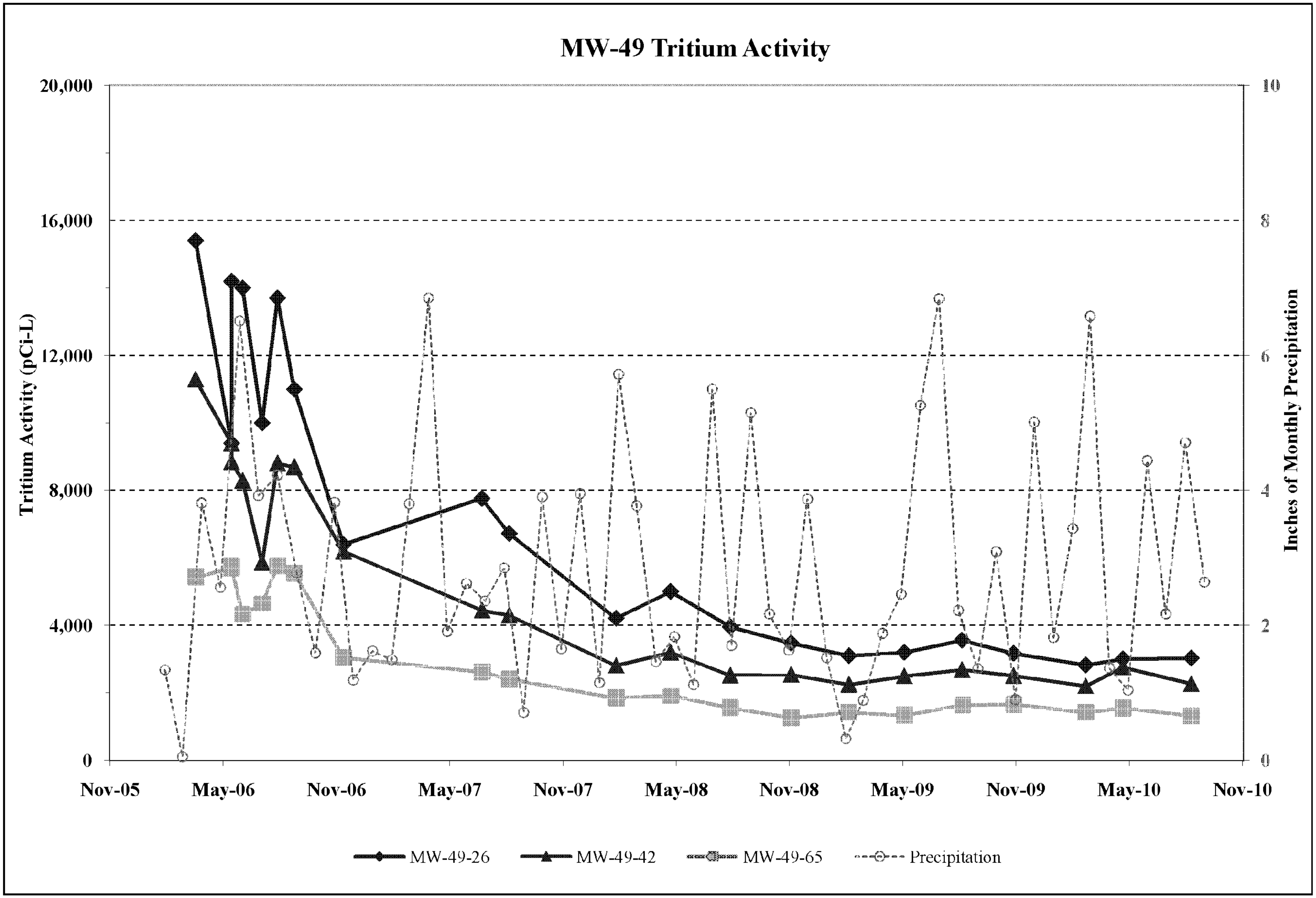

MW-49 Tritium Activity
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
20,000
16,000
12,000
8,000
4,000
0
10
8
6
4
2
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
MW-49-26
MW-49-42
MW-49-65
Precipitation

FIGURE G10

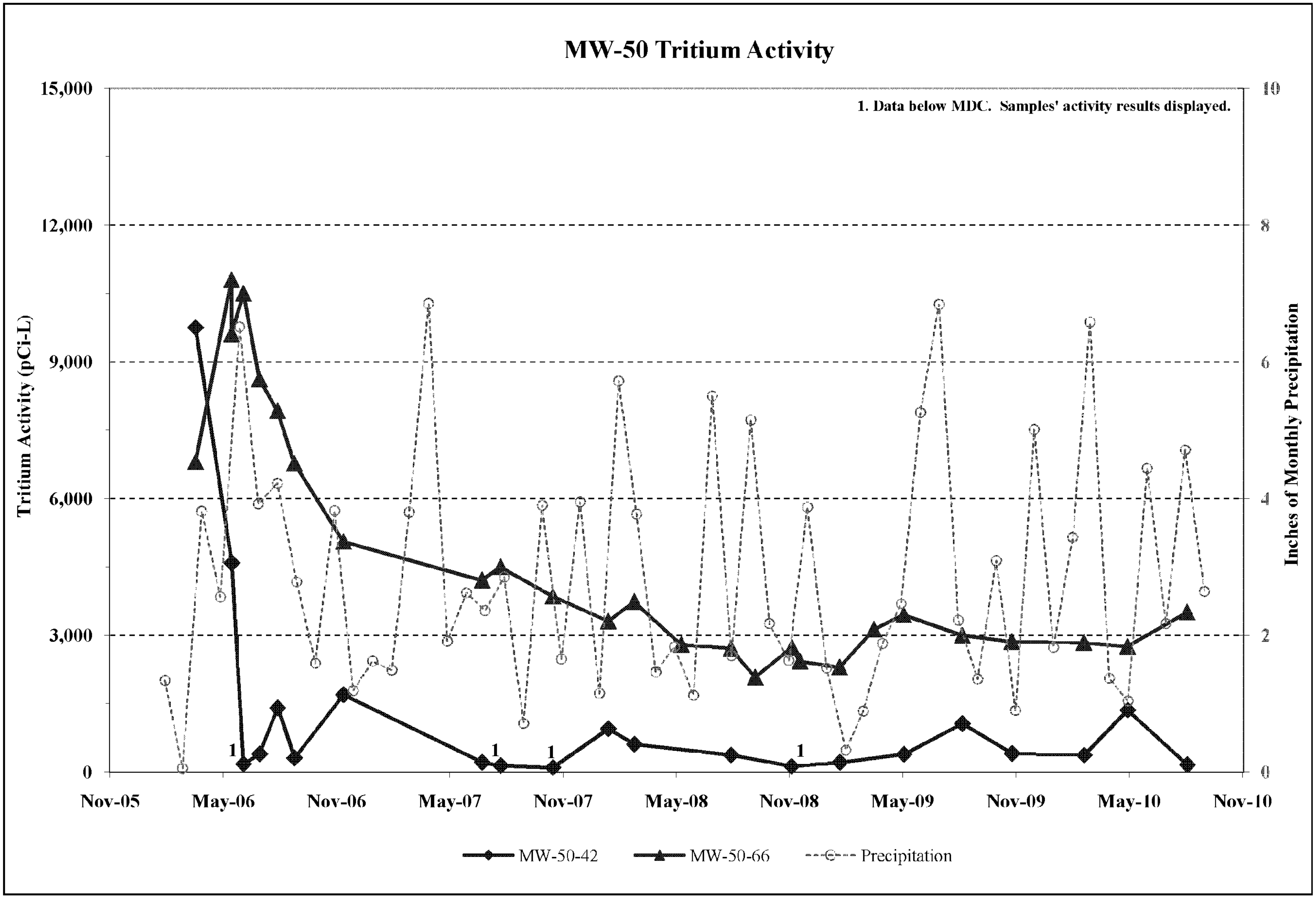

MW-50 Tritium Activity
1. Data below MDC. Samples' activity results displayed.
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
15,000
12,000
9,000
6,000
3,000
0
10
8
6
4
2
0
1
1
1
1
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
MW-50-42
MW-50-66
Precipitation

FIGURE G11

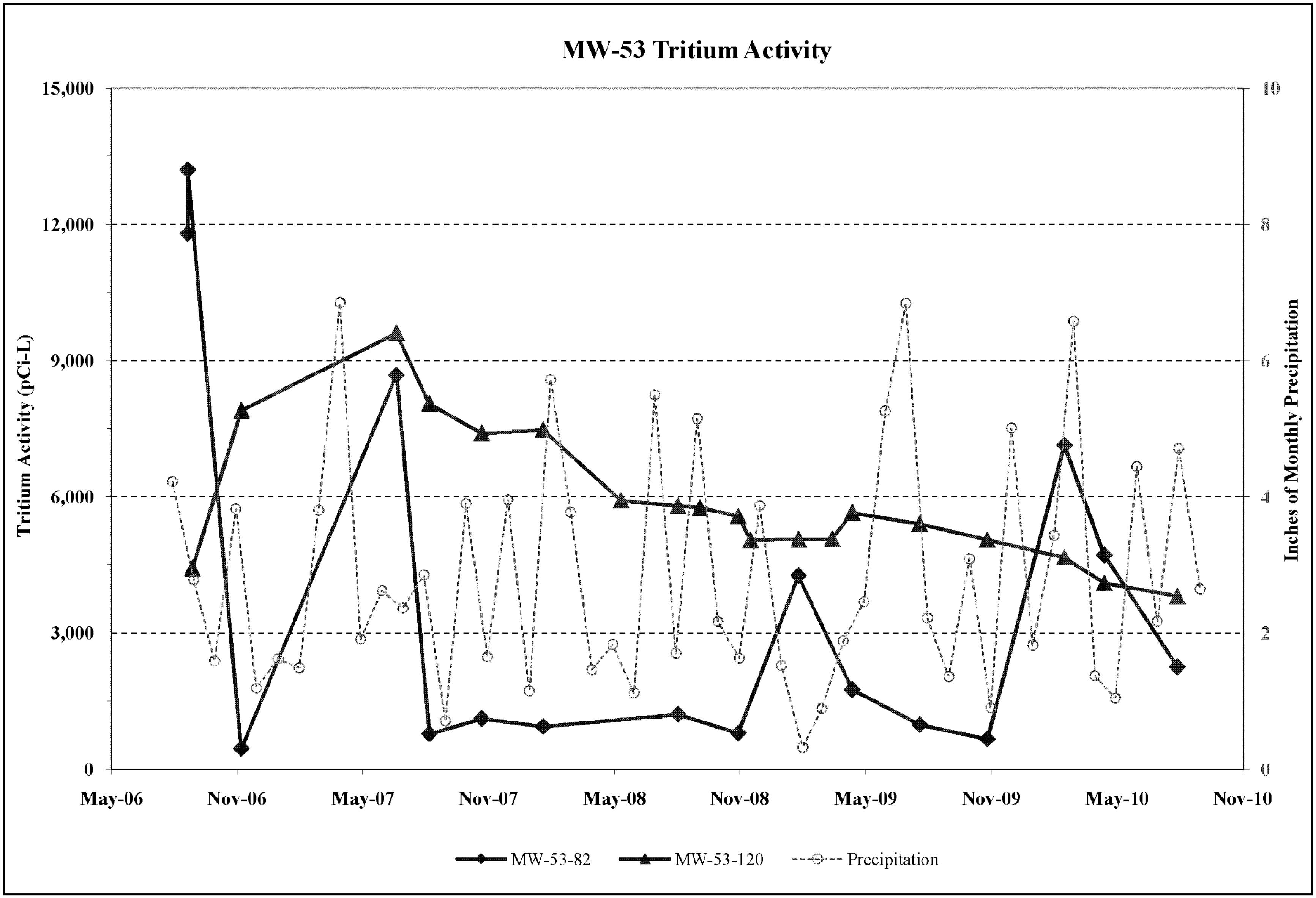

MW-53 Tritium Activity
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
15,000
12,000
9,000
6,000
3,000
0
10
8
6
4
2
0
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
MW-53-82
MW-53-120
Precipitation

FIGURE G12

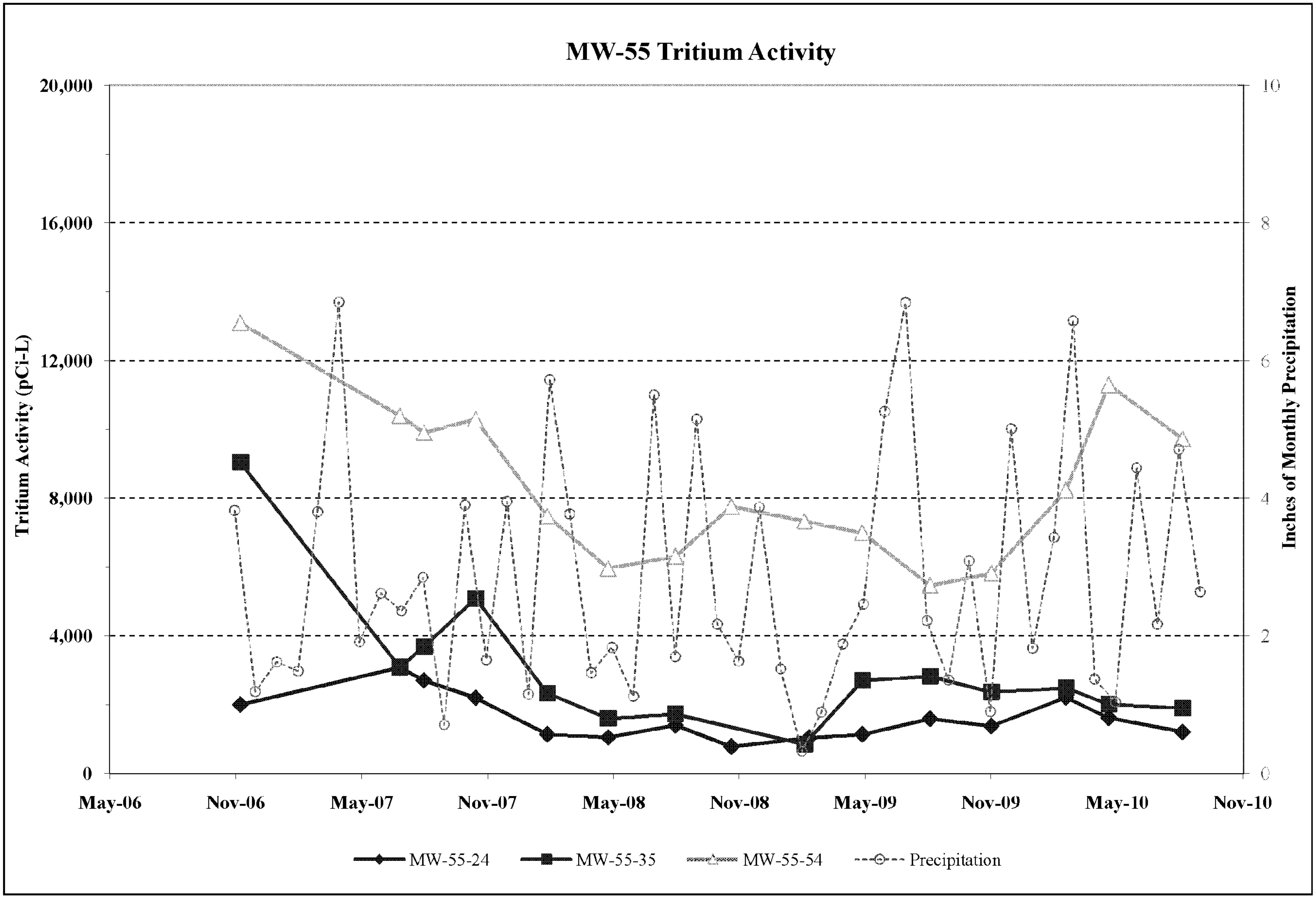

MW-55 Tritium Activity
20,000
16,000
12,000
8,000
4,000
0
Tritium Activity (pCi-L)
10
8
6
4
2
0
Inches of Monthly Precipitation
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
MW-55-24
MW-55-35
MW-55-54
Precipitation

FIGURE G13

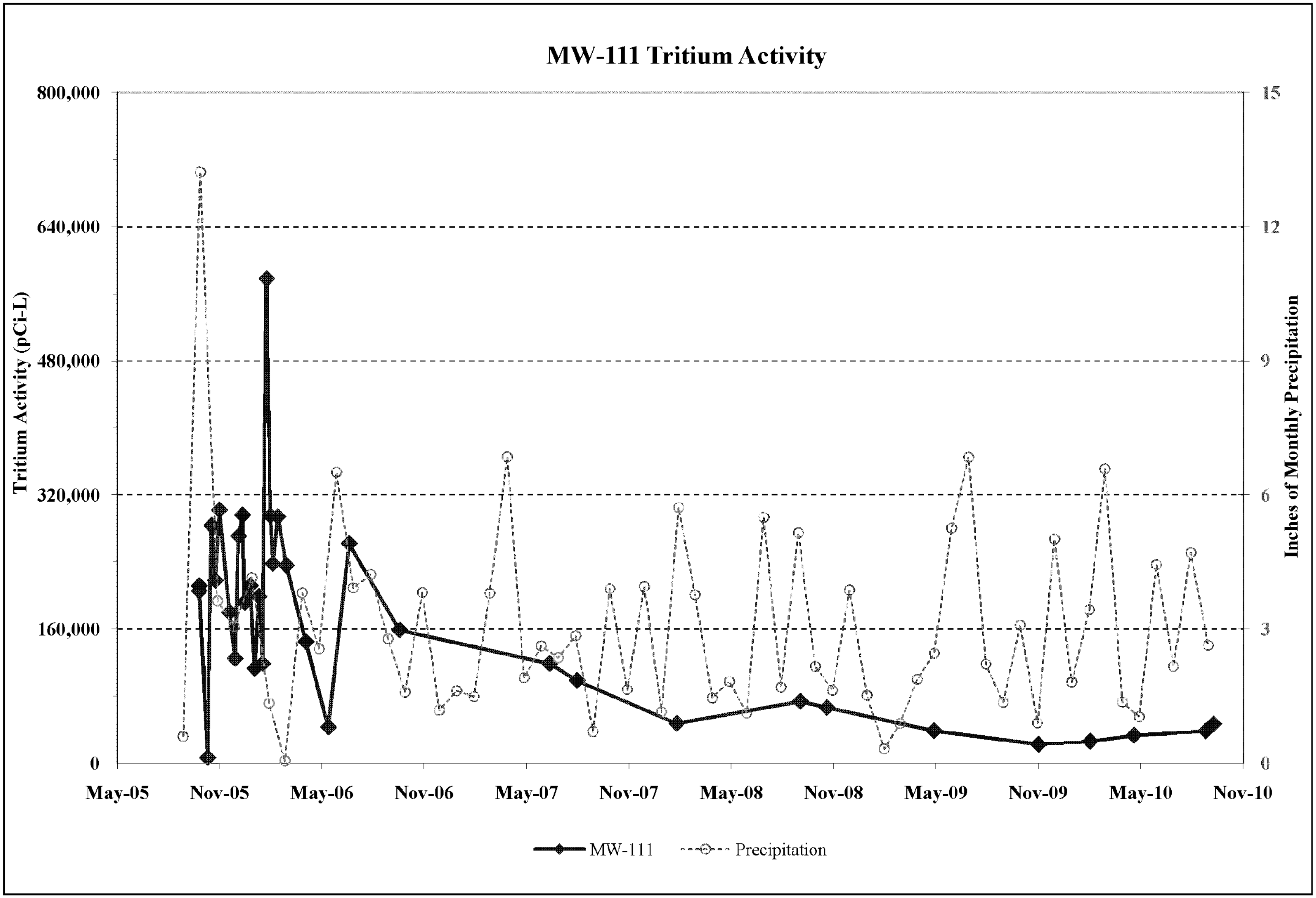

MW-111 Tritium Activity
Tritium Activity (pCi-L)
800,000
640,000
480,000
320,000
160,000
0
Inches of Monthly Precipitation
15
12
9
6
3
0
May-05
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
MW-111
Precipitation

FIGURE G14

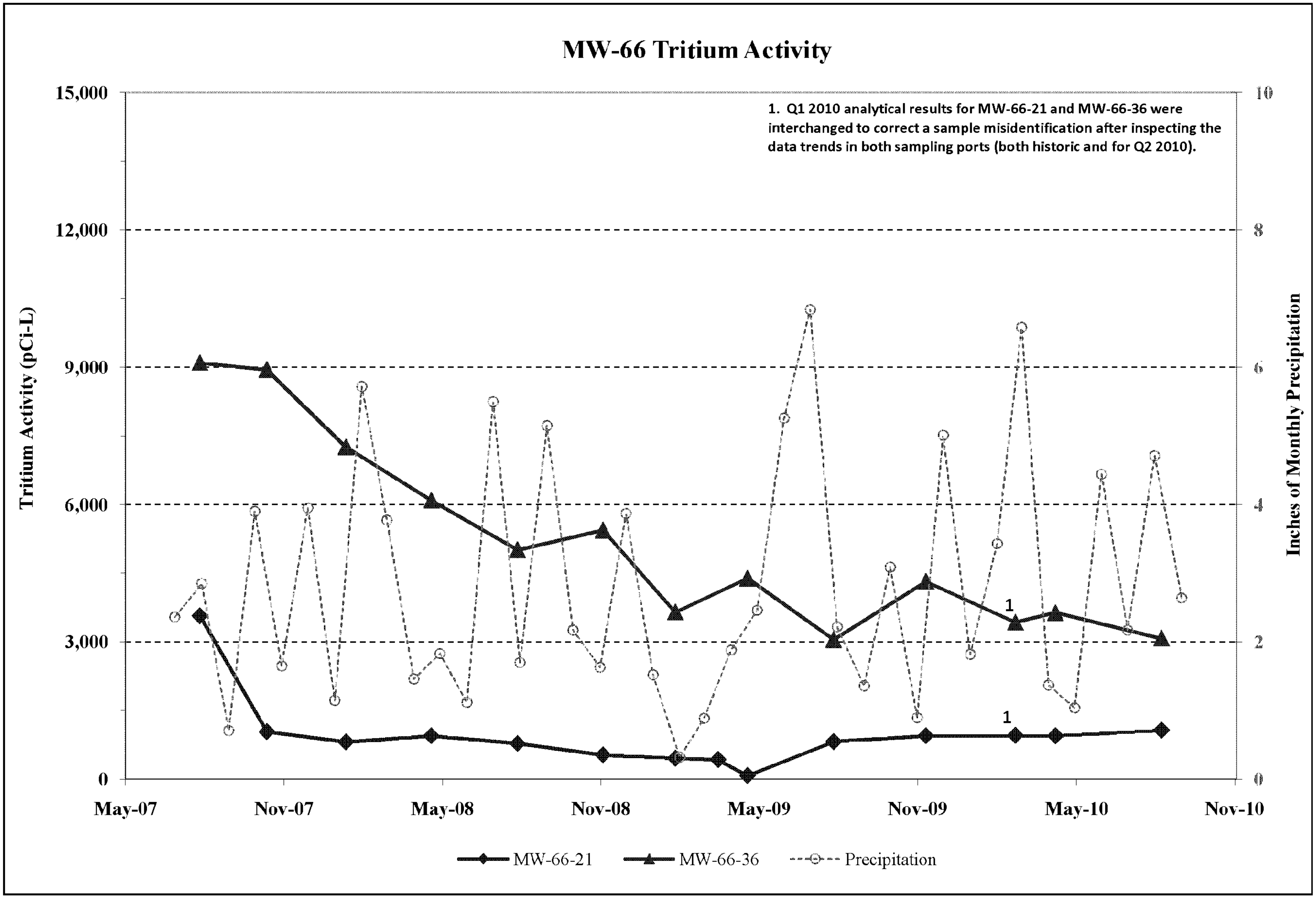

MW-66 Tritium Activity
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
15,000
12,000
9,000
6,000
3,000
0
10
8
6
4
2
0
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
1. Q1 2010 analytical results for MW-66-21 and MW-66-36 were interchanged to correct a sample misidentification after inspecting the data trends in both sampling ports (both historic and for Q2 2010).
1
1
MW-66-21
MW-66-36
Precipitation

FIGURE G15

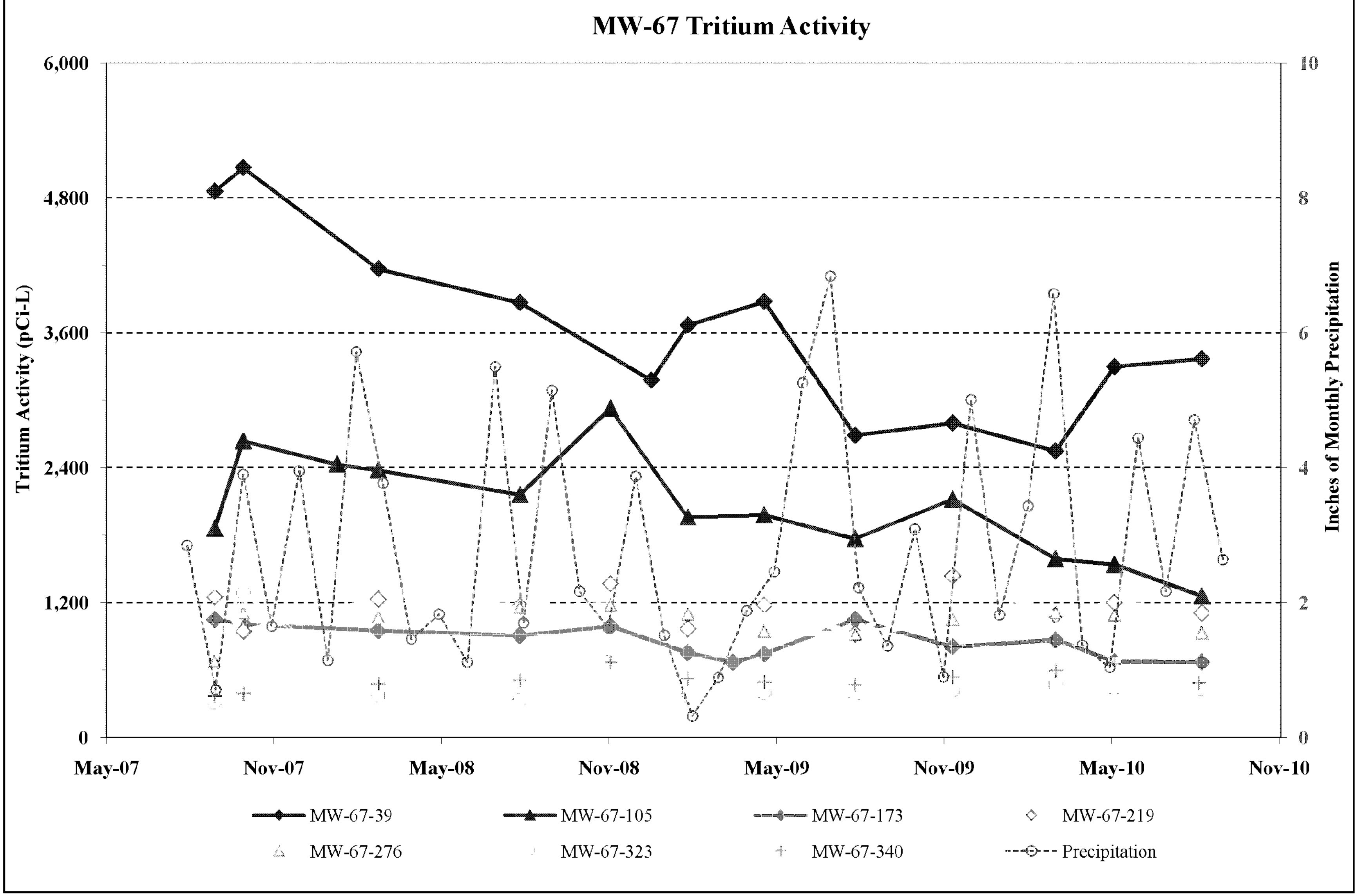
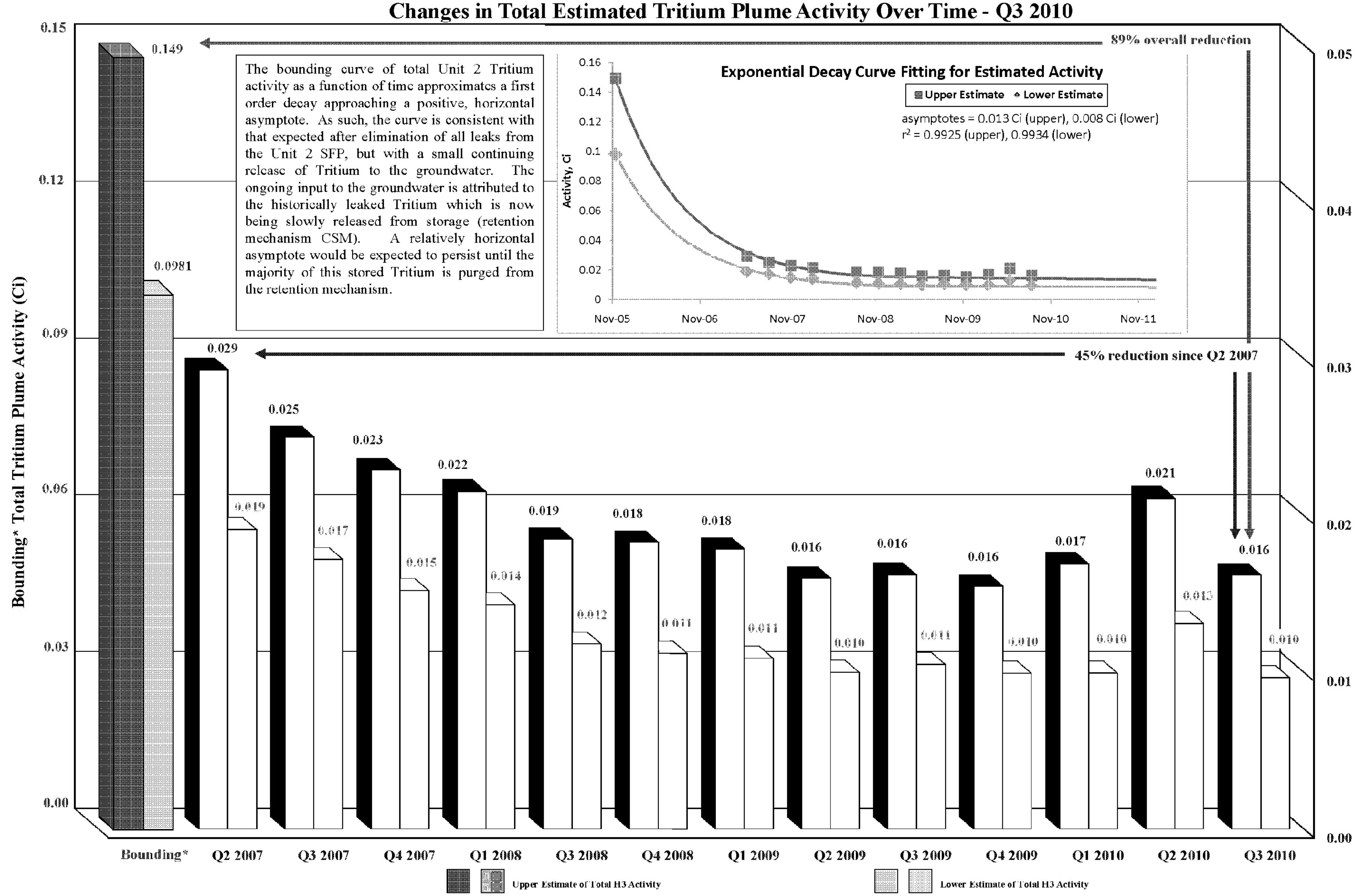


FIGURE G16

IPEC00263840

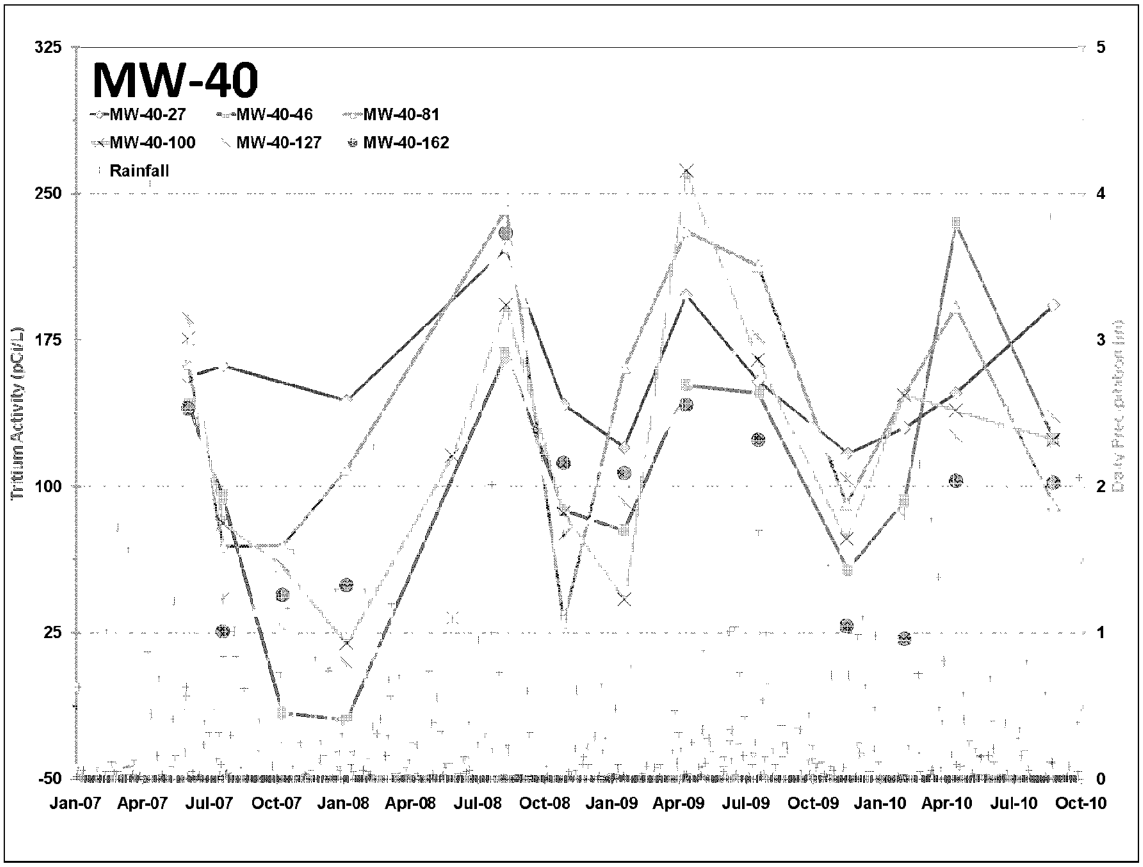


Note: Lower estimate is based on a porosity of 0.0003 which was derived from a pumping test conducted in 2006. Upper estimate is based on a porosity of 0.003 derived from a tracer test conducted in 2007. The Q2 2007 to Q1 2010 Tritium plume activity estimates are each based on Tritium levels measured in the groundwater monitoring installations at individual, quarterly "snapshots" in time.
*The bounding activity estimate, however, encompasses a longer period of time, and is focused on the Tritium levels existing during the earliest portions of the groundwater investigation. During this period of time, before termination of all the identified SFP leaks, Tritium concentrations were at their highest levels, but the network of monitoring installations was still being installed. Therefore, measurements made at a multiple times were required to capture early data covering the full extent of the Tritium plume; primarily over the period from Nov 20005 through Nov 2006 (a smaller percentage of the Tritium levels required inclusion of measurements through Sept 07). For the bounding Tritium plume activity estimate, the highest value recorded for each monitoring location during this time period was used in the analysis. For further discussion see Sections 6.0, 7.0 and 8.0 of the Final Hydrogeologic Site Investigation Report, prepared by GZA and dated January 7, 2008.

Figure G-17

APPENDIX H SOUTHERN BOUNDARY WELLS

TEMPORAL TRITIUM TRENDS IN SOUTHERN BOUNDARY WELLS



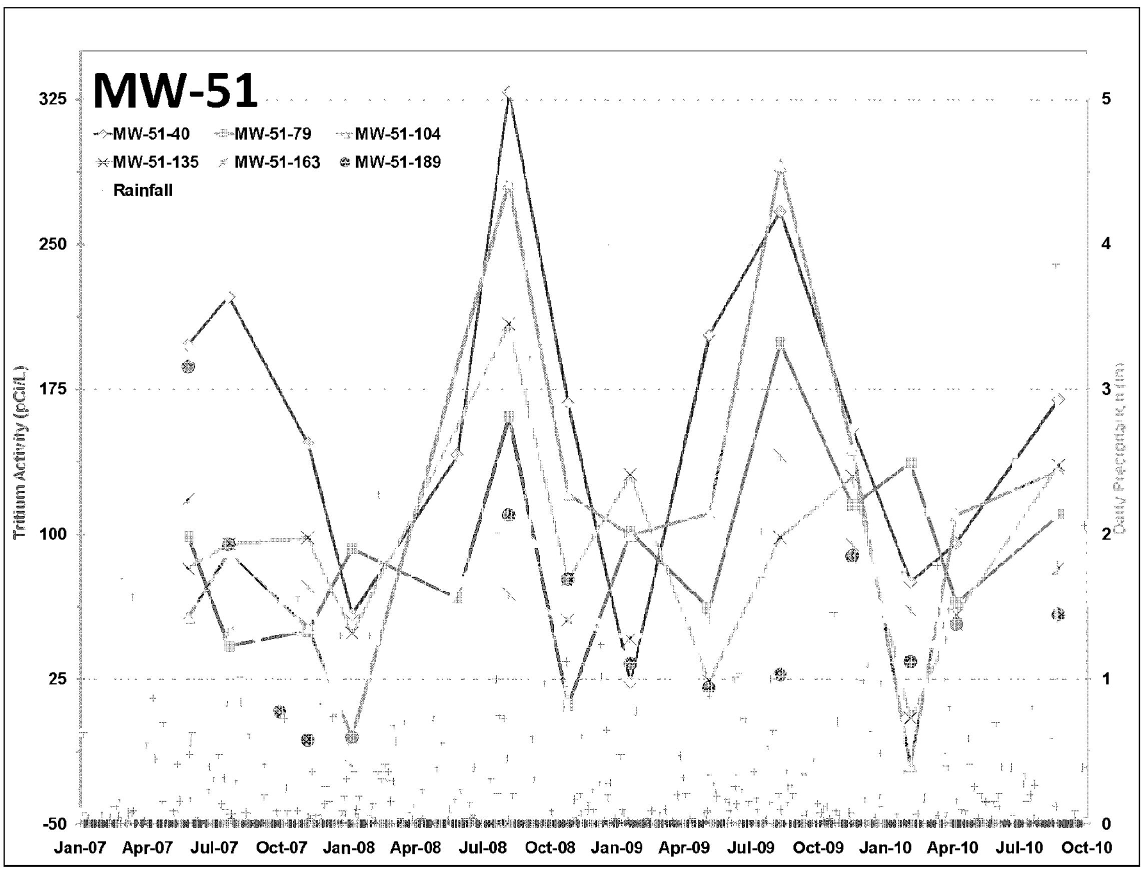


FIGURE H1