GZA GeoEnvironmental, Inc.

FINAL
IPEC QUARTERLY LONG-TERM GROUNDWATER MONITORING REPORT
QUARTERS ONE THROUGH FOUR 2011
(REPORT NO. 13)
INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

PREPARED FOR:

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Re: **FINAL IPEC Quarterly Groundwater Monitoring Report**
Quarters One through Four 2011 (Report No. 13)
Indian Point Energy Center
450 Broadway
Buchanan, New York 11501

Dear Mr. Doroski:

GZA GeoEnvironmental of New York (GZA) is pleased to provide this 2011 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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1.0 EXECUTIVE SUMMARY

On behalf of Entergy Nuclear Northeast, Inc., GZA GeoEnvironmental of New York (GZA) has completed the Q1 through Q4 2011 quarterly groundwater monitoring for the Indian Point Energy Center (IPEC), culminating in this report[1]. Interpretations of the monitoring data have been made in the context of the current Conceptual Site Model[2] (CSM). 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 four quarters of 2011 data. Relationships to prior data, more in-depth technical explanations and exceptions to generalized statements and conclusions have typically been explained in the 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 Q4 2011. Data that becomes available after the subject quarter (Q4 2011), but before the finalization date of the report, will be sequentially reflected in associated subsequent reports.

Consistent with our interpretation of earlier data, and based on the 2011 quarterly groundwater sampling data , 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 activities measured during each 2011 quarter were combined with the four previous quarterly and post-quarterly data sets to compute yearly rolling average groundwater activities for each quarter. For Q4 2011, these data were multiplied by the associated individual zone-specific groundwater flux values, derived from the Precipitation Mass Balance Model[3], to compute yearly average radionuclide release rates to the Discharge Canal and Hudson River. The 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; (2) the behavior of both the Unit 1 Strontium plume and the Unit 2 Tritium plume as evaluated each quarter; and (3) the behavior of the recent Unit 1 and Unit 3 Tritium plumes, as discussed further in this report. These data, in our opinion, continue to support the use of the current CSM as a basis for Long Term Monitoring Program design.

The 2011 quarterly data further support the conclusion that the overall Tritium activity in the Unit 2 plume is generally showing a historically decreasing trend, from both qualitative and quantitative perspectives[4]. These overall reductions are seen on **Figure G-17**, where the total

[1]The plume and data analyses discussed in this report reflect data available through the Q4 2011 quarterly monitoring round.

[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]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.

[4]A slightly increasing to stable trend in the overall Tritium activity was observed between Q4 2009 and Q2 2011 due to the Q4 2009 transient surface spill from the rented RWST/R.O. processing skid. The most recent quarterly data sets (Q3 2011 and Q4 2011) demonstrate a re-establishment of the overall historical decreasing trend of the total Unit 2 Tritium plume activity, with the dissipation of the R.O. skid spill (see **Figure G-17**). Further discussion on the transient RWST/R.O. skid spill can be found below and in the Q4 2009 Quarterly Monitoring Report.

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Tritium activity has decreased by approximately 55% since Q2 2007, and by 91% when compared to the bounding level Tritium activities. This overall trend is also evident on **Figures 6-Q1** through **6-Q4** and **6A,** where the shaded plume[5] no longer extends downgradient to the river, as first observed in the Q2 2009 data. It is further visually evident from **Figure 6A** that the core of the plume has also shown a marked decrease in activity 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:

- Beginning in Q2 2011, uncharacteristic increases in Tritium activity were noted in several monitoring installations located on the south side of Unit 1; whereas the Unit 2 Tritium plume is confined to Unit 2 and areas north of the Unit 1 Containment Building. Given that groundwater cannot flow from Unit 2 to this southern area of Unit 1, it was judged likely that a spill had recently occurred and investigations were therefore initiated.

  More specifically, the Tritium activity in the deeper sampling intervals directly to the south and southwest of the Unit 1 Containment Building (MW-47-80 and MW-56-83, respectively) increased markedly relative to typical historical levels for these monitoring locations. Also beginning in Q2 2011, a distinct increase in Tritium activity was observed in monitoring installation MW-39, located upgradient/cross-gradient of Unit 1 in the northern portion of Unit 3. Subsequently, monitoring installations located further downgradient (e.g. MW-54, MW-50 and MW-49) exhibited Tritium activity increases in Q3 2011 and Q4 2011, as the perturbation moved through these locations.

  The above cited increases in Tritium activity are likely related to a transient CSB Sample Sink Overflow[6] observed in the Unit 1 Chemical Systems Building (CSB) in April 2011. See **Figure 6-Q2** and **Section 3.4.4** below for further discussion on this identified source and the associated likely migration pathways.

- Coincident with the above discussed Unit 1 Tritium increases, a number of wells located further south in Unit 3 (e.g., MW-41, 44, 45, 46) also peaked to uncharacteristically high Tritium levels at the same time. Notwithstanding the temporal connection, and in part because these wells are located on the other side of a groundwater mound from Unit 1 (and MW-39), it is believed that these Unit 3 Tritium increases are not due to the above Sample Sink Overflow, but rather are associated with the washout[7] entering Manhole A2 (MH-A2) from the Fuel Storage Building (FSB) roof drain when the vent fan was

[5]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 conservatively represent three-dimensional contaminant data sets on two-dimensional maps.

[6]Note that, as further discussed in **Section 3.4.4**, this release includes the sink overflow, as well as a previously contained pipe leak, all of which flowed into a compromised floor drain. These multiple facets of this release are all associated with the distillate tank waste processing system located in the Unit 1 CSB, and are termed the "CSB Sample Sink Overflow".

[7]The term "washout," as used herein, is the process by which Tritiated water vapor is transformed into Tritiated water as a liquid. In general, this transformation is driven by condensation (as is the primary underlying driver associated with MH-A2, above) and/or Tritium diffusion from the Tritiated water vapor into precipitation (rain and/or snow), either while it is still falling or after deposition.

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generally not operating[8] (see **Section 3.4.4** below, and the Q4 2010 quarterly report for further discussion of the washout releases from the FSB roof drain to MH-A2).

Transient Tritium peaks above historical baseline in MH-A2 were initially observed in Q2 of 2009, with more elevated Tritium activity becoming evident between September 2010 and July 2011. These more recent data clearly demonstrated that the Tritium activity within MH-A2 is directly proportional to the discharge from the FSB roof drain when the vent fan was out of service. The vent fan was placed back in service on July 21, 2011, after which the Tritium activity rapidly[9] returned to baseline conditions (<2,000 pCi/L) within the FSB roof drain and MH-A2.

The greater response of the proximate groundwater monitoring wells, as compared to that observed during previous MH-A2 Tritium increases, is believed due to the coincident Unit 3 outage. During an outage, the reactor cavity is open and pool temperature becomes significantly elevated, both resulting in greater evaporative losses, and thus greater likely washout impacts. Based on these investigations and associated data collected, it has been concluded that the elevated Tritium levels detected in MH-A2, as well as the proximate and downgradient monitoring wells (MW-41-40, MW-44-66, MW-45-42 and MW-46) and manhole B-1, are due to the FSB roof condensate generated while the vent fan was not operating and, as such, do not indicate a new leak from a System, Structure or Component (SSC). Moreover, the vent fan has been replaced and the subsequent data show this issue to have been rectified (see **Section 3.4.4** below for further discussion).

- Subsequent to the relatively small, singular peak noted in MH-5 VCFD for the first time in Q3 2010, more elevated peaks in Tritium activity have been observed throughout 2011, where the maximum activity was multiple times higher than the Q3 2010 peak[10]. Due to these peaks in Tritium activity, the sampling frequency for MH-5 VCFD was increased from quarterly to weekly, including flow rate measurements. This more intensive sampling regimen was initiated in June 2011 to further support an investigation to identify the ultimate cause of these elevated Tritium levels, which is now more focused on potential process inputs such as Tritium contribution from plant/FSB vent condensate (**see Figure 6B** and **Section 3.4.4, MH-5 VCFD** below for further discussion). Based on these additional 2011 data, the Tritium peaks in MH-5 VCFD do not appear to be correlated with the recent increase in flow rate in the LCD, nor do they appear to foreshadow increases in the monitoring wells proximate to the Unit 2 SFP[11].
- During 2011, the flow rate into the Leak Collection Device (LCD) fluctuated between approximately 0.7 and 2.5 liters/day from March 2011 to September 2011, compared to a historical baseline flow rate of <0.02 L/day[12]. The LCD flow rate then gradually

[8] It is noted that the Tritiated water vapor evaporating from the SFP is a permitted release 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. This same Tritium has therefore been "double counted" because it is again included in the storm drain and groundwater portions of the dose computations.

[9] A MH-A2 sample was collected only 7 days after the vent fan was placed back in service (7/28/2011) and the Tritium activity in the sample was 3,140 pCi/L, approximately 30 times lower than the average Tritium activity from September 2010 to July 21, 2011. Subsequent samples showed further decreases.

[10] It is noted that the water collected by the MH-5 VCFD is routed to the discharge canal where it is released as a monitored discharge. As a monitored discharge, this Tritium activity is directly accounted for in the dose computations.

[11] Review of **Figure 6B,** which includes four additional quarters of data (relative to that presented in the previous Q4 2010 report), demonstrates that the Tritium peaks observed in MH-5 VCFD (as well as those observed in the proximate the monitoring wells) are not convincingly correlated with the increased flow rates in the LCD. Therefore, the conjecture that these data were potentially correlated, as hypothesized in both the Q3 and Q4 2010 reports, appears to be less likely the case given the additional data. As such, the Tritium peaks observed in the monitoring point data, particularly that from MW-31 and MW-32, appear to be more likely the result of the subsequently discussed transient surfaces spills as well as the Retention Mechanisms.

[12] All of the water collected by the LCD is fully contained and does not enter the groundwater regime (see below).

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decreased to approximately 0.5 L/day between September 2011 and December 2011[13], but still remained well above the historical baseline collection rate.

A previous, clear increase in the daily volume of water collected by the LCD was also observed in Q3 2010, with an average flow rate of approximately 1.5 L/day. However, this increase was followed by a rapid return to baseline conditions in October 2010, and the LCD flow rate remained at those baseline conditions during Q4 2010. Previous investigations indicated that the increased flow observed in Q3 2010 was potentially correlated[14] with the timing of atypically elevated water in the fuel pool 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 throughout Q4 2010.

With the resumed increased LCD flow, further investigations by GZA and Entergy in Q1 2011 and Q2 2011 identified a number of existing light outlet boxes, welded to the inside liner of the fuel pool, as potential locations where pool water could get through the liner during high water levels (i.e., above the designed high water level of the pool). Earlier investigation into the light outlet boxes, through examination of design drawings, indicated that the light boxes were unlikely to be a leak point because the electrical conduits which sourced the boxes were routed up the pool wall, connected to conduits above the top of the pool, and did not penetrate the liner. However, subsequent visual investigations, as confirmed by further plant drawings, identified locations where an alternative design was employed so the conduits sourcing the boxes would not interfere with the crane rail at the top of the pool. In these specific cases, the conduits did penetrate the liner. Following subsequent invasive inspections of the light boxes, it was concluded that there is definitive indication that these specific boxes did contribute, at least in part, to the LCD flow rate under transient overfill conditions. This conclusion is based on the finding of boron precipitate within the boxes and conduit penetrations.

See **Section 3.4.4** below for further discussion of the construction and planned permanent sealing of these light boxes.

- Given the increased 2010 and 2011 LCD flow rate observations, **Figure 6B** has been included in this report to visually present both the historical LCD flow rate data and the Tritium data for the monitoring installations located within the Unit 2 Tritium plume. In this regard, it is first emphasized that all water collected in the LCD is captured, measured and disposed of as a monitored release, and does not enter the groundwater system. Further, review of **Figure 6B,** which includes four additional quarters of data (relative to that presented in the previous Q4 2010 report) demonstrates that the increased flow rates in the LCD are not convincingly correlated with the peaks in the monitoring wells or MH-5 VCFD. Therefore, the conjecture that these data were potentially correlated, as hypothesized in both the Q3 and Q4 2010 reports, now appears to be less likely the case given the additional data. As such, the Tritium peaks observed in the monitoring point data, particularly that from MW-31 and MW-32, appear to be more likely the result of the subsequently discussed transient surfaces spills (see below), as well as the Retention Mechanisms[15] associated with the historical releases and these more recent spills. Therefore, we found no conclusive evidence for new,

[13] It is noted that the LCD flow rate actually increased from approximately 0.5 to 0.9 L/day between December 21, 2011 and the end of the year.

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

[15] 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 Mechanism(s). 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. The original discussion of these Retentions Mechanisms can be found, along with the CSM, in the previously cited Hydrogeologic Site Investigation Report.

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unidentified leaks in the Unit 2 SFP or other monitored Unit 2 SSCs that have released radionuclides to the groundwater system during 2011.

The recent LCD data are discussed in more detail in **Section 3.4.4** below.

- While Retention Mechanisms clearly appear to impact Tritium activity as referenced above, more noticeable increases in Tritium levels in several MW-31 and MW-32 sampling intervals were observed during the Q1 2010 through Q3 2010 sampling events, where Tritium activities peaked within multiple intervals at the highest recorded historical levels. These elevated Tritium activities were likely related to a Q4 2009 surface spill, located proximate to these wells, from a temporary rental RWST/R.O. processing skid[16], which was first detected during routine 80-10[17] sampling of MH-9 in mid-January 2010.

  Due to the short duration of the elevated Tritium activity measured at the release point in MH-9 and the transient nature of this surface spill, it was anticipated that the elevated Tritium levels would dissipate in these monitoring locations once this pulse input migrated downgradient. As expected, the Tritium activity at these upgradient monitoring locations generally decreased to the typical historical Tritium levels by Post-Q1 2011[18]. Furthermore, sampling intervals further downgradient (e.g. MW-36-41, MW-37-40) also returned to typical historical Tritium activities by Q4 2011, in response to the dissipation of the RWST/R.O. spill. As such, the transient release from the RWST/R.O. appears to have generally dissipated through the system[19], as seen in **Figure G-17** which shows clear reductions in Unit 2 total plume Tritium activity during Q3 2011 and Q4 2011.

  Moreover, as a proactive response to this spill, Entergy has made modifications to plant systems and operational procedures to allow the RWST/R.O. processing skid to be positioned inside the Unit 2 MOB for all future outages. These operational modifications were implemented based, in part, on the findings of the Long Term Monitoring Program as a measure to reduce the potential for future spills.

The overall Sr-90 activity within the Unit 1 plume 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 **Figures 7-Q1** through **7-Q4** 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[20]. As expected, Strontium levels have decreased since the completion of defueling. The Unit 1 total plume Strontium activity has, on average, decreased by nearly 70% relative to peak defueling levels, and approximately 20% relative to pre-defueling levels (see **Figure J-1**, **Appendix J**). More proximate to the pool, the Strontium activity has decreased to an even greater degree. In fact, the Q4 2011 Strontium activities at the majority of these near-pool monitoring locations (e.g. U1-NCD, MW-42-49, U1-SFDS, U1-CSS) were approximately 80-98% lower than the average pre-defueling levels. The Strontium activity further downgradient of the pool generally exhibited decreasing trends approaching pre-defueling levels (MW-37, MW-55)

[16] This transient and localized surface spill involved a rented RWST/R.O. processing skid brought on-site by an outside contractor during the Unit 2 outage. As such, this equipment is not an in-place Unit 2 SSCs and is no longer on site.

[17] NRC Inspection Enforcement Bulletin (IEB) 80-10, Contamination of Nonradioactive System and Resulting Potential for Unmonitored, Uncontrolled Release of Radioactivity to Environment, May 6, 1980.

[18] Only one sampling interval, MW-32-85, at these monitoring locations did not yet return to the historical baseline by Post-Q1 2011. A slightly elevated Tritium activity was noted in this sampling interval until Q3 0211. It is also noted that the 2010 Tritium Investigation Level was not exceeded at MW-32-85 from Q1 2010 through Q4 2011.

[19] Also note that the transient RWST/R.O. skid spill potentially replenished the Retention Mechanism storage. Therefore, future releases from Retention Mechanisms could still be seen in future quarters.

[20] 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.

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or decreased to pre-defueling levels (MW-36, MW-49, MW-50, MW-54, MW-57) in recent quarters; however, Strontium increases were noted in a few downgradient sampling intervals (e.g. MW-50-42, MW-53-120 and MW-55-24) during Q3 and Q4 2011. Strontium peaks were observed in both downgradient riverfront wells (MW-66-36 and MW-67-39) during 2011 as this input moved towards the river. It is expected that the downgradient, riverfront 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 Unit 2 Tritium and Unit 1 Strontium plumes have both been undergoing overall long-term reductions in activity after the respective source interdictions. Given this conclusion, and the recognition that Entergy terminated all previously identified leaks in the Unit 2 SFP[21], will permanently seal the light boxes, 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 Mechanism(s). 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 full return to the original Strontium baseline levels existing prior to Unit 1 defueling in the downgradient wells (i.e. MW-37-40, MW-50-42, MW-55-24), 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 Mechanism(s). It is important to recognize that, even with these localized, transient spills, 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 and the apparent strength of the CSM to evaluate that data, 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). In addition, given the robustness of the monitoring network and the overarching Long Term Monitoring Program, particularly as further data sets are collected, it has become a valuable tool for identifying existing equipment and/or operational procedures that can be upgraded to prevent future radionuclide releases/spills.

[21] 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. However, given the current behavior observed in the Unit 2 LCD data (see Section 3.6 of the Q1 2009 Long Term Monitoring Report and **Section 3.4** of this report) even following the temporary sealing of the light boxes, 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 (<0.01%) compared to permitted levels of Tritium discharge to the river through the Discharge Canal.

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2.0 SCOPE OF WORK

During each quarter in 2011, 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[22]. 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[23]. The scope of work completed for this year'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 through Q4 2011.

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[24], which are then downloaded on a quarterly basis[25]. 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 each quarter of 2011 from these 22 transducers are presented in **Table 2** and compared to historical minimum and maximum values on the four **Figure 5**As (**5A-Q1** through **5A-Q4**)[26] included in this report.

The Q1 2011 low-tide groundwater elevation was recorded on January 22, 2011 and the data at four locations (five transducer intervals) were outside 30% of the Q2 2007 through Q2 2009 range. One of these locations (two transducer intervals) is a Unit 2 riverfront well where the maximum deviation was less than one foot in elevation. Both of these intervals (MW-67-39 and MW-67-340) also: (1) recorded a deviation of similar magnitude during the previous, Q4 2010, quarter; and (2) malfunctioned in the following, Q2 2011, quarter. Even with these potential equipment malfunctions, the overall horizontal and vertical gradients are still consistent with

[22] 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.

[23] 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.

[24] 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).

[25] 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.

[26] 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 the Q2 2009 Quarterly Monitoring Report for further analysis).

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groundwater elevation data from previous quarters. Another location (MW-30-69) deviated by less than 0.1 feet from the 30% criteria; as such, the vertical and horizontal groundwater gradients showed no substantial variations in the Unit 2 power block area of the plant. The final two locations (MW-43-28 and MW-51-40) are both located to the south of Unit 3, and MW-51 represents an on-site boundary well. The groundwater elevation in MW-51 was lower than the 30% criteria by approximately 2 feet, while the groundwater elevation in MW-43 was approximately 3 feet greater than the 30% criteria. Even though these deviations were observed, the groundwater elevation in MW-43 was still lower than MW-51, indicating no alteration in the overall groundwater flow direction towards the power block area of the plant. Additionally, the overall vertical gradients at both locations were still consistent with the historical data.

The Q2 2011 low-tide groundwater elevation data were recorded on May 25, 2011 and the data at two locations (three transducer intervals) were outside 30% of the Q2 2007 through Q2 2009 range. One of these locations (two transducer intervals) is a Unit 2 riverfront well where the deviation was greater than the 2007 through 2009 criteria by approximately one foot in elevation. However, these data points still represented the lowest groundwater elevations (other than the river location, HR-1) of all the long-term monitoring transducer locations, and thus still demonstrate that groundwater flows towards the Hudson River. The final interval showed a deviation of less than 0.1 feet from the Q2 2007 through Q2 2009 criteria.

The Q3 2011 low-tide groundwater elevation data were recorded on August 22, 2011 and the data at three locations were outside 30% of the Q2 2007 through Q2 2009 range. All three of these intervals were within 1.5 feet of the 30% criteria; as such, the overall groundwater gradients (both horizontal and vertical) were not substantially altered across the site based on the Q3 2011 transducer data.

The Q4 2011 low-tide groundwater elevation data were recorded on November 21, 2011 and the data at three locations (four transducer intervals) were outside 30% of the Q2 2007 through Q2 2009 range. One of these monitoring locations (two transducer intervals) is the same Unit 2 riverfront well (MW-67) that recorded deviations from the 30% criteria in Q4 2010 and Q1 2011. The Q4 2011 groundwater elevations are consistent with these recent results and the overall horizontal and vertical gradients are still similar to historical data. The remaining two transducer intervals showed a deviation of less than 0.5 feet from the Q2 2007 through Q2 2009 criteria, resulting in no overall alterations to groundwater flow direction.

Therefore, these 2011 groundwater elevation data show no alterations in overall groundwater flow direction and no substantial variations in the overall horizontal and vertical groundwater gradients. As such, these data demonstrate that substantial variations to the observed flow field have not 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**.

2.2 Monitoring Installation Sampling

During each quarter in 2011, GZA collected groundwater samples for radionuclide analysis from scheduled sampling intervals within select monitoring installations ("wells") as shown in **Tables 3-Q1** through **3-Q4**. Chains of Custody for these samples are presented in **Appendix C**. GZA also collected additional groundwater sample volumes to provide aliquots to the NYDEC in Q2 2011.

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GZA used a number of different types of pumping equipment depending upon the sampling method and the characteristics of the individual monitoring installation[27]. **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[28]. As agreed by Entergy Nuclear Northeast, the NRC, NYSDEC, and GZA, the modified traditional purge method[29] allows for the collection of a representative groundwater sample from a monitoring installation after purging 1.5 volumes of water[30]. 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 **Table 1** for a summary of the sampling methods, equipment, frequency, and depths employed during this quarter's groundwater monitoring round.

2.3 Additional Monitoring Location Installation

In October 2011, GZA began the installation of an additional multi-level monitoring installation, designated MW-68, near the southwest corner of the Unit 3 Transformer Yard. Entergy authorized the construction of this monitoring location in order to increase the robustness of the Unit 3 well network and thus reduce risk of potential future Unit 3 releases going undetected. After grouting 8 inch steel casing four feet into bedrock (top of bedrock was approximately 10 feet below ground surface (bgs)), PQ bedrock core samples were collected to 150 feet bgs, using 5 foot core runs. During borehole advancement, a GZA field engineer evaluated the rock cores and logged rock type/conditions.

Following advancement to 150 feet bgs, the borehole was developed through surging and pumping techniques in preparation for downhole geophysical testing. Due to an open fracture zone in the shallow bedrock, approximately 8,000 gallons of water were purged prior to adequate removal of fines/rock dust, which settled at the bottom of the borehole during the surging process[31]. After the borehole was developed, multiple downhole geophysical logs were completed, including: fluid resistivity, temperature, caliper, acoustic-televiewer (ATV), television, and heat pulse flow meter (both ambient and stressed) logs. The geophysical data were reviewed by GZA personnel and five sampling intervals were identified within the borehole. See **Appendix I** for the MW-68 geophysical logs.

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[27] 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.

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

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

[30] 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.

[31] Approximately 4,700 gallons were introduced during coring activities. Following the initial surging, approximately 12 feet of fines/rock dust had settled into the bottom of the borehole. The apparent source of these fines was a 1.5-foot open fracture located approximately 25 feet below ground surface.

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The borehole was subsequently over-reamed to 8 inches using rotary (spun casing) drilling techniques. Approximately 10,000 gallons of water were introduced during the reaming process due to the open, shallow bedrock fracture. The widened borehole was then developed a second time using surging and pumping techniques, and the volume of water introduced during over-reaming was purged from the hole. Following borehole development, four individual PVC monitoring wells (one containing two screens and an inflatable packer) were installed at varying depths based on the geophysical data. For additional information, the borehole and well completion logs are located in **Appendix I**. The monitoring well installation for MW-68 was completed on December 22, 2011. The initial MW-68 groundwater samples will be collected in Q1 2012 (following the appropriate stabilization time), and this monitoring installation will be sampled quarterly thereafter as part of the Long Term Monitoring Program in the future.

2.4 Vapor Containment Building Foundation Drain Sampling

During 2011, GZA collected water samples from on-Site manholes MH-5 VCFD[32], 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"[33]).[34]

2.5 Proactive Mid-Quarter and Confirmatory Sample Collection

In response to the 2010 Tritium peaks observed in multiple MW-31 and MW-32 sampling intervals (RWST/ R.O. skid spill), additional Post-Q1 2011 groundwater samples were collected at all active sampling intervals within these two monitoring locations (as well as MW-30). Additional Post-Q2 2011 and Post-Q3 2011 groundwater samples were also collected at multiple locations in response to the recent Tritium peaks observed in several Unit 1 and Unit 3 monitoring locations (Unit 1 transient sink overflow).

The results of the confirmatory and 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**.

2.6 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.

[32] GZA collects the water sample from the vapor containment foundation drain (VCFD) input into this manhole and not the manhole's sump. Thus, the MH-5 VCFD sample name.

[33] 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.

[34] These two Unit 2 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. 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.

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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 the property to locations other than the river; and
- Monitor the existing 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)[35], 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). In addition, given the robustness of the monitoring network and the overarching Long Term Monitoring Program, particularly as further data sets are collected, it has become a valuable tool for identifying existing equipment and/or operational procedures that can be upgraded to prevent future radionuclide releases/spills.

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 sixteen year average for precipitation measured at the Site is approximately 37 inches per year. Based on a USGS infiltration study[36], as well as the Precipitation Mass Balance Model (PMBM) calibration[37], approximately 25 percent of the

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

[36] 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.

[37] 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).

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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[38], the yearly precipitation just prior to Q4 2011 (approximately 61 inches) was calculated and input into the recalibrated model to compute the flows used in the estimation of Q4 2011 dose values. Based on the USGS study cited above, the aquifer recharge rate is therefore approximately 16 inches for the year prior to the Q4 2011 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 11 gpm of groundwater flowed into the Discharge Canal from the upper and lower zones during the previous year. In addition, approximately 17 gpm and 25 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 64 and 7 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 each quarter in 2011 were analyzed at GEL Laboratories for Tritium, Sr-90, Cs-137, Co-60, and Ni-63[39]. **Table 3-Q4** presents the analytical results for these radionuclides through the last quarter of 2011. The rolling yearly averages, which were calculated using all the valid data from Q1 2011 through Q4 2011, including Mid-Quarter and confirmatory samples, are also presented in **Table 3-Q4**. **Table 4-Q4** presents minimum detection concentrations (MDC), standard deviation, and I.L.s assigned to each well for the Q4 2011 analytical results. **Table 5** presents historical Site groundwater analytical data. Isopleth maps of Q4 2011 rolling averages for Tritium and Sr-90 are presented in **Figures 6-Q4** and **7-Q4**, respectively. **Figure 8-Q4** presents a data map of Q4 2011 rolling

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The two models use different sets of input parameters which are not dependent on 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 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 1/2 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.

[38] 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 (5A-Q1** through **5A-Q4)** of this 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.

[39] 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.

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averages for Cs-137, Co-60, and Ni-63[40]. Similar tables and Figures are also presented in this report for the three previous 2011 quarters (Q1 2011, Q2 2011 and Q3 2011).

An overall evaluation of the sample handling, shipment and analytical procedures indicates that the quality assurance quality control protocols were met in all four 2011 quarters for all of the analyses except for five[41], and the analytical results should be useable as presented in **Table 5**. This conclusion is further supported by a review of the 2011 analytical data, as compared to previous historical trends. Refer to **Section 5.2.2** of the Final 2007 Quarterly Long-Term Groundwater Monitoring Report No. 1 for further details regarding 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[42] computed based on yearly precipitation rates are multiplied by radionuclide activities measured in the storm drains to compute the associated storm drain radionuclide release rates[43] 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 the most-current quarter, Q4 2011, 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*	5.94E-04	0.00E+00**
Unit 2 North Zone	4.53E-03	1.24E-01
Unit ½ Zone	1.87E-02	4.74E-02
Unit 3 North Zone	1.50E-02	1.06E-02
Unit 3 South Zone	4.83E-03	6.04E-02
Southern Clean Zone*	0.00E+00	7.10E-02

*Activity in the Northern Clean Zone is attributable to an assumed Tritium background activity 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.

[40] 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.

[41] The Q1 2011 Cs-137 positive detections in MW-40-100, MW-127 and MW-51-189 were re-analyzed and verified. However, based on the site hydrogeologic and historical chemistry data, these values do not appear to represent groundwater conditions at these locations. Additionally, Sr-90 was positively detected in the preliminary results for MW-40-46 (Q2 2011) and MW-58-65 (Post-Q3 2011). These samples were re-analyzed and Sr-90 was then found to be below the detection limit. Therefore, these preliminary results were likely false laboratory positives. Documentation of the analyses performed to reach these conclusions was subsequently provided in: "Corrections to 2011 RGWMP Analyses from GEL" memorandum dated March 1, 2012.

[42] 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.

[43] 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.

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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) Revision 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. Furthermore, the LTMP also aids in the detection, and thus prevention, of potential future leaks/spills due to the generally wide-ranging investigations that are conducted in response to radionuclide peaks observed in the monitoring network. During these investigations, a number of potential SSCs are inspected and work practices are reviewed. These inspections and reviews have identified conditions which could have potentially resulted in a future spills/leak before any release had taken place. Such early identification, allows implementation of proactive measures to upgrade these SSCs and/or work practices, thus preventing them from resulting in a future leak/spill[44].

Rapid release detection monitoring is specifically focused on those SSCs which exhibit a credible probability of resulting in a visually undetected release of radionuclides to the subsurface[45]. The monitored SSCs are shown on **Figure 4** and a description of the specific monitoring installations 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 07-07 Groundwater Protection Initiative (GPI).

As discussed in **Section 2.3** above, GZA also completed the installation of an additional multi-level monitoring installation in December 2011. This new installation is designated MW-68, and is located near the southwest corner of the Unit 3 Transformer Yard, downgradient of MW-46[46] (see **Figure 6-Q4** for location[47]). Entergy authorized the construction of MW-68 at Unit 3 in order to increase the robustness of the Unit 3 well network and thus reduce risk of potential future releases going undetected. The initial MW-68 groundwater samples will be collected in Q1 2012 (following the appropriate stabilization time), and this monitoring installation will be sampled quarterly thereafter as part of the Long Term Monitoring Program. 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 activities above which further action would be undertaken. As part of the ongoing groundwater

[44] Previous examples include: (1) work practices updated following the Q4 2009 RWST/R.O. skid spill; (2) maintenance to piping in the utility tunnel (eventually exonerated as a source) following the 2011 Tritium peaks observed at multiple Unit 1/Unit 3 monitoring locations; (3) work practice upgrades made to the RWST and the WHT pit following the U3 FSB washout peaks in MH-A2; and (4) improvements made to sumps following multiple investigations.

[45] 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 formal procedural emphasis has been placed on routine review of these reports as they potentially relate to GPI objectives.

[46] 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 an additional monitoring well installation, there was a moderate risk that some small releases could go undetected. In particular, it appeared 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.

[47] 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.

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monitoring program, the reported analytical values 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 analytical results from the previous year, including Aliquot, Confirmatory, and Mid-Quarter sample results[48]. As an exception to the established procedure discussed above, the 2010 Tritium I.L.s (based on 2009 yearly averages) were conservatively used as the I.L.s for the 2011 monitoring period. This exception was deemed appropriate, and conservative, because the uncharacteristic Tritium peaks in multiple Unit 2 and Unit 3 monitoring locations during 2010 would otherwise result in high Tritium I.L.s, which would then desensitize the screening process. For the remaining radionuclides, the standard procedure was followed; i.e., 2010 yearly averages were used to calculate the 2011 Investigation Levels. The monitoring well-specific I.L.s are presented in T**ables 4-Q1** through **4-Q4** (identical I.L.s for all four quarters) and are established for a comparison with the 2011 analytical results.

WELL DESIGNATION	INVESTIGATION LEVELS (I.L.s)		
	TRITIUM (pCi/L)	Sr-90 (pCi/L)	OTHER PLANT-RELATED RADIONUCLIDES
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 a 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;
- 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[49];

[48]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 activities, 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.
[49]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.

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- Initiate an investigation utilizing Entergy's corrective action program and related resources as appropriate (e.g. site engineering / radiation protection); and
- Initiate source/ground water remediation techniques commensurate with the potential dose impact analyses and good environmental stewardship.

3.4.1 Proactive Mid Quarter Samples

In response to the 2010 Tritium peaks observed in multiple MW-31 and MW-32 sampling intervals, additional Post-Q1 2011 groundwater samples were collected at all active sampling intervals within these two monitoring installations (as well as MW-30). Additional Post-Q2 2011 and Post-Q3 2011 groundwater samples were also collected at multiple locations in response to the recent Tritium peaks observed in several Unit 1 and Unit 3 monitoring locations.

The results of the confirmatory and 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**.

3.4.2 Previous Q4-2010 Investigation Level Exceedances

As indicated in the previous Q4 2010 Quarterly LTM Report, a comparison of the Q4 2010 analytical results to their respective I.L. values shows that the I.L.s were only exceeded at four sampling intervals. All four of these exceedances were likely related to the transient spills discussed in **Section 1.0** above (e.g. the RWST/R.O. skid spill and the MH-A2 Tritium peaks from the U3 FSB roof drain condensate); all four of these exceedances were still ongoing during at least portions of 2011. Therefore, these I.L. exceedances are discussed in **Section 3.4.4** below.

3.4.3 Q1 through Q4 2011 Boundary Investigation Levels

A comparison of the Q1 through Q4 2011 analytical results for the On-Site Boundary Wells to their respective I.L. values shows that the I.L.s were not met for any of the monitoring locations[50]. Therefore, there was no requirement to further investigate radionuclide activity in these wells. However, monitoring installations 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 historical I.L. exceedances at these two southern boundary locations and the majority of the data from Q1 through Q4 2011 fall within previous ranges, the Tritium activity was at the historical maximum during 2011 in multiple MW-40 and MW-51 sampling intervals. Even though the historical maximum was recorded at the following six intervals: (1) MW-40-46 in Q1 2011; (2) MW-40-81 in Q2 2011; (3) MW-40-100 in Q2 2011; (4) MW-51-40 in Q2 2011; (5) MW-51-163 in Q4 2011; and (6) MW-51-189 in Q2 2011, all of these results were still below 375 pCi/L and, more importantly, below the detection limit. Because historical, internally correlated fluctuations in Tritium activity have been observed in the laboratory results, these monitoring locations continue to be evaluated 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 375 pCi/L) and typically below the 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-40 during 2011 as the sampling intervals exhibited a general increase in Tritium activity during Q2 2011, followed by a general

[50] As discussed in **Section 3.4.4** below, while the laboratory reported positive Cesium detections for Q2 2011 samples at MW-52-122 and MW-52-181, these detections were likely false positives.

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decrease through Q4 2011. MW-51 also remained consistent with this overall pattern, but it recorded a second general increase in Tritium activity from Q3 2011 to Q4 2011.

An appropriate metric to evaluate whether or not these cyclical trends are due to Tritiated groundwater migration 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, the southern boundary groundwater elevations are well above those in the power block area[51]. 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 historical 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 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 Tritium activity 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, is ongoing.

3.4.4 Q1 through Q4 2011 SSC Investigation Levels

For the SSC monitoring wells, a comparison of the 2011 quarterly analytical results to their respective I.L. values shows that the I.L.s were met at twenty monitoring locations (thirty-five sampling intervals) during the four quarters of 2011. Because multiple I.L. exceedances have been related to the same transient spills, the following discussion is split into four subsections, with general discussion explaining the likely source followed by the corresponding exceedances:

1. Unit 2 RWST/R.O. skid spill;
2. Unit 3 FSB roof condensate;
3. Unit 1 CSB sample sink overflow; and
4. Other (explained individually).

The following table is separated into quarters/radionuclides and summarizes the cases where the I.L.s were met, with these exceedances discussed below. See the footnote to the table for the key to the color designations.

[51] The current, Q1 through Q4 2011, transducer data confirm the overall groundwater flow direction remains from the southern boundary toward the power block area, as discussed in **Section 2.1** above.

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WELL ID	Q1 2011 RESULT* (pCi/L)	Q2 2011 RESULT* (pCi/L)	Q3 2011 RESULT* (pCi/L)	Q4 2011 RESULT* (pCi/L)	INVESTIGATION LEVEL (pCi/L)
MW-32-149	1,060**				1,000
MW-36-24		3,070			2,563
MW-39-67		10,900/2,240 (Post)	14,900 (Post)	1,030	1,000
MW-39-84				3.1	2.1
MW-39-102		14,300/12,400 (Post) 44.8	19,000 (Post)	1,120	1,000 Any Detection*
MW-39-124		9.1			Any Detection*
MW-39-195		7,040/4,190 (Post)	17,200	5,130	1,000
MW-41-40	2,030 11.5	4,510			1,000 7.3
MW-41-63	1,230				1,000
MW-44-66		1,620 (Post)			1,000
MW-44-102				1,050	1,000
MW-45-42	8,120	8,560/39,400 (Post)	27,200 (Post)		5,900
MW-45-61		5,630	5,910 (Post)		2,650
MW-46	2,470	5,250/3,080 (Post)	3,300	2,280	1,844
MW-49-65				4,240	3,030
MW-50-42		3,770		30.2	1,038 11.0
MW-50-66		6,500	7,150	7,830	5,896
MW-52-122		34.8			Any Detection*
MW-52-181		64.6			Any Detection*
MW-53-120			14.5		Any Detection*
MW-54-37		5,160/27,900 (Post)	31,300	14,000	2,710
MW-54-58		2,480 (Post)	4,230	4,830	1,480
MW-54-123				3,920	1,302
MW-54-144		4,340	5,270	6,850	2,635
MW-54-190				8,770	3,490
MW-56-83		76,400/84,200 (Post)	105,000 (Post)	72,500	6,390
MW-57-20		20,300/38,100 (Post)	24,700 (Post)		3,040
MW-57-45		13,500/25,300 (Post)	24,600 (Post)		2,380
MW-58-26		1,860	2,470 (Post)	4,770	1,000
MW-58-65			1,100 (Post)	1,750	1,000
MW-62-138				3,010	2,000
MW-63-121				3,630	2,000
MW-66-36	15.5				14.0
U3-T2	2,270	3,830/2,670 (Post)	2,650	2,980	2,077
U1-CSS		6,380/10,800 (Post)			5,173

*A radionuclide is positively detected when the result is greater than or equal to the MDC and 3 times the 1 sigma uncertainty.
**Tritium = blue; Strontium = green; Cesium = red; Nickel = purple.

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RWST/R.O. Skid Spill at Unit 2

In January 2010, a peak in Tritium activity was measured in MH-9 during routine 80-10 Effluents Program sampling[52]. Additionally, several sampling intervals in MW-31 and MW-32 exhibited clear Tritium increases and I.L. exceedances in 2010, generally reaching maximum historical levels at these locations. Following a series of investigations by IPEC, a Q4 2009[53] surface spill related to a RWST/R.O. processing skid was identified as the likely source of the Tritium increases. This transient and localized spill involved rented equipment that was brought on-site by an outside contractor for use during the Unit 2 outage, and is no longer on site. In addition to likely entering the subsurface through the storm drain system, this spill also entered the MW-32 well vault, and may have penetrated the well casings[54]. Additional I.L. exceedances were also noted at downgradient monitoring locations later in 2010 as this perturbation moved through the system.

This spill resulted in numerous I.L exceedances in 2010. However, by Q4 of that year, only one near-source monitoring location (MW-32-149) still exceeded its Tritium I.L.. This sampling interval again exceeded its I.L. during Q1 2011; however, an overall, clear decrease in Tritium activity was noted from June 2010 through Q1 2011, and the Tritium activity decreased below the I.L. for the final three quarters in 2011. It is expected that the Tritium activity in MW-32-149 will continue to exhibit an overall decrease, similar to the other MW-31 and MW-32 sampling intervals, because the probable source has been terminated.

The only additional 2011 I.L. exceedance which may be attributable to the RWST/R.O. skid spill was in MW-36-24 during Q2. This conclusion is based in part on the preceding RWST/R.O. skid peak seen in the lower sampling interval at this location (MW-36-41), and an I.L. exceedance in Q4 2010. However, variable Tritium levels have been observed in MW-36-24 since August 2009, which predates the RWST/R.O. skid spill. As such, the 2011 I.L. exceedance in this monitoring interval is more likely a response to Retention Mechanism releases, some of which are likely associated with RWST/R.O. skid spill. The samples collected at MW-36-24 in Q3 2011 and Q4 2011 showed a decreasing trend (similar to the overall trend seen in the upgradient monitoring locations) to an activity below the detection limit in Q4 2011.

The two 2011 I.L. exceedances discussed above, as related to the transient RWST/R.O. skid spill, were resolved in subsequent 2011 quarterly monitoring rounds. As such, and because the Q4 2009 RWST/R.O. skid spill was transient in nature and Tritium is non-sorbing, it appears that this perturbation had generally dissipated through the system by Q4 2011. However, it is noted that the transient RWST/R.O. skid spill has likely replenished the Retention Mechanism(s) and further contributions to the groundwater flow regime are still possible.

Unit 3 FSB Roof Condensate

A transient Tritium peak was observed in manhole A2 (MH-A2) in Q2 2009, with a concurrent Tritium I.L. exceedance in MW-45-42; this well is located immediately adjacent to MH-A2. Both locations exhibited rapid decreases of Tritium activity by the following, Q3 2009, quarter; and the Tritium activity in MH-A2 was consistently below 1,500 pCi/L for the next year. However, in

[52] The Tritium levels were measured at ~85,000 pCi/L in MH-9 on January 14th and 15th, 2010, and then decreased to 4,650 pCi/L on January 19th, 2010. Typical Tritium levels prior and post-spill were ~1,500-4,000 pCi/L in MH-9.

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

[54] 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.

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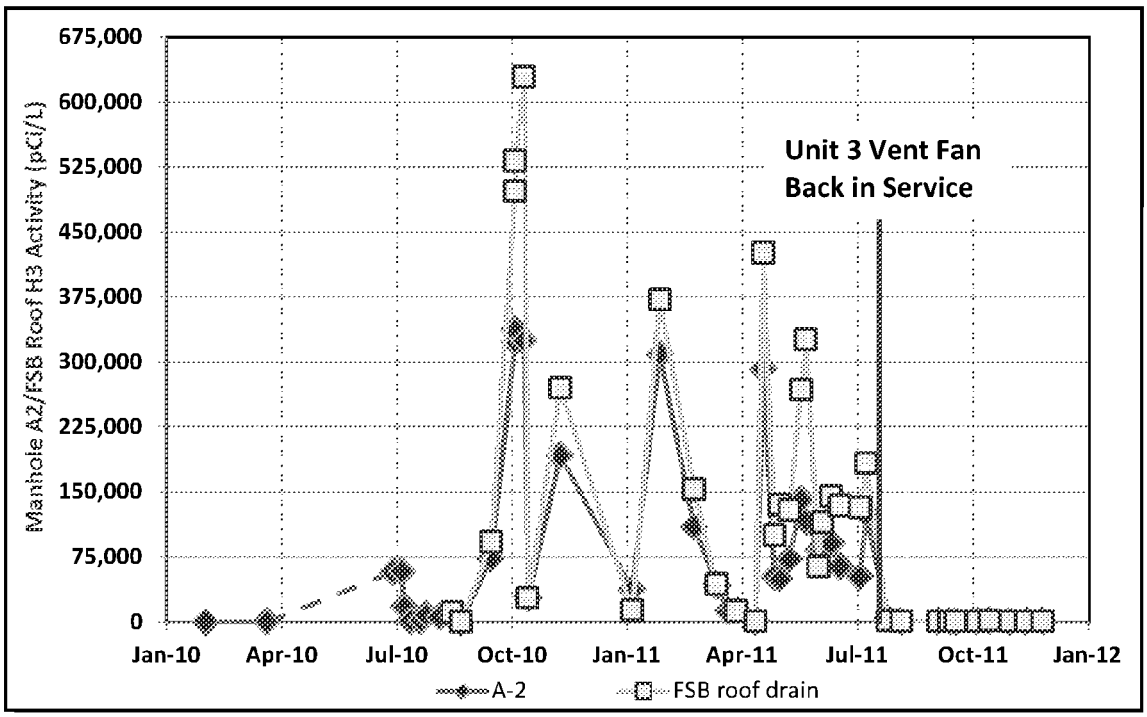
early June 2010, a transient Tritium peak was again observed in MH-A2, followed by a rapid decrease in activity (<1 week) to baseline levels for this storm drain system (< 2000 pCi/L). A prolonged peak of elevated Tritium activity was subsequently observed in Q4 2010 through Q3 2011 (10/5/2010 – 07/28/2011)[55]. Tritium peaks and I.L. exceedances have also been noted in MW-41-40, located adjacent to this storm drain system, and MW-46, hydraulically downgradient of MH-A2, since Q3 2010[56]. Additional I.L. exceedances and Tritium peaks have also been noted in MW-45, MW-44, MH-A4 and MH-B1 during 2011.

Because of these Tritium peaks in the monitoring network, a series of investigations into the correlation and underlying cause of the I.L. exceedances, as well as the increased Tritium in the manholes, have been conducted by Entergy and GZA. Early investigations identified that the likely cause of both the monitoring well and manhole peaks was higher levels of Tritium washout[57] entering MH-A2 from the FSB building roof drain during periods when the vent fan was not operational. Under specific climatic conditions, SFP evaporation was likely condensing on the roof and being transported into the storm drain system via rain water.

As one step in the investigative process (to rule out a leak in a SSC), a standpipe was constructed which solely receives inflow from the FSB roof drains and isolates this water from other water sources to MH-A2. The Q3 2010 through Q4 2011 sample data from this standpipe clearly demonstrate, as shown in the graph below, that the recent Tritium activity within MH-A2 is directly proportional to the discharge from the FSB roof.



[55] Additionally, a clear increase in Tritium activity was also observed downstream in this storm drain system at MH-A4 in Q4 2010.

[56] A manhole in the vicinity of MW-46, designated MH-B1, has also exhibited an elevated Tritium activity during this time frame.

[57] The term "washout," as used herein, is the process by which Tritiated water vapor is transformed into Tritiated water as a liquid. In general, this transformation is driven by condensation (as is the primary underlying driver associated with MH-A2, above) and/or Tritium diffusion from the Tritiated water vapor into precipitation (rain and/or snow), either while it is still falling or after deposition.

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These investigations also identified that the Unit 3 FSB fan was generally out of service from May 2010 through July 2011[58]. Consequently, IPEC repaired the vent fan in Q3 2011 and it was placed back in service on July 21, 2011. The Tritium activity in MH-A2 rapidly[59] returned to baseline conditions thereafter (~1 week later) and remained at those levels throughout Q4 2011. Based on the investigations and associated data collected, it has been concluded that the elevated Tritium levels detected in MH-A2 and A4 were due to the FSB roof condensate entering the storm drain system when the vent fan was not operating.

Some of this highly Tritium-laden water was, in all probability, released into the groundwater from the storm drain system[60] and thus likely resulted in the recent Tritium I.L. exceedances observed in monitoring wells adjacent to and downgradient of this system. The greater response of the proximate groundwater monitoring wells, as compared to that observed during previous MH-A2 Tritium increases, is believed due to the coincident Unit 3 outage. During an outage, the reactor cavity is open and the pool temperature becomes significantly elevated, both resulting in greater evaporative losses, and thus greater likely washout impacts. The following 2011 Tritium I.L. exceedances are likely related to (and have been attributed to) the Unit 3 FSB roof condensate, and as such, do not indicate any new SSC leak at Unit 3.

MW-41-40: Q1 2011 and Q2 2011;
MW-41-63: Q1 2011;
MW-44-66: Post Q2 2011;
MW-44-102: Q4 2011;
MW-45-42: Q1 2011, Q2 2011, Post Q2 2011 and Post Q3 2011;
MW-45-61: Q2 2011 and Post Q3 2011;
MW-46: Q1 2011, Q2 2011, Post Q2 2011, Q3 2011 and Q4 2011; and
U3-T2: Q1 2011, Q2 2011, Post Q2 2011, Q3 2011 and Q4 2011.

Similar to the response observed within MH-A2, the Tritium activity at the majority of these monitoring installations (e.g. MW-41-40, MW-41-63, MW-44-66, MW-45-42, MW-45-61 and MW-46) has shown an overall decrease following the repair of the vent fan. Because the apparent source of these peaks was transient and terminated, and due to the non-sorbing behavior of Tritium, these decreasing trends are likely to continue at these locations. The Tritium I.L. exceedances at MW-46, U3-T2 and MW-44-102 were not yet resolved through Q4 2011; therefore, these monitoring locations will be specifically evaluated based on the additional data obtained during the upcoming quarterly monitoring round. All other I.L. exceedances related to the U3 FSB condensate were resolved during 2011.

Unit 1 CSB Sample Sink Overflow

Beginning with the Q2 and Post-Q2 2011 samples, uncharacteristic increases in Tritium activity were noted in a number of Unit 1 monitoring locations. These increases included historical maximum levels (since the beginning of the LTMP) observed in MW-47-80[61] and MW-56-83, and were well above the historical average activities. The highest Tritium peaks were concentrated in the deeper monitoring intervals, with a lack of similarly elevated levels in the

[58] It is noted that the SFP was ventilated during all fuel transfers.

[59] A MH-A2 sample was collected only 7 days after the vent fan was placed back in service (7/28/2011) and the Tritium activity in the sample was 3,140 pCi/L, approximately 30 times lower than the average Tritium activity from September 2010 to July 21, 2011. Subsequent samples showed further decreases.

[60] It is noted that the Tritiated water vapor evaporating from the SFP is a permitted release through the Plant Vent located atop the vapor containment building. Analyses were conducted to account for this release to the FSB roof in the dose computations. This same Tritium is therefore "double counted" because it has again been included in the storm drain and groundwater portions of the dose computations.

[61] It is noted that MW-47 is a standby monitoring well and is thus not typically scheduled for quarterly monitoring. As such, it does not have an I.L for 2011, and therefore does not appear on the above table of I.L. exceedances. With initial detection of the spill in MW-56, MW-47 was reactivated to provide additional definition of the developing IP-1 Tritium plume.

corresponding shallowest sampling intervals (MW-47-56[62] and MW-56-53). These two monitoring locations are located directly to the south and southwest of the Unit 1 Containment Building. Also beginning in Q2 2011, a distinct and coincident increase in Tritium activity was also observed in multiple sampling intervals of MW-39, located upgradient/cross-gradient of Unit 1 in the northern portion of Unit 3. Subsequently, monitoring installations located further downgradient exhibited Tritium activities which continued to increase through Q3 2011 (MW-57) and Q4 2011 (MW-54, MW-50 and MW-49) as the perturbation moved through these locations.

Given the observed Tritium increases, particularly recognizing that groundwater cannot flow from Unit 2 (Tritium plume location) to this southern area of Unit 1, it was judged likely that a spill had recently occurred. As such, an investigation into the underlying cause of these peaks was immediately initiated by Entergy. Through this investigation, an April 1, 2011 sample sink overflow in the Unit 1 Chemical Systems Building (CSB) was initially identified as a likely source of the above identified Tritium peaks. This sample sink, located next to the Waste Distillate Transfer Pumps on the 70' Fuel Handling floor, was found overflowing because the sink's sock filter had become obstructed. This caused subsequent flooding on the floor which flowed into the floor drain. Upon discovering the sink overflow, Entergy removed the materials obstructing the sink, and removed the residual water. However, additional investigations revealed that the 70' floor drain piping was compromised, which resulted in flooding of the Sample Room below[63] on the 53' floor. Concurrently, it was noted that leakage previously being captured from Waste Distillate Transfer Pump piping was also being discharged to the 70' floor drain; this captured piping leakage was then rerouted. These multiple facets of this overall release, collectively called the "CSB Sample Sink Overflow", are all associated with the distillate tank waste processing system located in the Unit 1 CSB. While the Sample Sink Overflow and associated flooding was previously identified and resolved by IPEC, the release to the environment only became apparent via the Q2 2011 sampling results.

Based on the proximity of the Unit 1 CSB 53' Sample Room to the South Curtain Drain (SCD), it appears that a portion of the above described spill exited the structure through wall/floor joints and entered the curtain drain. The spill then appears to have entered the groundwater flow regime along this drain line. A portion of the highly-Tritium laden water likely stayed within the SCD above the working mat[64] and is a likely source of the 2011 Tritium peaks observed in MW-47, MW-56 and additional further downgradient Unit 1 monitoring locations. Additionally, part of the release may have also followed the Southwestern IP1-CB Flow Path, as discussed in Section 8.2 of the Hydrogeologic Site Investigation Report prepared by GZA, dated January 7, 2008 and also impacted these two well locations. Finally, water appears to have also exfiltrated from the SCD near the southern portion of the CSB into the vadose zone. Given the slope of the bedrock surface in this area, as well as the strike and dip of the bedrock fractures[65], this migration pathway is likely responsible for the 2011 Tritium increases observed in MW-39.

Given the above discussion, the following 2011 Tritium I.L. exceedances appear related to (and have been attributed to) the Unit 1 CSB Sample Sink Overflow:

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[62] The Tritium activity within MW-47-56 increased by nearly tenfold during 2011; however, this activity was still nearly two orders of magnitude less than that observed in the deeper sampling interval at this monitoring location, MW-47-80.

[63] The floor drain in this room was obstructed, which resulted in the water backing up until there was 1/2 -3/4" of standing water throughout this room. The water in the 53' Sample Room then leaked down to the 43' CSB landing at the bottom of a nearby stairway (Stairway #11).

[64] It is noted that this drain is typically dry, and thus, in conjunction with the building foundation and associated working mat, can form a preferential flow path, which can then transport water around the building without it being intercepted by the deeper CSB drain.

[65] See the Hydrogeologic Site Investigation Report discussion of vadose zone transport along bedrock fracture strike and dip as related to up/cross gradient Tritium migration from Unit 2 to the Unit 1 NCD. A similar migration mechanism is hypothesized to have occurred in the case of MW-39, as graphically presented on **Figure 6-Q2 2011.**

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MW-39-67: Q2 2011, Post-Q2 2011, Post-Q3 2011 and Q4 2011;
MW-39-102: Q2 2011, Post-Q2 2011, Post-Q3 2011 and Q4 2011;
MW-39-195: Q2 2011, Post Q2 2011, Post-Q3 2011 and Q4 2011;
MW-50-42: Q2 2011;
MW-50-66: Q2 2011, Q3 2011 and Q4 2011;
MW-54-37: Q2 2011, Post-Q2 2011, Q3 2011 and Q4 2011;
MW-54-58: Post-Q2 2011, Q3 2011 and Q4 2011;
MW-54-123: Q4 2011;
MW-54-144: Q2 2011, Q3 2011 and Q4 2011;
MW-54-190: Q4 2011;
MW-56-83: Q2 2011, Post-Q2 2011, Post-Q3 2011 and Q4 2011;
MW-57-20: Q2 2011, Post-Q2 2011 and Post-Q3 2011;
MW-57-45: Q2 2011, Post-Q2 2011 and Post-Q3 2011;
MW-58-26: Q2 2011, Post-Q3 2011 and Q4 2011;
MW-58-65: Post-Q3 2011 and Q4 2011;
MW-62-138: Q4 2011;
MW-63-121: Q4 2011; and
U1-CSS: Q2 2011 and Post-Q2 2011.

The Tritium activity in the majority of the more upgradient monitoring locations (e.g. MW-39, MW-47, MW-56, U1-CSS and potentially MW-57) appears to have peaked in Q3 2011, and these locations appear to be entering the decreasing portion of the breakthrough curve in Q4 2011. The downgradient wells (e.g. MW-49 and MW-50) are generally still exhibiting increasing trends as the center of mass migrates towards these locations. The first Tritium I.L. exceedances at the river boundary (monitoring locations MW-62-138 and MW-63-121) occurred in Q4 2011, indicating the leading edge of this pulse input had reached the river boundary wells by Q4 2011.

Due to the transient nature of this spill and the non-sorbing behavior of Tritium, it is expected that the upgradient wells will continue their overall decreasing trend back to historical baseline conditions. However, all indications are that this spill was released into the vadose zone; therefore further releases from associated Retention Mechanisms could potentially cause temporary increases in Tritium activity at these locations in the future. Once this input migrates through the system, it is anticipated that the Tritium activity in the farther downgradient monitoring locations will also return to historical baseline levels. Of all the 2011 I.L. exceedances that have been attributed to the U1 CSB Sample Sink Overflow, only those at sampling intervals MW-50-42 and U1-CSS were resolved during 2011. As such, the unresolved I.L.s at the other monitoring locations will be further evaluated based on the additional data obtained during the upcoming quarterly monitoring rounds.

Other (Explained Individually)

MW-39-84 (Q4 2011; Strontium). The Q4 2011 Strontium result exceeded the I.L. at MW-39-84 by approximately 1 pCi/L, which is the highest Strontium activity measured at this interval since the initiation of the LTMP. A corresponding positive Strontium detection was also noted in the sampling interval directly below (MW-39-102). Prior to this point, Strontium was typically detected between 1 and 2 pCi/L at this interval. The source of this Strontium has been associated with the Legacy IP1 Storm Drain piping, which historically carried water collected by the Unit 1 SFDS[66]. This discharge was rerouted after testing revealed that numerous sections

[66] Refer to the Hydrogeologic Site Investigation Report prepared by GZA, dated January 7, 2008 for additional information.

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of the storm drains leaked. As such, no active Strontium source has been present in the Legacy piping since 1994[67].

However, even after source termination, Strontium peaks have still been noted at MW-39 since the initiation of the LTMP. These peaks have been attributed to residual sediment in storm drains as well as fluctuation in precipitation and thus Retention Mechanism influences. The somewhat higher Strontium measured in Q4 2011 is therefore likely related to the high amount of precipitation in 2011 (e.g. Hurricane Irene), and/or storm drain work, which could have potentially remobilized trapped/sorbed Strontium. Given that Strontium discharges to the nearby Legacy Storm Drain have been terminated, the elevated activity is expected to return to historical levels below the I.L. with the resumption of more normal precipitation rates. This monitoring location will be specifically evaluated based on the additional data obtained during the upcoming quarterly monitoring round.

MW-39-102 and MW-39-124 (Q2 2011; Cesium). Cesium was detected in both MW-39-102 and MW-39-124 in Q2 2011. Prior to Q2 2011, Cesium was never detected in either of these sampling intervals, it immediately returned to below the detection limit in both intervals by the Post-Q2 2011 sampling round, and remained below detection through Q3 and Q4 2011. In addition, Cesium was not detected in any of the other sampling intervals (either above or below) these two intervals during Q2 2011, and has never been detected in these intervals since the beginning of the LTMP. Therefore, these Q2 2011 Cesium detections in MW-39-102 and MW-39-124 are likely false positives due to laboratory errors or glassware contamination.

However, it is noted that MW-39-102 concurrently exhibited elevated Tritium in Q2 2011, as attributed to the U1 CSB Sample Sink Overflow. Although unlikely due to the high partitioning affinity of Cesium, these detections could potentially be related to this transient spill. Both of these Cesium detections and I.L. exceedances were resolved in 2011.

MW-41-40 (Q1 2011; Strontium). The Q1 2011 Strontium activity slightly exceeded the I.L. for this sampling interval; this activity is the highest measured at this interval since the initiation of the LTMP. Additionally, a clear increase in Strontium activity was also noted in the lower sampling interval at this location (MW-41-63) in Q1 2011. Strontium has consistently been measured above 2 pCi/L at this monitoring location. As discussed above relative to MW-39-84, the source of this Strontium has been associated with the Legacy IP1 Storm Drain piping, which historically carried water collected by the Unit 1 SFDS (see **Figures 7-Q1** through **7-Q4**). As such, this Q1 2011 Strontium peak is likely associated with liberation of Strontium stored (Retention Mechanism) near this Unit 1 Legacy piping due to high precipitation events or potentially storm drain work. The Strontium activity at MW-41-40 immediately decreased below the I.L. in Q2 2011 (similar decrease also observed in MW-41-63) and remained at historical levels through Q4 2011. As such, this I.L. exceedance was resolved in 2011.

MW-50-42 (Q4 2011; Strontium). The Q4 2011 sample exceeded the Strontium I.L. by approximately a factor of three, which represented the highest activity measured at this interval since the initiation of the LTMP. Inspection of **Figure 7A** reveals that this Q4 2011 peak was likely a delayed response to the increase in water levels during defueling operations in the Unit 1 SFPs, possibly resulting from a delayed contribution from Retention Mechanisms. An extended response to the defueling operations has been noted at MW-50-42 since Q3 2009, so the return to pre-defueling levels could potentially be prolonged at this downgradient location. However, because the ultimate source has been terminated, an eventual decrease below the historical Strontium activity at this location is expected. This monitoring location will be further

[67] It is also noted that the ultimate Strontium source, the Unit 1 SFPs, has also been terminated during the defueling operations in 2008.

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evaluated based on the additional data obtained during the upcoming quarterly monitoring round.

MW-52-122 and MW-52-181 (Q2 2011; Cesium). Positive Cesium detections were measured in both of these sampling intervals in Q2 2011. However, these detections are likely false positives because: (1) Cesium was **not** detected in Q2 2011 in the other sampling intervals (both above and below) at this location (e.g. MW-52-11, MW-52-18, MW-52-42, MW-52-64 and MW-52-162); (2) prior to Q2 2011, a positive Cesium detection has never been observed for all sampling intervals (including MW-52-122 and MW-52-181) at this location; (3) Cesium was below the detection limit in MW-52-122 and MW-52-181 immediately following this detection (Q3 2011); (4) additional Cesium detections were **not** measured in any surrounding monitoring location during Q2 2011; and (5) no plausible upgradient Cesium source is present. As concluded for MW-39-102 and MW-39-124 discussed above, these Cesium detections appear to be false positives.

MW-53-120 (Q3 2011; Nickel). A positive Nickel detection was measured at MW-53-120 in Q3 2011, the first detection observed at this sampling interval since Q4 2008. The MDC, which has been typically around 20 pCi/L historically, was only 11 pCi/L in Q3 2011. If a historically typical MDC had been applied to the Q3 2011 sample results, the Nickel results (14.5 pCi/L) would have been below the detection limit. Therefore, this positive detection is likely only a result of laboratory adjustments during Q3 2011[68]. The MDC returned to a historically typical value (21.7 pCi/L) in the following, Q4 2011, quarter and Nickel was then below the detection limit at this sampling interval. As such, the Q3 2011 I.L. exceedance was resolved in 2011.

MW-66-36 (Q1 2011; Strontium). The Q1 2011 Strontium activity slightly exceeded the I.L. and slightly exceeded the historical maximum activity measured at this sampling interval. Inspection of **Figure 7A** demonstrates that this Q1 2011 increase was the first clear Strontium increase at this location since the defueling operations were completed on the Unit 1 SFPs. Because this monitoring location is located downgradient of the Unit 1 SFPs, the Q1 2011 increase is likely in response to the defueling operations in the Unit 1 SFPs, as this perturbation migrated downgradient to this location. This Q1 2011 peak was immediately followed by a decrease in Q2 2011 to an activity below the Strontium I.L. The Strontium activity remained below the I.L. in Q3 2011 and Q4 2011, although the activity was slightly elevated and fluctuations were observed. As such, this I.L. was resolved in 2011. However, because this sampling interval is located along the downgradient boundary, and recognizing the partitioning behavior of Strontium, the eventual return to pre-Q1 2011 levels may be prolonged.

Foundation Drains and Manholes

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.

> **MH-5 VCFD -** Throughout 2011, peaks in Tritium activity have been observed within MH-5 VCFD[69], where the maximum activity (12/22/2011 sample) was multiple times higher than the relatively small, singular peak previously noted in Q3 2010.[70] This original 2010 peak was immediately followed by a rapid reduction[71] to the previous

[68] It is noted that this monitoring location, MW-53, is located near the U1-NCD. The Nickel activity in this curtain drain is consistently >100 pCi/L. Additionally, positive Nickel detections have been measured in every sample collected at MW-42-49, an upgradient sampling interval that is also located adjacent to the drain, since the beginning of the LTMP.

[69] It is noted that the water collected by the MH-5 VCFD is routed to the discharge canal where it is released as a monitored discharge. As a monitored discharge, this Tritium activity is directly accounted for in the dose computations.

[70] The Q3 Tritium peak in MH-5 VCFD was approximately ten times higher than the previous baseline of approximately 1000 pCi/L.

[71] After the initial Q3 10 increase, the Post-Q3 2010 sample, obtained only 10 days later, showed the Tritium activity in MH-5 VCFD had already returned to the previous baseline levels.

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baseline levels in Post-Q3 2010, and remained at baseline through Q4 2010. At the time, the Q3 and Q4 Q3 2010 Quarterly Monitoring Reports conjectured that this MH-5 VCFD peak in Tritium activity could be potentially correlated with the increased LCD flow rate, and also associated with the increased activity in proximate monitoring wells MW-31and MW-32 (as discussed in **Section 3.4** of these reports).

However, this correlation no longer appears plausible based on weekly samples and flow rate measurements[72] more recently collected from MH-5 VCFD. This more intense sampling regimen, relative to the previous quarterly sampling frequency, was initiated in June 2011 as part of the ongoing investigation to identify the ultimate cause of these elevated Tritium levels. As shown on **Figure 6B,** which includes four additional quarters of data (relative to that presented in the previous Q4 2010 report), the 2011 Tritium peaks observed in MH-5 VCFD (as well as those observed in the proximate the monitoring wells) are not convincingly correlated with the increased flow rates in the LCD. Therefore, the previous conjecture that these data were potentially correlated appears to be less likely the case given the additional data. As such, the Tritium peaks observed in the monitoring points from MW-31 and MW-32 appear to be more likely the result of the previously discussed transient surfaces spills (see above), as well as Retention Mechanisms.

The peaks in MH-5 VCFD currently remain unexplained. The ongoing investigation is now more focused on potential process inputs such as floor and roof drains, with potential contribution from plant/FSB vent condensate. Construction drawings are currently being reviewed in order to potentially identify additional process inputs to the drain lines upstream of this sampling point. Finally, it is noted that the other radionuclides analyzed (e.g. Strontium, Cesium, Cobalt) were all non-detect for all samples collected in 2011, similar to historical results at MH-5 VCFD.

B-I - During Q1 and Q2 2011, elevated Tritium was observed in Unit 3 manhole B-1. However, the activity then decreased by over an order of magnitude[73] by Q3 2011, after the U3 FSB vent fan was placed back in service. The operational vent fan eliminated the roof drain input of Tritium into MH-A2; B-I, and its associated foundation drain, is located downgradient of MH-A2 and likely collects exfiltration from A2 via this groundwater pathway. The 2010 and 2011 trends at B-1 were generally consistent with the transient increases in Tritium activity observed in MH-A2 during that period (See discussion above under Unit 3 FSB roof condensate). However, unlike the earlier Q4 2010 decrease observed in B-1, there was a Tritium peak observed in MH-A2 during that quarter, and the Tritium activity seen at monitoring locations MW-41-40 and MW-46 also remained elevated during that time. Therefore, while it appears that the Tritium activity in B-1 is generally related to the recent MH-A2 / roof drain induced Tritium peaks, a clear correlation is not apparent. As such, the previously inoperable U3 FSB vent fan may not be the only cause for the recent peaks observed in B-1. This manhole will therefore be further evaluated in the upcoming quarterly monitoring rounds.

Similar to the historical sampling events at B-1[74], Cesium was also detected in all three 2011 samples from this manhole at an activity comparable to the Q3 and Q4 2010 results[75]. These Cesium levels are well below the 80-10 Effluents Program reporting

[72]The flow rate at MH-5 VCFD was consistently between 4 and 8 gpm in 2011.

[73]The Q3 2011 Tritium activity decreased to 736 pCi/L, which is even below baseline activity (~1,000 pCi/L) in this manhole.

[74]A total of 13 samples have been collected from Manhole B-1 and low levels of Cesium have been positively detected in 9 of these samples.

[75]At manhole B-1, the Cs-137 activity slightly decreased from the first 2011 sample (Q1 2011) to the final, Q3 2011, sample. However, a slight increase was noted between Q4 2010 and Q1 2011.

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limits, and are believed to be associated with Unit 1 contaminated construction backfill remaining in the vicinity of the Unit 3 VC Building. The remaining radionuclides were all non-detect during the three 2011 sampling events at B-1.

B-6 Similar to the recent trends seen in the upgradient Unit 3 monitoring locations (and U3-T2), a Tritium peak was observed at Manhole B-6 in Q2 2011. Following this peak, the Tritium activity exhibited an overall decrease through Q4 2011 and the Tritium results were below the detection limit in Q4 2011. All other radionuclides were non-detect at B-6 during the five 2011 sampling events. It is believed that B-6, and its associated foundation drain, is also capturing groundwater with increased Tritium activity due to previous Exfiltration of Unit 3 FSB roof condensate from MH-A2.

Leak Collection Device (LCD). During 2011, the flow rate into the Unit 2 Leak Collection Device (LCD) fluctuated between approximately 0.7 and 2.5 liters/day from March 2011 to September 2011, compared to a historical baseline flow rate of <0.02 L/day. The LCD flow rate then gradually decreased to approximately 0.5 L/day between September 2011 and December 2011[76], but still remained well above (over an order of magnitude) the historical baseline collection rate.

A previous, clear increase in the daily volume of water collected by the LCD was also observed in Q3 2010, with an average flow rate of approximately 1.5 L/day[77]. However, this increase was followed by a rapid return to baseline conditions in October 2010, and the LCD flow rate remained at those baseline conditions through Q1 2011.

Previous investigations indicated that the increased flow observed in Q3 2010 was potentially correlated[78] with the timing of 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 throughout Q4 2010.

With the resumed increased LCD flow, further investigations by GZA and Entergy identified a number of existing light outlet boxes, welded to the inside liner of the fuel pool, as potential locations where pool water could get through the liner during high water levels (i.e., above the designed high water level of the pool). The majority of the boxes are sourced by electrical conduits which were constructed without penetrating the liner by running the conduit along the side of the wall to the top of the fuel pool. However, for a portion of the light outlet boxes (i.e. the boxes on sides of the pool where the crane rails are located), these electrical conduits penetrate the liner and do not prohibit water from entering the annulus[79]. Following subsequent inspections of the light boxes, it has been concluded that there is definitive indication that these boxes did contribute, at least in part, to the LCD flow rate under transient overfill conditions. This conclusion has been reached based, in part, on the observation of boron precipitate within the boxes and conduit penetrations.

Due to these investigations, the six light boxes that contain electrical conduits which penetrate the liner have been temporarily sealed and IPEC has implemented restrictions on the pool elevation during atypical operations. Entergy is also scheduling the removal of these light boxes

[76] It is noted that the LCD flow rate increased from approximately 0.5 to 0.9 L/day between December 21, 2011 and the end of the year.

[77] The LCD collected approximately 50 liters of water during the July to October 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.

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

[79] At the time, it was believed that raising pool levels above the light boxes for the dry cask work was acceptable because the construction drawings showed the boxes were sourced via conduits that do not penetrate the liner. Therefore, it was not clear that a transient overfill would pose a problem.

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with permanent plating/sealing of the liner so as to permanently eliminate any possible future contribution to the LCD flow rate.

Given the elevated 2010 and 2011 LCD flow rates, **Figure 6B** is included in this report to visually present both the historical LCD flow rate data and the Tritium data for the monitoring locations located within the Unit 2 Tritium plume. Review of **Figure 6B** suggests that the increased flow rates in the LCD do not correlate with trends observed in the Unit 2 monitoring locations, which further supports the conclusion that the flow into the LCD is not indicative of release of similar water into the groundwater system.

However, it is noted that the LCD flow rate remained elevated after the temporary sealing of the light boxes. This could either indicate that: (1) the temporary seals are not sufficiently robust; (2) there is an additional contributing leak in the liner; or (3) the continued 0.5 L/day flow is a residual effect, given the unknown travel time for water trapped behind the liner (prior to the repair) to migrate from the light boxes through the four-foot thick concrete wall and then into the LCD. Given the remaining uncertainty, additional liner investigations are currently being planned, and this monitoring location will be further evaluated based on additional data gathered during the upcoming quarterly monitoring rounds.

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 through monitored discharge points with the NCD flow undergoing treatment prior to discharge[80]. These drains have also historically been 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).

Visual inspection of the U1-SFDS Tritium data demonstrates that this drain also likely collected groundwater impacted by the recent U1 CSB Sample Sink Overflow. A clear increase in Tritium activity, by nearly one order of magnitude, was measured in Q2 2011. This was followed by steady decreases through Q4 2011, with the Q4 2011 Tritium activity dropping below the detection limit. The U1-NCD Tritium activity also temporarily increased in Q3 2011 by a factor of three relative to baseline conditions reestablished through Q4 2010. This peak was immediately followed by a decrease of greater magnitude in Q4 2011, which dropped the Tritium activity back to the baseline levels seen in 2009. This increase in the NCD has also been attributed to the U1 CSB Sample Sink Overflow.

Strontium data from these drains continues to show overall decreasing trends since the completion of U1 SFP defueling; in fact, the Q4 2011 Strontium activity in the U1-SFDS and U1-NCD was 85% and 82%, respectively, lower than the average pre-defueling levels seen at these locations (as summarized on **Figure 7A)**.

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,

[80] Prior to the Unit 1 SFP defueling, the U1-NCD and U1-SFDS drains were collecting approximately 20-40 times more Strontium than was discharging through groundwater into the Hudson River. Additionally, these drains were particularly effective during defueling and captured approximately 300-350 times more Strontium during this time frame. Following the completion of the defueling operations, these drains have been removing approximately 10 times more Strontium than is discharging into the Hudson River from groundwater.

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as is consistent with the requirements of Monitored Natural Attenuation (MNA), the selected remediation for the IPEC Site[81].

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 which impact the geohydrologic flow regime[82] 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) and the pools were then subsequently fully defueled and drained in Q4 2008, 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 (including more-recent localized, transient spills) 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. In fact, the total Unit 2 Tritium plume activity stopped decreasing and even increased for one quarter due to the impact of the transient RWST/R.O. skid spill. While the overall decreasing trend since source interdiction is clear, the more current rate of reduction has been difficult to predict due to the impact of: (1) these transient, localized spills; and (2) natural geologic and anthropogenic Retention Mechanism(s)[83]. However, as seen in the data for Q3 2011 and Q4 2011, the Tritium levels in the plume are once again declining at rates comparable to those seen during the beginning of the LTMP (see **Figure G-17**). Further discussion of this year'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 more slowly than Tritium levels. This is because, in addition to the Retention Mechanism(s) 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

[81] The selection of MNA as the remediation for the Site is more fully discussed in the Hydrogeologic Site Investigation Report, dated January 7, 2008.

[82] While a release of pool water through the Unit 2 SFP liner (and into the LCD) via light outlet boxes has been documented, there is no compelling evidence that any of this water has migrated through the concrete wall elsewhere and entered the groundwater flow regime. This conclusion is based primarily on the lack of convincing correlation of LCD flow rate with the response of groundwater monitoring points proximate to the pool.

[83] These subsurface features have trapped and stored Tritium that was released during historical Unit 2 SFP leaks and were likely replenished during the transient, localized spills. Therefore, they 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.

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level for fuel rod removal[84]. The increased leakage rate had resulted in a noticeable increase in Strontium levels in the immediate vicinity, and downgradient of, the fuel pool. However, as more currently observed, the Q4 2011 Strontium activity in the near-pool monitoring locations has generally decreased substantially below the average pre-defueling levels (by 80-98%). More downgradient monitoring locations have also 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, the total Unit 1 Strontium plume activity has dropped by approximately 68% since the completion of the Unit 1 SFPs defueling operations, and has dropped by approximately 20% when compared to pre-defueling conditions.

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 most-current, Q4 2011, 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 more recent 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[85] no longer extends to the river as it did in previous quarters through Q1 2009. 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 greater than six over the last two years, from 70,150 pCi/L in Q1 2009 to 11,100 pCi/L in Q4 2011, and by over an order of magnitude since tracking of the plume began. 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 Hydrogeologic Site 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,[86] was performed on the Tritium levels measured through the most-current quarterly data, Q4 2011, at monitoring locations associated with the IP2-SFP and downgradient Unit 2 Tritium plume[87]. Because this monitoring report covers the entire year, all quarterly data from Q1 through Q4 2011 have been added to the Mann-Kendall analysis. Each of the vertical monitoring intervals

[84] 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.

[85] 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.

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

[87] 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 not 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.

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at each monitoring installation was analyzed separately. In general, only data collected after final completion of the multi-level installation was used[88].

Graphs showing the variation in Tritium activity 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[89], 49, 50, 53[89], 55 and 111) and downgradient, 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 Q4 2011 to that from Q4 2010 indicates that the number of increasing trend designations has now begun decreasing, from 5 total intervals (1 river boundary interval) in Q4 2010 to 3 total intervals (0 river boundary intervals) in Q4 2011, and the upgradient monitoring locations (MW-31 and MW-32) also showed an overall shift toward decreasing trends now that the RWST/R.O. skid perturbation has generally migrated through the local groundwater flow regime. Of the 32 non-river-boundary intervals included in the table for Q4 2011, approximately one-half (18) show a decreasing trend, no change from the last quarterly report (Q4 2010). 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 great percentage of the Tritium activity in the plume. For the river boundary monitoring intervals, slightly less than one-half (4 of 9) show a decreasing trend, the same as last quarterly report (Q4 2010)[90].

Notwithstanding the above, it is noted that the Mann Kendal analysis is still currently of limited use for evaluating the behavior of the plume in response to the termination of the identified leaks in the Unit 2 SFP, the reason these analyses were implemented. This is primarily due to the impact of two localized, transient Tritium surface spills[91], the most critical of which is the

[88] The majority of the boreholes were completed as a multi-level installation. 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 sampling 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, for example MW-32.
While the overall intent was to use only depth-discrete data, there were a number of exceptions 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.

[89] 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.

[90] Closer inspection of the current "no trend" river boundary wells reveals that the normalized test statistic decreased from Q4 2010 to Q4 2011 at four of the five intervals (MW-67-219, MW-67-276, MW-67-323 and MW-67-340). In fact, MW-67-340 switched from an "increasing trend" designation to a "no trend" designation from Q4 2010 to Q4 2011. As such, these intervals are all statistically shifting towards the "decreasing trend" designation, which is currently defined at a 95% confidence interval, with the addition of the current, Q4 2011, monitoring data.

[91] In addition, effectiveness is further impacted by a limitation 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/climatic

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RWST/R.O. skid spill. These spills have been shown to result in increases in activity, which, while valid measures of plume behavior, impair the ability of the trend analysis to serve as a measure of the effectiveness of Unit 2 SFP leak identification and termination, the intended purpose of this analysis. Due to these spills, a number of wells had previously transitioned from decreasing trend status to no trend, and no trend status to increasing trend. While this trend has been somewhat reversed as the RWST/R.O. skid spill has dissipated, as seen in the 2011 sampling data discussed above, associated Retention Mechanism impacts and the recent U1 CSB Sample Sink Overflow will likely further adversely affect the Mann-Kendall analyses. As such, the original practice of providing a discussion of each monitoring interval exhibiting a no trend or increasing trend is no longer in effect (as begun in Q4 2010) until the transient, localized spills have flushed through the groundwater system. The summary table and the individual Tritium plots for each sampling interval are still provided in **Appendix G**.

Unit 2 Tritium Plume Total Activity Analysis

Another method to analyze plume behavior is to compute the total Tritium activity in the plume at multiple snapshots over time. This procedure[92] was implemented for each quarterly sampling round from the beginning of the LTMP in Q2 2007 through the current, Q4 2011 quarter. In addition, the bounding Tritium activities from Figure 8.1 of the Hydrogeologic Site Investigation Report[93] 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. However, the Q4 2009 transient surface RWST/R.O. skid spill did cause a noticeable increase in total Tritium mass in Q1 and Q2 2010[94]. This was followed by a decrease in Q3 2010, and then relatively stable total Tritium mass thereafter through Q2 2011. Once this perturbation moved through the local groundwater flow system, the total Tritium activity reverted back to its overall decreasing trend through Q3 and Q4 2011. Based on the data through Q4 2011, the total Tritium activity in the plume has decreased approximately 55 percent since Q2 2007, and has decreased by approximately 91 percent when compared to the bounding Tritium activity. It is noted that the general "first order" time/activity plume decay graph is now once again decreasing and no longer appears to be approaching a non-zero horizontal asymptote[95].

Conclusion- Unit 2 Tritium Plume MNA

Based on the data and analyses provided above, our conclusion is that the Tritium plume associated with the historical Unit 2 SFP leaks is undergoing overall, long-term reductions in

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.

[92] 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).

[93] 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.

[94] 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. As such, the total Tritium activity increased from 0.017 Ci to 0.021 Ci during this quarter. Similarly, an increase in Unit 2 Tritium I.L. exceedances was observed in 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.

[95] An apparent non-zero asymptote was previously conjectured, which suggested a continued input of Tritium into the groundwater flow regime. The current data show the graph is once again decreasing, but a lower, non-zero asymptote is still possible given the Retention Mechanism(s), and/or potentially a small unidentified Unit 2 SFP leak. If an unidentified leak does still remain in the Unit 2 SFP, it must be small. 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 more than 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.

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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[96], this Unit 2 Tritium plume satisfies the requirements for Monitored Natural Attenuation. Finally, it is important to recognize that, even with additional inputs from localized transient spills, 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

Well – Specific Evaluation

Despite the effects of partitioning, as discussed below, 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**: monitoring points U1-NCD, U1-SFDS, MW-42 and U1-CSS. The final defueling of the Unit 1 SFPs, however, resulted in a noticeable increase in Strontium groundwater activities proximate to the SFPs, as exhibited by these same monitoring points; an overall increase in Strontium activity was expected 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[97]. All of these monitoring points have subsequently shown large sustained decreases since mid-2009, to levels that are now even lower than pre-defueling activities. Farther downgradient (MW-53, MW-55, MW-54, MW-57, MW-50, and MW-37), increases in Strontium activities were also measured after defueling, but generally following 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 to pre-defueling levels, with a few exceptions (MW-53-120, MW-55-24, MW-50-42 and MW-37-40) still exhibiting responses to the increased leakage during defueling. The wells farthest downgradient, river boundary wells MW-66 and MW-67, have shown Strontium activity increases in the past few quarterly sampling events as the perturbation continues to migrate farther downgradient.

Viewed on a more detailed basis with the most current LTMP results, the monitoring well data for Q4 2011 indicate that the overall Strontium levels continued to exhibit a general decrease and are now 80 to 98 % lower than the average pre-defueling levels in the immediate vicinity of the pool (U1-NCD, MW-42-49, U1-SFDS and U1-CSS). These monitoring locations, as expected, were the first to reflect the complete decommissioning of the SFPs given their location/function. For a portion of the somewhat further downgradient wells (most evident in MW-37-22 and MW-50-66), the Q4 2011 data are generally consistent with the decreasing portion of the perturbation peak as the previous increased U1-SFPs leakage moves past these points[98]. However, other downgradient sampling intervals have most recently shown increases in Strontium activity (MW-53-120, MW-55-24, MW-55-35 and MW-50-42), possibly resulting from delayed input from Retention Mechanism(s), while similarly located monitoring points have already exhibited their peak Strontium activities and have now (Q4 2011) decreased back to pre-defueling levels (MW-53-82, MW-54, MW-57, MW-55-54, MW-36 and MW-49). This

[96] While a release of pool water through the Unit 2 SFP liner (and into the LCD) has been documented, there is no compelling evidence that this water has gotten through the concrete wall and entered the groundwater flow regime. This conclusion is based primarily on the lack of convincing correlation of LCD flow rate with the response of groundwater monitoring points proximate to the pool.

[97] 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.

[98] The maximum Strontium levels at these locations were typically recorded in 2009 and have generally shown overall decreases over the past few quarters.

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variable behavior at downgradient monitoring locations serves to again emphasize that the IPEC Site is located in a bedrock fracture controlled hydrologic regime[99]. As such, this type of localized "distance-based inconsistency" is to be expected and likely indicates that the downgradient wells which exhibited rapid responses to the defueling operations (e.g. MW-54) are closer to (or within) the more pervious preferential flow pathway. This pathway 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[100].

For the farthest downgradient wells, those proximate to the river, it is not clear whether the increased defueling leakage is just beginning to impact these wells, or has generally already past them and the observed increases are due to partitioning/Retention Mechanism impacts. As discussed above, both scenarios are likely the case, depending on the individual area/depth specific zone monitored. For example, Strontium activity in the MW-62-138 depth interval (along with, but to a lesser extent the shallower intervals in overburden) appears to show several Strontium peaks from Q1 2009 to Q1 2011, and then remained below the detection limit through the most-current, Q4 2011, quarter. 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 Strontium plume preferential flow path. 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 two additional riverfront monitoring installations downgradient of the Unit 1 Strontium plume, MW-66 and MW-67, have also exhibited peaks during the 2011 quarterly monitoring rounds. The Strontium data in the shallowest depth interval of MW-67, MW-67-39, also demonstrated a moderate increase in Strontium activity in Q4 2009, dissimilar to the previous overall decreasing trend that was seen at this sampling interval from Q4 2007 (pre-defueling) through Q3 2009. After slight, but distinct, Strontium decreases from Q1 2010 through Q4 2010, the activity again increased during Q1 2011 at this interval. A similar decrease followed this second perturbation for the next two quarter monitoring rounds; however, the Strontium activity again increased in the most-current, Q4 2011, quarter. The monitoring interval directly below MW-67-39 (MW-67-105) had also shown increases in Strontium activity during the Q2 2010 and Q3 2010 quarterly monitoring events, after previously exhibiting generally stable Strontium levels since the initiation of the LTMP. Following this 2010 perturbation in MW-67-105, the Strontium activity has been below the detection limit within this sampling interval through the most-current (Q4 2011) quarter. The Strontium data in the shallowest depth interval of MW-66, MW-66-21, has remained generally stable since the initiation of the LTMP and has not shown a clear response to the 2008 defueling activities. However, the deeper sampling interval, MW-66-36, has recently exhibited slightly elevated Strontium levels, beginning in Q1 2011.

Because the ultimate Strontium source was terminated, the Strontium activity at the river boundary locations are expected to decrease to pre-defueling levels once the perturbation passes through the system. However, as discussed above, Strontium partitioning and potential

[99] 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.

[100] By way of contrast, in a homogeneous porous media uniform flow field, 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 typical of a more 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).

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future inputs from Retention Mechanisms could delay the overall decrease in activity at these Unit 1 monitoring locations.

Unit 1 Strontium Plume Total Activity Analysis

Similar to the Tritium analysis discussed in **Section 3.5.1** above, the behavior of the Unit 1 Strontium plume was analyzed by computing the total Strontium activity in the plume at multiple snapshots over time. This procedure[101] was implemented for each quarterly sampling round from the beginning of the LTMP in Q2 2007 through the current, Q4 2011 quarter. These data are summarized as a histogram on **Figure J-1** in **Appendix J**.

As seen on the figure, the total Strontium activity in the plume downgradient of the Unit 1 SFPs has shown an overall decreasing trend since defueling was completed in November 2008. As expected after source termination, a general "first order" plume decay is observed in **Figure J-1**. While it appears that the Strontium data is approaching a non-zero horizontal asymptote, an indication of additional Strontium entering the groundwater flow regime, the ultimate Unit 1 Strontium source has been definitively terminated through the defueling operations in 2008. This slower attenuation was expected for the Strontium plume due to the strong partitioning behavior of this radionuclide. As such, Strontium was initially adsorbed onto solid surfaces (both geologic and anthropogenic) from the groundwater when the Unit 1 SFPs source was still active. This behavior is an equilibrium process, which means the "stored" Strontium will then desorb back into groundwater when the groundwater Strontium activity decreases, thus maintaining equilibrium between the sorbed and aqueous phases. Therefore, partitioning is expected to substantially slow plume attenuation as the Strontium desorbs back into groundwater.

Even though Strontium partitioning retards overall plume attenuation, the total Strontium activity in the Unit 1 Plume did initially decrease below the average pre-defueling total activity in Q1 2010, only five quarters after the defueling operations were completed. Further overall decreases in total Strontium activity have also observed between Q1 2010 and the most-current quarter, Q4 2011. Because the ultimate source was terminated, the total Strontium activity is expected to continue this overall decreasing trend over time. Based on the Q4 2011 data, the total Strontium activity in the Unit 1 plume has decreased by approximately 68% since the completion of the Unit 1 SFPs defueling operations, and has decreased by approximately 20% when compared to pre-defueling conditions. Future transient increases in total Strontium activity, similar to Q1 2011, may occur when Strontium is potentially released via the Retention Mechanism(s). However, an overall downward trend of total Strontium activity in the Unit 1 plume is expected to continue because the source of contamination was terminated when the Unit 1 SFPs defueling operations were completed.

Conclusion – Unit 1 Strontium Plume MNA

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 exhibited strong peaks in Strontium activity in response to defueling, and then have decreased even below pre-defueling activities. Monitoring installations farther downgradient have generally shown decreases in Strontium activity over the past four quarterly sampling rounds and are generally approaching pre-defueling levels. As expected, the Strontium activities in a portion of these sampling intervals have already decreased to pre-defueling levels. Monitoring installations closer to the river may still show Strontium increases (similar to the recent

[101] The individual sampling port Strontium activities were multiplied by the groundwater volumes in representative zones (discretized over area and depth), as computed using soil and bedrock porosities developed from the tracer and pumping tests (see Hydrogeologic Site Investigation Report for additional information).

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increases at MW-67-39 and MW-66-36) 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 and Retention Mechanisms on Strontium levels in the groundwater. However, over time it is expected that downgradient Strontium plume levels will also continue their overall downward trend given that Entergy has fully terminated the Unit 1 SFPs as a source through decommissioning.

Based on the Strontium data and plume analysis provided above, our conclusion is that the Strontium plume associated with the historical Unit 1 SFPs leak is undergoing overall, long-term reductions in activity which are consistent with Monitored Natural Attenuation (MNA), the remedial technology selected for the IPEC Site. Additionally, the Strontium plume total activity analysis provides further evidence that the Unit 1 Strontium plume has not only demonstrated a noticeable reduction since U1 SFPs defueling was completed, but also has decreased below the average pre-defueling total plume activity levels. 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 groundwater monitoring data through Q4 2011, within the context of the Long Term Monitoring Program, IPEC plans to continue routine groundwater and LCD monitoring, related monitoring network maintenance, and reporting of the data and engineering analyses. This work will be conducted in accordance with the IPEC Radiological Groundwater Monitoring Program IP-SMM-CY-110, and will incorporate the enhancements described herein.

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.

In summary, evaluation of data collected during the four 2011 quarters (through Q4 2011) has shown the following:

- Tritium I.L.s were met at a number of monitoring locations to the south of the Unit 1 Containment Building from Q2 2011 through Q4 2011. Investigations identified a transient overflow in a Unit 1 CSB Sample Sink[102] in April 2011 as the likely cause for these I.L. exceedances. The groundwater data from near-source monitoring locations (MW-47, MW-56 and MW-39) generally exhibit overall decreasing activity from Q3 2011 through Q4 2011, suggesting that the peak of this transient perturbation has migrated past these wells, Further downgradient monitoring locations (MW-55, MW-54, MW-50 and MW-49) are still generally exhibiting increases in Tritium activity through Q4 2011 as the center of mass moves towards these locations. The recent Q4 2011 I.L. exceedances in two river boundary sampling intervals (MW-62-138 and MW-63-121) also suggest that the leading edge of this perturbation has reached the River . Given that this transient U1 CSB Sample Sink Overflow was terminated, it is expected that the Tritium activity at these Unit 1 monitoring locations will fairly quickly return to the pre-spill levels.
- Coincident with the above discussed Unit 1 Tritium increases, a number of wells located further south in Unit 3 (e.g., MW-41, 44, 45, 46) also peaked to uncharacteristically high Tritium levels at the same time. Notwithstanding the temporal connection, and in part because these wells are located on the other side of a groundwater mound from Unit 1 (and MW-39), it is believed that these Unit 3 Tritium increases are not due to the above Sample Sink Overflow, but rather are associated with the washout[103] entering Manhole A2 (MH-A2) from the Fuel Storage Building (FSB) roof drain when the vent fan was

[102] Note that, as further discussed in **Section 3.4.4**, this release includes the sink overflow, as well as a previously contained pipe leak, all of which flowed into a compromised floor drain. These multiple facets of this release are all associated with the distillate tank waste processing system located in the Unit 1 CSB, and are termed the "CSB Sample Sink Overflow".

[103] The term "washout," as used herein, is the process by which Tritiated water vapor is transformed into Tritiated water as a liquid. In general, this transformation is driven by condensation (as is the primary underlying driver associated with MH-A2, above) and/or Tritium diffusion from the Tritiated water vapor into precipitation (rain and/or snow), either while it is still falling or after deposition.

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generally not operating[104] (see **Section 3.4.4**, and the Q4 2010 quarterly report for further discussion of the washout releases from the FSB roof drain to MH-A2).

Transient Tritium peaks above historical baseline in MH-A2 were initially observed in Q2 of 2009, with more elevated Tritium activity becoming evident between September 2010 and July 2011. These more recent data clearly demonstrated that the Tritium activity within MH-A2 is directly proportional to the discharge from the FSB roof drain when the vent fan was out of service. The vent fan was placed back in service on July 21, 2011, after which the Tritium activity rapidly[105] returned to baseline conditions (<2,000 pCi/L) within the FSB roof drain and MH-A2.

The greater response of the proximate groundwater monitoring wells, as compared to that observed during previous MH-A2 Tritium increases, is believed due to the coincident Unit 3 outage. During an outage, the reactor cavity is open and pool temperature becomes significantly elevated, both resulting in greater evaporative losses, and thus greater likely washout impacts. Based on these investigations and associated data collected, it has been concluded that the elevated Tritium levels detected in MH-A2, as well as the proximate and downgradient monitoring wells (MW-41-40, MW-44-66, MW-45-42 and MW-46) and manhole B-1, are due to the FSB roof condensate generated while the vent fan was not operating and, as such, do not indicate a new leak from a System, Structure or Component (SSC). Moreover, the vent fan has been replaced and the subsequent data show this issue to have been rectified (see **Section 3.4.4** for further discussion).

- During 2011, the flow rate into the Unit 2 Leak Collection Device (LCD) fluctuated between approximately 0.7 and 2.5 liters/day from March 2011 to September 2011, compared to a historical baseline flow rate of <0.02 L/day. The LCD flow rate then gradually decreased to approximately 0.5 L/day by the end of Q4 2011[106]. A previous increase in the flow rate into the LCD was also measured in Q3 2010, with an average flow rate of approximately 1.5 L/day. However this increase was followed by a rapid return to baseline conditions in October 2010, and the LCD flow rate generally remained at those baseline conditions through Q1 2011.

  With the resumed increased LCD flow during the latter part of 2011, further investigations by GZA and Entergy identified a number of existing light outlet boxes, welded to the inside liner of the fuel pool, as potential locations where pool water could get through the liner during high water levels (i.e., above the designed high water level of the pool). The majority of the boxes are sourced by electrical conduits which were constructed without penetrating the liner by running the conduit along the side of the wall to the top of the fuel pool. However, for a portion of the light outlet boxes (i.e. the boxes on sides of the pool where the crane rails are located), these electrical conduits penetrate the liner and do not prohibit water from entering the annulus[107]. Following

[104] It is noted that the Tritiated water vapor evaporating from the SFP is a permitted release 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. This same Tritium has therefore been "double counted" because it is again included in the storm drain and groundwater portions of the dose computations.

[105] A MH-A2 sample was collected only 7 days after the vent fan was placed back in service (7/28/2011) and the Tritium activity in the sample was 3,140 pCi/L, approximately 30 times lower than the average Tritium activity from September 2010 to July 21, 2011. Subsequent samples showed further decreases.

[106] It is noted that the LCD flow rate increased from approximately 0.5 to 0.9 L/day between December 21, 2011 and the end of the year.

[107] At the time, it was believed that raising pool levels above the light boxes for the dry cask work was acceptable because the construction drawings showed the boxes sourced via conduits that do not penetrate the liner. Therefore, it was not clear that a transient, planned operational design overfill would pose a problem. In this regard, it is also important to note that: (1) this light outlet box-mediated release through the liner does not exist under design conditions; and (2) it does not constitute a design flaw nor indication of liner aging issues.

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subsequent invasive inspections of the light boxes, it has been concluded that there is definitive indication that these boxes did contribute, at least in part, to the LCD flow rate under transient overfill conditions. This conclusion has been reached based, in part, on the observation of boron precipitate within the boxes and conduit penetrations.

Due to these investigations, the six light boxes that contain electrical conduits which penetrate the liner have been temporarily sealed and IPEC has implemented restrictions on the pool elevation during atypical operations. Entergy is also scheduling the removal of these light boxes with permanent plating/sealing of the liner so as to permanently eliminate any possible future contribution to the LCD flow rate.

Given the elevated 2010 and 2011 LCD flow rates, **Figure 6B** is included in this report to visually present both the historical LCD flow rate data and the Tritium data for the monitoring locations located within the Unit 2 Tritium plume boundaries. Review of **Figure 6B** suggests that the increased flow rates in the LCD do not correlate with trends observed in the Unit 2 monitoring locations, which further supports the conclusion that the flow into the LCD is not indicative of release of similar water into the groundwater system.

However, it is noted that the LCD flow rate remained elevated after the temporary sealing of the light boxes. This could either indicate that: (1) the temporary seals are not sufficiently robust; (2) there is an additional contributing leak in the liner; or (3) the continued 0.5 L/day flow is a residual effect, given the unknown travel time for water trapped behind the liner (prior to the repair) to migrate from the light boxes through the four-foot thick concrete wall and then into the LCD. Given the remaining uncertainty, additional liner investigations are currently being planned, and this monitoring location will be further evaluated based on additional data gathered during the upcoming quarterly monitoring rounds.

- Throughout 2011, multiple peaks in Tritium activity have been observed in the MH-5 VCFD data, where the maximum activity (12/22/2011 sample) was multiple times higher than the initial, singular Q3 2010 peak[108]. While the water collected by the MH-5 VCFD is routed to the discharge canal as a monitored release, which is directly accounted for in the dose computations, the 2011 Tritium peaks initiated an increased MH-5 VCFD sampling frequency, from quarterly to weekly. This regimen was begun in June 2011 as part of an investigation to identify the ultimate cause of these elevated Tritium levels. Based on these additional 2011 data, the Tritium peaks in MH-5 VCFD do not appear to be correlated with the recent increase in flow rate in the LCD, nor do they appear to foreshadow increases in the monitoring wells proximate to the Unit 2 SFP (see **Figure 6B)**[109]. This increased sample collection and additional investigations will continue during the subsequent quarterly monitoring rounds, with the investigation now more focused on potential process inputs such as potential Tritium contribution from plant/FSB vent condensate.
- Previously identified, more historical transient leaks more fully discussed in earlier Quarterly Reports included: (1) the additional leakage from the Unit 1 SFPs during the

[108]The Q3 2010 peak was approximately ten times the baseline Tritium activity of approximately 1000 pCi/L, but had already decreased to baseline prior to the Post-Q3 2010 sample, taken only 10 days later.

[109]Review of **Figure 6B,** which includes four additional quarters of data (relative to that presented in the previous Q4 2010 report), demonstrates that the Tritium peaks observed in MH-5 VCFD (as well as those observed in the proximate the monitoring wells) are not convincingly correlated with the increased flow rates in the LCD. Therefore, the conjecture that these data were potentially correlated, as hypothesized in both the Q3 and Q4 2010 reports, appears to be less likely the case given the additional data. As such, the Tritium peaks observed in the monitoring point data, particularly that from MW-31 and MW-32, appear to be more likely the result of the subsequently discussed transient surfaces spills, as well as the Retention Mechanisms(see above).

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2008 defueling operations; (2) the transient leakage from the distillation tank valves in Q1 2009; and (3) the Q4 2009 RWST/R.O. processing skid surface spill. These transient releases have generally migrated through the groundwater flow system and have nearly fully dissipated:

- 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 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. These near-pool locations have since decreased below the pre-defueling levels, and downgradient locations have generally decreased to, or are currently approaching, pre-defueling levels. However, additional Strontium increases have recently been observed in a few monitoring installations farther downgradient, possibly related to delayed inputs from Retention Mechanism(s). Sampling intervals within the river boundary wells are also exhibiting general increases in Strontium activity during 2011 as this transient input migrates through the system. The transient Strontium behavior at individual U1 monitoring locations is provided in **Figure 7A**, and discussed more fully in **Section 3.5.2**.
- The Q1 2009 leakage from the distillation tank valves was independently[110] 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[111]. However, additional potential impacts of this release via the Retention Mechanism(s) will be specifically evaluated during subsequent monitoring rounds.
- Due to a transient surface spill from a rental RWST/R.O. skid, Tritium I.L.s were exceeded in a number of upgradient Unit 2 monitoring locations from Q1 2010 to Q3 2010, and additional exceedances were noted in further downgradient installations as the Tritium-laden groundwater migrated downgradient. IPEC conducted investigations into the cause of these Tritium increases, which identified the Q4 2009 RWST/R.O. skid spill as the likely source (see **Section 3.4.4**). This Tritium release was transient and quickly eliminated. As expected, the Tritium activity in many of the upgradient locations decreased to below the I.L. relatively quickly (prior to the Q4 2010 quarterly monitoring round). Furthermore, monitoring wells located further downgradient also decreased below I.L s during 2011. Based on the observed data trends in Q3 2011 and Q4 2011, it appears that the Tritium input into the local groundwater flow regime from the transient RWST/R.O. processing skid has generally dissipated through the system. However, future releases from the storage/Retention Mechanism(s), replenished by this spill and historical SFP leaks, could create additional perturbations in Unit 2 Tritium levels.

[110] 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.

[111] 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).

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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[112] 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).

- From both qualitative and quantitative perspectives, the overall quarterly monitoring data sets from 2011 support the conclusion that the overall Tritium activity in the Unit 2 plume has decreased substantially since termination of the identified Unit 2 SFP leaks. These overall reductions have become particularly evident on **Figures 6** and **6A** of the more recent quarterly reports where the shaded plume[113] 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. The total Tritium plume activity has also reestablished an overall decreasing trend in the past two quarters (Q3 2011 and Q4 2011) as the transient RWST/R.O. surface spill has generally dissipated through the system (see **Figure G-17**). Based on the data and analyses provided above, our conclusion is that the Tritium plume associated with the historical leaks in the Unit 2 SFP has undergone long-term, overall 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 that are impacting the groundwater system[114], 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 proximate to the SFPs, with later increases in the downgradient Strontium levels (see

[112] These transient events included: the increased Unit 1 SFPs leakage during defueling, the Unit 1 Distillate Tank Valve leak, the Unit 2 RWST R.O. skid spill, the Unit 3 FSB roof condensate input into manhole A2 and the Unit 1 CSB Sample Sink Overflow.

[113] 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.

[114] In addition to the more current data, 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 conclusion that the Unit 2 SFP is no longer releasing Tritium to the groundwater system. However, given the more recent behavior observed in the Unit 2 LCD 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.

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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[115]. As anticipated, the levels proximate to the pool have decreased, recently falling to activities approximately 85-98% lower than the average pre-defueling Strontium levels. Levels further downgradient of the pools 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 and potential future inputs from Retention Mechanism(s). However, over time it is expected that Strontium levels in more downgradient wells will also exhibit overall downward trends to values below pre-defueling levels. From an overall perspective, as based on the data through Q4 2011, the total Strontium activity in the Unit 1 plume has decreased by approximately 68% since the completion of the Unit 1 SFPs defueling operations, and has decreased by approximately 20% when compared to pre-defueling conditions. All indications are that the Unit 1 Strontium plume will continue to dissipate given that the SFPs Strontium source has been terminated. 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.

- The above conclusions are continually reassessed on a quarterly basis as new data becomes available. In particular, the current LCD flow rates and the elevated MH-5 VCFD Tritium activity have both initiated additional investigations. Even though increased flow rates have recently been observed in the LCD[116], no unexplained, recent 2011 Tritium peaks have been observed in the proximate Unit 2 monitoring installations. Therefore, the current data continues to suggest that no new, unidentified SFP leaks are releasing Tritium to the groundwater system.
- The amount of radionuclides being released through the groundwater pathway, even with the somewhat increased Tritium levels currently observed due to the residual RWST/R.O. skid transient surface spill impacts, the more recent Unit 1 CSB Sample Sink Overflow and the manhole A2 release, is still small compared to permitted levels of radionuclides discharged to the river through the Discharge Canal.

[115] 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.
[116] All of the water collected by the LCD is fully contained and does not enter the groundwater regime.

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TABLES

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Table 2 Historic Quarterly Low Tide Groundwater Elevations

Table 3-Q1 First Quarter 2011 Groundwater Analytical Results and Averages

Table 3-Q2 Second Quarter 2011 Groundwater Analytical Results and Averages

Table 3-Q3 Third Quarter 2011 Groundwater Analytical Results and Averages

Table 3-Q4 Fourth Quarter 2011 Groundwater Analytical Results and Averages

Table 4-Q1 2011 1st Quarter Groundwater Analytical Results and I.L.s

Table 4-Q2 2011 2nd Quarter Groundwater Analytical Results and I.L.s

Table 4-Q3 2011 3rd Quarter Groundwater Analytical Results and I.L.s

Table 4-Q4 2011 4th Quarter Groundwater Analytical Results and I.L.s

Table 5 Historic Groundwater Analytical Results

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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	Projected 2012 Sampling Frequency[2]	SAMPLING INTERVAL[3]				SAMPLING DEPTH[4]	
				Ft Below Top of Casing		Elevation in Feet msl			
				Top	Bottom	Top	Bottom	Feet Below TOC	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	-9.7	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	-9.8	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	-8.2
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	-48.7	-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	-113.2
MW-33	Low Flow	Peristaltic Pump	Annually	8.0	30.0	10.6	-11.4	16	2.6
MW-34	Low Flow	Peristaltic Pump	Inactive	5.0	30.0	13.1	-11.9	16.5	1.6
MW-35	Low Flow	Peristaltic Pump	Annually	6.5	30.0	11.9	-11.6	15	3.4
MW-36-24[5]	Low Flow	Peristaltic Pump	Quarterly	11.0	24.0	0.6	-12.4	17	-5.4
MW-36-41	Low Flow	Peristaltic Pump	Inactive	36.0	41.0	-24.3	-29.3	37.0	-25.3
MW-36-52	Low Flow	Peristaltic Pump	Quarterly	48.0	53.0	-36.3	-41.3	50	-38.3
MW-37-22	Low Flow	Peristaltic Pump	Quarterly	12.0	22.0	2.9	-7.2	17	-2.2
MW-37-32	Low Flow	Peristaltic Pump	Quarterly	28.0	32.5	-13.2	-17.7	29.0	-14.2
MW-37-40	Low Flow	Peristaltic Pump	Quarterly	38.5	40.5	-23.7	-25.7	39.0	-24.2
MW-37-57	Low Flow	Peristaltic Pump	Quarterly	52.0	57.0	-37.2	-42.2	55.0	-40.2
MW-38	Low Flow	Peristaltic Pump	Inactive	5.0	40.0	9.0	-26.0	25.4	-11.4
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	-118.6	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	-117.1	161.7	-88.5
MW-41-40	Low Flow	Peristaltic Pump	Quarterly	22.0	42.0	32.1	12.1	36.0	18.1
MW-41-63	Modified Well Vol. Purge	Waterra Pump	Quarterly	59.0	64.0	-4.9	-9.9	61.0	-6.9
MW-42-19	Modified Well Vol. Purge	Submersible Pump	Quarterly	31.0	51.0	38.4	18.4	41.0	28.4
MW-42-78	Modified Well Vol. Purge	Waterra Pump	Quarterly	69.0	79.0	0.5	-9.5	74.0	-4.5
MW-43-28	Low Flow	Submersible Pump	Quarterly	8.0	28.0	40.0	20.0	23.0	25.0
MW-43-62	Low Flow	Submersible Pump	Quarterly	42.0	62.0	5.8	-14.2	54.0	-6.2
MW-44-66	Modified Well Vol. Purge	Submersible Pump	Quarterly	52.0	67.0	41.0	26.0	63.0	30.0
MW-44-102	Modified Well Vol. Purge	Waterra Pump	Quarterly	79.0	104.0	14.1	-10.9	80.0	13.1
MW-45-42	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	27.5	42.5	25.7	10.7	37.0	16.2
MW-45-61	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	51.5	61.5	1.7	-8.3	58.0	-4.8
MW-46	Modified Well Vol. Purge	Submersible Pump	Quarterly	6.0	30.0	11.0	-13.0	10.5	6.5
MW-47-36	Low Flow	Submersible Pump	Inactive	36.0	56.0	33.8	13.8	52.0	17.8
MW-47-80	Modified Well Vol. Purge	Waterra Pump	Inactive	70.0	80.0	-0.3	-10.3	72.0	-2.3

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	Projected 2012 Sampling Frequency[2]	SAMPLING INTERVAL[3]				SAMPLING DEPTH[4]	
				Ft Below Top of Casing		Elevation in Feet msl			
				Top	Bottom	Top	Bottom	Feet Below TOC	Elevation in Feet msl
MW-48-23	Low Flow	Peristaltic Pump	Inactive	8.0	23.0	6.8	-8.2	15.8	-1.0
MW-48-37	Low Flow	Peristaltic Pump	Inactive	33.0	38.0	-17.8	-22.8	35.8	-20.6
MW-49-26	Low Flow	Peristaltic Pump	Quarterly	15.0	25.0	-0.8	-10.8	20.0	-5.8
MW-49-42	Low Flow	Peristaltic Pump	Quarterly	32.0	42.0	-17.8	-27.8	37.0	-22.8
MW-49-65	Low Flow	Peristaltic Pump	Quarterly	60.0	65.0	-45.5	-50.5	61.0	-46.5
MW-50-42	Low Flow	Peristaltic Pump	Quarterly	22.0	42.0	-7.6	-27.6	27.0	-12.6
MW-50-66	Low Flow	Peristaltic Pump	Quarterly	62.0	67.0	-47.4	-52.4	60.0	-45.4
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	-130.1	189.2	-121.5
MW-52-11	Modified Well Vol. Purge	Peristaltic Pump	Annually	2.0	12.0	12.9	2.9	10.0	4.9
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	-183.2	181.0	-166.1
MW-53-82	Low Flow	Submersible Pump	Quarterly	62.0	82.0	7.9	-12.1	75.0	-5.1
MW-53-120	Modified Well Vol. Purge	Waterra Pump	Quarterly	100.0	120.0	-29.8	-49.8	105.0	-34.8
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	-190.5	190.0	-176.9
MW-55-24	Low Flow	Peristaltic Pump	Quarterly	14.0	24.0	3.8	-6.2	16.0	1.8
MW-55-35	Low Flow	Peristaltic Pump	Quarterly	30.0	35.0	-12.2	-17.2	32.0	-14.2
MW-55-54	Low Flow	Peristaltic Pump	Quarterly	44.0	54.0	-26.2	-36.2	47.0	-29.2
MW-56-53	Modified Well Vol. Purge	Submersible Pump	Semi-Annually	49.2	54.2	20.1	15.1	52.0	17.3
MW-56-83	Modified Well Vol. Purge	Waterra Pump	Semi-Annually	69.9	84.9	-0.7	-15.7	74.0	-4.8
MW-57-11	Modified Well Vol. Purge	Peristaltic Pump	Annually	6.0	11.0	8.7	3.7	10.0	4.7
MW-57-20	Modified Well Vol. Purge	Peristaltic Pump	Annually	15.5	20.5	-0.8	-5.8	19.0	-4.3
MW-57-45	Modified Well Vol. Purge	Peristaltic Pump	Annually	30.5	45.5	-15.7	-30.7	40.0	-25.2
MW-58-26	Low Flow	Peristaltic Pump	Semi-Annually	16.0	26.0	-1.8	-11.8	20.0	-5.8
MW-58-65	Low Flow	Peristaltic Pump	Semi-Annually	50.0	65.0	-35.8	-50.8	54.0	-39.8
MW-59-32	Low Flow	Peristaltic Pump	Inactive	21.0	31.0	-6.6	-16.6	27.0	-12.6
MW-59-45	Low Flow	Peristaltic Pump	Inactive	35.0	45.0	-21.1	-31.1	42.0	-28.1
MW-59-68	Low Flow	Peristaltic Pump	Inactive	53.0	68.0	-38.8	-53.8	58.0	-43.8
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	-187.9	175.9	-163.4

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	Projected 2012 Sampling Frequency[2]	SAMPLING INTERVAL[5]				SAMPLING DEPTH[4]	
				Ft Below Top of Casing		Elevation in Feet msl			
				Top	Bottom	Top	Bottom	Feet Below TOC	Elevation in Feet msl
MW-62-18	Low Flow	Peristaltic Pump	Quarterly	4.7	14.7	8.1	-1.9	13.5	-0.7
MW-62-37	Low Flow	Peristaltic Pump	Quarterly	33.3	38.3	-20.5	-25.5	34.5	-21.7
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	-185.9	182.1	-169.3
MW-63-18	Low Flow	Peristaltic Pump	Quarterly	8.0	18.0	5.1	-4.9	14.9	-1.8
MW-63-34	Low Flow	Peristaltic Pump	Quarterly	30.0	35.0	-16.9	-21.9	31.5	-18.4
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	-178.8	174.0	-161.7
MW-66-21	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	7.0	27.0	6.4	-13.6	14.1	-0.7
MW-66-36	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	31.0	36.0	-17.6	-22.6	33.6	-20.2
MW-67-39	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	28.8	54.3	-15.9	-41.4	38.3	-25.4
MW-67-105	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	90.3	110.8	-77.4	-97.9	104.8	-91.9
MW-67-173	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	164.8	188.3	-151.9	-175.4	172.3	-159.4
MW-67-219	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	209.3	229.8	-196.4	-216.9	218.8	-205.9
MW-67-276	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	250.8	281.3	-237.9	-268.4	275.3	-262.4
MW-67-323	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	317.8	328.3	-304.9	-315.4	322.3	-309.4
MW-67-340	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	335.3	347.9	-322.4	-335.0	339.8	-326.9
MW-107	Low Flow	Submersible Pump	Annually	105.1	126.1	37.7	16.7	32.7	110.1
MW-111	Low Flow	Peristaltic Pump	Semi-Annually	11.6	17.4	6.8	1.0	16.5	1.9
U3-4S	Low Flow	Peristaltic Pump	Quarterly	7.4	17.4	6.5	-3.5	15.5	-1.6
U3-4D	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	25.0	27.6	-10.5	-13.1	25.6	-11.1
U3-T1	Low Flow	Peristaltic Pump	Quarterly	0.2	1.2	8.3	7.3	5.7	2.8
U3-T2	Low Flow	Peristaltic Pump	Quarterly	0.6	1.6	7.9	6.9	5.7	2.8
U1-CSS	Low Flow	Peristaltic Pump	Semi-Annually	NA	10.2	NA	9.9	14.0	6.1
LAF-002	Low Flow	NA	Semi-Annually	NA	NA	NA	NA	NA	-22.3
I-2	Modified Well Vol. Purge	Submersible Pump	Annually	30.1	40.1	52.1	42.1	40.0	42.2
U1-NCD	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA
U1-SFDS	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA
MH-5 VCFD[6]	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA
B-1[6]	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA
B-6[6]	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. Projected sampling frequencies presented for 2012 are subject to change.
3. 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.
4. Sampling depths within sampling intervals (i.e. location of pump intake) have been located adjacent to a transmissive zone where possible.
5. Dot pattern denotes sampling interval is positioned within overburden. Open box indicates sampling interval is in bedrock.
6. These locations are storm drains or foundation drains.

IPEC00267116

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[12], 2009	Quarter 1[13], 2010	Quarter 2[14], 2010	Quarter 3[15], 2010	Quarter 4[16], 2010	Quarter 1[17], 2011	Quarter 2[18], 2011	Quarter 3[19], 2011	Quarter 4[20], 2011
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	NA	NA	-1.14	-0.89	-1.51
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	NA	50.74	53.62	54.07	51.05
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	11.56	11.23	12.13	13.16	11.71
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	12.32	12.29	NA	NA	NA
MW-31-49	44.09	NA	45.40	47.50	46.14	45.39	44.13	45.44	45.40	-	-	-	-	-	-	-	-	-	-
MW-31-63	41.56	NA	42.71	45.52	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)[21]	10.27	12.35	12.78	13.30	13.17	12.30	12.16	12.69	11.61	-	-	-	-	-	-	-	-	-	-
MW-32-131 (MW-32-140)[2]	13.11	11.96	13.21	25.01	15.67	11.34	11.53	11.86	11.06	-	-	-	-	-	-	-	-	-	-
MW-32-149 (MW-32-165)[2]	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)[2]	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	9.71	-	-	-	-	-	-	-	-	-	-
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	6.42	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	NA	56.35	58.88	51.14	53.88
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	42.85	49.55	50.03	38.96	44.88	45.00	50.64	50.68	NA
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	31.95	37.47	NA	NA	NA
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	31.50	31.43	31.61	32.84	31.33
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	13.22	13.01	13.21	14.56	11.21
MW-47-56	21.82	20.77	23.05	27.76	31.53	22.84	22.27	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	0.61	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	0.27	0.49	-0.25	0.54	-	-	-	-	-	-	-	-	-	-
MW-49-42	0.31	0.99	0.10	-0.44	0.92	1.02	0.68	-0.06	0.51	-	-	-	-	-	-	-	-	-	-
MW-49-65	0.89	1.01	0.34	0.07	0.70	0.68	0.47	-0.03	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	41.24	41.25	NA	NA	42.57
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	29.60	29.48	31.16	31.45	NA
MW-52-11	6.04	5.61	8.12	8.47	8.85	8.65	8.44	8.19	9.20	-	-	-	-	-	-	-	-	-	-

IPEC00267117

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[12], 2009	Quarter 1[13], 2010	Quarter 2[14], 2010	Quarter 3[15], 2010	Quarter 4[16], 2010	Quarter 1[17], 2011	Quarter 2[18], 2011	Quarter 3[19], 2011	Quarter 4[20], 2011
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	11.27	10.59	12.07	13.49	11.90
MW-53-120	9.91	9.18	9.59	10.87	11.49	9.76	NA	10.55	9.78	10.43	9.43	10.53	11.02	9.60	10.33	10.35	11.55	12.07	11.13
MW-54-35	NA	NA	6.10	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	2.06	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	8.27	8.88	9.15	9.36	9.70
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	8.19	7.90	9.26	9.15	8.98
MW-56-53	21.04	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	-	-	-	-	-	-	-	-	-	-
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	0.69	-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	0.03	-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	NA	NA	NA	NA	NA
MW-65-80	NA	NA	NA	NA	34.97	32.95	32.72	33.71	33.36	33.79	32.81	33.69	33.98	49.35	NA	NA	NA	NA	NA
MW-66-21	0.26	0.17	-0.22	-0.74	0.05	0.17	0.29	-0.33	0.30	0.52	0.10	-0.01	1.82	1.05	1.02	0.74	1.65	0.45	0.50
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	0.36	0.59	2.28	1.18	0.41
MW-67-39	NA	1.02	0.34	-0.30	0.36	0.41	-0.02	-0.07	-0.56	0.81	-1.25	-0.76	-0.13	-0.09	-1.70	-1.42	NA	-1.58	-1.73
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	0.13	-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	-3.72	-3.47	NA	-2.99	-3.80
MW-107	116.85	113.87	117.48	121.79	118.94	115.00	115.76	120.28	117.52	-	-	-	-	-	-	-	-	-	-

IPEC00267118

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[12], 2009	Quarter 1[13], 2010	Quarter 2[14], 2010	Quarter 3[15], 2010	Quarter 4[16], 2010	Quarter 1[17], 2011	Quarter 2[18], 2011	Quarter 3[19], 2011	Quarter 4[20], 2011
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	NA	NA	NA	NA	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	0.26	3.28	3.20	NA	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, 2007 groundwater elevations were measured on 6/1/07 at 6:20 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 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. 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.
11. Quarter 3, 2009 groundwater elevations were measured on 8/9/09 at 8:18 am.
12. Quarter 4, 2009 groundwater elevations were measured on 11/28/09 at 3:45 pm.
13. Quarter 1, 2010 groundwater elevations were measured on 1/30/10 at 6:00 am.
14. Quarter 2, 2010 groundwater elevations were measured on 4/09/10 at 12:06 pm.
15. Quarter 3, 2010 groundwater elevations were measured on 7/31/10 at 12:30 am.
16. Quarter 4, 2010 groundwater elevations were measured on 10/16/10 at 1:36 am.
17. Quarter 1, 2011 groundwater elevations were measured on 1/22/11 at 8:20 pm.
18. Quarter 2, 2011 groundwater elevations were measured on 5/25/11 at 5:13 pm.
19. Quarter 3, 2011groundwater elevations were measured on 8/22/11 at 10:48 am.
20. Quarter 4, 2011 groundwater elevations were measured on 11/21/11 at 1:37 am.
21. 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.

TABLE 3
FIRST QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,8]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS[5]															YEARLY ROLLING AVERAGES[4,6]					Well ID[1]
							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.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Average	Average	Average	Average	Average	
MW-30-69	Q2-2010	031	69.3	6.4	4/29/2010	12:55	1.61E+05	4.67E+03	2.78E+02	-1.3[illegible]E-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	1.26E+05	ND	ND	ND	NA	MW-30-69
MW-30-69	Q2-2010 Mid	032	69.3	6.4	6/8/2010	12:32	1.52E+05	4.49E+03	4.30E+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						
MW-30-69	Q3-2010	033	69.3	6.4	7/28/2010	12:33	1.28E+05	3.72E+03	1.80E+02	9.14E-03	5.36E-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						
MW-30-69	Q3-2010	034	69.3	6.4	8/20/2010	15:08	1.11E+05	3.24E+03	2.72E+02	3.57E-01	7.30E-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						
MW-30-69	Q3-2010 Mid	035	69.3	6.4	9/8/2010	12:35	1.23E+05	3.63E+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-30-69	Q4-2010	036	69.3	6.4	11/5/2010	11:36	1.25E+05	1.88E+03	4.34E+02	9.69E-01	8.79E-01	1.94E+00	-3.68E+00	3.94E+00	7.79E+00	-5.01E+00	5.09E+00	9.47E+00	NA	NA	NA						
MW-30-69	Q1-2011	037	69.3	6.4	2/9/2011	12:17	1.01E+05	2.18E+03	2.78E+02	1.62E+00	1.93E+00	2.00E+00	1.87E+00	5.80E+00	6.74E+00	1.13E-01	5.88E+00	6.74E+00	NA	NA	NA						
MW-30-69	Q1-2011 Mid	038	69.3	6.4	3/31/2011	11:38	1.08E+05	3.40E+03	4.72E+02	-6.1[illegible]E-01	1.63E+00	2.15E+00	2.43E+00	7.96E+00	9.14E+00	-1.41E+00	6.70E+00	6.46E+00	NA	NA	NA						
MW-30-84	Q2-2010	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	-2.29E+00	5.36E+00	6.37E+00	NA	NA	NA	9.60E+03	ND	ND	ND	NA	MW-30-84
MW-30-84	Q2-2010 Mid	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	-4.31E+00	6.36E+00	6.10E+00	NA	NA	NA						
MW-30-84	Q3-2010	024	83.8	-8.1	7/28/2010	13:07	9.26E+03	5.09E+02	1.31E+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						
MW-30-84	Q3-2010	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						
MW-30-84	Q3-2010 Mid	026	83.8	-8.1	9/8/2010	13:14	1.01E+04	4.32E+02	2.10E+02	5.18E-01	6.20E-01	7.05E-01	-1.48E+00	6.18E+00	6.74E+00	-4.19E-01	7.65E+00	8.38E+00	NA	NA	NA						
MW-30-84	Q4-2010	027	83.8	-8.1	11/5/2010	12:35	1.02E+04	4.80E+02	3.87E+02	5.2[illegible]E-01	7.56E-01	1.70E+00	-3.07E+00	4.23E+00	8.35E+00	-5.22E+00	4.86E+00	8.20E+00	NA	NA	NA						
MW-30-84	Q1-2011	028	83.8	-8.1	2/9/2011	12:57	9.20E+03	3.86E+02	3.79E+02	1.12E+00	1.82E+00	1.98E+00	5.89E-01	4.74E+00	5.22E+00	1.09E+00	5.76E+00	6.49E+00	NA	NA	NA						
MW-30-84	Q1-2011 Mid	029	83.8	-8.1	3/31/2011	12:03	9.04E+03	1.06E+03	4.74E+02	-4.78E-01	1.66E+00	2.13E+00	5.00E-01	1.12E+01	1.21E+01	-3.04E+00	9.48E+00	9.12E+00	NA	NA	NA						
MW-31-49	Q2-2010	023	48.8	26.3	4/14/2010	10:42	1.46E+04	3.90E+02	1.30E+02	1.18E-01	4.62E-01	5.72E-01	2.95E+00	9.54E+00	9.06E+00	9.25E-03	3.91E+00	9.05E+00	NA	NA	NA	2.88E+04	ND	ND	ND	NA	MW-31-49
MW-31-49	Q2-2010 Mid	024	48.8	26.3	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	1.32E+00	6.72E+00	8.03E+00	NA	NA	NA						
MW-31-49	Q3-2010	025	48.8	26.3	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	2.33E+00	3.03E+00	9.96E+00	NA	NA	NA						
MW-31-49	Q3-2010	026	48.8	26.3	8/23/2010	12:11	4.11E+03	3.56E+02	1.23E+02	1.62E-01	7.39E-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	26.3	9/7/2010	13:49	1.04E+05	3.02E+03	1.58E+02	-1.13E-01	2.32E-01	4.23E-01	3.35E+00	5.52E+00	6.68E+00	2.[illegible]6E+00	5.97E+00	7.20E+00	NA	NA	NA						
MW-31-49	Q4-2010	028	48.8	26.3	11/3/2010	11:55	3.35E+04	9.8[illegible]E+02	1.15E+02	-3.04E-02	4.36E-01	5.51E-01	-2.82E+00	8.51E+00	8.97E+00	2.22E+00	3.87E+00	1.06E+01	NA	NA	NA						
MW-31-49	Q1-2011	029	48.8	26.3	2/9/2011	13:12	1.06E+05	3.40E+03	2.98E+02	-5.5[illegible]E-01	1.76E+00	2.14E+00	1.37E+00	5.22E+00	6.02E+00	4.34E-01	5.26E+00	5.91E+00	NA	NA	NA						
MW-31-49	Q1-2011 Mid	030	48.8	26.3	3/30/2011	12:33	4.31E+03	7.84E+02	4.55E+02	1.77E+00	2.04E+00	2.16E+00	-2.34E+00	7.80E+00	8.17E+00	-5.38E-01	9.18E+00	1.00E+01	NA	NA	NA						
MW-31-63	Q2-2010	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	3.75E-01	9.97E+00	1.12E+01	NA	NA	NA	3.90E+04	ND	ND	ND	NA	MW-31-63
MW-31-63	Q2-2010 Mid	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						
MW-31-63	Q3-2010	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	1.32E+00	7.33E+00	8.70E+00	NA	NA	NA						
MW-31-63	Q3-2010	026	63.3	12.3	8/23/2010	13:11	6.69E+04	1.95E+03	1.50E+02	4.60E-01	7.62E-01	8.48E-01	1.77E+00	6.11E+00	7.12E+00	-1.57E+00	6.17E+00	6.44E+00	NA	NA	NA						
MW-31-63	Q3-2010 Mid	027	63.3	12.3	9/7/2010	15:28	4.65E+04	1.4[illegible]E+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-31-63	Q4-2010	028	63.3	12.3	11/3/2010	12:32	2.95E+04	9.02E+02	1.14E+02	3.31E-01	6.30E-01	7.13E-01	-2.24E+00	9.63E+00	1.02E+01	3.44E+00	3.40E+00	1.07E+01	NA	NA	NA						
MW-31-63	Q1-2011	029	63.3	12.3	2/9/2011	13:14	2.46E+04	1.10E+03	2.38E+02	4.29E-01	1.78E+00	2.08E+00	-1.42E+00	6.46E+00	6.81E+00	-2.31E+00	6.42E+00	6.26E+00	NA	NA	NA						
MW-31-63	Q1-2011 Mid	030	63.3	12.3	3/30/2011	13:13	1.33E+04	1.14E+03	4.53E+02	1.49E+00	1.87E+00	2.02E+00	8.76E-01	9.00E+00	9.97E+00	-1.92E-01	7.26E+00	7.92E+00	NA	NA	NA						
MW-31-85	Q2-2010	023	84.8	-9.2	4/14/2010	12:09	4.85E+03	2.60E+02	9.99E+01	-1.42E-01	4.53E-01	6.36E-01	5.84E+00	6.90E+00	8.60E+00	1.40E-01	6.13E+00	6.84E+00	NA	NA	NA	5.48E+03	ND	ND	ND	NA	MW-31-85
MW-31-85	Q2-2010 Mid	024	84.8	-9.2	6/7/2010	12:00	9.34E+03	4.33E+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	1.70E+00	4.81E+00	NA	NA	NA						
MW-31-85	Q3-2010	025	84.8	-9.2	7/27/2010	15:22	6.70E+03	4.34E+02	1.30E+02	3.55E-01	4.72E-01	5.04E-01	-3.98E+00	8.82E+00	9.22E+00	2.50E+00	3.43E+00	9.53E+00	NA	NA	NA						
MW-31-85	Q3-2010	026	84.8	-9.2	8/23/2010	12:10	5.07E+03	3.96E+02	1.25E+02	6.61E-03	7.39E-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	Q3-2010 Mid	027	84.8	-9.2	9/7/2010	14:14	6.21E+03	5.24E+02	1.44E+02	-3.23E-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-31-85	Q4-2010	028	84.8	-9.2	11/3/2010	12:00	6.06E+03	4.16E+02	1.14E+02	2.41E-01	4.33E-01	5.47E-01	-1.36E+00	8.88E+00	9.62E+00	-2.66E-01	[illegible]	1.19E+01	NA	NA	NA						
MW-31-85	Q1-2011	029	84.8	-9.2	2/9/2011	13:03	4.83E+03	6.84E+02	3.32E+02	3.26E-01	1.79E+00	2.18E+00	3.19E+00	5.96E+00	7.08E+00	3.[illegible]4E+00	6.06E+00	7.39E+00	NA	NA	NA						
MW-31-85	Q1-2011 Mid	030	84.8	-9.2	3/30/2011	12:55	7.75E+02	4.66E+02	4.52E+02	9.37E-01	1.81E+00	2.00E+00	5.91E+00	1.31E+01	8.10E+00	6.43E+00	3.88E+00	1.17E+01	NA	NA	NA						
MW-32-48	Q2-2010	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-01	6.18E+00	7.66E+00	NA	NA	NA	2.38E+04	ND	ND	ND	NA	MW-32-48
MW-32-48	Q3-2010	007			7/27/2010	12:52	3.69E+03	3.26E+02	9.34E+01	3.59E-01	8.37E-01	9.60E-01	1.54E-01	7.00E+00	8.04E+00	-3.36E+00	7.74E+00	7.51E+00	NA	NA	NA						
MW-32-48	Q3-2010	008			8/24/2010	14:03	5.90E+03	3.5[illegible]E+02	2.10E+02	3.55E-01	6.33E-01	7.09E-01	-4.14E-01	4.49E+00	5.04E+00	1.96E+00	4.95E+00	5.95E+00	NA	NA	NA						
MW-32-59	Q2-2010	017	58.8	18.3	4/28/2010	11:30	6.93E+04	2.00E+03	1.39E+02	3.10E-01	3.61E-01	6.30E-01	4.95E+00	4.96E+00	6.21E+00	1.39E+00	1.96E+00	5.51E+00	NA	NA	NA	2.29E+04	ND	ND	ND	NA	MW-32-59
MW-32-59	Q2-2010 Mid	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						
MW-32-59	Q3-2010	019	58.8	18.3	7/27/2010	13:00	6.54E+04	1.9[illegible]E+03	1.33E+02	1.50E-01	4.37E-01	5.21E-01	1.07E+00	1.02E+01	1.14E+01	3.30E+00	9.26E+00	1.21E+01	NA	NA	NA						
MW-32-59	Q3-2010	020	58.8	18.3	8/24/2010	14:22	5.78E+03	3.48E+02	2.10E+02	-9.82E-02	6.[illegible]4E-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	18.3	9/9/2010	13:57	7.44E+04	2.18E+03	1.57E+02	4.21E-01	7.30E-01	8.03E-01	1.63E+00	5.43E+00	6.39E+00	-1.58E+00	5.38E+00	5.54E+00	NA	NA	NA						
MW-32-59	Q4-2010	022	58.8	18.3	11/3/2010	12:08	1.58E+04	6.60E+02	1.16E+02	2.02E-01	6.[illegible]5E-01	7.14E-01	5.67E+00	7.98E+00	1.02E+01	1.[illegible]9E+00	9.11E+00	1.06E+01	NA	NA	NA						
MW-32-59	Q1-2011	023	58.8	18.3	3/1/2011	11:28	4.39E+03	6.42E+02	3.59E+02	1.25E+00	1.49E+00	1.55E+00	6.56E-01	5.82E+00	6.6[illegible]E+00	-4.41E-01	7.00E+00	7.38E+00	NA	NA	NA						
MW-32-59	Q1-2011 Mid	024	58.8	18.3	3/31/2011	12:46	3.37E+04	1.96E+03	5.77E+02	-2.13E-01	1.15E+00	1.51E+00	8.24E-01	8.92E+00	9.96E+00	1.39E-02	[illegible]	1.11E+01	NA	NA	NA						
MW-32-85	Q2-2010	020	35.3	35.3	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	9.42E+00	1.03E+00	6.79E+00	8.05E+00	NA	NA	NA	1.32E+04	ND	ND	ND	NA	MW-32-85
MW-32-85	Q2-2010 Mid	021	35.3	35.3	6/9/2010	12:03	1.20E+04	4.85E+02	2.14E+02	3.30E-01	7.36E-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						
MW-32-85	Q3-2010	022	35.3	35.3	7/27/2010	14:51	1.21E+04	5.8[illegible]E+02	1.31E+02	3.80E-01	6.37E-01	7.07E-01	1.33E+00	7.47E+00	8.65E+00	2.30E+00	7.74E+00	9.52E+00	NA	NA	NA						
MW-32-85	Q3-2010	023	35.3	35.3	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						
MW-32-85	Q3-2010 Mid	024	35.3	35.3	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-32-85	Q4-2010	025	35.3	35.3	11/3/2010	12:45	1.49E+04	6.48E+02	1.16E+02	3.80E-01	4.90E-01	5.36E-01	5.89E+00	9.60E+00	1.12E+01	-5.55E+00	3.71E+00	7.61E+00	NA	NA	NA						
MW-32-85	Q1-2011	026	35.3	35.3	3/1/2011	12:05	1.34E+04	1.4[illegible]E+03	2.52E+02	3.81E-01	1.41E+00	1.63E+00	7.79E-01	8.26E+00	9.36E+00	4.73E+00	9.72E+00	1.24E+01	NA	NA	NA						
MW-32-85	Q1-2011 Mid	027	35.3	35.3	3/31/2011	13:18	1.32E+04	1.27E+03	5.37E+02	-1.62E-01	1.20E+00	1.56E+00	-6.56E-01	7.26E+00	7.61E+00	3.30E+00	3.28E+00	1.02E+01	NA	NA	NA						
MW-32-149	Q2-2010	017	149.3	-72.2	4/28/2010	13:50	6.60E+03	4.52E+02	1.47E+02	3.02E-01	7.08E-01	8.24E-01	1.93E+00	6.88E+00	7.55E+00	9.80E-01	4.44E+00	5.26E+00	NA	NA	NA	5.55E+03	ND	ND	ND	NA	MW-32-149
MW-32-149	Q2-2010 Mid	018	149.3	-72.2	6/9/2010	12:52	9.76E+03	4.44E+02	2.14E+02	1.16E-01	6.15E-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						
MW-32-149	Q3-2010	019	149.3	-72.2	7/27/2010	15:34	3.81E+03	3.33E+02	1.31E+02	1.14E-01	3.57E-01	4.33E-01	7.24E-01	1.28E+01	1.64E+01	1.53E+00	3.88E+00	1.06E+01	NA	NA	NA						
MW-32-149	Q3-2010	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	2.57E-02	5.89E+00	6.71E+00	NA	NA	NA						
MW-32-149	Q3-2010 Mid	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	3.63E+00	7.83E+00	9.10E+00	1.34E+00	3.52E+00	1.00E+01	NA	NA	NA						
MW-32-149	Q4-2010	022	149.3	-72.2	11/3/2010	16:09	1.55E+03	2.24E+02	1.12E+02	4.08E-01	5.02E-01	5.49E-01	-1.00E+01	1.08E+01	1.12E+01	3.36E+00	7.71E+00	9.94E+00	NA	NA	NA						
MW-32-149	Q1-2011	023	149.3	-72.2	3/1/2011	13:37	1.06E+03	4.48E+02	2.58E+02	-7.0[illegible]E-01	1.66E+00	2.15E+00	9.25E-01	5.42E+00	6.30E+00	2.06E+00	6.60E+00	7.93E+00	NA	NA	NA						
MW-32-149	Q1-2011 Mid	024	149.3	-72.2	3/31/2011	11:33	8.99E+02	5.34E+02	5.39E+02	-2.0[illegible]E-01	1.10E+00	1.49E+00	2.52E+00	9.30E+00	1.09E+01	2.31E+00	9.92E+00	1.18E+01	NA	NA	NA						
MW-32-173	Q2-2010	014	172.8	-95.7	4/28/2010	15:45	1.54E+03	2.43E+02	1.48E+02	4.67E-01	5.34E-01	5.49E-01	4.94E+00	5.45E+00	6.76E+00	-2.08E-01	4.93E+00	5.31E+00	NA	NA	NA	1.71E+03	ND	ND	ND	NA	MW-32-173
MW-32-173	Q2-2010 Mid	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						
MW-32-173	Q3-2010	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						
MW-32-173	Q3-2010	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	2.93E+00	6.57E+00	7.82E+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	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-32-173	Q4-2010	020	172.8	-95.7	11/3/2010	15:53	1.40E+03	2.16E+02	1.14E+02	1.65E-02	4.38E-01	5.24E-01	3.87E+00	1.76E+01	9.62E+00	-2.94E+00	9.88E+00	1.01E+01	NA	NA	NA						
MW-32-173	Q1-2011	021	172.8	-95.7	3/1/2011	13:13	9.02E+02	4.12E+02	2.51E+02	-4.04E-01	1.12E+00	1.45E+00	5.92E+00	6.06E+00	7.72E+00	-2.04E+00	7.36E+00	7.55E+00	NA	NA	NA						
MW-32-173	Q1-2011 Mid	022	172.8	-95.7	3/31/2011	11:35	8.41E+02	5.22E+02	5.04E+02	2.46E-01	1.27E+00	1.54E+00	5.51E+00	1.58E+01	8.26E+00	2.[illegible]9E+00	3.22E+00	9.58E+00	NA	NA	NA						
MW-32-190	Q2-2010	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	6.63E+00	-2.37E+00	5.38E+00	5.33E+00	NA	NA	NA	1.61E+03	ND	ND	ND	NA	MW-32-190
MW-32-190	Q2-2010 Mid	020	190.3	-113.7	6/9/2010	12:43	1.76E+03	2.43E+02	2.35E+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						
MW-32-190	Q3-2010	021	190.3	-113.7	7/27/2010	15:41	1.58E+03	2.2[illegible]E+02	9.33E+01	-8.57E-02	3.52E-01	5.06E-01	6.23E-01	7.98E+00	9.16E+00	-2.52E+00	7.77E+00	7.60E+00	NA	NA	NA						
MW-32-190	Q3-2010	022	190.3	-113.7	8/24/2010	11:37	1.69E+03	2.43E+02	2.39E+02	2.54E-01	7.84E-01	9.25E-01	-5.47E-01	4.84E+00	5.45E+00	9.30E-01	4.96E+00	5.87E+00	NA	NA	NA						
MW-32-190	Q3-2010 Mid	023	190.3	-113.7	9/9/2010	11:34	1.65E+03	2.48E+02	1.30E+02	-1.3[illegible]E-01	5.35E-01	8.27E-01	-2.[illegible]9E-01	9.87E+00	1.08E+01	2.00E+00	6.66E+00	7.98E+00	NA	NA	NA						
MW-32-190	Q4-2010	024	190.3	-113.7	11/3/2010	16:07	1.53E+03	2.28E+02	1.17E+02	9.74E-02	4.35E-01	5.82E-01	2.13E+00	9.02E+00	1.07E+01	2.40E+00	9.21E+00	9.36E+00	NA	NA	NA						
MW-32-190	Q1-2011	025	190.3	-113.7	3/1/2011	13:24	1.64E+03	5.32E+02	2.54E+02	7.65E-01	1.20E+00	1.29E+00	2.74E+00	5.52E+00	6.57E+00	4.38E+00	7.64E+00	8.75E+00	NA	NA	NA						
MW-32-190	Q1-2011 Mid	026	190.3	-113.7	3/31/2011	11:47	1.41E+03	5.76E+02	5.32E+02	-7.79E-01	1.15E+00	1.67E+00	8.78E-01	7.96E+00	9.01E+00	5.[illegible]1E+00	[illegible]	1.30E+01	NA	NA	NA						
MW-33	Q2-2010	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	8.35E-01	-3.25E+00	7.39E+00	7.21E+00	-3.17E+00	7.74E+00	6.17E+00	NA	NA	NA	2.38E+04	ND	ND	ND	NA	MW-33
MW-33	Q3-2010	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						
MW-33	Q3-2010 Mid	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.[illegible]2E+00	5.10E+00	5.55E+00	NA	NA	NA						
MW-33	Q2-2010 Mid	021	19	-0.4	5/20/2010	13:25	2.82E+03	2.8[illegible]E+02	2.14E+02	-1.9[illegible]E-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	2.82E+03	ND	ND	ND	NA	MW-33
MW-36-24	Q2-2010	018	16.1	-4.3	4/28/2010	14:14	3.33E+03	3.30E+02	1.45E+02	1.91E-01	5.60E-01	6.67E-01	1.74E+00	5.87E+00	6.82E+00	2.23E+00	5.66E+00	6.66E+00	NA	NA	NA	2.14E+03	ND	ND	ND	NA	MW-36-24
MW-36-24	Q3-2010	019	16.1	-4.3	7/29/2010	12:04	2.64E+02	1.17E+02	1.30E+02	2.45E-01	3.84E-01	4.23E-01	8.89E-01	9.88E+00	1.10E+01	-2.51E+00	[illegible]	1.26E+01	NA	NA	NA						
MW-36-24	Q4-2010	020	16.1	-4.3	11/4/2010	16:15	2.62E+03	2.82E+02	1.13E+02	3.75E-01	5.31E-01	6.42E-01	3.42E-01	9.88E+00	1.17E+01	-1.30E+00	[illegible]	1.26E+01	NA	NA	NA						
MW-36-24	Q1-2011	021	16.1	-4.3	2/23/2011	12:37	2.56E+02	3.51E+02	3.31E+02	9.97E-02	1.67E+00	2.08E+00	4.53E-01	5.26E+00	5.72E+00	3.09E-01	7.74E+00	5.03E+00	NA	NA	NA						
MW-36-41	Q2-2010	012	37	-25.2	4/28/2010	15:38	1.36E+04	6.89E+02	1.50E+02	5.95E+03	1.20E+00	3.74E-01	1.33E+00	6.43E+00	6.92E+00	8.55E-01	5.70E+00	6.68E+00	NA	NA	NA	1.24E+04	3.87E+00	ND	ND	NA	MW-36-41
MW-36-41	Q3-2010	013	37	-25.2	7/29/2010	12:23	1.30E+04	7.52E+02	1.46E+02	1.88E+03	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-36-41	Q4-2010	014	37	-25.2	11/4/2010	16:55	1.22E+04	5.73E+02	1.10E+02	3.54E+03	9.3[illegible]E-01	6.12E-01	7.62E-01	8.76E+00	1.01E+01	3.09E+00	5.58E+00	1.06E+01	NA	NA	NA						
MW-36-41	Q1-2011	015	37	-25.2	2/28/2011	13:53	8.74E+03	6.88E+02	2.27E+02	4.11E+03	1.57E+00	1.57E+00	1.31E+00	5.26E+00	6.09E+00	1.58E+00	5.68E+00	6.65E+00	NA	NA	NA						
MW-36-52	Q2-2010	017	49.7	-37.9	4/28/2010	13:46	8.49E+03	5.09E+02	1.47E+02	1.36E+03	1.53E+00	6.85E-01	2.23E+00	5.31E+00	6.27E+00	2.98E+00	4.80E+00	6.12E+00	NA	NA	NA	6.43E+03	3.03E+00	ND	ND	NA	MW-36-52
MW-36-52	Q3-2010	018	49.7	-37.9	7/29/2010	12:24	7.07E+03	4.46E+02	1.10E+02	-1.52E-01	6.55E-01	4.25E-01	-1.63E-01	7.79E+00	8.57E+00	-1.74E+00	7.65E+00	1.06E+01	NA	NA	NA						
MW-36-52	Q4-2010	019	49.7	-37.9	11/4/2010	15:55	7.08E+03	4.40E+02	1.10E+02	4.73E+03	1.11E+00	6.76E-01	1.15E-01	5.89E+00	6.55E+00	2.38E+00	7.92E+00	7.79E+00	NA	NA	NA						
MW-36-52	Q1-2011	020	49.7	-37.9	2/28/2011	12:43	3.14E+03	4.92E+02	3.37E+02	1.33E+03	2.00E+00	2.14E+00	-6.00E+00	5.58E+00	4.80E+00	-2.56E+00	5.94E+00	5.65E+00	NA	NA	NA						
MW-37-22	Q2-2010	016	17	-2	4/27/2010	13:23	9.06E+03	4.20E+02	2.39E+02	1.29E+01	1.68E+00	6.94E-01	-1.08E+00	5.73E+00	5.64E+00	-1.34E+00	4.41E+00	5.29E+00	NA	NA	NA	5.99E+03	1.06E+01	ND	ND	NA	MW-37-22
MW-37-22	Q3-2010	019	17	-2	8/5/2010	14:06	3.70E+03	3.26E+02	2.20E+02	5.19E+00	1.29E+00	9.19E-01	-1.60E+00	7.62E+00	8.20E+00	4.52E+00	7.13E+00	9.76E+00	NA	NA	NA						
MW-37-22	Q4-2010	020	17	-2	11/4/2010	14:28	4.46E+03	3.57E+02	1.12E+02	1.38E+01	1.33E+00	5.33E-01	-2.26E+00	7.33E+00	7.68E+00	-1.24E+00	9.31E+00	1.00E+01	NA	NA	NA						
MW-37-22	Q1-2011	021	17	-2	1/27/2011	15:19	6.74E+03	6.18E+02	2.38E+02	1.04E+01	2.12E+00	1.68E+00	-2.18E+00	4.74E+00	4.94E+00	2.59E+00	5.38E+00	6.55E+00	NA	NA	NA						

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Q1'2011 FINAL Table 3 - First Quarter 2011 Groundwater Analytical Results and Averages.xls
Q12011 Table 3

See Page 5 for Notes

IPEC00267119

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TABLE 3
FIRST QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,8]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS[5]															YEARLY ROLLING AVERAGES[4,6]					Well ID[1]
							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.[9]	MDC[6]	Result	Std. Dev.[9]	MDC[6]	Result	Std. Dev.[9]	MDC[6]	Result	Std. Dev.[9]	MDC[6]	Result	Std. Dev.[9]	MDC[6]	Average	Average	Average	Average	Average	
MW-37-32	Q2-2010	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	7.65E+03	1.59E+01	ND	ND	NA	MW-37-32
MW-37-32	Q3-2010	019	29	-14	8/5/2010	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	3.67E+00	9.54E+00	NA	NA	NA						
MW-37-32	Q4-2010	020	29	-14	11/4/2010	13:14	5.99E+03	4.22E+02	1.17E+02	-2.91E-01	6.35E-01	7.91E-01	-4.11E+00	7.41E+00	7.07E+00	1.54E+00	7.68E+00	9.14E+00	NA	NA	NA						
MW-37-32	Q1-2011	021	29	-14	1/27/2011	15:09	4.57E+03	5.29E+02	2.79E+02	1.49E+01	3.02E+00	1.74E+00	4.20E-01	6.12E+00	6.82E+00	1.72E+00	6.60E+00	7.76E+00	NA	NA	NA						
MW-37-40	Q2-2010	018	39.2	-24.2	4/27/2010	12:43	5.37E+03	3.43E+02	2.37E+02	1.71E+01	1.81E+00	6.52E-01	-2.56E+00	4.54E+00	4.41E+00	-7.35E-02	3.03E+00	3.31E+00	NA	NA	NA	6.19E+03	1.59E+01	ND	ND	NA	MW-37-40
MW-37-40	Q3-2010	019	39.2	-24.2	8/5/2010	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	3.32E+00	7.44E+00	9.31E+00	NA	NA	NA						
MW-37-40	Q4-2010	020	39.2	-24.2	11/4/2010	12:06	6.41E+03	4.29E+02	1.15E+02	1.28E+01	1.92E+00	6.32E-01	2.77E+00	8.58E+00	1.02E+01	-2.01E+00	3.29E+00	8.29E+00	NA	NA	NA						
MW-37-40	Q1-2011	021	39.2	-24.2	1/27/2011	13:35	5.97E+03	7.42E+02	3.32E+02	1.93E+01	3.14E+00	1.85E+00	1.95E+00	5.84E+00	6.78E+00	2.03E+00	6.84E+00	7.92E+00	NA	NA	NA						
MW-37-57	Q2-2010	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	1.11E+00	6.43E+00	7.89E+00	NA	NA	NA	6.21E+03	1.91E+01	ND	ND	NA	MW-37-57
MW-37-57	Q3-2010	019	53.2	-38.2	8/5/2010	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	7.72E+00	-6.93E-01	3.96E+00	9.77E+00	NA	NA	NA						
MW-37-57	Q4-2010	020	53.2	-38.2	11/4/2010	13:49	6.72E+03	4.4?E+02	1.15E+02	1.97E+01	2.15E+00	5.70E-01	5.72E+00	1.52E+01	9.04E+00	-3.50E+00	7.95E+00	7.35E+00	NA	NA	NA						
MW-37-57	Q1-2011	021	53.2	-38.2	1/27/2011	15:26	5.63E+03	5.76E+02	2.99E+02	2.02E+01	3.60E+00	1.96E+00	-3.70E-01	6.34E+00	6.92E+00	-1.36E+00	5.64E+00	5.68E+00	NA	NA	NA						
MW-39-67	Q2-2010	008	57	13	5/4/2010	15:23	3.79E+02	2.07E+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	3.33E+02	1.65E+00	ND	ND	NA	MW-39-67
MW-39-67	Q3-2010	009	57	13	7/22/2010	14:26	2.86E+02	1.19E+02	9.20E+01	1.73E+00	6.00E-01	3.90E-01	2.91E+00	6.33E+00	7.80E+00	5.55E+00	7.25E+00	5.04E+00	NA	NA	NA						
MW-39-67	Q4-2010	010	57	13	11/15/2010	16:28	3.74E+02	1.86E+02	3.38E+02	1.96E+00	9.36E-01	1.94E+00	-1.74E+00	3.99E+00	8.40E+00	-3.17E+00	4.38E+00	8.38E+00	NA	NA	NA						
MW-39-84	Q2-2010	008	83.5	-3.5	5/4/2010	15:32	2.25E+02	1.94E+02	2.12E+02	1.26E+00	6.08E-01	5.62E-01	1.07E+00	5.85E+00	6.81E+00	-2.75E+00	3.78E+00	5.63E+00	NA	NA	NA	2.98E+02	1.05E+00	ND	ND	NA	MW-39-84
MW-39-84	Q3-2010	009	83.5	-3.5	7/22/2010	14:42	3.70E+02	1.30E+02	1.31E+02	3.43E-01	6.31E-01	5.85E-01	-3.32E+00	6.79E+00	6.90E+00	2.43E+00	6.95E+00	8.34E+00	NA	NA	NA						
MW-39-84	Q4-2010	010	83.5	-3.5	11/15/2010	16:38	2.51E+02	2.10E+02	4.59E+02	1.80E+00	8.83E-01	1.86E+00	3.53E+00	4.41E+00	1.05E+01	7.47E+00	4.82E+00	1.24E+01	NA	NA	NA						
MW-39-102	Q2-2010	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	6.41E+00	NA	NA	NA	3.16E+02	4.05E+00	ND	ND	NA	MW-39-102
MW-39-102	Q3-2010	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	-3.58E+00	5.55E+00	4.42E+00	NA	NA	NA						
MW-39-102	Q4-2010	010	101.5	-21.5	11/15/2010	16:12	3.61E+02	1.83E+02	3.34E+02	1.40E+00	9.00E-01	1.93E+00	2.93E+00	3.38E+00	8.21E+00	4.12E+00	3.52E+00	6.33E+00	NA	NA	NA						
MW-39-124	Q2-2010	008	124	-44	5/4/2010	12:32	3.08E+02	1.92E+02	2.06E+02	5.96E-02	8.28E-01	3.96E-01	-2.56E-02	5.43E+00	5.42E+00	1.35E-02	6.05E+00	5.58E+00	NA	NA	NA	2.08E+02	2.25E+00	ND	ND	NA	MW-39-124
MW-39-124	Q3-2010	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-39-124	Q4-2010	010	124	-44	11/15/2010	12:46	3.73E+02	1.83E+02	3.36E+02	1.17E+00	8.85E-01	1.93E+00	-6.40E+00	6.71E+00	1.61E+01	-1.31E-01	4.28E+00	1.10E+01	NA	NA	NA						
MW-39-183	Q2-2010	008	132.5	-102.5	5/4/2010	12:51	1.34E+02	1.89E+02	2.10E+02	3.20E-02	5.44E-01	6.90E-01	2.11E+00	6.52E+00	7.72E+00	-2.38E+00	7.59E+00	6.99E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-39-183
MW-39-183	Q3-2010	009	132.5	-102.5	7/22/2010	11:38	1.07E+02	1.12E+02	1.19E+02	2.08E-01	4.?9E-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-39-183	Q4-2010	010	132.5	-102.5	11/15/2010	12:53	-8.02E+01	1.6?E+02	3.38E+02	4.19E-01	7.56E-01	1.77E+00	1.45E+00	4.83E+00	1.10E+01	3.58E+00	4.93E+00	1.19E+01	NA	NA	NA						
MW-39-195	Q2-2010	008	195	-115	5/4/2010	13:14	6.99E+01	1.64E+02	1.34E+02	6.21E-01	6.54E-01	6.82E-01	-1.36E+00	6.42E+00	6.87E+00	-1.59E-01	6.84E+00	7.43E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-39-195
MW-39-195	Q3-2010	009	195	-115	7/22/2010	12:10	9.26E+01	1.1?E+02	1.20E+02	5.61E-01	5.70E-01	5.97E-01	7.86E-01	8.64E+00	9.42E+00	-9.78E-01	3.93E+00	9.62E+00	NA	NA	NA						
MW-39-195	Q4-2010	010	195	-115	11/15/2010	13:25	2.16E+02	1.86E+02	4.39E+02	1.52E-01	7.35E-01	1.73E+00	-3.21E+00	4.09E+00	6.54E+00	8.70E+00	4.38E+00	1.20E+01	NA	NA	NA						
MW-40-27	Q2-2010	011	26.7	46.5	4/15/2010	16:00	1.48E+02	1.74E+02	1.98E+02	1.05E-01	6.29E-01	7.95E-01	1.30E+00	4.03E+00	4.36E+00	2.98E+00	5.64E+00	4.66E+00	NA	NA	NA	2.00E+02	ND	ND	ND	NA	MW-40-27
MW-40-27	Q3-2010	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-40-27	Q4-2010	013	26.7	46.5	11/29/2010	15:23	2.06E+02	1.49E+02	1.44E+02	1.10E-01	7.98E-01	9.63E-01	3.16E-01	3.38E+00	3.76E+00	1.01E+00	3.63E+00	4.18E+00	NA	NA	NA						
MW-40-27	Q1-2011	014	26.7	46.5	3/8/2011	12:55	1.85E+02	2.56E+02	2.55E+02	1.58E-01	1.17E+00	1.61E+00	3.72E-01	6.78E+00	7.39E+00	2.83E+00	3.56E+00	9.59E+00	NA	NA	NA						
MW-40-46	Q2-2010	012	46.2	27	4/15/2010	16:18	2.33E+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	1.79E+00	3.40E+00	3.55E+00	NA	NA	NA	1.99E+02	ND	ND	ND	NA	MW-40-46
MW-40-46	Q3-2010	013	46.2	27	8/26/2010	14:56	1.24E+02	1.22E+02	1.29E+02	-1.83E-01	5.?1E-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-40-46	Q4-2010	014	46.2	27	11/29/2010	16:36	1.63E+02	1.47E+02	1.48E+02	6.60E-03	7.39E-01	9.38E-01	5.82E-01	3.82E+00	4.28E+00	2.06E+00	3.99E+00	4.74E+00	NA	NA	NA						
MW-40-46	Q1-2011	015	46.2	27	3/8/2011	12:58	2.48E+02	2.74E+02	2.53E+02	1.03E-01	8.58E-01	1.07E+00	2.82E+00	8.00E+00	9.15E+00	7.99E+00	3.74E+00	1.19E+01	NA	NA	NA						
MW-40-81	Q2-2010	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	4.90E+00	1.08E-01	3.82E+00	4.36E+00	NA	NA	NA	2.20E+02	ND	ND	ND	NA	MW-40-81
MW-40-81	Q3-2010	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	-2.54E+00	4.68E+00	4.20E+00	NA	NA	NA						
MW-40-81	Q4-2010	014	80.7	-7.5	11/29/2010	12:03	2.48E+02	1.58E+02	1.47E+02	1.13E-03	6.15E-01	7.85E-01	9.67E-01	4.38E+00	4.75E+00	4.37E-01	1.83E+00	5.28E+00	NA	NA	NA						
MW-40-81	Q1-2011	015	80.7	-7.5	3/8/2011	10:17	2.33E+02	2.68E+02	2.53E+02	3.50E-01	1.11E+00	1.67E+00	1.25E+00	1.06E+01	7.71E+00	-1.45E+00	6.08E+00	6.16E+00	NA	NA	NA						
MW-40-100	Q2-2010	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	ND	ND	ND*	ND	NA	MW-40-100
MW-40-100	Q3-2010	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-40-100	Q4-2010	016	100.2	-27	11/29/2010	12:12	1.34E+02	1.40E+02	1.46E+02	-2.12E-01	6.70E-01	8.39E-01	-1.46E-01	4.05E+00	4.51E+00	3.11E-01	4.26E+00	4.81E+00	NA	NA	NA						
MW-40-100*	Q1-2011	017	100.2	-27	3/8/2011	10:27	5.17E+01	2.14E+02	2.54E+02	2.52E-03	1.10E+00	1.58E+00	2.46E+01*	1.35E+01	7.66E+00	-1.40E+00	7.88E+00	8.30E+00	NA	NA	NA						
MW-40-127	Q2-2010	014	127.2	-54	4/15/2010	13:13	1.26E+02	1.34E+02	1.47E+02	-5.12E-03	3.90E-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	ND	ND	ND*	ND	NA	MW-40-127
MW-40-127	Q3-2010	015	127.2	-54	8/26/2010	11:16	1.36E+02	1.40E+02	1.47E+02	2.23E-03	2.78E-01	3.67E-01	-5.02E+00	7.95E+00	8.25E+00	6.43E-01	6.48E+00	7.28E+00	NA	NA	NA						
MW-40-127	Q4-2010	016	127.2	-54	11/29/2010	12:26	1.22E+02	1.38E+02	1.45E+02	7.34E-01	9.02E-01	9.73E-01	-1.53E-01	4.82E+00	5.41E+00	1.12E+00	4.38E+00	5.06E+00	NA	NA	NA						
MW-40-127*	Q1-2011	017	127.2	-54	3/8/2011	10:41	1.33E+02	2.40E+02	2.54E+02	1.03E+00	1.40E+00	1.51E+00	5.07E+01*	1.64E+01	7.61E+00	3.45E-01	7.18E+00	7.96E+00	NA	NA	NA						
MW-40-162	Q2-2010	012	151.7	-88.5	4/15/2010	14:30	1.08E+02	1.32E+02	1.46E+02	9.77E-02	6.63E-01	8.18E-01	-2.92E+00	8.36E+00	8.61E+00	-2.95E+00	3.63E+00	1.05E+01	NA	NA	NA	ND	ND	ND	ND	NA	MW-40-162
MW-40-162	Q3-2010	013	151.7	-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-40-162	Q4-2010	014	151.7	-88.5	11/29/2010	12:45	6.40E+01	1.27E+02	1.45E+02	-5.5?E-03	6.55E-01	7.94E-01	3.60E-01	4.34E+00	4.91E+00	3.43E-01	4.47E+00	5.03E+00	NA	NA	NA						
MW-40-162	Q1-2011	015	151.7	-88.5	3/8/2011	11:02	8.33E+01	2.24E+02	2.53E+02	1.02E+00	1.07E+00	1.57E+00	-3.72E+00	6.12E+00	5.92E+00	-2.11E+00	6.42E+00	6.37E+00	NA	NA	NA						
MW-41-40	Q2-2010	016	34.4	20.5	4/19/2010	14:09	4.32E+02	1.70E+02	1.50E+02	2.09E+00	1.15E+00	3.40E-01	-2.56E+00	8.09E+00	8.29E+00	-6.83E-01	3.55E+00	9.32E+00	NA	NA	NA	1.92E+03	5.51E+00	ND	ND	NA	MW-41-40
MW-41-40	Q3-2010	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	1.52E+00	5.82E+00	7.07E+00	-6.50E-01	7.18E+00	7.61E+00	NA	NA	NA						
MW-41-40	Q4-2010	018	34.4	20.5	10/25/2010	16:06	2.43E+03	2.78E+02	1.17E+02	4.08E+00	1.16E+00	6.72E-01	3.32E+00	5.63E+00	6.87E+00	-1.99E+00	6.74E+00	6.96E+00	NA	NA	NA						
MW-41-40	Q1-2011	019	34.4	20.5	2/14/2011	14:05	2.03E+03	4.02E+02	2.38E+02	1.15E+01	2.68E+00	1.83E+00	4.63E+00	7.30E+00	8.61E+00	4.22E+00	7.36E+00	9.38E+00	NA	NA	NA						
MW-41-63	Q2-2010	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	1.32E+01	-7.27E-02	6.99E+00	7.76E+00	NA	NA	NA	6.73E+02	4.91E+00	ND	ND	NA	MW-41-63
MW-41-63	Q3-2010	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-41-63	Q4-2010	017	59.5	-4.6	10/25/2010	12:59	5.06E+02	1.50E+02	1.14E+02	4.25E+00	1.19E+00	7.17E-01	1.05E+00	6.08E+00	7.05E+00	2.87E+00	5.85E+00	7.23E+00	NA	NA	NA						
MW-41-63	Q1-2011	018	59.5	-4.6	2/14/2011	13:37	1.23E+03	4.44E+02	3.30E+02	5.92E+00	2.46E+00	1.96E+00	1.24E+00	5.30E+00	6.01E+00	2.69E+00	6.06E+00	7.29E+00	NA	NA	NA						
MW-42-49	Q2-2010	021	42.6	27	4/16/2010	12:59	1.30E+03	4.25E+02	3.71E+02	2.40E+01	2.51E+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	2.83E+01	2.07E+01	1.44E+03	1.98E+01	2.48E+04	ND	2.35E+02	MW-42-49
MW-42-49	Q3-2010	022	42.6	27	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-42-49	Q4-2010	023	42.6	27	10/27/2010	12:23	1.28E+03	2.03E+02	1.54E+02	1.81E+01	2.11E+00	3.72E-01	2.33E+04	2.94E+03	2.97E+01	-1.57E+00	9.77E+00	1.03E+01	2.24E+02	2.66E+01	2.10E+01						
MW-42-49	Q1-2011	024	42.6	27	3/4/2011	11:37	1.49E+03	5.14E+02	3.38E+02	2.32E+01	3.14E+00	1.11E+00	3.30E+04	4.42E+03	2.75E+01	1.42E+00	6.78E+00	7.87E+00	3.02E+02	3.04E+01	2.00E+01						
MW-42-78	Q2-2010	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	1.02E+01	-6.97E+00	9.24E+00	7.54E+00	-6.55E+00	1.76E+01	2.08E+01	5.59E+02	ND	ND	ND	ND	MW-42-78
MW-42-78	Q3-2010	017	74	-4.3	7/30/2010	12:23	6.31E+02	1.7?E+02	1.31E+02	2.79E-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	1.76E+01	1.52E+01						
MW-42-78	Q4-2010	018	74	-4.3	10/27/2010	13:56	6.13E+02	1.74E+02	1.54E+02	-1.14E-01	4.79E-01	5.87E-01	-1.09E+00	8.69E+00	9.51E+00	-5.11E+00	3.41E+00	7.24E+00	-4.24E+00	1.80E+01	2.09E+01						
MW-42-78	Q1-2011	019	74	-4.3	3/4/2011	10:58	5.98E+02	4.06E+02	3.34E+02	3.92E-01	1.47E+00	1.60E+00	-2.03E+00	6.72E+00	6.99E+00	8.03E-02	6.70E+00	7.41E+00	0.00E+00	1.73E+01	1.96E+01						
MW-43-28	Q2-2010	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	-2.76E-01	5.61E+00	6.36E+00	-1.90E-01	6.61E+00	6.33E+00	NA	NA	NA	2.10E+02	ND	ND	ND	NA	MW-43-28
MW-43-28	Q3-2010	016	23.5	25.3	7/20/2010	13:48	9.11E+01	1.33E+02	1.47E+02	-6.43E-02	3.30E-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-43-28	Q4-2010	017	23.5	25.3	10/25/2010	11:29	1.95E+02	1.17E+02	1.13E+02	-1.98E-01	5.01E-01	6.94E-01	3.35E+00	5.00E+00	6.09E+00	-5.01E-01	5.43E+00	5.84E+00	NA	NA	NA						
MW-43-28	Q1-2011	018	23.5	25.3	2/15/2011	13:08	2.54E+02	2.80E+02	2.99E+02	1.06E+00	1.40E+00	2.00E+00	5.75E-02	1.26E+01	7.06E+00	-3.34E+00	6.84E+00	6.54E+00	NA	NA	NA						
MW-43-62	Q2-2010	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	-1.18E+00	4.44E+00	4.90E+00	1.30E-01	4.68E+00	5.49E+00	NA	NA	NA	2.16E+02	ND	ND	ND	NA	MW-43-62
MW-43-62	Q3-2010	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	3.22E+00	8.59E+00	NA	NA	NA						
MW-43-62	Q4-2010	017	51	-2.2	10/25/2010	11:06	9.76E+01	1.03E+02	1.12E+02	3.69E-01	7.20E-01	8.03E-01	5.94E-01	6.27E+00	6.81E+00	-6.69E-01	5.37E+00	5.81E+00	NA	NA	NA						
MW-43-62	Q1-2011	018	51	-2.2	2/15/2011	13:15	1.82E+02	2.76E+02	3.00E+02	7.75E-01	1.74E+00	1.95E+00	6.59E-01	5.08E+00	5.56E+00	2.37E-01	5.16E+00	5.52E+00	NA	NA	NA						
MW-44-66	Q2-2010 Mid	016	62.4	31	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	-1.21E+00	6.06E+00	6.25E+00	NA	NA	NA	3.54E+02	ND	ND	ND	NA	MW-44-66
MW-44-66	Q3-2010	017	62.4	31	7/22/2010	15:47	1.75E+02	1.4?E+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	3.52E+00	9.73E+00	NA	NA	NA						
MW-44-66	Q4-2010	018	62.4	31	10/26/2010	14:46	3.10E+02	1.29E+02	1.11E+02	-1.07E-01	4.30E-01	5.95E-01	4.23E-01	6.24E+00	7.11E+00	-3.70E+00	7.37E+00	7.27E+00	NA	NA	NA						
MW-44-66	Q1-2011	019	62.4	31	2/18/2011	10:41	4.57E+02	3.90E+02	3.99E+02	-2.94E-01	1.59E+00	1.95E+00	1.74E+00	7.72E+00	8.56E+00	-1.40E+00	7.92E+00	8.46E+00	NA	NA	NA						
MW-44-102	Q2-2010 Mid	017	80	13.5	6/10/2010	13:13	4.94E+02	1.79E+02	1.83E+02	-1.79E-01	5.3?E-01	6.74E-01	-2.41E+00	7.89E+00	8.11E+00	-3.22E+00	7.37E+00	6.86E+00	NA	NA	NA	4.03E+02	ND	ND	ND	NA	MW-44-102
MW-44-102	Q3-2010	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	2.33E+00	1.02E+01	1.18E+01	-1.33E+00	3.85E+00	9.25E+00	NA	NA	NA						
MW-44-102	Q4-2010	019	80	13.5	10/26/2010	13:32	4.47E+02	1.47E+02	1.12E+02	2.47E-01	5.47E-01	6.33E-01	-2.73E+00	5.49E+00	5.42E+00	-1.39E+00	5.38E+00	6.11E+00	NA	NA	NA						
MW-44-102	Q1-2011	020	80	13.5	2/18/2011	10:44	3.93E+02	2.90E+02	2.37E+02	2.63E-01	1.86E+00	2.15E+00	2.22E-01	4.96E+00	5.47E+00	-2.93E-01	6.02E+00	6.58E+00	NA	NA	NA						
MW-45-42	Q2-2010	020	37	16.6	4/20/2010	16:13	2.02E+03	3.08E+02	1.51E+02	2.96E-01	6.37E-01	7.32E-01	2.94E+00	6.79E+00	7.62E+00	-3.47E+00	3.46E+00	5.57E+00	NA	NA	NA	4.14E+03	ND	ND	ND	NA	MW-45-42
MW-45-42	Q3-2010	021	37	16.6	7/19/2010	15:38	3.69E+03	3.33E+02	1.43E+02	5.05E-01	6.00E-01	6.47E-01	1.01E+00	7.75E+00	9.35E+00	1.37E+00	7.10E+00	7.11E+00	NA	NA	NA						
MW-45-42	Q4-2010	022	37	16.6	10/22/2010	15:59	2.74E+03	2.90E+02	1.13E+02	9.55E-02	5.39E-01	6.32E-01	1.35E+00	6.04E+00	6.99E+00	-1.55E+00	5.70E+00	5.89E+00	NA	NA	NA						
MW-45-42	Q1-2011	023	37	16.6	2/16/2011	16:58	8.12E+03	7.80E+02	3.53E+02	1.03E+00	1.59E+00	1.48E+00	-8.23E-01	5.64E+00	5.99E+00	1.42E+00	6.30E+00	7.17E+00	NA	NA	NA						
MW-45-61	Q2-2010	020	58	-4.4	4/20/2010	11:13	9.69E+02	2.2?E+02	1.45E+02	2.71E-01	7.70E-01	8.69E-01	-8.76E-02	7.91E+00	6.84E+00	-5.32E+00	3.78E+00	8.72E+00	NA	NA	NA	1.33E+03	ND	ND	ND	NA	MW-45-61
MW-45-61	Q3-2010	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	-2.53E+00	8.29E+00	8.61E+00	-2.24E+00	3.88E+00	9.24E+00	NA	NA	NA						
MW-45-61	Q4-2010	022	58	-4.4	10/22/2010	11:54	1.51E+03	2.22E+02	1.12E+02	3.58E-01	5.33E-01	6.05E-01	-2.92E+00	5.78E+00	5.94E+00	1.19E-01	6.92E+00	7.73E+00	NA	NA	NA						
MW-45-61	Q1-2011	023	58	-4.4	2/16/2011	16:15	1.84E+03	2.40E+02	3.58E+02	-4.27E-01	1.64E+00	1.96E+00	1.33E+00	4.80E+00	5.41E+00	9.59E-01	5.46E+00	6.15E+00	NA	NA	NA						
MW-46	Q2-2010	020	10.5	7.6	4/12/2010	11:32	7.69E+02	1.92E+02	1.77E+02	7.57E-01	7.68E-01	7.39E-01	-3.93E+00	1.08E+01	1.14E+01	-1.33E+00	8.05E+00	1.13E+01	NA	NA	NA	2.07E+03	4.37E-01	ND	ND	NA	MW-46
MW-46	Q3-2010	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-46	Q4-2010	022	10.5	7.6	10/28/2010	13:25	3.13E+03	3.08E+02	1.13E+02	3.70E-01	5.09E-01	5.49E-01	-2.05E+00	5.83E+00	5.88E+00	2.98E+00	6.81E+00	8.22E+00	NA	NA	NA						
MW-46	Q1-2011	023	10.5	7.6	2/23/2011	12:46	2.47E+03	5.70E+02	3.28E+02	1.12E+00	1.59E+00	2.06E+00	-2.22E+00	5.28E+00	5.20E+00	5.21E-01	5.10E+00	5.66E+00	NA	NA	NA						
MW-49-26	Q2-2010	020	19.1	-4.4	4/23/2010	14:42	3.00E+03	3.30E+02	1.38E+02	1.53E+01	2.44E+00	8.19E-01	2.82E+00	7.32E+00	8.95E+00	-2.28E-01	9.12E+00	1.01E+01	-7.28E+00	1.95E+01	2.26E+01	2.95E+03	1.38E+01	ND	ND	ND	MW-49-26
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	3.66E-01	-7.91E-01	1.14E+01	1.15E+01	-1.36E+00	1.03E+01	1.19E+01	3.27E-01	1.64E+01	1.92E+01						
MW-49-26	Q4-2010	022	19.1	-4.4	11/11/2010	14:23	2.59E+03	3.00E+02	4.76E+02	-3.42E-01	9.36E-01	2.34E+00	4.62E+00	4.84E+00	1.12E+01	1.8E+00	3.96E+00	9.11E+00	-1.79E+00	1.03E+01	2.29E+01						
MW-49-26	Q1-2011	023	19.1	-4.4	1/28/2011	13:37	3.17E+03	6.00E+02	4.29E+02	1.30E+01	2.56E+00	2.01E+00	3.39E+00	1.04E+01	7.00E+00	-2.43E+00	6.42E+00	6.44E+00	-4.38E+00	1.87E+01	2.20E+01						

IPEC00267121

TABLE 3
FIRST QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,3]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[4]	SAMPLE ZONE CENTER Elevation Ft msl[5]	SAMPLE COLLECTION		ANALYSIS RESULTS[6]														YEARLY ROLLING AVERAGES[6,7]					
							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)	Well ID[1]
					Date	Time	Result	Std. Dev.[8]	MDC	Result	Std. Dev.[8]	MDC	Result	Std. Dev.[8]	MDC	Result	Std. Dev.[8]	MDC	Result	Std. Dev.[8]	MDC	Average	Average	Average	Average	Average	
MW-49-42	Q2-2010	022	38.1	23.4	4/23/2010	14:39	2.76E+03	3.23E+02	3.43E+02	1.73E+01	2.22E+00	7.01E-01	5.52E+00	6.62E+00	9.61E+00	1.58E+00	5.83E+00	7.68E+00	2.23E+00	2.41E+01	2.51E+03	2.47E+03	[9]	[9]	[9]	[9]	MW-49-42
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	1.47E+00	3.91E-01	4.83E+00	7.88E+00	9.81E+00	-2.34E+00	3.76E+00	9.05E+00	-1.91E+00	1.63E+01	1.99E+01						
MW-49-42	Q4-2010	022	38.1	23.4	11/1/2011	14:12	2.39E+03	2.72E+02	4.42E+02	1.95E+01	1.62E+00	1.12E+00	3.46E+00	6.79E+00	9.71E+00	2.72E+00	3.42E+00	1.03E+01	4.00E+00	8.14E+00	1.93E+01						
MW-49-42	Q1-2011	023	38.1	23.4	1/28/2011	13:00	3.45E+03	3.35E+02	3.36E+02	3.30E+01	4.62E+00	2.02E+00	1.67E+00	5.74E+00	6.21E+00	3.45E+00	3.50E+00	5.52E+00	1.84E+01	2.13E+01						
MW-49-65	Q2-2010	022	50	45.4	4/22/2010	14:17	3.55E+03	3.63E+02	3.50E+02	1.04E+01	1.45E+00	6.37E-01	3.31E+00	1.26E+01	9.91E+00	2.32E+01	1.72E+00	1.32E+01	-1.39E+01	1.96E+01	2.03E+03	1.55E+00	1.21E+01	[9]	[9]	[9]	MW-49-65
MW-49-65	Q3-2010	021	50	45.4	8/11/2010	11:19	1.32E+03	2.18E+02	1.28E+02	1.24E+01	1.64E+00	1.49E-01	-1.12E+01	1.22E+01	1.4E+01	2.53E+01	9.83E+00	1.11E+01	-6.74E-01	1.88E+01	2.13E+01						
MW-49-65	Q4-2010	022	50	45.4	11/1/2011	14:10	1.37E+03	2.34E+02	3.77E+02	1.41E+01	1.45E+00	1.34E+00	2.92E+00	6.88E+00	1.07E+01	3.39E+01	3.72E+00	1.18E+01	2.41E+00	2.3E+01	2.09E+01						
MW-49-65	Q1-2011	023	50	45.4	1/28/2011	13:15	1.94E+03	3.02E+02	3.35E+02	1.15E+01	3.38E+00	1.06E+00	-6.10E-31	4.96E+00	5.21E+00	7.15E+01	3.20E+00	5.81E+00	-6.08E+00	1.83E+01	2.20E+01						
MW-50-42	Q2-2010	021	42	27.1	4/20/2010	12:44	1.36E+03	2.24E+02	1.52E+02	9.26E+00	1.23E+00	5.83E-01	2.49E+00	7.26E+00	8.26E+00	-1.97E+00	3.09E+00	9.24E+00	-1.40E+01	2.25E+01	2.61E+02	1.37E+00	1.49E+00	[9]	[9]	[9]	MW-50-42
MW-50-42	Q3-2010	022	42	27.1	8/9/2010	13:11	1.91E+03	2.42E+02	1.68E+02	8.43E+00	1.42E+00	2.63E-01	-1.34E+00	8.63E+00	9.42E+00	1.30E+01	3.02E+00	9.23E+00	0.00E+00	1.29E+01	1.88E+01						
MW-50-42	Q4-2010	023	42	27.1	11/1/2011	12:10	2.67E+03	2.83E+02	1.22E+02	3.73E+01	1.12E+00	9.89E-01	2.41E+00	5.71E+00	6.79E+00	2.73E+00	3.58E+00	6.54E+00	-2.36E+00	1.78E+01	2.15E+01						
MW-50-42	Q1-2011	024	42	27.1	2/25/2011	12:36	5.61E+03	3.81E+02	3.85E+02	5.42E+01	2.24E+00	1.91E+00	-1.29E-31	5.46E+00	5.81E+00	9.07E-01	4.42E+00	4.42E+00	-7.19E+00	1.82E+01	2.18E+01						
MW-50-66	Q2-2010	022	80	-45.5	4/20/2010	14:22	2.75E+03	2.82E+02	1.58E+02	2.99E+01	2.55E+00	3.93E-01	-1.56E+00	3.84E+00	6.15E+00	3.83E-01	3.38E+00	6.62E+00	-1.14E+01	2.31E+01	2.52E+03	1.44E+00	2.65E+01	[9]	[9]	[9]	MW-50-66
MW-50-66	Q3-2010	023	50	45.1	8/9/2010	16:39	3.51E+03	3.33E+02	1.34E+02	2.63E+01	2.58E+00	1.80E-01	3.53E+00	8.29E+00	9.9E+00	9.23E-01	9.13E+00	1.06E+01	2.07E+00	1.56E+01	1.81E+01						
MW-50-66	Q4-2010	024	50	45.1	11/12/2010	12:30	3.72E+03	3.38E+02	1.20E+02	2.33E+01	2.71E+00	9.50E-01	-1.59E+00	6.21E+00	6.75E+00	-1.57E+00	6.95E+00	7.38E+00	3.25E-01	1.83E+01	2.18E+01						
MW-50-66	Q1-2011	025	50	45.1	2/25/2011	12:36	3.76E+03	6.15E+02	3.33E+02	2.61E+01	4.02E+00	1.13E+00	2.94E+00	7.20E+00	8.24E+00	6.79E-01	3.80E+00	9.30E+00	-3.80E+00	1.8E+01	2.12E+01						
MW-51-40	Q2-2010	017	39.7	28	4/9/2010	15:28	3.95E+03	4.05E+02	1.64E+02	-4.04E-01	7.98E-01	2.90E-01	-8.94E-30	3.62E+00	9.29E+00	-3.74E+00	9.18E+00	9.32E+00	NA	NA	NA	1.39E+00	[9]	[9]	[9]	[9]	MW-51-40
MW-51-40	Q3-2010	016	39.7	28	8/25/2010	16:29	1.70E+02	1.07E+02	1.33E+02	4.3.E-02	3.1E-01	4.19E-01	-2.43E+00	6.17E+00	6.5E+00	1.46E-00	3.21E+00	6.7E+00	NA	NA	NA						
MW-51-40	Q4-2010	017	39.7	28	11/30/2011	12:54	1.48E+02	1.4.E+02	1.46E+02	1.46E-0.	6.05E-01	7.12E-01	1.54E+00	4.28E+00	4.9E+00	1.72E-00	4.17E+00	4.55E+00	NA	NA	NA						
MW-51-40	Q1-2011	018	39.7	28	2/9/2011	10:18	1.91E+02	2.24E+02	2.57E+02	1.07E+01	1.11E+00	1.91E+00	-7.73E+00	1.41E+01	1.5E+01	2.42E+00	7.01E+00	8.86E+00	NA	NA	NA						
MW-51-79	Q2-2010	015	78.7	-11	4/9/2010	14:31	4.68E+00	6.09E+00	5.51E+00	4.65E-0.	7.07E-01	9.92E-01	4.05E+00	8.89E+00	1.11E+01	-9.53E+00	-0.02E+00	[9]	NA	NA	NA	NA	[9]	[9]	[9]	[9]	MW-51-79
MW-51-79	Q3-2010	016	78.7	-11	8/25/2010	16:47	1.10E+02	9.8.E+01	1.31E+02	5.81E-0.	8.93E-01	3.92E-01	5.22E+00	6.13E+00	7.7.E+00	1.18E+00	6.71E+00	7.88E+00	NA	NA	NA						
MW-51-79	Q4-2010	017	78.7	-11	11/30/2011	13:00	1.11E+02	1.2.E+02	1.44E+02	-1.22E-01	4.42E-01	2.24E-01	-8.70E-31	4.13E+00	4.5.E+00	9.29E-01	4.02E+00	4.65E+00	NA	NA	NA						
MW-51-79	Q1-2011	018	78.7	-11	2/9/2011	10:24	1.56E+02	2.07E+02	2.70E+02	1.12E+00	1.12E+00	1.55E+00	2.41E+00	5.44E+00	6.2.E+00	-2.74E+00	2.36E+00	6.45E+00	NA	NA	NA						
MW-51-104	Q2-2010	032	113.7	-36	4/9/2010	18:42	3.10E+02	1.04E+02	1.45E+02	1.25E-0.	7.52E-01	3.99E-01	5.8E-31	3.43E+00	9.34E+00	2.53E-00	7.96E+00	8.98E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-51-104
MW-51-104	Q3-2010	014	113.7	-36	8/25/2010	13:18	1.33E+02	1.3.E+02	1.4E+02	7.62E-0.	8.3E-01	3.23E-01	8.90E-01	5.73E+00	6.6.E+00	-2.70E-01	4.96E+00	5.4.E+00	NA	NA	NA						
MW-51-104	Q4-2010	017	113.7	-36	11/30/2011	9.23	1.34E+02	1.3.E+02	1.4E+02	3.7.E-0.	8.8E-01	3.12E-01	-1.43E-31	3.99E+00	4.2.E+00	2.18E-01	4.36E+00	5.2.E+00	NA	NA	NA						
MW-51-104	Q1-2011	018	113.7	-36	2/8/2011	12:10	1.76E+02	2.18E+02	2.55E+02	3.91E-0.	1.47E+00	1.60E+00	2.54E+00	7.20E+00	8.1.E+00	9.13E-01	5.30E+00	6.54E+00	NA	NA	NA						
MW-51-135	Q2-2010	012	135.2	-67.5	4/9/2010	13:06	2.38E+01	1.5.E+01	1.5E+02	-2.00E-02	5.90E-01	2.83E-01	-9.14E-30	3.87E+00	9.82E+00	-4.95E-01	0.04E+00	1.09E+01	NA	NA	NA	3.30E+00	[9]	[9]	[9]	[9]	MW-51-135
MW-51-135	Q3-2010	014	135.2	-67.5	8/25/2010	12:41	1.91E+01	1.4.E+01	1.6E+02	-7.53E-01	4.48E-01	6.70.-01	-6.64E-31	6.13E+00	6.8.E+00	1.74E+00	6.61E+00	7.77E+00	NA	NA	NA						
MW-51-135	Q4-2010	015	135.2	-67.5	11/30/2011	9.57	9.53E+01	1.23E+02	1.45E+02	4.21E-0.	7.38E-01	9.99E-01	5.11E-31	4.18E+00	4.61E+00	2.99E-01	4.30E+00	4.9E+00	NA	NA	NA						
MW-51-135	Q1-2011	016	135.2	-67.5	2/8/2011	12:44	8.29E+01	2.24E+02	2.52E+02	3.62E-0.	1.1E+00	1.42E+00	8.60E-02	6.02E+00	6.7.E+00	2.37E-00	3.96E+00	7.3E+00	NA	NA	NA						
MW-51-163	Q2-2010	012	152.7	-95	4/9/2010	13:31	3.33E+01	1.2.E+02	1.4E+02	-7.63E-02	6.06E-01	2.13E-01	-2.15E+00	3.55E+00	8.7.E+00	-1.50E+00	0.04E+00	1.03E+01	NA	NA	NA	ND	ND	ND	ND	NA	MW-51-163
MW-51-163	Q3-2010	014	152.7	-95	8/25/2010	13:51	5.20E+01	9.7.E+01	1.35E+02	1.00E-01	3.90E-01	2.31E-01	3.91E+00	6.72E+00	8.1.E+00	8.27E-01	6.32E+00	7.52E+00	NA	NA	NA						
MW-51-163	Q4-2010	017	152.7	-95	11/30/2011	10:02	9.01E+01	1.3.E+02	1.44E+02	-3.1.E-01	6.98E-01	9.94E-01	1.23E+00	8.07E+00	4.1.E+00	3.30E-01	3.94E+00	4.43E+00	NA	NA	NA						
MW-51-163	Q1-2011	018	152.7	-95	2/9/2011	13:01	0.00E+00	1.9.E+02	2.53E+02	5.9.E-01	1.9.E+00	1.95E+00	2.81E+00	6.54E+00	7.6.E+00	5.53E-01	4.76.+00	8.49E+00	NA	NA	NA						
MW-51-189	Q2-2010	012	189.2	121.5	4/23/2010	14:06	3.33E+01	1.2.E+02	1.4E+02	5.24.E-0.	1.33E+00	3.44E-01	-1.27E+00	6.29E+00	8.2.E+00	2.39E-01	5.39E+00	6.29E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-51-189
MW-51-189	Q3-2010	014	189.2	121.5	8/25/2010	13:13	1.86E+01	9.3.E+01	1.3E+02	4.4.E-02	3.9.E-01	7.65.-01	2.87E+00	5.6.E+00	6.6.E+00	8.01E-01	3.83E+00	6.2.E+00	NA	NA	NA						
MW-51-189	Q4-2010	017	189.2	121.5	11/30/2011	9.56	6.91E+01	1.2.E+02	1.4E+02	1.9.E-0.	7.9.E-01	9.81E-01	-7.45E-31	4.5.E+00	4.9.E+00	-3.16E-01	4.61E+00	5.6.E+00	NA	NA	NA						
MW-51-189*	Q1-2011	018	189.2	121.5	2/8/2011	12:30	1.30E+01	1.9.E+02	2.5E+02	3.0.E-01	1.4.E+00	1.9.E+00	3.7.E-01*	1.4.E+00	6.2.E+00	2.2.E-01	3.28.+00	5.7.E+00	NA	NA	NA						
MW-52-18	Q2-2010	002	17.5	-2.1	4/22/2010	13:26	3.70E+02	1.73E+02	1.53E+02	3.01E-0.	4.7.E-01	5.66.-01	3.26E-01	5.50E+00	6.2.E+00	2.12E+00	4.03E+00	6.03E+00	NA	NA	NA	7.3.E+00	[9]	[9]	[9]	[9]	MW-52-18
MW-52-18	Q3-2010	002	17.5	-2.1	8/9/2010	16:19	3.01E+02	1.7.E+02	1.3.E+02	3.01E-0.	4.9E-01	3.26E-01	1.83E+00	5.61E+00	6.4.E+00	9.90E-01	4.25+00	6.2.E+00	NA	NA	NA	7.01E+00	[9]	[9]	[9]	[9]	MW-52-18
MW-52-48	Q2-2010	002	48	-33.5	4/22/2010	16:43	1.68E+02	1.6.E+02	1.2.E+02	6.43E-0.	6.30E-01	6.01E-01	-6.41E-31	6.08E+00	6.7.E+00	-1.90E-01	5.13E+00	5.8.E+00	NA	NA	NA	8.0.	[9]	[9]	[9]	[9]	MW-52-48
MW-52-64	Q2-2010	001	64	-49.9	4/22/2010	12:52	1.31E+02	1.6.E+02	1.2.E+02	-2.32E-01	7.08E-01	9.43E-01	-3.12E+00	2.22E+00	4.9.E+00	1.49E+00	2.80E+00	4.85E+00	NA	NA	NA	8.0.	[9]	[9]	[9]	[9]	MW-52-64
MW-52-122	Q2-2010	007	122	-107	4/22/2010	14:57	6.46E+01	1.6.E+02	1.3.E+02	1.56E-0.	4.66E-01	5.60E-01	-3.04E-02	5.53E+00	6.0.E+00	3.25E+00	6.23E+00	6.3.E+00	NA	NA	NA	8.0.	[9]	[9]	[9]	[9]	MW-52-122
MW-52-162	Q2-2010	007	151.5	-146.6	4/22/2010	12:39	2.66E+02	1.7.E+02	1.3.E+02	-7.36E-02	4.58E-01	3.66E-01	-1.54E+00	5.53E+00	5.9.E+00	3.03E+00	3.63E+00	7.33E+00	NA	NA	NA	6.0.E+00	[9]	[9]	[9]	[9]	MW-52-162
MW-52-191	Q2-2010	007	191.5	-186.6	4/22/2010	15:07	4.47E+01	1.6.E+02	1.3.E+02	2.81E-0.	4.29E-01	4.14E-01	-2.48E+00	2.09E+00	5.0.E+00	-2.98E+00	0.02E+00	5.0.E+00	NA	NA	NA	5.1.E+00	[9]	[9]	[9]	[9]	MW-52-191
MW-52-212	Q2-2010	007	212	-207	4/22/2010	15:18	4.47E+01	1.6.E+02	1.3.E+02	3.96E-0.	5.07E-01	5.29E-01	1.91E+00	1.27E+01	1.4.E+01	-1.45E+00	1.13E+01	1.19E+01	-1.99E+00	1.69E+01	2.70E+01	1.54E+00	[9]	[9]	[9]	[9]	MW-52-212
MW-53-82	Q3-2010	016	75	-4.7	7/30/2010	12:32	2.25E+03	2.6.E+02	1.7E+02	3.34E-0.	3.33E-01	4.00E-01	-3.53E+00	8.36E+00	8.4E+00	-1.10E+00	3.00E+00	8.3E+00	-1.45E+01	1.7E+01	2.23E+01						
MW-53-82	Q4-2010	017	75	-4.7	10/27/2011	12:07	2.59E+03	2.7.E+02	1.1E+02	3.07E-0.	7.90E-01	3.26E-01	-3.74E-32	5.82E+00	6.5.E+00	1.14E-01	6.23E+00	7.0.E+00	NA	NA	NA						
MW-53-82	Q1-2011	018	75	-4.7	2/9/2011	11:53	2.93E+03	2.7.E+02	3.72E+02	1.61E+01	1.12E+00	1.91E+00	3.61E+00	6.18E+00	7.2.E+00	-1.39E+00	4.02E+00	7.52E+00	-7.62E+00	1.55E+01	1.85E+01						
MW-53-120	Q2-2010	015	119.8	-39.5	4/15/2010	14:26	4.16E+03	8.1.E+02	2.8E+02	3.22E+01	2.55E+00	9.06E-01	-6.65E+00	9.72E+00	8.1.E+00	9.24E-01	3.74E+00	9.07E+00	3.53E+00	1.96E+01	2.22E+02	5.93E+00	3.05E+01	[9]	[9]	[9]	MW-53-26
MW-53-120	Q3-2010	02C	119.8	-39.5	7/30/2010	14:36	3.81E+03	3.3.E+02	1.8E+02	2.97E+01	2.22E+00	4.77E-01	2.02E+00	1.27E+01	1.3.E+01	-4.76E-01	3.04E+00	8.5.E+00	3.59E+00	1.9.E+01	2.21E+01						
MW-53-120	Q4-2010	021	119.8	-39.5	10/27/2011	12:48	3.91E+03	3.5.E+02	1.1E+02	2.92E+01	2.21E+00	7.02E-01	2.32E+00	1.07E+01	0.0.E+00	-9.22E-01	4.40E+00	2.3.E+00	NA	NA	NA						
MW-53-120	Q1-2011	022	119.8	-39.5	3/2/2011	12:00	3.84E+03	7.1.E+02	3.9E+02	2.9.E+01	1.13E+00	3.56E+00	2.31E+00	7.3.E+00	8.4.E+00	-2.41E+00	3.14E+00	8.1.E+00	-1.09E+00	1.78E+01	1.87E+01						
MW-54-37	Q2-2010	014	36.5	-23.4	4/9/2010	14:09	1.15E+03	2.2.E+02	1.3E+02	4.71E+01	1.65E+00	6.67E-01	-3.47E+00	3.43E+00	8.3.E+00	-1.69E+00	9.49E+00	1.14E+01	3.61E+00	2.0.E+01	2.26E+02	1.29E+00	1.23E+00	[9]	[9]	[9]	MW-54-37
MW-54-37	Q3-2010	014	36.5	-23.4	8/4/2010	14:32	1.21E+03	2.1.E+02	1.3E+02	4.01E+01	3.07E-01	3.62E-01	-4.56E-31	1.65E+00	8.1.E+00	-3.07E+00	9.23E+00	9.2.E+00	-1.30E+00	1.9.E+01	1.93E+01						
MW-54-37	Q4-2010	014	36.5	23.4	11/23/2011	14:47	1.45E+03	2.2.E+02	1.3E+02	1.54E+01	1.2.E+00	9.1E-01	3.20E+00	5.46E+00	5.8.E+00	6.89E-01	4.35+00	6.3.E+00	2.56E+00	1.8.E+01	2.15E+01						
MW-54-37	Q1-2011	014	36.5	-23.4	2/1/2011	14:10	1.33E+03	4.3.E+02	3.7E+02	4.83E+03	1.7.E+00	1.26E+00	-1.42E+00	5.54E+00	5.6.E+00	3.12E-01	6.42E+00	7.0.E+00	-2.81E+00	1.5.E+01	1.82E+01						
MW-54-58	Q2-2010	012	57.5	-44.4	4/15/2010	13:22	1.31E+03	2.2.E+02	1.4E+02	1.44E+01	6.33E-01	6.60E-01	-6.00E-31	1.00E+00	7.3.E+00	-1.36E+00	4.46.+00	9.2.E+00	-8.83E+00	1.9.E+01	2.26E+02	3.58E+00	1.79E+00	[9]	[9]	[9]	MW-54-58
MW-54-58	Q3-2010	013	57.5	-44.4	8/4/2010	14:55	1.27E+03	1.9.E+02	1.3E+02	1.30E+02	6.80E-01	6.20E-01	2.55E+00	9.21E+00	9.8.E+00	8.12E-01	1.22E+01	1.22E+01	1.44E+01	1.7.E+01							
MW-54-58	Q4-2010	014	57.5	-44.4	11/23/2011	14:55	8.21E+02	1.8.E+02	1.2.E+02	2.67E+01	1.13E+00	9.76.-01	3.81E+00	6.50E+00	7.8.E+00	2.55E-00	6.57.+00	8.0.E+00	-2.94E+00	1.8.E+01	2.21E+01						
MW-54-58	Q1-2011	015	57.5	-44.4	2/1/2011	14:22	9.58E+02	4.5.E+02	3.5E+02	1.68E+03	1.4.E+00	1.28E+00	-4.08E-32	7.14E+00	7.9.E+00	-2.21E+00	6.84.+00	6.2.E+00	-4.89E+00	1.6.E+01	1.92E+01						
MW-54-123	Q2-2010	012	20	109.9	4/9/2010	13:08	9.10E+02	1.9.E+02	1.3E+02	1.12E+00	2.2.E+00	9.33.-01	-2.24E+00	8.00E+00	9.8.E+00	-3.74E-01	6.46.+00	1.0.E+01	-6.31E+00	1.9.E+01	2.22E+01	1.98E+00	3.86E+00	[9]	[9]	[9]	MW-54-23
MW-54-123	Q3-2010	014	23	109.9	8/4/2010	14:48	7.53E+02	1.8.E+02	1.3E+02	2.90E+01	3.15E-01	4.15E-01	1.51E+00	9.99E+00	1.1.E+01	-9.37E-01	7.31E+00	8.7.E+00	-7.12E+00	1.6.E+01	1.97E+01						
MW-54-123	Q4-2010	013	23	109.9	11/23/2011	15:12	8.12E+02	1.8.E+02	1.2.E+02	7.65E+00	1.45E+00	9.15.-01	2.12E+00	6.74E+00	7.7.E+00	-1.25E+00	6.18.+00	6.2.E+00	9.26E+00	1.9.E+01	2.15E+01						
MW-54-123	Q1-2011	014	23	109.9	2/1/2011	14:11	1.08E+03	4.6.E+02	3.9E+02	2.56E+00	1.9.E+00	1.03E+00	-3.76E-31	6.03E+00	6.6.E+00	-3.66E-03	3.16.+00	5.5.E+00	3.50E+00	1.6.E+01	1.97E+01						
MW-54-144	Q2-2010	013	44	130.9	4/9/2010	13:41	1.29E+03	1.9.E+02	1.3E+02	2.01E+00	2.9.E+00	9.23.-01	9.23E+00	9.23E+00	9.9.E+00	-5.50E+00	7.61.+00	6.0.E+00	-6.61E+00	2.1.E+01	2.26E+02	1.33E+00	1.14E+01	[9]	[9]	[9]	MW-54-144
MW-54-144	Q3-2010	014	44	130.9	8/4/2010	11:44	1.44E+03	2.2.E+02	1.3E+02	1.17E+01	1.4.E+00	4.70.-01	3.95E+00	1.13E+01	1.4.E+01	1.72E-00	3.79.+00	1.0.E+01	1.78E+00	1.8.E+01	2.21E+01						
MW-54-144	Q4-2010	014	44	130.9	11/23/2011	12:30	1.34E+03	2.1.E+02	1.2E+02	1.03E+01	1.6.E+00	3.83.-01	1.02E+00	7.82E+00	8.5.E+00	-3.87E+00	6.48.+00	5.5.E+00	2.30E+00	1.9.E+01	2.21E+01						
MW-54-144	Q1-2011	015	44	130.9	2/1/2011	12:34	1.35E+03	3.7.E+02	3.2E+02	2.31E+00	2.4.E+00	1.9.E+00	1.9.E+00	6.14E+00	6.7.E+00	-6.36E-01	5.20.+00	6.9.E+00	-4.27E+00	1.5.E+01	1.82E+01						
MW-54-175	Q2-2010	012	172.5	159.4	4/9/2010	13:47	1.02E+03	1.9.E+02	1.3E+02	5.48E+00	2.2.E+00	7.94.-01	3.27E+00	8.87E+00	9.7.E+00	2.77E-00	6.92.+00	9.4.E+00	-1.60E+00	2.0.E+01	2.22E+01	1.61E+00	2.62E+00	[9]	[9]	[9]	MW-54-23
MW-54-173	Q3-2010	014	172.5	159.4	8/4/2010	12:09	1.53E+03	2.3.E+02	1.3E+02	5.97E+03	1.2.E+00	3.24.-01	-7.45E+00	8.07E+00	7.1.E+00	4.26E-01	9.46.+00	1.0.E+01	-1.31E+00	1.6.E+01	1.99E+01						
MW-54-173	Q4-2010	012	172.5	159.4	11/23/2011	12:23	1.31E+03	2.2.E+02	1.2E+02	4.63E+00	1.3.E+00	3.17.-01	-1.14E+00	7.03E+00	7.3.E+00	-1.32E+00	6.33.+00	7.2.E+00	-1.34E+00	1.8.E+01	2.14E+01						
MW-54-173	Q1-2011	013	172.5	159.4	2/1/2011	12:29	1.66E+03	5.2.E+02	3.1E+02	5.81E+03	1.6.E+00	1.10.E+00	-2.27E-31	8.09E+00	8.7.E+00	1.81E+00	6.67.+00	1.2.E+01	-1.49E+00	1.5.E+01	1.91E+01						
MW-54-190	Q2-2010	012	90	176.9	4/9/2010	13:01	7.71E+03	5.6.E+02	1.4E+02	2.23E+01	2.1.E+00	9.32.-01	5.81E+00	1.05E+01	1.2.E+01	-3.30E+00	1.15+00	1.4.E+01	-6.69E+00	2.2.E+01	2.26E+01	1.78E+00	1.85E+01	[9]	[9]	[9]	MW-54-90
MW-54-190	Q3-2010	014	90	176.9	8/4/2010	12:54	1.60E+03	2.5.E+02	1.2E+02	1.5.E+01	1.1.E+00	2.87.-01	-1.42E+00	8.23E+00	8.8.E+00	-1.40E+00	7.80.+00	9.1.E+00	-2.22E+00	1.8.E+01	2.21E+01						
MW-54-190	Q4-2010	013	90	176.9	11/23/2011	12:22	1.91E+03	2.5.E+02	1.2E+02	1.09E+01	1.0.E+00	3.12.-01	9.64E-31	6.04E+00	6.6.E+00	2.20E+00	6.71.+00	6.7.E+00	1.15E+01	1.8.E+01	2.14E+01						
MW-54-190	Q1-2011	014	90	176.9	2/1/2011	12:25	1.89E+03	3.5.E+02	3.0E+02	1.63E+01	3.6.E+00	1.28E+00	4.59E-01	6.34E+00	7.1.E+00	3.55E+00	3.96.+00	5.2.E+00	1.71E+00	1.6.E+01	1.89E+01						
MW-55-24	Q2-2010	012	16	2.5	4/21/2010	14:06	6.22E+02	8.6.E+01	1.3E+02	1.94E+01	2.0.E+00	2.38.-01	-1.11E+00	7.53E+00	7.2.E+00	4.56E-01	4.22.+00	1.0.E+01	-1.82E+01	1.7.E+01	2.07E+02	1.31E+00	1.24E+

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TABLE 3
FIRST QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,8]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS[5]														YEARLY ROLLING AVERAGES[6,7]						
							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)	Well ID[1]
					Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Average	Average	Average	Average	Average	
MW-58-65	Q2-2010	011	54	-39.4	4/30/2010	13:51	3.59E+02	1.64E+02	1.72E+02	7.35E-02	7.76E-01	6.40E-01	3.53E+00	8.09E+00	9.90E+00	3.34E-01	7.73E+00	6.80E+00	NA	NA	NA	4.20E+02	NA	NA	NA	NA	MW-58-65
MW-58-65	Q4-2010	011	54	-39.4	11/1/2011	13:53	4.81E+02	1.81E+02	1.45E+02	7.15E-0.	7.72E-01	5.51E-01	2.61E-01	3.71E+00	4.11E+00	3.74E-01	4.41E+00	5.49E+00	NA	NA	NA						
MW-60-55	Q2-2010 Dup	015	44.4	-22.4	5/6/2010	15:00	2.83E+02	1.48E+02	1.26E+02	2.99E-02	7.09E-01	6.56E-01	-1.78E+00	7.20E+00	9.05E+00	-1.92E+00	9.12E+00	9.36E+00	-3.12E-01	6.24E+01	2.66E+03	1.60E+02	N.S.	0.0	9.0	N.D.	MW-60-55
MW-60-35	Q3-2010	012	34.9	22.4	8/4/2010	14:43	3.35E+02	1.42E+02	1.41E+02	3.15E-0.	6.8E-01	7.39E-01	3.02E-01	5.73E+00	6.45E+00	1.36E+00	6.23E+00	6.45E+00	-7.52E+00	2.11E+01	2.52E+01						
MW-60-35	Q4-2010	012	34.9	22.4	11/1/2011	13:25	2.44E+02	1.8.5E+02	4.30E+02	-5.53E-01	6.54E-01	1.73E+00	9.47E-01	4.80E+00	1.01E+01	-4.28E-01	4.56E+00	9.75E+00	-1.11E+01	8.47E+00	1.92E+01						
MW-60-35	Q1-2011	012	34.9	22.4	2/11/2011	12:17	3.20E+02	1.7.2E+02	3.88E+02	9.73E-0.	1.13E+00	1.75E+00	2.69E+00	6.24E+00	7.4.E+00	1.22E-01	3.76E+00	4.34E+00	-1.61E+01	1.63E+01	1.54E+01						
MW-60-55	Q2-2010 Dup	015	44.4	-22.4	5/6/2010	15:00	2.83E+02	1.48E+02	1.26E+02	2.99E-02	7.09E-01	6.56E-01	-1.78E+00	7.20E+00	9.05E+00	-1.92E+00	9.12E+00	9.36E+00	-3.12E-01	6.24E+01	2.66E+03	1.60E+02	N.S.	0.0	9.0	N.D.	MW-60-55
MW-60-53	Q3-2010	014	53.4	-40.9	8/4/2010	15:34	2.58E+02	1.50E+02	1.50E+02	-2.84E-02	4.87E-01	6.04E-01	-8.42E+00	7.92E+00	7.7.E+00	-2.54E+00	6.03E+00	6.02E+00	-3.48E+00	1.91E+01	2.37E+01						
MW-60-53	Q4-2010	015	53.4	-40.9	11/1/2011	12:22	2.49E+02	1.8.3E+02	3.76E+02	-4.32E-01	4.30E-01	1.32E+00	4.54E-01	4.11E+00	9.1.E+00	2.31E-00	3.57E+00	8.35E+00	1.10E+01	8.91E+00	1.96E+01						
MW-60-53	Q1-2011	014	53.4	-40.9	2/11/2011	10:27	2.19E+02	2.0.8E+02	2.52E+02	7.46E-0.	1.08E+00	1.74E+00	-1.43E+00	2.88E+00	3.1.E+00	-1.99E+00	2.99E+00	8.44E+00	-1.29E+01	1.26E+01	1.42E+01						
MW-60-75	Q2-2010 Dup	015	73.4	-59.9	5/6/2010	12:11	3.01E+02	1.5.9E+02	1.8.E+02	1.57E-0.	1.49E-01	5.01E-01	-5.56E+00	1.20E+01	1.53E+01	-3.77E+00	1.16E+01	1.30E+01	-3.97E+00	3.05E+01	2.61E+01	0.0	N.S.	N.D.	N.D.	N.D.	MW-60-75
MW-60-72	Q3-2010	014	72.4	-59.9	8/17/2010	11:59	2.33E+02	1.21E+02	1.44E+02	1.97E-0.	5.90E-01	6.91E-01	-2.51E-01	5.40E+00	6.0.E+00	-1.59E+00	6.08E+00	6.7.E+00	1.19E+00	2.04E+01	2.37E+01						
MW-60-72	Q4-2010	017	72.4	-59.9	11/16/2011	13:17	2.51E+02	1.6.E+02	3.95E+02	5.3.E-02	5.35E-01	1.23E+00	2.12E+00	5.34E+00	1.2.E+01	-3.72E+00	5.67E+00	1.09E+01	-1.14E+01	8.33E+00	1.89E+01						
MW-60-72	Q1-2011	014	72.4	-59.9	2/10/2011	12:54	3.66E+02	1.7.E+02	3.34E+02	2.41E-0.	1.45E+00	1.70E+00	5.10E-02	9.13E+00	1.01E+01	2.27E-00	3.84E+00	1.7.E+01	2.13E+00	1.51E+01	1.75E+01						
MW-60-135	Q2-2010 Dup	015	134.9	-122.4	5/6/2010	12:21	4.15E+02	1.8.E+02	1.8.E+02	9.4.E-02	8.05E-01	3.55E-01	3.53E+00	7.70E+00	9.0.E+00	6.55E-02	9.37E+00	9.2.E+00	-2.62E+00	2.04E+01	2.28E+01	3.4E+00	N.S.	0.0	N.D.	N.D.	MW-60-135
MW-60-135	Q3-2010	014	134.9	-122.4	8/17/2010	12:09	1.87E+02	1.3.E+02	1.43E+02	-2.74E-01	5.3.E-01	7.22E-01	-3.26E+00	3.41E+00	9.0.E+00	-1.52E+00	6.30E+00	6.3.E+00	-1.77E-01	2.1.E+01	2.45E+01						
MW-60-135	Q4-2010	012	134.9	-122.4	11/16/2011	15:22	2.41E+02	1.5.E+02	3.9.E+02	-4.9.E-02	7.0.E-01	1.22E+00	9.16E-01	2.37E+00	1.2.E+01	1.02E+00	4.33E+00	1.0.E+01	4.07E-01	8.35E+00	1.90E+01						
MW-60-135	Q1-2011	016	134.9	122.4	2/10/2011	13:04	3.98E+02	1.7.E+02	3.33E+02	1.14E+03	1.12E+00	1.98E+00	1.72E+00	6.72E+00	7.7.E+00	2.24E-01	7.44E+00	8.2.E+00	-2.56E+00	1.52E+01	1.76E+01						
MW-60-154	Q2-2010 Dup	013	154.4	141.9	5/6/2010	12:32	4.38E+02	1.8.E+02	1.9.E+02	3.51E-0.	6.2.E-01	7.03E-01	-1.53E+00	8.40E+00	9.2.E+00	-3.93E-01	7.65E+00	8.4.E+00	-2.16E+00	2.13E+01	2.46E+01	5.6E+00	N.D.	N.D.	N.D.	N.D.	MW-60-154
MW-60-154	Q3-2010	014	154.4	141.9	8/17/2010	12:18	4.21E+02	1.2.E+02	1.2.E+02	-2.43E-01	5.9.E-01	8.61E-01	-4.41E-01	5.04E+00	9.0.E+00	1.52E+00	9.7.E+00	8.1.E+00	-1.10E+01	2.1.E+01	2.46.E+01						
MW-60-154	Q4-2010	014	154.4	141.9	11/16/2011	13:40	4.68E+02	1.9.E+02	3.9.E+02	3.2.E-0.	9.3.E-01	1.94E+00	5.28E+00	4.0.E+00	7.5.E+00	2.29E-01	5.09E+00	1.1.E+01	-1.54E+00	7.91E+00	1.78E+01						
MW-60-154	Q1-2011	016	154.4	141.9	2/10/2011	12:53	5.44E+02	4.0.E+02	3.8.E+02	2.3.E-02	8.3.E-01	1.87E+00	-4.12E+00	9.26E+00	8.9.E+00	9.3.E-01	* 8.63+00	9.1.E+00	4.61E+00	1.5.E+01	1.71E+01						
MW-60-176	Q2-2010 Dup	013	175.9	163.4	5/6/2010	13:28	3.93E+02	1.2.E+02	1.5.E+02	-3.0.E-02	4.2.E-01	6.99E-01	-3.76E-01	3.5.E+00	7.9.E+00	9.2.E-01	3.25E+00	8.9.E+00	-3.00E+00	2.02E+01	2.24E+01	2.4E+01	N.D.	N.D.	N.D.	N.D.	MW-60-176
MW-60-176	Q3-2010	014	175.9	163.4	8/17/2010	12:51	5.13E+02	1.4.E+02	1.44E+02	6.9.E-01	6.4.E-01	7.01E-01	1.22E-01	6.43E+00	7.2.E+00	1.35E-00	8.00E+00	6.7.E+00	0.0E+00	2.12E+01	2.42E+01						
MW-60-176	Q4-2010	017	175.9	163.4	11/16/2011	14:06	8.33E+02	2.1.E+02	3.7.E+02	9.0.E-0.	9.4.E-01	2.10E+00	-1.57E+00	4.38E+00	9.0.E+00	2.5.E-00	4.70E+00	1.2.E+01	-4.40E+00	7.9.E+00	1.78E+01						
MW-60-176	Q1-2011	016	175.9	163.4	2/10/2011	10:31	1.12E+03	4.6.E+02	3.5.E+02	2.5.E-0.	1.49E+00	1.74E+00	4.83E+00	1.13E+01	6.6.E+00	-1.75E+00	6.70E+00	6.3.E+00	7.24E+00	1.62E+01	1.79E+01						
MW-62-18	Q2-2010	012	13.5	1.2	4/30/2010	12:57	1.24E+02	1.3.E+02	1.4.E+02	6.4.E-02	6.6.E-01	1.27E-01	-1.13E+00	5.0.E+00	4.3.E+00	8.9.E-01	3.38E+00	4.5.E+00	NA	NA	NA	2.6E+02	N.D.	N.D.	N.D.	NA	MW-62-18
MW-62-18	Q3-2010	014	13.5	1.2	8/3/2010	15:00	1.14E+02	1.5.E+02	1.4.E+02	6.6.E-0.	6.5.E-01	6.80E-01	3.01E+01	8.40E+00	1.0.E+01	0.0+00	1.12E+01	NA	NA	NA	NA						
MW-62-18	Q4-2010	015	13.5	1.2	1.0/2010	11:57	7.48E+01	1.7.E+02	3.6.E+02	-1.0.E-02	6.0E-01	1.54E+00	2.87E+00	4.59E+00	1.0.E+01	-6.86E-01	4.79+00	1.1.E+01	NA	NA	NA						
MW-62-18	Q1-2011	016	13.5	1.2	2/24/2011	13:49	1.91E+02	1.6.E+02	4.3.E+02	-1.39E-01	1.1.E+00	1.1.E+00	4.1.E-01	4.74E+00	5.1.E+00	1.39E+00	4.40+00	6.0.E+00	NA	NA	NA						
MW-62-37	Q2-2010	013	54.5	-19.8	4/30/2010	15:03	3.39E+02	1.6.E+02	1.5.E+02	5.6.E-02	5.4.E-01	7.23E-01	-9.22E+00	3.6.E+00	4.2.E+00	-1.33E-00	4.04+00	4.9.E+00	NA	NA	NA	3.3E+00	N.D.	N.D.	N.D.	NA	MW-62-37
MW-62-37	Q3-2010	014	54.5	-19.8	8/3/2010	12:52	1.91E+02	1.4.E+02	1.4.E+02	-1.52E-02	5.4.E-01	6.85E-01	-9.19E-31	8.7.E+00	9.7.E+00	-5.33E+00	9.12+00	7.2.E+00	NA	NA	NA						
MW-62-37	Q4-2010	015	54.5	-19.8	1.0/2010	11:56	6.09E+01	1.7.E+02	3.5.E+02	7.6.E-0.	6.6.E-01	1.47E+00	-3.4.E-31	4.49E+00	9.9.E+00	3.5.E-00	4.28+00	1.7.E+01	NA	NA	NA						
MW-62-37	Q1-2011	014	54.5	-19.8	2/24/2011	12:52	3.05E+02	2.7.E+02	4.3.E+02	5.1.E-0.	1.4.E+00	1.1.E+00	1.1.E+00	1.07E+01	6.0.E+00	-6.5.E-01	2.34E+00	6.2.E+00	NA	NA	NA						
MW-62-37	Q2-2011	015	54.1	-40.3	4/3/2010	13:27	1.23E+02	1.4.E+02	1.4.E+02	1.3.E-02	5.6.E-01	7.67E-01	3.35E+00	3.3.E+00	3.8.E+00	-1.52E+00	3.65+00	4.0.E+00	NA	NA	NA	4.2E+00	N.D.	N.D.	N.D.	NA	MW-62-37
MW-62-53	Q3-2010	015	53.1	-40.3	8/3/2010	12:20	1.59E+02	1.4.E+02	1.4.E+02	3.1.E-0.	5.6.E-01	6.32E-01	2.92E+00	1.1.E+01	1.3.E+01	2.39E-01	1.83+00	9.2.E+00	NA	NA	NA						
MW-62-53	Q4-2010	014	53.1	-40.3	1.0/2010	12:49	2.03E+02	1.7.E+02	3.5.E+02	-6.9.E-02	7.1.E-01	1.39E+00	-4.23E+00	4.8.E+00	9.1.E+00	-2.26E+00	3.20+00	1.0.E+01	NA	NA	NA						
MW-62-53	Q1-2011	014	53.1	-40.3	2/24/2011	12:37	3.08E+02	3.7.E+02	4.3.E+02	8.9.E-0.	1.5.E+00	1.5.E+00	-3.7.E-31	4.7.E+00	5.2.E+00	1.2.E+00	3.58+00	5.1.E+00	NA	NA	NA						
MW-62-71	Q2-2010	011	71.1	-58.3	4/3/2010	13:45	3.37E+02	2.1.E+02	2.9.E+02	-2.2.E-02	5.6.E-01	3.4.E-01	-5.6.E-31	4.4.E+00	4.8.E+00	-3.2.E+00	3.89E+00	8.8.E+00	NA	NA	NA	4.4.E+00	N.D.	N.D.	N.D.	N.A.	MW-62-71
MW-62-71	Q3-2010	011	71.1	-58.3	8/3/2010	11:30	3.2.E+02	1.7.E+02	1.7.E+02	2.4.E-0.	3.7.E-01	4.1.E-01	-2.1.E+00	8.3.E+00	8.9.E+00	1.2.E-00	9.87+00	1.1.E+01	NA	NA	NA						
MW-62-71	Q4-2010	011	71.1	-58.3	1.0/2010	11:02	1.17E+02	1.5.E+02	3.2.E+02	6.7.E-02	6.0.E-01	1.12E+00	6.7.E-31	3.0.E+00	8.1.E+00	4.5.E+00	4.61+00	1.0.E+01	NA	NA	NA						
MW-62-71	Q1-2011	011	71.1	-58.3	2/24/2011	12:40	5.38E+02	4.0.E+02	4.3.E+02	1.2.E-0.	1.2.E+00	1.4.E+00	4.1.E+00	1.1.E+01	6.6.E+00	-2.36E-01	3.00+00	5.4.E+00	NA	NA	NA						
MW-62-92	Q2-2010	011	91.6	-78.8	4/3/2010	13:58	3.96E+02	1.5.E+02	1.4.E+02	1.7.E-0.	6.3.E-01	3.34E-01	-3.35E+00	3.2.E+00	4.2.E+00	3.3.E-01	3.75+00	8.3.E+00	NA	NA	NA	4.7.E+00	N.D.	N.D.	N.D.	N.A.	MW-62-92
MW-62-92	Q3-2010	014	91.6	-78.8	8/3/2010	11:32	3.11E+02	1.6.E+02	1.7.E+02	4.1.E-0.	5.3.E-01	2.80E-01	-3.42E+00	2.3.E+00	3.1.E+00	-4.99E-01	2.39+00	8.9.E+00	NA	NA	NA						
MW-62-92	Q4-2010	015	91.6	-78.8	1.0/2010	11:15	4.82E+02	1.8.E+02	3.3.E+02	-9.7.E-01	7.7.E-01	1.95E+00	-2.56E+00	5.4.E+00	1.1.E+01	1.7.E-00	4.84+00	1.1.E+01	NA	NA	NA						
MW-62-92	Q1-2011	011	91.6	-78.8	2/24/2011	12:39	5.09E+02	4.0.E+02	4.3.E+02	9.5.E-0.	1.1.E+00	1.0.E+00	1.6.E+00	5.3.E+00	6.2.E+00	-1.4.E+00	3.68+00	5.6.E+00	NA	NA	NA						
MW-62-138	Q2-2010	012	138.1	-125.3	4/30/2010	13:02	3.63E+02	1.7.E+02	1.8.E+02	1.2.E-01	7.4.E-01	6.9.E-01	-1.0.E+00	6.9.E+00	7.6.E+00	-5.9.E-01	6.2.E+00	6.9.E+00	-9.7.E+00	2.2.E+01	2.4.E+01	5.8E+00	1.6E+00	0.0	N.A.	MW-62-38	
MW-62-138	Q3-2010	014	138.1	-125.3	8/3/2010	14:01	1.91E+02	1.8.E+02	1.7.E+02	1.4.E+01	7.3.E-01	6.9.E-01	3.8.E+00	7.2.E+00	8.9.E+00	1.7.E+00	8.57+00	7.9.E+00	NA	NA	NA						
MW-62-138	Q4-2010	015	138.1	-125.3	1.0/2010	14:31	3.31E+02	2.0.E+02	4.9.E+02	-1.0.E-01	6.8.E-01	1.57E+00	-1.4.E+00	4.0.E+00	8.5.E+00	2.3.E-00	4.68+00	1.1.E+01	NA	NA	NA						
MW-62-138	Q1-2011	016	138.1	-125.3	2/24/2011	14:54	3.17E+02	4.0.E+02	4.3.E+02	2.1.E+03	1.7.E+00	1.7.E+00	-1.7.E+00	4.7.E+00	4.9.E+00	1.3.E-00	3.04+00	8.3.E+00	NA	NA	NA						
MW-62-182	Q2-2010	011	182.1	-169.3	4/3/2010	15:12	4.97E+02	1.9.E+02	1.9.E+02	2.9.E-0.	6.9.E-01	6.9.E-01	-5.6.E-01	9.0.E+00	4.3.E+00	2.0.E-00	4.45+00	5.9.E+00	NA	NA	NA	4.0E+00	N.D.	N.D.	N.D.	N.A.	MW-62-182
MW-62-182	Q3-2010	014	182.1	-169.3	8/3/2010	14:02	2.78E+02	1.6.E+02	1.7.E+02	2.8.E-0.	7.0.E-01	3.30E-01	-5.5.E+00	1.2.E+01	1.5.E+01	-9.25E-01	3.00+00	8.6.E+00	NA	NA	NA						
MW-62-182	Q4-2010	011	182.1	-169.3	1.0/2010	14:43	4.76E+02	1.8.E+02	3.7.E+02	1.0.E+01	6.7.E-01	1.46E+00	-2.5.E+00	4.1.E+00	8.5.E+00	1.9.E-00	5.26+00	1.2.E+01	NA	NA	NA						
MW-62-182	Q1-2011	012	182.1	-169.3	2/24/2011	13:07	3.23E+02	3.4.E+02	4.3.E+02	-1.4.E-01	1.4.E+00	1.9.E+00	-1.5.E+00	2.4.E+00	6.8.E+00	2.3.E-01	3.56+00	7.3.E+00	NA	NA	NA						
MW-63-18	Q2-2010	013	14.9	0.7	4/26/2010	12:23	1.56E+02	1.5.E+02	1.4.E+02	4.7.E-0.	6.2.E-01	6.6.E-01	3.7.E-31	9.2.E+00	6.9.E+00	5.0.E-00	5.34E+00	7.9.E+00	NA	NA	NA	4.9E+00	N.D.	N.D.	N.D.	N.A.	MW-63-18
MW-63-18	Q3-2010	014	14.9	0.7	8/10/2010	12:08	1.62E+02	1.5.E+02	1.7.E+02	-1.5.E-02	3.8.E-01	4.7.E-01	-6.4.E-31	7.2.E+00	8.1.E+00	-2.17E+00	6.42+00	6.4.E+00	NA	NA	NA						
MW-63-18	Q4-2010	012	14.9	0.7	1.0/2010	12:22	1.9.E+02	1.1.E+02	1.1.E+02	1.3.E-0.	6.7.E-01	2.1.E-01	1.3.E+00	3.4.E+00	6.4.E+00	3.4.E-00	6.35+00	8.1.E+00	NA	NA	NA						
MW-63-18	Q1-2011	011	14.9	0.7	2/2/2011	11:10	1.90E+02	2.5.E+02	4.3.E+02	4.3.E-0.	1.0.E+00	2.0.E+00	1.8.E+00	5.3.E+00	6.7.E+00	7.9.E-01	4.32+00	8.2.E+00	NA	NA	NA						
MW-63-34	Q2-2010	015	31.5	-17.3	4/26/2010	13:21	2.89E+02	1.5.E+02	1.4.E+02	-3.0.E-02	5.3.E-01	6.9.E-01	5.6.E-31	3.3.E+00	5.5.E+00	1.2.E+00	3.10+00	3.7.E+00	NA	NA	NA	2.9E+00	N.D.	N.D.	N.D.	N.A.	MW-63-34
MW-63-34	Q3-2010	014	31.5	-17.3	8/10/2010	11:44	1.89E+02	1.6.E+02	1.7.E+02	2.2.E-0.	3.9.E-01	3.9.E-01	2.6.E+00	9.2.E+00	1.0.E+01	3.0.E-00	9.21+00	9.2.E+00	NA	NA	NA						
MW-63-34	Q4-2010	014	31.5	-17.3	1.0/2010	13:04	3.41E+02	1.3.E+02	1.4.E+02	2.1.E-0.	2.7.E-01	1.4.E-01	1.4.E-01	2.6.E+00	6.2.E+00	2.1.E-00	2.32+00	6.1.E+00	NA	NA	NA						
MW-63-34	Q1-2011	014	31.5	-17.3	3/2/2011	10:50	2.98E+02	2.8.E+02	2.5.E+02	-4.2.E-01	1.7.E+00	2.1.E+00	7.4.E-02	7.9.E+00	8.8.E+00	-2.10E+00	3.42+00	8.9.E+00	NA	NA	NA						
MW-63-50	Q2-2010	013	49.5	-37.2	4/26/2010	12:06	4.13E+02	1.6.E+02	1.4.E+02	2.3.E-0.	5.3.E-01	6.3.E-01	-5.2.E+00	1.0.E+01	9.3.E+00	-3.1.E+00	6.74+00	6.4.E+00	NA	NA	NA	4.8E+00	N.D.	N.D.	N.D.	N.A.	MW-63-50
MW-63-50	Q3-2010	014	49.5	-37.2	8/10/2010	14:32	2.72E+02	1.6.E+02	1.7.E+02	-2.4.E-02	3.4.E-01	6.9.E-01	-1.2.E+00	7.1.E+00	7.8.E+00	7.7.E-01	7.45+00	8.9.E+00	NA	NA	NA						
MW-63-50	Q4-2010	017	49.5	-37.2	1.0/2010	14:07	3.59E+02	1.1.E+02	1.5.E+02	2.2.E-0.	6.7.E-01	7.2.E-01	-3.6.E-31	7.7.E+00	8.4.E+00	2.7.E-00	1.00+00	9.7.E+00	NA	NA	NA						
MW-63-50	Q1-2011	016	49.5	-37.2	3/2/2011	14:21	4.35E+02	3.4.E+02	3.4.E+02	1.7.E-0.	1.4.E+00	2.0.E+00	1.1.E+00	6.5.E+00	7.4.E+00	3.6.E-00	9.02+00	8.7.E+00	NA	NA	NA						
MW-63-93	Q2-2010	012	93	-80.7	4/26/2010	12:42	3.02E+02	1.5.E+02	1.4.E+02	-2.9.E-02	5.6.E-01	6.4.E-01	-9.4.E-31	5.5.E+00	6.8.E+00	-3.5.E+00	3.52+00	5.5.E+00	NA	NA	NA	4.6E+00	N.D.	N.D.	N.D.	N.A.	MW-63-93
MW-63-93	Q3-2010	015	93	-80.7	8/10/2010	13:10	1.95E+02	1.6.E+02	1.7.E+02	1.9.E-01	4.8.E-01	6.1.E-01	1.2.E+00	6.6.E+00	7.7.E+00	2.9.E-01	5.42+00	9.4.E+00	NA	NA	NA						
MW-63-93	Q4-2010	014	93	-80.7	1.0/2010	15:08	2.39E+02	1.2.E+02	1.1.E+02	3.2.E-0.	5.7.E-01	6.4.E-01	-4.1.E-32	4.9.E+00	5.6.E+00	3.3.E-00	3.80+00	7.1.E+00	NA	NA	NA						
MW-63-93	Q1-2011	013	93	-80.7	3/2/2011	14:14	2.69E+02	3.0.E+02	2.9.E+02	3.3.E-0.	1.5.E+00	2.1.E+00	-1.1.E+00	8.7.E+00	9.0.E+00	3.3.E-00	5.56+00	9.5.E+00	NA	NA	NA						
MW-63-112	Q2-2010	013	111.5	-99.2	4/26/2010	12:39	3.97E+02	1.6.E+02	1.4.E+02	6.4.E-0.	6.2.E-01	6.8.E-01	4.1.E-01	6.7.E+00	7.2.E+00	9.2.E-00	6.90+00	8.5.E+00	NA	NA	NA	4.6E+00	N.D.	N.D.	N.D.	N.A.	MW-63-112
MW-63-112	Q3-2010	014	111.5	-99.2	8/10/2010	14:52	3.71E+02	1.7.E+02	1.7.E+02	2.8.E-0.	4.7.E-01	4.7.E-01	-3.1.0E+00	7.6.E+00	7.9.E+00	-5.2.E+00	9.73+00	9.1.E+00	NA	NA	NA						
MW-63-112	Q4-2010	012	111.5	-99.2	1.0/2010	15:05	3.01E+02	1.2.E+02	1.1.E+02	6.0.E-02	5.5.E-01	6.5.E-01	-2.5.E+00	6.2.E+00	6.5.E+00	1.9.E-00	6.72+00	7.5.E+00	NA	NA	NA						
MW-63-112	Q1-2011	016	111.5	-99.2	3/2/2011	14:13	3.33E+02	3.1.E+02	2.9.E+02	1.4.E-0.	1.0.E+00	1.0.E+00	-3.7.E-31	6.7.E+00	7.2.E+00	1.9.E-00	6.36+00	7.1.E+00	NA	NA	NA						
MW-63-121	Q2-2010	013	21	-108.7	4/26/2010	13:59	4.58E+02	1.8.E+02	1.6.E+02	4.0.E-0.	6.0.E-01	6.7.E-01	5.5.E-01	6.5.E+00	6.0.E+00	2.9.E-00	4.19E+00	7.5.E+00	NA	NA	NA	4.9E+00	N.D.	N.D.	N.D.	N.A.	MW-63-121
MW-63-121	Q3-2010	014	21	-108.7	8/10/2010	11:28	5.39E+02	1.8.E+02	1.7.E+02	3.6.E-0.	5.9.E-01	6.5.E-01	-9.4.E-31	8.1.E+00	8.9.E+00	-6.5.E-01	1.76+00	9.3.E+00	NA	NA	NA						
MW-63-121	Q4-2010	012	21	-108.7	1.0/2010	11:46	5.20E+02	1.4.E+02	1.1.E+02	6.3.E-0.	7.5.E-01	2.1.E-01	1.1.E+00	6.6.E+00	7.6.E+00	-4.1.E+00	1.17+00	6.3.E+00	NA	NA	NA						
MW-63-121	Q1-2011	011	21	-108.7	2/2/2011	11:10	3.91E+02	2.5.E+02	2.3.E+02	2.2.E-0.	6.0.E-01	1.4.E-01	1.4.E-01	6.7.E+00	7.2.E+00	2.4.E-00	6.00+00	6.7.E+00	NA	NA	NA						
MW-63-163	Q2-2010	013	152.5	-150.2	4/26/2010	14:30	3.29E+02	1.7.E+02	1.6.E+02	1.9.E-0.	6.6.E-01	6.7.E-01	-1.1.E+00	7.7.E+00	8.0.E+00	2.3.E-00	6.17+00	5.5.E+00	NA	NA	NA	3.8E+00	N.D.	N.D.	N.D.	N.A.	MW-63-163
MW-63-163	Q3-2010	014	152.5	-150.2	8/10/2010	11:21	4.13E+02	1.7.E+02	1.7.E+02	2.4.E-0.	4.4.E-01	4.9.E-01	-5.1.7E-31	8.5.E+00	9.1.E+00	-5.2.E-01	3.23+00	9.4.

IPEC00267123

TABLE 3
FIRST QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,8]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER Elevation Ft msl[4]	SAMPLE COLLECTION		ANALYSIS RESULTS[5]														YEARLY ROLLING AVERAGES[6,7]					Well ID[1]
							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.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Average	Average	Average	Average	Average	
MW-67-173	Q2-2010	015	172.3	159.8	5/6/2010	14:03	5.78E+02	2.02E+02	3.96E+02	1.35E-01	4.87E-01	7.07E-01	3.38E+00	9.64E+00	1.31E+01	3.08E+00	2.01E+01	2.32E+03	6.58E+02	NA	NA	NA	NA	NA	MW-67-173
MW-67-173	Q3-2010	014	172.3	159.8	8/9/2010	11:07	6.72E+02	1.7 E+2	1.27E+02	7.71E-02	4.44E-01	3.35E-01	-7.16E-31	1.34E+01	1.61E+01	6.44E-01	1.97E+00	1.14E+01	1.34E+01						
MW-67-173	Q4-2010	013	172.3	159.8	11/10/2011	12:04	6.23E+02	2.0 E+2	2.47E+02	9.97E-01	6.58E-01	1.86E+00	4.01E-01	1.58E+00	1.1 E+1	-1.17E+00	4.82E+00	1.12E+01	1.81E+01						
MW-67-173	Q1-2011	016	172.3	159.8	2/7/2011	14:13	4.47E+02	4.45E+2	4.65E+02	3.32E-01	1.45E+00	5.12E+00	4.75E-31	5.25E+00	5.8 E+00	7.55E-01	6.38E+00	1.85E+01	2.13E+01						
MW-67-219	Q2-2010	015	218.8	206.3	5/6/2010	14:31	2.06E+02	2.48E+2	2.58E+02	1.76E-01	5.31E-01	7.43E-01	2.27E+00	8.27E+00	1.0 E+1	2.55E+00	9.38E+00	9.29E+00	1.95E+01	1.05E+02	NA	PD	ND	ND	MW-67-219
MW-67-219	Q3-2010	013	218.8	206.3	8/9/2010	13:33	1.11E+02	2.0 E+2	1.25E+02	9.94E-02	5.32E-01	6.41E-01	-7.59E-31	8.14E+00	9.1 E+0	6.19E+00	9.03E+00	8.33E+00	2.34E+01	1.2 E+1	1.39E+01				
MW-67-219	Q4-2010	014	218.8	206.3	11/10/2011	13:40	1.15E+02	2.24E+2	2.56E+02	3.22E-0.	7.2E-01	1.75E+00	2.10E-31	3.60E+00	7.0 E+0	2.49E-01	3.62E+00	8.84E+00	1.92E+01						
MW-67-219	Q1-2011	015	218.8	206.3	1/31/2011	14:48	6.41E+02	4.1E+2	4.2E+02	-1.01E+00	1.42E+00	1.97E+00	9.72E-01	5.88E+00	6.4 E+0	2.44E+00	3.46E+00	6.75E+00	1.43E+01	2.14E+01					
MW-67-276	Q2-2010	015	275.2	262.8	5/6/2010	12:29	1.09E+03	2.53E+2	3.03E+02	-1.16E-01	5.43E-01	1.54E+00	1.79E+00	7.91E+00	9.7 E+0	2.63E+00	9.16E+00	1.09E+01	2.27E+01	5.77E+02	NA	PD	ND	ND	MW-67-276
MW-67-276	Q3-2010	014	275.2	262.8	8/9/2010	13:39	1.35E+03	1.88E+2	1.44E+02	6.01E-0.	4.96E-01	1.49E+00	4.22E+00	1.44E+01	8.8 E+0	4.29E+00	1.44E+01	1.44E+01	1.54E+01						
MW-67-276	Q4-2010	014	275.2	262.8	11/10/2011	14:16	1.01E+03	2.1E+2	2.36E+02	-7.31E-01	5.46E-01	1.77E+00	1.94E+00	4.24E+00	9.9 E+0	5.48E+00	4.47E+00	7.48E+00	8.51E+00	1.99E+01					
MW-67-276	Q1-2011	013	275.2	262.8	1/31/2011	14:31	8.75E+02	4.1E+2	4.3E+02	2.5E-02	1.16E+00	1.03E+00	-2.76E+00	8.76E+00	8.1E+0	6.49E-01	6.48E+00	7.0E+00	1.91E+01	2.22E+01					
MW-67-322	Q2-2010	012	322.3	309.8	5/6/2010	12:20	4.44E+02	1.85E+2	1.67E+02	-1.62E-01	4.38E-01	6.97E-01	-2.29E+00	7.72E+00	7.2 E+0	1.97E-01	7.31E+00	9.30E+00	1.11E+01	1.19E+02	3.38E+02	ND	ND	ND	ND	MW-67-322
MW-67-323	Q3-2010	012	322.3	309.8	8/9/2010	13:23	4.32E+02	1.45E+2	1.23E+02	6.35E-0.	6.31E-01	6.53E-01	1.47E+00	6.85E+00	8.0 E+0	3.25E-01	6.72E+00	7.56E+00	1.51E+01	1.37E+01	1.63E+01				
MW-67-323	Q4-2010	014	322.3	309.8	11/10/2011	14:03	3.88E+02	1.85E+2	3.34E+02	1.85E-0.	8.31E-01	2.01E+00	2.73E+00	4.61E+00	1.0 E+1	3.11E-01	3.07E+00	1.12E+01	2.22E+01	7.93E+01	1.78E+01				
MW-67-323	Q1-2011	013	322.3	309.8	1/31/2011	15:04	3.38E+02	3.78E+2	3.9E+02	2.5E-0.	1.71E+00	2.03E+00	2.47E-01	5.78E+00	6.3 E+0	8.12E-03	5.80E+00	6.55E+00	1.98E+01	2.25E+01					
MW-67-340	Q2-2010	013	339.8	327.3	5/6/2010	12:24	6.27E+02	2.06E+2	1.65E+02	-2.19E-05	4.46E-01	9.93E-01	-2.21E+00	7.77E+00	9.3 E+0	3.32E-01	3.78E+00	1.02E+01	2.49E+01	1.99E+02	2.29E+02				
MW-67-340	Q3-2010	012	339.8	327.3	8/9/2010	13:20	4.86E+02	1.5 E+2	1.25E+02	3.8 E-02	5.00E-01	6.29E-01	1.23E+00	7.44E+00	8.7 E+0	-2.42E+00	6.98E+00	7.6E+00	2.60E+00	1.43E+01	1.67E+01				
MW-67-340	Q4-2010	014	339.8	327.3	11/10/2011	13:53	5.31E+02	1.9 E+2	2.35E+02	-8.95E-01	5.00E-01	1.64E+00	1.72E+00	4.50E+00	1.0 E+1	-2.97E+00	3.90E+00	7.25E+00	2.23E+00	8.84E+00	1.97E+01				
MW-67-340	Q1-2011	012	339.8	327.3	1/31/2011	14:23	4.23E+02	2.2 E+2	2.58E+02	-7.10E-01	1.11E+00	1.97E+00	4.89E-01	5.24E+00	7.0 E+0	-1.12E+00	6.34E+00	6.88E+00	-2.79E+00	1.82E+01	2.41E+01				
MW-MW	Q2-2010	005	10.5	10.1	4/29/2010	10:01	9.87E+04	6.64E+3	1.38E+03	7.4 E-01	7.23E-01	2.75E-01	0.25E+00	5.00E+00	3.9 E+0	1.23E+00	2.95E+00	7.56E+00	NA	NA	NA	NA	NA	NA	MW-MW
MW-1.1	Q2-2010	032	16.5	2.4	4/21/2010	14:48	3.35E+04	5.0 E+3	5.9 E+02	1.43E+00	7.36E-01	9.23E-01	5.71E+00	6.54E+00	4.32 E+0	1.70E-01	4.37E+00	6.8 E+00	NA	NA	NA	3.32E+00	3.76E+00	NA	MW-1.1
MW-1.1	Q3-2010	031	16.5	2.4	8/27/2010	15:21	3.86E+04	1.1 E+3	1.2 E+02	6.4 E-0.	8.07E-01	2.55E-01	-8.13E-31	6.30E+00	6.5 E+0	1.15E+00	3.70E+00	6.1 E+00	NA	NA	NA				
MW-1.1	Q3-2010 Dup	033	16.5	2.4	9/10/2010	14:09	4.67E+04	1.2 E+3	1.4 E+02	1.00E+00	1.10E+00	0.02E+00	-5.4 E+00	6.8 E+00	6.8 E+0	3.62E-01	6.04E+00	7.4 E+00	NA	NA	NA				
MW-1.1	Q4-2010	032	16.5	2.4	1./1/2010	14:55	4.59E+04	1.3 E+3	1.2 E+02	3.47E-0.	5.90E-01	6.60E-01	-1.19E-31	5.63E+00	6.3 E+0	5.49E-00	5.91E+00	7.75E+00	NA	NA	NA				
U3-4D	Q2-2010	026	25.6	-10.8	4/13/2010	12:49	1.07E+03	2.0 E+3	1.7 E+02	-4.8 E-02	5.34E-01	5.39E-01	-1.23E+00	9.53E+00	8.9 E+0	-2.13E+00	5.04E+00	7.69E+00	NA	NA	NA	5.7 E+02	NA	NA	NA	U3-4D
U3-4D	Q3-2010	027	25.6	-10.8	7/23/2010	13:21	8.84E+02	1.8 E+2	1.7 E+02	-1.3 E-01	4.60E-01	6.46E-01	2.21E+00	7.34E+00	8.9 E+0	-1.11E+00	7.41E+00	8.4 E+00	NA	NA	NA				
U3-4D	Q4-2010	027	25.6	-10.8	10/28/2011	14:04	7.17E+02	1.6 E+2	1.1 E+02	2.2 E-0.	4.39E-01	5.61E-01	2.75E+00	5.75E+00	6.9 E+0	1.11E+00	7.82E+00	9.0 E+00	NA	NA	NA				
U3-4D	Q1-2011	027	25.6	-10.8	2/17/2011	14:41	6.28E+02	4.1 E+2	4.3 E+02	8.3 E-02	1.1 E+00	1.95E+00	1.24E+00	4.72E+00	5.2 E+0	8.5 E-01	4.84E+00	5.2 E+00	NA	NA	NA				
U3-4D	Q3-2010 Dup	001			7/23/2010	14:12	2.74E+02	1.7 E+2	1.7 E+02	1.2 E-01	4.3 E-01	7.12 E-01	2.99E+00	9.5 E+00	9.9 E+0	1.79E+00	9.77E+00	9.2 E+00	NA	NA	NA	7.6 E+02	NA	NA	NA	U3-4D
U3-4D	Q4-2010	002			10/29/2011	11:40	3.51E+03	1.2 E+2	1.1 E+02	3.6 E-0.	5.2 E-01	6.4 E-01	1.61E+00	5.59E+00	6.5 E+0	2.32E+00	5.91E+00	6.1 E+00	NA	NA	NA					
U3-T	Q2-2010	025	5.7	2.8	5/5/2010	16:54	5.0 E+02	1.7 E+2	1.5 E+02	6.4 E-02	4.5 E-01	7.9 E-01	-2.2 E+00	8.9 E+00	1.0 E+1	3.6 E-01	4.7 E+00	9.6 E+00	NA	NA	NA	2.6 E+02	NA	NA	NA	U3-T
U3-T	Q3-2010	026	5.7	2.8	7/26/2010	12:15	3.8 E+02	1.7 E+2	1.7 E+02	1.2 E-02	3.9 E-01	4.9 E-01	5.0 E+00	7.6 E+00	9.7 E+0	4.6 E-01	6.9 E+00	7.9 E+00	NA	NA	NA				
U3-T	Q4-2010	026	5.7	2.8	10/29/2011	14:04	3.0 E+02	1.2 E+2	1.0 E+02	4.8 E-02	6.3 E-01	7.6 E-01	-3.7 E-31	6.0 E+00	6.7 E+0	1.2 E-00	7.7 E+00	7.9 E+00	NA	NA	NA				
U3-T	Q1-2011	031	5.7	2.8	2/22/2011	11:11	6.5 E+02	4.0 E+2	3.9 E+02	1.6 E+00	1.6 E+00	1.9 E+00	1.8 E+0	1.0 E+01	6.1 E+0	2.3 E-00	6.4 E+00	7.4 E+00	NA	NA	NA				
U3-T3	Q2-2010	032	5.7	2.6	5/7/2010	13:05	9.7 E+02	1.9 E+2	1.9 E+02	6.3 E-0.	6.3 E-01	9.3 E-01	-2.2 E+00	5.7 E+00	5.9 E+0	-1.56E+00	6.9 E+00	6.5 E+00	NA	NA	NA	1.6 E+02	NA	NA	NA	U3-T3
U3-T3	Q3-2010	034	5.7	2.6	7/26/2010	14:28	8.7 E+02	1.9 E+2	1.7 E+02	3.3 E-0.	6.2 E-01	6.4 E-01	-2.1 E+00	7.3 E+00	7.6 E+0	2.1 E-00	7.3 E+00	8.1 E+00	NA	NA	NA				
U3-T3	Q4-2010	034	5.7	2.6	10/29/2011	11:23	1.4 E+03	2.1 E+2	1.1 E+02	4.2 E-0.	6.7 E-01	7.5 E-01	-6.1 E-32	5.4 E+00	6.1 E+0	3.8 E-00	5.4 E+00	6.9 E+00	NA	NA	NA				
U3-T3	Q1-2011	035	5.7	2.6	2/22/2011	14:30	2.2 E+03	4.9 E+2	3.9 E+02	1.8 E+00	2.6 E+00	2.0 E+00	3.6 E+0	6.0 E+00	7.2 E+0	5.2 E-01	7.1 E+00	7.5 E+00	NA	NA	NA				
U3-CSS	Q2-2010	014	14	6.1	5/5/2010	15:55	1.6 E+03	2.7 E+2	1.7 E+02	8.9 E-01	1.1 E+00	0.8 E-01	-4.6 E-01	5.8 E+00	5.6 E+0	3.4 E-00	6.2 E+00	6.3 E+00	-1.7 E+00	2.1 E+03	2.3 E+02	1.0 E+02	1.0 E+02	NA	U3-CSS
U3-CSS	Q3-2010	014	14	6.1	1./5/2010	14:56	3.2 E+03	2.7 E+2	1.6 E+02	1.1 E+00	1.5 E+00	0.8 E-01	2.2 E+0	5.0 E+00	5.0 E+0	2.0 E-00	5.6 E+00	6.9 E+00	1.1 E-01	1.8 E+01	2.1 E+02				
U1-NCD	Q3-2010	006			7/15/2010	9:00	1.3 E+04	8.4 E+2	5.8 E+02	5.0 E+01	3.1 E+00	7.5 E-01	1.1 E+3	1.4 E+03	1.4 E+0	7.5 E-01	2.1 E+00	6.1 E+00	2.9 E+02	3.3 E+03	2.4 E+03	4.2 E+02	4.0 E+01	NA	U1-NCD
U1-NCD	Q4-2010	005			10/20/2011	13:40	3.3 E+03	3.2 E+2	1.7 E+02	3.8 E+01	2.1 E+00	6.3 E-01	1.2 E+3	1.4 E+03	9.9 E+0	-1.1 E+00	4.9 E+00	5.2 E+00	2.3 E+02	3.1 E+03	2.2 E+03				
U1-SFDS	Q3-2010	009			7/15/2010	9:45	6.4 E+02	1.2 E+2	1.4 E+02	1.2 E+01	2.1 E+00	6.6 E-01	2.2 E+3	1.2 E+03	1.2 E+0	1.4 E+00	1.9 E+00	6.3 E+00	3.9 E+00	2.9 E+00	3.9 E+00	2.2 E+00	3.2 E+01	NA	U1-SFDS
U1-SFDS	Q4-2010	010			10/20/2010	8:45	4.8 E+02	1.5 E+2	1.2 E+02	1.1 E+01	1.1 E+00	3.7 E-01	7.9 E+0	7.5 E+00	5.7 E+0	-8.1 E-01	1.2 E+00	5.7 E+00	5.7 E-01	1.8 E+01	2.1 E+01				
L-2	Q3-2010	001			8/2/2010	14:39	6.2 E+02	1.5 E+2	1.2 E+02	-3.6 E-06	6.9 E-01	3.5 E-01	1.3 E+0	7.0 E+00	7.0 E+0	9.9 E-02	6.3 E+00	7.9 E+00	NA	NA	NA	NA	NA	NA	NA	L-2
L-2	Q4-2010	001			10/1/2011	14:23	1.7 E+03	2.7 E+2	1.7 E+02	2.4 E-0.	6.2 E-01	6.4 E-01	4.7 E+0	7.0 E+00	7.1 E+0	3.3 E-00	7.0 E+00	7.4 E+00	NA	NA	NA					
MH-5 VCFD	Q2-2010 Dup	005			5/4/2010	10:13	4.5 E+03	1.7 E+2	1.7 E+02	1.7 E+00	2.6 E-01	6.4 E-01	2.3 E+0	8.0 E+00	7.1 E+0	1.2 E-01	7.9 E+00	7.2 E+00	NA	NA	NA	7.9 E+02	NA	NA	NA	MH-5 VCFD
MH-5 VCFD	Q3-2010	011			8/5/2010	14:45	7.3 E+02	1.8 E+2	1.7 E+02	5.3 E-0.	5.6 E-01	3.8 E-01	7.2 E-01	7.7 E+00	8.6 E+0	-2.2 E+00	6.9 E+00	7.7 E+00	NA	NA	NA					
MH-5 VCFD	Q3-2010	011			8/30/2010	13:30	9.9 E+02	1.4 E+2	1.2 E+02	1.2 E-0.	3.3 E-01	3.8 E-01	1.5 E+0	5.5 E+00	6.4 E+0	8.3 E-01	6.5 E+00	7.3 E+00	NA	NA	NA					
MH-5 VCFD	Q4-2010 Dup	012			9/10/2011	15:30	1.3 E+03	1.8 E+2	1.4 E+02	1.6 E-0.	6.3 E-01	7.1 E-01	1.2 E+0	6.4 E+00	7.4 E+0	1.2 E+00	7.1 E+00	8.2 E+00	NA	NA	NA					
MH-5 VCFD	Q4-2010	013			11/2/2011	11:10	4.6 E+03	1.8 E+2	1.4 E+02	1.5 E-0.	7.7 E-01	8.8 E-01	1.7 E+0	8.4 E+00	8.6 E+0	5.4 E-01	8.4 E+00	8.7 E+00	NA	NA	NA					
MH-5 VCFD	Q1-2011	014			2/28/2011	9:47	5.1 E+03	6.5 E+2	3.5 E+02	1.9 E+00	1.5 E+00	1.9 E+00	3.4 E-01	5.6 E+00	6.1 E+0	-1.2 E+00	6.1 E+00	6.4 E+00	NA	NA	NA					
LAP-002	Q2-2010 Dup	012		22.3	5/4/2010	13:44	1.3 E+04	1.5 E+3	1.5 E+02	6.5 E-0.	5.7 E-01	7.7 E-01	1.4 E+0	6.9 E+00	7.2 E+0	1.4 E-00	6.8 E+00	7.5 E+00	-6.8 E+00	2.2 E+04	2.3 E+02	ND	ND	ND	LAP-002
LAP-002	Q4-2010	012		22.3	11/2/2011	14:41	1.0 E+04	1.2 E+3	1.2 E+02	1.9 E-0.	4.6 E-01	5.8 E-01	6.1 E-31	6.1 E+00	6.5 E+0	1.5 E+00	6.2 E+00	6.7 E+00	3.6 E+00	1.7 E+04	2.0 E+02				
B-1	Q2-2010	006			4/23/2010	16:08	3.1 E+02	1.9 E+2	1.9 E+02	2.2 E-0.	5.9 E-01	6.0 E-01	2.7 E+0	7.9 E+00	7.9 E+0	5.2 E-01	5.9 E+00	7.2 E+00	NA	NA	NA	2.5 E+02	NA	NA	NA	B-1
B-1	Q3-2010	005			8/17/2010	15:40	1.4 E+04	6.4 E+2	1.2 E+02	1.2 E-0.	6.3 E-01	9.1 E-01	2.2 E+0	1.0 E+01	9.8 E+0	2.8 E-00	6.0 E+00	7.4 E+00	NA	NA	NA					
B-1	Q4-2010	010			11/17/2011	11:10	2.3 E+03	2.7 E+2	1.5 E+02	6.8 E-0.	7.6 E-01	1.7 E+00	1.3 E+0	6.4 E+00	7.9 E+0	8.3 E-01	4.3 E+00	9.7 E+00	NA	NA	NA					
B-1	Q1-2011	011			2/16/2011	15:44	3.8 E+03	5.5 E+2	2.5 E+02	5.1 E-02	1.7 E-00	2.1 E+00	2.1 E+0	1.2 E+01	6.7 E+0	1.1 E+00	7.0 E+00	7.5 E+00	NA	NA	NA					
B-6	Q2-2010 Dup	008			5/4/2010	9:40	1.4 E+04	1.6 E+3	1.3 E+02	-1.0 E-02	1.4 E-01	2.7 E-01	3.9 E-01	5.5 E+00	6.3 E+0	2.3 E-01	5.7 E+00	6.7 E+00	NA	NA	NA	3.9 E+02	NA	NA	NA	B-6
B-6	Q3-2010	008			8/5/2010	13:43	1.4 E+02	1.6 E+2	1.7 E+02	1.1 E-0.	8.0 E-01	9.7 E-01	2.3 E+0	6.5 E+00	8.0 E+0	-9.2 E-02	3.3 E+00	9.7 E+00	NA	NA	NA					
B-6	Q4-2010	011			11/8/2010	11:45	1.0 E+03	1.5 E+2	1.6 E+02	1.4 E-0.	6.0 E-01	6.6 E-01	3.0 E+0	6.4 E+00	7.0 E+0	-3.4 E-01	4.7 E+00	7.2 E+00	NA	NA	NA					
B-6	Q1-2011	011			2/28/2011	11:27	9.3 E+02	2.0 E+2	2.5 E+02	6.2 E-0.	1.5 E+00	2.0 E+00	4.4 E+0	1.3 E+01	7.0 E+0	1.3 E+00	6.9 E+00	6.9 E+00	NA	NA	NA					

Notes

1 For nested multi-level monitoring wells, suffix of well ID indicates depth (measured to nearest foot) from reference point on casing to bottom of well screen. For Westbay 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 well boreas

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 Average provided are analytical result averages of all valid samples (including mid-quarter and confirmatory samples) collected from each monitoring location from the second quarter of 2010 (Q2 2010) to the first quarter of 2011 (Q1 2011), including the post Q1 2011 sampling. 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 and request 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 created inconsistency and the incongruent result discredits 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 These locations are storm drains or foundation drains

8 Mid-quarter samples were collected and analyzed to evaluate the potential effect of certain operations on groundwater quality

9 Column designated as "Std. Dev." provides the three time 1 sigma uncertainty value

* The Q1 2011 MW-40-.00, MW-40-127 and MW-51-189 Sr-89/Sr-90 results were verified by re-analysis. However, based on the available chemistry and Site hydrogeologic data, these values do not appear to be representative of the groundwater conditions at these sampling intervals

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TABLE 3
SECOND QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,2]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing	SAMPLE ZONE CENTER Elevation Ft msl	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														YEARLY ROLLING AVERAGES[4,6]					Well ID[1]
							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.[5]	MDC	Result	Std. Dev.[5]	MDC	Result	Std. Dev.[5]	MDC	Result	Std. Dev.[5]	MDC	Result	Std. Dev.[5]	MDC	Average	Average	Average	Average	Average	
MW-30-09	3Q 2010	031	69.3	6.4	9/30/2010	12:31	1.31E+03	2.57E+02	3.89E+02	1.34E-01	1.93E-01	3.91E-01	3.91E-01	5.91E-01	1.00E+00	6.09E-01	6.45E+00	9.20E+00	NA	NA	NA	1.66E+03	2.40E+00	ND	ND	NA	MW-30-09
MW-30-09	Q3-2010	034	69.3	6.4	8/30/2010	15:08	1.11E+03	3.24E-03	1.02E+02	3.53E-01	7.30E-01	9.08E-01	-3.14E+00	5.12E+00	7.12E+00	-2.4.E+00	5.25E+00	5.03E+00	HA	NA	NA						
MW-30-09	Q3-2010 Mid	033	69.3	6.4	9/1/2010	12:35	1.23E+03	3.15E-03	1.47E+02	1.91E-01	4.41E-01	3.14E-01	-1.13E+00	4.42E+00	4.87E+00	1.4E+00	4.72E+00	5.73E+00	HA	NA	NA						
MW-30-09	Q4-2010	036	69.3	6.4	11/30/2010	11:36	1.23E+03	1.38E-03	1.34E+02	9.63E-01	1.70E-01	9.45E+00	3.61E+00	3.84E-00	7.79E+00	5.0..E+00	5.80E+00	9.47E+00	HA	NA	NA						
MW-30-09	Q1-2011	037	69.3	6.4	2/9/2011	12:17	1.01E+03	2.18E-03	1.95E+02	1.63E+00	1.93E-00	2.00E+00	1.87E+00	5.10E-00	6.74E+00	-1.13E-1	5.55E+00	6.44E+00	HA	NA	NA						
MW-30-09	Q1-2011 Mid	032	69.3	6.4	3/01/2011	11:38	1.03E+03	3.80E-03	1.72E+02	-6.11E-01	1.63E-00	2.15E+00	2.42E+00	7.76E-00	5.14E+00	-1.4..E+0	5.70E+00	6.46E+00	HA	NA	NA						
MW-30-09	Q2-2011	039	69.3	6.4	5/5/2011	12:00	1.13E+03	2.40E-03	2.99E+02	2.48E+00	1.37E-00	2.23E+00	2.46E+00	8.92E-00	1.05E+01	2.21E+00	9.38E+00	1.16E+01	HA	NA	NA						
MW-30-09	Q2-2011 Mid	040	69.3	6.4	7/11/2011	12:05	1.13E+03	4.23E-03	1.83E+02	-6.14E-02	7.52E-01	0.0E+00	3.56E+00	1.07E-01	1.24E+01	2.4E.E00	1..9E+01	1.40E+01	HA	NA	NA						
MW-30-09	Q3-2010	035	69.3	6.4	9/30/2010	12:31	1.31E+03	2.57E+02	3.89E+02	1.34E-01	1.93E-01	3.91E-01	-1.43E+00	5.91E-00	1.00E+01	-3.93E-02	5.97E+00	5.91E+00	NA	NA	NA	9.12E+03	ND	ND	8.0	NA	MW-30-09A
MW-30-14	Q3-2010	032	53.8	-8.1	9/30/2010	16:21	1.01E+04	2.77E-02	2.9E+02	2.63E-01	2.70E-01	9.23E-01	3.22E+00	6.17E-00	7.24E+00	-3.97E+0	5.99E+00	6.20E+00	HA	NA	NA						
MW-30-14	Q3-2010 Mid	026	53.8	-8.1	9/1/2010	13:14	1.01E+04	4.32E-02	3.10E+02	3.11E-01	6.20E-01	7.05E-01	-1.41E+00	6..8E-00	6.74E+00	-4.1.E-1	7.63E+00	8.38E+00	HA	NA	NA						
MW-30-14	Q4-2010	027	53.8	-8.1	11/3/2010	12:35	1.02E+04	4.30E-02	3.87E+02	5.23E-01	7.56E-01	7.0E+00	-3.07E+00	4.23E-00	5.33E+00	-5.23E+0	4.65E+00	5.20E+00	HA	NA	NA						
MW-30-14	Q1-2011	040	53.8	-8.1	2/9/2011	12:27	9.43E+03	3.98E-02	2.99E+02	1.14E+00	1.64E+00	2.93E+00	2.29E-01	4.74E-00	5.44E+00	1.01E+00	5.66E+00	6.48E+00	HA	NA	NA						
MW-30-14	Q1-2011 Mid	029	53.8	-8.1	3/01/2011	12:03	9.01E+03	1.36E-03	4.74E+02	-4.78E-01	1.66E+00	1.11E+00	5.01E-01	1..2E-01	1.21E+01	-3.0.E+0	9.48E+00	9.12E+00	HA	NA	NA						
MW-30-14	Q2-2011	030	53.8	-8.1	5/5/2011	12:58	7.57E+03	3.96E-02	3.92E+02	1.64E-01	1.5E-00	4.0E+00	3.08E+00	8.04E-00	9.35E+00	4.6.E-01	7.4E+00	7.76E+00	HA	NA	NA						
MW-30-14	Q2-2011 Mid	041	53.8	-8.1	7/11/2011	12:40	7.53E+03	1.10E-03	2.12E+02	-5.02E-01	9.72E-01	2.0E+00	4.1.E-01	7.39E-00	1.03E+01	1.0.E+01	1..6E+01	1.29E+01	HA	NA	NA						
MW-30-14	Q3-2010	025	53.8	-8.1	9/30/2010	16:41	9.45E+04	2.58E-02	2.98E+02	3.05E-01	4.71E-01	5.30E-01	3.27E+00	4.77E-01	3.40E+00	9.0.E+00	9.83E+00	1.96E+01	HA	NA	NA	9.89E+03	ND	ND	ND	NA	MW-30-14
MW-31-49	Q3-2010	026	48.8	26.5	8/3/2010	12:11	4.11E+03	3.56E-02	2.3E+02	1.61E-01	7.39E-01	9.97E-01	-1.21E+00	5.42E-00	7.91E+00	-3.33E-02	5.9E+00	5.80E+00	HA	NA	NA						
MW-31-49	Q3-2010 Mid	027	48.8	26.5	9/7/2010	12:49	1.04E+04	3.32E-03	6.8E+02	-1.15E-01	2.22E-01	1.23E-01	3.3.E+00	5.22E-00	6.65E+00	2.1.E+00	5.97E+00	7.20E+00	HA	NA	NA						
MW-31-49	Q4-2010	025	48.8	26.5	11/3/2010	11:35	3.35E+04	9.31E-02	1.5E+02	3.14E-02	4.36E-01	7.51E-01	2.83E+00	8.31E-00	9.97E+00	2.2.E+00	8.57E+00	1.06E+01	HA	NA	NA						
MW-31-49	Q1-2011	029	48.8	26.5	2/9/2011	13:12	1.05E+03	3.40E-02	1.93E+02	-5.51E-01	1.76E-00	2.14E+00	1.39E+00	5.12E-00	6.02E+00	4.84E-01	5.26E+00	5.91E+00	HA	NA	NA						
MW-31-49	Q1-2011 Mid	030	48.8	26.5	3/09/2011	12:33	4.31E+03	7.54E-02	4.63E+02	1.77E+00	2.04E-00	2.16E+00	-2.34E+00	7.00E-00	8.17E+00	-3.33E-1	9..8E+00	1.00E+01	HA	NA	NA						
MW-31-49	Q2-2011	04	48.8	26.5	4/13/2011	12:23	1.93E+03	5.00E-02	4.60E+02	4.03E-01	1.51E-00	2.00E+00	-1.52E+00	8.92E-00	9.22E+00	6.1.E-00	6.17E+00	1.13E+01	HA	NA	NA						
MW-31-49	Q2-2011 Mid	031	48.8	26.5	5/27/2011	15:34	6.13E+04	2.77E+00	2.5E+02	2.51E-01	6.45E-01	6.89E-01	2.81E+00	8.37E-00	9.91E+00	2.2.E+00	8.70E+00	1.03E+01	NA	NA	NA	7.72E+02	NA	NA	NA	NA	MW-31-49
MW-31-63	Q3-2010	026	63.3	12.3	8/3/2010	13:11	6.62E+04	1.35E-03	6.0E+02	4.61E-01	7.52E-01	1.48E-01	1.7.E+00	6..1E-00	7.13E+00	-1.67E+0	5..7E+00	6.44E+00	HA	NA	NA						
MW-31-63	Q3-2010 Mid	027	63.3	12.3	9/7/2010	13:28	6.43E+04	1.41E-03	4.6E+02	3.99E-01	7.26E-01	3.18E-01	4.03E-01	4.3E-00	5.31E+00	-1.4.E+0	3.43E+00	3.56E+00	HA	NA	NA						
MW-31-63	Q4-2010	028	63.3	12.3	11/3/2010	12:32	2.93E+04	9.12E-02	1.4E+02	3.31E-01	6.30E-01	7.13E-01	-2.2.E+00	9.63E-00	1.02E+01	3.4.E+00	3.40E+00	1.07E+01	HA	NA	NA						
MW-31-63	Q1-2011	029	63.3	12.3	2/9/2011	13:14	2.45E+04	1.10E-03	1.95E+02	4.29E-01	1.78E-00	2.05E+00	-1.42E+00	6.46E-00	6.81E+00	-2.3..E+0	5.42E+00	6.26E+00	HA	NA	NA						
MW-31-63	Q1-2011 Mid	030	63.3	12.3	3/09/2011	13:28	1.84E+04	1.14E-03	1.48E+02	4.23E+00	1.48E+00	2.0.E+00	8.76E-01	7.90E-00	1.97E+01	1.7.E-1	1.46E+01	1.42E+01	HA	NA	NA						
MW-31-63	Q2-2011	03	63.3	12.3	4/13/2011	13:11	1.91E+04	1.45E-03	4.67E+02	2.24E-01	1.48E+00	2.05E+00	-3.11E-1	7.62E-00	8.46E+00	1.7.E+00	8.4E+00	1.03E+01	HA	NA	NA						
MW-31-85	Q3-2010	04	54.8	-9.2	8/3/2010	13:20	6.71E+03	6.54E-02	9.0E+02	-3.50E-01	9.72E-01	3.06E-01	-3.93E+00	8.32E-00	9.22E+00	5.3.E+00	8.45E+00	9.93E+00	HA	NA	NA	4.68E+03	ND	ND	ND	NA	MW-31-85
MW-31-85	Q3-2010 Mid	026	54.8	-9.2	9/2/2010	12:17	5.96E+03	2.5E+02	6.6E+02	7.09E-01	1.39E-00	8.18E-01	3.42E+00	4.43E-00	5.08E+00	1.5.E+00	4.7E+00	5.71E+00	HA	NA	NA						
MW-31-85	Q3-2010 Mid	027	54.8	-9.2	9/7/2010	14:14	6.21E+03	5.14E-02	4.4E+02	3.25E-01	1.45E-00	6.85E-01	1.54E+00	5.65E-00	6.11E+00	2.71E+00	5.42E+00	7.79E+00	HA	NA	NA						
MW-31-85	Q4-2010	020	54.8	-9.2	11/3/2010	12:01	6.03E+03	4.16E-02	1.4E+02	2.41E-01	4.83E-01	3.47E-01	-1.33E+00	8.33E-00	9.62E+00	-2.61E-1	7.08E+00	1.19E+01	HA	NA	NA						
MW-31-85	Q1-2011	029	54.8	-9.2	2/9/2011	13:03	4.83E+03	6.54E-02	1.32E+02	3.23E-01	1.79E-00	2.13E+00	3.17E+00	5.96E-00	7.08E+00	3.1.E+00	5.96E+00	7.39E+00	HA	NA	NA						
MW-31-85	Q1-2011 Mid	030	54.8	-9.2	3/09/2011	12:35	7.79E+02	4.56E-02	4.52E+02	9.27E-01	1.11E-00	2.00E-00	5.09E+00	1.11E-01	5.10E+00	4.4.E+00	3.85E+00	1.17E+01	HA	NA	NA						
MW-31-85	Q2-2011	03	54.8	-9.2	4/13/2011	13:13	3.03E+03	6.26E-02	4.66E+02	-1.02E+00	1.45E-00	2.09E+00	-4.53E+00	9.34E-00	1.19E+01	3.8.E+00	1.01E+01	1.22E+01	HA	NA	NA						
MW-32-46	Q3-2010	007			8/20/2010	12:52	3.62E+03	3.26E-02	9.6E+02	-3.02E-01	9.97E-01	9.02E-01	-1.54E-01	7.80E-00	9.04E+00	-3.36E+0	7.45E+00	7.53E+00	HA	NA	NA	4.69E+03	ND	ND	ND	NA	MW-32-46
MW-32-46	Q3-2010	001			8/24/2010	14:03	3.9E+03	3.21E-02	3.1E+02	3.32E-01	6.33E-01	7.09E-01	-4.34E-01	4.49E-00	5.04E+00	1.9.E+00	4.5.E+00	3.9.E+00	HA	NA	NA						
MW-32-59	Q3-2010	004	38.8	18.3	8/20/2010	13:00	6.54E+04	1.91E-03	3.9E+02	-3.02E-01	9.97E-01	3.02E-01	6.97E+00	1.82E-01	1.14E+01	9.30E+00	9.65E+00	1.23E+01	HA	NA	NA	9.90E+03	ND	ND	ND	NA	MW-32-59
MW-32-59	Q3-2010	020	38.8	18.3	8/24/2010	14:22	5.71E+03	3.48E-02	3.1E+02	-9.92E-02	6.14E-01	1.32E-01	3.2.E+00	5.14E-00	7.14E+00	-2.0..E+0	5.60E+00	6.75E+00	HA	NA	NA						
MW-32-59	Q3-2010 Mid	02	38.8	18.3	9/9/2010	13:37	7.44E+04	2.18E-03	6.8E+02	4.21E-01	7.20E-01	1.03E-01	1.62E+00	3.43E-00	3.99E+00	1.32E+00	3.28E+00	3.24E+00	HA	NA	NA						
MW-32-59	Q4-2010	023	38.8	18.3	11/3/2010	12:08	1.53E+04	6.56E-02	1.6E+02	2.01E-01	6.15E-01	9.14E-01	6.6E+00	7.98E-00	1.05E+01	1.1.E+00	9..1E+00	1.06E+01	HA	NA	NA						
MW-32-59	Q1-2011	023	38.8	18.3	3/0/2011	11:28	4.32E+03	6.42E-02	3.59E+02	1.23E+00	1.49E-00	3.5E+00	6.5E-01	5.32E-00	6.63E+00	-6.41E-1	7.80E+00	7.58E+00	HA	NA	NA						
MW-32-59	Q1-2011 Mid	024	38.8	18.3	3/01/2011	12:46	3.47E+04	1.46E-03	3.0E+02	-2.31E-01	1.5E-00	5.1E+00	8.24E-01	8.9E-00	5.96E+00	1.9.E-01	1.0E+01	1.11E+01	HA	NA	NA						
MW-32-59	Q2-2011	024	38.8	18.3	4/27/2011	12:26	3.31E+03	6.68E-02	1.0E+02	4.01E-01	1.58E-00	7.4E+00	4.7.E+00	6.4E-00	1.0E+01	3.3.E+00	8.38E+00	9.58E+00	HA	NA	NA						
MW-32-63	Q3-2010	022	55.3	85.3	8/20/2010	14:51	1.01E+04	6.51E-02	9.4E+02	3.03E-01	6.97E-01	7.02E-01	6.20E+00	7.47E-00	8.69E+00	2.0.E+00	7.4E+00	8.32E+00	NA	NA	NA	3.8E+03	ND	ND	ND	NA	MW-32-63
MW-32-63	Q3-2010	023	55.3	85.3	8/24/2010	11:03	1.13E+04	4.74E-02	1.1E+02	-3.76E-01	4.75E-01	7.02E-01	-6.65E-1	5.56E-00	6.62E+00	-1.1.E+0	5.22E+00	5.48E+00	HA	NA	NA						
MW-32-63	Q3-2010 Mid	021	55.3	85.3	9/9/2010	15:23	1.14E+04	6.57E-02	2.7E+02	1.31E-1	6.77E-01	1.36E-01	1.43E+00	6.37E-00	6.99E+00	1.2.E-1	6.09E+00	6.18E+00	HA	NA	NA						
MW-32-63	Q4-2010	023	55.3	85.3	11/3/2010	12:45	1.43E+04	6.48E-02	1.6E+02	3.81E-1	4.90E-01	5.36E-01	5.89E+00	9.60E-00	1.15E+01	-5.5.E+0	8..1E+00	7.61E+00	HA	NA	NA						
MW-32-63	Q1-2011	023	55.3	85.3	3/0/2011	12:05	1.34E+04	1.41E-03	2.62E+02	3.81E-1	1.41E-00	6.3E+00	7.79E-01	8.36E-00	5.36E+00	4.7.E+00	9..2E+00	1.24E+01	HA	NA	NA						
MW-32-63	Q1-2011 Mid	027	55.3	85.3	3/21/2011	13:12	1.32E+04	1.7E-03	2.07E+02	-1.12E-01	1.20E-00	5.6E+00	-6.51E-1	7.2E-00	5.61E+00	3.0.E+00	2.25E+00	1.02E+01	HA	NA	NA						
MW-32-63	Q2-2011	025	55.3	85.3	4/27/2011	13:04	1.14E+04	1.19E-03	3.10E+02	1.52E+00	1.69E-00	7.5E+00	-1.23E+00	6.30E-00	7.31E+00	5.30E-01	1.02E+01	1.15E+01	HA	NA	NA						
MW-32-68	Q3-2010	019	109.3	-72.2	9/20/2010	15:34	3.81E+05	3.93E-02	2.0E+02	-1.14E-1	5.07E-01	3.93E-01	-7.34E-01	1.18E-01	3.84E+00	4.5.E+00	3.23E+00	1.06E+01	NA	NA	NA	8.4E+05	ND	ND	8.0	NA	MW-32-68
MW-32-49	Q3-2010	020	149.3	-72.2	8/24/2010	11:27	2.63E+03	2.70E-02	2.10E+02	1.04E-01	5.54E-01	1.13E-01	1.04E-01	6.01E-00	5.44E+00	2.0.E-01	5.28E+00	6.01E+00	HA	NA	NA						
MW-32-49	Q3-2010 Mid	02	149.3	-72.2	9/9/2010	11:35	2.13E+03	2.70E-02	2.7E+02	2.27E-1	7.72E-01	9.22E-01	5.61E+00	7.53E-00	6.16E+00	3.2.E+00	6.12E+00	1.00E+01	HA	NA	NA						
MW-32-49	Q4-2010	023	149.3	-72.2	11/3/2010	16:09	1.53E+03	2.24E-02	1.2E+02	4.01E-1	5.32E-01	5.49E-01	-1.02E+01	1.88E-01	1.15E+01	3.3.E+00	9..1E+00	9.94E+00	HA	NA	NA						
MW-32-49	Q1-2011	024	149.3	-72.2	3/1/2011	11:37	1.03E+03	4.86E-02	1.8E+02	-7.11E-01	1.16E-00	2.13E+00	9.42E-01	3.44E-00	6.58E+00	4.0.E-01	3.80E+00	1.93E+01	HA	NA	NA						
MW-32-49	Q1-2011 Mid	024	149.3	-72.2	3/21/2011	11:53	1.03E+03	5.54E-02	1.0E+02	-2.21E-01	1.1E-00	4.0E+00	2.57E+00	6.70E-00	1.00E+01	2.1.E+00	6.97E+00	1.18E+01	HA	NA	NA						
MW-32-49	Q2-2011	023	149.3	-72.2	4/27/2011	11:12	8.62E+02	4.44E-02	4.1E+02	3.01E-1	1.43E-00	6.7E+00	2.12E+00	7.44E-00	1.59E+00	9.8E-01	7.7E+00	8.83E+00	HA	NA	NA						
MW-32-68	Q3-2010	02	27.8	90.2	9/20/2010	15:11	2.47E+03	3.59E-02	9.2E+02	9.04E-1.2	3.36E-01	9.14E-01	-1.31E+00	8.15E-00	9.63E+00	-2.27E+0	7.91E+00	7.91E+00	NA	NA	NA	4.8E+03	ND	ND	8.0	NA	MW-32-68
MW-32-73	Q3-2010	018	172.8	95.7	8/24/2010	11:21	2.13E+03	2.10E+02	1.27E-01	9.20E-01	1.77E-01	2.93E+00	6.67E-00	1.32E+00	4.5.E-01	8.12E+00	7.41E+00	HA	NA	NA						
MW-32-73	Q3-2010 Mid	019	172.8	-95.7	9/9/2010	11:29	1.91E+03	2.53E-02	2.8E+02	5.82E-1	3.34E-01	3.96E-01	1.67E+00	4.06E-00	7.81E+00	9.94E-01	4.24E+00	5.77E+00	HA	NA	NA						
MW-32-73	Q4-2010	020	172.8	-95.7	11/3/2010	15:53	1.43E+03	2.16E-02	1.4E+02	1.63E-02	4.38E-01	3.24E-01	3.87E+00	1.76E-01	5.62E+00	-2.92E+0	9.35E+00	1.01E+01	HA	NA	NA						
MW-32-73	Q1-2011	02	172.8	-95.7	3/1/2011	11:13	9.02E+02	3.61E-02	4.1E+02	-4.14E-01	1.2E-00	4.5E+00	3.59E+00	6.86E-00	7.79E+00	2.04E+00	6.74E+00	7.55E+00	HA	NA	NA						
MW-32-73	Q1-2011 Mid	023	172.8	-95.7	3/21/2011	11:35	8.41E+02	5.22E-02	3.0E+02	2.46E-1	1.17E-00	5.4E+00	6.5..E+00	1.12E-01	3.26E+00	2.15E+00	3.22E+00	9.98E+00	HA	NA	NA						
MW-32-73	Q2-2011	023	172.8	-95.7	4/27/2011	11:27	5.82E+02	4.98E-02	3.0E+02	6.37E-1	1.54E-00	7.4E+00	0.00E+00	2.80E-01	6.23E+00	2.4.E-01	9.35E+00	1.07E+01	HA	NA	NA						
MW-32-80	Q3-2010	02	190.3	-113.7	8/24/2010	15:41	3.53E+03	2.51E-02	9.2E+02	-5.27E-02	3.95E-01	1.06E-01	1.06E-01	3.60E-00	4.46E-00	5.31E+00	2.62E+00	7.77E+00	NA	NA	NA	5.5E+03	NB	ND	ND	NA	MW-32-80
MW-32-90	Q3-2010	023	190.3	-113.7	8/24/2010	11:37	1.67E+03	2.43E-02	3.09E+02	2.54E-1	7.54E-01	9.25E-01	-5.47E-1	4.24E-00	7.45E+00	9.00E-01	4.96E+00	5.87E+00	HA	NA	NA						
MW-32-90	Q3-2010 Mid	023	190.3	-113.7	9/9/2010	11:34	1.65E+03	2.48E-02	3.0E+02	-1.51E-01	5.35E-01	3.27E-01	-2.39E-1	9.37E-00	1.08E+01	2.0.E+00	5.66E+00	7.95E+00	HA	NA	NA						
MW-32-90	Q4-2010	024	190.3	-113.7	11/3/2010	16:07	1.53E+03	2.38E-02	1.7E+02	-9.74E-02	4.33E-01	3.83E-01	2.12E+00	9.82E-00	1.07E+01	-2.48E+0	9.21E+00	9.36E+00	HA	NA	NA						
MW-32-90	Q1-2011	023	190.3	-113.7	3/1/2011	11:24	1.43E+03	5.13E-02	1.6E+02	7.61E-1	1.10E-00	2.0E+00	2.74E+00	5.12E-00	6.57E+00	4.8.E+00	3.74E+00	1.57E+01	HA	NA	NA						
MW-32-90	Q1-2011 Mid	026	190.3	-113.7	3/21/2011	11:47	1.41E+03	5.76E-02	3.0E+02	-7.79E-01	1.5E-00	6.7E+00	8.73E-01	7.96E-00	5.01E+00	5.1.E+00	1.04E+01	1.30E+01	HA	NA	NA						
MW-32-90	Q2-2011	027	190.3	-113.7	4/27/2011	11:17	1.21E+03	5.24E-02	3.1E+02	-7.53E-1	1.1E-00	2.0E+00	5.0.E-01	8.0.E-00	8.60E+00	-5.08E+0	6.93E+00	6.47E+00	HA	NA	NA						
MW-35	Q3-2010	007	9.2	-0.4	8/20/2010	14:39	3.63E+03	3.96E-02	9.6E+02	3.64E-01	6.97E-01	5.06E-01	7.77E-01	8.14E-00	9.03E+00	5.9.E+00	8.13E+00	8.60E+00	HA	NA	NA	7.9E+03	ND	ND	ND	NA	MW-35
MW-35	Q3-2010 Mid	020	9.2	-0.4	9/1/2010	13:28	3.85E+03	3.53E-02	2.7E+02	9.91E-03	7.38E-01	9.28E-01	-1.3.E+00	4.06E-00	5.14E+00	1.1.E+00	5.0E+00	5.95E+00	HA	NA	NA						
MW-36-24	Q3-2010	004	6.1	-4.2	8/20/2010	12:00	2.84E+04	2.47E-02	9.9E+02	-2.40E-01	3.94E-01	9.23E-01	3.39E-01	9.35E-00	1.31E+01	-2.6.E+0	1.09E+01	1.28E+01	NA	NA	NA	9.9E+02	NB	ND	ND	NA	MW-36-24
MW-36-24	Q4-2010	020	6.1	-4.2	11/2/2010	16:15	2.62E+03	1.2E+02	1.7E+02	1.21E-1	5.81E-01	6.42E-01	2.45E+00	9.03E-00	1.17E+01	3.88E+00	1.12E+01	1.26E+01	HA	NA	NA						
MW-36-24	Q1-2011	02	6.1	-4.2	2/8/2011	12:37	2.55E+02	3.54E-02	3.81E+02	-8.67E-02	1.67E-00	2.08E+00	4.53E-01	5.36E-00	5.75E+00	-3.0.E-1	4.7E+00	5.03E+00	HA	NA	NA						
MW-36-24	Q2-2011	022	6.1	-4.2	4/28/2011	14:34	3.07E+03	7.26E-02	3.19E+02	1.53E+00	1.53E-00	5.9E+00	-6.41E-1	7.68E-00	8.47E+00	2.8.E+00	7.48E+00	9.35E+00	HA	NA	NA						
MW-36-41	Q3-2010	027	37	-25.3	8/20/2010	12:25	1.23E+04	3.52E-02	1.4E+02	1.31E+00	1.74E-01	1.31E-01	-1.12E+00	8.23E-00	9.43E+00	5.0.E+00	8.07E+00	9.77E+00	HA	NA	NA	6.5E+02	2.21E+00	NB	ND	NA	MW-36-41
MW-36-41	Q4-2010	014	37	-25.3	11/4/2010	16:35	1.23E+04	5.71E-02	1.0E+02	3.34E+00	9.13E-01	6.12E-01	7.63E-01	8.76E-00	1.01E+01	3.0.E+00	8.3E+00	1.06E+01	HA	NA	NA						
MW-36-41	Q1-2011	013	37	-25.3	2/8/2011	13:53	8.74E+03	6.18E-02	1.97E+02	4.1..E+00	1.17E-00	1.57E+00	1.3.E+00	5.16E-00	6.09E+00	1.5.E+00	5.6E+00	6.65E+00	HA	NA	NA						
MW-36-41	Q2-2011	014	37	-25.3	4/28/2011	15:39	8.17E+03	1.34E-03	2.1E+02	3.3..E+00	1.75E-00	3.6E+00	-2.11E+00	9.2E-00	1.07E+01	-2.9.E-1	1.04E+01	1.12E+01	HA	NA	NA						
MW-36-52	Q3-2010	013	49.7	-37.7	8/20/2010	12:31	9.05E+04	3.58E-02	9.6E+02	5.25E-01	9.23E-01	9.03E-01	1.24E+00	8.68E-00	9.79E+00	3.2.E+00	8.45E+00	9.43E+00	NA	NA	NA	7.6E+02	4.67E+00	NB	ND	NA	MW-36-52
MW-36-52	Q4-2010	019	49.7	-37.7	11/4/2010	15:55	7.03E+03	4.80E-02	1.0E+02	4.73E+00	1.1E-00	6.76E-01	1.1.E-01	5.19E-00	6.52E+00	-2.2.E+0	7.92E+00	7.79E+00	HA	NA	NA						
MW-36-52	Q1-2011	020	49.7	-37.7	2/8/2011	12:43	3.14E+03	4.72E-02	1.3E+02	1.53E+00	2.80E-00	2.14E+00	-6.03E

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TABLE 3
SECOND QUARTER 2011 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	SAMPLE ZONE CENTER Elevation Ft msl	SAMPLE COLLECTION Date	SAMPLE COLLECTION Time	ANALYSIS RESULTS[3] TRITIUM (pCi/L) Result	TRITIUM (pCi/L) Std. Dev.[3]	TRITIUM (pCi/L) MDC	Sr-90 (pCi/L) Result	Sr-90 (pCi/L) Std. Dev.[3]	Sr-90 (pCi/L) MDC	Cs-137 (pCi/L) Result	Cs-137 (pCi/L) Std. Dev.[3]	Cs-137 (pCi/L) MDC	Co-60 (pCi/L) Result	Co-60 (pCi/L) Std. Dev.[3]	Co-60 (pCi/L) MDC	Ni-63 (pCi/L) Result	Ni-63 (pCi/L) Std. Dev.[3]	Ni-63 (pCi/L) MDC	YEARLY ROLLING AVERAGES[4,5] 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[1]
MW-39-67	Q3-2010	009	67	13	7/22/2010	18:25	3.84E+02	1.19E-02	9.80E+02	1.73E+00	6.90E-01	3.09E-01	2.84E+00	6.53E+00	1.08E+01	3.56E+00	7.23E+00	5.00E+00	NA	NA	NA	6.48E+02	1.03E+00	NA	NA	NA	MW-39-67
MW-39-67	Q4-2010	010	67	13	11/15/2010	16:28	3.74E+02	1.36E-02	1.88E+02	1.96E+00	9.36E-01	9.45E+00	-1.74E+00	3.99E+00	5.40E+00	-3.17E+00	4.35E+00	3.35E+00	NA	NA	NA						
MW-39-67	Q1-2011	011	67	13	4/6/2011	14:52	1.02E+04	9.54E-02	4.15E+02	1.74E+00	1.49E+00	5.01E+00	-8.12E-01	8.22E+00	9.73E+00	-4.02E+00	9.42E+00	9.00E+00	NA	NA	NA						
MW-39-67	Q2-2011 Mid	012	67	13	7/15/2011	13:42	2.24E+03	6.12E-02	4.40E+02	2.55E-01	1.40E-00	3.45E+00	-1.15E-01	9.28E-00	9.19E+00	-2.41E+00	9.72E+00	1.12E+01	NA	NA	NA						
MW-39-84	Q3-2010	009	83.5	-3.5	7/22/2010	18:40	3.71E+02	1.30E-02	1.01E+02	3.40E-01	6.26E-01	3.85E+01	-3.53E+00	6.79E+00	1.09E+01	2.45E+00	5.65E+00	3.54E+00	NA	NA	NA	4.05E+02	3.45E-01	ND	ND	NA	MW-39-84
MW-39-84	Q4-2010	010	83.5	-3.5	11/15/2010	16:38	2.51E+02	2.10E-02	4.59E+02	1.88E+00	8.33E-01	8.65E+00	3.52E+00	4.41E+00	1.05E+01	7.47E+00	4.22E+00	1.24E+01	NA	NA	NA						
MW-39-84	Q1-2011	011	83.5	-3.5	4/6/2011	14:43	4.43E+02	4.32E-02	4.13E+02	-2.13E-01	1.38E+00	5.05E+00	-9.30E-01	7.42E+00	8.84E+00	-4.01E-01	8.52E+00	7.41E+00	NA	NA	NA						
MW-39-84	Q2-2011 Mid	013	83.5	-3.5	7/15/2011	14:53	3.53E+02	4.17E-02	4.48E+02	6.54E-01	1.58E+00	2.77E+00	-1.73E+00	1.43E+01	1.71E+01	-4.84E+00	9.45E+00	8.20E+00	NA	NA	NA						
MW-39-102	Q3-2010	009	103.5	-23.5	7/22/2010	18:50	2.32E+02	1.49E-02	4.60E+02	-8.02E+00	9.23E-01	4.47E+01	-1.03E+00	6.35E+00	9.69E+00	-3.62E+00	5.62E+00	4.62E+00	1.88E+01	4.65E+00	4.88E+01	ND	ND	NA	MW-39-102
MW-39-102	Q4-2010	010	103.5	-23.5	11/15/2010	16:32	1.61E+02	1.12E-02	1.84E+02	1.48E+00	9.30E-01	9.63E+00	2.93E+00	4.10E+00	9.21E+00	-4.12E+00	4.22E+00	6.22E+00	NA	NA	NA						
MW-39-102	Q1-2011	011	103.5	-23.5	4/6/2011	14:33	1.43E+04	1.39E-01	4.19E+02	1.03E+00	1.35E+00	2.03E+00	-4.47E+01	3.89E+01	5.86E+00	6.01E+00	2.96E+00	1.07E+01	NA	NA	NA						
MW-39-102	Q2-2011 Mid	013	103.5	-23.5	7/15/2011	14:02	1.24E+04	1.20E-03	4.36E+02	5.81E-01	1.89E-00	2.06E+00	3.70E+00	8.76E-00	1.02E+01	-6.84E-01	9.42E+00	9.35E+00	NA	NA	NA						
MW-39-24	Q3-2010	009	24	-46	7/22/2010	17:59	3.14E+02	1.34E+02	4.65E+02	2.22E+00	7.71E-01	9.03E+00	-1.11E+00	8.32E+00	1.42E+01	4.37E+00	7.35E+00	1.13E+01	ND	2.25E+00	9.13E+00	NA	NA	NA	MW-39-24
MW-39-24	Q4-2010	010	24	-46	11/15/2010	12:46	3.72E+02	1.33E-02	3.86E+02	1.11E+00	1.35E-01	9.35E+00	6.43E+00	6.71E+00	1.61E+01	1.31E-01	4.05E+00	1.10E+01	NA	NA	NA						
MW-39-24	Q1-2011	011	24	-46	4/6/2011	13:01	1.51E+02	3.70E-02	4.15E+02	5.21E-01	1.37E-00	5.55E+00	9.13E+00	8.36E-00	1.57E+00	3.07E+00	7.22E+00	9.27E+00	NA	NA	NA						
MW-39-24	Q2-2011 Mid	013	24	-46	7/15/2011	11:44	2.53E+02	3.72E-02	4.29E+02	3.71E-01	1.39E-00	2.77E+00	-4.13E+00	1.36E+01	1.15E+01	-1.83E+00	9.13E+00	9.57E+00	NA	NA	NA						
MW-39-252	Q3-2010	009	252.5	-223.5	7/22/2010	17:30	1.07E+02	1.51E-02	1.08E+02	2.01E-01	4.09E-01	3.99E+01	-4.62E+00	6.65E-00	9.01E+00	-5.80E+00	9.62E+00	5.50E+00	ND	ND	ND	ND	ND	ND	MW-39-252
MW-39-83	Q4-2010	010	182.5	-102.5	11/15/2010	12:53	8.02E+01	1.51E-02	1.88E+02	4.11E-01	7.56E-01	7.77E+00	1.42E+00	4.32E+00	1.10E+01	3.51E+00	4.93E+00	1.19E+01	NA	NA	NA						
MW-39-83	Q1-2011	011	182.5	-102.5	4/6/2011	11:35	1.13E+02	3.54E-02	4.02E+02	1.13E+00	1.56E-00	6.67E+00	6.46E+00	8.23E+00	1.09E+01	-1.53E+00	8.68E+00	3.94E+00	NA	NA	NA						
MW-39-83	Q2-2011 Mid	013	182.5	-102.5	7/15/2011	11:49	7.03E+01	3.73E-02	4.32E+02	3.41E-01	1.63E-00	1.19E+00	2.23E+00	1.88E-01	1.22E+01	-2.37E+00	1.00E+01	1.57E+01	NA	NA	NA						
MW-39-95	Q3-2010	009	95	-115	7/22/2010	17:11	9.23E+01	1.41E-02	2.02E+02	5.91E-01	5.00E-01	5.97E+01	7.36E-01	8.64E+00	9.42E+00	9.72E-01	2.03E+00	9.62E+00	6.24E+03	1.88E+00	ND	ND	ND	NA	MW-39-95
MW-39-95	Q4-2010	010	95	-115	11/15/2010	13:25	2.15E+02	1.36E-02	4.09E+02	1.53E-01	7.35E-01	7.35E+00	-3.21E+00	4.09E-00	6.54E+00	8.70E+00	4.38E+00	1.20E+01	NA	NA	NA						
MW-39-95	Q1-2011	011	95	-115	4/6/2011	12:46	1.08E+02	4.24E+02	4.24E+02	1.82E+00	1.73E+00	1.95E+00	-2.11E+00	1.18E+01	1.42E+01	4.63E+00	1.18E+01	1.12E+01	NA	NA	NA						
MW-39-95	Q2-2011 Mid	013	95	-115	7/15/2011	11:13	4.19E+03	7.56E-02	4.15E+02	1.18E+00	1.78E-00	9.81E+00	2.79E+00	8.45E-00	5.76E+00	6.83E-01	1.08E+01	1.08E+01	NA	NA	NA						
MW-40-27	Q3-2010	009	26.7	46	7/26/2010	14:42	3.93E+02	1.26E-02	1.26E+02	3.23E-01	8.54E-01	7.93E-01	3.93E+00	4.60E-00	7.48E+00	1.01E+00	4.72E+00	5.42E+00	NA	NA	NA	1.00E+01	ND	ND	ND	NA	MW-40-27
MW-40-27	Q4-2010	010	26.7	46	11/19/2010	13:23	3.02E+02	8.89E-02	4.48E+02	1.11E-01	7.49E-01	9.63E+00	4.10E-00	2.30E+00	7.78E+00	1.03E+00	3.62E+00	4.18E+00	NA	NA	NA						
MW-40-27	Q1-2011	011	26.7	46	3/3/2011	13:55	1.93E+02	2.56E-02	2.62E+02	1.51E-01	1.37E-00	6.61E+00	3.72E-01	6.75E-00	7.39E+00	2.81E+00	8.46E+00	9.09E+00	NA	NA	NA						
MW-40-27	Q2-2011	011	26.7	46	4/29/2011	13:29	1.77E+02	3.56E-02	4.07E+02	1.13E+00	1.74E-00	8.87E+00	1.9.E+00	8.40E-00	5.77E+00	-9.21E-01	9.26E+00	1.15E+01	NA	NA	NA						
MW-40-27	Q2-2011 Mid	016	26.7	46	7/7/2011	15:13	3.62E+01	3.30E-02	4.57E+02	-4.57E-01	1.40E-00	9.97E+00	-2.11E+00	7.15E-00	7.64E+00	1.52E+00	9.03E+00	1.03E+01	NA	NA	NA						
MW-40-46	Q3-2010	013	46.2	-27	7/26/2010	14:35	2.24E+02	1.32E-02	1.25E+02	-1.10E+00	5.61E-01	1.10E+01	7.20E+00	6.66E-00	1.05E+01	5.45E+00	5.25E+00	8.20E+00	8.21E+02	ND**	ND	ND	NA	NA	MW-40-46
MW-40-46	Q4-2010	014	46.2	27	11/29/2010	16:35	1.63E+02	1.47E-02	4.85E+02	6.61E-02	7.59E-01	9.38E-01	5.83E-01	3.32E-00	4.28E+00	2.06E+00	3.99E+00	4.74E+00	NA	NA	NA						
MW-40-46	Q1-2011	013	46.2	27	3/1/2011	12:38	2.41E+02	2.74E-02	1.63E+02	1.01E-01	8.58E-01	0.7E+00	2.82E+00	8.80E-00	5.18E+00	7.91E+00	3.74E+00	1.19E+01	NA	NA	NA						
MW-40-46**	Q2-2011	014	46.2	27	4/29/2011	13:31	7.52E+01	3.54E-02	4.05E+02	-1.21E-01 **	1.88E-00	7.7E+00	-9.91E+01	8.46E-00	9.00E+00	-3.95E+00	9.54E+00	9.04E+00	NA	NA	NA						
MW-40-46	Q2-2011 Mid	017	46.2	27	7/7/2011	15:55	1.33E+02	3.39E-02	3.44E+02	-9.16E-01	1.26E-00	8.6E+00	2.21E+00	8.15E-00	1.01E+01	5.0_E-01	9.30E+00	1.03E+01	NA	NA	NA						
MW-40-81	Q3-2010	013	80.7	-7	7/26/2010	14:00	9.93E+01	1.44E-02	2.28E+02	-2.80E-01	5.25E-01	6.06E-01	-1.33E+00	5.54E-00	1.29E+00	-2.26E+00	8.85E+00	4.20E+00	2.85E+02	ND	ND	ND	NA	NA	MW-40-81
MW-40-81	Q4-2010	014	80.7	-7	11/29/2010	12:03	2.41E+02	1.58E-02	4.71E+02	1.11E-03	6.41E-01	7.83E-01	-9.67E-01	4.38E-00	4.79E+00	-4.37E-01	4.33E+00	3.22E+00	NA	NA	NA						
MW-40-81	Q1-2011	011	80.7	-7	3/3/2011	10:17	2.53E+02	2.58E-02	1.63E+02	3.51E-01	1.11E-00	6.7E+00	1.2aE+00	1.86E-01	2.71E+00	-1.43E+00	5.02E+00	6.16E+00	NA	NA	NA						
MW-40-81	Q2-2011	016	80.7	-7	4/29/2011	11:08	3.33E+02	4.12E-02	4.36E+02	1.07E+00	1.38E-00	7.0E+00	3.0.E+00	6.90E-00	3.51E+00	-2.65E-01	8.04E+00	3.83E+00	NA	NA	NA						
MW-40-81	Q2-2011 Mid	017	80.7	-7	7/6/2011	12:48	1.11E+02	3.91E-02	4.34E+02	3.21E-01	1.54E-00	2.09E+00	-2.44E+00	1.84E-00	1.17E+01	3.91E-01	9.17E+00	1.01E+01	NA	NA	NA						
MW-40-1054	Q3-2010	05	1053.5	-27	7/26/2010	17:00	5.52E+02	1.37E-02	4.45E+02	5.50E-01	1.45E-01	6.51E+01	9.55E-01	4.70E-00	5.52E+00	6.5.E-01	5.35E+00	6.53E+00	NA	NA	NA	ND	ND	ND	NA	MW-40-100
MW-40-100	Q4-2010	016	130.2	-27	11/29/2010	12:12	1.34E+02	1.40E-02	4.6E+02	-2.12E-01	6.70E-01	3.89E-01	-1.45.E-1	4.85E-00	4.25E+00	3.1_E-01	4.25E+00	4.81E+00	NA	NA	NA						
MW-40-100	Q1-2011	015	130.2	-27	3/3/2011	10:27	5.17E+01	2.14E-02	1.64E+02	2.31E-02	1.30E-00	5.5E+00	2.46E+01	1.15E-01	7.66E+00	-1.48E+00	7.23E+00	3.30E+00	NA	NA	NA						
MW-40-100	Q2-2011	015	130.2	-27	4/29/2011	11:37	2.73E+02	4.36E-02	4.58E+02	-2.45E-01	1.63E-00	6.7E+00	5.53E+00	7.4E-00	1.23E+00	2.05E+00	7.76E+00	9.58E+00	NA	NA	NA						
MW-40-100	Q2-2011 Mid	019	130.2	-27	7/7/2011	13:29	1.07E+02	3.12E-02	3.50E+02	-9.70E-01	1.41E-00	9.8E+00	2.29E+00	9.83E-00	1.04E+01	7.10E-01	1.03E+01	1.20E+01	NA	NA	NA						
MW-40-127*	Q3-2010	013	127.2	-54	7/26/2010	12:15	1.53E+02	1.40E-02	4.45E+02	-2.32E-03	2.79E-01	3.67E-01	-7.02E+00	7.23E-00	1.23E+00	6.42E-01	5.34E+00	7.40E+00	NA	NA	NA	ND	ND	NA	NA	MW-40-127
MW-40-127	Q4-2010	014	127.2	-54	11/29/2010	12:25	1.23E+02	1.38E-02	4.5E+02	7.34E-01	9.22E-01	9.77E+00	-1.51E-01	4.92E-00	5.42E+00	1.11E-00	4.25E+00	5.06E+00	NA	NA	NA						
MW-40-127	Q1-2011	017	127.2	-54	3/1/2011	10:41	1.33E+02	2.40E-02	1.64E+02	1.03E+00	4.0E-00	5.1E+00	5.07E+01	1.64E-01	7.63E+00	3.4.E-01	7.38E+00	7.96E+00	NA	NA	NA						
MW-40-127	Q2-2011	013	127.2	-54	4/29/2011	11:25	2.27E+01	3.90E-02	4.32E+02	5.71E-01	1.78E-00	2.05E+00	-2.13E-01	8.16E-00	1.83E+00	-1.62E+00	9.62E+00	9.97E+00	NA	NA	NA						
MW-40-127	Q2-2011 Mid	019	127.2	-54	7/7/2011	13:12	1.20E+02	3.13E-02	4.01E+02	3.11E-01	1.64E-00	9.2E+00	1.42E+00	9.90E-00	1.02E+01	-3.00E+00	1.02E+01	1.04E+01	NA	NA	NA						
MW-40-162*	Q3-2010	013	161.7	-88.5	7/26/2010	12:30	1.03E+02	1.38E-02	4.5E+02	5.60E-01	7.22E-01	3.70E-01	-7.14E-01	9.83E-00	9.08E+00	3.5.E+00	5.35E+00	5.38E+00	NA	NA	NA	ND	ND	ND	NA	MW-40-162
MW-40-162	Q4-2010	014	161.7	-88.5	11/29/2010	12:45	6.43E+01	1.27E-02	4.5E+02	-5.51E-03	6.55E-01	7.94E-01	3.60E-01	4.34E-00	4.91E+00	3.45E-01	4.47E+00	5.03E+00	NA	NA	NA						
MW-40-162	Q1-2011	013	161.7	-88.5	3/3/2011	11:02	8.33E+01	2.24E-02	1.63E+02	-1.03E+00	1.67E-00	5.7E+00	-3.71E+00	1.2E-00	5.93E+00	-2.1_E+00	5.42E+00	6.37E+00	NA	NA	NA						
MW-40-162	Q2-2011	016	161.7	-88.5	4/29/2011	12:25	1.03E+02	3.78E-02	4.53E+02	3.71E-01	1.34E-00	4.6E+00	4.54E+00	1.7E-01	1.43E+01	4.45E-01	9.09E+00	1.08E+01	NA	NA	NA						
MW-40-162	Q2-2011 Mid	017	161.7	-88.5	7/7/2011	14:43	5.54E+00	2.77E-02	3.44E+02	-8.61E-01	1.38E-00	9.8E+00	-2.44E+00	9.31E-00	1.54E+00	-6.93E-1	1.70E+00	9.41E+00	NA	NA	NA						
MW-41-46	Q3-2010	05	39.8	40	7/21/2010	12:40	2.12E+03	2.45E-02	4.45E+02	-4.25E+00	1.92E-00	6.85E+01	5.58E+00	5.92E-00	9.01E+00	-9.25E+01	7.03E+00	7.22E+00	NA	NA	NA	1.49E+02	4.95E+00	6.1_	5.0_	NA	MW-41-40
MW-41-40	Q4-2010	018	34.4	20	10/15/2010	16:06	2.45E+03	2.78E-02	1.7E+02	1.00E+00	1.48E-00	6.72E-01	3.03E+00	4.83E-00	6.87E+00	5.7E+00	6.06E+00	1.09E+01	NA	NA	NA						
MW-41-40	Q1-2011	019	34.4	20	2/14/2011	14:05	2.03E+03	4.12E-02	3.95E+02	1.13E+01	2.68E-00	8.3E+00	4.68E+00	7.30E-00	5.61E+00	4.2.E+00	7.26E+00	9.28E+00	NA	NA	NA						
MW-41-40	Q2-2011	020	34.4	20	4/20/2011	13:31	4.51E+03	7.36E-02	4.53E+02	2.32E+00	1.37E-00	4.4E+00	2.20E+00	9.12E-00	1.06E+01	3.0.E+00	1.06E+01	1.25E+01	NA	NA	NA						
MW-41-40	Q2-2011 Mid	021	34.4	20	7/15/2011	12:22	1.41E+03	2.93E+02	1.98E+02	2.93E+00	1.37E+00	1.09E+00	1.09E+00	4.80E+00	1.89E+01	1.14E+00	1.02E+01	9.13E+00	NA	NA	NA						
MW-41-63*	Q3-2010	016	59.5	-8.5	7/21/2010	13:40	5.15E+02	1.38E-02	4.45E+02	4.79E+00	1.60E+00	8.23E-01	-2.71E+00	8.29E+00	1.57E+00	1.85E+00	7.03E+00	9.39E+00	NA	NA	NA	4.05E+02	4.73E+00	NA	NA	NA	MW-41-63
MW-41-63	Q4-2010	017	59.5	-8.5	10/15/2010	12:59	5.05E+02	1.50E-02	1.4E+02	4.23E+00	1.9E-00	9.17E-01	1.0aE+00	6.80E-00	7.07E+00	2.87E+00	5.55E+00	7.23E+00	NA	NA	NA						
MW-41-63	Q1-2011	013	59.5	-8.5	2/14/2011	13:37	1.23E+03	4.44E-02	3.90E+02	6.91E+00	2.40E-00	9.2E+00	1.24E+00	7.30E-00	7.00E+00	2.60E+00	7.96E+00	7.29E+00	NA	NA	NA						
MW-41-63	Q2-2011	019	59.5	-8.5	4/20/2011	13:13	7.53E+02	4.20E-02	4.72E+02	-7.72E-01	1.51E-00	2.03E+00	3.51E+00	8.12E-00	1.01E+01	4.0.E+00	1.04E+01	1.09E+01	NA	NA	NA						
MW-41-63	Q2-2011 Mid	020	59.5	-8.5	7/15/2011	12:51	7.13E+02	4.56E-02	4.33E+02	3.03E+00	1.60E-00	3.0E+00	2.3aE+00	7.71E-00	8.88E+00	4.4.E-01	8.51E+00	7.51E+00	NA	NA	NA						
MW-42-49	Q3-2010	013	42.6	27	7/20/2010	11:30	1.60E+03	2.34E-02	3.4E+02	1.53E+00	1.03E+00	5.90E-01	1.82E+00	2.40E-00	3.30E+00	1.75E+00	4.40E+00	7.77E+00	1.27E+02	2.57E+01	2.13E+01	2.4E+03	1.32E+01	3.43E+04	NA	3.23E+02	MW-42-49
MW-42-49	Q4-2010	023	42.6	27	10/20/2010	12:23	2.13E+03	6.4E+02	4.3E+02	1.8_E+01	2.31E-00	1.72E-01	2.29E+00	4.24E-03	2.93E+01	1.67E+00	9.7E+00	1.03E+01	2.2.E+02	2.6E+01						
MW-42-49	Q1-2011	024	42.6	27	3/4/2011	11:37	1.49E+03	5.14E-02	3.88E+02	2.33E+01	3.34E-00	1.1E+00	3.38E+00	4.42E-03	2.75E+01	1.4_E+00	5.5E+00	7.87E+00	3.0.E+02	3.4E+01	2.00E+01						
MW-42-49	Q2-2011	022	42.6	27	4/6/2011	14:04	1.71E+03	5.98E-02	4.8E+02	5.43E+00	6.38E-00	4.3E+00	2.13E+00	4.68E-03	3.48E+01	1.8.E+00	6.6E+00	1.09E+01	1.9.E+02	4.4E+01	1.4E+01						
MW-42-49	Q2-2011 Mid	027	42.6	27	7/20/2011	12:00	1.51E+03	2.97E+02	2.03E+02	2.79E+00	1.77E+00	1.03E+00	1.10E+00	1.09E+00	1.49E+01	1.24E+00	1.24E+01	1.24E+01	1.7.E+02	1.5E+01							
MW-42-78	Q3-2010	013	74	-4.5	10/27/2010	13:55	6.13E+02	1.74E-02	4.6E+02	-1.14E-01	4.79E-01	3.87E-01	-1.0.E+00	8.69E-00	5.51E+00	-5.1_E+00	3.41E+00	7.24E+00	-4.24E+00	1.50E+01	2.09E+01						
MW-42-78	Q1-2011	019	74	-4.5	3/4/2011	10:52	5.93E+02	4.36E-02	1.84E+02	3.91E-01	1.47E-00	6.0E+00	-2.0.E+00	6.7E-00	6.99E+00	8.0.E-01	5.7E+00	7.41E+00	0.0E+00	1.73E+01	1.96E+01						
MW-42-78	Q2-2011	020	74	-4.5	4/21/2011	13:45	2.25E+02	4.78E-02	1.77E+02	-6.72E-1	1.3E-00	3.2E+00	9.7.E-1	9.4E-00	9.83E+00	3.5E+00	3.46E+00	1.11E+01	5.9E.0	1.79E+01	1.72E+01						
MW-42-78	Q2-2011 Mid	022	74	-4.5	7/20/2011	13:43	2.29E+02	4.78E-02	4.72E+02	-6.72E-1	1.3E-00	3.2E+00	9.7.E-1	9.4E-00	9.83E+00	3.5E+00	3.46E+00	1.11E+01	5.9E.0	1.79E+01	1.72E+01						
MW-43-22	Q3-2010	013	23.5	25.5	7/20/2010	19:48	9.31E+01	1.53E-02	4.7E+02	-8.29E-02	3.38E-01	5.95E-01	3.38E+00	7.53E-00	8.76E+00	1.44E+00	9.49E+00	9.15E+00	NA	NA	NA	8.9E+02	1.05E+00	NA	NA	NA	MW-43-22
MW-43-28	Q4-2010	013	23.5	25.5	10/15/2010	11:29	1.95E+02	1.17E-02	1.3E+02	-1.58E-01	5.31E-01	6.94E-01	3.36E+00	5.80E-00	6.09E+00	-5.01E-01	5.43E+00	5.84E+00	NA	NA	NA						
MW-43-28	Q1-2011	015	23.5	25.5	2/15/2011	13:08	2.24E+02	2.10E-02	2.95E+02	1.10E+00	1.10E-00	2.00E+00	5.73E-01	1.16E-01	3.06E+00	3.1.E+00	6.54E+00	6.25E+00	NA	NA	NA						
MW-43-28	Q2-2011	019	23.5	25.5	4/21/2011	11:15	2.34E+02	4.08E-02	4.72E+02	1.46E+00	1.96E-00	2.04E+00	-9.31E-1	8.74E-00	9.22E+00	4.5E+00	8.60E+00	1.09E+01	NA	NA	NA						
MW-43-28	Q2-2011 Mid	020	23.5	25.5	7/20/2011	15:00	3.97E+01	1.35E+02	2.51E+02	-4.41E-1	4.45E-01	3.94E-01	-1.11E+00	1.54E-00	3.83E+00	-2.48E+00	3.22E+00	3.55E+00	ND	ND	ND	ND	ND	ND	NA	NA	MW-43-28
MW-43-62	Q4-2010	017	51	-2.5	10/25/2010	11:06	9.77E+01	1.52E-02	1.2E+02	5.02E-01	7.10E-01	3.03E+00	5.9aE-01	6.72E-00	6.81E+00	-6.02E-01	5.17E+00	5.01E+00	NA	NA	NA						
MW-43-62	Q1-2011	015	51	-2.5	2/15/2011	13:15	2.22E+02	2.08E-02	2.95E+02	7.77E-01	1.4E-00	2.02E+00	6.59E-01	1.88E-00	2.56E+00	-2.37E-01	5.52E+00	5.43E+00	NA	NA	NA						
MW-43-62	Q2-2011	019	51	-2.5	4/21/2011	11:00	1.03E+02	4.12E-02	4.72E+02	-4.65E-01	1.67E-00	2.15E+00	-1.9.E+00	9.88E-00	5.35E+00	-2.34E+00	3.70E+00	3.43E+00	NA	NA	NA						
MW-43-62	Q2-2011 Mid	020	51	-2.5	7/20/2011	13:40	1.37E+02	3.41E-02	4.47E+02	-2.71E-01	5.02E-01	0.45E-01	-3.57E+00	6.66E-00	1.28E+00	5.2E+00	5.29E+00	9.73E+00	6.30E+01	1.8E+00	4.4E+00						
MW-44-66	Q3-2010	013	62.4	31	10/26/2010	12:40	1.31E+02	1.12E-02	4.8E+02	1.17E-01	4.30E-01	3.93E-01	4.2.E-01	6.14E-00	7.11E+00	-3.78E+00	7.27E+00	7.27E+00	NA	NA	NA						
MW-44-66	Q1-2011	019	62.4	31	2/18/2011	10:41	4.57E+02	3.20E-02	3.99E+02	-2.54E-01	1.59E-00	9.5E+00	1.74E+00	7.92E-00	8.56E+00	-1.48E+00	7.92E+00	8.46E+00	NA	NA	NA						
MW-44-66	Q2-2011	020	62.4	31	4/6/2011	13:17	8.57E+02	4.60E-02	4.03E+02	7.03E-1	1.2aE-00	7.0E+00	-1.14E-1	9.26E-00	1.04E+01	5.42E+00	1.04E+01	1.31E+01	NA	NA	NA						
MW-44-66	Q2-2011 Mid	021	62.4	31	7/6/2011	15:19	1.62E+03	4.68E-02	4.47E+02	7.03E-1	1.2aE-00	7.0E+00	6.6E+00	9.26E-00	1.04E+01	5.42E+00	1.04E+01	1.31E+01	NA	NA	NA						
MW-44-102	Q3-2010

IPEC00267126

TABLE 3
SECOND QUARTER 2011 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	SAMPLE ZONE CENTER Elevation Ft msl	SAMPLE COLLECTION Date	SAMPLE COLLECTION Time	ANALYSIS RESULTS[3] TRITIUM (pCi/L) Result	TRITIUM (pCi/L) Std. Dev.[3]	TRITIUM (pCi/L) MDC	Sr-90 (pCi/L) Result	Sr-90 (pCi/L) Std. Dev.[3]	Sr-90 (pCi/L) MDC	Cs-137 (pCi/L) Result	Cs-137 (pCi/L) Std. Dev.[3]	Cs-137 (pCi/L) MDC	Co-60 (pCi/L) Result	Co-60 (pCi/L) Std. Dev.[3]	Co-60 (pCi/L) MDC	Ni-63 (pCi/L) Result	Ni-63 (pCi/L) Std. Dev.[3]	Ni-63 (pCi/L) MDC	YEARLY ROLLING AVERAGES[4a] 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[1]
MW-46	Q3 2010	021	-0.5	7.6	7/29/2010	13:13	1.03E+03	3.58E-02	2.46E+02	3.03E-01	1.53E-01	6.39E-01	1.29E-01	7.93E-02	1.31E+00	2.91E+00	5.21E+00	3.23E+00	HA	NA	NA	1.17E+03	ND	ND	ND	ND	MW-46
MW-46	Q4 2010	022	-0.5	7.6	10/28/2010	13:25	3.13E+03	3.38E-02	1.38E+02	3.75E-01	3.29E-01	1.49E-01	-2.03E+00	5.35E+00	7.88E+00	2.91E+00	5.21E+00	3.22E+00	HA	NA	NA						
MW-46	Q1 2011	023	-0.5	7.6	2/23/2011	12:46	2.47E+03	5.70E-02	3.93E+02	1.13E+00	1.39E+00	2.06E+00	-2.22E+00	5.33E+00	7.20E+00	5.2..E-01	5.09E+00	5.66E+00	HA	NA	NA						
MW-46	Q2 2011	024	-0.5	7.6	4/25/2011	11:19	5.22E+03	7.74E-02	3.92E+02	1.46E+00	1.72E+00	2.00E+00	-2.41E+00	7.74E+00	9.00E+00	-4.44E+00	6.77E+00	7.44E+00	HA	NA	NA						
MW-46	Q2 2011 Mid	025	-0.5	7.6	7/13/2011	13:29	3.01E+03	7.17E-02	3.86E+02	8.44E-01	1.9E+00	2.6E+00	37.E+00	8.64E+00	1.04E+01	-9.54E-01	1.02E+01	1.08E+01	HA	NA	NA						
MW-47,56	Q2-2011 Mid	026	-3.2	17	7/6/2011	15:50	3.52E+03	6.57E-02	3.44E+02	-3.46E-01	1.60E+00	2.22E+00	-1.52E+00	3.33E+00	4.02E+00	1.47E-01	5.45E+00	3.25E+00	-1.99E+01	2.37E+01	2.50E+01	2.52E+03	ND	ND	ND	ND	MW-47,56
MW-47,89	Q4 2010	001	-54	-34.4	2/8/2011	14:39	4.43E+03	3.80E-02	4.10E+02	1.22E+00	1.43E+00	2.28E+00	-1.02E+00	3.32E+00	4.83E+00	3.43E+00	5.65E+00	3.78E+00	3.61E+00	2.29E+01	2.93E+01	3.06E+03	1.93E+00				MW-47,89
MW-49,26	Q3 2010	021	-9.1	-4.4	8/11/2010	11:22	3.01E+03	7.33E-02	3.87E+02	1.52E+00	1.44E+00	2.36E+00	-1.39E+00	1.14E+01	1.44E+01	-1.38E+00	1.03E+01	1.13E+01	8.2..E-01	1.64E+01	1.62E+01	1.02E+03	1.28E+00	ND	ND	ND	MW-49,26
MW-49,26	Q4 2010	022	-9.1	-4.4	11/11/2010	14:23	2.52E+03	3.30E-02	4.76E+02	-3.42E-01	9.56E-01	1.34E+00	4.63E+00	4.74E+00	1.13E+01	1.11E+00	3.93E+00	9.11E+00	1.79E+00	1.03E+01	2.29E+01						
MW-49,26	Q1 2011	023	-9.1	-4.4	1/19/2011	12:47	2.17E+03	6.30E-02	4.29E+02	1.08E+00	1.29E+00	2.01E+00	1.89E+00	1.84E+01	1.98E+01	-4.48E+00	5.42E+00	6.44E+00	-4.52E+00	1.17E+01	2.10E+01						
MW-49,26	Q2 2011	024	-9.1	-4.4	4/13/2011	11:52	3.23E+03	7.18E-02	4.89E+02	1.52E+00	1.86E+00	9.1E+00	47.2E+00	1.87E+01	1.27E+01	4.0..E+00	1.09E+01	1.47E+01	1.81E+01	1.78E+01	1.72E+01						
MW-49,42	Q3 2010	021	-28.1	-23.4	8/11/2010	11:00	2.37E+03	7.17E-02	3.90E+02	3.52E+00	1.47E+00	2.91E+00	4.21E+00	7.15E+00	1.23E+01	2.23E+00	3.75E+00	9.96E+00	-3.6..E+00	1.03E+01	2.20E+01	2.20E+03	1.95E+00	ND	ND	ND	MW-49,42
MW-49,42	Q4 2010	022	-28.1	-23.4	11/11/2010	14:13	2.53E+03	3.73E-02	4.02E+02	1.59E+00	1.63E+00	1.12E+00	8.42E-01	6.79E+00	5.79E+00	3.7..E+00	5.42E+00	1.30E+01	4.01E+00	1.34E+01	1.80E+01						
MW-49,42	Q1 2011	023	-28.1	-23.4	1/19/2011	13:00	2.45E+03	5.85E-02	3.86E+02	2.23E+01	4.02E+00	2.03E+00	1.07E+00	5.74E+00	6.21E+00	3.43E+00	5.09E+00	5.53E+00	3.26E+00	1.66E+01	2.13E+01						
MW-49,42	Q2 2011	024	-28.1	-23.4	4/13/2011	11:35	1.93E+03	6.34E-02	4.75E+02	1.57E+00	1.34E+00	3.07E+00	-6.7..E+00	7.62E+00	6.17E+00	1.1..E-01	7.72E+00	8.33E+00	-6.61E+00	1.52E+01	1.73E+01						
MW-49,42	Q3 2011	025	-28.1	-23.4	7/12/2011	11:19	2.32E+03	7.21E-02	3.89E+02	1.52E+00	1.24E+00	1.94E+00	-1.12E+01	1.52E+01	1.43E+01	-2.52E+00	9.21E+00	1.13E+01	-6.71E+00	1.53E+01	2.13E+01	2.28E+03	1.38E+00	ND	ND	ND	MW-49,42
MW-49,65	Q4 2010	022	-60	-45.4	11/11/2010	14:12	1.37E+03	2.24E-02	3.97E+02	1.4..E+00	1.45E+00	3.4E+00	6.95E+00	6.68E+00	1.07E+01	3.29E-01	5.27E+00	1.18E+01	-3.4..E+00	8.21E+00	2.09E+01						
MW-49,65	Q1 2011	023	-60	-45.4	1/20/2011	13:15	1.94E+03	5.32E-02	3.85E+02	1.1..E+00	3.38E+00	2.06E+00	-6.33E-01	4.96E+00	7.21E+00	7.1..E-01	5.20E+00	5.81E+00	-9.01E+00	1.13E+01	2.20E+01						
MW-49,65	Q2 2011	024	-60	-45.4	4/13/2011	11:50	2.31E+03	6.40E-02	4.81E+02	1.62E+00	3.2..E+00	6.0E+00	2.59E+00	9.66E+00	1.12E+01	4.62E-01	1.01E+01	1.10E+01	4.11E+00	1.49E+01	1.66E+01						
MW-50,42	Q3 2010	023	-42	-29.1	8/9/2010	15:15	3.61E+03	5.12E-02	4.23E+02	6.43E+00	1.42E+00	2.03E+00	-1.39E+00	6.43E+00	8.23E+00	1.30E-01	3.82E+00	9.92E+00	9.0..E+00	9.0..E+00	1.33E+01	2.2E+03	4.02E+00	ND	ND	ND	MW-50,42
MW-50,42	Q4 2010	023	-42	-27.1	11/12/2010	12:13	8.67E+02	1.33E-02	2.2E+02	3.73E+00	1.31E+00	9.89E-01	2.48E+00	5.71E+00	4.76E+00	2.7..E+00	5.38E+00	6.94E+00	-7.36E+00	1.59E+01	2.15E+01						
MW-50,42	Q1 2011	024	-42	-27.1	2/25/2011	12:35	5.61E+02	3.38E-02	3.85E+02	5.43E+00	2.34E+00	9.1E+00	-1.2..E-01	5.46E+00	7.88E+00	-9.07E-01	6.42E+00	6.42E+00	-7.19E+00	1.53E+01	2.13E+01						
MW-50,42	Q2 2011	025	-42	-27.1	5/9/2011	14:10	1.17E+03	3.20E-02	3.41E+02	9.2..E+00	2.08E+00	1.0E+00	1.92E+00	1.44E+00	1.07E+01	3.79E-01	1.84E+01	1.18E+01	3.08E-01	1.59E+01	1.92E+01						
MW-50,42	Q3 2011 Mid	026	-42	-27.1	7/5/2011	12:18	1.03E+03	4.49E-02	4.45E+02	3.0..E+00	1.89E+00	2.03E+00	-1.11E+00	7.56E+00	3.36E+00	6.6..E-01	3.4..E+00	9.04E+00	3.81E+01	1.71E+01	1.91E+01						
MW-50,66	Q3 2010	021	-60	-45.1	8/9/2010	16:35	3.51E+03	3.33E-02	3.24E+02	2.65E+00	2.39E+00	3.80E+00	3.52E+00	8.69E+00	9.99E+00	9.92E-01	9.35E+00	1.06E+01	2.30E+01	1.54E+01	1.83E+01	3.48E+03	2.57E+00	ND	ND	ND	MW-50,66
MW-50,66	Q4 2010	022	-60	-45.1	11/11/2010	12:11	1.72E+03	2.8..E-02	2.4..E+02	2.4..E+00	2.71E+00	9.36E+00	-3.1..E+00	8.21E+00	1.07E+01	-1.6..E+00	3.25E+00	1.08E+01	1.1..E+00	1.42E+01	2.12E+01						
MW-50,66	Q1 2011	023	-60	-45.1	2/25/2011	12:35	3.77E+03	6.18E-02	3.82E+02	2.6..E+01	4.02E+00	2.13E+00	2.69E+00	7.70E+00	9.24E+00	6.79E-01	8.80E+00	9.10E+00	3.88E+00	1.61E+01	2.17E+01						
MW-50,66	Q2 2011	030	-60	-45.1	5/9/2011	12:07	4.73E+03	6.12E-02	3.45E+02	2.63E+01	3.30E+00	1.08E+00	0.08E+00	1.77E+01	9.05E+00	-2.33E+00	9.86E+00	9.12E+00	8.4..E+00	1.76E+01	1.88E+01						
MW-50,66	Q3 2011 Mid	031	-60	-45.1	7/5/2011	12:25	6.53E+03	8.17E-02	4.45E+02	2.6..E+01	4.03E+00	3.5E+00	-4.9..E-01	7.32E+00	7.74E+00	3.81E+00	1.15E+01	1.07E+01	1.0..E+01	1.81E+01	1.81E+01						
MW-51,40	Q2 2010	014	-26.7	-28	5/5/2010	16:21	1.72E+02	1.15E-02	1.82E+02	-4.1..E-02	3.61E-01	1.31E+00	3.14E-01	4.78E-01	4.25E+00	1.4..E+00	2.52E+00	4.62E+00	-6.25E+00	1.4..E+00	1.5..E+01	30E+02	1.9E+00	ND	ND	ND	MW-51,40
MW-51,40	Q4 2010	017	39.7	28	11/30/2010	12:54	1.43E+02	1.41E-02	1.44E+02	1.45E-01	6.35E-01	7.12E-01	1.54E+00	4.38E+00	4.95E+00	1.7..E+00	4..7E+00	4.95E+00	HA	NA	NA						
MW-51,40	Q1 2011	013	39.7	28	3/1/2011	10:18	1.02E+02	2.34E-02	1.67E+02	1.07E+00	1.31E+00	6.1E+00	-7.97E+00	1.11E+01	1.36E+01	2.4..E+00	7.30E+00	3.76E+00	HA	NA	NA						
MW-51,40	Q2 2011	019	39.7	28	4/25/2011	10:48	3.62E+02	4.14E-02	4.32E+02	2.21E-01	1.97E+00	5.9E+00	-3.43E+00	8.41E+00	9.62E+00	6.2..E+00	1.1..E+01	1.40E+01	HA	NA	NA						
MW-51,79	Q3 2010	016	-78.7	-11	8/5/2010	16:40	3.13E+02	9.54E-03	2.01E+02	5.81E-01	2.25E-01	3.92E-01	5.52E+00	6.53E+00	7.75E+00	4.45E+00	5.73E+00	7.88E+00	HA	NA	NA	10E+02	ND	ND	ND	ND	MW-51,79
MW-51,79	Q4 2010	017	-78.7	-11	11/30/2010	13:08	3.11E+01	1.21E-02	4.4E+02	-1.2..E-01	4.22E-01	3.24E-01	-8.3..E-01	4.3E+00	4.54E+00	9.9..E-01	4.02E+00	4.66E+00	HA	NA	NA						
MW-51,79	Q1 2011	013	-78.7	-11	3/1/2011	10:34	1.33E+02	2.40E-02	1.70E+02	-2.13E-01	1.12E+00	3.3E+00	2.42E+00	5.52E+00	2.74E+00	2.4..E+00	7.30E+00	6.43E+00	HA	NA	NA						
MW-51,79	Q3 2011	019	-78.7	-11	4/26/2011	10:57	1.17E+02	3.32E-02	4.33E+02	1.03E+00	1.67E+00	8.3E+00	-4.91E+00	7.16E+00	7.23E+00	-8.31E+00	8.02E+00	8.53E+00	HA	NA	NA						
MW-51,104	Q3 2010	014	103.7	-36	8/5/2010	13:13	3.33E+02	1.37E-02	2.46E+02	-2.62E-01	3.15E-01	3.20E-01	-8.9..E-01	3.52E+00	6.85E+00	-2.7..E-01	4.95E+00	3.47E+00	HA	NA	NA	ND	ND	ND	ND	ND	MW-51,104
MW-51,104	Q4 2010	017	103.7	-36	11/30/2010	12:30	2.38E+01	1.23E-02	4.1..E+02	2.74E-01	1.14E+00	1.12E+00	-1.4..E+00	2.27E+00	4.52E+00	-4.12E+00	4.45E+00	3.02E+00	HA	NA	NA						
MW-51,104	Q1 2011	016	103.7	-36	3/1/2011	12:13	4.73E+01	3.10E-02	1.55E+02	2.91E-01	1.27E+00	4.0E+00	2.54E+00	7.70E+00	5.14E+00	9.0..E-01	5.09E+00	6.24E+00	HA	NA	NA						
MW-51,104	Q2 2011	017	103.7	-36	4/26/2011	12:25	1.97E+02	3.30E-02	4.32E+02	1.4..E+00	1.45E+00	4.8E+00	-1.9..E+00	1.88E+01	1.25E+01	-6.72E-01	1.0..E+01	1.20E+01	HA	NA	NA						
MW-51,137	Q3 2010	013	153.2	-67.3	8/5/2010	12:21	1.53E+02	1.41E-02	1.47E+02	-2.23E-01	4.44E-01	6.70E-01	-6.64E+00	6.3E+00	4.83E+00	1.47E+00	5.52E+00	7.77E+00	HA	NA	NA	ND	ND	ND	ND	MW-51,137
MW-51,137	Q4 2010	015	153.2	-67.3	11/30/2010	9:58	1.13E+02	4.5E+00	2.01E-01	7.13E-01	7.92E-01	5.1E+00	4.58E+00	3.20E+00	4.56E+00	4.58E+00											
MW-51,137	Q1 2011	016	153.2	-67.3	3/1/2011	12:44	8.22E+01	2.24E-02	1.62E+02	3.61E-01	1.31E+00	4.4E+00	8.60E-02	6.82E+00	4.77E+00	2.35E+00	5.96E+00	7.38E+00	HA	NA	NA						
MW-51,137	Q2 2011	017	153.2	-67.3	4/26/2011	13:15	0.0E+00	3.56E-02	4.33E+02	1.1..E+00	1.12E+00	6.3E+00	2.53E+00	1.31E+01	1.17E+01	-3.6..E-01	9.0..E+00	9.56E+00	HA	NA	NA						
MW-51,137	Q3 2010	014	152.7	-95	8/5/2010	12:50	3.72E+02	1.65E-02	1.46E+02	5.06E-01	3.06E-01	5.31E-01	-7.9..E+00	4.82E+00	4.14E+00	8.6..E-01	4.52E+00	7.24E+00	HA	NA	NA	ND	ND	ND	ND	MW-51,63
MW-51,63	Q4 2010	015	152.7	-95	11/30/2010	10:02	9.01E+01	1.31E-02	4.4E+02	-3.11E-01	6.9E-01	9.94E-01	1.23E+00	3.87E+00	4.14E+00	3.30E-01	3.94E+00	4.43E+00	HA	NA	NA						
MW-51,63	Q1 2011	016	152.7	-95	3/1/2011	12:01	0.0E+00	1.26E-02	1.62E+02	-3.57E-01	1.19E+00	9.9E+00	2.8..E+00	6.54E+00	7.66E+00	5.3..E-01	7.7..E+00	3.69E+00	HA	NA	NA						
MW-51,63	Q2 2011	017	152.7	-95	4/26/2011	13:19	4.03E+01	3.20E-02	4.30E+02	1.2..E+00	1.42E+00	6.2E+00	2.2..E+00	1.40E+01	1.27E+01	9.2..E-01	7.2..E+00	1.27E+01	HA	NA	NA						
MW-51,189	Q3 2010	014	189.2	121.5	8/5/2010	13:13	5.83E+02	9.83E-04	6.4E+02	5.40E-02	3.97E-01	5.65E-01	2.8..E+00	3.64E+00	4.69E+00	5.91E-01	5.55E+00	6.35E+00	HA	NA	NA	ND	ND	ND	ND	MW-51,189
MW-51,189	Q4 2010	015	189.2	121.5	11/30/2010	9:56	6.91E+01	1.29E-02	4.6E+02	1.93E-01	7.29E-01	9.81E-01	-7.4..E-01	4.31E+00	4.93E+00	-3.15E-01	4.61E+00	5.06E+00	HA	NA	NA						
MW-51,189	Q1 2011	016	189.2	121.5	3/1/2011	12:33	3.50E+01	1.16E-02	1.63E+02	3.1..E-01	1.41E+00	9.7E+00	3.7..E+00	1.47E+01	1.28E+01	2.2..E-01	8.2..E+00	1.29E+01	HA	NA	NA						
MW-51,189	Q3 2011	017	189.2	121.5	4/26/2011	12:52	2.53E+02	3.36E-02	4.33E+02	1.23E+00	1.10E+00	5.7E+00	-8.0..E-01	1.52E+01	1.23E+01	5.07E+00	9.42E+00	8.89E+00	HA	NA	NA						
MW-52,11	Q3 2010	004	0.0	-6.8	8/22/2010	12:10	3.04E+02	4.39E-02	4.35E+02	3.32E-01	1.45E+00	2.8E+00	2.2..E+00	3.82E+00	5.41E+00	3.30E+00	8.92E+00	1.24E+01	HA	NA	NA	ND	ND	ND	ND	MW-52,11
MW-52,11	Q4 2010	005	0.0	6.8	12/6/2010	12:44	3.47E+02	4.11E-02	1.93E+02	1.49E-01	7.4E+00	1.2..E+00	1.2..E+00	8.76E+00	5.71E+00	-2.2..E+00	8.42E+00	5.62E+00	HA	NA	NA						
MW-52,11	Q2 2011	006	-0.5	-7.3	4/5/2011	12:10	3.01E+02	3.78E-02	4.34E+02	6.9..E+00	2.7..E+00	6.8E+00	6.8..E+00	1.39E+01	9.01E+00	1.49..E+00	1.03E+01	9.08E+00	HA	NA	NA	ND	ND	ND	ND	MW-52,11
MW-52,18	Q2-2011 Mid	007	7.5	-2.4	7/6/2011	14:39	2.52E+02	3.37E-02	4.22E+02	1.0..E+00	1.62E+00	7.6E+00	3.88E+00	6.45E+00	8.08E+00	-3.2..E+00	8.0..E+00	7.84E+00	HA	NA	NA						
MW-52,48	Q3 2010	006	48	-33.1	8/22/2010	12:13	1.03E+02	3.52E-02	4.36E+02	-3.69E-01	1.37E+00	2.26E+00	-5.4..E+00	7.29E+00	5.34E+00	3.32E+00	7.02E+00	9.37E+00	HA	NA	NA	ND	ND	ND	ND	MW-52,48
MW-52,48	Q2 2011 Mid	007	48	-33.1	7/5/2011	15:03	2.56E+02	1.21E-02	4.3..E+02	2.53E-01	1.30E+00	2.0E+00	2.3..E+00	9.60E+00	1.01E+01	HA	NA	NA	HA	NA	NA						
MW-52,64	Q3 2010	006	64	-48.1	8/22/2010	15:23	3.26E+01	3.38E-02	4.32E+02	3.12E-01	1.43E+00	2.27E+00	6.8..E+00	6.72E+00	5.78E+00	3.83E+00	8.38E+00	6.63E+00	HA	NA	NA	ND	ND	ND	ND	MW-52,64
MW-52,64	Q2 2011 Mid	007	64	-48.1	7/7/2011	10:45	1.51E+02	3.11E-02	4.31E+02	-4.3..E-01	1.97E-01	2.7E+00	2.4..E+00	7.7..E+00	1.34E+00	6.6..E-01	8.3..E+00	9.05E+00	HA	NA	NA						
MW-52,222	Q3 2010	006	222	107.9	8/22/2010	10:49	1.21E+02	3.37E-02	4.30E+02	1.22E+00	1.23E+00	1.7E+00	3.4..E+00	2.90E+00	3.91E+00	2.2..E+00	5.91E+00	2.99E+00	HA	NA	NA	ND	ND	ND	ND	MW-52,222
MW-52,22	Q2-2011 Mid	007	22	107.1	7/6/2011	13:35	2.15E+01	3.48E-02	4.19E+02	1.0..E-01	1.9..E+00	4.7E+00	-5.4..E+00	7.92E+00	7.50E+00	8.0..E-01	5.54E+00	7.89E+00	HA	NA	NA						
MW-52,82	Q3 2010	006	103.5	186.6	8/22/2010	10:13	1.83E+02	3.34E-02	4.29E+02	-7.2..E-01	9.9..E-01	5.4E+00	6.4..E+00	8.4E+00	5.68E+00	1.3..E+00	1.0..E+01	1.0..E+01	HA	NA	NA	66E+02	ND	ND	ND	ND	MW-52,82
MW-52,82	Q2-2011 Mid	007	103.5	186.6	7/6/2011	11:53	4.22E+02	3.37E-02	4.10E+02	1.11E+00	1.77E+00	2.7E+00	4.2..E+00	1.04E+01	2.34E+00	5.2..E+00	1.0..E+01	1.0..E+01	HA	NA	NA						
MW-52,181	Q3 2010	006	181	166.1	8/22/2010	10:23	2.45E+02	3.25E-02	4.33E+02	5.1..E+00	1.42E+00	2.4E+00	6.64E+00	6.38E+00	4.23E+00	2.0..E+00	1.2..E+01	1.0..E+01	HA	NA	NA	ND	ND	3.56E+01	ND	MW-52,181
MW-52,181	Q2-2011 Mid	007	181	166.1	7/6/2011	11:48	2.41E+02	3.37E-02	4.22E+02	3.37E-01	1.38E+00	5.4E+00	-1.9..E+00	7.0E+00	7.52E+00	-1.2..E+00	9.39E+00	9.97E+00	HA	NA	NA						
MW-53,84	Q3 2010	016	73	-4.7	7/29/2010	14:44	4.43E+03	4.30E-02	4.25E+02	3.43E-01	3.34E+01	4.80E+01	-1.30E+00	8.40E+00	1.49E+01	-1.99E+00	6.80E+00	1.31E+01	-1.4..E+01	1.5..E+01	2.23E+01	2.1E+03	1.9E+01	ND	ND	ND	MW-53,84
MW-53,87	Q4 2010	017	75	-4.4	10/27/2010	13:07	2.53E+03	2.79E-02	1.0E+02	2.07E-01	2.30E+01	1.36E+01	-3.1..E+00	1.15E+01	1.57E+01	-1.4..E+01	1.7..E+01	7.08E+00	HA	NA	NA						
MW-53,82	Q1 2011	013	75	-4.7	3/3/2011	11:53	5.93E+02	3.76E-02	1.73E+02	1.6..E+00	1.12E+00	9.1E+00	3.6..E+00	6.3E+00	7.60E+00	-1.83E+00	7.02E+00	7.25E+00	-7.63E+00	1.59E+01	1.85E+01						
MW-53,82	Q2 2011	019	75	-4.7	4/18/2011	12:46	6.23E+02	4.56E-02	4.50E+02	4.4..E+00	1.45E+00	6.7E+00	-4.47E+00	9.92E+00	1.80E+00	3.1..E+00	8.3..E+00	1.07E+01	5.8..E-01	1.45E+01	1.72E+01						
MW-53,87	Q3 2010	020	109.8	-29.7	7/30/2010	14:25	3.81E+03	5.33E-02	4.29E+02	2.95E+00	1.52E+00	1.97E+00	2.20E+00	1.27E+01	1.32E+01	-9.79E-01	9.0..E+00	1.29E+01	2.51E+01	1.54E+01	2.31E+01	3.2E+03	2.11E+01	ND	ND	ND	MW-53,87
MW-53,20	Q4 2010	02.	139.8	-39.5	10/27/2010	12:48	3.91E+03	3.88E-02	1.1..E+02	2.9..E+01	2.91E+00	7.02E-01	2.33E+00	5.87E+00	6.0..E+00	-9.51E-01	5.46E+00	5.76E+00	HA	NA	NA						
MW-53,20	Q1 2011	023	139.8	-39.5	3/3/2011	12:01	3.84E+03	7.18E-02	1.89E+02	2.9..E+01	3.76E+00	1.3E+00	2.38E+00	7.72E+00	8.49E+00	-2.43E+00	8..4E+00	8.13E+00	1.0..E+01	1.76E+01	1.87E+01						
MW-53,20	Q2 2011	022	139.8	-39.5	4/18/2011	11:52	1.72E+03	4.11E-02	4.50E+02	1.3..E+00	1.56E+00	6.7E+00	1.3..E+00	1.22E+01	9.09E+00	4.5..E-01	1.02E+01	1.02E+01	1.7..E+01	1.72E+01	1.87E+01						
MW-54,37	Q3 2010	013	36.5	-23.4	8/9/2010	14:32	3.21E+03	3.10E-02	4.10E+02	3.40..E+00	2.77E+01	3.92E+01	4.95..E+00	9.16E+00	1.34E+01	-3.9..E+00	9.63E+00	1.39E+01	-3.9..E+00	1.7..E+01	2.30E+01	2.41E+03	1.45E+01	ND	ND	ND	MW-54,37
MW-54,37	Q4 2010	012	36.5	-23.4	11/23/2010	14:47	1.43E+03	2.27E-02	2.6E+02	4.5..E+00	1.42E+00	9.84E-01	-2.0..E+00	5.46E+00	7.80E+00	-6.83E-01	5.52E+00	6.93E+00	-2.56E+00	1.61E+01	2.15E+01						
MW-54,37	Q1 2011	014	36.5	-23.4	2/1/2011	14:13	1.53E+03	4.32E-02	3.72E+02	4.02E+00	1.97E+00	2.0E+00	-1.4..E+00	6.4E+00	5.07E+00	3.11E+00	5.42E+00	7.04E+00	-3.8..E+00	1.59E+01	1.92E+01						
MW-54,37	Q2 2011	017	36.5	-23.4	4/7/2011	12:02	8.4..E+02	2.74E-02	4.43E+02	4.8..E+00	2.68E+00	6.9E+00	-2.9..E+00	8.35E+00	6.69E+00	2.2..E+00	9.06E+00	9.06E+00	-3.1..E+00	1.47E+01	1.87E+01						
MW-54,37	Q2-2011 Mid	018	36.5	-23.4	7/18/2011	13:45	2.77E+04	1.57E-03	4.43E+02	4.3..E+00	2.9..E+00	1.8E+00	-1.17E+00	6.36E+00	6.58E+00	4.0..E+00	9.21E+00	1.09E+01	1.5..E+01	1.61E+01	2.07E+01						
MW-54,58	Q3 2010	013	77.5	-44.4	8/9/2010	14:51	2.67E+02	1.28E-02	2.28E+02	1.3..E+00	8.52E-01	1.0E+00	-3.8..E+00	4.15E+00	5.82E+00	-6.1..E-01	3.12E+00	1.13E+01	-5.35E-01	1.4..E+01	1.7..E+01	20E+03	1.0E+00	ND	ND	ND	MW-54,58
MW-54,58	Q4 2010	013	77.5	-44.4	11/12/2010	11:45	2.3..E+02	1.3..E-02	2.3..E+02	2.2..E+00	1.3..E+00	9.76E-01	3.8..E+00	6.0..E+00

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TABLE 3
SECOND QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,3]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing[4]	SAMPLE ZONE CENTER Elevation Ft msl[4]	SAMPLE COLLECTION Date	SAMPLE COLLECTION Time	ANALYSIS RESULTS[5] TRITIUM (pCi/L) Result	TRITIUM (pCi/L) Std. Dev.[9]	TRITIUM (pCi/L) MDC	Sr-90 (pCi/L) Result	Sr-90 (pCi/L) Std. Dev.[9]	Sr-90 (pCi/L) MDC	Cs-137 (pCi/L) Result	Cs-137 (pCi/L) Std. Dev.[9]	Cs-137 (pCi/L) MDC	Co-60 (pCi/L) Result	Co-60 (pCi/L) Std. Dev.[9]	Co-60 (pCi/L) MDC	Ni-63 (pCi/L) Result	Ni-63 (pCi/L) Std. Dev.[9]	Ni-63 (pCi/L) MDC	YEARLY ROLLING AVERAGES[6,7] 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[1]
MW-54_90	Q3 2010	014	90	176.9	8/0/2010	12:31	1.63E+03	2.53E-02	2.30E+02	3.37E+01	1.15E-00	2.97E-01	1.63E+00	2.55E-01	2.20E+00	1.20E+00	2.50E+00	2.90E+00	2.90E+00	3.23E+00	1.35E+00	3.21E+00	872+03	1.79E+01	NA	NA	NA	MW-54_90
MW-54_90	Q4 2010	013	90	176.9	11/23/2010	12:22	1.93E+03	2.55E-02	2.7E+02	1.93E+01	1.39E-00	7.12E-01	-9.64E-01	6.84E-00	6.61E+00	-2.29E+00	5.71E+00	6.79E+00	-3.15E-01	1.51E+01	2.14E+01						
MW-54_90	Q1 2011	016	90	176.9	2/1/2011	12:25	1.82E+03	5.56E-02	3.90E+02	1.61E+01	3.35E-00	2.0E+00	4.59E-01	6.34E-00	1.14E+00	-3.53E+00	5.96E+00	5.21E+00	1.71E+03	1.47E+01	1.89E+01						
MW-54_90	Q2 2011	017	90	176.9	4/12/2011	10:01	2.07E+03	6.11E-02	4.72E+02	1.90E+01	3.30E-00	7.77E-00	3.31E+00	7.92E-00	9.23E+00	8.70E-01	9.80E-00	1.00E+01	3.31E-00	1.52E+01	1.92E+01						
MW-54_90	Q2-2011 Mid	013	90	176.9	7/18/2011	12:14	2.37E+03	6.36E-02	4.43E+02	1.73E+01	2.15E-00	1.1E+00	2.24E+00	1.6E-01	1.29E+01	-2.73E+00	1.3E+01	1.22E+01	3.86E+00	1.55E+01	1.74E+01						
MW-55_24	Q3 2010	014	66	2.3	8/0/2010	12:11	1.61E+03	2.52E-02	3.0E+02	9.63E+00	1.12E-00	4.81E-01	-6.13E+00	8.84E-00	1.04E+01	3.02E-01	8.22E+00	9.59E+00	1.41E+01	1.84E+01	2.01E+01	21E+03	1.01E+01	8E	ND	ND	MW-55_24
MW-55_24	Q4 2010	016	66	2.3	11/1/2010	14:12	1.39E+03	2.39E-02	6.2E+02	1.03E+01	1.88E-00	9.92E-01	-2.29E-01	8.0E+00	9.04E+00	-4.7 E+00	7.53E+00	6.34E+00	7.31E+00	1.83E+01	2.12E+01						
MW-55_24	Q1 2011	017	66	2.3	2/1/2011	14:13	1.03E+03	4.88E-02	4.39E+02	1.09E+01	2.12E-00	9.6E+00	-3.57E-01	4.92E-00	7.43E+00	4.7 E+00	3.4E+00	7.44E+00	5.3 E+01	1.81E+01	2.14E+01						
MW-55_55	Q3 2010	014	82	-13.1	8/0/2010	12:15	1.84E+03	2.46E-02	2.5E+02	1.26E+00	1.65E-00	3.57E-01	-9.42E-01	8.80E-00	1.06E+00	8.53E+00	9.66E+00	1.22E+01	9.6 E+01	1.92E+01	2.17E+01	7.0E+03	1.37E+01	8E	ND	ND	MW-55_55
MW-55_55	Q4 2010	015	82	-13.1	11/1/2010	14:0	1.29E+03	2.42E-02	5.2E+02	1.12E+01	1.97E-00	9.11E-01	-2.41E+00	8.33E+00	9.48E+00	3.26E-01	8.38E+00	9.42E+00	6.44E+01	1.99E+01	2.18E+01						
MW-55_55	Q1 2011	016	82	-13.1	2/1/2011	14:15	1.73E+03	4.34E-02	3.86E+02	1.03E+01	2.27E-00	2.03E+00	8.33E-01	5.12E-00	6.45E+00	1.0 E+00	5.2 E+00	7.03E+00	3.14E+01	1.56E+01	2.17E+01						
MW-55_54	Q3 2010	014	47	-28.3	8/0/2010	12:31	1.97E+03	2.52E-02	2.0E+02	3.93E+00	1.32E-00	5.09E-01	-1.51E+00	7.77E-00	1.24E+00	7.52E+00	7.52E+00	9.57E+00	-1.77E-01	1.61E+01	1.65E+01	9.0E+03	1.92E+01	8E	ND	ND	MW-55_54
MW-55_54	Q4 2010	016	47	-28.3	11/1/2010	13:25	1.86E+03	2.57E+02	1.93E+01	1.72E-00	6.48E-01	-3.03E+00	7.79E-00	7.24E+00	9.59E-01	7.0E+00	3.63E+00	1.12E-01	1.77E+01	2.04E+01						
MW-55_54	Q1 2011	017	47	-28.3	2/1/2011	14:17	3.45E+03	6.55E-02	3.89E+02	1.9E-01	3.75E-00	9.5E+00	3.63E+00	5.50E-00	7.00E+00	6.93E-01	7.45E+00	7.93E+00	8.13E+00	1.55E+01	2.14E+01						
MW-56_53	Q4 2010	009	52	18.2	11/5/2010	12:48	4.46E+03	1.38E-02	1.82E+02	5.47E+00	2.57E-01	5.86E+00	3.27E+00	4.59E-00	1.06E+01	1.72E+00	4.28E+00	9.95E+00	NA	NA	NA	1.64E+03	ND	ND	ND	NA	MW-56_53
MW-56_53	Q2 2011	010	52	18.2	4/27/2011	12:01	1.13E+02	3.48E-02	3.97E+02	-3.07E-02	1.73E-00	6.0E+00	3.04E+00	8.10E-00	1.01E+01	-1.62E+00	8.42E+00	1.44E+00	NA	NA	NA						
MW-56_53	Q2-2011 Mid	01	52	18.2	7/5/2011	12:28	2.03E+02	2.72E-02	2.72E-02	-2.03E-01	7.29E-01	1.12E-00	2.72E+00	7.77E-00	1.43E+00	-4.34E+00	1.22E+00	9.25E+00	-4.47E+00	2.43E-01	2.45E-01						
MW-56_83	Q4 2010	01	74	-3.5	11/5/2010	14:31	2.74E+03	2.55E-02	3.84E+02	5.03E+00	7.38E-01	1.50E+00	-2.51E+00	3.45E-00	2.83E+00	-2.07E+00	3.20E+00	7.54E+00	NA	NA	NA	4.4E+04	2.66E+00	ND	ND	NA	MW-56_83
MW-56_83	Q2 2011	013	74	-3.5	4/27/2011	13:46	7.64E+04	2.40E-03	4.19E+02	3.87E+00	1.60E-00	2.8E+00	-1.03E+00	1.4E-01	1.33E+01	-1.27E+00	9.0E+00	1.01E+01	IFA	NA	NA						
MW-56_83	Q2-2011 Mid	013	74	-3.5	7/5/2011	11:35	8.41E+04	3.34E-03	1.81E+02	1.43E+00	1.17E-00	1.9E+00	2.77E+00	2.01E-01	9.44E+00	4.20E-01	5.0E+00	9.23E+00	-1.36E+01	2.12E+01	2.46E+01						
MW-57_21	Q3 2010	007	20	2	8/0/2010	10:25	6.43E+03	6.14E-02	3.41E+02	3.1E+00	3.62E-00	1.09E+00	3.74E+00	6.52E-00	1.57E+00	2.0E+00	2.40E+00	9.92E+00	6.2E+01	1.65E+01	1.85E+01	9.88E+03	3.49E+01	ND	ND	ND	MW-57_21
MW-57_21	Q2-2011 Mid	008	20	2	7/18/2011	11:57	7.53E+03	9.18E-02	4.45E+02	3.87E+01	2.38E-00	2.11E+00	3.27E-01	8.88E-00	9.84E+00	-2.34E+00	9.3E+00	9.39E+00	8.75E+00	1.45E+01	1.67E+01						
MW-57_40	Q2 2011	007	39	-14	5/9/2011	10:47	2.06E+04	1.57E+00	2.44E+02	1.18E+01	2.72E+00	9.97E+00	2.45E+00	2.92E+00	3.42E+00	2.25E+00	2.92E+00	1.12E+01	2.56E+02	1.49E+01	2.23E+01	9.2E+04	5.71E+00	ND	ND	ND	MW-57_40
MW-57_50	Q2-2011 Mid	005	19	-4	7/18/2011	12:19	3.81E+04	1.34E-01	4.43E+02	1.37E+00	1.88E-00	8.1E+00	-5.13 E+00	7.71E-00	7.35E+00	9.1E-01	3.47E+00	9.93E+00	5.69E+01	1.63E+01	2.20E+01						
MW-57_45	Q3 2010	010	40	-25	8/0/2010	11:03	1.33E+04	9.49E-02	3.43E+02	-9.05E-01	9.76E-01	9.06E-01	7.40E+00	8.54E-00	3.21E+00	-1.84E+00	9.49E+00	9.59E+00	6.35E+01	1.55E+01	1.93E+01	9.8E+04	NA	NA	NA	NA	MW-57_45
MW-57_40	Q4 2010	009	40	-25	11/1/2010	12:45	1.02E+04	1.44E+01	1.02E+02	1.02E+01	1.02E+00	6.6E+00	-7.03E-01	1.5E+00	1.88E+01	-2.53E+00	1.96E+01	1.96E+01	1.04E+01	1.14E+01	1.14E+01						
MW-58_56	Q4 2010	03	50	-6.6	10/12/2010	16:13	3.85E+02	2.43E-02	2.40E+02	-6.31E-01	7.89E-01	3.90E-01	1.30E+00	2.0E+00	2.53E+00	2.06E+00	2.70E+00	8.06E+00	NA	NA	NA	9.3E+03	ND	ND	ND	NA	MW-58_56
MW-58_26	Q2 2011	013	20	-5.4	5/3/2011	9:58	7.23E+02	4.88E-02	4.21E+02	3.15E-01	1.38E-00	3.2E+00	2.29E+00	5.80E-00	6.89E+00	-6.41E+00	9.0E+00	8.00E+00	IFA	NA	NA						
MW-58_26	Q2-2011 Mid	013	20	-5.4	7/5/2011	12:29	1.83E+03	5.86E-02	4.47E+02	1.23E-01	1.08E-00	4.1E+00	7.4 E-01	6.34E-00	7.61E+00	1.12E+00	9.23E+00	2.39E+00	1.0 E+01	1.92E+01	2.23E+01						
MW-58_65	Q4 2010	011	54	-29.4	11/4/2010	12:53	4.81E+02	1.38E-02	4.29E+02	1.31E-01	2.72E-01	2.21E-01	2.26 E-01	1.15E-00	2.30E+00	1.25E+00	1.38E+00	8.41E+00	1.81E+01	1.75E+01	2.15E+01	6.0E+03	NA	NA	NA	NA	MW-58_65
MW-58_65	Q2 201.	013	54	-29.4	5/3/2011	10:11	3.22E+02	3.78E-02	3.97E+02	-4.47E-01	1.83E-00	4.4E+00	1.93E+00	5.92E-00	7.00E+00	-7.81E-01	7.04E+00	7.26E+00	IFA	NA	NA						
MW-58_65	Q2-2011 Mid	013	54	-29.4	7/5/2011	13:53	7.03E+02	3.93E-02	3.83E+02	4.17E-01	9.12E-01	0.0E+00	5.27E+00	1.85E-01	1.25E+01	1.42E+00	7.38E+00	3.78E+00	3.44E-01	2.03E+01	2.27E+01						
MW-59_32	Q2-2011 Mid	005	27	-13.2	7/20/2011	9:09	1.35E+02	3.39E-02	4.29E+02	5.23E-01	1.48E-00	2.37E+00	-1.77E+00	7.82E-00	1.02E+01	-2.29E+00	8.75E+00	1.02E+01	-3.48E+00	1.02E+01	2.07E+01	ND	ND	ND	ND	ND	MW-59_32
MW-59_45	Q2-2011 Mid	005	42	-27.3	7/20/2011	9:09	5.24E+02	4.35E-02	3.43E+02	-1.01E+00	1.83E-00	2.46E+00	3.32E+00	6.62E-00	5.82E+00	-2.07E+00	9.48E+00	1.15E+01	1.11E+01	1.03E+01	2.28E+01	2.8E+02	ND	ND	ND	ND	MW-59_45
MW-59_68	Q2-2011 Mid	005	58	-43.3	7/20/2011	10:14	3.13E+02	3.30E-02	3.42E+02	-1.13E+00	7.26E-01	9.01E-01	2.83E+00	9.83E-00	3.09E+00	8.2E-01	9.57E+00	1.06E+01	3.47E+01	2.15E+01	2.47E+01	ND	ND	ND	ND	ND	MW-59_68
MW-60_53	Q3 2010	014	34.9	22.4	8/0/2010	14:48	2.33E+02	4.82E-02	4.0E+02	-3.12E+00	6.48E-01	7.30E-01	3.80E+00	6.47E-00	1.42E+00	-3.36E+00	9.23E+00	1.07E+01	-4.83E+00	2.04E+01	2.12E+01	3.5E+02	ND	ND	ND	ND	MW-60_53
MW-60_53	Q4 2010	011	34.9	22.4	11/18/2010	13:25	3.48E+03	1.35E-02	4.0E+02	-5.53E-01	6.54E-01	7.3E+00	9.4E-01	4.0E+00	1.08E+01	-4.21E-01	4.6E+00	9.25E+00	1.1 E+01	1.47E+01	1.93E+01						
MW-60_35	Q1 201.	016	34.9	-22.4	2/1/2011	12:17	3.23E+02	3.72E-02	3.88E+02	9.73E-01	1.63E-00	7.8E+00	2.69E+00	6.34E-00	7.46E+00	1.22E-01	3.7E+00	4.24E+00	1.6 E+00	1.22E-01	1.84E+01						
MW-60_35	Q2 2011	017	34.9	-22.4	4/12/2011	11:30	1.40E+04	4.70E-02	3.82E+02	1.27E+01	1.46E+00	1.0E+00	-4.02E+00	1.0E+00	1.93E+00	-4.81E+00	2.34E+00	1.04E+01	-4.81E+00	1.02E+01	1.81E+01						
MW-60_35	Q3 2010	014	34.9	-22.4	8/0/2010	11:54	2.53E+03	4.70E-02	3.60E+02	-2.56E+00	4.47E-01	6.04E-01	-3.42E+00	7.82E-00	1.57E+00	-3.5 E+00	8.03E+00	8.03E+00	-3.5 E+00	2.03E+01	2.17E+01	5.9E+02	ND	ND	ND	ND	MW-60_35
MW-60_53	Q4 2010	013	34.4	-40.3	11/18/2010	12:22	2.42E+02	1.33E-02	3.96E+02	-4.32E-01	4.20E-01	3.2E+00	4.5E-01	4.1E-00	6.15E+00	2.2 E+00	3.27E+00	8.75E+00	1.1 E+01	1.53E+01	1.96E+01						
MW-60_53	Q1 201.	016	34.4	-40.3	2/1/2011	10:37	3.12E+02	3.70E-02	3.87E+02	7.41E-01	1.52E-00	7.0E+00	-2.03E+00	3.33E-00	6.16E+00	1.31E+00	7.26E+00	3.33E+00	1.39E+00	1.52E+01	1.72E+01						
MW-60_53	Q2 2011	017	34.4	-40.3	4/5/2011	11:37	5.97E+03	3.45E-02	3.90E+02	1.41E-02	1.60E-00	2.0E+00	2.17E+00	6.09E-00	1.14E+01	1.1 E+00	3.45E+00	3.05E+00	1.68E+00	1.52E+01	1.66E+01						
MW-60_72	Q3 2010	014	29.2	-59.9	8/7/2010	11:57	2.43E+03	2.13E-02	3.48E+02	-3.92E-01	5.90E-01	6.91E-01	-3.80E+00	6.90E-00	1.09E+00	-1.59E+00	5.85E+00	6.32E+00	1.45E+00	2.0E+01	2.27E+01	ND	ND	ND	ND	ND	MW-60_72
MW-60_72	Q4 2010	013	29.2	-59.9	11/16/2010	13:17	2.51E+03	1.58E-02	3.93E+02	5.83E-02	3.15E-01	3.3E+00	2.12E+00	3.34E-00	1.26E+01	-3.93E+00	5.67E+00	1.09E+01	1.14E+01	1.3 E+00	1.89E+01						
MW-60_72	Q1 201.	016	29.2	-59.9	2/16/2011	12:54	3.84E+03	3.76E-02	3.84E+02	2.43E-01	1.45E-00	7.0E+00	-5.11E-02	7.2E-00	1.01E+01	-2.27E+00	3.84E+00	1.07E+01	2.12E+01	1.45E+01	1.75E+01						
MW-60_72	Q2 201.	017	29.2	-59.9	4/15/2011	13:12	2.13E+02	3.78E-02	4.13E+02	7.11E-01	1.92E-00	9.7E+00	-5.14E+00	6.54E-00	7.80E+00	-3.38E+00	1.4E+01	1.14E+01	2.93E+00	1.79E+01	1.63E+01						
MW-60_72	Q3 2010	014	134.9	122.4	8/7/2010	12:00	1.57E+02	1.39E-02	3.45E+02	-2.56E-01	5.26E-01	7.27E-01	-2.49E+00	8.42E-00	5.07E+00	-1.52E+00	5.50E+00	6.70E+00	6.7E-01	2.31E+01	2.45E+01	9.5E+02	ND	ND	ND	ND	MW-60_53
MW-60_35	Q4 2010	01	134.9	122.4	11/1/2010	12:12	2.41E+02	1.12E-02	3.92E+02	-4.55E-02	9.72E-01	2.2E+00	9.1E-01	1.27E-00	1.20E+01	1.0E+00	6.23E+00	1.03E+01	6.7E-01	2.32E+01	1.90E+01						
MW-60_35	Q1 201.	016	134.9	122.4	2/10/2011	13:04	3.91E+02	3.78E-02	3.83E+02	1.14E+00	1.52E-00	9.8E+00	1.72E+00	6.72E-00	7.79E+00	2.24E-01	7.44E+00	3.25E+00	3.56E+00	1.52E+01	1.76E+01						
MW-60_35	Q2 201.	017	134.9	122.4	4/15/2011	13:25	4.13E+02	4.12E-02	4.12E+02	6.53E-01	1.90E-00	2.16E+00	-6.83E+00	1.19E-01	1.63E+01	-2.41E+00	9.26E+00	1.01E+01	4.64E+00	1.47E+01	1.65E+01						
MW-60_35	Q3 2010	014	154.4	141.9	8/7/2010	12:10	2.93E+02	2.20E-02	3.42E+02	-6.25E-01	5.00E-01	8.61E-01	-4.40E+00	9.84E-01	5.60E+00	-2.57E+00	5.55E+00	5.80E+00	-2.57E+00	2.32E+01	2.48E+01	4.5E+02	ND	ND	ND	ND	MW-60_54
MW-60_54	Q4 2010	011	154.4	141.9	11/16/2010	13:41	4.63E+02	1.34E-02	1.92E+02	5.23E-01	8.30E-01	9.4E-01	-5.23E+00	4.82E-00	5.53E+00	5.09E+00	1.11E+01	-4.54E+00	7.63E+00	1.73E+01	1.73E+01						
MW-60_54	Q1 201.	016	154.4	141.9	2/10/2011	12:53	5.44E+02	4.12E-02	3.87E+02	2.31E-02	1.50E-01	0.0E+00	-4.12E+00	9.36E-00	1.97E+00	9.9 E-01	7.26E+00	9.12E+00	4.61E+00	1.72E+01	1.71E+01						
MW-60_54	Q2 201.	017	154.4	141.9	4/15/2011	13:17	3.03E+02	3.78E-02	4.11E+02	-4.40E-01	1.23E-00	2.0E+00	-2.02E+00	7.62E-00	8.54E+00	-7.4 E+00	5.43E+00	6.79E+00	1.6 E+00	1.54E+01	1.62E+01						
MW-60_76	Q3 2010	014	179.9	163.4	8/7/2010	12:30	1.23E+03	1.44E-02	3.50E+02	-6.60E-01	6.86E-01	9.0E-01	-2.05E+00	8.05E-00	4.05E+00	-1.05E+00	4.05E+00	4.05E+00	1.37E+00	2.03E+01	2.03E+01	4.6E+02	ND	ND	ND	ND	MW-60_76
MW-60_76	Q4 2010	013	179.9	163.4	11/16/2010	14:05	8.33E+02	2.10E-02	3.97E+02	9.07E-01	9.42E-01	2.10E+00	-1.97E+00	4.35E-00	5.04E+00	2.8 E+00	4.7 E+00	1.12E+01	-5.48E+00	7.51E+00	1.78E+01						
MW-60_76	Q1 201.	016	179.9	163.4	2/10/2011	10:31	1.12E+03	4.56E-02	3.83E+02	2.31E-01	1.49E-00	7.4E+00	4.32E+00	1.3E-01	6.69E+00	-1.7 E+00	5.7 E+00	6.74E+00	7.24E+00	1.62E+01	1.79E+01						
MW-60_76	Q2 201.	017	179.9	163.4	4/15/2011	13:10	8.97E+02	1.15E-02	4.0E+02	1.15E-01	1.21E+00	7.8E+00	7.83E+00	9.90E-00	1.19E+01	3.32E+00	9.90E+00	1.03E+01	2.01E+01	1.49E+01	1.78E+01						
MW-62_18	Q3 2010	014	3.5	-1.2	8/0/2010	13:30	2.14E+02	1.33E-02	3.46E+02	-8.60E-01	6.55E-01	6.80E-01	-3.00E+00	8.40E-00	3.03E+00	7.30E+00	1.02E+01	1.32E+01	NA	NA	NA	ND	1.28E+00	8E	ND	NA	MW-62_18
MW-62_18	Q4 2010	01	3.5	1.2	11/9/2010	11:57	7.41E+01	1.71E-02	3.86E+02	-3.15E-02	6.10E-01	5.4E+00	2.87E+00	4.99E-00	1.07E+01	-6.93E-01	4.75E+00	1.01E+01	NA	NA	NA						
MW-62_18	Q1 201.	016	3.5	1.2	2/24/2011	12:49	1.80E+02	3.70E-02	4.00E+02	3.30E-01	1.71E-00	2.1E+00	2.12E-01	4.7E-00	7.16E+00	3.51E-00	5.42E+00	6.72E+00	NA	NA	NA						
MW-62_18	Q2 201.	017	3.5	1.2	4/13/2011	11:58	3.23E+02	4.56E-02	4.92E+02	7.81E-01	1.54E-00	7.1E+00	-4.31E+00	1.80E-01	1.09E+01	-4.07E-01	1.06E+01	1.16E+01	NA	NA	NA						
MW-62_18	Q2-2011 Mid	013	3.5	1.2	7/20/2011	11:35	2.03E+02	4.32E-02	4.43E+02	1.23E+00	1.34E-00	2.5E+00	4.94E+00	9.42E-00	1.14E+01	-1.79E+00	1.02E+01	1.03E+01	-3.83E+00	1.56E+01	2.20E+01						
MW-62_37	Q3 2010	014	26.2	-19.3	8/0/2010	12:39	1.81E+02	1.42E-02	4.02E+02	-1.42E-02	5.07E-01	6.85E-01	-2.92E+00	8.25E-00	3.25E+00	-3.23E+00	9.23E+00	7.92E+00	NA	NA	NA	8.1E+02	ND	8E	ND	NA	MW-62_37
MW-62_37	Q4 2010	013	26.2	-19.3	11/9/2010	11:55	6.02E+01	1.10E-02	3.83E+02	7.61E-01	6.39E-01	4.7E+00	-8.4E-02	4.49E-00	5.91E+00	3.1E-01	4.35E+00	1.07E+01	NA	NA	NA						
MW-62_37	Q1 201.	016	26.2	-19.3	2/24/2011	12:52	3.05E+02	3.76E-02	4.00E+02	5.14E-01	1.54E-00	2.1E+00	1.07E+00	6.06E-00	7.86E+00	-2.84E+00	5.38E+00	6.28E+00	NA	NA	NA						
MW-62_37	Q2 201.	017	26.2	-19.3	4/14/2011	14:12	1.52E+02	4.08E-02	4.21E+02	-1.37E-01	1.88E-00	3.1E+00	-4.41E+00	9.14E-00	1.16E+01	-1.02E+00	9.14E+00	9.03E+00	NA	NA	NA						
MW-62_37	Q2-2011 Mid	013	26.2	-19.3	7/7/2011	13:20	1.13E+02	3.30E-02	4.42E+02	1.01E+00	1.60E-00	7.9E+00	-3.54E+00	1.87E-00	9.96E+00	-8.93E+00	1.03E+01	1.03E+01	-8.93E+00	1.03E+01	2.08E+01						
MW-62_32	Q3 2010	013	3.3	-40.3	8/0/2010	12:23	1.54E+02	1.38E-02	4.47E+02	5.13E-01	5.56E-01	6.32E-01	2.89E+00	1.15E-01	1.33E+01	2.29E-01	7.5E+00	8.24E+00	NA	NA	NA	20E+03	NA	NA	NA	NA	MW-62_53
MW-62_53	Q4 2010	013	3.3	-40.3	11/9/2010	12:49	2.03E+02	1.77E-02	3.88E+02	3.31E-02	6.79E-01	5.9E+00	-4.23E+00	4.23E-00	5.53E+00	-2.63E+00	5.26E+00	1.04E+01	NA	NA	NA						
MW-62_53	Q1 201.	016	3.3	-40.3	2/24/2011	12:57	3.03E+02	3.78E-02	4.03E+02	2.93E-01	1.84E-00	2.1E+00	2.63E-01	4.72E-00	7.23E+00	1.8 E+00	5.38E+00	5.91E+00	NA	NA	NA						
MW-62_53	Q2 201.	017	3.3	-40.3	4/13/2011	11:32	1.57E+02	4.36E-02	4.92E+02	1.73E+00	1.79E-00	8.4E+00	5.42E-01	6.78E-00	7.51E+00	-3.01E-01	5.24E+00	6.58E+00	NA	NA	NA						
MW-62_53	Q2-2011 Mid	013	3.3	-40.3	7/20/2011	10:47	1.63E+02	3.96E-02	4.43E+02	-4.03E-01	1.87E-00	5.5E+00	4.34E+00	7.76E-00	9.53E+00	1.66E+00	3.15E+00	1.02E+01	-1.68E+01	1.75E+01	2.03E+01						
MW-62_71	Q3 2010	013	-71.1	-55.2	8/0/2010	12:57	3.23E+02	1.70E-02	2.72E+02	-2.34E-01	3.55E-01	3.11E-01	1.21E+00	2.60E+00	2.70E+00	1.30E+00	1.61E+00	1.61E+00	NA	NA	NA	1.2E+04	ND	ND	ND	NA	MW-62_71
MW-62_71	Q4 2010	013	-71.1	-58.3	11/9/2010	11:02	4.17E+02	1.13E-02	3.82E+02	-6.34E-02	6.32E-01	5.2E+00	-6.51E-01	3.90E-00	3.41E+00	-4.59E+00	5.63E+00	1.09E+01	NA	NA	NA						
MW-62_71	Q1 201.	016	-71.1	-58.3	2/24/2011	12:40	5.33E+02	4.36E-02	4.02E+02	1.21E-01	1.32E-00	4.8E+00	4.10E+00	1.8E-01	6.67E+00	-2.31E-01	5.80E+00	5.47E+00	NA	NA	NA						
MW-62_71	Q2 201.	017	-71.1	-58.3	4/13/2011	11:15	3.52E+02	4.72E-02	4.02E+02	2.02E+00	1.44E-00	5.0E+00	2.33E+00	7.94E-00	9.57E+00	-5.23E+00	2.09E+00	3.56E+00	NA	NA	NA						
MW-62_71	Q2-2011 Mid	013	-71.1	-58.3	7/7/2011	10:12	4.21E+02	4.66E-02	4.00E+02	9.00E-01	1.46E-00	9.0E+00	-7.22 E+00	7.74E-00	1.43E+01	2.93E-01	3.23E+00	6.59E+00	-6.78E+00	1.59E+01	2.13E+01						
MW-62_92	Q3 2010	014	91.6	-78.3	8/0/2010	11:32	3.33E+02	1.56E-02	3.76E+02	-4.31E-01	5.37E-01	5.90E-01	-3.42E+00	6.35E-00	3.38E+00	-4.89E-01	7.09E+00	8.56E+00	NA	NA	NA	-4.7E+03

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TABLE 3
SECOND QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,5]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing	SAMPLE ZONE CENTER Elevation Ft msl	SAMPLE COLLECTION Date	SAMPLE COLLECTION Time	ANALYSIS RESULTS[3] TRITIUM (pCi/L) Result	TRITIUM (pCi/L) Std. Dev.[3]	TRITIUM (pCi/L) MDC	Sr-90 (pCi/L) Result	Sr-90 (pCi/L) Std. Dev.[3]	Sr-90 (pCi/L) MDC	Cs-137 (pCi/L) Result	Cs-137 (pCi/L) Std. Dev.[3]	Cs-137 (pCi/L) MDC	Co-60 (pCi/L) Result	Co-60 (pCi/L) Std. Dev.[3]	Co-60 (pCi/L) MDC	Ni-63 (pCi/L) Result	Ni-63 (pCi/L) Std. Dev.[3]	Ni-63 (pCi/L) MDC	YEARLY ROLLING AVERAGES[4,6] 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[1]
MW-63.34	Q3-2010	014	31.5	-17.3	8/30/2010	11:40	1.63E+03	3.34E-02	7.70E+02	2.20E-01	3.90E-01	3.95E-01	2.66E+00	9.29E-01	1.06E+00	3.31E+00	7.21E+00	1.92E+00	NA	NA	NA	2.76E+02	ND	ND	ND	NA	MW-63.34
MW-63.34	Q4-2010	015	31.5	-17.3	11/2/2010	13:04	3.41E+02	1.35E-02	1.4E+02	3.11E-01	3.72E-01	6.45E-01	1.16E-01	5.66E-01	6.29E+00	-2.3.E+00	5.32E+00	6.51E+00	NA	NA	NA						
MW-63.34	Q1-2011	016	31.5	-17.3	3/2/2011	10:53	2.91E+02	2.16E-02	3.62E+02	-4.29E-01	1.17E-00	2.11E+00	9.41E-02	7.96E-01	1.92E+00	-2.19E+00	8.42E+00	8.59E+00	NA	NA	NA						
MW-63.34	Q1-2011	017	31.5	-17.3	4/19/2011	11:25	3.94E+02	4.00E-02	4.07E+02	-1.13E+00	1.22E-00	2.3E+00	4.36E+00	9.34E-01	9.94E+00	3.77E-00	2.25E+00	1.02E+01	NA	NA	NA						
MW-63.34	Q2-2011 Mid	013	31.5	-17.3	7/21/2011	10:08	3.04E+02	4.38E-02	4.39E+02	2.31E-01	1.7E-00	4.42E+00	-1.34E+00	9.63E-00	5.54E+00	1.66E-01	7.29E+00	8.63E+00	-1.26E+01	1.35E+01	1.47E+01						
MW-63.50	Q3-2010	014	49.5	-37.3	8/30/2010	14:20	2.72E+02	3.55E-02	7.35E+02	-2.47E-02	3.47E-01	8.99E-01	-1.53E+00	7.08E+00	5.83E+00	2.72E-01	7.47E+00	3.99E+00	NA	NA	NA	3.45E+02	ND	ND	ND	NA	MW-63.50
MW-63.50	Q4-2010	015	49.5	-37.3	11/2/2010	13:07	3.42E+02	1.31E-02	1.2E+02	2.27E-01	9.33E-01	1.33E-01	-2.39E+00	7.72E+00	1.44E+00	2.27E+00	8.95E+00	9.78E+00	NA	NA	NA						
MW-63.50	Q1-2011	016	49.5	-37.3	3/2/2011	14:21	4.53E+02	3.80E-02	1.44E+02	1.71E-01	1.62E-00	2.03E+00	1.13E+00	6.10E-00	5.48E+00	3.65E+00	7.02E+00	3.70E+00	NA	NA	NA						
MW-63.50	Q2-2011	017	49.5	-37.3	4/19/2011	11:25	1.63E+02	4.36E-02	4.89E+02	7.71E-01	1.39E-00	5.3E+00	-6.45E+00	9.76E-00	5.29E+00	3.72E+00	8.35E+00	1.03E+01	NA	NA	NA						
MW-63.50	Q2-2011 Mid	013	49.5	-37.3	7/21/2011	10:42	4.07E+02	4.49E-02	4.41E+02	-9.31E-01	8.30E-01	2.9E+00	-2.49E-01	7.00E+00	3.33E+00	-4.71E+01	6.94E+00	1.02E+01	-4.39E+01	1.21E+01	1.69E+01						
MW-63.93	Q3-2010	02	93	-80.7	8/30/2010	15:15	3.03E+03	5.51E-02	7.04E+02	5.01E-01	4.38E-01	5.35E-01	3.24E+00	8.84E+00	7.78E+00	2.46.E+01	7.25E+00	8.84E+00	NA	NA	NA	1.57E+03	ND	ND	ND	NA	MW-63.93
MW-63.93	Q4-2010	016	93	-80.7	11/2/2010	15:08	2.53E+02	1.21E-02	1.1E+02	3.22E-01	3.72E-01	6.42E-01	-4.11E-12	4.95E-00	1.64E+00	3.31E+00	5.10E+00	7.11E+00	NA	NA	NA						
MW-63.93	Q1-2011	017	93	-80.7	3/2/2011	14:14	2.66E+02	3.30E-02	3.94E+02	3.31E-01	1.79E-00	2.17E+00	-1.51E+00	8.75E-00	5.03E+00	3.32E+00	7.45E+00	9.56E+00	NA	NA	NA						
MW-63.93	Q2-2011	018	93	-80.7	4/19/2011	11:27	2.65E+02	4.43E-02	4.50E-02	1.4E-00	4.4E+00	3.3.E+00	8.8.E+00	8.92E-00	1.03E+01	4.35E-01	5.50E+00	7.25E+00	NA	NA	NA						
MW-63.93	Q2-2011 Mid	019	93	-80.7	7/21/2011	11:39	4.17E+02	4.38E-02	4.40E+02	-4.23E-01	1.86E-00	4.5E+00	-3.53E+00	8.0E-00	7.77E+00	-6.1.E+00	7.92E+00	5.51E+00	6.58E-0.	1.71E+01	1.90E+01						
MW-63.93	Q3-2010	021	111.5	-99.2	8/30/2010	14:52	3.71E+02	3.72E-02	7.52E+02	2.05E-01	4.57E-01	4.27E-01	-3.30E+00	7.93E+00	7.00E+00	-1.72E+00	9.72E+00	9.51E+00	4.03E+01	NA	NA						
MW-63.12	Q4-2010	014	111.5	-99.2	11/2/2010	15:05	3.01E+02	1.29E-02	1.2E+02	6.03E-02	3.25E-01	6.21E-01	-2.5E+00	6.29E-00	1.5E+00	1.5E-00	4.7.E+00	7.95E+00	NA	NA	NA						
MW-63.-12	Q1-2011	016	111.5	-99.1	3/2/2011	14:15	3.33E+02	3.18E-02	3.96E+02	1.41E-01	1.60E-00	2.00E+00	-3.71E-11	6.70E-00	7.21E+00	1.15E+00	5.36E+00	7.21E+00	NA	NA	NA						
MW-63.-12	Q2-2011	017	111.5	-99.1	4/19/2011	11:25	4.23E+02	4.53E-02	4.92E+02	-7.16E-01	1.80E-00	4.7E+00	4.9.E+0	1.05E-01	1.25E+01	1.6.E+00	1.7E+01	1.36E+01	NA	NA	NA						
MW-63.-12	Q2-2011 Mid	013	111.5	-99.1	7/21/2011	11:49	6.01E+02	4.34E-02	4.44E+02	2.23E-01	1.5E-00	3.7E+00	-3.4E-11	1.80E-01	1.11E+01	6.0.E+00	1.21E+01	1.24E+01	-1.23E+00	1.77E+01	1.93E+01						
MW-63.-21	Q3-2010	02	21	-108.7	8/30/2010	14:28	3.32E+02	3.10E-02	7.72E+02	3.30E-01	5.93E-01	9.36E-01	-8.43E-01	8.2E+00	8.85E+00	-6.52E-02	2.7E+00	9.58E+00	NA	NA	NA	9.84E+03	ND	ND	ND	NA	MW-63.-21
MW-63.-21	Q4-2010	014	21	-108.7	11/2/2010	11:46	3.23E+02	1.39E-02	1.0E+02	6.31E-01	7.27E-01	1.11E+00	1.17E+00	6.66E-00	7.68E+00	-4.06E+00	7.7E+00	6.83E+00	NA	NA	NA						
MW-63.-21	Q1-2011	016	21	-108.7	3/2/2011	11:11	3.03E+02	3.54E-02	3.94E+02	-9.62E-02	1.53E+00	2.0.E+00	-9.2.E-11	7.2E+00	4.0E+00	1.49E-01	3.98E+00	6.67E+00	NA	NA	NA						
MW-63.-21	Q3-2011	017	21	-108.7	4/19/2011	9:54	5.77E+02	4.34E-02	4.11E+02	-8.8E-01	3.7E+00	1.01E+01	6.92E-00	7.17E+00	1.09E+01	9.6.E+00	6.99E+00	NA	NA	NA						
MW-63.-21	Q2-2011 Mid	013	21	-108.7	7/21/2011	9:35	1.33E+03	5.28E-02	4.45E+02	-3.15E-01	1.36E-00	7.4E+00	1.63E-03	7.14E-00	3.17E+00	-3.19E+00	1.05E+01	1.07E+01	1.11E+03	1.14E+01	2.05E+01						
MW-63.-63	Q3-2010	024	152.5	-150.2	8/30/2010	11:20	4.43E+02	1.74E-02	7.29E+02	-2.40E-01	4.43E-01	9.9E+00	-1.45E+01	8.05E+00	3.37E+00	-2.22E+12	9.2.E+00	9.24E+00	4.95E+01	NA	NA						
MW-63.-63	Q4-2010	015	152.5	-150.2	11/2/2010	11:49	4.43E+02	1.11E-02	1.0E+02	7.71E-01	1.38E-01	2.77E-01	3.9.E+00	9.33E-00	1.10E+01	2.9.E+00	5.2.E+00	7.63E+00	NA	NA	NA						
MW-63.-63	Q1-2011	016	152.5	-150.2	3/2/2011	10:27	6.05E+02	3.76E-02	3.95E+02	1.37E+00	1.99E-00	3.1E+00	3.09E+0.0	5.40E-00	6.65E+00	-2.0.E+0.0	7.7E+00	7.12E+00	NA	NA	NA						
MW-63.-63	Q2-2011	017	152.5	-150.2	4/19/2011	9:40	4.9.E+02	4.54E-02	5.03E+02	1.1.E+00	1.12E-00	2.0.E+00	4.40.E-01	8.94E-00	5.9.E+00	4.7.E+00	1.02E+01	1.26E+01	NA	NA	NA						
MW-63.-63	Q2-2011 Mid	013	152.5	-150.2	7/21/2011	10:00	5.03E+02	4.36E-02	4.26E+02	-6.14E-01	1.11E-00	4.0E+00	-8.4E+11	7.47E-00	1.17E+00	4.07E-01	7.23E+00	5.66E+00	-5.69E+0	1.47E-01	1.67E+01						
MW-63.-74	Q3-2010	034	174	-161.7	8/30/2010	11:41	3.33E+02	1.55E-02	7.71E+02	-3.54E-01	3.45E-01	6.01E-01	-3.32E+00	7.07E-00	4.89E+00	-1.9.E+00	7.23E+00	3.11E+00	NA	NA	NA	3.56E+02	ND	ND	ND	NA	MW-63.-74
MW-63.-74	Q4-2010	013	174	-161.7	11/2/2010	11:50	2.63E+02	1.26E-02	1.3E+02	-1.42E-01	4.59E-01	6.06.E-01	-6.01E-11	6.63E-00	6.82E+00	2.1.E-01	5.42E+00	7.11E+00	NA	NA	NA						
MW-63.-74	Q1-2011	014	174	-161.7	3/2/2011	10:22	4.13E+02	3.30E-02	3.91E+02	2.21E-01	1.80E-00	2.03E+00	3.6.E+0.0	6.92E-00	1.10E+00	2.2.E+00	7.52E+00	9.20E+00	NA	NA	NA						
MW-63.-74	Q2-2011	017	174	-161.7	4/19/2011	9:52	1.55E+02	4.48E-02	5.04E+02	-7.07E-01	9.72E-01	4.8E+00	-6.41E+00	8.12E-00	7.72E+00	-9.83E-11	1.38E+00	9.20E+00	NA	NA	NA						
MW-63.-74	Q2-2011 Mid	013	174	-161.7	7/21/2011	9:5.	4.1.E+02	4.17E-02	4.36E+02	6.93E-01	1.25E-00	2.10E+00	-3.57E+00	8.0E-00	3.27E+00	4.6.E-01	9.36E+00	1.09E+01	-2.53E+00	1.53E+01	1.49E+01						
MW-63.-88	Q3-2010	02	43.5	-30.3	8/30/2010	12:13	3.32E+03	3.28E-02	7.32E+02	-3.23E-01	4.34E-01	1.05E+00	-4.41E+00	8.63E+00	1.09E+01	-1.15E+01	1.28E+01	1.14E+01	4.93E+02	1.24E+01	1.42E+01	ND	ND	ND	ND	ND	MW-63.-88
MW-63.-88	Q4-2010	013	43.5	-30.3	11/2/2010	12:13	3.81E+03	2.01E-02	1.3E+02	-1.09E-01	3.72E-01	6.43E-01	-2.23E+00	9.07E-00	1.08E+01	-1.45E+00	1.27E+01	1.27E+01	1.37E+01	1.54E+01	1.52E+01						
MW-63.-88	Q1-2011	014	43.5	-30.3	3/2/2011	11:30	3.42E+03	3.39E-02	3.98E+02	3.31E-01	1.80E-00	2.10E+00	-3.83E+00	9.43E-00	5.34E+00	-9.97E-01	3.63E+00	5.51E+00	7.4E+02	1.17E+00	1.03E+01						
MW-66.21	Q3-2010	013	4.1	0	8/30/2010	12:33	3.07E+03	3.31E-02	7.43E+02	2.37E+00	3.92E-01	6.41E-01	-3.83E+00	9.43E-00	5.34E+00	-9.97E-01	3.63E+00	5.51E+00	1.39E+02	1.27E+01	1.49E+01						
MW-66.21	Q4-2010	014	4.1	0	11/10/2010	12:13	2.42E+03	1.94E-02	1.4E+02	2.67E-01	1.74E-01	6.4E+00	0.04E-01	2.06E-00	1.44E+01	1.21.E-11	2.91E+00	1.02E+01	2.26E+02	1.52E+01	1.62E+01						
MW-66.21	Q1-2011	016	4.1	0	1/21/2011	14:25	4.77E+03	4.19E-02	4.24E+02	3.41E-11	1.73E-00	3.03E+00	-2.13E-11	1.80E-00	7.53E+00	9.98E-01	6.09E+00	7.23E+00	-1.06E+00	1.54E+01	2.14E+01						
MW-66.21	Q2-2011	017	4.1	0	4/14/2011	13:48	9.53E+01	3.88E-02	4.46E+02	6.73E-11	1.64E-00	3.5E+00	-4.73E+00	8.7.E-00	3.45E+00	6.9.E+00	9.2.E+00	1.25E+01	1.81E+03	1.71E+01	1.72E+01						
MW-66.36	Q3-2010	013	23.6	-19.5	8/30/2010	11:47	3.03E+03	3.36E-02	7.28E+02	-6.48E+00	1.97E-00	3.74E-01	-1.38E+00	8.82E-00	5.41E+00	-6.6.E+00	7.51E+00	1.02E+01	-8.55E+00	1.25E+01	-1.38E+00	3.59E+02	9.98E+00	ND	ND	ND	MW-66.36
MW-66.36	Q4-2010	014	23.6	-19.5	11/2/2010	12:23	3.11E+03	2.56E-02	1.3E+02	7.43E+00	1.63E-00	1.2E+00	5.52E+00	9.27E-00	6.67E+00	4.23E+00	6.43E+00	9.51E+00	4.23E+00	1.64E+01	2.14E+01						
MW-66.36	Q1-2011	015	23.6	-19.5	1/21/2011	15:51	3.01E+03	6.78E-02	4.61E+02	1.53E+01	3.8E-00	2.11E+00	-1.13E+00	6.2E-00	6.49E+00	-8.31E-11	5.50E+00	7.15E+00	-8.89E+00	1.79E+01	2.12E+01						
MW-66.36	Q2-2011	016	23.6	-19.5	4/14/2011	12:53	3.53E+03	3.36E-02	4.79E+02	1.03E+01	2.33E-00	9.5E+00	1.5.E-01	7.34E-00	3.14E+00	5.40.E-01	7.92E+00	9.01E+00	6.18E-0.	1.55E+01	1.79E+01						
MW-67.26	Q3-2010	014	26.2	-25.3	8/30/2010	10:40	2.97E+03	3.33E-02	7.22E+02	3.32E+00	4.61E-00	5.49E-01	-9.97E+00	9.80E-00	1.20E+01	-3.58E+00	5.05E+00	3.77E+00	-2.2.E+00	1.42E+01	1.49E+01	6.5E+02	1.63E+01	ND	ND	ND	MW-67.26
MW-67.39	Q4-2010	013	38.3	-25.3	11/10/2010	11:49	3.55E+03	3.39E-02	3.95E+02	5.43E+00	3.85E-01	1.0E+00	1.04E+0	3.96E-00	1.88E+00	2.8.E+00	4.30E+00	1.04E+01	-1.86E+0	9.17E+00	2.21E+01						
MW-67.39	Q1-2011	016	38.3	-25.3	2/7/2011	13:48	3.85E+03	7.50E-02	4.81E+02	1.57E+00	3.34E-00	8.5E+00	8.00.E-02	6.8E-00	6.83E+00	6.64E-01	5.75E+00	7.57E+00	4.4.E+00	1.57E+01	2.23E+01						
MW-67.39	Q2-2011	017	38.3	-25.3	4/14/2011	13:23	3.73E+03	4.17E+02	1.2.E+01	1.7.E+00	2.11E+00	4.7.E+00	4.7.E+0	1.52E-00	1.04E+01	9.1.E+00	1.14E+01	1.47E+01	6.9.E+0	1.47E+01	1.63E+01						
MW-67.-05	Q3-2010	013	134.8	-99.3	8/30/2010	10:37	3.12E+03	2.01E-02	7.44E+02	2.6.E+00	3.16E-01	6.36E-01	5.46E+00	9.24E-00	5.48E+00	3.57E+00	5.5E+00	7.28E+00	8.5E+00	1.42E+01	1.99E+01	1.2E+02	2.61E+00	ND	ND	ND	MW-67.-05
MW-67.-05	Q4-2010	014	134.8	-99.3	11/10/2010	11:40	1.13E+03	2.24E-02	1.3E+02	1.4.E+00	3.12E-01	6.9E+00	-1.63E+00	3.9E-00	7.64E+00	-3.13E+0.0	4.4E+00	8.26E+00	1.2.E+0	1.56E+01	1.90E+01						
MW-67.-05	Q1-2011	015	134.8	-99.3	2/7/2011	13:37	9.9.E+02	4.03E-02	3.83E+02	3.3.E-11	1.64E-00	9.4E+00	2.48.E+0	6.14E-00	5.67E+00	-1.12E+0.0	4.05E+00	4.81E+00	-4.39E+0	1.96E+01	2.31E+01						
MW-67.-05	Q3-2011	016	134.8	-99.3	4/14/2011	13:48	1.13E+03	4.54E-02	4.17E+02	2.71E-11	1.73E-00	3.11E+00	-3.95E+11	9.6E+00	1.05E+01	1.91.E-11	7.2E+00	7.88E+00	5.71E+00	1.75E+01	1.73E+01						
MW-67.-73	Q3-2010	014	172.3	-139.8	8/30/2010	11:09	6.73E+02	1.73E-02	7.29E+02	2.70E-02	4.94E-01	3.93E-01	-7.70E+11	3.04E-01	1.66E+00	8.64E-01	3.87E+00	1.04E+01	-4.84E+00	1.32E+01	1.34E+01	4.23E+02	ND	ND	ND	ND	MW-67.-73
MW-67.-73	Q4-2010	015	172.3	-139.8	11/10/2010	12:04	8.63E+02	2.11E-02	1.2.E+02	-2.95E-01	8.55E-01	1.86E+00	4.02E-11	7.03E-00	1.14E+01	-1.1.E+00	4.23E+00	1.01E+01	-1.03E+00	1.91E+01	2.11E+01						
MW-67.-73	Q1-2011	016	172.3	-139.8	2/7/2011	14:13	4.17E+02	4.0E+02	1.67E+02	2.8.E-01	1.68E-00	3.12E+00	4.75.E-11	1.88E-00	5.83E+00	2.5.E+00	5.5E+00	7.05E+00	1.09E+0	1.81E+01	2.13E+01						
MW-67.-73	Q2-2011	017	172.3	-139.8	4/14/2011	14:09	5.72E+02	4.20E-02	4.10E+02	-2.5E-01	1.69E-00	3.9E+00	5.04E+0.0	9.64E-00	1.17E+01	-9.27E+0.0	1.03E+01	6.83E+00	7.5E+0	1.23E+01	1.34E+01						
MW-67.219	Q3-2010	013	218.8	-206.3	8/30/2010	12:33	1.41E+03	2.33E-02	7.25E+02	-9.99E-02	5.52E-01	8.4E-01	-7.55E+11	8.4E-00	5.41E+00	-8.81E+0.0	8.6E+00	3.33E+00	2.3.E+0	1.21E+01	1.39E+01	9.9E+02	ND	ND	ND	NE	MW-67.219
MW-67.219	Q4-2010	014	218.8	-206.3	11/10/2010	11:43	1.13E+03	3.76E-02	1.3E+02	2.51E-01	7.22E-01	7.0E+00	2.23E-01	3.80E-00	5.6E+00	2.9E-01	3.42E+00	4.4.E+00	1.95E+00								
MW-67.219	Q1-2011	015	218.8	-206.3	1/21/2011	14:48	6.41E+02	4.18E-02	4.20E+02	-1.03E+00	1.42E-00	3.9E+00	9.73E-01	5.80E-00	6.44E+00	2.4.E+00	5.46E+00	6.55E+00	-4.53E+0	1.51E+01	2.14E+01						
MW-67.219	Q2-2011	016	218.8	-206.3	4/14/2011	10:49	1.07E+03	4.78E-02	4.12E+02	-7.7E-01	9.50E-01	5.5E+00	-2.7.E+00	6.62E-00	6.47E+00	4.1.E+00	9.7E+00	1.20E+01	2.9.E+0	1.43E+01	1.62E+01						
MW-67.276	Q3-2010	013	275.3	-262.8	8/30/2010	12:52	1.31E+03	2.22E-02	7.40E+02	-4.40E-01	4.50E-01	8.99E-01	8.54E+00	9.27E-00	2.27E+00	2.5.E+00	4.2.E+00	1.42E+01	-2.38E+00	1.42E+01	1.42E+01	4.7E+02	ND	ND	ND	NE	MW-67.276
MW-67.276	Q4-2010	014	275.3	-262.8	11/10/2010	14:15	1.01E+03	2.18E-02	1.9E+02	3.96E+00	7.55E-01	7.7E+00	1.94E+0	4.36E-00	5.92E+00	-5.41E+0.0	4.42E+00	7.40E+00	5.4E+0	1.35E+01	1.89E+01						
MW-67.276	Q1-2011	015	275.3	-262.8	1/21/2011	14:21	8.73E+02	4.18E-02	4.18E+02	-2.7E-02	1.66E-00	3.03E+00	-2.5.E+00	8.7E-00	3.16E+00	6.4E-01	5.45E+00	7.20E+00	-7.11E-0	1.52E+01	2.22E+01						
MW-67.276	Q2-2011	016	275.3	-262.8	4/14/2011	10:33	1.03E+03	4.19E+02	1.2.E+01	3.4.E+00	1.28E-00	4.2.E+00	-3.2.E+00	1.03E-00	4.15E+00	1.1.E+00	1.02E+01	1.12E+01	1.02E+0	1.42E+01	1.42E+01						
MW-67.325	Q3-2010	013	322.3	-309.8	8/30/2010	15:23	4.32E+02	1.43E-02	7.28E+02	-6.83E-01	6.52E-01	9.35E-01	2.47.E+00	8.65E-00	3.02E+00	2.2.E+00	8.2.E+00	1.25E+01	-4.5.E+0	1.63E+01	1.63E+01	4.2E+02	ND	ND	ND	ND	MW-67.325
MW-67.323	Q4-2010	014	322.3	-309.8	11/10/2010	14:03	3.83E+02	1.39E-02	1.9E+02	1.91E-11	3.21E-01	2.01E+00	2.70E+0	4.61E-00	1.06E+01	3.1.E-01	5.07E+00	1.12E+01	-3.23E+0	1.75E+01	1.78E+01						
MW-67.323	Q1-2011	015	322.3	-309.8	1/21/2011	13:04	3.53E+02	4.19E-02	4.19E+02	4.23E-11	1.71E-00	2.0E+00	4.4.E-11	3.70E-00	6.53E+00	8.12E-01	3.93E+00	6.53E+00	-3.2.E+0	1.91E+01	1.42E+01						
MW-67.323	Q2-2011	016	322.3	-309.8	4/14/2011	11:51	4.43E+02	4.36E-02	4.13E+02	1.03E+00	1.70E-00	4.2E+00	2.07E+0	8.56E-00	6.67E+00	1.13E+0.0	7.77E+00	1.22E+01	2.2.E+0	1.51E+01	1.51E+01						
MW-67.340	Q3-2010	013	339.8	-327.3	8/30/2010	15:23	4.32E+02	1.55E-02	7.25E+02	-8.81E-02	5.00E-01	8.29E-01	5.20E+00	7.34E-00	3.77E+00	2.45E+00	8.88E+00	7.06E+00	2.6E+0	1.45E+01	1.67E+01	3.8E+02	ND	ND	ND	ND	MW-67.340
MW-67.340	Q4-2010	014	339.8	-327.3	11/10/2010	13:53	5.31E+02	1.77E-02	1.9.E+02	-8.52E-01	3.30E-01	6.4E+00	1.73E+0	4.30E-00	1.03E+01	-2.97E+0.0	3.90E+00	7.23E+00	2.2E+0	1.33E+01	1.97E+01						
MW-67.340	Q1-2011	015	339.8	-327.3	1/21/2011	14:53	2.75E+02	3.52E-02	3.82E+02	7.6.E-01	1.51E-00	9.9E+00	4.30.E-11	6.34E-00	7.02E+00	1.15E+0.0	5.74E+00	6.88E+00	5.79E+0	1.12E+01	2.20E+01						
MW-67.340	Q2-2011	016	339.8	-327.3	4/14/2011	11:17	6.55E+02	4.32E-02	4.13E+02	2.62.E-11	1.6E-00	4.0E+00	5.89E+0	9.82E-00	1.12E+01	4.5.E+00	9.02E+00	1.15E+01	7.5E+0	1.47E+01	1.71E+01						
MW-107	Q3-2010	020	92.7	-110.1	9/30/2010	9:30	3.13E+02	1.76E-02	1.93E+02	-3.29E-11	3.39E-00	1.40E+00	-3.55E+00	1.10E+01	1.63E+01	2.93E+00	9.22E+00	8.65E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-107
MW-107	Q4-2010	021	92.7	-110.1	12/9/2010	15:01	2.21E+02	2.20E-02	1.93E+02	-9.21E-02	3.20E-01	6.5E+00	-2.30.E+0	6.64E-00	1.37E+01	-2.3.E+00	4.14E+00	7.14E+00	5.2E+0	1.29E+01	2.0E+01	ND	ND	ND	ND	NA	MW-107
MW-109	Q2-2011 Mid	80	93	-80.7	7/21/2011	15:05	2.42E+03	4.36E-02	4.37E+02	-2.61E-11	1.35E-00	4.45E+00	2.33E-11	8.47E-00	1.62E+01	5.2.E+00	5.7.E+00	6.65E+00	4.2E+0	1.45E+01	1.82E+01	4.2E+03	ND	ND	ND	NA	MW-109
MW-111	Q3-2010	033	6.5	2.4	8/30/2010	14:58	3.83E+04	1.43E-03	7.38E+02	-6.48E-11	3.37E-01	3.35E-01	-5.83E-11	6.60E-00	2.58E+00	1.81E+00	3.7E+00	6.83E+00	4.28E+04	1.88E+00	ND	ND	ND	ND	NA	MW-111
MW-111	Q4-2010	034	6.5	2.4	9/10/2010	14:09	4.63E+04	1.37E-03	4.0E+02	1.08E+00	1.80E-00	3.0E7+00	-5.04E+00	6.24E-00	6.98E+00	-2.62E-11	2.84E+00	7.62E+00	NA	NA	NA						
MW-111	Q1-2011	035	6.5	2.4	11/2/2010	14:55	5.27E+04	1.4E-03	4.0E+02	2.90E+00	1.60E-00	2.60E+00	-1.99E-11	5.63E-00	6.2E+00	5.4.E+00	7.7E+00	7.77E+00	NA	NA	NA						
U3-3	Q2-2011 Mid	034	6.5	2.4	7/13/2011	12:25	6.73E+02	5.01E-02	1.21E+02	-3.09E-01	3.13E-01	1.9E+00	-1.46E-11	6.66E-00	3.84E+00	-3.5.E+0.0	3.61E+00	3.02E+00	NA	NA	NA	6.73E+03

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TABLE 3
SECOND QUARTER 2011 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[4]	SAMPLE COLLECTION		ANALYSIS RESULTS[5]														YEARLY ROLLING AVERAGES[6c]					Well ID[1]
							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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Average	Average	Average	Average	Average	
U1-MCD	Q3-2010	008			7/15/2010	9:10	1.33E+03	1.03E-02	2.58E+02	5.03E+00	1.13E-00	2.39E-01	1.14E+00	1.10E-03	1.40E+00	7.5.E-01	3.32E+00	6.05E+00	2.0CE+03	3.50E+03	4.8E+03	4.47E+01	1.17E+04	N.D.	2.61E+02	U1-MCD
U1-MCD	Q4-2010	009			10/20/2010	13:40	3.34E+03	3.33E-02	2.7E+02	3.82E+01	2.31E-00	6.39E-01	1.28E+04	1.47E-03	5.98E+00	-1.1.E+0	4.26E+00	5.42E+00	2.31E+02	3.19E+01	2.23E+01					
U1-SPENT	Q3-2010	009			7/9/2010	8:30	5.44E+02	1.20E-02	2.42E+02	1.32E+00	2.10E-00	8.02E-01	2.09E+02	1.20E-04	5.48E+00	1.36E+00	7.61E+00	1.94E+00	5.41E+03	2.2E+04	2.55E+03	1.63E+02	1.43E+01	1.48E+01	N.D.	N.D.	Q1-SPENT
U1-SPFC	Q4-2010	010			10/20/2010	8:45	4.82E+02	1.52E-02	2.02E+02	1.17E+01	1.12E-00	1.74E-01	7.99E+00	7.4E-00	7.72E+00	-0.31E-01	5.24E+00	5.67E+00	9.7.E-0	1.01E+01	2.12E+01					
L-2	Q3-2010	001			8/0/2010	14:29	6.01E+03	1.33E-02	2.73E+02	2.20E-01	3.72E-01	3.22E-01	3.04E+00	7.30E-00	3.03E+00	9.34E-01	6.64E+00	7.19E+00	NA	NA	NA	ND	ND	ND	ND	NA	L-2
L-2	Q4-2010	001			11/17/2010	14:25	1.74E+02	1.71E-02	2.72E+02	2.23E-01	6.25E-01	5.0E+00	-4.51E-01	5.84E-00	1.10E+01	3.3.E+00	5.94E+00	1.40E+01	NA	NA	NA						
MH-1 WCFD[8]	Q3-2010	004			8/0/2010	14:40	9.24e+04	2.69E+02	2.72E+02	3.30E-01	2.91E-01	9.84E-01	7.26E-01	2.24E+00	2.56E+00	-2.28E+00	2.52E+00	2.71E+00	NA	NA	NA	4.5E+02	NB	NB	N.D.	NA	MH-1 WCFD[8]
MH-1 WCFD	Q2-2010	01-			5/0/2010	12:53	2.95E+03	5.48E-02	2.6E+05	1.25E-01	2.21E-01	2.81E-01	1.58E+00	6.18E-00	6.48E+00	8.00E-01	5.11E+00	7.50E+00	NA	NA	NA						
MH-1 WCFD	Q3-2010 Mid	013			9/0/2010	15:50	8.83E+02	1.39E-02	2.5E+05	3.61E-01	6.35E-01	7.11E-01	7.2.E-01	6.45E-00	7.44E+00	1.2.E+00	5.71E+00	6.85E+00	NA	NA	NA						
MH-1 WCFD	Q4-2010	013			11/04/2010	11:13	4.63E+02	1.16E-02	4.7E+05	1.31E-01	2.77E-01	3.85E-01	1.7.E+00	3.45E+00	4.02E+00	5.4E-01	3.79E+00	4.28E+00	NA	NA	NA						
MH-1 WCFD	Q1-2011	014			2/0/2011	9:47	5.17E+03	6.51E-02	3.6E+05	1.59E+00	1.99E-00	9.4E+00	3.45E-01	5.64E-00	< 1.9E+00	-1.2.E+0	5.0E+00	6.45E+00	NA	NA	NA						
MH-1 WCFD	Q2-201.	013			4/22/2011	13:37	1.25E+04	1.10E-03	4.4E+05	3.17E-01	1.35E+00	2.08E+00	-3.21E+00	8.36E-00	5.43E+00	-1.68E+0	9.06E+00	9.51E+00	NA	NA	NA						
MH-1 WCFD	Q2-2011 Mid	013			7/7/2011	14:22	2.97E+03	7.32E-02	1.83E+05	-3.15E-01	8.34E-01	1.1E+00	9.24E-01	7.95E-00	8.84E+00	5.1.E-01	8.49E+00	9.13E+00	NA	NA	NA						
MH-1 WCFD	Q2-2011 Mid	019			7/12/2011	12:48	9.25E+03	1.23E-03	1.81E+05	9.13E-01	1.83E-00	0.0E+00	-1.17E+01	1.13E-01	1.32E+01	-1.19E+0	9.79E+00	1.06E+01	NA	NA	NA						
MH-1 WCFD	Q2-2011 Mid	020			7/10/2011	10:48	2.82E+03	7.32E-02	3.53E+05	-4.72E-01	1.81E-00	4.7E+00	1.79E+00	6.10E-00	5.26E+00	-2.6.E+0	3.74E+00	8.34E+00	NA	NA	NA						
MH-1 WCFD	Q2-2011 Mid	02-			7/26/2011	12:51	1.85E+03	6.30E-02	3.33E+05	-7.10E-01	9.45E-01	4.5E+00	2.8.E+00	7.47E-00	5.99E+00	-8.31E-1	9.66E+00	1.03E+01	NA	NA	NA						
LAR-01C	Q3-2010	014		223	10/26/2010	12:40	1.91E+04	2.24E+02	2.15E+05	1.29E-01	4.24E-01	0.0E+00	-6.21E+00	2.24E+00	1.43E+01	-1.69E+0	3.33E+00	6.32E+00	3.5E+04	1.7E+05	2.2E+04	ND	ND	ND	N.D.	ND	LAR-01C
LAR-02	Q3-201	01		-223	9/2/2011	12:51	6.63E+03	3.34E-02	1.43E+05	1.15E+00	1.35E-00	6.6E+00	-5.81E-11	7.75E-00	5.57E+00	-6.45E-11	7.74E+00	7.65E+00	3.42E-01	1.09E+01	1.85E+01						
B-1	Q3-2010	009			8/17/2010	10:41	3.43E+04	6.49E-02	2.7E+05	1.2E-01	8.43E-01	7.9E-01	2.27E+00	1.06E-03	7.87E+00	2.9.E+00	5.80E+00	7.45E+00	NA	NA	NA	1.7E+03	ND	2.09E+01	N.D.	NA	B-1
B-1	Q4-2010	010			11/17/2010	11:13	2.37E+03	2.72E-02	1.86E+05	6.87E-01	7.38E-01	7.2E+00	1.87E+01	6.46E-00	7.93E+00	8.39E-01	4.22E+00	9.74E+00	NA	NA	NA						
B-1	Q1-201.	01-			2/14/2011	13:44	3.82E+03	3.38E-02	1.91E+05	3.41E-02	1.70E-00	2.1.E+00	2.1.E+01	1.12E-01	< 7.3E+00	-1.8.E+0	2.00E+00	7.23E+00	NA	NA	NA						
B-1	Q2-201	013			4/25/2011	10:53	8.13E+03	9.22E-02	4.53E+05	-6.51E-03	1.74E-00	2.09E+00	2.03E+01	1.33E-01	1.03E+01	3.15E+00	9.06E+00	1.11E+01	NA	NA	NA						
B-6	Q3-2010	009			8/0/2010	15:45	1.49E+02	3.32E-02	2.76E+05	3.12E-01	3.92E-01	9.78E-01	2.32E+00	6.57E-00	3.03E+00	-9.21E-Q	2.53E+00	9.57E+00	NA	NA	NA	3.0E+05	ND	ND	N.D.	NA	B-6
B-6	Q4-2010	010			11/3/2010	11:45	1.03E+02	1.33E-02	4.3E+05	1.41E-01	6.50E-01	7.68E-01	0.00E+00	5.84E-00	6.20E+00	-3.21E-1	4.70E+00	5.29E+00	NA	NA	NA						
B-6	Q1-201.	01-			2/15/2011	11:27	8.29E+02	3.30E-02	3.6E+05	6.21E-01	1.78E-00	2.0.E+00	4.43E+00	5.92E-00	5.02E+00	-1.3.E+0	2.10E+00	6.88E+00	NA	NA	NA						
B-6	Q2-201.	013			4/25/2011	9:48	2.63E+03	6.18E-02	4.53E+05	-6.69E-01	1.83E-00	2.09E+00	-1.31E-11	8.36E-00	5.08E+00	47.E+00	1.06E+01	1.35E+01	NA	NA	NA						
B-6	Q2-2011 Mid	013			7/1/2011	11:05	5.32E+02	3.54E-02	3.82E+05	1.32E+00	1.56E-00	6.3E+00	6.09E+00	1.38E-01	3.04E+00	-2.6.E+0	3.97E+00	8.84E+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 wells or s

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 average of all valid samples (including mid-quarter and confirmatory samples) collected from each monitoring location from the third quarter of 2010 (Q3-2010) to the second quarter of 2011 (Q2-2011) including the post Q2-2011 samples
Monitoring locations are sampled quarterly, bi-annually, or annually and additional samples are collected when necessary. Therefore, some rolling periods 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 analyses (i.e. cases in which reanalyses did not call into the validity of the original sample result, the replacement results were used to calculate the average. If analytical results called into question during the reanalysis, and the reanalysis did not call into question the validity of the original sample result (i.e. a particular radionuclide
the original sample result was initially found to be unusable and/or the reanalysis result was used. For cases in which a reanalysis was not conducted, if the original sample was considered valid (i.e. the result of the aliquot confirmed the original result, based on 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 These locations are storm drains or foundation drains

8 Mid-quarter samples were collected and analyzed to evaluate the potential effect of certain operations on groundwater quality

9 Column designated as "Std. Dev." provides the associated 1 sigma uncertainty values

* The Q1 2011 MW-60-10C, MW-4(-12", and MW-51-189C+, 27 results were verified by re-analysis. However, based on the available chemistry and Site hydrogeologic data, these values do not appear to be representative of the groundwater conditions at these sampling intervals.

** The Q2 2011 MW-41-46 preliminary Sr-90 result was 2.83 pCi/L and exceeded the IL. However, after re-analysis, the sample was below the detection limit, which suggests the preliminary result was likely a false positive. A shift in the MDC for the preliminary result could have possibly resulted from contaminated laboratory equipment, modified count time, or changes in sample preparation.

IPEC00267130

TABLE 3
THIRD QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,3]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing[4]	SAMPLE ZONE CENTER Elevation Ft msl[4]	SAMPLE COLLECTION		ANALYSIS RESULTS[5]															YEARLT ROLLING AVERAGES[5,6]					
							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)	Well ID[1]
					Date	Time	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Average	Average	Average	Average	Average	
MW-30-68	Q4-2010	068	64.5	6.2	11/05/2010	11:55	4.55E+03	1.58E+03	2.34E+02	9.60E-01	9.70E-01	1.64E+00	3.26E+00	5.96E+00	9.79E+00	-1.01E+00	5.58E+00	9.27E+00	NA	NA	NA						
MW-30-69	Q1-2011	037	69.3	6.4	2/5/2011	12:17	1.01E+03	2.13E-03	2.98E+02	1.62E+00	1.93E+00	2.00E+00	1.82E+00	5.00E+00	6.74E+00	-1.11E-01	5.53E+00	6.64E+00	NA	NA	NA						
MW-30-69	Q1-2011 Mid	038	69.3	6.4	3/01/2011	11:38	1.03E+03	3.83E-03	4.72E+02	-6.11E-01	1.63E+00	1.15E+00	2.48E+00	7.76E+00	9.14E+00	-1.4 E+01	6.10E+00	6.46E+00	NA	NA	NA						
MW-30-69	Q2-2011	039	69.3	6.4	5/2/2011	12:03	1.13E+03	3.45E-03	3.99E+02	2.40E+00	1.37E+00	1.23E+00	2.40E+00	8.92E+00	1.03E+01	3.21E+00	9.15E+00	1.16E+01	NA	NA	NA						
MW-30-69	Q2-2011 Mid	040	69.3	6.4	7/11/2011	12:05	1.19E+03	4.23E-03	2.83E+02	-6.14E-02	7.72E-01	1.00E+00	3.35E+00	1.07E+01	1.24E+01	2.42E+00	1.19E+01	1.40E+01	NA	NA	NA						
MW-30-69	Q3-2011	041	69.3	6.4	8/5/2011	10:49	1.14E+03	3.45E-03	4.22E+02	1.02E+00	1.76E+00	1.92E+00	2.63E-01	1.03E+01	1.15E+01	2.42E+00	8.78E+00	9.50E+00	NA	NA	NA						
MW-30-69	Q4-2010	027	69.3	6.3	10/5/2010	12:35	1.01E+03	4.30E-02	1.07E+02	1.53E-01	7.56E-01	3.79E+00	3.39E+00	4.32E+00	6.26E+00	4.64E+00	4.62E+00	8.20E+00	ND	ND	NA						
MW-30-84	Q1-2011	028	83.8	-8.1	2/6/2011	12:57	9.20E+03	8.36E-02	7.79E+02	1.12E+00	1.52E+00	1.98E+00	5.89E-01	4.74E+00	5.22E+00	1.05E+00	5.56E+00	6.49E+00	NA	NA	NA						
MW-30-84	Q1-2011 Mid	029	83.8	-8.1	3/01/2011	12:03	9.06E+03	1.30E-03	4.74E+02	-4.72E-01	1.66E+00	2.13E+00	5.00E-01	1.22E+01	1.21E+01	-3.04E+00	9.46E+00	9.12E+00	NA	NA	NA						
MW-30-84	Q2-2011	030	83.8	-8.1	5/2/2011	12:23	7.77E+03	9.36E-02	2.92E+02	1.64E-01	1.42E+00	1.40E+00	3.06E+00	8.84E+00	9.53E+00	4.61E-01	7.14E+00	7.76E+00	NA	NA	NA						
MW-30-84	Q2-2011 Mid	031	83.8	-8.1	7/11/2011	12:45	7.51E+03	1.83E-03	2.82E+02	-3.75E-01	9.75E-01	1.29E+00	2.17E-01	7.09E+00	8.89E+00	1.35E+00	1.16E+01	1.59E+01	NA	NA	NA						
MW-30-84	Q3-2011	032	83.8	-8.1	8/5/2011	11:13	7.06E+03	7.35E-02	5.41E+02	-1.21E+00	1.28E+00	1.92E+00	-1.67E+00	7.08E+00	7.43E+00	-3.23E+00	9.23E+00	9.65E+00	NA	NA	NA						
MW-31-49	Q4-2010	026	48.8	16.8	11/04/2010	11:55	2.40E+04	2.41E+02	1.15E+03	-2.04E+00	4.49E+00	5.91E+00	4.62E+00	6.51E+00	9.97E+00	-4.62E+00	8.51E+00	1.66E+01	NA	NA	NA	9.90E+03	ND	ND	ND	ND	MW-31-49
MW-31-49	Q1-2011	009	48.8	16.8	2/6/2011	13:13	1.09E+04	3.40E-02	1.98E+02	-5.51E-01	1.76E+00	1.14E+00	1.76E+00	5.72E+00	6.02E+00	4.84E-01	5.56E+00	5.91E+00	NA	NA	NA						
MW-31-49	Q1-2011 Mid	030	48.8	16.8	3/03/2011	12:33	4.3 E+03	7.34E-02	4.65E+02	1.77E+00	2.04E+00	2.16E+00	-2.34E+00	7.00E+00	8.17E+00	-5.31E-01	9.18E+00	1.00E+01	NA	NA	NA						
MW-31-49	Q2-2011	031	48.8	16.8	4/13/2011	12:31	1.16E+03	2.83E-02	4.66E+02	4.91E-01	1.31E+00	1.09E+00	-1.52E+00	5.12E+00	5.42E+00	6.11E+00	8.08E+00	1.13E+01	NA	NA	NA						
MW-31-49	Q3-2011	033	48.8	16.8	8/5/2011	10:47	4.91E+03	7.30E-02	4.16E+02	2.63E-02	1.34E+00	1.58E+00	6.38E+00	2.76E+00	1.10E+01	5.30E-01	1.16E+01	1.16E+01	NA	NA	NA						
MW-31-49	Q4-2010	068	48.9	2.3	11/03/2010	12:32	2.91E+04	9.92E-02	1.14E+02	2.31E-01	6.90E-01	7.63E-01	-2.24E+00	9.45E+00	1.02E+01	3.64E+00	8.40E+00	1.87E+01	NA	NA	NA	0.4E+00	ND	ND	ND	ND	MW-31-49
MW-31-63	Q1-2011	029	63.3	2.3	2/5/2011	13:14	2.43E+04	1.10E-03	2.98E+02	4.23E-01	1.75E+00	2.03E+00	-1.42E+00	6.46E+00	6.81E+00	-2.23 E+00	6.23E+00	6.26E+00	NA	NA	NA						
MW-31-63	Q1-2011 Mid	030	63.3	2.3	3/03/2011	13:13	1.83E+04	1.14E-03	2.53E+02	1.49E+00	1.77E+00	2.02E+00	8.79E-01	9.80E+00	1.07E+01	1.91E-01	7.26E+00	7.92E+00	NA	NA	NA						
MW-31-63	Q2-2011	031	63.3	2.3	4/13/2011	13:21	1.8 E+04	1.45E-03	4.67E+02	7.23E-01	1.54E+00	1.08E+00	-3.13E-01	7.92E+00	8.46E+00	1.76E+00	8.74E+00	1.03E+01	NA	NA	NA						
MW-31-63	Q3-2011	033	63.3	2.3	8/5/2011	11:29	1.63E+04	1.31E-03	4.18E+02	-1.30E-01	1.71E+00	2.02E+00	-2.83E-01	9.27E+00	1.12E+01	2.12E+00	9.24E+00	1.03E+01	NA	NA	NA						
MW-31-63	Q4-2010	027	63.3	2.3	11/03/2010	12:00	2.60E+04	1.14E-02	1.14E+02	2.41E-01	4.12E-01	7.47E-01	-1.52E+00	5.38E+00	6.02E+00	-3.62E-01	6.43E+00	1.15E+01	ND	ND	ND	2.6E+00	ND	ND	ND	ND	MW-31-63
MW-31-85	Q1-2011	029	84.8	-9.2	2/6/2011	13:03	4.81E+03	6.34E-02	7.82E+02	3.23E-01	1.79E+00	2.18E+00	3.16E+00	5.96E+00	7.08E+00	3.14E+00	6.16E+00	7.39E+00	NA	NA	NA						
MW-31-85	Q1-2011 Mid	030	84.8	-9.2	3/03/2011	12:35	7.73E+02	4.56E-02	4.52E+02	9.37E-01	1.31E+00	2.00E+00	5.9 E+00	1.31E+01	1.10E+01	6.42E+00	8.18E+00	1.17E+01	NA	NA	NA						
MW-31-85	Q2-2011	031	84.8	-9.2	4/13/2011	13:15	3.03E+03	6.66E-02	4.68E+02	-1.01E+00	1.48E+00	2.09E+00	-4.30E+00	9.24E+00	9.19E+00	3.54E+00	1.11E+01	1.22E+01	NA	NA	NA						
MW-31-85	Q3-2011	033	84.8	-9.2	8/5/2011	11:27	4.81E+03	7.74E-02	4.72E+02	1.32E-01	1.40E+00	1.63E+00	-8.77E-01	8.35E+00	8.80E+00	-4.79E+00	9.77E+00	8.27E+00	NA	NA	NA						
MW-32-39	Q4-2010	022	53.8	8.3	11/03/2010	12:05	1.52E+04	5.95E-02	1.16E+02	2.03E-01	6.15E-01	9.34E-01	6.65E+00	7.76E+00	1.03E+01	1.15E+00	9.31E+00	1.95E+01	NA	NA	NA	1.5E+04	ND	ND	ND	ND	MW-32-39
MW-32-39	Q1-2011	023	53.8	8.3	2/10/2011	11:43	1.42E+04	2.98E-02	2.11E+02	1.42E+00	1.89E+00	1.32E+00	5.24E-01	5.24E+00	6.03E+00	2.41E+00	7.10E+00	7.52E+00	NA	NA	NA						
MW-32-39	Q1-2011 Mid	024	53.8	8.3	3/01/2011	12:45	9.97E+03	1.90E-03	4.07E+02	2.21E+00	1.58E+00	1.51E+00	8.24E-01	8.92E+00	9.96E+00	1.09E+00	1.07E+01	1.11E+01	NA	NA	NA						
MW-32-59	Q2-2011	025	53.8	8.3	4/27/2011	12:25	9.3 E+03	6.56E-02	4.08E+02	4.03E-01	1.30E+00	1.74E+00	4.75E+00	8.44E+00	1.04E+01	-3.37E+00	9.78E+00	9.50E+00	NA	NA	NA						
MW-32-59	Q3-2011	027	53.8	8.3	8/7/2011	12:37	2.06E+04	1.47E-03	4.65E+02	1.54E+00	1.65E+00	1.71E+00	-3.77E+00	9.24E+00	1.04E+01	5.79E+00	1.02E+01	1.03E+01	NA	NA	NA						
MW-32-39	Q4-2010	025	53.8	15.2	11/03/2010	12:40	1.49E+04	6.45E-02	1.16E+02	2.53E-01	4.50E-01	2.30E-01	3.30E+00	9.46E+00	1.15E+01	3.13E+00	8.71E+00	2.45E+00	ND	ND	NA	3.0E+04	ND	ND	ND	ND	MW-32-39
MW-32-85	Q1-2011	026	33.3	15.3	3/01/2011	12:05	1.34E+04	1.41E-03	1.62E+02	3.31E-01	1.41E+00	1.63E+00	7.79E-01	9.26E+00	9.36E+00	4.73E+00	9.72E+00	1.24E+01	NA	NA	NA						
MW-32-85	Q1-2011 Mid	027	33.3	15.3	3/01/2011	13:13	1.31E+04	1.77E-03	2.07E+02	-1.62E-01	1.30E+00	1.56E+00	-6.55E-01	7.26E+00	7.61E+00	3.81E+00	8.18E+00	1.02E+01	NA	NA	NA						
MW-32-85	Q2-2011	028	33.3	15.3	4/27/2011	13:04	1.14E+04	1.10E-03	2.10E+02	1.52E+00	1.67E+00	1.77E+00	-1.22E+00	6.00E+00	7.31E+00	5.30E-01	7.03E+00	1.12E+01	NA	NA	NA						
MW-32-85	Q3-2011	030	33.3	15.3	8/7/2011	13:35	1.14E+04	1.12E-03	4.20E+02	1.14E-01	1.64E+00	1.92E+00	5.4 E+00	6.77E+00	8.79E+00	-1.2 E+00	6.09E+00	6.57E+00	NA	NA	NA						
MW-32-149	Q4-2010	022	149.3	72.2	11/03/2010	16:00	1.53E+03	2.38E-02	1.12E+02	-8.03E-02	5.12E-01	9.09E-01	-1.00E+01	7.68E+00	1.15E+01	-3.30E+00	5.71E+00	9.94E+00	ND	ND	NA	1.7E+03	ND	ND	ND	ND	MW-32-149
MW-32-149	Q1-2011	023	149.3	72.2	3/10/2011	13:37	1.06E+03	4.8 E-02	2.66E+02	-7.01E-01	1.60E+00	1.12E+00	9.2 E-01	7.42E+00	7.30E+00	2.05E+00	6.00E+00	7.93E+00	NA	NA	NA						
MW-32-149	Q1-2011 Mid	024	149.3	72.2	3/01/2011	11:33	8.99E+02	5.34E-02	7.09E+02	-2.01E-01	1.08E+00	1.49E+00	2.52E+00	9.30E+00	1.09E+01	2.31E+00	9.52E+00	1.18E+01	NA	NA	NA						
MW-32-149	Q2-2011	025	149.3	72.2	4/27/2011	11:12	8.69E+02	4.44E-02	4.11E+02	3.01E-01	1.42E+00	1.67E+00	2.1 E+00	7.44E+00	8.59E+00	9.83E-01	7.76E+00	8.83E+00	NA	NA	NA						
MW-32-149	Q3-2011	027	149.3	72.2	8/7/2011	11:12	9.86E+02	4.21E-02	4.03E+02	2.31E+00	1.91E+00	1.96E+00	-9.94E-01	6.39E+00	8.39E+00	2.72E+00	9.04E+00	9.23E+00	NA	NA	NA						
MW-32-149	Q4-2010	026	149.3	-95.7	11/03/2010	15:53	3.40E+03	2.16E-02	1.14E+02	-1.55E-02	4.18E-01	5.59E-01	9.85E+00	7.56E+00	1.07E+01	-5.42E+00	9.39E+00	9.93E+00	ND	ND	NA	3.9E+03	ND	ND	ND	ND	MW-32-149
MW-32-173	Q1-2011	021	172.8	-95.7	3/1/2011	13:13	9.01E+02	4.12E-02	6.61E+02	-4.04E-01	1.2E+00	1.45E+00	5.9 E+00	6.86E+00	7.73E+00	-2.04E+00	7.56E+00	7.55E+00	NA	NA	NA						
MW-32-173	Q1-2011 Mid	022	172.8	-95.7	3/01/2011	11:43	8.4 E+02	5.42E-02	7.04E+02	2.49E-01	1.77E+00	1.34E+00	6.34E+00	1.48E+01	1.26E+01	4.11E+00	8.23E+00	9.95E+00	NA	NA	NA						
MW-32-173	Q2-2011	024	172.8	-95.7	4/27/2011	11:47	5.80E+02	4.56E-02	4.08E+02	6.07E-01	1.54E+00	1.71E+00	8.05E+00	1.06E+01	1.23E+01	2.47E-01	9.58E+00	1.07E+01	NA	NA	NA						
MW-32-173	Q3-2011	025	172.8	-95.7	8/7/2011	11:11	5.69E+02	4.17E-02	4.12E+02	6.24E-01	1.48E+00	1.66E+00	-9.53E-01	6.26E+00	6.56E+00	-1.5 E+00	1.10E+01	1.14E+01	NA	NA	NA						
MW-32-190	Q4-2010	024	190.3	-13.7	11/03/2010	16:00	1.30E+03	3.38E-02	1.17E+02	-9.74E-02	4.10E-01	5.83E-01	2.15E+00	9.92E+00	1.07E+01	2.40E+00	9.21E+00	8.36E+00	NA	NA	NA	1.4E+03	ND	ND	ND	ND	MW-32-190
MW-32-190	Q1-2011	025	190.3	-13.7	3/1/2011	13:24	1.61E+03	5.22E-02	6.44E+02	6.63E-01	1.29E+00	1.29E+00	2.7 E+00	5.23E+00	6.57E+00	4.55E+00	7.46E+00	8.57E+00	NA	NA	NA						
MW-32-190	Q1-2011 Mid	026	190.3	-13.7	3/01/2011	11:47	1.4 E+03	5.76E-02	7.02E+02	-7.79E-01	1.5E+00	1.67E+00	8.72E-01	7.76E+00	8.01E+00	5.11E+00	8.14E+00	1.30E+01	NA	NA	NA						
MW-32-190	Q2-2011	027	190.3	-13.7	4/27/2011	11:17	1.2 E+03	5.54E-02	4.10E+02	7.54E-01	1.3E+00	1.20E+00	8.6 E-01	9.88E+00	9.78E+00	6.60E+00	8.83E+00	6.37E+00	NA	NA	NA						
MW-32-190	Q3-2011	029	190.3	-13.7	8/7/2011	11:15	1.44E+03	5.41E-02	4.09E+02	7.23E-01	1.44E+00	1.82E+00	2.02E+00	7.22E+00	8.43E+00	2.52E+00	8.02E+00	8.62E+00	NA	NA	NA						
MW-36-24	Q4-2010	020	14.1	-4.3	11/4/2010	16:15	2.60E+03	2.32E-02	1.13E+02	3.79E-02	5.21E-01	6.42E-01	3.45E+00	9.92E+00	1.17E+01	1.88E+00	1.19E+01	1.36E+01	NA	NA	NA	2.7E+03	ND	ND	ND	ND	MW-36-24
MW-36-24	Q1-2011	021	14.1	-4.3	2/23/2011	12:37	2.56E+02	3.34E-02	1.81E+02	-8.87E-02	1.67E+00	1.08E+00	4.53E-01	5.26E+00	5.75E+00	-3.0E-01	4.74E+00	5.03E+00	NA	NA	NA						
MW-36-24	Q2-2011	022	14.1	-4.3	4/21/2011	14:24	2.07E+03	7.30E-02	1.19E+02	1.32E+00	1.53E+00	1.29E+00	-6.43E-01	7.42E+00	7.47E+00	3.52E+00	7.42E+00	9.53E+00	NA	NA	NA						
MW-36-24	Q3-2011	023	14.1	-4.3	8/1/2011	13:34	1.13E+03	5.31E-02	4.51E+02	2.34E-01	9.96E-01	1.18E+00	-2.88E+00	7.71E+00	9.54E+00	7.10E-01	7.19E+00	8.75E+00	NA	NA	NA						
MW-36-41	Q4-2010	014	-7	-25.2	11/4/2010	16:35	4.21E+04	3.75E-02	1.16E+02	3.54E+00	9.12E-01	6.53E-01	7.63E-01	8.76E+00	1.01E+01	3.98E+00	8.38E+00	1.86E+01	NA	NA	NA	7.5E+03	3.5E+00	ND	ND	NA	MW-36-41
MW-36-41	Q1-2011	013	-7	-25.2	2/23/2011	13:53	8.74E+03	8.68E-02	7.91E+02	4.1 E+00	1.67E+00	1.51E+00	1.5 E+00	5.26E+00	6.09E+00	1.38E+00	5.16E+00	6.63E+00	NA	NA	NA						
MW-36-41	Q2-2011	016	-7	-25.2	4/21/2011	15:53	8.19E+03	1.48E-02	1.48E+02	3.5 E+00	1.75E+00	1.36E+00	2.15E+00	6.76E+00	7.07E+00	2.43E+00	7.07E+00	1.12E+01	NA	NA	NA						
MW-36-41	Q3-2011	017	-7	-25.2	8/1/2011	14:13	5.98E+03	8.07E-02	4.55E+02	1.74E+00	1.36E+00	1.13E+00	1.7 E+00	8.81E+00	9.88E+00	4.43E+00	9.15E+00	1.15E+01	NA	NA	NA						
MW-36-56	Q4-2010	019	49.7	-37.9	11/4/2010	15:50	1.06E+04	4.43E-02	1.10E+02	1.11E+00	6.06E-01	1.07E+00	1.02E+00	9.92E+00	1.15E+01	4.32E+00	1.03E+01	1.77E+01	NA	NA	NA	1.1E+04	5.0E+00	ND	ND	NA	MW-36-56
MW-36-59	Q1-2011	020	49.7	-37.9	2/23/2011	12:43	3.81E+03	2.77E-02	1.82E+02	3.3E+00	2.00E+00	1.41E+00	6.08E+00	5.32E+00	8.08E+00	2.64E+00	5.51E+00	5.45E+00	NA	NA	NA						
MW-36-52	Q2-2011	021	49.7	-37.9	4/21/2011	14:33	5.84E+03	9.36E-02	7.15E+02	3.4 E+00	1.56E+00	1.11E+00	4.25E+00	8.42E+00	1.03E+01	-2.6 E+00	8.06E+00	8.36E+00	NA	NA	NA						
MW-36-52	Q3-2011	022	49.7	-37.9	8/1/2011	14:52	4.69E+03	7.39E-02	4.48E+02	2.92E+00	1.37E+00	1.36E+00	3.52E+00	9.22E+00	1.03E+01	1.82E+00	9.23E+00	9.74E+00	NA	NA	NA						
MW-37-22	Q4-2010	020	17	-2	11/4/2010	14:05	6.74E+03	3.27E-02	1.12E+02	1.32E+00	5.19E-01	5.97E-01	2.26E+00	9.71E+00	1.16E+01	1.42E+00	1.00E+01	1.92E+01	NA	NA	NA	4.6E+03	1.0E+01	ND	ND	NA	MW-37-22
MW-37-22	Q1-2011	021	17	-2	1/27/2011	15:19	6.74E+03	6.18E-02	7.98E+02	1.04E+00	2.32E+00	1.68E+00	-2.12E+00	4.74E+00	4.94E+00	2.52E+00	5.18E+00	6.52E+00	NA	NA	NA						
MW-37-22	Q2-2011	022	17	-2	4/21/2011	12:05	6.87E+03	9.56E-02	7.14E+02	8.72E+00	2.90E+00	2.05E+00	7.12E-01	6.76E+00	7.67E+00	5.14E-01	7.16E+00	8.62E+00	NA	NA	NA						
MW-37-22	Q3-2011	023	17	-2	8/1/2011	10:25	7.55E+03	5.52E-02	4.52E+02	7.97E+00	2.07E+00	1.32E+00	5.77E+00	9.29E+00	1.07E+01	4.98E+00	9.22E+00	7.40E+00	NA	NA	NA						
MW-37-32	Q4-2010	020	-39	-58.8	11/4/2010	13:10	5.99E+03	4.22E-02	1.17E+02	2.91E+01	6.15E+00	7.91E+00	4.43 E+00	7.41E+00	2.07E+00	1.84E+00	7.05E+00	9.84E+00	NA	NA	NA	9.6E+03	9.0E+01	ND	ND	NA	MW-37-32
MW-37-32	Q1-2011	021	-39	-14	1/27/2011	15:09	4.57E+03	5.28E-02	7.98E+02	1.49E+01	3.02E+00	1.74E+00	4.26E-01	6.25E+00	6.85E+00	1.72E+00	6.09E+00	7.76E+00	NA	NA	NA						
MW-37-32	Q2-2011	022	-39	-14	4/21/2011	12:21	4.1 E+03	7.38E-02	7.13E+02	8.62E+01	3.76E+00	1.65E+00	3.3 E+00	1.20E+01	1.42E+01	1.92E+00	1.19E+01	1.09E+01	NA	NA	NA						
MW-37-32	Q3-2011	023	-39	-14	8/1/2011	11:01	5.21E+03	6.03E-02	4.64E+02	1.46E+01	2.67E+00	1.15E+00	-2.51E+00	5.34E+00	7.15E+00	-6.09E+00	8.16E+00	8.10E+00	NA	NA	NA						
MW-37-46	Q4-2010	020	-38.2	-54.2	11/4/2010	12:05	6.8 E+03	4.39E-02	1.11E+02	1.22E+01	6.32E-01	6.97E-01	6.37E+00	8.38E+00	1.03E+01	2.01E+00	8.05E+00	8.39E+00	NA	NA	NA	3.8E+03	1.8E+01	ND	ND	NA	MW-37-46
MW-37-46	Q1-2011	021	-38.2	-54.2	1/27/2011	14:40	3.97E+04	7.42E-02	8.21E+02	1.91E+01	2.58E+00	1.83E+00	1.97E+00	6.54E+00	6.78E+00	2.02E+00	6.14E+00	7.87E+00	NA	NA	NA						
MW-37-46	Q2-2011	022	-38.2	-54.2	4/21/2011	11:51	8.12E+03	7.53E-02	7.31E+02	1.46E+01	2.67E+00	1.61E+00	4.11E+00	8.87E+00	1.09E+01	6.47E-01	1.03E+01	1.03E+01	NA	NA	NA						
MW-37-40	Q3-2011	023	39.2	-24.2	8/1/2011	11:24	5.01E+03	7.36E-02	4.53E+02	1.91E+01	3.18E+00	1.17E+00	-2.03E+00	8.25E+00	8.54E+00	1.72E+00	7.75E+00	8.59E+00	NA	NA	NA						
MW-37-57	Q4-2010	020	-39.2	-58.2	11/4/2010	12:40	6.71E+03	4.41E-02	1.11E+02	1.37E+01	5.26E+00	7.09E+00	6.57E+00	7.22E+00	9.04E+00	2.80E+00	7.65E+00	9.25E+00	NA	NA	NA	8.2E+03	1.0E+01	ND	ND	NA	MW-37-57
MW-37-57	Q1-2011	021	-39.2	-58.2	1/27/2011	15:35	5.61E+03	5.56E-02	7.99E+02	2.07E+01	1.96E+00	1.67E+00	2.73E-01	6.24E+00	6.47E+00	1.24E+00	5.43E+00	5.43E+00	NA	NA	NA						
MW-37-57	Q2-2011	022	53.2	-38.2	4/21/2011	12:17	5.8 E+03	8.88E-02	7.07E+02	1.32E+01	3.54E+00	2.00E+00	5.11E+00	1.12E+01	8.67E+00	1.42E+00	8.56E+00	8.80E+00	NA	NA	NA						
MW-37-57	Q3-2011	023	53.2	-38.2	8/1/2011	10:55	5.1 E+03	7.88E-02	4.59E+02	2.11E+01	3.97E+00	1.30E+00	1.8 E+00	7.92E+00	9.16E+00	-1.34E+00	6.79E+00	6.57E+00	NA	NA	NA						
MW-37-47	Q4-2010	010	-47	-12.7	11/05/2010	10:20	2.74E+03	3.36E-02	2.86E+02	1.53E+00	9.54E-01	1.94E+00	-1.74E+00	7.29E+00	8.46E+00	-2.41E+00	6.42E+00	9.55E+00	ND	ND	NA	2.5E+02	1.8E+00	ND	ND	NA	MW-37-47
MW-39-67	Q2-2011	011	67	13	4/25/2011	14:52	1.09E+04	4.18E-02	1.74E+02	1.49E+00	1.50E+00	-8.12E-01	8.22E+00	8.78E+00	9.42E+00	4.0 E+00	9.42E+00	9.00E+00	NA	NA	NA						
MW-39-67	Q2-2011 Mid	012	67	13	7/13/2011	13:42	2.24E+03	6.12E-02	4.40E+02	2.55E-01	1.6E+00	1.34E+00	-1.15E-01	9.38E+00	9.19E+00	-2.41E-02	9.72E+00	1.12E+01	NA	NA	NA						
MW-39-67	Q3-2011 Mid	013	67	13	10/7/2011	13:47	1.49E+04	1.34E-03	4.51E+02	1.06E+00	1.8E+00	1.20E+00	2.22E+00	7.77E+00	8.94E+00	4.92E+00	8.15E+00	1.05E+01	NA	NA	NA						
MW-39-84	Q4-2010	010	-20.3	-34.5	11/05/2010	10:20	2.45E+04	2.07E-02	1.09E+02	2.29E+00	8.53E-01	1.06E+00	1.85E+00	8.32E+00	9.84E+00	1.06E+00	8.47E+00	1.42E+01	ND	ND	NA	4.0E+04	2.2E+00	ND	ND	NA	MW-39-84
MW-39-84	Q2-2011	011	31.5	-3.5	4/25/2011	14:25	4.48E+04	4.12E-02	4.13E+02	-2.03E-01	1.5E+00	1.50E+00	-9.33E-01	7.42E+00	7.84E+00	-4.0E-01	6.52E+00	7.41E+00	NA	NA	NA						
MW-39-84	Q2-2011 Mid	012	31.5	-3.5	7/13/2011	14:33	3.31E+03	4.17E-02	4.46E+02	6.24E-01	1.5E+00	1.27E+00	-1.7E+00	1.43E+01	1.71E+01	-4.87E+00

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TABLE 3
THIRD QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	Sampling Quarter[2,3]	Sample ID	Sample Zone Center Depth Ft Below Top of Casing[4]	Sample Zone Center Elevation Ft msl[4]	Sample Collection		Analysis Results[5]														Yearly Rolling Averages[5,6]					Well ID[1]
							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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Average	Average	Average	Average	Average	
MW-40-27	Q4-2010	013	26.7	46.5	10/20/2010	15:20	2.09E+02	1.40E+02	3.44E+02	1.13E-01	7.35E-01	1.65E+00	4.63E-01	3.12E-01	3.39E+00	2.79E+00	1.01E+00	3.23E+00	4.12E+00	NA	NA	NA	3.98E+02	NA	NA	NA	NA	MW-40-27
MW-40-27	Q1-2011	014	26.7	46.5	3/6/2011	12:55	1.81E+02	2.56E-02	1.65E+02	1.53E-01	1.37E+00	1.61E+00	3.73E-01	6.73E+00	7.39E+00	2.83E+00	8.56E+00	9.99E+00	NA	NA	NA						
MW-40-27	Q2-2011	015	26.7	46.5	4/20/2011	13:20	1.77E+02	3.56E-02	4.07E+02	1.11E+00	1.74E+00	1.87E+00	1.91E+00	8.40E+00	5.77E+00	-9.21E-01	9.16E+00	1.15E+01	NA	NA	NA						
MW-40-27	Q3-2011 Mid	016	26.7	46.5	7/27/2011	15:12	3.09E+01	3.90E-02	1.42E+02	-4.97E-01	1.40E+00	1.93E+00	-2.11E+00	7.52E+00	7.64E+00	1.30E+00	9.10E+00	1.03E+01	NA	NA	NA						
MW-40-46	Q4-2010	013	46.2	27	10/20/2010	16:35	3.63E+02	1.47E+02	3.43E+02	-6.83E-02	7.09E-01	1.93E+00	5.68E-01	3.02E+00	5.28E+00	2.06E+00	3.39E+00	4.74E+00	NA	NA	NA	1.83E+02	ND**	ND	ND	ND	MW-40-46
MW-40-46	Q1-2011	015	46.2	27	3/6/2011	12:50	2.43E+02	2.74E-02	1.63E+02	1.03E-01	8.33E-01	1.07E+00	2.82E+00	8.80E+00	5.18E+00	7.95E+00	8.74E+00	1.19E+01	NA	NA	NA						
MW-40-46**	Q2-2011	016	46.2	27	4/20/2011	13:31	2.81E+01	3.54E-02	1.63E+02	-1.37E-01**	1.38E+00	1.77E+00	-9.93E-01	8.46E+00	5.00E+00	-3.93E+00	9.21E+00	9.04E+00	NA	NA	NA						
MW-40-46	Q3-2011 Mid	017	46.2	27	7/27/2011	15:55	1.31E+02	3.99E-02	1.44E+02	-9.09E-01	1.36E+00	1.86E+00	2.28E+00	8.15E+00	1.01E+01	5.0 E-01	9.78E+00	1.03E+01	NA	NA	NA						
MW-40-31	Q4-2010	014	39.7	7.5	10/20/2010	12:00	2.40E+02	1.58E-02	1.47E+02	-1.13E-01	6.15E-01	-9.53E-01	-9.67E-01	3.38E+00	4.79E+00	-4.12E-01	4.23E+00	5.28E+00	NA	NA	NA	2.48E+02	ND	ND	ND	ND	MW-40-31
MW-40-31	Q1-2011	013	39.7	7.5	3/6/2011	10:17	2.41E+02	2.30E-02	1.61E+02	3.03E-01	1.31E+00	1.61E+00	1.47E+00	1.18E+01	7.11E+00	-1.14E+00	6.13E+00	9.16E+00	NA	NA	NA						
MW-40-31	Q2-2011	014	39.7	7.5	4/20/2011	11:02	3.39E+02	4.12E-02	4.34E+02	1.07E+00	1.83E+00	1.70E+00	3.07E+00	6.98E+00	5.51E+00	-3.45E-01	8.45E+00	8.83E+00	NA	NA	NA						
MW-40-31	Q3-2011 Mid	017	39.7	7.5	7/27/2011	13:24	1.11E+02	2.99E-02	4.8E+02	8.31E-01	1.70E+00	1.90E+00	-3.22E-01	6.48E+00	6.87E+00	1.03E+00	8.47E+00	8.91E+00	NA	NA	NA						
MW-40-100	Q4-2010	014	100.2	-27	10/20/2010	12:13	1.30E+02	1.40E-02	1.96E+02	-2.12E-01	6.70E-01	3.29E+00	-2.45E-01	4.61E+00	4.55E+00	-3.51E-01	4.26E+00	4.81E+00	NA	NA	NA	ND	ND	ND*	ND	ND	MW-40-100
MW-40-100*	Q1-2011	017	100.2	-27	3/6/2011	10:37	5.15E+01	2.14E-02	1.64E+02	2.63E-02	1.30E+00	1.55E+00	3.46E+00 *	1.15E+01	7.66E+00	1.40E+00	7.19E+00	8.30E+00	NA	NA	NA						
MW-40-100	Q2-2011	018	100.2	-27	4/20/2011	11:27	2.78E+02	4.36E-02	4.38E+02	2.45E-01	1.42E+00	1.67E+00	5.5 E+00	7.48E+00	5.23E+00	2.95E+00	7.56E+00	9.80E+00	NA	NA	NA						
MW-40-100	Q3-2011 Mid	019	100.2	-27	7/27/2011	13:57	1.07E+02	3.12E-02	1.59E+02	-9.93E-01	1.41E+00	1.96E+00	2.28E+00	9.85E+00	1.04E+01	7.10E-01	1.10E+01	1.10E+01	NA	NA	NA						
MW-40-127	Q4-2010	013	127.2	-54	10/20/2010	12:25	1.20E+02	1.36E-02	1.45E+02	7.24E-05	7.12E-01	3.59E-01	-1.42E+01	4.62E+00	5.46E+00	-1.12E+00	4.58E+00	5.66E+00	NA	NA	NA	9D	ND	ND*	ND	ND	MW-40-127
MW-40-27*	Q1-2011	017	127.2	-54	3/6/2011	10:41	1.31E+02	2.40E-02	1.64E+02	1.03E+00	1.40E+00	1.51E+00	5.07E+00 *	1.14E+01	7.63E+00	3.43E-01	7.18E+00	7.96E+00	NA	NA	NA						
MW-40-27	Q2-2011	018	127.2	-54	4/20/2011	11:25	-2.27E+01	3.30E-02	4.32E+02	5.71E-01	1.70E+00	2.05E+00	-2.13E-01	8.26E+00	8.83E+00	-1.62E+00	9.05E+00	9.87E+00	NA	NA	NA						
MW-40-27	Q3-2011 Mid	019	127.2	-54	7/27/2011	13:22	1.36E+02	3.12E-02	2.92E+02	4.81E-01	1.64E+00	1.92E+00	1.43E+00	9.86E+00	1.03E+01	-3.00E+00	1.12E+01	7.94E+00	NA	NA	NA						
MW-40-162	Q4-2010	014	161.7	-88.5	10/20/2010	12:45	6.46E+01	1.27E-02	1.45E+02	-5.51E-01	6.13E-01	3.04E-01	4.54E+00	2.91E+00	3.43E-01	4.27E+00	5.03E+00	NA	NA	NA	ND	ND	ND	ND	ND	MW-40-162
MW-40-162	Q1-2011	015	161.7	-88.5	3/6/2011	11:02	8.31E+01	2.24E-02	1.63E+02	-1.01E+00	1.07E+00	1.57E+00	-3.71E+00	6.22E+00	5.93E+00	-2.1 E+00	6.42E+00	6.37E+00	NA	NA	NA						
MW-40-162	Q2-2011	016	161.7	-88.5	4/6/2011	12:43	1.02E+02	4.03E-02	4.31E+02	8.71E-01	1.54E+00	1.46E+00	4.54E+00	1.24E+01	1.42E+01	4.4E-01	9.28E+00	1.03E+01	NA	NA	NA						
MW-40-162	Q3-2011 Mid	017	161.7	-88.5	7/27/2011	14:41	5.54E+01	2.77E-02	1.44E+02	-3.61E-01	1.38E+00	1.98E+00	-2.48E+00	9.71E+00	9.58E+00	-6.91E-01	8.70E+00	9.41E+00	NA	NA	NA						
MW-41-46	Q4-2010	019	34.9	20.5	10/20/2010	16:05	2.40E+02	1.75E-02	1.72E+02	4.00E+00	7.06E-01	-6.03E-01	-3.5 E+00	5.30E+00	6.07E+00	0.99E+00	6.74E+00	6.86E+00	NA	NA	NA	0.0E+00	0.00E+00	ND	ND	NA	MW-41-46
MW-41-46	Q1-2011	019	34.9	20.5	2/8/2011	14:10	2.01E+02	1.42E-02	1.96E+02	1.11E+01	1.60E+00	1.31E+00	4.01E+00	7.81E+00	3.61E+00	1.4E+00	4.22E+00	9.22E+00	NA	NA	NA						
MW-41-40	Q2-2011	020	31.4	20.5	4/21/2011	13:51	4.5 E+02	7.36E-02	4.55E+02	3.22E+00	1.37E+00	1.44E+00	3.2 E+00	9.22E+00	1.06E+01	3.0E+00	1.16E+01	1.23E+01	NA	NA	NA						
MW-41-40	Q3-2011 Mid	021	31.4	20.5	7/13/2011	12:33	6.99E+02	4.59E-02	4.41E+02	2.48E+00	1.35E+00	1.19E+00	-1.91E+00	1.09E+01	1.14E+01	-1.1 E+00	8.54E+00	9.13E+00	NA	NA	NA						
MW-41-40	Q4-2011	022	31.4	20.5	10/6/2011	14:32	5.91E+02	5.37E-02	5.31E+02	1.70E+00	1.07E+00	9.51E-01	4.9 E-01	1.07E+01	9.61E+00	-6.0 E-02	8.16E+00	8.00E+00	NA	NA	NA						
MW-41-63	Q4-2010	017	59.5	-4.6	10/20/2010	12:57	1.30E+02	1.14E-02	1.45E+02	1.43E+00	1.05E+00	7.47E-01	1.14E+00	6.86E+00	3.07E+00	2.82E+00	5.54E+00	7.42E+00	NA	NA	NA	7.4E+02	4.73E+00	ND	ND	ND	MW-41-63
MW-41-63	Q1-2011	018	59.5	-4.6	2/14/2011	13:37	1.21E+03	4.44E-02	1.80E+02	6.92E+00	2.46E+00	1.96E+00	1.24E+00	5.30E+00	6.03E+00	2.65E+00	6.16E+00	7.29E+00	NA	NA	NA						
MW-41-63	Q2-2011	019	59.5	-4.6	4/21/2011	13:13	7.51E+02	4.30E-02	4.72E+02	-7.72E-01	1.31E+00	1.03E+00	3.5 E+00	8.32E+00	1.01E+01	4.02E+00	8.14E+00	1.09E+01	NA	NA	NA						
MW-41-63	Q3-2011 Mid	020	59.5	-4.6	7/13/2011	12:51	7.14E+02	4.50E-02	4.55E+02	2.00E+00	1.40E+00	1.30E+00	2.3 E+00	7.71E+00	8.00E+00	-4.4 E-01	6.11E+00	7.51E+00	NA	NA	NA						
MW-41-63	Q3-2011	021	59.5	-4.6	8/4/2011	14:23	6.60E+02	3.90E-02	1.51E+02	1.9 E+00	1.95E+00	1.96E+00	1.64E+00	7.19E+00	8.72E+00	-1.43E+00	7.9E+00	7.72E+00	NA	NA	NA						
MW-42-49	Q4-2010	023	43.6	17.1	10/27/2010	12:22	1.21E+03	2.03E-02	1.64E+02	1.35E+01	3.21E+00	3.72E-01	2.36E+04	2.94E+03	2.93E+03	1.47E+03	0.72E+03	1.95E+01	2.24E+02	2.25E+04	2.29E+12	1.31E+03	2.21E+02	2.25E+04	2.29E+12	MW-42-49
MW-42-49	Q1-2011	024	43.6	17.1	3/6/2011	11:37	1.49E+03	3.14E-02	1.68E+02	2.53E+01	3.34E+00	1.11E+00	3.3 E+04	4.42E+03	2.2 E+03	1.42E+03	0.18E+03	7.87E+00	3.02E+02	3.14E+04	2.20E+11						
MW-42-49	Q2-2011	025	43.6	17.1	4/21/2011	14:04	1.7 E+03	5.38E-02	4.80E+02	5.41E+01	2.38E+00	1.45E+00	2.1 E+04	2.28E+03	2.08E+03	3.41E+03	9.16E+03	1.09E+01	1.90E+02	1.90E+03	2.23E+11	1.73E+01					
MW-42-49	Q3-2011	027	43.6	17.1	8/1/2011	12:53	7.75E+02	3.30E-02	1.74E+02	2.60E+00	1.82E+00	1.52E+00	1.92E+03	2.16E+03	1.55E+03	8.60E+00	1.01E+01	2.80E+02	3.43E+01	2.02E+01						
MW-44-66	Q4-2010	018	62.4	11.1	10/26/2010	14:20	1.09E+03	1.94E-02	1.64E+02	-1.16E+01	4.79E+00	-2.02E+00	-1.19E+00	1.80E+01	1.62E+01	-3.11E+00	6.44E+00	-2.48E+00	1.40E+02	6.47E+01	1.40E+00	2.20E+01					
MW-42-78	Q1-2011	019	54	4.3	2/8/2011	10:53	9.09E+02	8.64E-02	8.93E+01	1.27E+00	1.40E+00	2.10E+00	4.72E+00	4.99E+00	6.09E+00	4.75E+00	7.41E+00	8.00E+00	1.75E+01	1.96E+01							
MW-42-78	Q2-2011	020	54	4.3	4/21/2011	13:45	6.26E+02	4.78E-02	4.77E+02	4.25E-01	1.32E+00	1.23E+00	-9.71E-01	9.46E+00	5.83E+00	3.58E+00	8.16E+00	1.11E+01	5.81E-01	1.49E+01	1.72E+01						
MW-42-78	Q3-2011	022	54	4.3	8/1/2011	12:53	3.97E+02	3.77E-02	1.72E+02	-1.16E-01	1.38E+00	1.40E+00	5.81E-01	7.98E+00	7.65E+00	-3.61E-01	9.25E+00	1.03E+01	1.03E+00	1.17E+01	1.31E+01						
MW-42-78	Q4-2011	017	54	4.3	10/6/2011	15:10	1.60E+02	1.07E-02	1.13E+02	-1.09E+01	1.51E+00	-2.07E+00	-3.25E+00	5.08E+00	4.60E+00	-5.53E+00	4.01E+00	4.35E+00	NA	NA	NA	3.95E+02	ND	ND	ND	NA	MW-42-78
MW-43-28	Q1-2011	018	23.5	15.3	2/15/2011	13:08	2.54E+02	2.30E-02	1.99E+02	-1.01E+00	1.40E+00	1.00E+00	5.7 E-02	1.26E+01	7.06E+00	-3.84E+00	6.14E+00	6.54E+00	NA	NA	NA						
MW-43-28	Q2-2011	019	23.5	15.3	4/21/2011	11:15	2.51E+02	4.30E-02	4.72E+02	1.46E+00	1.96E+00	1.04E+00	-9.31E-01	8.74E+00	5.22E+00	4.32E+00	8.06E+00	1.09E+01	NA	NA	NA						
MW-43-28	Q3-2011	020	23.5	15.3	8/5/2011	11:15	2.26E+02	3.34E-02	1.50E+02	-1.13E-01	1.42E+00	1.07E+00	4.0E-01	7.55E+00	6.92E+00	-2.5 E+00	7.73E+00	9.21E+00	NA	NA	NA						
MW-43-62	Q4-2010	017	2.2	2.2	10/25/2010	11:00	9.76E+01	1.15E-02	1.12E+02	2.89E-01	7.10E-01	3.03E-01	5.94E-01	3.27E+00	2.83E+00	3.40E-01	3.57E+00	3.91E+00	NA	NA	NA	ND	ND	ND	ND	ND	MW-43-62
MW-43-62	Q1-2011	018	2.1	2.2	2/15/2011	13:15	1.81E+02	2.76E-02	1.00E+02	7.77E-01	1.74E+00	1.95E+00	6.59E-01	5.88E+00	5.56E+00	-2.37E-01	5.16E+00	5.52E+00	NA	NA	NA						
MW-43-62	Q2-2011	019	2.1	2.2	4/21/2011	11:03	1.01E+02	4.12E-02	4.72E+02	-4.02E-01	1.07E+00	1.15E+00	-1.90E+00	8.86E+00	5.37E+00	-2.24E+00	8.09E+00	8.43E+00	NA	NA	NA						
MW-43-62	Q3-2011	021	2.1	2.2	8/4/2011	11:35	1.66E+02	3.31E-02	1.55E+02	-2.14E-01	1.61E+00	1.93E+00	-1.63E+00	7.95E+00	8.00E+00	-2.93E+00	8.13E+00	8.75E+00	NA	NA	NA						
MW-44-66	Q4-2010	018	62.4	11.1	10/26/2010	14:40	3.10E+02	1.20E-02	1.11E+02	-1.07E+01	4.60E+00	-2.03E+00	-4.43E+00	6.24E+00	7.31E+00	-3.70E+00	7.27E+00	7.27E+00	NA	NA	NA	1.0E+02	ND	ND	ND	NA	MW-44-66
MW-44-66	Q1-2011	019	61.4	11.1	2/8/2011	10:41	4.3 E+02	9.99E-03	2.04E+01	1.39E+01	1.91E+00	1.7 E+00	1.7 E+00	7.2 E+00	8.30E+00	1.40E+00	7.2E+00	9.46E+00	NA	NA	NA						
MW-44-66	Q2-2011	020	61.4	11.1	4/25/2011	13:17	6.87E+02	4.30E-02	4.81E+02	7.05E+00	1.32E+00	1.70E+00	1.1 E+00	9.36E+00	1.03E+01	3.30E+00	1.17E+01	1.31E+01	NA	NA	NA						
MW-44-66	Q3-2011 Mid	021	61.4	11.1	7/13/2011	15:39	1.61E+03	5.49E-02	4.32E+02	-7.04E-01	6.48E-01	1.06E+00	4.61E+00	9.46E+00	1.16E+01	-5.7 E+00	1.11E+01	9.79E+00	NA	NA	NA						
MW-44-66	Q4-2011	022	61.4	11.1	10/6/2011	12:05	4.7 E+02	4.56E-02	4.53E+02	1.1 E+01	1.11E+00	-7.4 E+00	6.3 E+00	8.89E+00	9.19E+00	-3.1 E+00	9.19E+00	9.0 E+00	NA	NA	NA						
MW-44-102	Q4-2010	018	60	-8.5	10/26/2010	15:50	4.45E+02	1.15E-02	1.12E+02	-2.63E+00	4.77E+00	-2.93E+00	-3.07E+00	6.46E+00	6.51E+00	-3.97E+00	6.61E+00	6.61E+00	NA	NA	NA	1.9E+02	ND	ND	ND	NA	MW-44-102
MW-44-102	Q1-2011	020	10	3.5	2/11/2011	10:44	3.91E+02	2.30E-02	1.97E+02	2.63E-01	1.36E+00	1.15E+00	2.22E-01	4.76E+00	5.47E+00	-2.93E-01	6.12E+00	6.38E+00	NA	NA	NA						
MW-44-102	Q2-2011	021	10	3.5	4/25/2011	12:13	6.76E+02	4.14E-02	1.99E+02	1.07E+00	1.41E+00	1.49E+00	3.59E-01	7.42E+00	8.15E+00	-2.06E+00	7.16E+00	7.82E+00	NA	NA	NA						
MW-44-102	Q3-2011	022	10	3.5	7/13/2011	10:53	6.35E+02	4.90E-02	2.07E+02	2.53E-01	1.62E+00	1.17E+00	1.01E+00	6.35E+00	7.60E+00	1.25E+00	6.72E+00	7.47E+00	NA	NA	NA						
MW-44-102	Q3-2011	023	10	3.5	8/2/2011	10:43	8.22E+02	4.77E-02	4.57E+02	-1.10E-01	9.59E-01	1.28E+00	-3.22E+00	6.69E+00	6.63E+00	8.95E+00	7.70E+00	1.08E+01	NA	NA	NA						
MW-45-42	Q4-2010	022	7	6.6	10/27/2010	15:55	2.74E+03	2.30E-02	1.13E+02	9.55E-02	8.09E-01	-3.32E+00	-6.04E+00	6.94E+00	5.09E+00	-5.65E+00	5.09E+00	5.69E+00	NA	NA	NA	1.72E+04	ND	ND	ND	NA	MW-45-42
MW-45-42	Q1-2011	023	7	6.6	2/8/2011	16:53	1.81E+02	1.92E-02	1.01E+02	1.01E+00	1.40E+00	-8.52E-01	1.46E+00	5.44E+00	5.90E+00	-1.42E+00	6.08E+00	7.17E+00	NA	NA	NA						
MW-45-42	Q2-2011	024	7	6.6	4/20/2011	14:09	8.56E+03	1.13E-03	4.65E+02	1.42E+00	1.36E+00	1.61E+00	7.04E-01	6.20E+00	7.46E+00	7.12E+00	1.17E+01	1.29E+01	NA	NA	NA						
MW-45-42	Q3-2011	025	7	6.6	7/25/2011	13:23	3.91E+04	2.77E-03	4.36E+02	1.14E+00	1.30E+00	1.37E+00	3.06E+00	7.41E+00	6.65E+00	-2.66E+00	1.01E+01	1.05E+01	NA	NA	NA						
MW-45-42	Q3-2011 Mid	026	7	6.6	10/20/2011	13:23	1.08E+03	2.50E-02	1.77E+02	9.1 E-01	1.01E+00	1.08E+00	3.77E-01	1.23E+01	1.02E+01	7.23E+00	1.16E+01	1.09E+01	NA	NA	NA						
MW-45-56	Q4-2010	023	28	4.4	10/26/2010	11:54	1.25E+03	2.23E-02	1.12E+02	5.55E-05	2.12E-01	6.03E-05	-2.29E+00	5.78E+00	2.94E+00	-1.15E-01	3.57E+00	2.73E+00	NA	NA	NA	3.8E+03	ND	ND	ND	NA	MW-45-56
MW-45-61	Q1-2011	023	28	4.4	2/15/2011	16:15	1.84E+03	1.98E-02	2.25E-01	1.64E+00	1.96E+00	1.3 E+00	4.00E+00	5.41E+00	9.83E-01	5.46E+00	6.15E+00	NA	NA	NA							
MW-45-61	Q2-2011	024	28	4.4	4/6/2011	10:07	4.01E+03	9.14E-04	4.74E+02	1.40E+00	1.31E+00	-4.01E+00	1.6 E+00	7.53E+00	-3.47E+00	1.76E+00	7.71E+00	NA	NA	NA							
MW-45-61	Q3-2011 Mid	025	28	4.4	7/27/2011	10:01	8.36E+03	1.68E-03	4.47E+02	1.45E+00	1.37E+00	1.45E+00	1.45E+00	8.69E+00	7.70E+00	-8.4E+00	1.03E+01	9.03E+00	NA	NA	NA						
MW-45-61	Q3-2011 Mid	026	28	4.4	8/23/2011	10:48	5.9 E+03	8.13E-02	4.34E+02	7.01E-01	1.62E+00	1.26E+00	-8.63E+01	7.44E+00	7.90E+00	1.8E+00	6.13E+00	7.89E+00	NA	NA	NA						
MW-46	Q4-2010	022	10.2	7.6	10/28/2010	13:25	3.15E+03	3.38E-02	1.13E+02	-3.73E-05	3.10E-01	3.88E-05	-2.06E+06	5.65E+00	2.88E+00	-2.88E+00	6.51E+00	8.22E+00	4.5E+03	ND	ND	ND	ND	NA	MW-46
MW-46	Q1-2011	023	10.5	7.6	3/23/2011	12:45	2.47E+03	1.99E+02	1.13E+02	1.12E+00	1.99E+00	1.06E+00	2.21E+00	5.32E+00	5.28E+00	5.2 E-01	5.10E+00	6.66E+00	NA	NA	NA						
MW-46	Q2-2011	024	10.5	7.6	4/25/2011	11:19	5.22E+03	7.54E-02	4.95E+02	1.42E+00	1.82E+00	1.48E+00	-2.42E+00	7.34E+00	7.06E+00	-4.44E+00	7.44E+00	6.77E+00	NA	NA	NA						
MW-46	Q2-2011 Mid	025	10.5	7.6	7/13/2011	13:29	3.01E+03	7.17E-02	4.86E+02	8.44E-01	1.99E+00	1.26E+00	3.71E+00	9.84E+00	1.04E+01	-9.54E-01	1.12E+01	1.03E+01	NA	NA	NA						
MW-46	Q3-2011	026	10.5	7.6	8/17/2011	11:35	6.72E+03	2.50E-02	1.64E+02	8.77E-01	1.31E+00	1.27E+00	3.43E-01	7.56E+00	5.92E+00	-1.18E+00	7.29E+00	7.07E+00	NA	NA	NA						
MW-47-56	Q3-2011 Mid	006	51.2	7.1	7/7/2011	15:53	2.95E+03	6.57E-02	4.85E+02	4.63E-01	1.05E+00	1.22E+00	-1.50E+00	5.01E+00	5.20E+00	1.43E-01	7.41E+00	8.35E+00	1.99E+01	2.07E+01	2.09E+01	0.0E+00	ND	ND	ND	ND	MW-47-56
MW-47-56	Q3-2011 Mid	007	51.2	7.1	8/1/2011	12:39	5.41E+02	2.76E-02	1.00E+02	1.02E+00	1.38E+00	1.31E+00	-8.54E-01	1.38E+01	1.25E+01	3.85E+00	8.54E+00	1.07E+01	2.22E+00	1.73E+01	2.00E+01						
MW-47-56	Q3-2011 Mid	008	51.2	7.1	8/23/2011	14:37	1.56E+03	3.53E-02	4.91E+02	1.33E+00	1.35E+00	1.32E+00	1.47E+00	8.87E+00	8.75E+00	2.44E+00	9.51E+00	9.10E+00	2.09E+01	2.09E+01	2.09E+01	1.37E+03	3.95E+00	ND	ND	ND	MW-47-56
MW-47-56	Q3-2011 Mid	009	51.2	7.1	8/31/2011	11:39	8.23E+02	2.77E-02	1.00E+02	1.37E+00	1.38E+00	1.32E+00	1.53E+00	9.83E+00	9.30E+00	1.53E+00	9.27E+00	9.13E+00	1.17E+01	1.58E+01	2.15E+01						
MW-49-26	Q4-2010	022	19.1	4.4	11/1/2010	14:25	2.96E+03	3.30E-02	4.76E+02	3.42E-01	9.56E-01	2.54E+00	-4.65E+00	4.45E+00	5.15E+00	1.12E+00	3.66E+00	9.13E+00	1.79E+01	1.12E+01	2.29E+01	2.0E+03	1.27E+01	ND	ND	ND	MW-49-26
MW-49-26	Q1-2011	023	19.1	4.4	1/31/2011	13:37	3.17E+03	6.30E-02	4.29E+02	1.30E+00	2.50E+00	2.01E+00	3.39E-01	1.04E+01	7.00E+00	-3.43E+00	6.42E+00	6.44E+00	-4.31E+00	1.57E+01	2.20E+01						
MW-49-26	Q2-2011	024	19.1	4.4	4/13/2011	11:53	2.81E+03	4.80E-02	4.26E+02	1.96E+00	1.91E+00	1.91E+00	4.72E+00	1.07E+01	1.27E+01	4.05E+00	1.08E+01	1.43E+01	1.81E+01	1.57E+01	1.72E+01						
MW-49-26	Q3-2011	025	19.1	4.4	8/1/2011	10:45	3.97E+03	6.39E-02	1.00E+02	1.20E+00	2.39E+00	1.34E+00	-1.94E+00	9.86E+00	5.33E+00	2.94E+00	8.15E+00	1.00E+01	-1.77E+01	2.04E+01	2.57E+01						
MW-49-42	Q4-2010	022	33.1	-23.4	11/1/2010	14:15	2.49E+03	2.45E-02	4.50E+02	1.95E+01	1.05E+00	1.14E+00	-6.63E+00	6.29E+00	5.79E+00	-1.02E+01	2.42E+00	1.10E+01	3.60E+01	1.38E+01	2.48E+01	6.4E+03	1.82E+01	ND	ND	ND	MW-49-42
MW-49-42	Q1-2011	023	33.1	-23.4	1/31/2011	13:01	2.44E+03	1.88E-02	3.66E+02	1.60E+01	1.07E+00	1.08E+00	-6.21E+00	4.27E+00	5.21E+00	-1.07E+01	2.47E+00	1.04E+01	3.37E+01	1.56E+01	2.18E+01

IPEC00267132

TABLE 3
THIRD QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,3]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing[4]	SAMPLE ZONE CENTER Elevation Ft msl[5]	SAMPLE COLLECTION		ANALYSIS RESULTS[6]														YEARLY ROLLING AVERAGES[6,8]					Well ID[1]
							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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Average	Average	Average	Average	Average	
MW-51-40	Q1-2011	018	39.7	28	3/1/2011	10:13	1.01E+02	2.34E-02	4.67E+02	1.07E+00	1.31E+00	1.61E+00	7.97E+00	1.21E+01	1.36E+01	2.42E+00	7.06E+00	8.76E+00	NA	NA	NA						
MW-51-40	Q2-2011	019	39.7	28	4/29/2011	10:41	3.61E+02	4.14E-02	4.33E+02	2.23E-01	1.37E+00	1.59E+00	-3.40E+00	9.48E+00	5.62E+00	6.32E+00	1.11E+01	1.40E+01	NA	NA	NA						
MW-51-40	Q3-2011	020	39.7	28	7/21/2011	11:43	2.70E+01	3.30E-02	4.52E+02	-2.51E-01	1.37E+00	1.85E+00	-2.50E+00	1.35E+01	1.65E+01	-3.37E+00	9.73E+00	9.85E+00	NA	NA	NA						
MW-51-79	Q4-2010	017	73.7	-11	12/20/2010	13:03	2.61E+01	1.11E-02	4.44E+02	-3.22E-01	4.12E-01	5.23E-01	-2.23E-01	4.23E+00	2.05E+00	-1.93E-01	4.42E+00	4.60E+00	ND	ND	ED	NA	NA	MW-51-79			
MW-51-79	Q1-2011	018	73.7	-11	3/6/2011	10:34	1.36E+02	2.46E-02	4.70E+02	-2.03E-01	1.22E+00	1.53E+00	2.45E+00	5.42E+00	6.52E+00	-2.74E+00	7.76E+00	6.45E+00	NA	NA	NA						
MW-51-79	Q2-2011	019	73.7	-11	4/29/2011	10:57	1.17E+02	3.52E-02	4.33E+02	1.01E+00	1.67E+00	1.82E+00	-4.95E-01	7.46E+00	5.23E+00	-3.13E-01	8.18E+00	8.53E+00	NA	NA	NA						
MW-51-79	Q3-2011	020	73.7	-11	7/21/2011	11:23	1.93E+01	3.39E-02	4.60E+02	1.23E-01	1.63E+00	1.96E+00	2.82E+00	8.38E+00	5.43E+00	-2.24E-01	9.27E+00	9.93E+00	NA	NA	NA						
MW-51-104	Q4-2010	015	162.7	-36	12/20/2010	9:55	8.45E+01	1.33E-02	1.47E+02	3.74E-01	7.05E-01	-3.53E-01	-1.43E+01	3.40E+01	1.95E+01	3.10E-01	4.75E+00	5.55E+00	NA	NA	NA	ND	ND	ND	ED	NA	MW-51-104
MW-51-104	Q1-2011	016	162.7	-36	3/6/2011	12:13	5.76E+01	3.10E-02	4.55E+02	8.91E-01	1.47E+00	1.60E+00	2.54E+00	7.20E+00	5.14E+00	9.02E-01	5.50E+00	6.24E+00	NA	NA	NA						
MW-51-104	Q2-2011	017	162.7	-36	4/29/2011	12:20	1.97E+02	4.43E-02	4.44E+02	1.43E+00	1.46E+00	1.46E+00	-1.98E+00	1.08E+01	1.22E+01	-5.77E-01	1.18E+01	1.41E+01	NA	NA	NA						
MW-51-104	Q3-2011	018	162.7	-36	7/21/2011	9:51	1.41E+02	3.18E-02	4.51E+02	2.89E-01	1.36E+00	1.94E+00	-1.15E+01	6.85E+00	4.84E+00	-3.17E+00	8.18E+00	7.93E+00	NA	NA	NA						
MW-51-135	Q4-2010	013	132.2	67.5	12/20/2010	9:35	9.55E+01	1.33E-02	1.45E+02	4.01E-01	7.12E-01	7.98E-01	-3.11E+01	6.28E+01	2.66E+01	2.93E-01	4.09E+00	4.92E+00	NA	NA	NA	ND	ND	ND	ED	NA	MW-51-135
MW-51-135	Q1-2011	016	132.2	67.5	3/6/2011	12:44	8.29E+01	2.34E-02	4.62E+02	8.63E-01	1.31E+00	1.42E+00	8.69E-02	6.82E+00	4.77E+00	2.55E+00	5.56E+00	7.33E+00	NA	NA	NA						
MW-51-135	Q2-2011	017	132.2	67.5	4/29/2011	13:15	0.00E+00	3.56E-02	4.35E+02	1.11E+00	1.52E+00	1.63E+00	2.52E+00	1.01E+01	1.17E+01	3.69E-01	9.01E+00	9.56E+00	NA	NA	NA						
MW-51-135	Q3-2011	018	132.2	67.5	7/21/2011	10:04	5.63E+01	2.36E-02	4.49E+02	8.05E-01	1.71E+00	1.91E+00	-4.41E+00	8.22E+00	5.83E+00	1.52E+00	9.54E+00	1.05E+01	NA	NA	NA						
MW-51-163	Q4-2010	013	162.7	-93.3	12/20/2010	10:03	9.03E+01	1.31E-02	1.44E+02	-3.11E-01	6.72E-01	7.69E-01	-1.25E+01	3.07E+01	2.12E+01	-3.50E-01	4.54E+00	4.43E+00	ND	ND	ED	NA	NA	MW-51-163			
MW-51-163	Q1-2011	016	162.7	-93	3/6/2011	13:01	0.00E+00	1.36E-02	4.62E+02	-5.07E-01	1.39E+00	1.89E+00	2.81E+00	6.44E+00	5.06E+00	5.23E-01	7.56E+00	8.05E+00	NA	NA	NA						
MW-51-163	Q2-2011	017	162.7	-93	4/29/2011	13:19	4.61E+01	3.56E-02	4.30E+02	5.27E-01	1.45E+00	1.63E+00	2.26E+00	9.40E+00	5.72E+00	9.23E-01	7.72E+00	8.87E+00	NA	NA	NA						
MW-51-163	Q3-2011	018	162.7	-93	7/21/2011	10:13	1.20E+02	3.18E-02	4.54E+02	-7.15E-01	1.26E+00	1.96E+00	6.34E-01	7.71E+00	5.41E+00	3.60E+00	9.09E+00	1.17E+01	NA	NA	NA						
MW-51-28	Q4-2010	013	189.2	-21.3	12/20/2010	9:24	9.95E+01	1.39E-02	1.46E+02	-1.53E-01	7.79E-01	9.61E-01	-1.74E+01	4.63E+01	2.96E+01	-2.71E-01	4.91E+00	4.61E+00	ND	ND	ND	ED	NA	MW-51-183			
MW-51-29*	Q1-2011	016	189.2	-21.3	3/6/2011	12:33	-1.53E+01	1.23E-02	4.68E+02	-3.06E-01	1.46E+00	1.97E+00	3.77E+00 *	1.47E+01	6.28E+00	2.23E-01	5.48E+00	5.79E+00	NA	NA	NA						
MW-51-29	Q2-2011	017	189.2	-21.3	4/29/2011	12:52	2.31E+02	3.36E-02	4.33E+02	1.23E+00	1.50E+00	1.57E+00	-8.07E-01	5.62E+00	4.25E+00	-5.07E+00	9.48E+00	8.89E+00	NA	NA	NA						
MW-51-29	Q3-2011	018	189.2	-21.3	7/21/2011	10:42	-5.67E+00	3.11E-02	4.32E+02	3.67E-01	1.60E+00	1.92E+00	4.42E+00	1.07E+01	1.04E+01	-1.52E+00	1.11E+01	1.17E+01	NA	NA	NA						
MW-52-14*	Q2-2011	006	6.6	6.6	4/27/2011	14:37	4.83E+02	4.83E-02	4.54E+02	1.03E+00	1.35E+00	1.61E+00	1.03E+00	2.52E+00	3.10E+00	-1.07E+00	6.43E+00	7.15E+00	NA	NA	NA	6*	ND	ND	ED	NA	MW-52-14
MW-52-11	Q2-2011 Mod	007	10	6.8	7/21/2011	12:33	3.39E+02	3.39E-02	4.21E+02	1.83E-01	1.49E+00	1.74E+00	1.71E+00	8.76E+00	5.71E+00	-2.27E+00	8.43E+00	8.63E+00	NA	NA	NA						
MW-52-11	Q3-2011 Mod	008	10	6.8	10/27/2011	12:13	1.91E+02	3.09E-02	4.22E+02	2.82E+00	1.39E+00	1.42E+00	1.93E+00	9.01E+00	5.91E+00	-1.49E+00	9.94E+00	9.90E+00	NA	NA	NA						
MW-52-18	Q3-2011 Mod	007	17.5	2.6	7/21/2011	14:33	2.53E+02	3.77E-02	4.22E+02	1.06E+00	1.62E+00	1.76E+00	3.81E+00	6.45E+00	5.09E+00	3.23E+00	8.10E+00	7.81E+00	NA	NA	NA						
MW-52-48	Q2-2011	006	48	33.6	4/29/2011	12:45	4.06E+02	3.12E-02	4.26E+02	1.66E-01	1.47E+00	1.62E+00	-3.39E+00	9.38E+00	5.31E+00	-3.15E+00	7.10E+00	9.17E+00	NA	NA	NA	ED	ND	ND	ED	NA	MW-52-48
MW-52-48	Q3-2011 Mod	007	48	33.6	7/27/2011	15:03	7.61E+01	3.56E-02	4.21E+02	2.13E-01	1.30E+00	1.46E+00	2.52E+00	9.40E+00	5.07E+00	-1.07E+00	8.73E+00	1.01E+01	NA	NA	NA						
MW-52-64	Q2-2011	006	64	-49.4	4/29/2011	15:31	3.85E+01	3.85E+01	4.23E+02	1.41E+00	1.31E+00	1.27E+00	1.65E+00	6.72E+00	4.70E+00	5.49E+00	6.61E+00	6.61E+00	ND	ND	ND	ED	NA	MW-52-64			
MW-52-64	Q3-2011 Mod	007	64	-49.4	7/27/2011	10:45	1.31E+02	3.31E-02	4.31E+02	-4.58E-01	8.57E-01	1.27E+00	2.46E+00	7.75E+00	5.34E+00	6.66E-01	8.13E+00	9.05E+00	NA	NA	NA						
MW-52-122	Q2-2011	006	122	-07	4/29/2011	10:45	-2.20E+01	3.00E-02	4.31E+02	1.14E+00	1.37E+00	1.57E+00	-3.84E+01	2.00E+01	5.71E+00	1.06E+00	7.16E+00	7.90E+00	NA	NA	NA	ND	ND	3.48E+01	ED	NA	MW-52-122
MW-52-122	Q2-2011 Mod	007	122	-07	7/27/2011	13:32	-2.11E+01	3.81E-02	4.19E+02	1.03E+00	1.35E+00	1.47E+00	-5.49E+00	7.92E+00	5.50E+00	3.02E+00	6.14E+00	7.59E+00	NA	NA	NA						
MW-52-162	Q2-2011	006	181.5	-46.9	4/29/2011	10:15	4.01E+02	3.34E-02	4.29E+02	-7.70E-01	9.50E-01	1.42E+00	-1.46E+00	8.40E+00	5.66E+00	1.82E-01	4.10E+00	5.11E+00	NA	NA	NA	1.6E+02	ND	ND	ED	NA	MW-52-162
MW-52-162	Q2-2011 Mod	007	181.5	-46.9	7/25/2011	11:33	5.16E+02	4.20E-02	4.22E+02	3.77E-03	1.21E+00	1.57E+00	4.29E-02	8.34E+00	5.09E+00	-2.32E+00	9.17E+00	1.00E+01	NA	NA	NA						
MW-52-181	Q2-2011	006	214	-66	4/29/2011	10:30	2.46E+02	3.30E-02	4.33E+02	1.41E+00	1.46E+00	1.64E+00	-6.64E+00	2.40E+01	1.42E+01	-1.09E+00	1.22E+01	1.10E+01	ND	ND	ED	NA	NA	MW-52-181			
MW-53-181	Q3-2011 Mod	007	111	-66	7/25/2011	11:43	2.4.E+02	3.37E-02	4.23E+02	3.57E-01	1.38E+00	1.54E+00	-1.99E+00	7.47E+00	5.72E+00	-1.27E+00	9.79E+00	9.97E+00	NA	NA	NA						
MW-53-32	Q4-2010	017	55	-44.4	10/27/2010	12:07	2.79E+03	2.79E-03	1.00E+02	3.07E-01	5.90E-01	3.26E-01	3.74E+02	5.21E+00	6.57E+00	1.14E-01	6.23E+00	7.20E+00	NA	NA	NA	1.13E+03	ND	ND	ED	NA	MW-53-32
MW-53-32	Q1-2011	018	55	-44.4	3/6/2011	11:33	2.91E+02	2.03E-02	4.11E+02	1.03E+00	1.41E+00	1.91E+00	5.01E+00	6.48E+00	4.68E+00	1.14E+00	6.06E+00	6.23E+00	NA	NA	NA						
MW-53-32	Q2-2011	019	55	-44.4	4/8/2011	12:45	6.21E+02	4.95E-02	4.05E+02	4.41E-01	1.35E+00	1.67E+00	-4.75E+00	9.72E+00	6.99E+00	3.12E+00	8.78E+00	1.07E+01	5.8E+02	1.6E+01	1.73E+01						
MW-53-82	Q3-2011	021	75	4.7	8/1/2011	11:11	7.16E+02	3.34E-02	4.71E+02	-5.52E-01	9.06E-01	1.06E+00	-2.46E+00	7.38E+00	5.34E+00	-3.41E-01	8.49E+00	9.05E+00	8.23E+00	1.10E+01	1.92E+01						
MW-53-120	Q4-2010	021	158.8	-39.5	10/27/2010	12:46	3.62E+03	3.38E-03	1.11E+02	2.26E+01	3.34E+00	-7.02E-01	-3.52E+00	3.07E+00	4.00E+00	-8.52E-01	5.46E+00	5.76E+00	NA	NA	NA	1.03E+03	3.05E+01	ND	ED	1.35E+01	MW-53-120
MW-53-120	Q1-2011	022	158.8	-39.5	3/6/2011	12:03	2.81E+02	1.89E+00	4.20E+02	2.03E+01	3.76E+00	1.12E+00	2.58E+00	7.23E+00	4.47E+00	2.43E+00	8.13E+00	1.00E+01	NA	NA	NA						
MW-53-120	Q2-2011	023	109.8	39.5	4/1/2011	11:53	4.1.E+03	7.72E-02	4.75E+02	3.55E+01	4.56E+00	1.67E+00	1.38E+00	8.82E+00	5.99E+00	4.87E-01	9.24E+00	1.02E+01	1.76E+01	1.77E+01	1.87E+01						
MW-53-120	Q3-2011	025	109.8	39.5	8/1/2011	10:03	4.41E+03	6.13E-02	4.71E+02	3.30E+01	5.22E+00	1.94E+00	-2.07E+00	8.49E+00	5.67E+00	-5.11E-01	9.56E+00	1.01E+01	1.43E+01	1.52E+01	1.07E+01						
MW-54-37	Q4-2010	015	58.5	22.5	10/27/2010	14:45	3.40E+03	3.27E-02	1.06E+02	4.25E+00	1.42E+00	9.34E-01	-2.09E+00	3.46E+00	3.50E+00	-4.83E-01	4.97E+00	5.45E+00	1.24E+04	9.66E+03	ND	ED	ND	MW-54-37			
MW-54-37	Q1-2011	016	36.5	-23.4	2/1/2011	14:13	1.33E+03	4.36E-02	4.78E+02	4.82E+00	1.77E+00	1.26E+00	-1.42E+00	5.44E+00	5.67E+00	3.12E-01	6.42E+00	7.04E+00	2.81E+00	1.79E+01	1.82E+01						
MW-54-37	Q2-2011	017	36.5	-23.4	4/1/2011	12:02	5.16E+03	8.40E-02	4.76E+02	4.9.E+00	2.08E+00	1.69E+00	2.97E+00	9.26E+00	5.69E+00	2.52E+00	8.16E+00	9.96E+00	3.16E+00	1.45E+01	1.65E+01						
MW-54-37	Q2-2011 Mod	018	36.5	-23.4	7/1/2011	13:42	2.79E+04	6.40E-02	4.54E+02	2.49E+00	1.21E+00	1.21E+00	-1.17E+00	5.50E+00	5.63E+00	4.07E+00	9.21E+00	1.09E+01	1.52E+01	1.50E+01	2.07E+01						
MW-54-37	Q3-2011	019	36.5	-23.4	8/3/2011	9:27	3.11E+04	1.75E-03	1.98E+02	2.75E-01	1.60E+00	1.88E+00	5.03E-01	6.69E+00	7.58E+00	3.3.E+00	7.56E+00	9.28E+00	1.07E+01	1.66E+01	1.96E+01						
MW-54-38	Q4-2010	015	57.5	-44.6	10/26/2010	14:20	8.3.E+03	1.30E-02	1.02E+02	2.07E+00	1.32E+00	9.76E-01	-3.3.E+00	6.00E+00	7.88E+00	2.72E+00	6.70E+00	8.00E+00	3.94E+00	1.66E+01	2.31E+01	1.8.E+03	1.95E+00	ND	ED	ND	MW-54-38
MW-54-38	Q1-2011	016	57.5	-44.6	2/1/2011	14:22	9.32E+02	4.50E-02	4.92E+02	1.05E+00	1.34E+00	1.23E+00	-4.23E+00	7.48E+00	7.94E+00	2.2.E+00	6.14E+00	6.82E+00	4.83E+00	1.66E+01	1.92E+01						
MW-54-38	Q2-2011	017	57.5	-44.6	4/1/2011	12:04	9.91E+02	5.30E-02	4.79E+02	1.13E+00	1.52E+00	1.01E+00	1.7.E+00	8.35E+00	6.66E+00	1.1.E+00	8.14E+00	9.95E+00	5.01E+00	1.58E+01	1.73E+01						
MW-54-38	Q2-2011 Mod	018	57.5	-44.4	7/1/2011	13:33	2.41E+03	6.12E-02	4.44E+02	1.49E+00	1.31E+00	1.14E+00	-1.90E+00	9.15E+00	5.27E+00	2.3.E-01	9.09E+00	1.01E+01	1.83E+01	1.57E+01	2.13E+01						
MW-54-38	Q3-2011	019	57.5	-44.4	8/3/2011	9:4.	4.41E+03	6.36E-02	4.41E+02	-1.52E-01	9.23E-01	1.41E+00	-1.01E+00	6.81E+00	5.19E+00	-3.43E-01	9.53E+00	1.01E+01	2.67E+01	1.24E+01	2.01E+01						
MW-54-139	Q4-2010	015	109.9	-26.6	10/26/2010	15:10	3.47E+02	1.03E-02	1.73E+02	6.78E+00	1.83E+00	9.38E-01	-1.81E+00	6.56E+00	6.56E+00	1.79E+00	6.13E+00	6.62E+00	3.94E+00	1.66E+01	2.14E+01	3.95E+03	1.54E+00	ND	ED	ND	MW-54-139
MW-54-123	Q1-2011	016	123	-09.9	2/1/2011	14:11	1.01E+03	4.58E-02	4.90E+02	2.56E+00	1.39E+00	1.08E+00	-3.55E+00	6.62E+00	6.69E+00	-3.63E-01	5.16E+00	5.75E+00	2.50E+00	1.66E+01	1.87E+01						
MW-54-123	Q2-2011	017	123	-09.9	4/1/2011	12:22	8.21E+02	4.58E-02	4.77E+02	3.44E+00	1.96E+00	1.72E+00	-5.24E+00	8.48E+00	7.60E+00	1.82E+00	8.14E+00	9.55E+00	-3.32E+00	1.45E+01	1.75E+01						
MW-54-123	Q3-2011	018	123	-09.9	7/1/2011	14:05	7.13E+02	4.16E-02	4.66E+02	7.18E-01	1.62E+00	1.07E+00	1.92E+00	9.66E+00	1.05E+01	2.57E-01	6.20E+00	6.27E+00	1.54E+01	1.54E+01	2.06E+01						
MW-54-123	Q3-2011	019	123	-09.9	8/3/2011	9:57	1.2.E+03	3.75E-02	1.00E+02	3.74E+00	2.03E+00	1.78E+00	5.50E-01	9.46E+00	5.31E+00	-5.0.E-01	8.18E+00	9.49E+00	-3.4.E+00	1.54E+01	2.22E+01						
MW-54-144	Q4-2010	014	144	-30.9	10/26/2010	12:50	1.34E+03	2.15E-02	1.21E+02	1.06E+01	5.83E+00	3.18E+00	7.02E+00	8.09E+00	6.93E+00	3.87E+00	6.93E+00	7.03E+00	7.26E+03	1.09E+01	1.61E+01	2.21E+01						
MW-54-144	Q1-2011	016	144	-30.9	2/1/2011	12:24	3.81E+02	4.30E-02	4.97E+02	9.3.E+00	2.34E+00	1.90E+00	-8.04E+00	7.48E+00	7.40E+00	-2.42E+00	6.06E+00	6.27E+00	1.20E+01	1.52E+01	1.83E+01						
MW-54-144	Q2-2011	017	144	-30.9	4/1/2011	9:51	1.40E+03	5.58E-02	4.79E+02	1.20E+01	2.92E+00	1.81E+00	6.4.E+00	7.44E+00	5.59E+00	-4.65E+00	9.58E+00	8.86E+00	-2.77E+00	1.45E+01	1.74E+01						
MW-54-144	Q2-2011 Mod	018	144	-30.9	7/1/2011	12:33	4.31E+03	7.41E-02	4.43E+02	1.13E+01	2.46E+00	1.26E+00	3.35E+00	7.47E+00	6.78E+00	-3.49E+00	8.81E+00	8.83E+00	1.53E+00	1.57E+01	2.03E+01						
MW-54-144	Q3-2011	019	144	-30.9	8/3/2011	9:44	2.72E+03	1.96E-02	1.10E+02	2.77E+00	2.02E+00	2.05E+00	2.99E+00	9.10E+00	7.04E+00	-4.22E-01	9.11E+00	1.02E+01	2.11E+00	1.59E+01	2.12E+01						
MW-54-172	Q4-2010	013	172.5	-59.4	10/26/2010	12:25	1.53E+03	2.28E-02	1.24E+02	4.65E+00	1.28E+00	3.57E-01	1.84E+00	7.65E+00	7.21E+00	1.82E+00	6.53E+00	6.51E+00	2.22E+00	1.64E+01	2.14E+01	1.48E+03	4.65E+00	ND	ED	ND	MW-54-172
MW-54-173	Q1-2011	016	172.5	-59.4	2/1/2011	12:29	1.66E+03	5.36E-02	4.81E+02	5.8.E+00	1.88E+00	1.10E+00	-2.87E+00	8.00E+00	6.79E+00	1.01E+00	1.16E+01	1.20E+01	5.46E+00	1.77E+01	2.05E+01						
MW-54-173	Q2-2011	017	172.5	-59.4	4/1/2011	9:26	1.40E+03	4.61E+02	4.9.E+00	1.94E+00	1.36E+00	-1.26E+00	1.48E+00	1.53E+01	9.05E+00	-4.1.E+00	1.20E+01	1.47E+01	1.77E+01	1.77E+01	2.06E+01						
MW-54-173	Q2-2011 Mod	018	172.5	-59.4	7/1/2011	12:21	1.45E+03	5.20E-02	4.46E+02	1.14E+01	1.11E+00	2.97E-01	4.54E+00	1.14E+01	6.51E+00	1.47E+00	1.17E+01	1.70E+01	1.47E+01	1.77E+01	2.06E+01						
MW-54-173	Q3-2011	019	172.5	-59.4	8/3/2011	11:53	1.50E+03	4.38E-02	1.97E+02	4.32E+00	1.94E+00	1.48E+00	-1.36E+00	1.01E+01	1.05E+01	-7.7.E-01	1.15E+01	1.33E+01	7.41E+00	2.05E+01	2.42E+01						
MW-54-190	Q4-2010	013	190	-76.9	10/26/2010	12:52	1.95E+03	3.55E-02	1.27E+02	1.62E+01	1.39E+00	-3.38E-01	-9.64E-01	6.66E+00	9.61E+00	2.95E+00	8.51E+00	6.70E+00	3.11E-01	1.61E+01	2.14E+01	3.1.E+03	1.83E+01	ND	ED	ND	MW-54-190
MW-54-190	Q1-2011	016	190	-76.9	2/1/2011	12:25	1.89E+03	5.56E-02	1.90E+02	1.68E+01	2.36E+00	1.28E+00	4.59E-01	6.24E+00	7.14E+00	3.5.E+00	5.56E+00	5.51E+00	1.71E+00	1.67E+01	1.89E+01						
MW-54-190	Q2-2011	017	190	-76.9	4/1/2011	10:01	2.07E+03	6.18E-02	4.78E+02	1.90E+01	3.38E+00	1.77E+00	3.3.E+00	7.56E+00	5.23E+00	3.70E-01	9.06E+00	1.00E+01	3.3.E-0.	1.58E+01	1.82E+01						
MW-54-190	Q2-2011 Mod	018	190	-76.9	7/1/2011	12:14	2.3.E+03	6.90E-02	4.45E+02	1.7.E+01	2.53E+00	1.12E+00	2.2.E+00	1.6.E+01	1.29E+01	-2.7.E+00	1.18E+01	1.22E+01	-3.6.E+00	1.5.E+01	1.74E+01						
MW-54-190	Q3-2011	019	190	-76.9	8/3/2011	12:03	2.8.E+03	2.09E+00	1.89E+02	1.9.E+01	2.30E+00	1.22E+00	2.20E+00	2.41E+01	2.57E+01	-6.6.E+00	8.57E+00	1.11E+01	-6.6.E+00	1.6.E+01	2.20E+01						
MW-55-24	Q4-2010	014	16	2.3	10/26/2010	14:13	1.99E+03	2.99E-02	1.05E+02	1.05E+01	1.95E+00	9.93E-01	2.39E+01	2.03E+01	5.04E+00	-4.4.E+00	7.56E+00	6.54E+00	3.56E+00	1.88E+01	2.12E+01	1.9.E+03	1.45E+01	ND	ED	ND	MW-55-24
MW-55-24	Q1-2011	017	16	2.3	2/1/2011	14:13	1.01E+03	4.83E-02	4.20E+02	1.00E+01	2.52E+00	1.96E+00	-4.4.E+00	3.57E+01	4.52E+00	5.43E+00	4.7.E+00	8.14E+00	7.44E+00	-3.31E+00	1.51E+01	2.14E+01						
MW-55-24	Q2-2011	018	16	2.3	3/1/2011	12:11	1.7.E+03	4.35E-02	1.01E+02	1.09E+01	2.31E+00	1.59E+00	-4.1.E+00	2.22E+01	6.90E+00	5.1.E+00	7.51E+00	8.93E+00	6.27E+00	1.64E+01	2.09E+01	2.14E+01						
MW-55-35	Q4-2010	013	13.6	-13.8	10/26/2010	14:35	1.57E+03	2.12E-02	1.03E+02	1.31E+01	1.97E+00	9.67E-01	-2.24E+00	8.08E+00	6.46E+00	1.53E+00	6.81E+00	6.92E+00	1.79E+00	1.62E+01	2.17E+01	1.07E+03	1.56E+01	ND	ED	ND	MW-55-35
MW-55-35	Q1-2011	016	-2	-13.8	2/1/2011	14:15	1.70E+03	4.34E-02	1.86E+02	1.93E+01	3.42E+00	2.05E+00	8.33E-01	5.12E+00	6.45E+00	1.02E+00	6.24E+00	7.03E+00	-2.1.E+00	1.66E+01	2.17E+01						
MW-55-35	Q3-2011	017	-2	-13.8	8/1/2011	12:17	2.94E+03	5.30E-02	1.01E+02	1.02E+01	3.8.E+00	1.30E+00	4.23E-01	7.40E+00	5.43E+00	-1.40E+00	8.11E+00	8.83E+00	-1.22E+00	2.17E+01	2.60E+01						
MW-55-54	Q4-2010	018	47	-28.8	10/26/2010	13:25	1.52E+03	2.05E-02	1.02E+02	1.09E+01	1.94E+00	6.48E-01	3.30E+00	7.39E+00	6.24E+00	1.29E+00	6.59E+00	6.63E+00	1.13E+00	1.70E+01	2.20E+01	1.6.E+03	1.20E+01	ND	ED	ND	MW-55-54
MW-55-54	Q1-2011	017	47	-28.8	2/1/2011	14:17	8.4.E+03	8.58E-02	1.89E+02	1.9.E+01	3.78E+00	1.95E+00	3.6.E+

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TABLE 3
THIRD QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,3]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing[4]	SAMPLE ZONE CENTER Elevation Ft msl[5]	SAMPLE COLLECTION		ANALYSIS RESULTS[6]														YEARLY ROLLING AVERAGES[6,8]						Well ID[1]
							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.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Average	Average	Average	Average	Average	
MW-58-26	Q2-2011	013	-10	-5.4	5/C/2011	9:35	7.22E+02	4.80E+02	2.51E+02	3.15E-01	1.38E+00	1.32E+00	2.32E+00	5.10E+00	6.89E+00	6.42E+00	9.02E+00	8.00E+00	NA	NA	NA							MW-58-26
MW-58-26	Q3-2011 Mid	013	-10	-5.4	7/C/2011	13:22	1.86E+03	5.46E+02	4.47E+02	-3.25E-01	1.08E+00	1.41E+00	7.4_E-01	6.54E+00	7.61E+00	1.22E+00	7.72E+00	8.39E+00	-1.01E+01	1.59E+01	2.25E+01							
MW-58-26	Q3-2011 Mid	014	-10	-5.4	8/C/2011	14:47	2.47E+03	5.10E+02	1.99E+02	-6.17E-02	7.13E-01	1.05E+00	2.39E-01	7.45E+00	5.47E+00	3.23E-01	8.23E+00	9.22E+00	NA	NA	NA							
MW-58-26	Q4-2011	011	-10	-5.4	10/C/2011	13:53	4.03E+03	1.35E+02	1.45E+02	7.13E-01	7.72E-01	1.23E+00	2.60E-01	3.71E+00	5.18E+00	4.41E+00	5.40E+00	6.40E+00	NA	NA	NA	2.85E+02	3.75E-01	ND***	ND	ND	NA	MW-58-26
MW-58-65	Q2-2011	012	-14	-39.4	5/C/2011	10:11	3.29E+02	3.78E-02	1.97E+02	-4.47E-01	1.03E+00	1.44E+00	1.9_E+00	5.92E+00	7.00E+00	-7.81E-01	7.14E+00	7.26E+00	NA	NA	NA							
MW-58-65	Q3-2011 Mid	013	-14	-39.4	7/C/2011	13:53	7.26E+02	3.72E-02	1.51E+02	4.17E-01	9.12E-01	1.03E+00	5.2E+00	6.16E+00	1.25E+01	1.47E+00	7.73E+00	8.75E+00	3.44E-01	2.03E+01	2.27E+01							
MW-58-65***	Q3-2011 Mid	014	-14	-39.4	8/C/2011	14:04	1.10E+03	4.32E-02	1.61E+02	1.31E-01***	1.12E+00	1.60E+00	1.00E+00	9.86E+00	9.62E+00	1.34E+00	8.11E+00	10.4E+01	NA	NA	NA							
MW-58-65***	Q4-2011 Mid	011	-14	-39.4	10/C/2011	13:40	1.44E+03	4.32E-02	1.61E+02	1.31E-01***	1.12E+00	1.60E+00	1.00E+00	9.86E+00	9.62E+00	1.34E+00	8.11E+00	10.4E+01	NA	NA	NA							
MW-59-33	Q2-2011 Mid	006	-27	-12.5	5/C/2011	9:55	3.68E+02	3.30E-02	2.58E+02	-5.53E-01	1.45E+00	1.70E+00	1.70E+00	5.40E+00	5.02E+00	5.53E+00	9.78E+00	9.02E+00	-1.63E+01	-1.63E+01	-1.63E+01	-7.78E+02	NC	ND	ND	ND	MW-59-33	
MW-59-33	Q3-2011 Mid	006	-27	-12.5	7/C/2011	14:22	4.71E+02	3.72E-02	1.77E+02	7.95E-01	1.3E+00	1.20E+00	2.53E+00	1.05E+01	1.13E+01	8.43E+00	9.93E+00	8.67E+00	2.63E+01	2.16E+01	2.54E+01							
MW-59-33	Q4-2011 Mid	003	-27	-12.5	10/C/2011	9:25	3.45E+02	4.50E+02	4.61E+02	-1.21E+00	1.03E+00	1.30E+00	1.51E+00	6.92E+00	5.32E+00	2.70E+00	9.43E+00	9.12E+00	1.13E+01	1.31E+01	1.40E+01	3.84E+02	NC	ND	ND	ND	MW-59-33	
MW-59-45	Q3-2011 Mid	006	-42	-27.5	7/C/2011	14:53	1.31E+03	4.22E-02	1.64E+02	1.11E-01	1.11E+00	1.13E+00	1.3E+00	8.27E+00	8.81E+00	4.22E+01	9.42E+00	1.13E+01	1.31E+01	1.17E+01	1.20E+01							
MW-59-45	Q4-2011 Mid	003	-42	-27.5	10/C/2011	10:14	1.15E+03	3.90E-02	1.42E+02	-1.13E-01	7.06E-01	9.01E-01	2.82E+00	9.93E+00	1.09E+01	3.42E-01	9.97E+00	1.06E+01	-1.43E+01	-1.21E+01	-2.47E+01	ND	ND	ND	ND	ND	MW-59-45	
MW-59-68	Q2-2011 Mid	006	-78	-63.5	5/C/2011	14:09	2.6_E+02	2.33E-02	2.66E+02	-5.46E-01	1.11E+00	1.14E+00	-3.5_E+00	8.22E+00	7.69E+00	1.52E+00	9.13E+00	10.3E+01	-8.94E+00	1.22E+01	1.42E+01							
MW-59-68	Q4-2011 Mid	003	-78	-63.5	10/C/2011	10:25	2.49E+02	1.95E-02	2.80E+02	5.53E-01	6.54E-01	1.72E+00	9.47E-01	4.92E+00	3.06E+00	2.21E-01	3.75E+00	9.73E+00	1.17E+01	9.27E+00	9.95E+00	-9.95E+02	NC	ND	ND	ND	MW-59-68	
MW-60-35	Q1-2011	016	34.9	-22.4	2/1/2011	12:17	3.28E+02	3.72E-02	2.88E+02	9.71E-01	1.63E+00	1.78E+00	2.66E+00	6.24E+00	7.46E+00	1.22E-01	3.76E+00	4.24E+00	-1.61E+00	1.42E+01	1.84E+01							
MW-60-35	Q2-2011	017	34.9	-22.4	4/1/2011	11:35	2.03E+02	4.52E-02	2.80E+02	3.77E-01	1.66E+00	1.90E+00	2.4_E+00	1.48E+01	1.95E+01	-8.41E-01	9.15E+00	10.3E+01	2.63E+01	1.42E+01	1.61E+01							
MW-60-35	Q3-2011 Mid	018	34.9	-22.4	7/1/2011	10:24	4.29E+02	2.29E-02	2.02E+02	-5.04E-01	7.74E-01	1.17E+00	2.11E+00	6.76E+00	7.20E+00	1.84E+00	1.13E+01	1.10E+01	NA	NA	NA							
MW-60-35	Q4-2010	013	34.9	-22.4	11/18/2010	12:33	2.49E+02	1.33E-02	2.96E+02	-4.35E-01	4.20E-01	1.32E+00	4.3_E-01	4.31E+00	5.15E+00	2.32E+00	3.27E+00	8.73E+00	1.10E+00	8.83E+00	9.98E+01	1.6E+02	ND	ND	ND	ND	MW-60-35	
MW-60-53	Q1-2011	016	51.4	-40.9	2/1/2011	10:57	3.19E+02	3.70E-02	2.87E+02	7.44E-01	1.52E+00	1.70E+00	-2.0E+00	5.58E+00	6.16E+00	1.38E+00	7.16E+00	8.33E+00	-1.35E+00	1.50E+01	1.72E+01							
MW-60-53	Q2-2011	017	51.4	-40.9	4/1/2011	11:37	2.37E+02	3.30E-02	2.88E+02	-1.11E-02	1.60E+00	1.94E+00	2.1_E+00	9.76E+00	1.14E+01	-1.1_E+00	8.43E+00	8.93E+00	-1.0_E+00	1.43E+01	1.66E+01							
MW-60-53	Q3-2011	018	51.4	-40.9	7/1/2011	11:45	5.16E+02	2.70E-02	1.99E+02	1.12E+00	1.39E+00	1.45E+00	5.7_E-01	1.34E+01	6.78E+00	-5.1_E-01	1.17E+01	11.5E+01	NA	NA	NA							
MW-60-53	Q4-2010	013	51.4	-40.9	11/18/2010	13:07	2.53E+02	1.38E-02	2.96E+02	-5.63E-02	2.12E-01	1.32E+00	2.1_E+00	5.54E+00	1.26E+01	-5.9_E+00	3.47E+00	8.89E+01	1.12E+01	8.32E+00	9.89E+01	9.1E+02	ND	ND	ND	ND	MW-60-53	
MW-60-54	Q1-2011	016	154.4	-41.9	2/1/2011	12:54	3.64E+02	3.92E-02	2.44E+02	-2.41E-01	1.43E+00	1.70E+00	-3.1_E-2	7._E+00	1.01E+01	4.22E+01	8.48E+00	10.7E+01	4.22E+01	1.54E+01	1.23E+01							
MW-60-54	Q2-2011	017	154.4	-41.9	4/1/2011	13:12	3.06E+02	3.36E-02	4.21E+02	-4.02E-01	1.33E+00	1.02E+00	-2.0_E+00	7.82E+00	7.82E+00	-7.2_E-01	6.08E+00	6.79E+00	1.62E+01	1.44E+01	1.64E+01							
MW-60-54	Q3-2011	018	154.4	-41.9	7/1/2011	13:22	5.99E+02	2.31E-02	1.97E+02	-5.03E-02	1.38E+00	1.40E+00	-1.0E+00	1.47E+01	6.47E+00	2.90E+00	1.91E+01	10.7E+01	NA	NA	NA							
MW-60-76	Q4-2010	015	175.9	-63.4	11/18/2010	14:05	8.31E+02	2.10E-02	2.97E+02	9.07E-01	9.42E-01	1.05E+00	1.5_E+00	4.28E+00	6.04E+00	2.83E+00	4.70E+00	9.12E+01	6.45E+00	7.51E+00	9.78E+01	6.45E+02	ND	ND	ND	ND	MW-60-176	
MW-60-176	Q1-2011	016	175.9	-63.4	2/1/2011	10:31	1.11E+03	4.58E-02	1.81E+02	2.31E-01	1.49E+00	1.74E+00	4.8_E+00	1.3_E+01	6.69E+00	-1.7_E+00	6.01E+00	6.74E+00	7.24E+00	1.42E+01	1.79E+01							
MW-60-176	Q2-2011	017	175.9	-63.4	4/1/2011	13:49	8.99E+02	4.92E-02	2.18E+02	-8.29E-01	1.41E+00	1.10E+00	-7.8_E-2	2.90E+01	1.10E+01	2.3_E+00	1.12E+01	10.5E+01	2.48E-01	1.44E+01	1.62E+01							
MW-60-176	Q3-2011	018	175.9	-63.4	7/1/2011	14:13	9.71E+02	3.42E-02	1.88E+02	-1.79E-01	9.31E-01	1.23E+00	-3.8_E+00	1.74E+01	7.27E+00	-1.7_E-01	8.51E+00	9.60E+01	NA	NA	NA							
MW-62-18	Q4-2010	015	13.5	-12	11/9/2010	11:37	7.48E+01	1.71E-02	2.66E+02	-3.05E-02	6.10E-01	1.34E+00	-3.5_E+00	4.39E+00	3.07E+01	-8.3_E-01	4.78E+00	9.81E+01	NA	NA	NA	4.9E+02	1.26E+00	ND	ND	NA	MW-62-18	
MW-62-18	Q1-2011	016	14.2	-14	2/6/2011	11:44	1.43E+02	2.30E-02	4.04E+02	1.26E-01	1.71E+00	1.13E+00	-4.1_E-01	4._E+00	3.14E+00	3.20E+00	3.68E+00	9.43E+01	NA	NA	NA							
MW-62-18	Q2-2011	017	13.5	1.2	4/1/2011	11:53	3.21E+02	4.95E-02	2.93E+02	7.93E-01	1.48E+00	1.71E+00	-4.3_E+00	1.80E+01	1.09E+01	-4.07E-01	1.16E+01	1.16E+01	NA	NA	NA							
MW-62-18	Q2-2011 Mid	018	13.5	1.2	7/1/2011	11:35	2.08E+02	4.42E-02	4.45E+02	1.26E+00	1.34E+00	1.25E+00	4.9_E+00	9.42E+00	1.14E+01	-1.7_E+00	1.15E+01	10.8E+01	-3.8_E+00	1.56E+01	2.20E+01							
MW-62-18	Q3-2011	019	13.5	1.2	8/C/2011	10:13	4.01E+02	3.99E-02	2.51E+02	2.03E-01	1.27E+00	1.24E+00	-1.1_E+00	5.7_E+00	6.15E+00	4.72E+00	9.11E+00	1.21E+01	NA	NA	NA							
MW-62-37	Q4-2010	012	34.5	-19.8	11/9/2010	11:56	6.09E+01	1.70E-02	2.55E+02	-7.24E-02	6.59E-01	1.27E+00	3.5_E+00	4.95E+00	4.95E+00	3.25E+00	3.97E+00	9.81E+01	NA	NA	NA	ND	ND	ND	ND	NA	MW-62-37	
MW-62-37	Q1-2011	016	34.5	-19.8	2/6/2011	12:53	3.01E+02	3.76E-02	4.00E+02	5.14E-01	1.54E+00	1.13E+00	1.6_E+00	6.86E+00	6.86E+00	-2.8_E+00	6.38E+00	6.38E+00	NA	NA	NA							
MW-62-37	Q2-2011	017	34.5	-19.8	4/1/2011	12:13	1.56E+02	4.36E-02	4.91E+02	-1.97E-01	1.08E+00	1.37E+00	-4.4_E+00	8.32E+00	7.76E+00	-1.6_E+00	9.12E+00	9.05E+00	NA	NA	NA							
MW-62-37	Q2-2011 Mid	018	34.5	-19.8	7/2/2011	12:23	1.15E+02	3.30E-02	4.42E+02	1.02E+00	1.60E+00	1.72E+00	-2._E+00	9.03E+00	7.55E+00	2.90E+00	1.10E+01	10.5E+01	-3.92E+00	1.25E+01	1.20E+01							
MW-62-37	Q3-2011	019	34.5	-19.8	8/C/2011	10:35	3.09E+02	3.33E-02	2.52E+02	1.22E+00	1.31E+00	1.96E+00	3.0_E+00	6.99E+00	8.03E+00	2.71E+00	8.15E+00	10.1E+01	NA	NA	NA							
MW-62-37	Q4-2010	014	34.5	-19.8	11/9/2010	12:49	2.02E+02	1.77E-02	2.68E+02	9.53E-02	6.79E-01	1.29E+00	3.4_E+00	4.91E+00	8.52E+00	2.82E+00	3.52E+00	10.4E+01	NA	NA	NA	2.2E+02	ND	ND	ND	NA	MW-62-37	
MW-62-53	Q1-2011	016	53.1	-40.3	2/6/2011	12:27	3.02E+02	4.02E-02	4.93E+02	5.91E-01	1.94E+00	1.11E+00	-3.0_E-1	4.72E+00	7.20E+00	1.22E+00	7.11E+00	10.1E+01	1.64E+01	1.58E+01	1.58E+01							
MW-62-53	Q2-2011	017	53.1	-40.3	4/1/2011	11:32	1.57E+02	4.36E-02	4.92E+02	1.72E+00	1.79E+00	1.84E+00	5.4_E-01	6.78E+00	7.51E+00	-3.0_E-01	6.54E+00	6.53E+00	NA	NA	NA							
MW-62-53	Q2-2011 Mid	017	53.1	-40.3	7/2/2011	10:47	1.60E+02	3.36E-02	4.45E+02	-4.83E-01	1.07E+00	1.58E+00	4.3_E+00	7.16E+00	5.52E+00	1.66E+00	8.15E+00	10.2E+01	-1.61E+01	1.79E+01	2.05E+01							
MW-62-53	Q3-2011	018	53.1	-40.3	8/C/2011	12:44	1.12E+02	3.42E-02	4.45E+02	1.32E-01	1.48E+00	1.72E+00	2.5_E+00	7.99E+00	5.04E+00	3.12E+00	8.45E+00	10.6E+01	NA	NA	NA							
MW-62-71	Q4-2010	014	7.1	-58.5	11/10/2010	11:00	4.47E+01	1.15E-02	2.67E+02	-6.74E-02	6.13E-01	1.52E+00	-5.5_E+00	4.90E+00	5.43E+00	5.49E+00	5.47E+00	9.60E+01	9.81E+00	1.60E+01	1.60E+01	NA	NA	NA	NA	NA	MW-62-71	
MW-62-71	Q1-2011	016	7.1	-58.5	2/24/2011	12:43	5.31E+02	4.36E-02	4.03E+02	1.21E-01	1.22E+00	1.48E+00	4.1_E+00	1.8_E+01	6.67E+00	-2.3_E-01	5.01E+00	5.47E+00	NA	NA	NA							
MW-62-71	Q2-2011	017	7.1	-58.5	4/6/2011	11:15	3.42E+02	4.76E-02	1.81E+02	9.15E-01	1.43E+00	1.30E+00	4.5_E+00	1.7_E+01	7.76E+00	5.47E+00	8.13E+00	8.50E+00	NA	NA	NA							
MW-62-71	Q2-2011 Mid	017	7.1	-58.5	7/5/2011	10:13	4.23E+02	4.45E-02	4.44E+02	3.90E-01	1.36E+00	1.80E+00	7.2_E+00	1.7_E+01	7.46E+00	5.31E+00	8.59E+00	8.59E+00	6.47E+00	1.89E+01	2.13E+01							
MW-62-71	Q3-2011	019	7.1	-58.5	8/C/2011	11:53	5.14E+02	3.99E-02	2.07E+02	3.42E-01	1.39E+00	1.65E+00	-7.3_E-1	1.81E+01	1.10E+01	2.51E+00	1.14E+01	1.20E+01	NA	NA	NA							
MW-62-92	Q4-2010	015	9.6	-78.8	11/9/2010	11:15	4.83E+02	1.38E-02	2.88E+02	-9.75E-01	7.72E-01	1.95E+00	-2.0_E+00	5.42E+00	3.17E+01	-1.7_E+00	4.43E+00	9.12E+01	NA	NA	NA	2.2E+02	ND	ND	ND	NA	MW-62-92	
MW-62-92	Q1-2011	016	9.6	-78.8	2/24/2011	12:27	3.70E+02	4.02E-02	4.09E+02	9.15E-01	1.55E+00	1.61E+00	1.9_E+00	5.27E+00	5.35E+00	1.43E+00	5.63E+00	5.56E+00	NA	NA	NA							
MW-62-92	Q2-2011	017	9.6	-78.8	4/13/2011	11:03	5.06E+02	4.78E-02	4.92E+02	2.87E-01	1.1_E+00	1.30E+00	-2.8_E+00	7.8_E+00	7.31E+00	-2.10E+00	8.54E+00	8.88E+00	NA	NA	NA							
MW-62-92	Q2-2011 Mid	018	9.6	-78.8	7/2/2011	10:13	5.6_E+02	4.35E-02	4.29E+02	-1.12E+00	1.32E+00	1.06E+00	5.2_E+00	9.42E+00	1.13E+01	-7.24E-02	9.48E+00	10.5E+01	-6.61E+00	1.76E+01	1.99E+01							
MW-62-92	Q3-2011	019	9.6	-78.8	8/C/2011	12:13	5.6_E+02	3.70E-02	2.02E+02	-3.20E-01	1.52E+00	1.52E+00	2.3_E+00	1.44E+01	1.42E+01	-2.1_E+00	1.17E+01	11.9E+01	NA	NA	NA							
MW-62-138	Q4-2010	014	138.1	-25.2	11/9/2010	14:31	3.3_E+02	2.07E-02	2.48E+02	-3.95E-01	6.08E-01	1.57E+00	-1.4_E+00	4.44E+00	5.07E+00	2.51E+00	4.03E+00	9.51E+01	NA	NA	NA	3.9E+02	2.5E+00	ND	ND	NA	MW-62-138	
MW-62-138	Q1-2011	016	138.1	-25.2	2/24/2011	14:54	5.17E+02	4.30E-02	4.01E+02	2.12E+00	1.77E+00	1.73E+00	-1.6_E+00	4.7_E+00	4.94E+00	1.88E+00	7.14E+00	8.19E+00	NA	NA	NA							
MW-62-138	Q2-2011	017	138.1	-25.2	4/13/2011	14:59	6.3_E+02	3.34E-02	2.09E+02	1.22E+00	1.39E+00	1.22E+00	1.2_E+00	9.8_E+00	1.04E+01	1.71E+00	1.22E+01	10.2E+01	NA	NA	NA							
MW-62-138	Q2-2011 Mid	018	138.1	-25.2	7/22/2011	11:53	4.66E+02	4.23E-02	4.36E+02	6.7_E-01	1.30E+00	1.32E+00	-5.9_E-1	7.4_E+00	8.13E+00	6.3_E+00	9.7_E+00	1.23E+01	1.1_E+01	1.79E+01	2.03E+01							
MW-62-138	Q3-2011	019	138.1	-25.2	8/C/2011	10:03	1.41E+03	5.46E-02	2.34E+02	1.52E+00	1.69E+00	1.73E+00	2.5_E-01	9.4_E+00	1.05E+01	1.3_E+00	8.40E+00	9.73E+00	NA	NA	NA							
MW-62-164	Q4-2010	012	164.4	-49.2	11/9/2010	14:40	4.79E+02	1.36E-02	2.87E+02	-1.04E+00	6.77E-01	1.96E+00	-4.3_E+00	4.48E+00	3.26E+00	1.08E+00	3.26E+00	1.01E+01	NA	NA	NA	3.1E+02	NC	ND	ND	NA	MW-62-164	
MW-62-164	Q1-2011	016	164.4	-49.2	2/24/2011	15:07	5.51E+02	4.01E-02	4.13E+02	1.49E-01	1.34E+00	1.94E+00	-1.9_E+00	4._E+00	4.64E+00	4.47E+00	4.71E+00	9.58E+01	NA	NA	NA							
MW-62-182	Q1-2011	017	182.1	-69.3	4/13/2011	14:44	1.91E+02	4.30E-02	4.03E+02	-5.04E-01	1.05E+00	1.45E+00	5.5_E+00	8.7_E+00	1.09E+01	-9.44E-01	1.1_E+01	11.5E+01	NA	NA	NA							
MW-62-182	Q2-2011 Mid	018	182.1	-69.3	7/22/2011	12:02	2.90E+02	4.30E-02	4.54E+02	2.07E-01	1.22E+00	1.47E+00	6.4_E-01	7.4_E+00	8.36E+00	-5.9_E-01	7.15E+00	8.31E+00	-2.27E+00	1.56E+01	1.75E+01							
MW-62-182	Q3-2011	019	182.1	-69.3	8/C/2011	10:23	5.81E+02	3.34E-02	2.05E+02	2.01E-01	1.27E+00	1.72E+00	5.9_E+00	1.2_E+01	1.13E+01	2.95E+00	1.13E+01	11.9E+01	NA	NA	NA							
MW-63-18	Q4-2010	013	14.9	0.7	11/9/2010	12:33	1.47E+02	1.38E-02	1.15E+02	-1.51E-01	9.17E-01	-3.15E-01	-1.2_E+00	5.4_E+00	5.4_E+00	5.4_E+00	6.15E+00	8.87E+00	NA	NA	NA	4.4E+02	ND	ND	ND	ND	MW-63-18	
MW-63-18	Q1-2011	016	14.9	0.7	3/C/2011	11:13	4.90E+02	3.98E-02	2.55E+02	-4.34E-01	1.30E+00	1.03E+00	1.8_E+00	6.7_E+00	7.90E+00	2.4_E+00	7.8_E+00	8.82E+00	NA	NA	NA							
MW-63-18	Q2-2011	017	14.9	0.7	4/6/2011	10:25	2.22E+02	4.85E-02	2.05E+02	3.13E-01	1.38E+00	1.40E+00	5.6_E-01	8.64E+00	5.92E+00	3.22E+00	8.16E+00	7.55E+00	NA	NA	NA							
MW-63-18	Q2-2011 Mid	018	14.9	0.7	7/21/2011	10:25	2.96E+02	3.99E-02	4.29E+02	6.5_E-02	1.9_E+00	1.50E+00	2.4_E+00	7.6_E+00	9.09E+00	2.57E+00	7.73E+00	9.30E+00	-8.91E+00	1.69E+01	1.92E+01							
MW-63-18	Q3-2011	019	14.9	0.7	8/C/2011	10:02	2.96E+02	3.15E-02	1.03E+02	-1.29E-01	1.30E+00	1.57E+00	1.7_E+00	6.17E+00	7.90E+00	3.8_E+00	8.78E+00	10.5E+01	NA	NA	NA							
MW-63-34	Q4-2010	012	32.5	-17.3	11/9/2010	12:04	2.43E+02	1.33E-02	2.11E+02	-5.41E-01	2.72E-01	1.44E+00	-1.1_E-01	5.6_E+00	5.29E+00	2.29E+00	3.25E+00	9.63E+01	NA	NA	NA	3.9E+02	ND	ND	ND	NA	MW-63-34	
MW-63-34	Q1-2011	016	3..5	-17.3	3/C/2011	10:53	3.94E+02	4.26E-02	4.29E+02	-4.29E-01	1.37E+00	1.11E+00	8._E+00	7.41E+00	7.76E+00	8.82E+00	8.59E+00	

IPEC00267134

TABLE 3
THIRD QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	Sampling Quarter[2,3]	Sample ID	Sample Zone Center Depth Ft Below Top of Casing[3]	Sample Zone Center Elevation Ft msl[3]	Sample Collection		Analysis Results[2]														Yearlt Rolling Averages[4,5]						Well ID[1]
							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.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Average	Average	Average	Average	Average	
MW-63.163	Q4-2010	015	142.5	-30.2	11/2/2010	11:40	3.40E+02	1.41E+02	1.00E+02	7.91E-01	8.18E-01	2.97E-01	2.09E+00	2.92E+00	3.10E+01	2.96E+00	8.12E+00	7.63E+00	NA	NA	NA	3.80E+02	NA	NA	NA	NA		MW-63.163
MW-63.163	Q1-2011	016	142.5	-30.2	3/6/2011	10:27	6.01E+02	3.76E+02	2.95E+02	1.37E+00	1.99E+00	1.13E+00	3.05E+00	5.40E+00	6.62E+00	2.01E+00	7.72E+00	7.12E+00	NA	NA	NA							
MW-63.163	Q2-2011	017	142.5	-30.2	4/8/2011	9:46	4.91E+02	4.34E+02	1.01E+02	1.1.E+0	1.52E+00	1.80E+00	4.43E-01	5.84E+00	5.90E+00	4.72E+00	1.12E+01	1.26E+01	NA	NA	NA							
MW-63.163	Q3-2011 Mid	018	142.5	-30.2	7/21/2011	10:09	5.00E+02	2.82E+02	1.50E+02	-6.14E-1	1.01E+00	1.40E+00	-3.47E-1	7.47E+00	6.17E+00	4.07E-01	7.73E+00	8.66E+00	-5.65E+00	1.47E+01	1.67E+01							
MW-63.163	Q3-2011	019	142.5	-30.2	8/5/2011	10:05	4.4.E+02	3.54E+02	1.08E+02	7.93E-02	1.35E+00	1.69E+00	5.5.E-01	8.40E+00	5.33E+00	2.22E+00	1.13E+01	1.20E+01	NA	NA	NA							
MW-63.174	Q4-2010	016	174	-61.7	11/2/2010	11:55	2.60E+02	1.36E+02	1.13E+02	-3.42E-1	4.19E-01	6.06E-01	-5.01E+01	6.93E+00	8.82E+00	2.37E-01	8.42E+00	7.11E+00	NA	NA	NA	2.28E+02	NA	NA	NA	NA		MW-63.174
MW-63.174	Q1-2011	016	174	-61.7	3/6/2011	10:47	8.43E+01	3.80E+02	2.91E+02	8.43E-01	1.80E+00	1.03E+00	3.62E+00	6.76E+00	8.18E+00	3.43E+00	7.16E+00	9.20E+00	NA	NA	NA							
MW-63.174	Q2-2011	017	174	-61.7	4/8/2011	9:55	1.92E+02	4.85E+02	1.04E+02	-7.87E-1	9.77E-01	1.48E+00	-6.4.E+00	8.12E+00	7.72E+00	-9.83E-01	8.78E+00	9.70E+00	NA	NA	NA							
MW-63.174	Q3-2011 Mid	018	174	-61.7	7/21/2011	9:55	4.14E+02	4.17E+02	4.36E+02	6.95E-01	1.35E+00	1.10E+00	-3.57E+00	8.10E+00	8.27E+00	4.67E-01	9.56E+00	1.09E+01	-1.55E+00	1.53E+01	1.49E+01							
MW-63.174	Q3-2011	019	174	-61.7	8/5/2011	10:14	6.01E+02	1.42E+02	1.09E+02	6.93E-01	1.86E+00	-4.11E+00	9.2.E+00	3.26E+00	4.31E+00	1.03E+00	1.12E+01	NA	NA	NA	NA							
MW-63.186	Q2-2011 Mid	003	186	-73.7	7/7/2011	13:15	5.90E+02	3.49E+02	9.87E+01	5.59E-02	1.04E+00	1.11E+00	-8.81E+00	9.01E+00	1.09E+01	-1.53E+00	1.15E+01	1.18E+01	5.87E+00	3.59E+01	2.49E+01							
MW-63.186	Q3-2011 Mid	003	186	-73.7	10/13/2011	13:15	5.58E+02	3.41E+02	9.84E+01	1.93E-01	9.14E-01	1.12E+00	-2.33E+00	9.22E+00	9.46E+00	3.58E+00	1.15E+01	1.34E+01	3.32E+01	3.20E+01	2.29E+01							
MW-66.21	Q4-2010	013	142.5	-30.2	11/10/2010	15:13	3.23E+02	1.54E+02	9.46E+01	-2.57E-01	9.74E-01	1.04E+00	-3.30E+00	5.26E+00	5.25E+00	3.91E+00	9.97E+00	8.42E+00	9.29E+01	8.42E+01	1.83E+01							
MW-66.21	Q1-2011	016	141	0	1/31/2011	16:35	4.77E+02	4.38E+02	2.24E+02	3.43E-01	1.73E+00	1.02E+00	3.12E-01	5.00E+00	5.33E+00	9.80E-01	6.70E+00	7.32E+00	1.90E+00	1.34E+01	2.14E+01							
MW-66.21	Q2-2011	017	141	0	4/6/2011	13:43	9.30E+01	3.88E+02	6.46E+02	6.71E-01	1.85E+00	-4.70E+00	8.74E+00	8.45E+00	6.95E+00	1.51E+00	1.25E+01	1.81E+01	1.51E+01	1.72E+01							
MW-66.21	Q3-2011	018	141	0	8/5/2011	10:55	7.84E+02	3.80E+02	2.71E+02	8.03E-01	1.34E+00	1.99E+00	-2.22E+00	8.49E+00	5.11E+00	3.27E-01	7.15E+00	7.75E+00	6.75E+00	9.01E+00	9.81E+00							
MW-66.36	Q4-2010	014	193.6	-98.2	11/10/2010	13:55	5.10E+02	2.50E+02	1.05E+02	7.40E+00	1.05E+00	1.13E+00	3.45E+00	3.07E+00	5.07E+00	3.54E+00	9.61E+00	9.63E+00	4.27E+00	9.63E+00	2.14E+01	3.95E+00	1.04E+01	ND	ND	ND	ND	MW-66.36
MW-66.36	Q1-2011	015	33.6	-19.5	1/31/2011	15:51	3.0.E+03	6.78E+02	4.61E+02	1.53E+00	3.38E+00	1.11E+00	-1.13E+00	6.25E+00	6.49E+00	-8.31E-01	6.10E+00	7.15E+00	4.85E+00	1.79E+01	2.12E+01							
MW-66.36	Q2-2011	016	33.6	-19.5	4/6/2011	12:53	3.51E+03	7.36E+02	4.79E+02	1.0.E+00	2.38E+00	1.95E+00	1.50E-01	7.24E+00	8.14E+00	5.40E-01	7.52E+00	9.01E+00	6.11E-0	1.15E+01	1.79E+01							
MW-66.36	Q3-2011	017	33.6	-19.5	8/5/2011	10:49	3.90E+03	7.31E+02	4.74E+02	8.00E+00	2.60E+00	1.01E+00	-3.94E+00	1.11E+01	1.07E+01	1.43E+00	1.05E+01	1.14E+01	1.43E+00	1.23E+01	1.71E+01							
MW-67.36	Q4-2010	013	58.2	-25.8	11/10/2010	11:40	2.56E+03	3.99E+02	2.95E+02	5.42E+00	2.12E+00	1.10E+00	1.06E+00	3.96E+00	5.25E+00	4.06E+00	1.04E+01	1.18E+01	9.98E+00	9.83E+00	2.21E+01	9.9E+00	9.74E+00	ND	ND	ND	ND	MW-67.36
MW-67.39	Q1-2011	016	33.3	-25.8	2/7/2011	13:48	3.81E+03	7.93E+02	4.81E+02	1.57E+01	3.34E+00	1.83E+00	8.01E-02	6.8.E+00	6.83E+00	6.64E-01	6.71E+00	7.57E+00	4.43E+00	1.57E+01	2.23E+01							
MW-67.39	Q2-2011	017	33.3	-25.8	4/6/2011	13:20	3.43E+03	7.14E+02	4.11E+02	1.42E+01	3.76E+00	1.10E+00	4.3.E+00	8.38E+00	1.04E+01	1.71E+00	1.47E+01	1.14E+01	9.54E+00	1.41E+01	1.63E+01							
MW-67.39	Q3-2011	018	33.3	-25.8	8/5/2011	12:35	3.63E+03	7.37E+02	7.7E+02	5.3.E+01	2.39E+00	1.98E+00	3.0.E+00	8.34E+00	5.17E+00	7.11E+00	8.23E+00	7.10E+00	5.90E+00	1.17E+01	1.90E+01							
MW-67.105	Q4-2010	014	104.8	-92.3	11/10/2010	13:45	4.14E+03	2.34E+02	9.9E+02	3.4.E+00	8.12E-01	1.03E+00	1.83E+00	3.09E+00	7.64E+00	4.12E+00	4.14E+00	8.26E+00	1.24E+00	8.36E+00	1.90E+01	1.16E+00	ND	ND	ND	ND	MW-67.105
MW-67.105	Q1-2011	015	104.8	-92.3	2/1/2011	12:37	3.94E+03	4.05E+02	2.86E+02	2.47E-01	1.94E+00	1.94E+00	2.4.E+00	4.24E+00	2.61E+00	-1.12E+01	4.05E+00	4.11E+00	4.53E+00	1.56E+01	2.11E+01							
MW-67.105	Q2-2011	016	104.8	-92.3	4/6/2011	13:43	3.10E+03	4.34E+02	2.12E+02	2.7.E-01	1.72E+00	2.11E+00	3.05E-01	9.46E+00	1.05E+01	1.91E-01	9.24E+00	7.83E+00	5.71E+00	1.55E+01	1.73E+01							
MW-67.105	Q3-2011	017	104.8	-92.3	8/6/2011	12:48	3.41E+03	4.38E+02	2.74E+02	7.41E-01	1.71E+00	1.92E+00	-4.93E-1	9.77E+00	8.36E+00	-6.18E+00	8.47E+00	7.26E+00	6.67E+00	1.25E+01	1.38E+01							
MW-67.172	Q4-2010	013	172.3	-59.8	11/10/2010	12:04	6.25E+02	2.01E+02	1.27E+02	-9.95E-1	6.53E-01	1.86E+00	-4.01E-01	7.03E+00	7.11E+00	-1.17E+00	9.43E+00	1.03E+01	1.63E+00	9.23E+00	2.31E+01	6.0E+00	ND	ND	ND	ND	MW-67.172
MW-67.173	Q1-2011	016	172.3	-59.8	2/7/2011	14:13	4.47E+02	4.45E+02	2.63E+02	-2.35E-1	1.68E+00	1.82E+00	-4.75E-1	5.28E+00	5.83E+00	6.18E-01	7.53E+00	7.56E+00	-7.0.E-01	1.18E+01	2.10E+01							
MW-67.173	Q2-2011	017	172.3	-59.8	4/6/2011	14:09	5.71E+02	4.00E+02	2.10E+02	-2.56E-1	1.69E+00	1.99E+00	5.04E+00	9.64E+00	1.17E+01	-9.2.E+00	1.13E+01	6.85E+00	7.50E+00	1.23E+01	1.34E+01							
MW-67.173	Q3-2011	018	172.3	-59.8	8/6/2011	12:53	6.13E+02	3.75E+02	2.72E+02	-3.44E-1	1.35E+00	1.94E+00	-1.91E+00	8.79E+00	5.16E+00	1.2E+00	8.10E+00	9.80E+00	4.91E+00	1.20E+01	1.33E+01							
MW-67.219	Q4-2010	014	230.8	-206.3	11/10/2010	10:43	1.14E+03	2.24E+02	1.96E+02	-3.5.E+00	7.93E-01	1.79E+00	-2.23E+01	9.00E+00	7.62E+00	-2.45E+01	3.42E+00	7.59E+00	-3.41E+00	8.84E+00	1.95E+01	3.83E+00	ND	ND	ND	ND	MW-67.219
MW-67.219	Q1-2011	015	218.8	-206.3	1/31/2011	14:48	6.4.E+02	4.18E+02	4.20E+02	-1.01E+00	1.42E+00	1.97E+00	9.73E-01	5.10E+00	6.44E+00	2.46E+00	5.66E+00	6.15E+00	4.51E+00	1.81E+01	2.14E+01							
MW-67.219	Q2-2011	016	218.8	-206.3	4/8/2011	10:49	1.07E+03	4.78E+02	4.12E+02	-7.57E-1	9.50E-01	1.53E+00	-2.70E+00	6.62E+00	6.47E+00	4.16E+00	9.78E+00	1.20E+01	2.95E+00	1.43E+01	1.62E+01							
MW-67.219	Q3-2011	017	218.8	-206.3	8/6/2011	10:33	1.14E+03	4.17E+02	2.12E+02	3.13E-02	1.61E+00	1.90E+00	8.34E-01	7.41E+00	6.13E+00	2.17E+00	9.20E+00	1.11E+01	1.06E+00	1.44E+01	1.79E+01							
MW-67.276	Q4-2010	014	275.5	-262.0	11/10/2010	14:15	1.06E+03	2.15E+02	9.6E+01	-7.85E-1	5.58E-01	1.77E+00	1.96E+00	4.63E+00	6.93E+00	3.40E+00	4.40E+00	7.40E+00	3.96E+00	8.15E+00	1.89E+01	6.6E+00	ND	ND	ND	ND	MW-67.276
MW-67.276	Q1-2011	015	275.3	-262.0	1/31/2011	14:31	8.71E+02	4.18E+02	2.7E+02	-2.57E-1	1.66E+00	2.03E+00	-2.5E+00	8.76E+00	8.16E+00	6.40E-01	6.48E+00	7.20E+00	7.1E-01	1.52E+01	2.22E+01							
MW-67.276	Q2-2011	016	275.3	-262.0	4/6/2011	10:23	1.08E+03	4.19E+02	2.93E+02	2.93E-01	1.42E+00	-2.20E+00	0.0.E+00	6.14E+00	1.02E+01	1.14E+01	1.12E+01	2.0.E+01	1.14E+01	1.02E+01							
MW-67.276	Q3-2011	017	275.3	-262.0	8/6/2011	10:45	8.99E+02	3.80E+02	2.67E+02	-3.99E-1	1.38E+00	1.83E+00	-3.35E-1	8.67E+00	6.59E+00	1.65E+00	9.4E+00	1.07E+01	1.23E+00	1.61E+01	2.10E+01							
MW-67.323	Q4-2010	014	322.5	-309.5	11/10/2010	14:00	3.82E+02	1.39E+02	9.4E+01	1.18E-01	5.11E-01	1.01E+00	2.30E+00	4.41E+00	1.06E+01	3.1.E-01	5.07E+00	5.12E+01	3.4E+00	7.55E+00	1.74E+01	3.6E+00	ND	ND	ND	ND	MW-67.323
MW-67.323	Q1-2011	015	322.3	-309.5	1/31/2011	15:04	3.32E+02	3.70E+02	1.9E+02	2.3.E-01	1.71E+00	2.03E+00	2.4.E-01	5.70E+00	6.35E+00	5.1E-01	5.10E+00	6.32E+00	-3.2.E+00	1.50E+01	2.22E+01							
MW-67.323	Q2-2011	016	322.3	-309.5	4/6/2011	14:36	4.63E+02	4.36E+02	1.13E+02	1.0.E+00	1.52E+00	1.62E+00	2.0.E+00	6.36E+00	6.62E+00	1.1.E+00	8.21E+00	9.21E+00	2.2.E.0	1.58E+01	1.58E+01							
MW-67.323	Q3-2011	017	322.3	-309.5	8/6/2011	10:53	3.09E+02	3.51E+02	1.73E+02	1.71E+00	1.35E+00	1.91E+00	-6.6.E-1	6.46E+00	7.23E+00	4.1.E+00	8.10E+00	9.9.E+00	2.15E+00	2.43E+01								
MW-67.340	Q4-2010	014	338.8	-327.5	11/10/2010	13:50	3.52E+02	1.77E+02	1.85E+02	-8.93E-1	5.70E-01	1.04E+00	-1.72E+00	4.40E+00	1.03E+01	-2.9.E+00	3.34E+00	9.22E+00	3.33E+00	8.54E+00	1.87E+01	3.3E+00	ND	ND	ND	ND	MW-67.340
MW-67.340	Q1-2011	015	339.8	-327.5	1/31/2011	14:53	2.75E+02	3.58E+02	1.82E+02	-7.06E-1	1.31E+00	1.97E+00	4.30E-01	6.54E+00	7.02E+00	-1.1.E+00	6.74E+00	6.85E+00	-7.7.E+00	1.15E+01	2.20E+01							
MW-67.340	Q2-2011	016	339.8	-327.5	4/6/2011	11:17	6.56E+02	4.32E+02	4.13E+02	2.6.E-01	1.6E+00	1.40E+00	5.8.E+00	9.02E+00	1.12E+01	4.5.E+00	9.0E+00	1.1.E+01	7.58E+00	1.54E+01	1.71E+01							
MW-67.340	Q3-2011	017	339.8	-327.5	8/6/2011	10:43	4.19E+02	3.93E+02	2.72E+02	-5.52E-1	1.49E+00	1.89E+00	-9.17E-1	7.72E+00	5.61E+00	-4.9.E+00	1.16E+01	1.00E+01	6.17E+00	1.64E+01	2.05E+01							
MW-117	Q4-2010	004	33.7	-10.7	10/26/2010	9:45	3.10E+03	3.92E+02	2.52E+02	2.2.E-01	1.39E+00	1.40E+00	3.3.E+00	1.19E+01	1.04E+01	3.0.E+00	1.02E+01	1.05E+01	6.0.E+00	1.05E+01	NA	NA	NA	NA	NA	NA	MW-117
MW-118	Q2-2011 Mid	005	6.2	6.2	7/7/2011	15:05	1.54E+03	4.09E+02	2.80E+02	9.21E-02	1.39E+00	1.25E+00	4.9.E+00	9.04E+00	1.17E+01	2.34E+00	8.39E+00	7.19E+00	8.7.E+00	2.22E+01	2.63E+01	3.1E+00	ND	ND	ND	ND	MW-118
MW-138	Q3-2011 Mid	006	8.3	6.2	8/23/2011	11:25	1.72E+03	5.73E+02	2.62E+02	-7.81E-1	2.19E-01	1.24E+00	-1.83E-1	1.95E+01	1.21E+01	-4.10E+00	1.13E+01	1.10E+01	2.65E+00	1.16E+01	1.30E+01							
MW-109	Q2-2011 Mid	005	65.2	6.1	7/7/2011	12:40	2.40E+03	3.90E+02	2.79E+02	-2.03E-02	1.15E+00	1.40E+00	2.23E-01	8.87E+00	8.62E+00	3.73E+00	9.74E+00	9.63E+00	3.52E+00	9.38E+00	2.83E+01	8.8E+00	ND	ND	ND	ND	MW-109
MW-139	Q3-2011 Mid	006	5.5	6.1	8/23/2011	13:49	3.30E+03	7.90E+02	2.90E+02	5.41E-01	1.81E+00	1.12E+00	2.52E+00	7.45E+00	9.04E+00	3.72E+00	9.03E+00	1.17E+01	5.7.E.01	8.31E+00	1.00E+01							
MW-111	Q4-2010	004	38.5	2.4	11/3/2010	14:55	4.49E+04	1.44E+03	1.27E+03	3.67E-01	5.10E-01	-6.60E-01	1.49E+01	9.63E+00	2.38E+00	2.46E+00	3.31E+00	3.75E+00	NA	NA	NA	3.39E+04	NA	ND	ND	ND	NA	MW-111
J-2	Q2-2011 Mid	014			7/8/2011	12:26	6.52E+02	3.81E+02	2.11E+02	-3.49E-1	6.15E-01	1.31E+00	-5.45E-1	3.81E+00	2.64E+00	-3.2.E+00	3.81E+00	4.01E+00	NA	NA	NA	2.5.E+02	NA	ND	ND	ND	NA	J-2
J-3	Q1-2011 Mid	015			3/6/2011	13:09	5.09E+02	4.66E+02	2.58E+02	1.86E+00	1.63E+00	1.86E+00	8.3.E+00	7.87E+00	7.57E+00	7.14E+00	7.57E+00	7.12E+00	NA	NA	NA							
U-3.4D	Q4-2010	026	23.6	-10.8	10/26/2010	14:04	7.12E+02	1.38E+02	1.13E+02	2.26E-01	4.59E-01	5.81E-01	2.27E+00	5.55E+00	5.97E+00	3.2E+00	7.12E+00	9.00E+00	NA	NA	NA	2.85E+02	NA	ND	ND	ND	NA	D3-4D
U-3.4D	Q1-2011	027	23.6	-10.8	2/17/2011	14:41	6.21E+02	4.14E+02	4.05E+02	-8.34E-2	1.35E+00	1.93E+00	1.2.E+00	4.72E+00	5.29E+00	5.8.E-01	4.14E+00	3.47E+00	NA	NA	NA							
U-3.4D	Q2-2011	028	23.6	-10.8	4/25/2011	14:53	7.4.E+02	3.96E+02	2.09E+02	1.13E+00	1.38E+00	1.46E+00	7.3.E+00	7.37E+00	5.90E+00	4.8.E.01	8.11E+00	8.11E+00	NA	NA	NA							
U-3.4D	Q2-2011 Mid	029	23.6	-10.8	7/14/2011	11:55	3.83E+02	4.30E+02	4.38E+02	1.24E-01	1.06E+00	1.26E+00	4.7.E+00	1.3E+01	1.32E+01	3.1.E+00	1.12E+01	1.46E+01	NA	NA	NA							
U-3.4D	Q3-2011	030	23.6	-10.8	7/23/2011	11:05	6.71E+02	4.12E+02	2.04E+02	1.28E-01	1.38E+00	1.90E+00	5.6.E+00	8.43E+00	1.05E+01	-2.5.E+00	9.0E+00	9.06E+00	NA	NA	NA							
MW-87	Q4-2010	003			10/26/2010	11:40	1.10E+02	2.01E+02	1.32E+02	2.92E-01	1.12E+00	1.44E+00	1.29E+00	7.26E+00	9.42E+00	-2.0.E+00	8.33E+00	9.14E+00	1.89E+00	1.44E+01	1.92E+01							
U3-4S	Q2-2011	003			4/25/2011	14:13	1.40E+02	3.78E+02	2.22E+02	6.6.E-01	1.27E+00	1.41E+00	5.5.E+00	8.12E+00	1.07E+01	1.7.E+00	8.12E+00	1.03E+01	NA	NA	NA							
U3-4S	Q2-2011 Mid	004			7/14/2011	11:27	3.29E+02	4.11E+02	4.36E+02	1.0.E+00	1.33E+00	1.40E+00	-2.4.E+00	7.39E+00	7.88E+00	3.2.E+00	7.6.E+00	9.52E+00	NA	NA	NA							
U3-4S	Q3-2011	005			7/23/2011	10:05	3.34E+02	4.03E+02	2.21E+02	1.44E+00	1.40E+00	9.1E+00	1.23E+00	9.2.E+00	1.12E+01	7.2.E.01	1.12E+01	1.17E+01	NA	NA	NA							
U-3.7D	Q4-2010	030	37	2.8	10/26/2010	16:04	5.09E+02	1.28E+02	1.01E+02	4.2.E-02	6.26E-01	7.68E-01	3.5.E+00	6.64E+00	5.70E+00	1.5.E+00	5.5.E+00	6.70E+00	NA	NA	NA	4.5.E+02	NA	ND	ND	ND	NA	U3-7D
U3-7I	Q1-2011	031	37	2.8	2/21/2011	11:11	6.51E+02	4.38E+02	9.2.E+02	1.62E+00	1.96E+00	1.02E+00	1.8.E+00	1.05E+01	6.14E+00	2.1.E+00	6.42E+00	7.54E+00	NA	NA	NA							
U-3.7I	Q2-2011	032	37	2.8	5/9/2011	10:43	7.8.E+02	5.10E+02	1.01E+02	-6.54E-1.2	9.74E-01	1.81E+00	-3.48E+00	9.4.E+00	5.44E+00	1.19E+01	1.21E+01	NA	NA	NA	NA							
U-3.7I	Q3-2011	033	37	2.8	8/23/2011	14:41	1.09E+03	3.81E+02	1.91E+02	-6.99E-2.2	1.08E+00	1.37E+00	-4.61E-1	8.70E+00	8.42E+00	-2.67E+00	8.13E+00	8.73E+00	NA	NA	NA							
U-3.7S	Q4-2010	030	37	2.8	10/26/2010	11:50	5.45E+03	2.10E+02	1.11E+02	4.22E-01	6.79E-01	1.56E+00	-3.11E+00	5.42E+00	8.11E+00	3.0E+00	5.27E+00	6.89E+00	NA	NA	NA	3.38E+03	NA	ND	ND	ND	NA	U3-7S
U-3.7I	Q1-2011	036	37	2.6	2/21/2011	14:33	2.27E+03	4.72E+02	1.62E+02	1.82E+00	2.04E+00	1.05E+00	3.6.E+00	6.68E+00	7.29E+00	5.9.E-01	7.12E+00	7.85E+00	NA	NA	NA							
U-3.7I	Q2-2011	037	37	2.6	5/9/2011	11:41	2.01E+03	3.27E+02	1.19E+02	1.32E+00	1.58E+00	1.58E+00	2.5.E+00	7.26E+00	5.74E+00	5.7.E-01	9.68E+00	1.03E+01	NA	NA	NA							
U-3.7I	Q2-2011 Mid	038	37	2.6	7/6/2011	10:55	2.67E+03	6.53E+02	2.88E+02	4.75E-01	1.31E+00	1.50E+00	3.7.E+00	6.68E+00	1.19E+01	-1.0.E+00	1.12E+01	1.07E+01	NA	NA	NA							
U-3.7I	Q3-2011	039	37	2.6	7/23/2011	12:32	2.61E+03	7.72E+02	3.54E+02	1.01E+00	1.81E+00	1.99E+00	-5.43E-1	8.49E+00	5.21E+00	2.63E+00	8.51E+00	1.07E+01	NA	NA	NA							
U-3.7D	Q4-2010	013	37	2.6	11/10/2010	14:55	3.72E+02	1.26E+02	1.14E+02	1.15E+00	4.54E-01	6.5.E-01	2.2.E+00	5.01E+00	5.96E+00	3.62E+00	5.27E+00	6.70E+00	1.21E+00	2.13E+01	2.13E+01	1.9E+00	ND	ND	ND	ND	U3-7D
U1-CSS	Q2-2011	016	14	6.1	5/4/2011	13:24	6.32E+03	6.34E+02	4.0E+02	1.6.E+1	2.70E+00	1.01E+00	3.2.E+00	8.36E+00	5.79E+00	7.12E+00	9.42E+00	1.24E+01	-1.0.E+1	1.55E+01	1.84E+01							
U1-CSS	Q2-2011 Mid	017	14	6.1	7/6/2011	13:33	1.03E+04	1.38E+03	1.79E+02	3.90E+00	1.52E+00	1.30E+00	3.84E-02	9.8.E+00	1.01E+01	-3.60E+00	9.56E+00	1.06E+01	-3.2.E+00	2.05E+01	2.34E+01							
U-3MD	Q4-2010	009			10/26/2010	10:43	5.34E+03	3.32E+02	1.22E+02	9.36E+01	1.31E+00	5.59E-01	1.0.E+01	1.05E+01	1.47E+01	4.95E+00	1.14E+01	1.45E+01	5.40E+00	3.10E+01	2.22E+01	6.0E+00	2.48E+01	2.20E+03	ND	1.72E+02	J1-3DD
U-3ND	Q3-2011	011			9/15/2011	11:45	2.09E+03	3.54E+02	1.71E+02	1.0.E+00	1.54E+00	1.54E+00	4.7.E+00	6.42E+00	7.77E+00	3.3.E+00	5.97E+00	6.97E+00	2.07E+00	1.52E+01	1.82E+01							
U1-3DD3	Q4-2010	010			10/26/2010	9:45	4.81E+02	1.56E+02	1.26E+02	1.1.E+01	1.33E+00	3.74E-01	7.9E+00	7.54E+00	9.76E+00	-8.3.E-01	5.4E+00	5.67E+00	9.71E.0	1.35E+01	2.10E+01	1.29E+00	9.93E+00	8.81E+00	ND	ND	J1-3DD
U1-3DD3	Q3-2011	033			9/15/2011	11:53	2.09E+03	5.12E+02	4.00E+02	7.7.E+0	2.54E+00	1.39E+00	9.2.E+0	6.72E+00	6.70E+00	1.1.E+00	6.27E+00	7.10E+00	-4.9.E+00	1.90E+01	1.93E+01							
L-2	Q4-2010	002			11/17/2010	14:05

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TABLE 3
THIRD QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,5]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER Elevation Ft msl[4]	SAMPLE COLLECTION		ANALYSIS RESULTS[6]														TEARLY ROLLING AVERAGES[6,8]					Well ID[1]
							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.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Average	Average	Average	Average	Average	
B-6	Q4-2010	010			11/2/2010	11:45	2.02E+02	1.35E+02	3.45E+02	1.43E-01	5.59E-01	7.88E-01	0.00E+00	5.04E+00	6.28E+00	-3.29E-01	4.70E+00	5.29E+00	NA	NA	NA	131E+00	ND	ND	ND	NA	B-6
B-6	Q1-2011	011			2/23/2011	11:27	8.39E+02	3.36E+02	6.5E+02	6.23E-01	1.78E+00	2.05E+00	-8.47E+00	5.82E+00	3.03E+00	-1.13E+00	6.7E+00	6.88E+00	NA	NA	NA						
B-6	Q2-2011	012			4/25/2011	9:45	2.65E+03	6.18E+02	4.53E+02	-6.69E-11	1.38E+00	2.09E+00	-1.31E-11	8.35E+00	5.08E+00	4.72E+00	1.06E+01	1.35E+01	NA	NA	NA						
B-6	Q3-2011 MOD	013			/6/2011	11:10	2.29E+03	5.43E+02	2.36E+02	1.52E+00	1.35E+00	1.61E+00	6.01E+00	1.05E+01	2.16E+00	-4.64E+00	8.52E+00	8.84E+00	NA	NA	NA						
B-6	Q3-2011	014			7/29/2011	10:52	6.45E+03	8.14E+02	4.38E+02	2.58E-01	1.39E+00	1.79E+00	1.46E+00	5.74E+00	5.72E+00	4.72E+00	5.17E+00	7.83E+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 at casing bottom of well screen. For Westbay multi-level systems, suffix indicates depth
(rounded to nearest foot) from reference point on casing at top of sampling port. Well IDs without a suffix are open bedrock well screen
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 (e.g. Locations of pump intakes have been located adjacent to transmissive zone where possible
4 Averages provided are analytical result averages if all valid samples (including mid-quarter and confirmatory samples) collected from each monitoring location from the fourth quarter of 2010 (Q4-2010) to the third quarter of 2011 (Q3-2011) including the post Q3-2011 samples
Monitoring locations are sampled quarterly, bi-annually, or annually and additional samples are collected when necessary. Therefore, some results presented 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 in subsequent results concerned the validity of the original sample result, the replacement results were used to calculate the average. If analytical results called into question, and the sample result discarded the validity of the original sample result of a particular radionuclide
the original sample results were not used for any calculations 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 5 times the 1 sigma uncertainty
7 These locations are storm drains or foundation drains
8 Mid-quarter samples were collected and analyzed to evaluate the potential effect of certain operations on groundwater quality
9 Column designated as "Std Dev" provides the three times 1 sigma uncertainty values
*The Q1 2011 MW-40-100, MW-40-37 and MW-51-189 Cs-137 results were verified by re-analysis. However, based on the available chemistry and Sale hydrogeologic data, these values do not appear to be representative of the groundwater conditions at these sampling intervals
** The Q2-2011 MW-40-46 preliminary Sr-90 result was 2.51 pCi/L and exceeded the IL. However, after re-analysis, the sample was below the detection limit which suggests the preliminary result was likely a false positive. A shift in the MDC for the preliminary result could have possibly resulted from contaminated laboratory equipment, modified count time, or changes in sample preparation
*** The Post-Q2 2011 MW-51-65 preliminary Sr-90 result was 3.54 pCi/L and exceeded the IL. However, after re-analysis, the sample was below the detection limit which suggests the preliminary result was likely a false positive. A shift in the MDC for the preliminary result could have possibly resulted from contaminated laboratory equipment, modified count time, or changes in sample preparation.

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TABLE 3
FOURTH QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,8]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing[2]	SAMPLE ZONE CENTER Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS[5]															YEARLY ROLLING AVERAGES[6,8]					Well ID[1]
							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.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Average	Average	Average	Average	Average	
MW-30-69	Q4-2011	035	69.3	6.4	12/6/2011	12:17	1.01E+05	2.12E+03	2.88E+02	2.12E+00	1.93E+00	2.30E+00	1.87E+00	3.50E+00	3.37E+00	3.50E+00	3.47E+00	6.04E+00	-1.13E-01	3.58E+00	6.04E+00	NA	NA	NA	NA	NA	MW-30-69
MW-30-69	Q1-20..1 Mid	038	69.3	6.4	3/31/2011	11:38	1.08E+05	3.10E+03	1.72E+02	6.11E-01	1.62E+00	2.15E+00	2.48E+00	7.26E+00	2.11E+00	1.41E+01	5.70E+00	6.16E+00	NA	NA	NA						
MW-30-69	Q2-2011	039	69.3	6.4	5/5/2011	12:08	1.11E+05	3.18E+03	3.96E+02	2.40E+00	1.75E+00	1.73E+00	2.46E+00	8.32E+00	1.01E+01	2.21E+00	3.58E+00	1.16E+01	NA	NA	NA						
MW-30-69	Q2-20..1 Mid	040	69.3	6.4	7/11/2011	12:05	1.15E+05	4.23E+03	2.81E+02	-6.14E-02	7.62E-01	1.30E+00	3.56E+00	1.17E+01	1.24E+01	2.40E+00	1.15E+01	1.40E+01	NA	NA	NA						
MW-30-69	Q3-2011	041	69.3	6.4	8/9/2011	13:45	1.14E+05	3.45E+03	4.22E+02	1.12E+00	1.76E+00	1.82E+00	-7.63E-01	1.13E+01	1.15E+01	-2.42E+01	8.58E+00	8.50E+00	NA	NA	NA						
MW-30-69	Q4-2011	042	69.3	6.4	11/30.2011	11:25	1.12E+04	3.36E+03	4.87E+02	-4.56E-01	1.51E+00	1.96E+00	1.95E+00	7.71E+00	9.97E+00	2.52E+00	7.41E+00	1.11E+01	NA	NA	NA						
MW-30-84	Q1-2011	032	83.8	-8.1	2/28/2011	13:57	8.20E+03	2.38E+03	3.27E+02	5.12E+00	1.82E+00	1.88E+00	3.89E-01	4.74E+00	5.22E+00	1.30E+00	3.37E+00	6.48E+00	NA	NA	NA	7.98E-03	ND	ND	ND	NA	MW-30-84
MW-30-84	Q1-20..1 Mid	031	83.8	-8.1	3/31/2011	12:02	9.04E+03	1.06E+03	1.74E+02	-4.78E-01	1.01E+00	2.13E+00	5.08E-01	1.12E+01	1.12E+01	-3.04E+01	9.84E+00	9.12E+00	NA	NA	NA						
MW-30-84	Q2-2011	030	83.8	-8.1	5/5/2011	12:58	7.57E+03	9.16E+02	3.92E+02	1.64E-01	1.15E+00	1.10E+00	3.00E+00	8.34E+00	2.23E+00	4.65E-02	7.14E+00	7.76E+00	NA	NA	NA						
MW-30-84	Q2-20..1 Mid	033	83.8	-8.1	7/11/2011	12:45	7.55E+03	1.88E+03	2.83E+02	-1.75E-01	9.75E-01	1.39E+00	2.17E+01	7.39E+00	8.84E+00	1.39E+01	1.16E+01	1.59E+01	NA	NA	NA						
MW-30-84	Q3-2011	034	83.8	-8.1	8/9/2011	11:16	7.06E+03	7.35E+02	3.54E+02	-1.22E+00	1.28E+00	1.32E+00	-1.67E+00	7.38E+00	7.43E+00	-3.28E+01	9.62E+00	9.46E+00	NA	NA	NA						
MW-30-84	Q4-2011	035	83.8	-8.1	11/30.2011	11:37	7.24E+03	9.39E+02	4.86E+02	5.31E-02	1.45E+00	1.31E+00	-1.63E+00	9.48E+00	1.05E+01	-1.64E+01	1.05E+01	1.26E+01	NA	NA	NA						
MW-31-49	Q1-2011	025	48.8	26.8	2/28/2011	13:12	1.06E+03	3.40E+02	2.91E+02	-5.55E-01	1.27E+00	1.14E+00	-1.35E+00	5.22E+00	5.68E+00	-4.24E+01	9.26E+00	5.51E+00	NA	NA	NA	5.37E-03	ND	ND	ND	NA	MW-31-49
MW-31-49	Q1-20..1 Mid	030	48.8	26.8	3/30/2011	12:32	4.31E+03	7.54E+02	4.65E+02	1.77E+00	1.04E+00	2.16E+00	-2.34E+30	7.30E+00	3.17E+00	-5.38E-01	7.11E+00	1.30E+01	NA	NA	NA						
MW-31-49	Q2-2011	031	48.8	26.8	4/18/2011	12:55	1.08E+03	5.30E+02	4.66E+02	4.98E-01	1.81E+00	2.39E+00	-1.82E+30	8.32E+00	9.22E+00	6.17E+00	3.77E+00	1.13E+01	NA	NA	NA						
MW-31-49	Q3-2011	032	48.8	26.8	8/5/2011	13:47	1.95E+03	7.30E+02	4.16E+02	2.63E-02	1.34E+00	1.58E+00	5.35E+00	8.76E+00	1.11E+01	5.20E 01	1.06E+01	1.16E+01	NA	NA	NA						
MW-31-49	Q4-2011	034	48.8	26.8	11/21.2011	13:35	1.54E+04	9.78E+02	3.42E+02	-3.16E-01	1.08E+00	1.45E+00	3.08E+00	1.14E+01	3.99E+00	-3.55E+01	3.54E+00	1.38E+01	NA	NA	NA						
MW-31-63	Q1-2011	026	63.3	12.3	2/28/2011	13:14	2.46E+04	3.10E+03	2.88E+02	4.29E-01	1.76E+00	2.38E+00	-1.42E+30	8.46E+00	3.83E+00	-2.31E+01	3.42E+00	6.36E+00	NA	NA	NA	1.39E-04	ND	ND	ND	NA	MW-31-63
MW-31-63	Q1-20..1 Mid	030	63.3	12.3	3/30/2011	13:13	1.32E+04	1.14E+03	4.52E+02	1.49E+00	1.87E+00	2.32E+00	8.76E-01	9.30E+00	9.97E+00	-1.92E-01	7.26E+00	7.32E+00	NA	NA	NA						
MW-31-63	Q2-2011	031	63.3	12.3	4/18/2011	13:21	1.81E+04	1.45E+03	4.67E+02	7.26E-01	1.84E+00	2.38E+00	-3.12E-01	7.52E+00	8.44E+00	1.76E+00	5.74E+00	1.13E+01	NA	NA	NA						
MW-31-63	Q3-2011	032	63.3	12.3	8/5/2011	13:25	1.61E+04	1.31E+03	4.18E+02	-1.30E-01	1.71E+00	2.22E+00	-2.83E-01	9.17E+00	1.12E+01	2.13E+00	5.24E+00	1.38E+01	NA	NA	NA						
MW-31-63	Q4-2011	033	63.3	12.3	11/21.2011	13:14	7.21E+04	3.30E+03	4.78E+02	1.16E+00	1.42E+00	2.20E+00	-2.72E+30	9.45E+00	1.05E+01	2.32E+00	8.15E+00	1.20E+01	NA	NA	NA						
MW-31-85	Q1-2011	025	84.8	-9.2	2/28/2011	13:03	4.85E+03	6.54E+02	3.85E+02	5.28E-01	1.77E+00	2.18E+00	3.51E+00	9.26E+00	7.91E+00	3.54E+00	5.96E+00	7.95E+00	NA	NA	NA	6.80E-03	ND	ND	ND	NA	MW-31-85
MW-31-85	Q1-20..1 Mid	030	84.8	-9.2	3/30/2011	12:55	7.77E+03	4.56E+02	4.52E+02	9.97E-01	1.81E+00	2.30E+00	5.98E+00	1.31E+01	8.11E+00	6.43E+00	8.88E+00	1.17E+01	NA	NA	NA						
MW-31-85	Q2-2011	031	84.8	-9.2	4/18/2011	13:18	3.08E+03	6.36E+02	4.66E+02	-1.09E+00	1.46E+00	2.39E+00	-4.50E+30	9.84E+00	9.19E+00	3.84E+00	1.01E+01	1.22E+01	NA	NA	NA						
MW-31-85	Q3-2011	032	84.8	-9.2	8/5/2011	11:27	4.82E+03	7.74E+02	4.22E+02	1.39E-01	1.46E+00	1.53E+00	-8.73E-01	8.25E+00	8.81E+00	-4.79E+01	9.57E+00	8.27E+00	NA	NA	NA						
MW-31-85	Q4-2011	034	84.8	-9.2	11/21.2011	11:25	5.45E+03	6.33E+02	3.45E+02	9.56E-01	1.41E+00	1.50E+00	-3.23E+30	9.21E+00	1.04E+01	-6.05E-01	9.57E+00	1.22E+01	NA	NA	NA						
MW-32-59	Q1-2011	027	58.8	18.3	2/10.2011	12:22	4.36E+03	6.42E+02	3.55E+02	4.15E+00	1.45E+00	1.55E+00	6.56E-01	9.52E+00	8.58E+00	4.41E+01	9.30E+00	7.35E+00	NA	NA	NA	1.32E-04	ND	ND	ND	NA	MW-32-59
MW-32-59	Q1-20..1 Mid	026	58.8	18.3	3/31/2011	12:46	3.15E+03	3.90E+02	5.07E+02	2.13E+00	1.12E+00	1.51E+00	8.29E-01	8.92E+00	9.39E+00	1.99E+02	1.02E+01	1.11E+01	NA	NA	NA						
MW-32-59	Q2-2011	027	58.8	18.3	4/27/2011	12:26	3.31E+03	6.36E+02	4.01E+02	4.03E-01	1.51E+00	1.74E+00	4.77E+00	8.54E+00	1.04E+01	-3.27E+01	7.55E+00	9.50E+00	NA	NA	NA						
MW-32-59	Q3-2011	027	58.8	18.3	8/5/2011	11:12	2.96E+04	1.47E+03	4.15E+02	1.54E+00	1.66E+00	1.71E+00	-3.73E+30	8.84E+00	8.04E+00	-1.05E+01	8.76E+00	9.34E+00	NA	NA	NA						
MW-32-59	Q4-2011	028	58.8	18.3	11/17.2011	14:15	2.91E+04	1.74E+03	2.26E+02	-1.28E+00	1.58E+00	2.33E+00	-3.9..E+30	1.31E+01	1.18E+01	-1.58E+01	9.84E+00	1.21E+01	NA	NA	NA						
MW-32-85	Q1-2011	026	85.3	85.3	2/10.2011	12:05	1.34E+04	1.41E+03	2.62E+02	3.81E-01	1.41E+00	1.83E+00	7.79E-01	8.26E+00	9.36E+00	4.73E+00	9.72E+00	1.34E+01	NA	NA	NA	1.17E-04	ND	ND	ND	NA	MW-32-85
MW-32-85	Q1-20..1 Mid	027	85.3	85.3	3/31/2011	13:18	1.32E+04	1.27E+03	5.07E+02	-1.62E-01	1.21E+00	1.56E+00	-6.55E-01	7.26E+00	7.61E+00	3.38E+00	3.28E+00	1.32E+01	NA	NA	NA						
MW-32-85	Q2-2011	028	85.3	85.3	4/27/2011	13:04	1.14E+04	1.19E+03	5.51E+02	1.58E+00	1.65E+00	1.75E+00	-1.23E+30	6.30E+00	7.31E+00	5.30E-01	1.02E+01	1.15E+01	NA	NA	NA						
MW-32-85	Q3-2011	030	85.3	85.3	8/5/2011	13:36	1.14E+04	1.12E+03	4.22E+02	1.14E-01	1.64E+00	1.82E+00	5.46E+00	6.57E+00	5.73E+00	-1.21E+01	5.85E+00	6.57E+00	NA	NA	NA						
MW-32-85	Q4-2011	031	85.3	85.3	11/17.2011	15:06	1.88E+03	7.55E+02	3.42E+02	4.57E-01	1.56E+00	1.32E+00	-1.20E+30	7.38E+00	8.80E+00	-1.88E+01	7.06E+00	1.29E+01	NA	NA	NA						
MW-32-149	Q1-2011	025	149.3	-72.2	2/10.2011	13:20	1.06E+03	3.48E+02	2.68E+02	7.01E-01	1.56E+00	2.15E+00	8.26E-01	5.42E+00	5.36E+00	2.26E+00	5.65E+00	7.95E+00	NA	NA	NA	9.31E-04	ND	ND	NA	NA	MW-32-149
MW-32-149	Q1-20..1 Mid	024	149.3	-72.2	3/31/2011	11:33	3.95E+02	5.34E+02	5.05E+02	-2.01E-01	1.11E+00	1.49E+00	2.52E+00	9.30E+00	1.05E+01	2.31E+00	7.92E+00	1.18E+01	NA	NA	NA						
MW-32-149	Q2-2011	027	149.3	-72.2	4/27/2011	11:12	3.65E+02	4.44E+02	4.11E+02	3.00E-01	1.42E+00	1.57E+00	2.12E+00	7.44E+00	8.55E+00	9.88E-01	7.76E+00	8.33E+00	NA	NA	NA						
MW-32-149	Q3-2011	027	149.3	-72.2	8/5/2011	11:10	3.82E+02	4.71E+02	4.21E+02	4.80E-01	1.81E+00	2.36E+00	-9.94E-01	9.50E+00	9.35E+00	2.75E+00	7.41E+00	9.38E+00	NA	NA	NA						
MW-32-149	Q4-2011	028	149.3	-72.2	11/17.2011	12:05	5.91E+02	3.45E+02	3.41E+02	3.84E-01	1.46E+00	1.72E+00	-5.23E+30	7.74E+00	7.86E+00	2.57E+00	3.07E+00	1.12E+01	NA	NA	NA						
MW-32-173	Q1-2011	021	172.8	-95.7	2/10.2011	13:15	9.01E+02	3.47E+02	2.61E+02	-4.04E-01	1.12E+00	1.45E+00	-5.95E+30	6.36E+00	7.37E+00	-2.04E+01	3.32E+00	7.35E+00	NA	NA	NA	6.30E-02	ND	ND	ND	NA	MW-32-173
MW-32-173	Q1-20..1 Mid	022	172.8	-95.7	3/31/2011	11:27	1.41E+02	2.24E+02	4.04E+02	4.46E-01	1.22E+00	1.54E+00	5.51E+00	1.38E+01	1.22E+01	2.19E+00	3.22E+00	1.30E+01	NA	NA	NA						
MW-32-173	Q2-2011	023	172.8	-95.7	4/27/2011	11:27	5.82E+02	4.88E+02	5.08E+02	6.37E-01	1.54E+00	1.74E+00	3.00E+00	2.30E+01	3.22E+00	2.47E-01	3.58E+00	1.37E+01	NA	NA	NA						
MW-32-173	Q3-2011	024	172.8	-95.7	8/5/2011	11:11	5.65E+02	4.17E+02	4.12E+02	6.34E-01	1.46E+00	1.56E+00	-9.53E-01	6.36E+00	5.56E+00	-1.55E+01	1.11E+01	1.14E+01	NA	NA	NA						
MW-32-173	Q4-2011	026	172.8	-95.7	11/17.2011	12:01	5.06E+02	3.33E+02	3.34E+02	7.83E-02	9.63E-01	1.24E+00	2.87E+00	9.12E+00	1.11E+01	-1.50E-01	9.93E+00	1.26E+01	NA	NA	NA						
MW-32-190	Q1-2011	025	190.3	113.7	2/10.2011	13:24	1.04E+03	5.32E+02	2.64E+02	7.65E-01	1.31E+00	1.78E+00	2.74E+00	3.32E+00	3.67E+00	4.32E+00	7.64E+00	8.75E+00	NA	NA	NA	1.13E-03	ND	ND	ND	NA	MW-32-190
MW-32-190	Q2-20..1 Mid	027	190.3	113.7	3/31/2011	11:47	1.41E+03	5.76E+02	5.02E+02	-7.79E-01	1.15E+00	1.57E+00	8.70E-01	7.76E+00	9.01E+00	5.11E+00	1.04E+01	1.30E+01	NA	NA	NA						
MW-32-190	Q2-2011	027	190.3	113.7	4/27/2011	11:17	1.21E+03	5.54E+02	5.51E+02	7.54E-01	1.12E+00	1.30E+00	8.63E-01	8.58E+00	9.77E+00	-6.60E+01	3.92E+00	6.37E+00	NA	NA	NA						
MW-32-190	Q3-2011	027	190.3	113.7	8/5/2011	11:17	1.44E+03	5.16E+02	4.24E+02	9.50E-01	1.64E+00	1.32E+00	2.62E+00	7.23E+00	8.42E+00	1.20E+00	7.24E+00	1.06E+01	NA	NA	NA						
MW-32-190	Q4-2011	030	190.3	113.7	11/17.2011	12:03	1.46E+03	4.35E+02	3.36E+02	-7.57E-01	8.37E-01	1.41E+00	1.36E+00	6.57E+00	8.55E+00	-4.42E-01	5.24E+00	7.33E+00	NA	NA	NA						
MW-36-24	Q1-2011	021	16.1	-4.3	2/28/2011	13:27	2.56E+02	3.54E+02	3.81E+02	4.87E-02	1.65E+00	2.26E+00	-4.83E-01	5.26E+00	5.97E+00	-2.09E-01	4.74E+00	5.53E+00	NA	NA	NA	4.40E-03	ND	ND	ND	NA	MW-36-24
MW-36-24	Q2-2011	022	16.1	-4.3	4.28/2011	14:34	3.07E+03	7.26E+02	5.15E+02	1.18E+00	1.52E+00	1.59E+00	-6.43E-01	7.58E+00	8.47E+00	2.32E+00	7.48E+00	9.35E+00	NA	NA	NA						
MW-36-24	Q3-2011	023	16.1	-4.3	8/16/2011	13:34	1.12E+03	5.31E+02	4.51E+02	2.34E-01	9.96E-01	1.18E+00	-2.88E+30	7.71E+00	7.54E+00	7.10E-01	7.85E+00	8.75E+00	NA	NA	NA						
MW-36-24	Q4-2011	024	16.1	-4.3	11/7/2011	11:04	1.00E+03	4.20E+02	4.96E+02	-3.36E-01	1.25E+00	1.70E+00	1.75E+00	7.26E+00	9.17E+00	-1.38E+01	5.01E+00	7.29E+00	NA	NA	NA						
MW-36-41	Q1-2011	022	37	-25.2	2/28/2011	13:52	8.74E+03	8.58E+02	2.63E+02	4.11E+00	1.63E+00	1.92E+00	1.31E+00	9.26E+00	8.50E+00	1.25E+00	6.98E+00	6.95E+00	NA	NA	NA	9.96E-03	3.95E-00	ND	ND	NA	MW-36-41
MW-36-41	Q2-2011	017	37	-25.2	4/28/2011	15:32	1.17E+03	1.34E+03	5.14E+02	3.31E-00	1.72E+00	1.36E+00	2.11E+00	9.26E+00	1.07E+01	-2.39E-01	1.04E+01	1.12E+01	NA	NA	NA						
MW-36-41	Q3-2011	017	37	-25.2	8/16/2011	14:18	5.96E+03	8.37E+02	4.55E+02	1.74E+00	1.26E+00	1.13E+00	1.75E+00	8.31E+00	9.38E+00	4.43E+00	1.15E+01	1.15E+01	NA	NA	NA						
MW-36-41	Q4-2011	018	37	-25.2	11/7/2011	13:05	2.62E+03	6.51E+02	4.76E+02	9.00E-01	1.71E+00	1.39E+00	1.15E-02	7.17E+00	9.01E+00	-5.23E-01	7.86E+00	1.31E+01	NA	NA	NA						
MW-36-52	Q1-2011	020	49.7	-37.9	2/28/2011	12:45	3.14E+03	4.32E+02	3.37E+02	1.13E+00	2.01E+00	2.14E+00	-6.00E+30	8.56E+00	8.81E+00	-2.65E+01	5.94E+00	5.55E+00	NA	NA	NA	4.31E-03	3.30E-00	ND	ND	NA	MW-36-52
MW-36-52	Q2-2011	021	49.7	-37.9	4/28/2011	14:38	5.84E+03	9.36E+02	5.15E+02	3.41E+00	1.56E+00	1.11E+00	4.25E+00	8.42E+00	1.01E+01	-2.61E+01	3.50E+00	8.36E+00	NA	NA	NA						
MW-36-52	Q3-2011	022	49.7	-37.9	8/16/2011	14:52	4.65E+03	7.59E+02	4.44E+02	2.93E+00	1.57E+00	1.36E+00	3.55E+00	8.22E+00	9.81E+00	-1.83E+01	3.32E+00	9.74E+00	NA	NA	NA						
MW-36-52	Q4-2011	022	49.7	-37.9	11/7/2011	11:36	4.76E+03	8.10E+02	4.91E+02	5.13E+00	1.96E+00	1.24E+00	2.85E+00	7.74E+00	1.01E+01	5.58E+00	9.07E+00	1.31E+01	NA	NA	NA						
MW-37-22	Q1-2011	001	17	-2	1/27/2011	13:19	5.27E+03	8.63E+02	2.85E+02	5.11E+00	9.52E+00	2.43E+00	2.51E+30	6.74E+00	6.39E+00	2.39E+00	5.38E+00	8.55E+00	5.78E-03	5.52E-00	ND	ND	NA	NA	NA	MW-37-22
MW-37-22	Q2-2011	002	17	-2	4/29/2011	11:37	5.27E+03	8.66E+02	5.07E+02	3.27E+00	1.96E+00	1.35E+00	1.71E+01	7.15E+01	7.47E+00	5.14E+01	7.87E+00	8.52E+00	NA	NA	NA						
MW-37-22	Q3-2011	023	17	-2	8/16/2011	13:35	4.52E+03	7.56E+02	4.53E+02	7.59E+00	2.07E+00	1.32E+00	3.11E+00	7.26E+00	8.77E+00	-9.99E-01	7.35E+00	7.48E+00	NA	NA	NA						
MW-37-22	Q4-2011	024	17	-2	11/23.2011	11:33	4.97E+03	8.28E+02	4.96E+02	8.12E+00	2.57E+00	1.38E+00	2.26E+00	9.12E+00	1.15E+01	-1.41E+01	7.35E+00	9.39E+00	NA	NA	NA						
MW-37-32	Q1-2011	021	29	-14	1/27/2011	15:05	4.52E+03	5.58E+02	2.95E+02	1.49E+00	3.02E+00	1.74E+00	9.28E-01	6.12E+00	5.83E+00	-1.72E+00	5.50E+00	7.76E+00	NA	NA	NA	4.36E-03	1.76E-03	NA	NA	NA	MW-37-32
MW-37-32	Q2-2011	022	29	-14	4.28/2011	12:21	4.11E+03	7.98E+02	5.15E+02	2.52E+01	3.76E+00	1.58E+00	3.56E+00	1.20E+01	1.42E+01	-1.92E+01	1.05E+01	1.39E+01	NA	NA	NA						
MW-37-32	Q3-2011	023	29	-14	8/16/2011	11:00	5.22E+03	7.95E+02	4.52E+02	1.58E+01	2.87E+00	1.13E+00	-2.53E+30	8.34E+00	7.51E+00	-6.09E+01	9.00E+00	8.10E+00	NA	NA	NA						
MW-37-32	Q4-2011	024	29	-14	11/23.2011	11:17	4.32E+03	7.50E+02	4.91E+02	1.26E+01	3.21E+00	1.52E+00	7.01E+00	9.30E+00	1.21E+01	-6.55E+01	7.76E+00	8.36E+00	NA	NA	NA						
MW-37-40	Q1-2011	020	39.2	-24.2	1/27/2011	13:49	5.97E+03	7.47E+02	3.87E+02	3.91E+01	3.48E+00	1.89E+00	1.44E+00	7.42E+00	7.85E+00	-6.38E+00	2.75E+00	7.92E+00	4.98E-03	1.20E-03	6.64E-04	6.40E-04	6.40E-04	NA	NA	MW-37-40
MW-37-40	Q2-2011	022	39.2	-24.2	4.28/2011	11:31	3.92E+03	8.32E+02	5.35E+02	2.30E+01	3.66E+00	1.58E+00	4.16E+00	9.32E+00	1.05E+01	6.47E-01	3.94E+00	1.32E+01	NA	NA	NA						
MW-37-40	Q3-2011	023	39.2	-24.2	8/16/2011	11:24	5.02E+03	7.36E+02	4.52E+02	1.35E+01	3.18E+00	1.17E+00	-2.03E+30	8.25E+00	8.54E+00	1.79E+00	7.35E+00	8.59E+00	NA	NA	NA						
MW-37-40	Q4-2011	024	39.2	-24.2	11/23.2011	11:46	5.22E+03	8.28E+02	4.81E+02	1.50E+01	3.45E+00	1.47E+00	1.06E+00	1.43E+01	7.71E+00	9.11E-01	7.25E+00	1.30E+01	NA	NA	NA						
MW-37-57	Q1-2011	021	53.2	-38.2	1/27/2011	15:26	5.85E+03	5.76E+02	3.95E+02	3.12E+01	3.80E+00	1.96E+00	-3.77E-01	6.34E+00	5.59E+00	-3.13E+01	5.84E+00	5.58E+00	5.36E-03	1.21E-03	6.64E-04	6.64E-04	6.64E-04	NA	NA	MW-37-57
MW-37-57	Q2-2011	022	53.2	-38.2	4.28/2011	12:17	5.81E+03	8.88E+02	5.07E+02	1.58E+01	3.54E+00	2.30E+00	5.18E+00	1.72E+01	5.67E+00	-1.42E+01	5.36E+00	8.50E+00	NA	NA	NA						
MW-37-57	Q3-2011	023	53.2	-38.2	8/16/2011	13:55	5.11E+03	7.08E+02	4.52E+02	2.15E+01	3.25E+00	1.30E+00	1.82E+00	7.22E+00	9.14E+00	-1.34E+01	5.35E+00	8.57E+00	NA	NA	NA						
MW-37-57	Q4-2011	024	53.2	-38.2	11/23.2011	11:22	4.87E+03	8.16E+02	4.91E+02	1.88E+01	3.97E+00	1.81E+00	-6.08E-01	8.28E+00	1.01E+01	3.30E+00	7.47E+00	1.27E+01	NA	NA	NA						
MW-39-67	Q2-2011	022	57	1[illegible]	4/26/2011	14:32	1.05E+04	9.54E+02	1.51E+02	1.74E+00	1.46E+00	1.50E+00	-8.21E-01	8.22E+00	8.75E+00	4.01E+01	9.42E+00	9.00E+00	7.77E-03	2.38E-00	ND	ND	NA	NA	NA	MW-39-67
MW-39-67	Q2-20..1 Mid	021	57	1[illegible]	7/15/2011	13:42	2.24E+03	6.12E+02	4.41E+02	2.55E-01	1.11E+00	1.34E+00	-1.15E-01	8.38E+00	9.19E+00	-2.42E-02	9.72E+00	1.12E+01	NA	NA	NA						
MW-39-67	Q3-20..1 Mid	021	57	1[illegible]	8/29/2011	13:47	1.45E+04	1.24E+03	4.51E+02	1.18E+00	1.18E+00	1.30E+00	2.23E+00	7.77E+00	8.94E+00	4.32E+00	3.25E+00	1.35E+01	NA	NA	NA						
MW-39-67	Q4-2011	014	57	1[illegible]	12/1/2011	14:04	1.08E+03	5.13E+02	4.75E+02	2.37E+00	1.90E+00	1.76E+00	-3.99E+30	9.24E+00	1.01E+01	-3.39E+01	8.07E+00	9.37E+00	NA	NA	NA						
MW-39-84	Q2-2011	021	83.5	-3.5	4/26/2011	14:25	4.45E+02	9.12E+02	4.52E+02	8.03E-01	1.15E+00	1.50E+00	-9.33E-01	7.42E+00	7.86E+00	-9.62E-01	7.92E+00	7.41E+00	4.08E-02	2.12E-00	NA	NA	NA	NA	NA	MW-39-84
MW-39-84	Q2-20..1 Mid	012	83.5	-3.5	7/15/2011	14:32	3.55E+02	4.17E+02	4.41E+02	6.54E-01	1.11E+00	1.27E+00	-1.70E+30	1.43E+01	1.77E+01	-4.89E+01	3.45E+00	8.30E+00	NA	NA	NA						
MW-39-84	Q3-20..1 Mid	012	83.5	-3.5

IPEC00267137

TABLE 3
FOURTH QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,8]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing[2]	SAMPLE ZONE CENTER Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS[5]																YEARLY ROLLING AVERAGES[6,8]					Well ID[1]
							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.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Average	Average	Average	Average	Average	
MW-39-102	Q2-2011	012	101.5	-21.5	4/26/2011	14:02	1.62E+04	1.19E+03	4.35E+02	1.19E+00	1.35E+00	2.03E+00	4.41E+00	2.05E+00	3.80E+00	6.03E+00	2.96E+00	3.07E+01	NA	NA	NA	1.17E+04	2.77E+00	6.48E+01	ND	NA	MW-39-102
MW-39-102	Q2-20..1 Mid	012	101.5	-21.5	7/15/2011	14:02	1.24E+04	1.10E+03	4.36E+02	5.85E-01	1.05E+00	1.80E+00	3.70E+00	8.70E+00	1.01E+01	-6.04E-01	3.42E+00	9.35E+00	NA	NA	NA						
MW-39-102	Q3-20..1 Mid	012	101.5	-21.5	8/29/2011	14:11	1.96E+04	1.37E+03	4.41E+02	7.38E-01	1.20E+00	1.80E+00	3.31E+00	7.72E+00	7.37E+00	4.56E+00	7.83E+00	1.34E+01	NA	NA	NA						
MW-39-102	Q4-2011	014	101.5	-21.5	12/1/2011	14:10	1.12E+04	5.25E+02	4.72E+02	2.77E+00	2.06E+00	1.35E+00	1.46E+00	2.58E+00	3.96E+00	-2.95E+00	5.96E+00	7.37E+00	NA	NA	NA						
MW-39-124	Q2-2011	011	124	-44	4/26/2011	13:01	1.51E+02	3.70E+02	4.51E+02	5.20E-01	1.35E+00	1.55E+00	3.41E+00	8.56E+00	3.55E+00	3.37E+00	7.52E+00	9.27E+00	NA	NA	NA	ND	ND	1.13E+01	ND	NA	MW-39-124
MW-39-124	Q2-20..1 Mid	012	124	-44	7/15/2011	11:44	2.30E+01	3.72E+02	4.35E+02	8.78E-01	1.15E+00	1.27E+00	-4.10E+30	1.13E+01	1.11E+01	-1.82E+01	9.51E+00	9.57E+00	NA	NA	NA						
MW-39-124	Q3-20..1 Mid	012	124	-44	8/29/2011	13:54	-1.02E+31	3.75E+02	4.45E+02	3.16E-01	1.12E+00	1.30E+00	-7.03E+30	1.36E+01	1.01E+01	7.76E+00	1.11E+01	1.46E+01	NA	NA	NA						
MW-39-124	Q4-2011	014	124	-44	12/1/2011	13:46	1.72E+02	4.52E+02	4.93E+02	-2.28E-01	1.41E+00	1.82E+00	5.72E-01	2.75E+00	4.13E+00	4.71E+00	7.80E+00	9.42E+00	NA	NA	NA						
MW-39-183	Q2-2011	011	192.5	302.5	4/26/2011	11:52	1.11E+02	3.54E+02	4.08E+02	1.12E+00	1.25E+00	1.97E+00	3.41E+00	8.56E+00	3.09E+01	-1.52E+01	3.90E+00	3.94E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-39-183
MW-39-183	Q2-20..1 Mid	012	182.5	102.5	7/15/2011	11:45	7.02E+01	3.75E+02	4.35E+02	3.45E-01	1.02E+00	1.19E+00	2.51E+00	1.38E+01	1.21E+01	2.37E+01	1.30E+01	1.37E+01	NA	NA	NA						
MW-39-183	Q3-20..1 Mid	013	182.5	102.5	8/29/2011	11:45	1.14E+02	3.31E+02	4.31E+02	1.10E+00	1.15E+00	1.10E+00	-3.70E+30	1.15E+01	1.01E+01	5.30E+00	9.54E+00	1.22E+01	NA	NA	NA						
MW-39-183	Q4-2011	014	182.5	102.5	12/1/2011	11:26	-8.23E+31	4.11E+02	4.97E+02	1.34E-01	1.45E+00	1.30E+00	-2.81E+30	1.34E+01	1.55E+01	4.19E+00	3.16E+00	1.46E+01	NA	NA	NA						
MW-39-195	Q2-2011	011	195	-115	4/26/2011	12:36	7.04E+03	8.34E+02	4.21E+02	5.18E+00	1.72E+00	1.78E+00	-2.03E+30	1.41E+01	1.32E+01	4.52E+00	8.70E+00	1.13E+01	NA	NA	NA	8.39E+03	3.9E+00	ND	ND	NA	MW-39-195
MW-39-195	Q2-20..1 Mid	012	195	-115	7/15/2011	11:12	4.15E+03	7.56E+02	4.35E+02	1.10E+00	1.70E+00	1.33E+00	2.95E+00	8.46E+00	9.77E+00	6.38E-01	1.01E+01	1.38E+01	NA	NA	NA						
MW-39-195	Q3-20..1 Mid	013	195	-115	8/29/2011	11:31	1.72E+04	1.51E+03	4.43E+02	4.93E-01	1.70E+00	1.99E+00	7.79E-01	1.72E+00	5.57E+00	5.11E+00	9.60E+00	9.60E+00	NA	NA	NA						
MW-39-195	Q4-2011	014	195	-115	12/1/2011	11:28	5.12E+03	8.33E+02	4.87E+02	3.00E-01	1.40E+00	1.75E+00	2.12E+00	7.52E+00	1.01E+01	3.51E-01	3.42E+00	1.22E+01	NA	NA	NA						
MW-40-27	Q1-2011	010	26.7	46.3	3/8/2011	13:55	1.81E+02	3.38E+02	2.83E+02	1.55E+00	1.37E+00	1.48E+00	3.77E-01	6.75E+00	2.33E+00	2.23E+00	3.56E+00	9.79E+00	NA	ND	NA	ND	ND	ND	ND	NA	MW-40-27
MW-40-27	Q2-2011	014	26.7	46.5	4/29/2011	13:29	1.77E+02	3.56E+02	4.07E+02	1.18E+00	1.76E+00	1.87E+00	1.91E+00	8.40E+00	3.77E+00	-9.20E-01	3.86E+00	1.15E+01	NA	NA	NA						
MW-40-27	Q2-20..1 Mid	016	26.7	46.5	7/27/2011	15:12	3.65E+01	3.30E+02	3.42E+02	-4.37E-01	1.40E+00	1.35E+00	-2.13E+30	7.35E+00	7.64E+00	1.36E+00	9.02E+00	1.33E+01	NA	NA	NA						
MW-40-27	Q4-2011	017	26.7	46.5	11/9/2011	11:50	2.24E+01	4.20E+02	4.96E+02	1.74E-01	1.46E+00	1.77E+00	7.84E-01	7.12E+00	8.97E+00	3.19E+00	7.14E+00	1.33E+01	NA	NA	NA						
MW-40-46	Q1-2011	012	46.2	27	3/8/2011	13:55	1.84E+02	3.74E+02	2.61E+02	1.63E-01	8.52E-01	1.37E+00	2.82E+00	8.30E+00	9.31E+00	2.29E+00	3.74E+00	1.19E+01	NA	ND	NA	ND	ND	ND	ND	NA	MW-40-46
MW-40-46**	Q2-2011	014	46.2	27	4/29/2011	13:31	7.82E+01	3.54E+02	4.02E+02	-1.35E-01**	1.81E+00	1.77E+00	-9.93E-01	8.46E+00	7.01E+00	-3.98E+01	7.84E+00	9.34E+00	NA	NA	NA						
MW-40-46	Q2-20..1 Mid	015	46.2	27	7/27/2011	13:25	3.19E+02	3.42E+02	3.44E+02	9.06E-01	1.32E+00	1.30E+00	2.82E+00	8.33E+00	1.01E+01	5.01E-01	3.35E+00	1.33E+01	NA	NA	NA						
MW-40-46	Q4-2011	018	46.2	27	11/9/2011	13:03	3.06E+01	4.17E+02	4.77E+02	2.87E-01	1.42E+00	1.32E+00	1.26E+00	7.11E+00	9.44E+00	9.20E-01	3.53E+00	8.16E+00	NA	NA	NA						
MW-40-81	Q1-2011	010	80.7	-7.5	3/8/2011	11:12	2.55E+03	6.58E+02	2.65E+02	8.63E-01	1.31E+00	1.47E+00	1.79E+00	1.08E+01	3.71E+00	-1.42E+01	3.89E+00	6.16E+00	NA	NA	NA	NE	NE	6.0*	ND	NA	MW-40-81
MW-40-81	Q2-2011	016	80.7	-7.5	4/29/2011	11:08	3.35E+02	4.12E+02	4.36E+02	1.17E+00	1.58E+00	1.70E+00	3.05E+00	6.90E+00	3.51E+00	-2.66E-01	3.04E+00	8.33E+00	NA	NA	NA						
MW-40-81	Q2-20..1 Mid	017	80.7	-7.5	7/27/2011	13:24	-1.18E+32	2.39E+02	3.46E+02	8.36E-01	1.70E+00	1.30E+00	-3.22E-01	6.48E+00	5.87E+00	-1.05E+01	3.67E+00	8.91E+00	NA	NA	NA						
MW-40-81	Q4-2011	021	80.7	-7.5	11/9/2011	13:25	8.05E+31	4.22E+02	4.86E+02	3.77E-01	1.51E+00	1.79E+00	4.68E-01	2.54E+01	1.11E+01	1.37E+00	1.07E+01	1.39E+01	NA	NA	NA						
MW-40-100*	Q1-2011	017	100.2	-27	3/8/2011	11:22	5.15E+03	2.54E+02	2.66E+02	9.52E-02	1.31E+00	1.58E+00	2.46E+01*	1.35E+03	7.86E+00	3.40E+01	7.30E+00	8.30E+00	NA	NE	NE	2.6*	ND	NA	MW-40-100*		
MW-40-100	Q2-2011	018	100.2	-27	4/29/2011	11:27	1.77E+02	3.30E+02	3.45E+02	2.40E-01	1.42E+00	1.77E+00	5.32E+00	7.14E+00	3.22E+00	7.39E+00	7.39E+00	9.30E+00	NA								
MW-40-100	Q2-20..1 Mid	019	100.2	-27	7/27/2011	13:27	1.07E+02	3.12E+02	3.56E+02	9.50E-01	1.41E+00	1.30E+00	2.25E+00	9.33E+00	1.01E+01	7.10E-01	1.03E+01	1.30E+01	NA	NA	NA						
MW-40-100	Q4-2011	020	100.2	-27	11/9/2011	11:28	4.87E+01	4.29E+02	5.07E+02	1.14E+00	1.57E+00	1.41E+00	1.84E+00	7.28E+00	9.97E+00	8.66E-01	7.77E+00	1.31E+01	NA	NA	NA						
MW-40-127*	Q1-2011	017	127.2	-54	3/8/2011	13:41	1.55E+02	2.40E+02	2.64E+02	1.15E+00	1.41E+00	1.55E+00	2.67E+01*	1.54E+01	7.65E+00	3.43E-05	7.16E+00	9.96E+00	NA	NE	NE	8.6*	ND	NA	MW-40-127*		
MW-40-127	Q2-2011	018	127.2	-54	4/29/2011	11:26	-2.27E+31	3.50E+02	4.32E+02	5.72E-01	1.76E+00	2.35E+00	-2.13E-01	8.26E+00	8.88E+00	-1.62E+01	3.68E+00	9.87E+00	NA	NA	NA						
MW-40-127	Q2-20..1 Mid	019	127.2	-54	7/27/2011	13:56	1.56E+02	3.15E+02	3.55E+02	4.81E-01	1.64E+00	1.32E+00	1.48E+00	9.36E+00	1.01E+01	-8.00E+01	1.02E+01	7.94E+00	NA	NA	NA						
MW-40-127	Q4-2011	020	127.2	-54	11/9/2011	13:46	5.65E+01	4.38E+02	4.71E+02	1.17E+00	1.51E+00	1.51E+00	-1.26E+30	8.31E+00	1.04E+01	-3.35E+01	3.18E+00	1.34E+01	NA	NA	NA						
MW-40-162	Q1-2011	012	162.5	-88.5	3/9/2011	11:02	3.53E+03	2.42E+02	2.62E+02	1.05E+00	1.37E+00	-9.72E+30	1.54E+00	6.42E+00	-3.21E+01	3.23E+00	6.97E+00	NA	NE	NE	NE	ND	NA	MW-40-162			
MW-40-162	Q2-2011	014	161.7	-88.5	4/29/2011	13:26	1.05E+02	3.78E+02	4.32E+02	8.71E-01	1.31E+00	1.16E+00	1.54E+00	1.23E+01	1.41E+01	4.43E-01	3.55E+00	1.20E+01	NA	NA	NA						
MW-40-162	Q2-20..1 Mid	017	161.7	-88.5	7/27/2011	14:40	5.44E+01	3.37E+02	3.44E+02	8.61E-01	1.58E+00	1.38E+00	-2.44E+30	9.21E+00	8.54E+00	-6.93E-01	3.77E+00	9.81E+00	NA	NA	NA						
MW-40-162	Q4-2011	018	161.7	-88.5	11/9/2011	11:02	-2.60E+31	3.42E+02	4.06E+02	6.89E-01	1.75E+00	1.35E+00	1.06E+00	8.43E+00	1.07E+01	-4.71E+01	1.17E+01	1.30E+01	NA	NA	NA						
MW-41-40	Q1-2011	010	36.4	20.5	3/8/2011	14:05	2.02E+03	4.12E+02	2.68E+02	1.18E+01	2.68E+00	1.33E+00	3.46E+00	7.30E+00	8.61E+00	4.32E+00	7.56E+00	9.38E+00	NA	NA	NA	1.9E+03	5.43E+00	ND	ND	NA	MW-41-40	
MW-41-40	Q2-2011	021	36.4	20.5	4/20/2011	13:51	4.51E+03	7.36E+02	4.55E+02	2.32E+00	1.57E+00	1.44E+00	2.26E+00	9.22E+00	1.06E+01	3.32E+00	1.06E+01	1.25E+01	NA	NA	NA						
MW-41-40	Q2-20..1 Mid	021	36.4	20.5	7/15/2011	12:30	5.99E+02	4.59E+02	4.41E+02	2.48E+00	1.55E+00	1.19E+00	-1.92E+30	1.19E+01	1.14E+01	-1.11E+01	3.94E+00	9.13E+00	NA	NA	NA						
MW-41-40	Q3-2011	022	36.4	20.5	8/4/2011	14:35	5.94E+02	3.57E+02	3.53E+02	1.70E+00	1.83E+00	1.93E+00	4.9..E-01	5.37E+00	3.61E+00	-6.02E-02	3.11E+00	8.80E+00	NA	NA	NA						
MW-41-40	Q4-2011	023	36.4	20.5	11/28/2011	14:15	5.15E+02	5.13E+02	5.14E+02	8.83E-01	1.72E+00	1.35E+00	5.21E+00	8.16E+00	1.01E+01	4.23E+00	3.81E+00	1.11E+01	NA	NA	NA						
MW-41-63	Q1-2011	010	59.5	-4.6	3/14/2011	13:32	1.85E+03	3.44E+02	3.81E+02	6.41E+00	2.44E+00	1.90E+00	3.34E+00	5.30E+00	5.60E+00	2.99E+00	5.09E+00	7.29E+00	NA	NA	NA	8.3E+02	4.8E+00	ND	ND	NA	MW-41-63	
MW-41-63	Q2-2011	019	59.5	-4.6	4/20/2011	13:13	7.58E+02	4.30E+02	4.72E+02	-7.72E-01	1.51E+00	2.33E+00	3.53E+00	8.52E+00	1.01E+01	4.32E+00	3.74E+00	1.39E+01	NA	NA	NA						
MW-41-63	Q2-20..1 Mid	020	59.5	-4.6	7/15/2011	12:51	7.14E+02	4.56E+02	4.35E+02	3.33E+00	1.50E+00	1.30E+00	2.36E+00	7.71E+00	8.81E+00	4.47E-01	5.81E+00	7.51E+00	NA	NA	NA						
MW-41-63	Q3-2011	021	59.5	-4.6	8/4/2011	14:20	5.66E+02	3.50E+02	3.51E+02	1.31E+00	1.95E+00	1.36E+00	1.64E+00	7.39E+00	8.7..E+00	-1.43E+01	7.25E+00	7.72E+00	NA	NA	NA						
MW-41-63	Q4-2011	022	59.5	-4.6	11/28/2011	14:05	5.41E+02	5.22E+02	5.22E+02	6.76E-01	1.75E+00	1.35E+00	-7.77E-01	7.20E+00	8.55E+00	-9.03E-01	7.41E+00	9.17E+00	NA	NA	NA						
MW-42-49	Q1-2011	009	42.8	27.1	3/9/2011	11:53	1.46E+03	3.81E+02	2.32E+02	5.34E+00	1.12E+00	2.03E+04	9.42E+03	2.37E+04	1.42E+00	3.78E+00	2.53E+00	2.06E+01	1.30E+03	1.90E+03	1.90E+02	3.62E+02	3.34E+01	2.06E+01		MW-42-49	
MW-42-49	Q2-2011	022	42.6	27.1	4/21/2011	14:04	1.71E+02	3.38E+02	4.05E+02	5.45E-01	1.45E+00	1.45E+00	2.15E+00	2.38E+03	3.09E+01	3.41E+00	3.14E+00	1.30E+01	1.90E+02	2.72E+01	1.72E+31						
MW-42-49	Q3-2011	027	42.6	27.1	8/11/2011	12:50	7.29E+02	3.30E+02	3.74E+02	2.00E+00	1.95E+00	1.82E+00	1.47E+04	1.22E+03	2.11E+01	3.58E+00	3.47E+00	1.31E+01	2.8E+02	3.48E+01	2.07E+31						
MW-42-49	Q4-2011	028	42.6	27.1	11/3/2011	11:12	1.4E+03	5.70E+02	5.0..E+02	8.98E-01	1.51E+00	1.55E+00	3.03E+03	3.30E+02	1.21E+01	-1.75E+01	7.56E+00	9.18E+00	5.77E+01	1.57E+01	1.45E+31						
MW-42-78	Q1-2011	015	74	-4.3	3/4/2011	13:58	5.9..E+02	4.36E+02	3.84E+02	8.92E-01	1.45E+00	1.50E+00	-2.03E+30	6.72E+00	5.95E+00	8.03E-02	5.70E+00	7.43E+00	3.8E+03	1.73E+01	1.96E+31	5.8E+02	NE	6.0	ND	8.0	MW-42-78	
MW-42-78	Q2-2011	020	74	-4.3	4/21/2011	13:45	5.2E+02	4.78E+02	4.77E+02	4.25E-01	1.15E+00	1.32E+00	-9.71E-01	9.16E+00	9.8..E+00	3.58E+00	3.5E+00	1.11E+01	5.8E-01	1.49E+01	1.72E+31						
MW-42-78	Q3-2011	022	74	-4.3	8/11/2011	12:50	3.9..E+02	3.57E+02	3.72E+02	-1.16E-01	1.15E+00	1.49E+00	-5.83E-01	7.38E+00	7.61E+00	-5.68E-01	3.45E+00	1.33E+01	1.02E+00	1.17E+01	1.3..E+31						
MW-42-78	Q4-2011	023	74	-4.3	11/3/2011	11:31	3.32E+02	4.55E+02	5.02E+02	-5.46E-02	1.15E+00	1.49E+00	-2.91E+30	7.32E+00	5.02E+00	1.57E-01	7.74E+00	9.35E+00	-2.28E+30	1.18E+01	1.35E+31						
MW-43-28	Q1-2011	010	25.5	25.5	3/10/2011	13:08	2.45E+03	2.92E+02	2.86E+02	1.86E+00	1.41E+00	1.58E+00	5.57E-01	1.28E+01	7.07E+00	2.94E+01	5.84E+00	6.54E+00	NA	NE	NE	ND	ND	NA	MW-43-28		
MW-43-28	Q2-2011	015	25.5	25.5	4/21/2011	11:15	2.34E+02	4.30E+02	4.77E+02	1.46E+00	1.96E+00	2.34E+00	-9.31E-01	8.74E+00	9.22E+00	4.50E+00	3.85E+00	1.19E+01	NA	NA	NA						
MW-43-28	Q3-2011	020	23.5	25.3	8/4/2011	11:15	2.26E+02	3.34E+02	3.56E+02	-1.34E-01	1.42E+00	1.37E+00	4.06E+00	7.35E+00	9.0..E+00	-3.51E+01	3.32E+00	9.21E+00	NA	NA	NA						
MW-43-28	Q4-2011	021	23.5	25.3	11/22/2011	11:23	1.21E+02	3.50E+02	4.05E+02	1.40E+00	1.81E+00	1.35E+00	-9.87E-02	5.58E+00	7.14E+00	-3.96E+01	3.07E+00	8.55E+00	NA	NA	NA						
MW-43-62	Q1-2011	010	51	-2.2	3/15/2011	13:15	1.81E+02	2.76E+02	3.0..E+02	7.75E-01	1.70E+00	1.35E+00	6.89E-01	5.09E+00	5.56E+00	-2.37E-01	3.16E+00	5.52E+00	NA	NA	NA						
MW-43-62	Q2-2011	015	51	-2.2	4/21/2011	11:08	1.02E+02	4.12E+02	4.72E+02	-4.65E-01	1.65E+00	2.18E+00	-1.98E+30	9.38E+00	9.35E+00	-2.34E+01	3.71E+00	8.43E+00	NA	NA	NA						
MW-43-62	Q3-2011	021	51	-2.2	8/4/2011	11:32	1.6..E+02	3.21E+02	3.52E+02	-2.14E-01	1.61E+00	1.35E+00	-1.62E+30	7.35E+00	8.0..E+00	-2.93E+01	3.15E+00	8.75E+00	NA	NA	NA						
MW-43-62	Q4-2011	022	51	-2.2	11/22/2011	13:22	3.81E+02	3.72E+02	3.1..E+02	9.55E-01	1.72E+00	1.36E+00	1.43E+31	1.12E+01	1.67E+01	1.24E+00	1.0..E+01	1.11E+01	NA	NA	NA						
MW-44-66	Q1-2011	010	62.4	31.1	3/10/2011	13:40	4.55E+03	3.38E+02	3.34E+02	2.39E+00	1.45E+00	1.96E+00	1.74E+00	7.72E+00	5.65E+00	1.48E+01	7.95E+00	8.86E+00	NA	NA	NA	6.0E+03	NE	ND	ND	NA	MW-44-66	
MW-44-66	Q2-2011	020	62.4	31.1	4/26/2011	13:17	5.8..E+02	4.20E+02	4.0..E+02	7.05E-01	1.52E+00	1.70E+00	-1.14E-01	9.36E+00	1.0..E+01	3.29E+00	1.07E+01	1.31E+01	NA	NA	NA						
MW-44-66	Q2-20..1 Mid	021	62.4	31.1	7/19/2011	15:35	1.62E+03	5.49E+02	4.32E+02	-7.04E-01	6.48E-01	1.36E+00	4.61E+00	9.56E+00	1.11E+01	-5.76E+01	1.11E+01	9.79E+00	NA	NA	NA						
MW-44-66	Q3-2011	021	62.4	31.1	8/22/2011	12:08	4.7..E+02	4.32E+02	4.45E+02	1.13E-01	9.03E-01	1.11E+00	-7.4..E+30	8.73E+00	5.85E+00	-3.14E+01	9.05E+00	9.37E+00	NA	NA	NA						
MW-44-66	Q4-2011	02..	62.4	31.1	11/8/2011	12:0..	5.4..E+02	5.04E+02	4.94E+02	-6.25E-01	1.44E+00	1.44E+00	1.95E+00	7.55E+00	9.5..E+00	2.52E+00	7.5..E+00	1.34E+01	NA	NA	NA						
MW-44-102	Q1-2011	010	30	13.5	3/10/2011	13:44	3.95E+03	3.90E+02	3.97E+02	3.63E-01	1.61E+00	2.15E+00	2.22E-01	1.49E+00	5.47E+00	-2.93E-01	3.02E+00	6.35E+00	NA	NA	NA	7.9E+02	NA	NA	NA	NA	MW-44-102	
MW-44-102	Q2-2011	021	30	13.5	4/26/2011	13:18	5.7..E+02	4.14E+02	3.95E+02	1.19E+00	1.41E+00	1.19E+00	3.55E-01	7.12E+00	5.1..E+00	2.06E+01	7.36E+00	7.52E+00	NA	NA	NA						
MW-44-102	Q2-20..1 Mid	020	30	13.5	7/19/2011	15:05	1.67E+03	4.78E+02	4.35E+02	2.56E-01	1.07E+00	1.19E+00	1.73E+00	6.43E+00	7.69E+00	-2.64E+01	5.29E+00	7.47E+00	NA	NA	NA						
MW-44-102	Q3-2011	022	30	13.5	8/22/2011	13:43	3.2..E+02	4.77E+02	4.57E+02	-1.10E-01	9.69E-01	1.28E+00	-3.22E+30	6.59E+00	5.6..E+00	8.39E+00	7.5..E+00	1.38E+01	NA	NA	NA						
MW-44-102	Q4-2011	024	30	13.5	11/1/2011	12:18	1.0..E+03	4.50E+02	4.07E+02	-2.13E-01	1.52E+00	1.35E+00	-7.91E-02	8.73E+00	1.04E+01	-5.88E-01	3.33E+00	1.15E+01	NA	NA	NA						
MW-45-42	Q1-2011	009	37	16.6	3/14/2011	14:58	5.12E+03	7.38E+02	3.03E+02	1.13E+00	1.38E+00	1.48E+00	-3.55E-01	5.54E+00	5.98E+00	1.42E+00	3.30E+00	9.27E+00	NA	NA	NA	1.0E+04	NE	ND	ND	NA	MW-45-42	
MW-45-42	Q2-2011	024	37	16.6	4/20/2011	14:05	3.5..E+03	1.33E+03	4.6..E+02	1.45E+00	1.5..E+00	1.51E+00	7.0..E-01	6.50E+00	7.4..E+00	7.13E+00	1.07E+01	1.29E+01	NA	NA	NA						
MW-45-42	Q2-20..1 Mid	023	37	16.6	7/25/2011	13:25	3.9..E+04	2.77E+03	4.3..E+02	1.14E+00	1.5..E+00	1.37E+00	3.05E+00	7.4..E+00	3.0..E+00	-2.60E+01	1.01E+01	1.35E+01	NA	NA	NA						
MW-45-42	Q3-20..1 Mid	027	37	16.6	8/23/2011	13:55	2.7..E+04	1.53E+03	1.5..E+02	1.77E-01	9.15E-01	1.10E+00	8.72E-01	1.12E+01	1.02E+01	-7.52E+01	1.0..E+01	8.39E+00	NA	NA	NA						
MW-45-42	Q4-2011	027	37	16.6	11/28/2011	13:40	1.6..E+04	6.77E+02	5.1..E+02	8.10E-01	1.79E+00	1.35E+00	1.73E+00	5.14..+00	7.69E+00	-2.64E+01	5.9..E+00	7.34E+00	NA	NA	NA						
MW-45-61	Q1-2011	022	58	-4.4	3/16/2011	15:12	1.84E+03	3.20E+02	3.96E+02	-2.29E-01	1.64E+00	1.96E+00	1.3..E+00	4.30E+00	5.41E+00	9.09E-01	3.46E+00	6.15E+00	NA	NA	NA	3.9..E+03	NE	ND	ND	NA	MW-45-61	
MW-45-61	Q2-2011	024	58	-4.4	4/20/2011	13:07	2.0..E+03	6.12E+02	4.74E+02	7.22E-01	1.3..E+00	1.51E+00	-4.02E+30	7.76E+00	7.5..E+00	-8.47E-01	7.5..E+00	7.91E+00	NA	NA	NA						
MW-45-61	Q2-20..1 Mid	023	58	-4.4	7/25/2011	13:0..	5.6..E+03	8.49E+02	4.3..E+02	9.47E-01	1.1..E+00	1.25E+00	1.42E+00	5.79E+00	5.6..E+00	2.37E+00	3.34E+00	9.38E+00	NA	NA	NA						
MW-45-61	Q3-20..1 Mid	026	58	-4.4	8/23/2011	13:48	5.9..E+03	8.13E+02	4.34E+02	7.01E-01	1.1..E+00	1.26E+00	-8.63E-01	7.44E+00	7.9..E+00	1.84E+00	5.62E+00	7.39E+00	NA	NA	NA						
MW-45-61	Q4-2011	027	58	-4.4	11/28/2011	11:44	2.0..E+03	6.72E+02	5.1..E+02	4.76E-01	1.7..E+00	1.37E+00	3.25E-01	7.41E+00	9.35E+00	-6.01E-01	3.42E+00	1.19E+01

IPEC00267138

TABLE 3
FOURTH QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,8]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS[5]														YEARLY ROLLING AVERAGES[6,7]					Well ID[1]
							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.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Average	Average	Average	Average	Average	
MW-46	Q1-2011	025	10 5	7 6	2/23/2011	13 46	2 63E+03	5 30E+02	3 99E+02	1 14E+00	1 03E+00	1 06E+00	-2 42E+00	5 38E+00	9 35E+00	5 21E-01	3 10E+00	5 39E+00	NA	NA	NA	3 39E+03	NE	ND	ND	NA	MW-46
MW-46	Q2-2011	024	10 5	7 6	4/25/2011	11 15	5 22E+03	7 54E+02	3 97E+02	1 48E+00	1 72E+00	1 50E+00	-2 48E+00	7 24E+00	7 06E+00	-4 44E+01	7 44E+00	6 77E+00	NA	NA	NA						
MW-46	Q3 20 1 Mid	023	10 5	7 6	7/13/2011	13 25	3 08E+03	7 17E+02	3 88E+02	8 44E 01	1 15E+00	1 36E+00	3 71E+00	8 54E+00	1 09E+01	9 54E 01	1 02E+01	1 38E+01	NA	NA	NA						
MW-46	Q4-2011	027	10 5	7 6	8/17/2011	11 36	3 36E+03	6 72E+02	4 58E+02	8 77E-01	1 21E+00	1 29E+00	3 43E-01	7 36E+00	8 88E+00	-1 10E+01	7 58E+00	7 37E+00	NA	NA	NA						
MW-46	Q1-2011	027	10 5	7 6	10/20/2011	13 35	2 28E+03	4 58E+02	3 46E+02	3 95E-01	1 30E+00	1 52E+00	-4 36E+30	8 19E+00	3 94E+00	-1 03E+01	3 07E+00	1 31E+01	NA	NA	NA						
MW-47-56	Q2-20 1 Mid	006	53 2	17 1	5/6/2011	13 32	3 52E+03	6 52E+02	4 41E+02	3 63E-01	1 08E+00	1 22E+00	-3 56E+30	1 13E+01	3 22E+00	3 45E-01	2 41E+00	8 25E+00	1 99E+01	2 17E+01	2 58E+01	3 52E-03	NE	ND	ND	ND	MW-47-56
MW-47-56	Q3-20 1 Mid	007	53 2	17 1	8/18/2011	12 35	5 42E+02	2 76E+02	2 02E+02	1 33E+00	1 28E+00	1 31E+00	-8 54E-01	1 13E+01	1 23E+01	3 36E+00	3 64E+00	1 37E+01	-2 23E+30	1 75E+01	2 80E+01						
MW-47-56	Q4-2011	080	53 2	17 1	11/28/2011	13 26	3 31E+03	8 32E+02	4 91E+02	-6 21E-01	8 70E-01	1 40E+00	1 54E+00	8 25E+00	1 01E+01	1 01E+01	1 01E+01	1 24E+01	9 47E+00	1 44E+01	1 44E+01						
MW-47-80	Q2-20 1 Mid	005	79	-3 7	5/6/2011	14 37	1 35E+03	3 36E+02	4 35E+02	1 35E+00	1 35E+00	1 32E+00	-6 57E+30	8 37E+00	5 37E+00	5 43E+01	7 90E+00	7 45E+00	3 07E+00	2 59E+01	2 99E+31	1 35E-03	2 36E-00	ND	ND	ND	MW-47-80
MW-47-80	Q3 20 1 Mid	006	79	3 7	8/18/2011	11 36	1 37E+03	4 08E+03	2 15E+02	8 23E 01	1 22E+00	1 29E+00	5 83E+30	9 30E+00	3 66E+00	6 32E 01	3 75E+00	9 27E+00	1 15E+30	1 38E+01	2 15E+31						
MW-47-80	Q4-2011	007	74	-3 7	11/28/2011	13 24	3 68E+04	3 21E+03	5 07E+02	2 13E+00	1 58E+00	1 38E+00	-1 36E+30	6 54E+00	7 91E+00	1 21E+00	5 47E+00	8 38E+00	3 54E+00	1 31E+01	1 46E+31						
MW-49-26	Q1-2011	022	19 1	-4 4	1/28/2011	13 32	3 15E+03	6 30E+02	4 25E+02	1 10E+00	3 81E+00	3 55E+00	3 28E-01	1 04E+01	7 01E+00	-2 43E+01	3 42E+00	6 44E+00	4 31E+00	1 57E+01	2 28E+31	3 39E-03	1 27E-01	6 0	6 0	6 0	MW-49-26
MW-49-26	Q2-2011	024	19 1	-4 4	4/15/2011	11 58	3 25E+03	7 18E+02	4 8E+02	1 26E+01	3 0E+00	1 31E+00	4 75E+00	1 17E+01	1 27E+01	4 33E+00	1 2E+01	1 47E+01	1 81E+00	1 50E+01	1 72E+31						
MW-49-26	Q3-2011	023	19 1	-4 4	8/10/2011	13 46	3 9E+03	6 39E+02	2 0E+02	1 26E+01	2 85E+00	1 34E+00	-1 94E+30	9 36E+00	3 3E+00	2 34E+00	3 31E+00	1 30E+01	-1 77E+31	2 34E+01	2 57E+31						
MW-49-26	Q4-2011	026	19 1	-4 4	11/4/2011	11 35	4 9E+03	8 5 E+02	5 0E+02	1 12E+01	1 9E+00	1 12E+00	6 61E+00	1 11E+01	7 4E+00	5 11E+00	5 04E+00	1 17E+01	-2 11E+30	1 60E+01	1 46E+31						
MW-49-42	Q1-2011	022	38 1	-23 4	1/28/2011	13 30	2 42E+03	3 55E+02	3 6E+02	3 10E+00	4 92E+00	5 32E+00	5 07E+30	5 74E+00	3 21E+00	2 43E+01	3 56E+00	5 32E+00	3 26E+00	1 50E+01	3 12E+31	3 37E-03	1 10E-01	ND	ND	ND	MW-49-42
MW-49-42	Q2-2011	024	38 1	23 4	4/15/2011	11 55	1 9E+03	6 3 E+02	1 7E+02	1 57E+01	3 34E+00	2 77E+00	6 72E+30	7 52E+00	5 1E+00	1 15E 01	7 7E+00	8 33E+00	5 6E+00	1 55E+01	1 75E+31						
MW-49-42	Q3-2011	023	38 1	23 4	8/10/2011	11 16	3 8E+03	6 2E+02	1 9E+02	1 51E+01	3 2dE+00	1 54E+00	-1 22E+30	8 34E+00	3 6E+00	-3 72E+01	3 7E+00	8 33E+00	-1 48E+31	1 81E+01	2 1E+31						
MW-49-42	Q4-2011	026	38 1	23 4	11/4/2011	11 43	4 9E+03	8 19E+02	4 9E+02	2 11E+01	3 9E+00	1 51E+00	5 98E-01	1 17E+01	1 1E+01	-3 91E+01	1 04E+01	1 20E+01	4 27E+00	1 30E+01	1 45E+31						
MW-49-65	Q1-2011	022	50	45 4	1/28/2011	13 15	1 94E+03	3 32E+02	3 8E+02	1 15E+00	3 28E+00	2 36E+00	-6 33E-01	4 36E+00	5 21E+00	7 15E-01	2 2E+00	5 34E+00	-9 10E+30	1 83E+01	2 20E+31	2 25E-03	1 0E-01	ND	ND	ND	MW-49-65
MW-49-65	Q2-2011	024	50	45 4	4/15/2011	11 50	2 3E+03	6 4E+02	4 8E+02	1 52E+01	3 12E+00	1 50E+00	2 55E+00	9 56E+00	1 1E+01	4 62E-02	1 01E+01	1 10E+01	4 1E+00	1 49E+01	1 62E+31						
MW-49-65	Q3-2011	023	50	45 4	8/10/2011	11 55	2 4E+03	5 10E+02	2 0E+02	1 14E+01	2 72E+00	1 42E+00	1 12E-01	7 72E+00	5 4E+00	-4 19E+01	3 0E+00	8 42E+00	-6 91E-01	1 51E+01	2 05E+31						
MW-49-65	Q4-2011	026	50	45 4	11/4/2011	11 45	3 2E+03	7 33E+02	4 9E+02	2 32E+01	3 0E+00	1 47E+00	-4 27E+30	8 8E+00	9 1E+00	-6 56E-01	3 4E+00	1 15E+01	7 03E-01	1 34E+01	1 36E+31						
MW-50-42	Q1-2011	022	42	-27 1	2/23/2011	13 36	5 61E+02	3 28E+02	3 8E+02	5 54E+00	2 34E+00	1 31E+00	-1 23E-01	8 46E+00	5 81E+00	-9 07E-01	4 42E+00	9 52E+00	7 19E-30	1 92E+01	2 25E+31	1 10E-03	1 15E-01	ND	ND	ND	MW-50-42
MW-50-42	Q2-2011	024	42	-27 1	4/5/2011	12 04	3 7E+03	5 58E+02	3 4E+02	9 53E+00	3 2E+00	1 3dE+00	1 95E+00	9 4dE+00	1 0E+01	5 79E-01	1 0E+01	1 1dE+01	5 8dE-01	1 59E+01	1 9E+31						
MW-50-42	Q3-2011	023	42	-27 1	7/25/2011	12 18	1 0E+03	4 39E+02	4 4E+02	3 31E+00	3 0E+00	2 32E+00	-1 1 E+30	7 36E+00	3 3E+00	6 63E-02	3 1E+00	9 3dE+00	3 8E+00	1 7 E+01	1 9 E+31						
MW-50-42	Q4-2011	027	42	-27 1	10/27/2011	13 48	3 12E+03	4 44E+00	1 5dE+00	1 7dE+00	1 1dE+00	9 2E-01	-2 60E+01	1 0E+01	9 5E+00	-5 7dE+30	1 21E+01	1 4 E+31								
MW-50-66	Q1-2011	022	50	-45 1	2/23/2011	13 26	1 76E+03	6 6dE+02	3 8E+02	2 51E+01	4 0E+00	2 15E+00	-3 94E+00	7 10E+00	5 2dE+00	6 29E-03	3 30E+00	9 1dE+00	2 20E+30	1 81E+01	2 12E+31	5 79E-03	2 20E-00	ND	ND	ND	MW-50-66
MW-50-66	Q2-2011	024	50	-45 1	4/5/2011	12 12	2 8E+03	5 4 E+02	3 8E+02	2 3dE+01	3 0E+00	1 3dE+00	-2 32E+30	9 0E+00	1 7 E+01	3 4E+00	1 1E+01	1 4dE+01	3 4E+00	1 7 E+01	1 6dE+31						
MW 50 66	Q2 20 1 Mid	031	50	45 1	7/25/2011	12 26	5 5E+03	8 7 3E+02	4 4E+02	2 51E+01	1 0E+00	1 3dE+00	4 5 E 01	7 2dE+00	7 7 E+00	3 1dE+00	3 5dE+00	1 3 E+01	1 4dE+00	1 7 E+01	1 8 E+31						
MW-50-66	Q3-2011	032	50	-45 1	8/19/2011	12 15	7 1E+03	8 49E+02	2 0E+02	2 57E+01	4 0E+00	1 5dE+00	3 6E+00	8 4dE+00	1 0 E+01	1 7 E+00	3 0E+00	1 3dE+01	8 9dE+30	1 8dE+01	2 1 E+31						
MW-50-66	Q4-2011	033	50	-45 1	10/27/2011	13 53	7 8E+03	9 37E+02	4 9dE+02	2 56E+01	4 3dE+00	1 59E+00	-6 4dE-01	8 5dE+00	1 0 E+01	1 3 E+01	1 0E+01	1 49E+01	-4 9dE+30	1 56E+01	1 9 E+31						
MW-51-40	Q1-2011	015	39 7	21	2/8/2011	13 18	1 0dE+02	2 3dE+02	2 6dE+02	1 17E+00	1 5 1E+00	1 3dE+00	-7 9dE+30	1 2 1E+01	1 3dE+01	2 4dE+00	7 3dE+00	8 7dE+00	NA	NA	NA	NE	NE	ND	ND	ND	MW-51-40
MW-51-40	Q2-2011	015	39 7	21	4/29/2011	13 41	3 6E+02	4 1dE+02	4 3dE+02	2 26E-01	1 3dE+00	1 59E+00	-3 40E+30	9 4dE+00	9 6dE+00	6 20E+00	1 1E+01	1 40E+01	NA	NA	NA						
MW-51-40	Q3-2011	021	39 7	21	7/28/2011	11 42	3 7E+01	3 3dE+02	3 5E+02	-2 51E-01	1 3dE+00	1 3dE+00	-2 5dE+30	1 3dE+01	1 6dE+01	-3 3dE+01	3 3dE+00	9 3dE+00	NA	NA	NA						
MW-51-40	Q4-2011	021	39 7	22	12/12/2011	13 47	1 6dE+02	3 3dE+02	3 2dE+02	-7 3dE-01	1 3dE+00	1 3dE+00	-5 5dE+30	1 4dE+01	1 4dE+01	4 2dE+00	1 1dE+01	1 39E+01	-3 4dE+30	1 39E+01	1 5 2E+31						
MW-51-79	Q1-2011	012	78 7	-11	2/8/2011	13 34	1 3dE+02	1 7dE+02	1 7dE+02	-7 0dE-01	1 2dE+00	1 3dE+00	2 4dE+00	5 12dE+00	5 5dE+00	-2 7dE+01	7 3dE+00	6 45dE+00	NA	NA	NA	NE	NE	ND	ND	NA	MW-51-79
MW-51-79	Q2-2011	016	78 7	-11	4/29/2011	13 45	1 1 7E+02	3 0dE+02	4 3dE+02	1 19E+00	1 6dE+00	1 8dE+00	-4 9 1E-01	9 6dE+00	8 2 7E+00	-8 3dE-01	8 0dE+00	8 53E+00	NA	NA	NA						
MW-51-79	Q3-2011	020	78 7	-11	7/28/2011	11 55	1 91E+31	3 39E+02	3 6dE+02	1 36E-01	1 6dE+00	1 3dE+00	2 2dE+00	8 28E+00	9 4 1E+00	-5 24E-01	3 2 7E+00	9 33E+00	NA	NA	NA						
MW-51-79	Q4-2011	021	78 7	-11	12/12/2011	11 05	1 5dE+02	2 9dE+02	3 2dE+02	-1 3dE-01	1 5dE+00	1 3dE+00	-3 2dE+30	7 3dE+00	8 9 5E+00	-3 0 1E-01	7 6dE+00	9 3dE+00	-1 1 2E+30	1 13E+01	1 2 7E+31						
MW-51-104	Q1-2011	016	103 7	-33	2/8/2011	13 16	1 7dE+02	3 5dE+02	3 5dE+02	5 9 1E-01	1 6dE+00	1 5dE+00	-3 5dE+30	7 0dE+00	9 3dE+00	9 0 2E-01	5 5dE+00	6 2dE+00	NA	NA	NA	NE	NE	ND	ND	NA	MW-51-104
MW-51-104	Q2-2011	017	103 7	-33	4/29/2011	12 35	1 9dE+02	3 3dE+02	4 3dE+02	1 41E+00	1 4dE+00	1 4dE+00	-1 9dE+30	1 3dE+01	1 2dE+01	-6 7 9E-01	1 1dE+01	1 3dE+01	NA	NA	NA						
MW-51-104	Q3-2011	018	103 7	-33	7/28/2011	9 51	1 6dE+02	3 1dE+02	3 5E+02	-8 6dE-01	1 2dE+00	1 3dE+00	-1 1 5E-01	6 1dE+00	3 8dE+00	-3 1 2E+01	3 1dE+00	7 9dE+00	NA	NA	NA						
MW-51-104	Q4-2011	019	103 7	-33	12/12/2011	13 12	1 4 5E+02	2 2 1E+02	3 2dE+02	1 3 3E+00	1 4dE+00	1 3dE+00	1 3 2E+00	9 2dE+00	9 2 5E+00	3 9 2E+00	9 2dE+00	1 13E+01	3 9 1E+30	1 33E+01	1 5 3E+31						
MW-51-135	Q1-2011	013	135 2	-67 5	2/8/2011	13 44	2 8dE+02	3 3dE+02	3 6dE+02	8 8 2E-01	1 3dE+00	1 4dE+00	8 8dE-01	6 3dE+00	5 7dE+00	2 3dE+00	5 9dE+00	7 3dE+00	NA	NA	NA	NE	NE	ND	ND	NA	MW-51-135
MW-51-135	Q2-2011	017	135 2	-67 5	4/29/2011	13 16	1 0dE+00	3 5dE+02	4 3dE+02	1 14E+00	1 5 2E+00	1 5 3E+00	2 5 2E+00	1 1 1E+01	1 1 7E+01	-5 6 9E-01	9 0dE+00	9 5dE+00	NA	NA	NA						
MW-51-135	Q3-2011	018	135 2	-67 5	7/28/2011	13 04	-5 6 1E+31	2 9dE+02	3 4dE+02	8 0dE-01	1 7 1E+00	1 3 2E+00	4 4 1E+00	8 2 2E+00	9 8 1E+00	1 3 2E+00	9 3dE+00	1 3 5E+01	NA	NA	NA						
MW-51-135	Q4-2011	019	135 2	-67 5	12/12/2011	12 50	1 3 2E+02	2 3 3E+02	3 3 3E+02	2 6 7E-01	1 6dE+00	1 3dE+00	5 8 3E+00	9 4 2E+00	1 2 1E+01	-3 7 3E+01	3 4dE+00	9 4 1E+00	-6 6 0E+30	1 18E+01	1 3 5E+31						
MW-51-163	Q1-2011	016	162 7	-95	2/8/2011	13 01	3 0dE+00	3 3dE+02	3 6dE+02	5 8 7E-01	1 5 5E+00	1 3dE+00	3 8 1E+00	6 5dE+00	7 6 6E+00	5 2 5E-01	7 7dE+00	8 59E+00	NA	NA	NA	NE	NE	ND	ND	NA	MW-51-163
MW-51-163	Q2-2011	017	162 7	-95	4/29/2011	13 15	1 6dE+01	3 5dE+02	4 3dE+02	5 2 7E-01	1 4 5E+00	1 3 5E+00	2 2dE+00	8 4dE+00	9 7 2E+00	9 2 5E-01	7 7 2E+00	8 3 7E+00	NA	NA	NA						
MW-51-163	Q3-2011	018	162 7	-95	7/28/2011	12 51	1 2dE+02	3 1dE+02	3 5dE+02	7 1 5E-01	1 2dE+00	1 3dE+00	3 6 1E+00	6 9 2E+00	7 7 1E+00	3 4dE+00	7 9dE+00	1 17E+01	NA	NA	NA						
MW-51-163	Q4-2011	019	162 7	-95	12/12/2011	12 29	1 7 1E+02	3 1 3E+02	3 3 2E+02	1 5 8E+00	1 8 1E+00	1 3dE+00	3 2 4E+00	8 4dE+00	1 1 6E+01	8 4 0E-01	1 3 5E+01	1 3 8E+01	-5 9 8E+30	1 22E+01	1 3 2E+31						
MW-51-189	Q1-2011	016	189 2	-12 5	2/8/2011	13 29	1 5dE+02	3 3dE+02	2 6dE+02	1 3 6E+00	1 4dE+00	1 3dE+00	7 7 6E+01	1 4 7E+01	1 5 2E+01	2 2 8E-01	1 2 6E+01	1 5 9E+01	NA	NA	NA	NE	NE	ND	ND	NA	MW-51-189
MW-51-189	Q2-2011	017	189 2	-12 5	4/29/2011	12 52	2 3 2E+02	3 3 6E+02	4 3 2E+02	1 2 8E+00	1 5 2E+00	1 5 7E+00	-8 0 7E-01	5 3 2E+00	5 2 2E+00	-5 0 7E+01	3 4 8E+00	8 3 9E+00	NA	NA	NA						
MW-51-189	Q3-2011	018	189 2	-12 5	7/28/2011	13 42	5 6 9E+30	3 3 3E+02	3 5 5E+02	3 6 9E-02	1 6dE+00	1 3 5E+00	2 3 6E+00	1 1 7E+01	1 0 1E+01	2 5 2E+00	1 0 1E+01	1 1 7E+01	NA	NA	NA						
MW-51-189	Q4-2011	019	189 2	-12 5	12/12/2011	12 25	5 5 7E+31	2 3 0E+02	3 2 5E+02	-3 9 4E-01	1 4 5E+00	1 3 1E+00	-4 4 9E+30	8 1 0E+00	8 5 1E+00	1 3 5E+00	8 3 4E+00	1 13E+01	-9 3 4E+30	1 3 4E+01	2 2 2E+31						
MW-52-10	Q2-2011	006	10	-6 2	4/22/2011	13 16	3 0dE+02	1 4dE+02	1 3dE+02	1 29E-01	1 3dE+00	1 0dE+00	2 2dE+00	1 2dE+01	1 1dE+01	5 3dE+00	3 9dE+00	1 2dE+01	NA	NA	NA	NE	NE	ND	ND	NA	MW-52-10
MW-52-11	Q2-20 1 Mid	007	63	36 8	7/26/2011	13 32	1 2dE+02	3 2dE+02	4 2dE+02	1 6dE-01	1 4dE+00	1 3dE+00	1 7 1E+00	7 7dE+00	8 5dE+00	-2 2 7E+01	3 4dE+00	8 5dE+00	NA	NA	NA						
MW-52-18	Q2-2011	006	17 5	-3 6	4/22/2011	13 26	7 0dE+00	3 4dE+02	4 3dE+02	1 47E+00	1 3dE+00	1 4dE+00	-9 3 1E+00	1 2dE+01	1 0dE+01	-3 4 9E+01	9 4dE+00	9 3dE+00	NA	NA	NA	NE	NE	ND	ND	NA	MW-52-18
MW-52-18	Q4-2011	007	17 5	-2 6	7/26/2011	14 39	2 5 2E+02	3 3 7E+02	4 2 2E+02	1 16E+00	1 6 2E+00	1 7 6E+00	3 8 0E+00	6 4 5E+00	3 0 1E+00	-3 2 4E+01	3 1 0E+00	7 9 4E+00	NA	NA	NA						
MW-52-48	Q2-2011	006	48	-33 1	4/22/2011	13 18	1 0dE+02	3 1 2E+02	4 3dE+02	1 69E-01	1 3 5E+00	1 0 2E+00	-4 5 9E+30	7 3 8E+00	2 3 1E+00	1 3 3E+00	2 3 0E+00	9 1 7E+00	NA	NA	NA	NE	NE	ND	ND	NA	MW-52-48
MW-52-48	Q2-20 1 Mid	007	48	-33 1	7/26/2011	15 08	7 6E+01	3 5 6E+02	4 2 1E+02	2 5 8E-01	1 2 0E+00	1 4 6E+00	2 3 4E+00	9 5 0E+00	1 0 7E+01	-7 6 8E-01	3 7 5E+00	1 0 1E+01	NA	NA	NA						
MW-52-64	Q2-2011	006	54	-49 1	4/22/2011	13 22	2 4dE+31	3 3 8E+02	4 3dE+02	1 1 6E+00	1 3 5E+00	1 2 6E+00	1 3 6E+00	6 7 2E+00	7 0 5E+00	3 3 5E+01	3 4 5E+00	8 1 8E+00	NA	NA	NA	NE	NE	ND	ND	NA	MW-52-64
MW-52-64	Q2-20 1 Mid	007	54	-49 1	7/27/2011	13 45	1 3 5E+02	3 3 1E+02	4 3 1E+02	4 3 6E-01	8 0 7E-01	1 2 7E+00	2 4 6E+00	7 1 7E+00	3 3 4E+00	6 6 6E-01	3 1 5E+00	9 3 5E+00	NA	NA	NA						
MW-52-122	Q2-2011	006	122	10 1	4/22/2011	13 45	2 2dE+31	3 3 0E+02	4 3dE+02	1 1 4E+00	1 3 2E+00	1 2 7E+00	2 2 1E+00	6 3 8E+00	6 3 8E+00	3 3 6E+01	3 2 8E+00	7 2 8E+00	NA	NA	NA	NE	NE	ND	ND	NA	MW-52-122
MW-52-122	Q2-20 1 Mid	007	122	10 1	7/26/2011	13 37	2 1 0E+31	3 3 4E+02	4 1 7E+02	1 1 0E+00	1 1 9E+00	1 4 7E+00	5 4 9E+00	7 1 7E+00	9 8 2E+00	6 8 4E+00	7 7 9E+00	NA	NA	NA							
MW-52-162	Q2-2011	006	163 5	144 6	4/22/2011	13 12	1 8 5E+02	3 3 9E+02	4 2 5E+02	7 9 0E-01	9 3 0E-01	1 4 2E+00	1 4 2E+00	8 4 0E+00	8 9 8E+00	1 3 5E-02	3 3 0E+00	1 1 8E+01	NA	NA	NA	5 1 6E-02	1 3 0E-01	ND	ND	NA	MW-52-162
MW-52-162	Q2-20 1 Mid	007	161 5	-146 6	7/26/2011	11 33	5 1 6E+02	4 2 0E+02	4 2 2E+02	3 7 7E-03	1 2 1E+00	1 5 7E+00	4 2 8E-02	8 3 4E+00	9 0 5E+00	-2 3 2E+01	3 8 7E+00	1 3 0E+01	NA	NA	NA						
MW-52-181	Q2-2011	006	181	-166 1	4/22/2011	13 22	2 4 5E+02	3 3 6E+02	4 3 3E+02	1 1 8E+00	1 4 2E+00	1 4 8E+00	5 4 8E+01	1 2 5E+01	1 3 3E+01	3 3 0E+00	1 3 2E+01	1 4 1E+01	NA	NA	NA						
MW-52-181	Q2-20 1 Mid	00.	181	-166 1	7/26/2011	11 47	2 4 1E+02	3 3 5E+02	4 2 6E+02	3 5 7E-01	1 2 6E+00	1 5 4E+00	-1 9 9E+30	7 5 0E+00	7 5 1E+00	-1 2 7E+01	3 5 8E+00	9 3 7E+00	NA	NA	NA						
MW-53-52	Q1-2011	012	75	-4 7	2/9/2011	13 53	5 3 9E+02	3 7 6E+02	3 7 1E+02	1 3 9E+00	1 6 2E+00	1 4 0E+00	3 9 2E+00	9 6 1E+00	8 7 6E+00	1 3 5E+01	3 7 2E+00	9 2 5E+00	7 0 1E+30	1 3 5E+01	1 3 1E+31	6 9E-02	NE	ND	ND	NA	MW-53-52
MW-53-52	Q2-2011	015	75	-4 7	4/13/2011	13 45	5 2dE+02	4 5 6E+02	1 5 6E+02	4 9 0E-01	1 4 5E+00	1 3 7E+00	4 5 7E+00	9 2 2E+00	9 8 1E+00	3 1 2E+00	3 7 2E+00	1 3 7E+01	8 3 5E 01	1 1 8E+01	1 7 2E+31						
MW-53-52	Q3-2011	017	76	-4 7	8/1/2011	11 11	7 1 7E+02	3 4 8E+02	3 7 1E+02	5 5 2E-01	7 8 8E-01	1 3 6E+00	2 4 6E+00	7 3 8E+00	7 9 2E+00	3 4 0E+00	3 4 5E+00	9 3 6E+00	3 2 7E+00	1 1 0E+01	1 3 0E+31						
MW-53-82	Q1-2011	022	75	-4 7	11/2/2011	11 26	2 2 7E+02	4 5 0E+02	5 0 1E+02	-2 4 2E-01	1 0 9E+00	1 4 9E+00	-1 1 9E+30	6 7 8E+00	7 8 7E+00	-6 9 5E-01	3 7 5E+00	1 3 7E+01	4 9 5E-01	1 2 4E+01	1 4 2E+31						
MW-53-120	Q1-2011	022	109 8	-39 5	2/9/2011	13 46	3 8dE+03	7 4 8E+02	3 8dE+02	2 1 5E+01	3 7 0E+00	1 5 8E+00	3 3 6E+00	7 3 2E+00	8 4 5E+00	-2 4 3E+01	3 1 4E+00	8 1 5E+00	1 9 0E+01	1 2 0E+01	1 8 7E+31	5 0E-03	2 4 0E-01	ND	ND	1 4E+01	MW-53-120
MW-53-120	Q2-2011	023	109 8	-39 5	4/18/2011	11 52	4 1 1E+03	7 7 2E+02	4 7 5E+02	3 5 5E+01	4 5 6E+00	1 5 7E+00	1 3 8E+00	8 3 2E+00	9 9 5E+00	4 8 7E-01	3 2 4E+00	1 3 2E+01	1 7 6E+01	1 7 7E+01	1 8 7E+31						
MW-53-120	Q3-2011	023	109 8	-39 5	8/1/2011	13 00	4 4 4E+03	6 1 5E+02	3 7 1E+02	3 3 0E+01	5 2 2E+00	1 3 4E+00	-2 0 7E+30	8 4 9E+00	8 6 7E+00	-5 1 0E-01	3 3 6E+00	1 3 1E+01	1 4 5E+01	1 3 2E+01	1 0 7E+31						
MW-53-120	Q4-2011	027	109 8	-39 5	11/2/2011

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TABLE 3
FOURTH QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,8]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS[5]														YEARLY ROLLING AVERAGES[6,7]					Well ID[1]
							TRITEM (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.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Average	Average	Average	Average	Average	
MW-54-58	Q1-2011	016	57.5	-44.4	2/9/2011	14:22	4.52E+02	4.56E+02	5.99E+02	5.58E+00	1.26E+00	1.88E+00	4.43E-02	3.49E+00	9.06E+00	9.22E+01	3.30E+00	6.92E+00	4.49E+01	1.36E+01	1.92E+01						MW-54-58
MW-54-58	Q2-2011	017	57.5	-44.4	4/12/2011	12:04	3.94E+02	5.20E+02	4.75E+02	1.15E+00	1.64E+00	2.31E+00	1.70E+00	8.35E+00	9.66E+00	1.14E+00	5.74E+00	9.35E+00	3.01E+00	1.58E+01	1.72E+01						
MW-54-58	Q3-20..1 Mid	018	57.5	-44.4	7/18/2011	13:33	2.48E+03	6.12E+02	1.44E+02	1.19E+00	1.21E+00	1.14E+00	1.93E+00	8.35E+00	9.27E+00	2.35E 01	7.05E+00	1.31E+01	1.83E+01	1.97E+01	2.15E+01						
MW-54-58	Q3-2011	019	57.5	-44.4	8/15/2011	9:47	4.23E+03	6.53E+02	2.02E+02	-1.92E-01	9.70E-01	1.11E+00	-1.08E+30	8.51E+00	8.51E+00	-8.43E-01	9.45E+00	1.11E+01	2.37E+00	1.84E+01	2.07E+01						
MW-54-58	Q4-2011	020	57.5	-44.4	11/6/2011	13:25	4.81E+03	6.48E+02	3.76E+02	1.50E+00	1.80E+00	1.31E+00	9.45E-01	4.23E+00	5.14E+00	1.72E+00	4.56E+00	5.35E+00	2.66E+00	1.25E+01	1.40E+01						
MW-54-123	Q1-2011	016	123	-109.9	2/9/2011	14:11	1.08E+03	4.38E+02	3.96E+02	3.10E+00	1.35E+00	1.38E+00	3.55E-03	6.32E+00	7.62E+00	-3.66E-03	5.10E+00	5.75E+00	3.32E+00	1.56E+01	1.87E+01	1.30E-03	4.70E-00	ND	ND	ND	5000-54-123
MW-54-123	Q2-2011	017	123	-109.9	4/12/2011	12:22	5.24E+02	4.38E+02	4.77E+02	3.44E+00	1.90E+00	1.72E+00	-5.24E+30	8.14E+00	7.61E+00	1.56E+00	3.04E+00	9.55E+00	-3.35E+30	1.43E+01	1.75E+31						
MW-54-123	Q2-20..1 Mid	018	123	-109.9	7/18/2011	14:05	2.47E+03	4.44E+02	1.44E+02	1.10E-01	1.02E+00	1.30E+00	1.92E+00	9.20E+00	1.02E+01	3.02E-02	5.31E+00	6.47E+00	2.42E+00	1.54E+01	2.05E+31						
MW-54-123	Q3-2011	019	123	-109.9	8/15/2011	9:55	1.21E+03	3.75E+02	2.02E+02	3.74E+00	2.02E+00	1.78E+00	5.58E-01	8.40E+00	9.31E+00	-5.09E-01	3.88E+00	9.49E+00	-3.40E+30	1.94E+01	2.22E+31						
MW-54-123	Q4-2011	020	123	-109.9	11/6/2011	13:37	3.92E+03	6.30E+02	3.71E+02	1.55E+00	1.86E+00	1.35E+00	1.2..E+30	4.38E+00	5.81E+00	1.34E+00	5.01E+00	6.38E+00	1.58E+00	1.28E+01	1.4..E+31						
MW-54-144	Q1-2011	016	144	-130.9	2/9/2011	13:54	1.31E+03	4.36E+02	3.82E+02	9.11E+00	2.04E+00	1.30E+00	9.04E-01	8.14E+00	9.77E+00	-6.36E-01	5.20E+00	6.74E+00	-4.27E+30	1.58E+01	1.87E+31	1.30E-03	1.95E-01	ND	ND	ND	5000-54-144
MW-54-144	Q2-2011	017	144	-130.9	4/12/2011	5:50	1.48E+03	5.58E+02	4.75E+02	1.10E+01	2.92E+00	1.31E+00	5.45E+00	7.44E+00	9.55E+00	-4.68E+01	9.58E+00	8.36E+00	-2.75E+30	1.48E+01	1.74E+31						
MW-54-144	Q2-20..1 Mid	018	144	-130.9	7/18/2011	12:38	4.34E+03	7.41E+02	1.42E+02	1.13E+01	2.44E+00	1.26E+00	3.35E+00	7.47E+00	8.72E+00	-3.49E+01	8.91E+00	8.38E+00	1.55E+01	1.87E+01	2.03E+31						
MW-54-144	Q3-2011	019	144	-130.9	8/15/2011	11:44	5.22E+03	7.23E+02	1.92E+02	1.10E+01	2.75E+00	1.52E+00	4.07E+00	9.39E+00	1.14E+01	4.25E-01	9.81E+00	1.38E+01	-5.13E+30	1.59E+01	2.16E+31						
MW-54-144	Q4-2011	020	144	-130.9	11/6/2011	13:45	3.82E+03	7.44E+02	5.21E+02	9.13E+00	2.99E+00	1.46E+00	8.66E-01	5.45E+00	6.52E+00	1.97E+01	5.20E+00	6.36E+00	-2.71E+30	1.42E+01	1.92E+31						
MW-54-173	Q1-2011	016	172.5	-159.4	2/9/2011	14:28	1.06E+03	3.36E+02	3.81E+02	3.51E+00	1.68E+00	1.10E+00	2.87E-01	6.39E+00	7.57E+00	-1.31E+00	3.90E+00	5.20E+00	5.49E+30	1.27E+01	1.81E+31	1.30E-03	4.30E-00	ND	ND	ND	5000-54-173
MW-54-173	Q2-2011	017	172.5	-159.4	4/12/2011	5:56	1.26E+03	5.16E+02	4.75E+02	3.31E+00	1.92E+00	1.58E+00	1.29E+31	1.35E+01	1.51E+01	5.33E+00	7.66E+00	1.25E+01	2.17E+30	1.50E+01	1.76E+31						
MW-54-173	Q2-20..1 Mid	018	172.5	-159.4	7/18/2011	12:20	1.48E+03	5.28E+02	1.44E+02	4.54E+00	1.64E+00	1.11E+00	2.97E-01	6.54E+00	7.47E+00	1.10E+00	5.51E+00	7.50E+00	-5.41E+30	1.56E+01	1.87E+31						
MW-54-173	Q3-2011	019	172.5	-159.4	8/15/2011	11:50	1.50E+03	4.38E+02	1.97E+02	4.32E+00	1.94E+00	1.48E+00	-1.36E+30	1.11E+01	1.01E+01	-7.70E-01	1.21E+01	1.33E+01	-7.4..E+30	2.35E+01	2.42E+31						
MW-54-173	Q4-2011	020	172.5	-159.4	11/6/2011	13:26	2.32E+03	6.56E+02	3.26E+02	4.72E+00	3.32E+00	1.37E+00	-8.33E-01	4.33E+00	5.47E+00	9.05E-01	5.15E+00	6.34E+00	-2.75E+30	1.24E+01	1.4..E+31						
MW-54-190	Q1-2011	016	190	-176.9	2/9/2011	13:22	1.89E+03	5.56E+02	3.91E+02	1.18E+01	3.32E+00	1.28E+00	4.55E-01	6.04E+00	7.31E+00	-3.55E+01	6.30E+00	5.21E+00	1.73E+00	1.57E+01	1.85E+31	1.30E-03	1.61E-03	ND	ND	ND	5000-54-190
MW-54-190	Q2-2011	017	190	-176.9	4/12/2011	11:01	2.01E+03	6.11E+02	4.72E+02	1.10E+01	3.30E+00	1.77E+00	3.32E+00	7.56E+00	9.22E+00	8.70E-01	7.01E+00	1.01E+01	-3.35E-11	1.58E+01	1.82E+31						
MW-54-190	Q2-20..1 Mid	018	190	-176.9	7/18/2011	12:15	2.61E+03	6.30E+02	1.44E+02	1.72E+01	2.82E+00	1.12E+00	2.24E+00	1.01E+01	1.16E+01	-2.72E+01	1.11E+01	1.12E+01	-3.86E+30	1.55E+01	1.79E+31						
MW-54-190	Q3-2011	019	190	-176.9	8/15/2011	13:00	3.31E+03	5.38E+02	2.02E+02	1.19E+01	3.32E+00	1.22E+00	3.96E+30	8.51E+00	7.57E+00	4.68E+01	7.75E+00	8.11E+00	5.67E+30	1.76E+01	2.30E+31						
MW-54-190	Q4-2011	020	190	-176.9	11/6/2011	13:38	8.77E+03	8.22E+02	3.63E+02	1.11E+01	3.75E+00	1.30E+00	5.15E-01	3.37E+00	4.56E+00	1.47E+00	4.11E+00	5.76E+00	3.29E+00	1.21E+01	1.34E+31						
MW-55-24	Q1-2011	017	16	2.3	2/9/2011	14:32	1.02E+03	3.48E+02	4.21E+02	1.19E+01	2.82E+00	1.36E+00	3.57E-01	4.32E+00	5.47E+00	4.75E+00	3.74E+00	7.44E+00	-5.3..E+30	1.51E+01	2.14E+31	1.70E-03	1.57E-01	ND	ND	ND	5000-55-24
MW-55-24	Q3-2011	018	16	2.3	8/12/2011	12:12	1.71E+03	4.35E+02	2.01E+02	1.19E+01	3.21E+00	1.59E+00	-4.4..E+30	7.32E+00	5.82E+00	5.14E-01	7.95E+00	8.32E+00	5.75E+00	2.39E+01	2.34E+31						
MW-55-24	Q4-2011	019	16	2.3	11/14/2011	11:26	2.57E+03	6.56E+02	4.91E+02	2.33E+01	4.08E+00	1.56E+00	3.00E+00	8.49E+00	1.07E+01	3.56E+00	1.08E+01	1.50E+01	-7.45E+30	1.57E+01	2.17E+31						
MW-55-35	Q1-2011	016	32	-13.8	2/9/2011	14:16	1.26E+03	4.34E+02	3.81E+02	1.13E+01	3.42E+00	1.35E+00	8.32E-01	5.52E+00	5.64E+00	-1.23E+00	5.28E+00	7.35E+00	-2.16E+30	1.58E+01	2.17E+31	1.80E-03	1.47E-01	ND	ND	ND	5000-55-35
MW-55-35	Q2-2011	017	32	-13.8	4/12/2011	12:12	3.38E+03	6.94E+02	4.91E+02	1.13E+01	3.11E+00	1.30E+00	4.22E-01	7.10E+00	8.45E+00	-1.44E+01	8.31E+00	8.33E+00	-1.26E+30	2.17E+01	2.08E+31						
MW-55-35	Q3-2011	018	32	13.8	11/14/2011	11:23	2.75E+03	6.34E+02	5.06E+02	2.35E+01	3.95E+00	1.50E+00	2.01E-01	7.75E+00	9.67E+00	8.98E 01	3.22E+00	1.36E+01	1.47E+00	1.57E+01	2.09E+31						
MW-55-54	Q1-2011	016	47	-28.8	2/9/2011	14:37	6.48E+03	8.38E+02	3.81E+02	1.11E+01	3.75E+00	1.30E+00	3.45E+00	8.30E+00	9.20E+00	3.45E+00	7.44E+00	9.03E+00	3.51E+00	1.78E+01	2.16E+31	1.30E-03	1.70E-00	ND	ND	ND	5000-55-54
MW-55-54	Q3-2011	018	47	-28.8	8/12/2011	12:05	3.55E+03	9.24E+02	2.02E+02	2.20E+01	3.36E+00	1.17E+00	7.03E+00	8.73E+00	1.01E+01	-2.52E+01	3.07E+00	7.72E+00	-2.57E+30	1.36E+01	2.27E+31						
MW-55-54	Q4-2011	019	47	-28.8	11/14/2011	11:07	5.97E+03	8.25E+02	4.67E+02	1.75E+01	3.57E+00	1.46E+00	-2.66E+30	8.57E+00	1.04E+01	3.50E+00	5.65E+00	1.33E+01	1.62E+00	1.32E+01	2.17E+31						
MW-56-53	Q2-2011	016	52	18.3	4/6/2011	13:06	1.15E+03	3.45E+02	3.87E+02	1.07E+00	1.22E+00	1.50E+00	3.04E+00	8.50E+00	1.01E+01	-1.84E+01	3.45E+00	8.34E+00	NA	NA	NA	NE	NE	ND	ND	NA	MW-56-53
MW-56-53	Q2-20..1 Mid	011	52	18.3	7/6/2011	12:58	2.02E+02	2.75E+02	2.81E+02	-3.68E-01	7.89E-1	1.12E+00	3.72E+00	7.77E+00	9.42E+00	-4.34E+01	3.82E+00	9.56E+00	-4.67E+30	2.28E+01	2.56E+31						
MW-56-53	Q3-2011	012	52	18.3	8/26/2011	11:02	2.47E+02	3.90E+02	2.81E+02	-6.90E-01	7.17E-1	1.13E+00	1.31E+00	8.47E+00	1.01E+01	2.41E+00	NA	9.33E+00	NA	NA	NA						
MW-56-53	Q4-2011	013	52	18.3	10/31/2011	12:13	5.15E+01	4.11E+02	5.01E+02	5.82E 02	1.05E+00	1.39E+00	1.08E+00	9.36E+00	1.21E+01	4.11E+00	3.21E+00	1.26E+01	1.96E+00	1.74E+01	2.17E+31						
MW-56-83	Q2-2011	010	74	-3.7	4/7/2011	13:46	7.64E+04	7.40E+03	4.47E+02	1.17E+00	1.61E+00	1.38E+00	2.10E+30	1.44E+01	1.73E+01	-1.57E+01	7.46E+00	1.31E+01	NA	NA	NA	3.40E-04	3.31E-00	ND	ND	NA	MW-56-83
MW-56-83	Q2-20..1 Mid	011	74	-3.7	7/6/2011	11:58	3.42E+04	3.54E+03	2.81E+02	1.45E+00	1.27E+00	1.19E+00	2.72E+00	2.11E+01	3.44E+00	4.20E-01	3.16E+00	9.20E+00	-1.36E+31	2.15E+01	2.46E+31						
MW-56-83	Q3-2011	014	74	-3.7	8/26/2011	13:56	1.05E+05	3.12E+03	4.42E+02	3.12E+00	1.61E+00	1.37E+00	-2.12E+30	8.13E+00	3.21E+00	-6.41E-01	3.67E+00	9.15E+00	NA	NA	NA						
MW-56-83	Q4-2011	015	74	-3.7	10/31/2011	12:00	7.22E+04	2.30E+03	5.11E+02	9.41E-01	1.45E+00	1.51E+00	2.15E+00	7.29E+00	9.56E+00	2.43E+00	3.94E+00	1.22E+01	-3.0..E+30	2.14E+01	2.44E+31						
MW-57-11	Q2-2011	007	10	-5	4/6/2011	11:28	5.41E+03	8.54E+02	3.41E+02	3.11E+01	3.62E+00	1.34E+00	8.34E+00	8.32E+00	9.74E+00	-2.35E+00	3.40E+00	9.32E+00	-8.32E+00	1.56E+01	1.85E+31	7.10E-03	3.32E-01	ND	ND	ND	MW-57-11
MW-57-11	Q2-20..1 Mid	008	10	-5	7/18/2011	11:57	7.3..E+03	9.18E+02	1.44E+02	3.17E+01	3.28E+00	2.11E+00	3.27E+01	8.38E+00	9.8..E+00	-2.34E+01	3.18E+00	9.39E+00	-6.76E+30	1.48E+01	1.87E+31						
MW-57-11	Q3-20..1 Mid	009	10	-5	8/19/2011	7:27	8.38E+03	3.02E+02	2.02E+02	2.32E+01	3.21E+00	1.35E+00	1.45E+00	8.02E+00	9.27E+00	2.31E+00	7.71E+00	9.17E+00	4.92E 01	2.36E+01	2.36E+31						
MW-57-20	Q2-2011	007	19	-4	4/6/2011	11:52	3.05E+04	3.15E+03	3.44E+02	3.74E+00	1.11E+00	8.49E-01	1.45E+00	7.55E+00	8.45E+00	-2.32E+01	3.25E+00	9.05E+00	-6.44E+30	1.54E+01	1.8..E+31	3.77E-04	4.8E-00	ND	ND	ND	MW-57-20
MW-57-20	Q2-20..1 Mid	008	19	-4	7/18/2011	12:05	3.81E+04	1.34E+03	1.42E+02	1.27E+00	1.08E+00	1.31E+00	-5.13E+30	7.71E+00	7.33E+00	9.16E-01	3.67E+00	9.32E+00	-5.69E+30	1.33E+01	2.20E+31						
MW-57-20	Q3-20..1 Mid	009	19	-4	8/19/2011	5:54	2.47E+04	1.55E+03	1.98E+02	1.30E+00	1.68E+00	1.56E+00	-2.0..E+30	7.35E+00	7.6..E+00	1.58E+00	3.07E+00	9.48E+00	3.14E+00	1.98E+01	2.25E+31						
MW-57-45	Q2-2011	008	40	-25	4/6/2011	11:05	1.05E+04	9.48E+02	3.42E+02	9.66E-01	9.76E-1	9.60E-01	7.4..E+00	9.23E+00	1.03E+01	-3.84E+01	2.42E+00	9.39E+00	-3.38E+00	1.78E+01	1.82E+31	2.10E-04	NA	NA	NA	NA	MW-57-45
MW-57-45	Q2-20..1 Mid	009	40	-25	7/18/2011	12:36	2.55E+04	1.50E+03	1.44E+02	1.18E+00	1.52E+00	1.34E+00	-2.03E-01	8.16E+00	8.8..E+00	-7.58E-01	3.35E+00	9.57E+00	-1.04E+31	1.53E+01	1.7..E+31						
MW-57-45	Q3-20..1 Mid	010	40	-25	8/19/2011	13:15	2.4..E+04	1.56E+03	2.02E+02	4.31E-01	1.01E+00	1.15E+00	-5.64E+30	1.13E+01	1.0..E+01	2.33E+00	3.04E+00	9.53E+00	2.27E+00	2.29E+01	2.36E+31						
MW-58-26	Q2-2011	012	30	-5.4	4/6/2011	11:43	7.21E+03	4.30E+02	4.42E+02	3.11E+00	1.32E+00	1.32E+00	2.32E+00	6.30E+00	7.40E+00	-6.42E+01	6.90E+00	8.30E+00	NA	NA	NA	2.40E-03	NA	ND	ND	NA	MW-58-26
MW-58-26	Q2-20..1 Mid	013	30	-5.4	7/6/2011	13:29	1.86E+03	5.46E+02	4.47E+02	3.25E+00	1.11E+00	1.41E+00	7.4..E+01	6.54E+00	7.61E+00	1.27E+00	7.53E+00	8.98E+00	-1.0..E+31	1.39E+01	2.25E+31						
MW-58-26	Q3-2011	014	30	-5.4	8/26/2011	14:47	2.47E+03	5.10E+02	1.95E+02	-6.17E-02	7.95E-1	1.35E+00	2.38E-1	7.55E+00	8.47E+00	3.25E-01	3.22E+00	9.22E+00	NA	NA	NA						
MW-58-26	Q4-2011	015	30	-5.4	11/15/2011	14:22	4.77E+03	7.29E+02	2.31E+02	-4.32E-01	8.28E-1	1.25E+00	1.04E+00	1.19E+01	3.9..E+00	2.18E+00	3.42E+00	1.24E+01	-3.0..E+30	1.22E+01	1.39E+31						
MW-58-65	Q2-2011	011	54	-39.4	4/5/2011	11:11	3.25E+02	3.78E+02	3.87E+02	1.47E+00	1.02E+00	1.44E+00	1.82E+00	8.32E+00	7.01E+00	-7.81E-01	7.04E+00	7.56E+00	NA	NA	NA	1.10E-03	1.15E***	ND	ND	NA	MW-58-65
MW-58-65	Q2-20..1 Mid	012	54	-39.4	7/5/2011	13:30	7.2..E+02	3.93E+02	2.81E+02	4.19E-01	9.12E-1	1.33E+00	5.25E+00	1.35E+01	1.21E+01	1.47E+00	7.52E+00	8.78E+00	3.44E-01	2.33E+01	2.27E+31						
MW-58-65***	Q3-20..1 Mid	013	54	-39.4	8/26/2011	14:04	1.1..E+03	4.52E+02	2.61E+02	6.31E-01***	1.82E+00	1.30E+00	-1.06E+30	9.30E+00	9.6..E+00	-1.54E+01	1.01E+01	1.34E+01	NA	NA	NA						
MW-58-65	Q4-2011	014	54	-39.4	11/15/2011	14:05	1.71E+03	3.42E+02	2.02E+02	1.02E+01	1.71E+00	2.32E+00	1.07E+30	8.12E+00	8.24E+00	-7.70E-01	2.12E+00	8.26E+00	NA	NA	NA						
MW-59-33	Q2-20..1 Mid	006	27	-12.5	7/20/2011	5:59	1.82E+02	4.30E+02	4.35E+02	9.88E-01	1.34E+00	1.77E+00	-3.70E+30	7.22E+00	8.0..E+00	-3.55E+01	2.78E+00	1.32E+01	-1.48E+31	1.32E+01	2.0..E+31	4.30E-02	NA	NA	NA	NA	MW-59-33
MW-59-32	Q3-20..1 Mid	007	27	-12.5	8/24/2011	14:22	4.74E+02	2.72E+02	2.17E+02	7.95E-01	1.12E+00	1.20E+00	-2.52E+30	1.35E+01	1.1..E+01	2.55E+00	3.25E+00	9.93E+00	-6.65E+30	2.16E+01	2.54E+31						
MW-59-45	Q2-20..1 Mid	005	42	-27.5	7/20/2011	5:59	5.24E+02	4.38E+02	4.43E+02	1.01E+00	1.0..E+00	1.48E+00	1.81E+00	8.32E+00	9.23E+00	2.79E+00	3.42E+00	1.15E+01	1.15E+31	1.33E+01	2.0..E+31	4.32E-02	NA	ND	ND	ND	MW-59-45
MW-59-45	Q3-20..1 Mid	006	42	-27.5	8/24/2011	14:32	1.24E+03	4.22E+02	2.64E+02	1.13E-01	1.11E+00	1.33E+00	-1.32E+30	8.37E+00	8.81E+00	4.22E+00	3.42E+00	1.18E+01	1.31E+00	1.37E+01	1.20E+31						
MW-59-68	Q2-20..1 Mid	005	58	-43.5	7/20/2011	5:14	1.21E+02	3.48E+02	4.45E+02	1.10E-01	7.66E-1	9.91E-01	-2.62E+30	9.53E+00	9.0..E+00	3.42E-03	3.42E+00	1.26E+01	1.57E+31	2.21E+01	2.47E+31	NA	NA	NA	NA	NA	MW-59-68
MW-59-68	Q3-20..1 Mid	006	58	-43.5	8/24/2011	14:05	2.61E+02	2.53E+02	2.02E+02	-5.46E-01	7.35E-1	1.14E+00	-5.02E+30	8.32E+00	7.65E+00	1.56E+00	3.02E+00	1.42E+01	4.9..E+00	1.28E+01	1.42E+31						
MW-60-35	Q1-2011	016	34.9	-22.4	2/11/2011	13:26	3.62E+02	3.72E+02	3.81E+02	9.73E-01	1.62E+00	1.78E+00	-3.45E+30	6.24E+00	6.24E+00	-3.42E+00	1.22E-03	2.78E+00	8.21E+00	1.36E+01	1.52E+01	1.30E-03	NE	ND	ND	ND	MW-60-35
MW-60-35	Q2-2011	017	34.9	-22.4	4/5/2011	11:37	2.07E+02	4.43E+02	4.87E+02	3.77E-01	1.46E+00	2.30E+00	7.46E+00	1.14E+01	1.14E+01	-8.48E-01	3.55E+00	1.13E+01	1.65E+00	1.42E+01	1.6..E+31						
MW-60-35	Q3-2011	018	34.9	-22.4	8/10/2011	13:54	4.95E+02	2.59E+02	2.02E+02	-5.84E-01	7.7..E-1	1.17E+00	2.11E+00	6.26E+00	8.21E+00	-1.04E+01	1.03E+01	1.10E+01	NA	NA	NA						
MW-60-35	Q4-2011	019	34.9	-22.4	11/2/2011	11:21	1.74E+02	3.56E+02	4.07E+02	3.94E-01	1.72E+00	1.88E+00	-8.22E-01	9.33E+00	1.1..E+01	2.53E+00	7.8..E+00	1.12E+01	NA	NA	NA						
MW-60-53	Q1-2011	016	53.4	-40.9	2/11/2011	13:55	3.15E+02	3.70E+02	3.82E+02	9.44E-01	1.52E+00	1.70E+00	-2.03E+30	5.38E+00	5.21E+00	-1.39E+00	2.43E+00	8.33E+00	-1.30E+30	1.38E+01	1.72E+31	2.10E-02	NA	ND	ND	ND	MW-60-53
MW-60-53	Q2-2011	017	53.4	-40.9	4/15/2011	11:37	5.87E+01	3.76E+02	4.81E+02	-1.18E-02	1.61E+00	2.04E+00	4.11E+00	9.40E+00	1.14E+01	-1.11E+01	5.66E+00	8.45E+00	-1.0..E+30	1.43E+01	1.66E+31						
MW-60-53	Q3-2011	012	53.4	-40.9	8/10/2011	11:42	5.1..E+02	2.70E+02	1.95E+02	1.18E+00	1.35E+00	1.45E+00	5.77E-1	1.34E+01	1.37E+00	-3.10E-01	1.07E+01	1.15E+01	NA	NA	NA						
MW-60-53	Q4-2011	013	53.4	-40.9	11/2/2011	11:46	2.65E+02	3.30E+02	3.32E+02	9.60E 02	1.65E+00	1.77E+00	4.62E-1	1.35E+01	5.62E+00	9.95E 01	1.83E+00	5.55E+00	NA	NA	NA						
MW-60-72	Q1-2011	016	72.4	-59.9	2/10/2011	13:50	3.26E+03	5.84E+02	3.84E+02	9.41E-01	1.45E+00	1.70E+00	-5.13E+30	8.12E+00	8.01E+00	-2.27E+00	3.84E+00	1.37E+01	-1.15E+00	1.54E+01	1.76E+31	1.40E-02	NE	ND	ND	ND	MW-60-72
MW-60-72	Q2-2011	017	72.4	-59.9	4/15/2011	13:12	2.15E+02	3.78E+02	4.13E+02	7.12E-01	1.77E+00	1.77E+00	-5.14E+30	6.54E+00	5.81E+00	-3.30E+01	1.14E+01	1.14E+01	-2.93E+30	1.39E+01	1.61E+31						
MW-60-72	Q3-2011	018	72.4	-59.9	8/10/2011	13:25	2.91E+02	2.23E+02	1.95E+02	1.22E-01	9.33E-1	1.14E+00	-4.03E+30	9.53E+00	1.01E+01	4.20E+00	3.40E+00	1.36E+01	NA	NA	NA						
MW-60-72	Q4-2011	019	72.4	-59.9	11/2/2011	13:01	3.08E+02	3.75E+02	4.01E+02	8.41E-01	1.75E+00	1.93E+00	-2.19E+30	6.99E+00	8.2..E+00	-1.72E+01	3.28E+00	1.31E+01	NA	NA	NA						
MW-60-135	Q1-2011	016	134.9	-122.4	2/10/2011	13:04	3.85E+02	3.78E+02	3.82E+02	1.14E+00	1.82E+00	1.98E+00	1.75E+00	6.72E+00	7.75E+00	3.24E-05	7.44E+00	8.25E+00	3.56E+30	1.52E+01	1.76E+31	4.90E-02	NE	ND	ND	ND	MW-60-135
MW-60-135	Q2-2011	017	134.9	-122.4	4/15/2011	13:22	4.14E+02	4.12E+02	4.12E+02	6.52E-01	1.9..E+00	2.10E+00	-6.83E+30	1.39E+01	1.0..E+01	-2.45E+01	9.8..E+00	1.31E+01	4.64E+00	1.47E+01	1.6..E+31						
MW-60-135	Q3-2011	011	134.9	-122.4	8/10/2011	13:51	1.0..E+02	2.16E+02	1.94E+02	2.08E 01

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TABLE 3
FOURTH QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,8]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing[2]	SAMPLE ZONE CENTER Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS[5]														YEARLY ROLLING AVERAGES[6,7]					Well ID[1]
							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.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Average	Average	Average	Average	Average	
MW-60-176	Q1-2011	016	175.9	-163.4	2/10/2011	11:20	1.12E+03	4.58E+02	5.85E+02	3.99E-01	1.46E+00	2.10E+00	4.38E+00	1.33E+01	2.59E+01	2.06E+00	3.25E+01	6.09E+00	2.06E+00	1.52E+01	4.09E+01	MW-60-176
MW-60-176	Q2-2011	017	175.9	-163.4	4/13/2011	13:45	5.99E+02	4.50E+02	4.12E+02	-6.29E-01	1.41E+00	2.10E+00	-7.83E-02	9.30E+00	1.11E+01	-2.35E+01	1.02E+01	1.33E+01	-2.43E-01	1.40E+01	1.62E+01	
MW 60 176	Q3 2011	018	175 9	163 4	8.10/2011	14 13	7 72E+02	3 12E+02	3 02E+02	1 79E 01	9 3 E C1	1 32E+00	3 87E+30	7 74E+00	7 27E+00	1 71E 01	3 91E+00	9 50E+00	NA	NA	NA	
MW-60-176	Q4-2011	019	175.9	-163.4	10/27/2011	13:25	1.36E+03	5.27E+02	5.15E+02	-1.17E+00	1.41E+00	1.35E+00	7.24E-01	9.50E+00	1.21E+01	1.35E+00	1.01E+01	1.36E+01	NA	NA	NA	
MW-62-18	Q1-2011	016	13.5	1.2	2/24/2011	12:46	1.81E+02	3.50E+02	4.01E+02	9.38E-01	1.71E+00	2.15E+00	2.13E-01	4.74E+00	5.51E+00	3.58E+00	5.46E+00	6.78E+00	NA	NA	NA	5.37E-02	1.26E-00	ND	ND	ND	MW-62-18
MW-62-18	Q2-2011	017	13.5	1.2	4/13/2011	11:58	3.25E+02	4.56E+02	4.92E+02	7.82E-01	1.54E+00	1.71E+00	-4.38E+30	1.10E+01	1.05E+01	-4.07E-01	1.05E+01	1.16E+01	NA	NA	NA						
MW-62-18	Q2-20..1 Mid	018	13.5	1.2	7/22/2011	11:35	2.05E+02	4.32E+02	4.45E+02	1.16E+00	1.24E+00	1.35E+00	4.94E+00	9.42E+00	1.14E+01	-1.75E+0(	1.05E+01	1.38E+01	-3.83E+30	1.36E+01	2.20E+31						
MW-62-18	Q3-2011	018	13.5	1.2	8/3/2011	11:18	8.94E+02	3.39E+02	3.52E+02	4.01E-01	1.12E+00	1.14E+00	-1.12E+30	8.70E+00	9.11E+00	4.70E+00	9.81E+00	1.21E+01	NA	NA	NA						
MW-62-18	Q4-2011	02(	13.5	1.2	10/21/2011	13:14	5.35E+02	3.54E+02	3.47E+02	-1.09E+0(	1.06E+00	2.27E+00	-1.19E+30	6.37E+00	3.21E+00	-8.37E-01	3.82E+00	1.11E+01	NA	NA	NA						
MW-62-37	Q1-2011	016	38.5	-19.8	2/24/2011	13:52	3.05E+02	3.76E+02	4.06E+02	5.14E-01	1.38E+00	1.13E+00	1.05E+30	6.36E+00	5.58E+00	2.84E+01	5.35E+00	6.23E+00	NA	NA	NA	3.39E-02	NC	NC	ND	NA	MW-62-37
MW-62-37	Q2-2011	017	38.5	-19.8	4/13/2011	12:10	1.56E+02	4.36E+02	4.91E+02	-1.97E-01	1.08E+00	1.17E+00	-4.46E+30	8.43E+00	7.77E+00	-1.68E+01	9.02E+00	9.36E+00	NA	NA	NA						
MW-62-37	Q2-20..1 Mid	018	38.5	-19.8	7/22/2011	12:28	1.15E+02	3.90E+02	4.42E+02	1.13E+00	1.60E+00	1.73E+00	-3.64E+30	7.35E+00	8.01E+00	2.96E+00	1.11E+01	1.30E+01	-8.92E+30	1.55E+01	2.09E+31						
MW-62-37	Q3-2011	019	38.5	-19.8	8/3/2011	13:35	3.05E+02	3.33E+02	3.52E+02	1.13E+00	1.81E+00	1.36E+00	3.02E+00	6.59E+00	8.01E+00	2.71E+00	8.55E+00	1.31E+01	NA	NA	NA						
MW-62-37	Q4-2011	02(	38.5	-19.8	10/21/2011	13:02	3.74E+02	3.33E+02	3.47E+02	-3.24E-01	1.60E+00	2.35E+00	5.93E-01	8.19E+00	3.91E+00	-1.66E+01	3.07E+00	9.72E+00	NA	NA	NA						
MW-62-53	Q1-2011	016	53.1	40.3	2/24/2011	13:20	8.06E+02	3.78E+02	4.01E+02	2.89E-01	1.39E+00	2.19E+00	-2.63E-01	4.42E+00	5.42E+00	-1.04E+01	5.26E+00	6.61E+00	NA	NA	NA	4.42E-02	NC	ND	ND	NA	MW-62-53
MW-62-53	Q2-2011	017	53 1	40 3	4/13/2011	11 32	1 27E+02	4 30E+02	4 92E+02	1 72E+00	1 79E+00	1 34E+00	3 42E-01	6 72E+00	7 51E+00	-3 00E-01	1 24E+00	6 56E+00	NA	NA	NA						
MW 62 53	Q2 20..1 Mid	017	53 1	40 3	7/22/2011	13 47	1 6E+02	3 36E+02	1 45E+02	4 83E 01	1 07E+00	1 58E+00	1 34E+00	7 36E+00	7 5E+00	1 56E+00	3 85E+00	1 32E+01	1 60E+31	1 79E+01	2 05E+31						
MW-62-53	Q3-2011	018	53.1	-40.3	8/3/2011	12:44	4.15E+02	3.42E+02	3.07E+02	1.52E-01	1.46E+00	1.75E+00	2.85E+00	7.59E+00	3.04E+00	3.15E+00	3.76E+00	1.36E+01	NA	NA	NA						
MW-62-53	Q4-2011	019	53.1	-40.3	10/21/2011	13:17	4.82E+02	3.39E+02	3.42E+02	-1.78E-02	1.24E+00	1.51E+00	1.64E+00	6.56E+00	3.55E+00	2.49E+00	7.05E+00	1.31E+01	NA	NA	NA						
MW-62-71	Q1-2011	016	71.1	-58.3	2/24/2011	13:40	5.35E+02	4.16E+02	4.01E+02	1.28E-01	1.22E+00	1.48E+00	4.41E+00	1.15E+01	5.67E+00	-2.30E-01	5.90E+00	5.47E+00	NA	NA	NA	5.37E-02	NC	ND	ND	NA	MW-62-71
MW-62-71	Q2-2011	017	71 1	-58 3	4/13/2011	11 15	3 35E+02	4 72E+02	5 08E+02	9 04E-01	1 45E+00	1 58E+00	2 32E+00	7 76E+00	9 27E+00	-2 30E+01	3 5E+00	8 56E+00	NA	NA	NA						
MW-62-71	Q2-20..1 Mid	018	71.1	-58.3	7/22/2011	11:12	4.21E+02	4.68E+02	4.44E+02	-2.90E-01	1.23E+00	1.70E+00	-7.22E-02	7.74E+00	5.51E+00	-7.90E-01	3.42E+00	8.59E+00	-6 .0E+30	1.55E+01	2.51E+31						
MW-62-71	Q3-2011	018	71.1	-58.3	8/3/2011	11:58	3.39E+02	3.07E+02	3.09E+02	1.36E+00	1.55E+00	7.31E-01	1.11E+01	1.11E+01	2.51E+00	1.06E+01	1.20E+01	NA	NA	NA							
MW-62-71	Q4-2011	02(	71.1	-58.3	10/21/2011	13:44	1.65E+02	3.36E+02	3.42E+02	1.43E-01	1.22E+00	1.59E+00	8.27E-01	9.36E+00	1.11E+01	2.36E+00	7.84E+00	1.32E+01	NA	NA	NA						
MW-62-92	Q1-2011	016	91.6	-78.8	2/24/2011	13:04	6.06E+02	3.70E+02	4.01E+02	9.68E-01	1.85E+00	1.96E+00	1.09E+00	4.35E+00	5.27E+00	-1.14E+01	4.85E+00	5.58E+00	NA	NA	NA	5.39E-02	NC	NC	ND	NA	MW-62-92
MW-62-92	Q2-2011	017	91 6	-78 8	4/13/2011	11 03	5 0E+02	4 78E+02	4 92E+02	2 87E-01	1 11E+00	1 30E+00	-2 87E+30	7 15E+00	7 31E+00	-2 10E+01	3 94E+00	8 38E+00	NA	NA	NA						
MW-62-92	Q2-20..1 Mid	018	91 6	-78 8	7/22/2011	13 18	5 61E+02	4 35E+02	4 35E+02	-1 12E+0(	1 52E+00	2 36E+00	5 2E+00	9 42E+00	1 11E+01	-7 24E-02	3 48E+00	1 35E+01	-6 69E+30	1 76E+01	1 99E+31						
MW-62-92	Q3-2011	019	91 6	-78 8	8/3/2011	12 10	5 61E+02	3 78E+02	3 03E+02	-3 26E-01	1 05E+00	1 52E+00	3 82E+00	1 46E+01	9 22E+00	-5 05E+01	1 17E+01	1 15E+01	NA	NA	NA						
MW-62-92	Q4-2011	02(	91 6	-78 8	10/21/2011	14 2	5 51E+02	3 45E+02	3 42E+02	4 45E-01	1 25E+00	1 48E+00	3 10E-01	9 39E+00	1 17E+01	1 88E-01	9 18E+00	1 22E+01	NA	NA	NA						
MW-62-138	Q1-2011	016	138.1	-125.3	2/24/2011	14:20	4.10E+02	4.01E+02	4.01E+02	3.13E+00	1.70E+00	1.70E+00	1.70E+00	6.67E+00	4.72E+00	2.30E+00	6.19E+00	6.09E+00	NA	NA	NA	1.11E-03	2.92E-00	ND	ND	NA	MW-62-138
MW 62 138	Q2 2011	017	138 1	-125 3	4/13/2011	14 35	5 31E+02	5 04E+02	5 0E+02	1 12E+00	1 2E+00	1 32E+00	1 2E+00	9 3E+00	1 0E+01	1 71E+00	3 8E+00	1 32E+01	NA	NA	NA						
MW-62-138	Q2-20..1 Mid	018	138.1	-125.3	7/22/2011	11:50	4.66E+02	4.73E+02	4.36E+02	6.72E-01	1.2E+00	1.32E+00	-5.47E-01	7.41E+00	8.1E+00	6.36E+00	3.57E+00	1.23E+01	-1.11E+31	1.79E+01	2.01E+31						
MW-62-138	Q3-2011	019	138.1	-125.3	8/3/2011	13:08	1.42E+03	5.46E+02	3.34E+02	1.53E+00	1.65E+00	1.73E+00	2.5 .E-(1	9.48E+00	1.0E+01	1.35E+00	3.4CE+00	9.73E+00	NA	NA	NA						
MW-62-138	Q4-2011	02(	138.1	-125.3	10/21/2011	11:25	3.01E+03	5.97E+02	2.3CE+02	1.14E+00	1.48E+00	1.50E+00	-5.83E+30	1.11E+01	1.11E+01	2.45E-01	1.02E+01	1.33E+01	NA	NA	NA						
MW-62-182	Q1-2011	016	182.1	-169.3	2/24/2011	15:00	3.55E+02	3.54E+02	4.01E+02	1.46E+00	1.34E+00	1.94E+00	-5.93E+30	6.24E+00	5.66E+00	5.86E-01	5.46E+00	7.35E+00	NA	NA	NA	6.96E-02	NC	NC	ND	NA	MW-62-182
MW-62-182	Q2-2011	017	182 1	-169 3	4 13/2011	14 44	1 9E+02	4 50E+02	5 0E+02	-5 04E-01	1 05E+00	1 45E+00	5 5E+00	8 70E+00	1 05E+01	-9 44E-01	1 08E+01	1 15E+01	NA	NA	NA						
MW-62-182	Q2-20..1 Mid	018	182 1	-169 3	7/22/2011	13 02	1 9E+02	3 54E+02	3 43E+02	2 09E-01	1 22E+00	1 47E+00	6 4E-(1	7 41E+00	9 3CE+00	-5 94E-01	8 31E+00	1 05E+01	-2 27E+30	1 56E+01	1 77E+31						
MW 62 182	Q3 2011	019	182 1	-169 3	8/3/2011	13 20	5 84E+02	3 34E+02	3 05E+02	2 04E 01	1 47E+00	1 75E+00	5 9E+30	1 25E+01	1 1CE+01	2 96E 01	1 13E+01	1 24E+01	NA	NA	NA						
MW-62-182	Q4-2011	02(	182.1	-169.3	10/21/2011	11:35	4.88E+02	3.42E+02	3.27E+02	-2.48E-01	1.46E+00	1.80E+00	-4.8 .E+30	1.22E+01	1.36E+01	-1.67E+01	1.0CE+01	1.27E+01	NA	NA	NA						
MW-63-18	Q1-2011	016	18.9	0.7	2/2/2011	11:10	4.9CE+02	3.58E+02	3.55E+02	4.94E-01	1.51E+00	1.33E+00	1.82E+00	6.78E+00	7.91E+00	2.80E+00	7.32E+00	8.32E+00	NA	NA	NA	3.72E-02	NC	ND	ND	NA	MW-63-18
MW-63-18	Q2-2011	017	18 9	0 7	4.19/2011	13 35	7 2E+02	4 38E+02	5 0E+02	-3 13E-01	1 15E+00	1 49E+00	8 69E-(1	8 34E+00	8 9E+00	-3 22E+0(	3 1CE+00	7 75E+00	NA	NA	NA						
MW-63-18	Q2-20..1 Mid	018	18 9	0 7	7/21/2011	13 26	2 9E+02	3 99E+02	4 2E+02	6 58E-02	1 15E+00	1 50E+00	2 4CE+00	7 52E+00	9 0SE+00	2 37E+00	7 52E+00	9 30E+00	-8 9 .E+30	1 59E+01	1 92E+31						
MW-63-18	Q3-2011	018	18 9	0 7	8/3/2011	13 02	2 9E+02	3 15E+02	3 0CE+02	-1 29E-01	1 2CE+00	1 57E+00	1 7CE+00	6 37E+00	7 9CE+00	3 30E+00	3 5SE+00	1 35E+01	NA	NA	NA						
MW-63-18	Q4-2011	02(	18 9	0 7	10/18/2011	11 34	3 5SE+02	2 54E+02	2 2CE+02	1 16E+00	1 34E+00	1 53E+00	1 3E+00	8 18E+00	1 0CE+01	1 72E+00	1 09E+01	1 44E+01	NA	NA	NA						
MW 63 34	Q1 2011	016	31 5	-17 3	2/2/2011	11 26	1 95E+02	3 58E+02	3 6E+02	1 29E 01	1 52E+00	2 11E+00	-7 73E+30	7 76E+00	6 32E+00	5 42E+00	7 0SE+00	8 52E+00	NA	NA	NA	3.39E-02	NC	NC	ND	NA	MW 63 34
MW-63-34	Q2-2011	017	31 5	-17 3	4/19/2011	13 25	3 94E+02	4 50E+02	4 87E+02	-1 15E+0(	1 25E+00	1 33E+00	4 9E+00	8 54E+00	9 94E+00	3 79E+00	8 29E+00	1 32E+01	NA	NA	NA						
MW-63-34	Q2-20..1 Mid	018	31 5	-17 3	7/21/2011	13 08	3 04E+02	4 38E+02	4 35E+02	2 38E-01	1 17E+00	1 42E+00	-1 34E+30	9 33E+00	9 5E+00	1 66E-01	7 8SE+00	8 53E+00	-1 26E+31	1 28E+01	1 47E+31						
MW-63-34	Q3-2011	019	31 5	-17 3	8/3/2011	13 14	3 61E+02	3 30E+02	3 0CE+02	1 90E-01	1 3E+00	1 56E+00	3 9SE+00	9 39E+00	1 1SE+01	-7 29E-01	8 1CE+00	8 53E+00	NA	NA	NA						
MW-63-34	Q4-2011	02(	31 5	-17 3	10/18/2011	11 35	4 3CE+02	3 36E+02	3 4CE+02	-4 71E-01	1 2SE+00	1 78E+00	-3 77E+30	8 31E+00	9 1CE+00	2 21E+00	7 6ZE+00	1 11E+01	NA	NA	NA						
MW-63-50	Q1-2011	016	49.5	-37.2	2/2/2011	14:20	4.35E+02	3.40E+02	3.44E+02	1.72E-01	1.65E+00	2.35E+00	1.15E+00	6.59E+00	7.74E+00	3.54E+00	7.05E+00	8.70E+00	NA	NA	NA	3.39E-02	NC	NC	ND	NA	MW-63-50
MW-63-50	Q2-2011	017	49 5	-37 2	4/19/2011	11 25	1 6E+02	4 36E+02	4 85E+02	7 72E-01	1 35E+00	1 53E+00	-6 46E+30	9 76E+00	9 2SE+00	3 72E+00	3 1E+00	1 33E+01	NA	NA	NA						
MW-63-50	Q2-20..1 Mid	018	49 5	-37 2	7/21/2011	11 22	5 6E+02	4 41E+02	4 4CE+02	4 56E-01	1 37E+00	1 3CE+00	1 3CE+00	2 4CE+01	7 5CE+00	3 5SE+00	2 7TE+00	1 3SE+01	-2 09E+30	1 51E+01	1 69E+31						
MW-63-50	Q3-2011	019	49 5	-37 2	8/3/2011	11 38	3 9CE+02	3 33E+02	3 0CE+02	3 4CE-01	1 1CE+00	1 5CE+00	3 1ZE+00	1 1SE+01	1 4CE+01	4 49E+00	8 5ZE+00	1 14E+01	NA	NA	NA						
MW-63-50	Q4-2011	02(	49 5	-37 2	10/18/2011	11 52	3 14E+02	3 53E+02	3 8SE+02	4 62E-01	1 68E+00	1 34E+00	-9 03E-01	1 19E+01	1 2SE+01	-2 69E+01	1 0SE+01	1 34E+01	NA	NA	NA						
MW-63-93	Q1-2011	017	93	-80.7	2/2/2011	14:10	2.65E+02	3.30E+02	2.94E+02	3.38E-01	1.75E+00	1.17E+00	2.5 .E+30	8.78E+00	9.8CE+00	9.38E+00	7.5CE+00	9.58E+00	NA	NA	NA	3.39E-02	NC	NC	ND	NA	MW-63-93
MW-63-93	Q2-2011	018	93	-80 7	4.19/2011	11 27	9 64E+01	4 42E+02	5 0E+02	-4 30E-02	1 14E+00	1 44E+00	3 31E+00	8 2CE+00	1 0CE+01	-4 35E-01	5 8CE+00	7 25E+00	NA	NA	NA						
MW-63-93	Q2-20..1 Mid	018	93	-80 7	7.21/2011	11 32	4 17E+02	4 20E+02	4 4CE+02	-4 28E-01	1 0CE+00	1 48E+00	-3 58E+30	8 10E+00	7 7CE+00	-6 11E+01	7 9ZE+00	5 51E+00	6 50E-01	1 71E+01	1 90E+31						
MW-63-93	Q3-2011	02(	93	-80 7	8/3/2011	11 50	1 84E+02	3 12E+02	3 3SE+02	4 25E-02	1 31E+00	1 33E+00	1 6IE+00	7 26E+00	7 8.E+00	-2 65E+01	7 7IE+00	8 38E+00	NA	NA	NA						
MW-63-93	Q4-2011	02(	93	-80 7	10/18/2011	11 44	5 04E+02	3 72E+02	3 2SE+02	5 60E-01	1 37E+00	1 5EE+00	2 3SE+00	9 2SE+00	1 0SE+01	3 5SE+00	9 5IE+00	1 32E+01	-2 09E+30	1 51E+01	1 69E+31						
MW-63-112	Q1-2011	016	1.1.5	-99.2	2/2/2011	13:55	1.39E+02	4.18E+02	2.9CE+02	1.42E-01	1.0CE+00	1.30E+00	-3.77E+30	8.70E+00	7.2CE+00	1.39E+00	5.9CE+00	7.23E+00	NA	NA	NA	3.39E-02	NC	NC	ND	NA	MW-63-112
MW-63-112	Q2-2011	017	1.1.5	-99 2	4.19/2011	11 25	4 2E+02	4 58E+02	4 9E+02	-7 96E-01	1 0E+00	1 47E+00	4 9E+00	1 1SE+01	1 2SE+01	1 54E+00	1 1TE+01	1 36E+01	NA	NA	NA						
MW-63-112	Q2-20..1 Mid	018	1.1.5	-99 2	7.21/2011	11 46	5 0IE+02	4 44E+02	4 44E+02	2 29E-01	1 1SE+00	1 37E+00	-8 45E-01	1 16E+01	1 1.E+01	6 3IE+00	1 2IE+01	1 54E+01	-1 22E+30	1 77E+01	1 9IE+31						
MW-63-112	Q3-2011	019	1.1.5	-99 2	8/3/2011	12 01	3 8IE+02	4 59E+02	3 3SE+02	-1 83E-01	1 3IE+00	1 57E+00	2 0IE+00	7 3SE+00	8 4IE+00	-2 13E+01	7 2IE+00	7 10E+00	NA	NA	NA						
MW-63-112	Q4-2011	02(	1.1.5	-99 2	10/18/2011	14 2(	1 34E+03	5 43E+02	5 2SE+02	-5 35E-01	1 3SE+00	1 37E+00	-1 3IE+30	7 5SE+00	5 7SE+00	1 7IE+00	7 0ZE+00	9 52E+00	NA	NA	NA						
MW-63-121	Q1-2011	016	121	-103.7	2/2/2011	11:10	2.0IE+02	3.54E+02	2.94E+02	2.82E-02	1.35E+00	1.35E+00	-2.03E-01	6.72E+00	7.2IE+00	3.49E-01	5.9CE+00	6.57E+00	NA	NA	NA	1.39E-03	NC	NC	ND	NA	MW-63-121
MW 63 121	Q2 2011	017	121	102 7	4.19/2011	1 54	5 77E+02	4 54E+02	4 91E+02	4 12E 01	1 1IE+00	1 37E+00	1 0IE+30	6 2ZE+00	7 1TE+00	1 09E+01	3 8IE+00	5 59E+00	NA	NA	NA						
MW-63-121	Q2-20..1 Mid	017	121	102 7	7.21/2011	1 58	1 1IE+03	4 39E+02	4 4IE+02	-3 05E-01	1 3IE+00	1 3IE+00	1 3IE+00	7 1IE+00	7 4IE+00	-3 11E+01	1 0IE+01	1 17E+01	1 1.E+00	1 84E+01	2 0IE+31						
MW-63-121	Q3-2011	018	121	102 7	8/3/2011	13 03	1 9IE+03	6 39E+02	3 2SE+02	9 09E-01	1 4SE+00	1 52E+00	-6 7IE+30	9 2TE+00	9 0IE+00	6 3IE+00	3 1IE+00	1 39E+01	NA	NA	NA						
MW-63-121	Q4-2011	02(	121	-108.7	10/18/2011	11 27	3 6IE+03	8 40E+02	3 3IE+02	1 49E+00	1 7IE+00	1 7SE+00	-6 42E+30	1 2IE+01	1 6.E+01	2 3IE+00	3 3IE+00	1 3IE+01	NA	NA	NA						
MW-63-163	Q1-2011	016	162.5	-150.2	2/2/2011	12:20	9.0IE+02	3.7IE+02	2.9IE+02	1.37E+00	1.9IE+00	2.12E+00	3.0IE+30	5.4IE+00	5.8IE+00	2.0IE+01	7.2IE+00	7.12E+00	NA	NA	NA	5.39E-02	NC	ND	NA	MW-63-163	
MW-63-163	Q2-2011	01.	162.5	-150 2	4.19/2011	3 49	4 9IE+02	4 58E+02	5 0IE+02	1 11E+00	1 8IE+00	2 0IE+00	4 4IE-(1	8 4IE+00	9 9IE+00	4 7IE+00	1 0IE+01	1 0IE+01	NA	NA	NA						
MW-63-163	Q2-20..1 Mid	01(	162 5	-150 2	7.21/2011	13 05	5 0IE+02	4 2IE+02	4 3IE+02	-6 14E-01	1 0IE+00	1 4IE+00	-8 4.E-01	7 4TE+00	8 1TE+00	4 0TE-01	7 5IE+00	8 3IE+00	-8 6IE+30	1 4TE+01	1 6TE+31						
MW-63-163	Q3-2011	018	162.5	150 2	8/3/2011	13 06	1 4IE+02	3 5IE+02	3 0IE+02	7 9IE-02	1 3IE+00	1 3IE+00	5 5.E-(1	8 1IE+00	9 3IE+00	2 3IE+00	1 0IE+01	1 3IE+01	NA	NA	NA						
MW-63-163	Q4-2011	02(	162 5	-150 2	10/18/2011	11 37	8 8IE+02	3 7IE+02	3 3IE+02	9 4IE-01	1 5IE+00	1 8IE+00	4 5IE+30	9 1IE+00	8 3IE+00	1 8IE+00	7 5IE+00	1 2IE+01	NA	NA	NA						
MW-63-174	Q1-2011	016	174	-16.7	2/2/2011	11:36	4.1IE+02	3.3IE+02	2.9IE+02	8.2IE-01	1.8IE+00	2.3IE+00	3.4IE+00	8.0IE+00	8.1IE+00	2.3IE+00	7.9IE+00	9.3IE+00	NA	NA	NA	4.92E-02	NC	NC	ND	NA	MW-63-174
MW-63-174	Q2-2011	017	174	-16 .7	4.19/2011	5 52	1 5E+02	4 48E+02	5 0IE+02	-7 87E-01	9 7IE-(1	1 4IE+00	-6 4 .E+30	8 2IE+00	7 7IE+00	-9 8IE-01	3 5IE+00	9 2IE+00	NA	NA	NA						
MW-63-174	Q2-20..1 Mid	018	174	-16 .7	7.21/2011	5 57	4 1IE+02	4 1IE+02	4 3IE+02	6 9IE-01	1 8IE+00	2 0IE+00	-3 5TE+30	8 1IE+00	8 2TE+00	4 6TE-01	3 3IE+00	1 39E+01	-2 5IE+30	1 33E+01	1 49E+31						
MW-63-174	Q3-2011	019	174	-16 .7	8/3/2011	13 18	5 0IE+02	3 3IE+02	3 0IE+02	6 9IE-01	1 4IE+00	1 5IE+00	-4 1IE+30	9 1IE+00	8 8IE+00	4 5IE+00	3 1IE+00	1 3IE+01	NA	NA	NA						
MW-63-174	Q4-2011	02(	174	-16 .7	10/18/2011	11 42	4 5IE+02	3 7IE+02	3 8IE+02	1 1IE+00	1 7IE+00	1 5IE+00	-6 3TE-02	8 4IE+00	1 0IE+01	-4 3IE+01	3 1IE+00	9 32E+00	NA	NA	NA						
MW-65-40	Q2-20..1 Mid	02(	40.3	56.256	7/2/2011	13:10	2.5IE+03	2.2IE+02	2.8IE+02	5.2IE-01	1.0IE+00	1.1IE+00	3.0IE+00	3.0IE+01	1.0IE+01	1.1IE+01	1.1IE+01	1.1IE+01	2.0IE+30	2.2IE+01	2.0IE+31	MW-65-40					
MW-65-40	Q3-2011	018	40.4	55.9	8/3/2011	11:17	8.9IE+03	4.3IE+02	2.9IE+02	1.9IE-01	1.2IE+00	1.2IE+00	2.9IE+00	9.1IE+00	9.4IE+00	2.9IE+00	1.1IE+01	1.3IE+01	1.2IE+01	2.0IE+01	2.2IE+31	MW-65-40					
MW-66-21	Q1-2011	016	14.1	0	1.31/2011	13:26	4.7IE+02	4.1IE+02	4.2IE+02	3.4IE-01	1.7IE+00	2.2IE+00	-2.1IE-01	5.0IE+00	5.3IE+00	9.0IE-01	5.5IE+00	9.2IE+00	-1.3IE+30	1.5IE+01	2.1IE+31	6.3IE-02	NC	NC	ND	ND	MW-66-21
MW-66-21	Q2-2011	017	14 1	0	4.14/2011	13 43	9 3E+01	3 38E+02	4 4CE+02	6 73E-01	1 64E+00	1 3SE+00	-4 70E+30	8 74E+00	8 4SE+00	6 94E+00	9 8ZE+00	1 25E+01	1 81E+00	1 51E+01	1 7Z

IPEC00267141

TABLE 3
FOURTH QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,8]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing	SAMPLE ZONE CENTER Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS[5]															YEARLY ROLLING AVERAGES[6,7]					Well ID[1]
							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.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Average	Average	Average	Average	Average	
MW-66-36	Q1-2011	013	33.6	-19.3	1/31/2011		3.01E+03	6.48E+02	4.61E+02	3.55E+01	6.31E+00	1.15E+00	3.13E+00	6.32E+00	9.54E+00	3.40E-01	8.30E-01	1.99E+00	9.15E+00	4.48E+01	1.99E+01	2.22E+11						
MW-66-36	Q2-2011	013	33.6	-19.3	4/14/2011	12:52	3.52E+03	7.36E+02	4.75E+02	1.10E+01	2.68E+00	1.85E+00	1.50E+00	1.58E+00	7.24E+00	5.14E+00	5.40E-01	7.92E+00	9.31E+00	6.10E-01	1.55E+01	1.79E+11						
MW-66-36	Q3-2011	013	33.6	-19.3	8/8/2011	13:49	3.96E+03	5.91E+02	3.74E+02	8.30E+00	2.65E+00	1.51E+00	3.94E+00	1.11E+01	1.07E+01	1.18E+00	1.26E+01	1.16E+01	2.82E+00	1.53E+01	1.7.E+11						
MW-66-36	Q4-2011	013	33.6	-19.3	11/29/2011	11:01	3.34E+03	6.78E+02	4.85E+02	1.12E+01	1.72E+00	1.38E+00	5.21E+00	9.78E+00	1.13E+01	1.53E+00	3.64E+00	1.21E+01	3.01E+00	1.34E+01	2.16E+11						
MW-67-39	Q1-2011	016	38.3	-25.8	2/3/2011	13:46	3.85E+03	7.50E+02	4.81E+02	1.37E+01	3.34E+00	1.35E+00	8.03E+00	6.18E+00	5.88E+00	6.64E-01	2.76E+00	7.57E+00	4.43E+00	1.97E+01	2.22E+11	3.38E-03	1.16E-01	ND	ND	ND	6MW-67-39
MW-67-39	Q2-2011	017	38.3	-25.8	4/14/2011	13:25	3.72E+03	7.14E+02	4.11E+02	1.15E+01	3.76E+00	2.10E+00	4.55E+00	8.78E+00	1.04E+01	3.71E+00	3.54E+00	1.14E+01	5.99E+00	1.47E+01	1.63E+11						
MW-67-39	Q3-2011	018	38.3	-25.8	8/8/2011	13:26	3.62E+03	5.76E+02	3.72E+02	5.31E+00	3.35E+00	1.38E+00	-3.0.E+30	8.34E+00	3.17E+00	-7.13E+01	3.22E+00	7.50E+00	5.91E+00	1.71E+01	1.90E+11						
MW-67-39	Q4-2011	019	38.3	-25.8	11/29/2011	14:23	3.51E+03	8.12E+02	5.31E+02	1.10E+01	2.40.E+00	1.44E+00	-1.00E+31	1.39E+01	1.01E+01	-1.18E+01	4.42E+00	1.17E+01	4.60E+00	1.64E+01	1.92E+11						
MW-67-085	Q1-2011	015	104.2	-92.3	2/3/2011	13:57	3.04E+02	9.20E+02	3.62E+02	3.37E-01	1.04E+00	1.34E+00	2.45E+00	4.54E+00	5.07E+00	4.22E+01	9.90E+00	4.91E+00	4.39E+30	1.90E+01	2.31E+11	1.32E-03	ND	ND	ND	ND	6MW-67-105
MW-67-105	Q2-2011	016	104.8	-92.3	4/14/2011	13:43	1.16E+03	4.34E+02	1.12E+02	2.70E-01	1.72E+00	2.11E+00	3.95E-01	9.56E+00	1.02E+01	1.91E-01	7.24E+00	7.38E+00	5.71E+00	1.55E+01	1.72E+11						
MW-67-105	Q3-2011	017	104.8	-92.3	8/8/2011	12:48	1.42E+03	4.38E+02	3.74E+02	7.40E-01	1.71E+00	1.32E+00	-4.93E-01	7.77E+00	8.34E+00	-6.18E+01	3.67E+00	7.76E+00	5.67E+00	1.75E+01	1.38E+11						
MW-67-105	Q4-2011	018	104.8	-92.3	11/29/2011	14:10	1.18E+03	5.94E+02	4.76E+02	1.13E+00	1.74E+00	1.30E+00	-1.36E+30	8.73E+00	1.01E+01	-1.41E+01	3.73E+00	1.34E+01	3.65E+00	1.97E+01	2.20E+11						
MW-67-173	Q1-2011	016	172.3	-159.8	2/3/2011	14:15	4.42E+02	8.48E+02	4.60E+02	2.58E-01	1.66E+00	2.12E+00	-4.75E-01	8.28E+00	9.83E+00	7.65E-01	3.38E+00	8.76E+00	7.93E-01	1.58E+01	2.18E+11	5.31E-02	ND	ND	ND	ND	6MW-67-173
MW-67-173	Q2-2011	017	172.3	-159.8	4/14/2011	14:05	5.72E+02	4.20E+02	4.11E+02	-2.56E-01	1.65E+00	1.99E+00	5.04E+00	9.54E+00	1.17E+01	-9.27E+01	1.02E+01	6.35E+00	7.56E+00	1.23E+01	1.36E+11						
MW-67-173	Q3-2011	018	172.3	-159.8	8/8/2011	12:52	5.12E+02	3.72E+02	3.72E+02	-1.44E+01	1.55E+00	1.48E+00	-1.93E+30	8.79E+00	9.41E+00	-1.20E+01	3.41E+00	9.40E+00	4.91E+00	1.40E+01	1.32E+11						
MW-67-173	Q4-2011	019	172.3	-159.8	11/29/2011	14:22	5.62E+02	4.74E+02	4.72E+02	1.13E+00	1.62E+00	1.70E+00	-1.42E+30	9.37E+00	1.14E+01	-1.48E+01	1.02E+01	1.30E+01	7.35E+00	1.18E+01	1.25E+11						
MW-67-219	Q1-2011	015	2.8.8	-206.3	2/3/2011	14:45	5.41E+02	8.43E+02	4.25E+02	8.85E+01	1.41E+00	1.72E+00	-8.75E-01	8.28E+00	8.93E+00	2.41E+00	3.45E+00	8.53E+00	1.31E+01	1.51E+01	1.96E+11	1.06E-03	ND	ND	ND	ND	6MW-67-219
MW-67-219	Q2-2011	016	2.8.8	-206.3	4/14/2011	13:46	1.07E+03	4.78E+02	4.12E+02	-7.57E-01	9.58E-01	1.53E+00	-2.70E+30	6.52E+00	5.47E+00	4.16E+00	3.78E+00	1.20E+01	2.99E+00	1.43E+01	1.67E+11						
MW-67-219	Q3-2011	017	2.8.8	-206.3	8/8/2011	13:33	1.11E+03	4.17E+02	3.72E+02	3.18E-02	1.61E+00	1.30E+00	8.34.E-01	7.41E+00	8.12E+00	-6.37E+01	3.13E+00	8.11E+00	1.06E+01	1.54E+01	1.79E+11						
MW-67-219	Q4-2011	018	2.8.8	-206.3	11/29/2011	13:41	1.26E+03	4.32E+02	4.45E+02	3.14E-01	1.42E+00	1.53E+00	-1.12E+31	1.14E+01	1.15E+01	1.99E+00	7.65E+00	1.12E+01	1.02E+01	1.13E+01	1.23E+11						
MW-67-276	Q1-2011	015	275.3	-262.8	2/3/2011	14:30	5.21E+02	4.38E+02	3.87E+02	-2.57E-02	1.66E+00	2.33E+00	-2.56E+30	8.76E+00	9.43E+00	7.18E-01	3.42E+00	9.22E+00	9.39E-02	1.32E+01	2.22E+11						
MW-67-276	Q2-2011	016	275.3	-262.8	4/14/2011	13:52	1.06E+03	4.54E+02	4.13E+02	3.40E-01	1.42E+00	1.45E+00	-5.38E+30	6.76E+00	5.12E+00	1.32E+00	1.02E+01	1.15E+01	5.62E-01	1.42E+01	1.61E+11						
MW-67-276	Q3-2011	017	275.3	-262.8	8/8/2011	13:14	1.39E+03	5.13E+02	3.72E+02	1.38E+00	1.52E+00	1.32E+00	3.35E-01	8.27E+00	9.31E+00	1.12E+00	3.24E+00	1.17E+01	1.12E+01	1.10E+01	1.21E+11						
MW-67-276	Q4-2011	018	275.3	-262.8	11/29/2011	13:57	1.06E+03	5.25E+02	4.84E+02	1.99E-01	1.70E+00	1.35E+00	2.95E+30	1.11E+01	1.11E+01	7.14E-01	3.82E+00	1.11E+01	5.41E+00	1.19E+01	1.3.E+11						
MW-67-323	Q1-2011	014	322.3	-309.8	2/3/2011	14:04	3.48E+03	7.70E+02	3.90E+02	4.35E+00	1.71E+00	1.33E+00	2.47E-01	6.70E+00	6.33E+00	8.72E-01	3.30E+00	6.53E+00	5.40E+00	1.90E+01	2.20E+11	4.19E-02	ND	ND	ND	ND	6MW-67-323
MW-67-323	Q2-2011	016	322.3	-309.8	4/14/2011	11:33	4.26E+02	4.36E+02	4.11E+02	1.15E+00	1.52E+00	1.52E+00	2.02E+00	8.36E+00	9.61E+00	-1.12E+01	7.80E+00	8.21E+00	-2.21E-01	1.30E+01	1.50E+11						
MW-67-323	Q3-2011	017	322.3	-309.8	8/8/2011	13:55	3.05E+02	3.51E+02	3.72E+02	1.75E+00	1.85E+00	1.31E+00	-6.64E-01	6.56E+00	7.22E+00	4.13E+00	3.82E+00	1.39E+01	-9.62E+30	2.15E+01	2.43E+11						
MW-67-323	Q4-2011	018	322.3	-309.8	11/29/2011	13:57	3.62E+02	4.56E+02	4.82E+02	7.61E-01	1.71E+00	1.31E+00	-3.9..E+30	9.31E+00	1.15E+01	1.58E+00	5.43E+00	8.36E+00	1.66E+01	2.34E+01	2.56E+11						
MW-67-340	Q1-2011	015	339.8	-327.3	2/3/2011	14:02	2.75E+02	3.58E+02	3.82E+02	-7.04E-01	1.51E+00	1.99E+00	-4.30E+31	6.38E+00	7.02E+00	-3.15E+01	5.50E+00	6.85E+00	5.79E+30	1.85E+01	2.20E+11	5.90E-04	ND	ND	ND	ND	6MW-67-340
MW-67-340	Q2-2011	016	339.8	-327.3	4/14/2011	11:17	2.45E+02	4.32E+02	4.11E+02	2.62E-01	1.61E+00	1.40E+00	5.63E+00	9.32E+00	1.12E+01	4.77E+00	9.02E+00	1.15E+01	7.32E+00	1.54E+01	1.7.E+11						
MW-67 340	Q3-2011	017	339 8	-327 3	8/8/2011	13:43	4.1E+02	3.50E+02	3.72E+02	5.52E 01	1.45E+00	1.29E+00	9.17E 01	7.22E+00	3.61E+00	4.93E+01	1.06E+01	1.30E+01	5.17E+00	1.54E+01	2.05E+11						
MW-67-340	Q4-2011	018	339.8	-327.3	11/29/2011	13:46	5.62E+02	4.58E+02	4.76E+02	-5.80E-01	1.55E+00	1.32E+00	-7.63E+30	7.53E+00	7.05E+00	1.23E+00	3.85E+00	1.14E+01	1.76E+00	1.76E+01	1.7E+11						
MW-107	Q2-2011	010	32.7	11.1	5/2/2011	9:55	3.15E+03	3.76E+02	3.95E+02	8.29E-01	1.02E+00	1.40E+00	-3.86E+30	1.39E+01	1.65E+01	2.39E+00	3.84E+00	8.35E+00	NA	NA	NA	NA	NA	NA	NA	NA	6MW-107
MW-108	Q2-20.1 Mid	009	3.3	6.2	5/5/2011	13:05	1.24E+03	4.38E+02	2.81E+02	9.21E-02	1.21E+00	1.35E+00	4.92E+00	9.34E+00	1.17E+01	7.54E+00	3.43E+00	7.19E+00	8.72E+00	2.32E+01	2.65E+11	1.1E-03	NA	NA	NA	NA	6MW-108
MW-108	Q3-20.1 Mid	009	3.3	6.2	8/29/2011	11:25	1.78E+03	5.73E+02	2.62E+02	-7.81E-01	7.89E-01	1.34E+00	-1.85E-01	1.19E+01	1.21E+01	-4.10E+01	1.12E+01	1.10E+01	2.65E+00	1.16E+01	1.30E+11						
MW-108	Q4-20.1 Mid	009	3.3	6.2	11/30/2011	13:45	2.41E+03	6.63E+02	2.75E+02	2.60E-01	1.22E+00	1.45E+00	-2.33E-01	8.37E+00	9.62E+00	-3.32E+01	7.74E+00	6.55E+00	3.57E+00	3.51E+01	3.32E+11	2.5E-03	NA	ND	ND	ND	6MW-108
MW-109	Q3-20.1 Mid	008	3.7	6	8/29/2011	13:49	3.20E+03	5.30E+02	2.55E+02	3.46E-01	1.01E+00	1.12E+00	2.37E+00	7.72E+00	8.29E+00	3.72E+00	3.60E+00	1.17E+01	4.77E+00	1.73E+01	1.90E+11						
MW-1.1	Q4-2011	032	16.5	2.4	11/11/2011	11:30	1.11E+03	1.12E+03	3.31E+02	1.19E+00	1.32E+00	1.52E+00	2.01E+30	7.11E+00	7.82E+00	2.75E+00	3.72E+00	1.26E+01	NA	NA	NA	1.1E-04	ND	ND	ND	NA	MW-1.1
UI-3	Q3-20.1 Mid	024			7/13/2011	17:20	4.75E+02	3.21E+02	2.81E+02	3.49E-01	8.19E-01	1.10E+00	-4.94E-01	8.31E+00	7.66E+00	3.53E+01	3.61E+00	8.30E+00	NA	NA	NA	4.9E-02	ND	ND	ND	NA	UI-3
UI-3	Q3-20.1 Mid	012			8/29/2011	13:05	1.01E+03	4.56E+02	2.66E+02	-5.04E-01	6.63E-01	1.16E+00	-2.50E+30	8.55E+00	7.81E+00	-3.69E+01	7.74E+00	7.12E+00	NA	NA	NA						
UI-4D	Q1-2011	027	25.6	-10.8	2/1/2011	14:41	3.28E+02	4.14E+02	4.01E+02	2.34E-02	1.55E+00	1.35E+00	-1.24E+00	4.72E+00	5.23E+00	8.61E-01	4.84E+00	5.47E+00	NA	NA	NA	8.1E-02	ND	ND	ND	NA	UI-4D
U3-4D	Q2-2011	028	25 6	-10 8	4/25/2011	14 50	7 41E+02	4 36E+02	3 91E+02	1 18E+00	1 38E+00	1 46E+00	-3 17E+30	7 58E+00	7 51E+00	4 81E-01	7 14E+00	8 11E+00	NA	NA	NA						
U3-4D	Q2-20.1 Mid	028	25 6	-10 8	7/14/2011	11 55	3 88E+02	4 20E+02	4 38E+02	1 24E-01	1 06E+00	1 26E+00	4 78E+00	1 13E+01	1 32E+01	3 12E+00	1 22E+01	1 46E+01	NA	NA	NA						
U3-4D	Q3-2011	031	25 6	-10 8	7/29/2011	11 07	5 72E+02	4 32E+02	3 04E+02	1 23E-01	1 58E+00	1 30E+00	5 66E+00	8 43E+00	1 02E+01	-2 58E+01	3 30E+00	9 30E+00	NA	NA	NA						
U3-4D	Q4-2011	031	25 6	-10 8	11/16/2011	11 56	3 55E+02	3 53E+02	3 81E+02	3 17E-01	1 54E+00	1 54E+00	9 83E-01	8 52E+00	1 07E+01	9 31E-01	3 52E+00	1 17E+01	NA	NA	NA						
UI-4S	Q1-2011	026			2/1/2011	14:13	1.48E+03	3.78E+02	4.20E+02	5.69E-01	1.25E+00	1.45E+00	5.54E+00	8.32E+00	1.07E+01	1.25E+00	3.95E+00	1.35E+01	NA	NA	NA	6.19E-02	ND	ND	ND	NA	UI-4S
U3-4S	Q2-20.1 Mid	004			7/14/2011	11 27	3 25E+02	4 11E+02	4 32E+02	1 16E+00	1 32E+00	1 40E+00	-2 4 .E+30	7 59E+00	7 81E+00	3 25E+00	7 65E+00	9 52E+00	NA	NA	NA						
U3-4S	Q3-2011	005			7/29/2011	11 06	4 67E+02	3 34E+02	3 42E+02	2 84E-01	1 64E+00	1 30E+00	9 15E+00	1 58E+01	9 21E+00	7 83E-01	1 02E+01	1 17E+01	NA	NA	NA						
U3-4S	Q4-2011	006			11/16/2011	11 28	7 52E+02	4 41E+02	3 32E+02	9 35E-01	1 38E+00	1 47E+00	-2 06E+30	9 27E+00	1 12E+01	1 53E+00	7 8E+00	1 38E+01	NA	NA	NA						
UI-T	Q1-2011	030	5.7	2.2	2/3/2011	11:15	3.55E+02	4.08E+02	3.91E+02	1.12E+00	1.59E+00	2.22E+00	-1.81E+00	1.05E+01	5.54E+00	2.13E+00	5.45E+00	7.54E+00	NA	NA	NA	8.2E-02	NE	ND	ND	NA	UI-T
U3-T	Q2-2011	032	5 7	2 2	5/6/2011	13 22	7 82E+02	5 10E+02	5 02E+02	-8 43E-02	9 9.E-01	1 30E+00	-3 24E+30	9 12E+00	9 22E+00	8 49E-01	1 03E+01	1 21E+01	NA	NA	NA						
U3-T	Q3-2011	032	5 7	2 2	8/22/2011	14 42	1 0E+03	3 42E+02	4 02E+02	-6 26E-02	1 31E+00	1 37E+00	-4 61E+01	8 70E+00	9 34E+00	-2 62E+01	3 31E+00	8 23E+00	NA	NA	NA						
UI-T	Q4-2011	034	5 7	2 2	10/19/2011	11 39	7 46E+02	4 15E+02	3 84E+02	1 59E-01	1 16E+00	1 45E+00	-3 91E+01	9 51E+00	1 17E+01	2 12E-01	3 12E+00	1 17E+01	NA	NA	NA						
UI-T2	Q1-2011	036	5.7	2.6	2/22/2011	14:30	2.21E+03	4.32E+02	3.62E+02	1.12E+00	2.04E+00	2.35E+00	3.61E+00	6.38E+00	7.22E+00	5.97E-01	2.71E+00	7.35E+00	NA	NA	NA	2.38E-03	ND	ND	ND	NA	UI-T2
UI-T2	Q2-2011	037	5 7	2 6	5/6/2011	11 41	3 81E+03	6 42E+02	4 15E+02	3 27E-01	1 32E+00	1 58E+00	2 82E+00	7 26E+00	8 74E+00	5 77E-01	3 68E+00	1 38E+01	NA	NA	NA						
UI-T2	Q2-20.1 Mid	038	5 7	2 6	7/8/2011	13 55	2 67E+03	6 53E+02	2 81E+02	4 75E-01	1 31E+00	1 50E+00	3 77E+00	1 18E+01	1 15E+01	-1 06E+01	1 02E+01	1 37E+01	NA	NA	NA						
UI-T2	Q3-2011	035	5 7	2 6	7/29/2011	12 32	2 65E+03	7 32E+02	3 34E+02	1 15E+00	1 81E+00	1 39E+00	-5 43E-01	8 49E+00	9 21E+00	2 53E+00	3 91E+00	1 37E+01	NA	NA	NA						
UI-T2	Q4-2011	040	5 7	2 6	10/19/2011	13 20	3 92E+03	7 52E+02	3 22E+02	-8 79E-02	1 15E+00	1 47E+00	-4 86E+30	1 22E+01	1 01E+01	-5 13E+01	1 12E+01	1 23E+01	NA	NA	NA						
UI-CSS	Q1-2011	014	14	6	2/3/2011	13:54	5.25E+03	1.04E+03	2.41E+02	1.51E+00	2.27E+00	2.91E+00	5.25E+00	6.38E+00	7.27E+00	7.12E+00	5.42E+00	1.24E+01	3.97E+01	1.55E+01	2.31E+11	9.9E-03	ND	ND	ND	ND	UI-CSS
UI-CSS	Q2-20.1 Mid	017	14	6	5/6/2011	13:15	1.08E+04	1.12E+03	2.77E+02	3.10E+00	1.83E+00	1.91E+00	9.8E-E+7	9.18E+00	1.01E+01	3.60E+00	3.97E+00	1.36E+01	-5.29E+30	2.19E+01	2.5.E+11						
UI-CSS	Q4-2011	018	14	6	10/27/2011	13:45	1.7E+03	5.54E+02	4.77E+02	7.82E-01	1.28E+00	1.39E+00	-2.80E+30	8.37E+00	9.39E+00	1.35E+00	7.0E+00	9.59E+00	-8.0..E+30	1.78E+01	2.0.E+11						
UI-NCD	Q2-2011	013			5/13/2011	11:45	3.84E+03	6.38E+02	3.81E+02	9.18E+01	2.21E+00	1.94E+00	4.47E+03	6.42E+02	8.83E+00	3.36E+00	3.68E+00	8.37E+00	1.14E+02	2.39E+01	1.85E+11	5.38E-03	4.15E-01	1.14E+01	ND	1.49E+02	UI-NCD
U1-NCD	Q4-2011	012			11/3/2011	13:20	1.11E+04	1.33E+03	3.35E+02	1.58E+01	3.7.E+00	1.74E+00	5.9.E+03	8.34E+02	1.4.E+01	1.93E+00	7.2E+00	9.97E+00	1.36E+02	2.21E+01	1.86E+11						
U1-NCD	Q4-2011	013			12/26/2011	12:45	3.32E+03	5.13E+02	5.74E+02	1.49E+01	3.52E+00	3.33E+00	7.7.E+03	9.75E+02	1.84E+01	-1.01E+01	7.42E+00	1.17E+01	1.19E+02	2.79E+01	1.88E+11						
UI-EFDS	Q3-2011	012			8/15/2011	14:35	2.05E+03	3.55E+02	4.01E+02	7.79E+00	2.24E+00	1.38E+00	3.35E+00	6.72E+00	5.76E+00	1.14E+00	3.27E+00	9.16E+00	-2.87E+30	1.70E+01	1.9.E+11	2.3.E-03	5.33E-00	1.23E+01	NA	2.00E+01	UI-EFDS
UI EFDS	Q4 2011	011			11/5/2011	1 00	2 0E+03	5 31E+02	3 35E+02	5 54E+00	2 52E+00	1 37E+00	1 27E+00	9 26E+00	1 22E+01	6 39E+00	3 91E+00	9 19E+00	2 0E+01	1 37E+01	2 00E+11						
UI-SFDS	Q4-2011	011			11/5/2011	14:19	1.21E+03	3.61E+02	3.61E+02	2.28E+00	2.22E+00	1.27E+00	1.27E+00	8.17E+00	1.11E+01	1.77E+01	1.44E+00	1.17E+01	-1.44E+30	1.47E+01	1.7.E+11						
U2	Q2-2011	008			5/12/2011	13:52	2.34E+03	2.15E+02	2.01E+02	3.95E-03	7.40E-01	1.16E+00	5.11E+00	1.19E+01	1.35E+01	-2.57E+01	7.24E+00	1.32E+01	NA	NA	NA	2.39E-02	ND	ND	NA	NA	U2
U-2	Q4-2011	009			11/8/2011	14:15	-3.49E+31	3.45E+02	4.05E+02	-2.39E-01	1.56E+00	1.32E+00	-2.33E+30	8.76E+00	1.01E+01	-2.12E+01	3.46E+00	1.34E+01	NA	NA	NA						
MH-5 VCFD	Q1-2011	014			2/28/2011	9:47	5.12E+03	6.38E+02	3.81E+02	1.10E+00	1.98E+00	1.44E+00	3.46E+01	5.34E+00	9.31E+00	-1.38E+01	3.12E+00	8.85E+00	NA	NA	NA	1.9E-04	ND	ND	ND	ND	MH-5 VCFD
MH-5 VCFD	Q2-2011	015			4/22/2011	13:37	1.25E+04	1.10E+03	4.46E+02	8.17E-01	1.85E+00	2.38E+00	-3.2..E+30	8.36E+00	8.4..E+00	-1.60E+01	9.0E+00	9.51E+00	NA	NA	NA						
MH-5 VCFL	Q2-20.1 Mid	018			7/7/2011	14:25	2.97E+03	7.72E+02	2.81E+02	-3.05E-01	8.0.E-01	1.11E+00	9.2.E-01	7.35E+00	8.84E+00	5.11E-01	3.45E+00	9.13E+00	NA	NA	NA						
MH-5 VCFL	Q2-20.1 Mid	019			7/12/2011	12:46	3.8.E+03	1.23E+03	2.81E+02	9.15E-01	1.05E+00	1.30E+00	-1.17E+31	1.33E+01	1.5.E+01	-1.19E+01	3.95E+00	1.36E+01	NA	NA	NA						
MH-5 VCFL	Q2-20.1 Mid	020			7/20/2011	13:41	2.8.E+03	7.22E+02	3.35E+02	-4.57E-01	1.01E+00	1.47E+00	1.7.E+00	6.30E+00	7.2.E+00	-2.61E+01	3.34E+00	8.34E+00	NA	NA	NA						
MH-5 VCFL	Q2-20.1 Mid	021			7/26/2011	12:52	1.8.E+03	6.19E+02	3.35E+02	-3.10E-01	9.45E-01	1.45E+00	2.81E+00	7.47E+00	8.9.E+00	-8.35E-01	3.46E+00	1.19E+01	NA	NA	NA						
MH-5 VCFL	Q3-2011	022			8/3/2011	14:12	3.9.E+03	8.31E+02	3.31E+02	-4.45E-01	1.0.E+00	1.50E+00	-6.13E-01	1.11E+01	1.1.E+01	-6.71E+01	1.42E+01	1.29E+01	NA	NA	NA						
MH-5 VCFL	Q3-2011	023			8/11/2011	12:35	2.74E+04	1.55E+03	2.02E+02	6.43E-01	1.15E+00	1.32E+00	-2.20E+30	7.47E+00	7.6.E+00	1.85E+00	5.85E+00	7.32E+00	NA	NA	NA						
MH-5 VCFL	Q3-2011	024			8/18/2011	5:50	2.0.E+04	1.37E+03	2.64E+02	9.64E-01	1.55E+00	1.70E+00	1.9.E+00	7.38E+00	9.0.E+00	-3.10E+01	3.6.E+00	9.54E+00	NA	NA	NA						
MH-5 VCFL	Q3-20.1 Mid	025			8/24/2011	11:01	1.4.E+04	1.51E+03	2.55E+02	5.99E-01	1.3.E+00	1.46E+00	-2.36E+30	7.36E+00	8.21E+00	3.46E+00	7.9.E+00	9.32E+00	NA	NA	NA						
MH-5 VCFL	Q3-20.1 Mid	026			8/30/2011	13:55	3.3.E+04	1.53E+03	2.0.E+02	9.19E-01	1.31E+00	1.40E+00	1.7.E+00	7.23E+00	8.4.E+00	-1.69E+01	7.8.E+00	7.79E+00	NA	NA	NA						
MH-5 VCFL	Q4-2011	027			10/17/2011	13:07	1.4.E+04	1.99E+03	3.8.E+02	-5.57E-01	1.17E+00	1.55E+00	1.51E+00	7.58E+00	9.0.E+00	-2.77E+01	7.92E+00	9.24E+00	NA	NA	NA						
MH-5 VCFL	Q4-2011	028			10/31/2011	14:37	9.4.E+04	1.37E+03	3.8.E+02	1.16E+00	1.73E+00	1.37E+00	5.9.E+00	1.15E+01	1.6.E+01	9.37E-01	1.0.E+01	1.35E+01	NA	NA	NA						
LAF-002	Q2-2011	012		-22.3	5/2/2011	12:50	5.6.E+03	3.14E+02	3.42E+02	1.16E+00	1.25E+00	1.66E+00	-2.83E-01	7.36E+00	8.5.E+00	-6.40E-01	7.24E+00	7.55E+00	3.43E-01	1.50E

IPEC00267142

TABLE 3
FOURTH QUARTER 2011 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2,8]	SAMPLE ID	SAMPLE ZONE CENTER Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER Elevation Ft msl[3]	SAMPLE COLLECTION		ANALYSIS RESULTS[5]													YEARLY ROLLING AVERAGES[4,6]					Well ID[1]
							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.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Result	Std. Dev.[9]	MDC	Average	Average	Average	Average	Average	
3-1	Q1-2011	011			2/14/2011	15:04	3.82E+03	6.38E+02	3.65E+02	5.41E-02	6.71E+00	2.18E+00	2.35E+01	1.22E+01	5.77E+00	3.81E+01	7.38E+00	7.25E+00	NA	NA	NA	4.22E-03	NC	1.60E+01	ND	NA	3-1
3-1	Q2-2011	012			4/25/2011	13:50	8.10E+03	9.22E+02	4.52E+02	6.21E-03	1.74E+00	2.39E+00	2.05E+01	1.33E+01	1.01E+01	3.18E+00	9.05E+00	1.11E+01	NA	NA	NA						
3-1	Q3-2011	013			8/17/2011	13:17	7.36E+02	3.03E+02	1.95E+02	-6.00E-02	9.87E-01	1.35E+00	1.31E+01	1.49E+01	7.23E+00	-4.01E-01	7.02E+00	7.34E+00	NA	NA	NA						
3-1	Q4-2011	014			12/29/2011	14:23	3.35E+03	3.30E+02	3.05E+02	5.28E-01	4.71E+00	2.55E+00	4.45E+00	5.32E+00	7.61E+00	4.13E+01	2.30E+00	6.38E+00	NA	NA	NA						
3-6	Q1-2011	016			2/14/2011	15:48	2.66E+03	6.18E+02	4.52E+02	-6.60E-01	1.55E+00	2.20E+00	-1.31E-01	8.56E+00	9.01E+00	4.72E+00	1.06E+01	1.35E+01	NA	NA	NA	1.92E-03	NC	5.11E+00	6.11E+00	3.19E+00	3-6
3-6	Q2-2011	016			4/25/2011	15:48	2.66E+03	6.18E+02	4.52E+02	-6.60E-01	1.55E+00	2.20E+00	-1.31E-01	8.56E+00	9.01E+00	4.72E+00	1.06E+01	1.35E+01	NA	NA	NA						
3-6	Q2-2011 Mid	017			7/8/2011	11:05	5.98E+02	3.54E+02	2.83E+02	1.12E+00	1.56E+00	1.93E+00	5.06E+00	1.58E+01	8.04E+00	-2.64E+01	8.97E+00	8.34E+00	NA	NA	NA						
3-6	Q3-2011	016			7/29/2011	13:52	5.45E+02	4.14E+02	3.38E+02	-2.59E-01	1.35E+00	1.79E+00	1.66E+00	7.74E+00	8.71E+00	4.72E+00	5.07E+00	7.32E+00	NA	NA	NA						
3-6	Q4-2011	016			10/20/2011	12:01	1.76E+02	3.48E+02	3.87E+02	-1.65E-01	1.57E+00	1.38E+00	-3.07E+30	7.55E+00	8.31E+00	1.53E+00	8.34E+00	1.10E+01	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 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 any intake) have been loaded as point-located features in massive zone vicinity models
4 Averages provided are analytical result averages of all valid samples (including mid-quarter and confirmatory samples) collected from each monitoring location from the first quarter of 2010 (Q1-2010) to the fourth quarter of 2011 (Q4-2011), including the post Q4-2011 samples, if collected. 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 reanalyzed 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 reveal an inconsistency, and the resample result discredits the validity of the original sample result of a particular radionuclide, the original sample results were not used for any radionuclides 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 These locations are storm drains or foundation drains
8 Mid-quarter samples were collected and analyzed to evaluate the potential effect of certain operations on groundwater quality or to further evaluate the groundwater conditions
9 Column designated as "Std. Dev." provides the 1-sigma uncertainty values
* The Q1 2011 MW-40-100, MW-40-127 and MW-51-186 Cs-137 results were verified by re-analysis. However, based on the available chemistry and site hydrogeologic data, these values do not appear to be representative of the groundwater conditions at these sampling intervals
** The Q1 2011 MW-40-46 preliminary Sr-90 result was 1.85 pCi/L and exceeded the IL. However, after re-analysis, the sample was below the detection limit which suggests the preliminary result was likely a false positive. A shift in the MDC for the preliminary result could have possibly resulted from contaminated laboratory equipment, modified count time, or changes in sample preparation
*** The Post-Q3 2011 MW-58-65 preliminary Sr-90 result was 3.64 pCi/L and exceeded the IL. However, after re-analysis, the sample was below the detection limit which suggests the preliminary result was likely a false positive. A shift in the MDC for the preliminary result could have possibly resulted from contaminated laboratory equipment, modified count time, or changes in sample preparation

IPEC00267143

TABLE 4
2011 1st QUARTER
GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE COLLECTION		ANALYSIS RESULTS[2,3]																	Well ID
				TRITIUM (pCi/L)				Sr-90 (pCi/L)				Cs-137 (pCi/L)				Co-60 (pCi/L)				Ni-63 (pCi/L)				
		Date	Time	Result	Std. Dev.[4]	MDC	LL.[5]	Result	Std. Dev.[4]	MDC	LL.[5]	Result	Std. Dev.[4]	MDC	LL.[5]	Result	Std. Dev.[4]	MDC	LL.[5]	Result	Std. Dev.[4]	MDC	LL.[5]	
MW-30-04	C28	2/9/2011	12:57	9.20E+03	8.36E+02	3.79E+02	1.22E+34	1.12E+00	1.82E+00	1.68E+00	2.00E+00	5.84E-01	4.74E+00	5.22E+00	positive	1.39E-00	5.76E+00	6.49E+00	positive	NA	NA	NA	positive	MW-30-04
MW-30-04	C29	5/31/2011	12:03	9.04E+03	1.36E+03	4.74E+02	1.22E+34	-4.70E-01	1.66E+00	2.12E+00	2.00E+00	5.08E-01	1.12E+01	1.21E+01	positive	-3.08E+00	9.40E+00	9.12E+00	positive	NA	NA	NA	positive	MW-30-04
MW-1-49	C29	2/9/2011	13:12	1.06E+03	3.40E+02	3.98E+02	4.28E+34	-2.51E-01	1.76E+00	2.14E+00	2.00E+00	1.36E+00	5.22E+00	6.02E+00	positive	4.84E-01	5.26E+00	5.91E+00	positive	NA	NA	NA	positive	MW-3-49
MW-1-49	C30	5/31/2011	12:55	4.32E+03	7.94E+02	4.62E+02	4.28E+34	1.17E+00	2.04E+00	2.10E+00	2.00E+00	-2.34E+00	7.08E+00	8.17E+00	positive	-5.30E+00	9.10E+00	9.13E+01	positive	NA	NA	NA	positive	MW-3-49
MW-1-63	C29	2/9/2011	13:14	2.46E+04	1.10E+03	3.93E+02	3.99E+34	4.29E-01	1.78E+00	2.03E+00	2.00E+00	-1.43E+00	6.46E+00	6.81E+00	positive	-2.31E+00	6.42E+00	6.23E+00	positive	NA	NA	NA	positive	MW-3-63
MW-1-63	C30	5/30/2011	13:13	1.33E+04	1.14E+03	4.53E+02	3.99E+34	1.49E+00	1.97E+00	2.12E+00	2.00E+00	3.76E-01	9.00E+00	9.57E+00	positive	-1.92E-01	7.26E+00	7.92E+00	positive	NA	NA	NA	positive	MW-3-63
MW-1-85	C29	2/9/2011	13:03	4.83E+03	6.84E+02	3.82E+02	1.46E+34	3.26E 01	1.79E+00	2.18E+00	2.00E+00	3.31E+00	5.96E+00	7.08E+00	positive	3.14E-00	6.06E+00	7.32E+00	positive	NA	NA	NA	positive	MW-3-85
MW-1-85	C30	5/30/2011	12:55	7.75E+03	4.56E+02	4.53E+02	1.46E+34	9.57E-01	1.81E+00	2.10E+00	2.00E+00	5.01E+00	1.31E+01	1.10E+01	positive	6.43E-00	8.88E+00	1.17E+31	positive	NA	NA	NA	positive	MW-3-85
MW-2-59	C25	3/1/2011	11:48	4.39E+03	6.42E+02	3.56E+02	3.42E+34	1.45E+00	1.96E+00	1.55E+00	2.00E+00	6.56E-01	5.62E+00	6.63E+00	positive	-4.41E-01	7.00E+00	7.55E+00	positive	NA	NA	NA	positive	MW-32-59
MW-2-59	C24	5/31/2011	12:46	3.37E+04	1.36E+03	5.07E+02	3.42E+34	-2.13E-01	1.15E+00	1.51E+00	2.00E+00	8.24E-01	8.92E+00	9.96E+00	positive	1.99E-02	1.02E+00	1.11E+31	positive	NA	NA	NA	positive	MW-32-59
MW-2-85	C26	3/1/2011	12:05	1.34E+04	1.41E+03	2.62E+02	1.63E+34	3.81E-01	1.41E+00	1.13E+00	2.00E+00	7.79E-01	8.26E+00	5.36E+00	positive	4.73E-00	9.72E+00	1.24E+31	positive	NA	NA	NA	positive	MW-33-85
MW-2-85	C27	5/31/2011	13:18	1.27E+03	5.07E+02	1.63E+34	-1.62E-01	1.26E+00	1.76E+00	2.00E+00	-6.55E-01	7.26E+00	7.61E+00	positive	3.30E-00	3.28E+00	1.02E+31	positive	NA	NA	NA	positive	MW-33-85
MW-32-149	C23	3/1/2011	13:37	1.06E+03	4.38E+02	6.68E+02	2.08E+33	-7.01E-01	1.66E+00	2.15E+00	2.00E+00	9.25E-01	5.42E+00	6.38E+00	positive	2.30E-00	6.60E+00	7.95E+00	positive	NA	NA	NA	positive	MW-32-145
MW-32-149	C24	5/31/2011	11:55	8.99E+02	5.34E+02	5.05E+02	1.08E+35	-1.01E-01	1.11E+00	1.49E+00	2.00E+00	2.52E+00	9.30E+00	1.09E+01	positive	2.51E-00	9.92E+00	1.15E+31	positive	NA	NA	NA	positive	MW-32-145
MW-32-173	C21	3/1/2011	13:13	9.02E+02	4.12E+02	2.61E+02	1.50E+33	-4.04E-01	1.12E+00	1.43E+00	2.00E+00	5.99E+00	6.86E+00	7.73E+00	positive	-2.04E+00	7.36E+00	7.55E+00	positive	NA	NA	NA	positive	MW-32-173
MW-32-173	C22	5/31/2011	11:35	8.43E+02	5.22E+02	5.04E+02	1.50E+33	2.46E-01	1.27E+00	1.54E+00	2.00E+00	6.51E+00	1.50E+01	1.26E+01	positive	2.19E-00	9.22E+00	9.93E+31	positive	NA	NA	NA	positive	MW-32-173
MW 33 150	C25	3/1/2011	13:24	1.61E+03	5.32E+02	2.64E+02	4.21E+33	7.65E 01	1.20E+00	1.09E+00	2.00E+00	2.79E+00	5.52E+00	6.57E+00	positive	4.38E-00	7.65E+00	8.75E+00	positive	NA	NA	NA	positive	MW-32-150
MW-33-150	C26	5/31/2011	11:47	1.47E+03	5.76E+02	5.03E+02	4.21E+33	-2.79E-01	1.15E+00	1.47E+00	2.00E+00	8.73E-01	7.06E+00	8.01E+00	positive	5.11E-00	1.04E+01	1.13E+31	positive	NA	NA	NA	positive	MW-32-150
MW-6-84	C20	2/28/2011	12:57	2.56E+04	5.54E+02	3.81E+02	2.56E+35	-8.87E-02	1.67E+00	2.18E+00	2.00E+00	4.53E-01	5.26E+00	5.75E+00	positive	-3.09E-01	4.74E+00	5.03E+00	positive	NA	NA	NA	positive	MW-6A-84
MW-6-41	C21	2/28/2011	13:53	8.74E+03	6.38E+02	3.97E+02	2.10E+34	4.11E+00	1.87E+00	1.57E+00	7.99E+00	1.31E+00	5.26E+00	6.09E+00	positive	1.58E-00	5.68E+00	6.65E+00	positive	NA	NA	NA	positive	MW-36-41
MW-6-52	C20	2/28/2011	12:43	3.14E+03	4.72E+02	3.37E+02	1.48E+34	1.33E+00	2.00E+00	2.14E+00	8.14E+00	-6.00E+00	5.00E+00	4.80E+00	positive	-2.66E+00	5.94E+00	5.65E+00	positive	NA	NA	NA	positive	MW-36-52
MW-7-22	C21	1/27/2011	15:19	6.74E+03	6.18E+02	3.98E+02	9.19E+33	1.04E+01	2.52E+00	1.68E+00	2.20E+01	-2.13E+00	4.74E+00	4.94E+00	positive	2.59E-00	5.38E+00	6.55E+00	positive	NA	NA	NA	positive	MW-37-22
MW-7-52	C21	1/27/2011	15:09	4.57E+03	5.28E+02	3.92E+02	9.32E+33	1.49E+01	3.02E+00	1.48E+00	3.54E+01	4.28E-01	6.28E+00	6.85E+00	positive	1.72E-00	6.00E+00	7.25E+00	positive	NA	NA	NA	positive	MW-37-52
MW-7-40	C21	1/27/2011	15:25	5.97E+03	7.42E+02	3.82E+02	9.02E+33	1.93E+01	3.34E+00	1.52E+00	2.84E+01	1.91E+00	5.04E+00	6.78E+00	positive	2.13E-00	6.84E+00	7.92E+00	positive	NA	NA	NA	positive	MW-37-40
MW-7-57	C21	1/27/2011	15:20	5.63E+03	5.70E+02	3.99E+02	9.02E+33	2.02E+01	3.60E+00	1.66E+00	3.66E+01	3.73E-01	6.34E+00	6.92E+00	positive	-1.36E+00	5.94E+00	5.65E+00	positive	NA	NA	NA	positive	MW-37-57
MW-40-2	C14	3/8/2011	12:55	1.02E+02	2.06E+02	2.65E+02	1.00E+33	1.53E-01	1.21E+00	1.11E+00	2.00E+00	3.71E-01	6.38E+00	7.29E+00	positive	2.23E-00	6.58E+00	9.95E+00	positive	NA	NA	NA	positive	MW-40-47
MW 40 46	C15	3/8/2011	12:58	2.45E+02	2.71E+02	2.63E+02	1.00E+33	1.03E 01	8.58E 01	1.07E+00	2.00E+00	2.82E+00	8.00E+00	7.18E+00	positive	7.39E-00	8.74E+00	1.13E+31	positive	NA	NA	NA	positive	MW-40-46
MW-40-8	C15	3/8/2011	10:17	2.33E+03	2.58E+02	2.63E+02	1.00E+33	8.50E-01	1.51E+00	1.47E+00	2.00E+00	1.29E+00	1.06E+01	7.71E+00	positive	-1.45E+00	6.68E+00	6.15E+30	positive	NA	NA	NA	positive	MW 40 81
MW-40-10C**	C17	3/8/2011	10:27	5.17E+01	2.14E+02	2.64E+02	1.00E+33	2.52E-02	1.30E+00	1.58E+00	2.00E+00	2.46E+01**	1.35E+01	7.66E+00	positive	-1.40E+00	7.88E+00	8.33E+30	positive	NA	NA	NA	positive	MW-40- 10C**
MW-40-127**	C17	3/8/2011	10:41	1.53E+02	2.48E+02	2.64E+02	1.00E+33	1.03E+00	1.46E+00	1.11E+00	2.00E+00	5.07E+01**	1.04E+01	7.63E+00	positive	3.45E-01	7.18E+00	7.95E+00	positive	NA	NA	NA	positive	MW-40- 27**
MW-43-162	C15	3/8/2011	11:02	8.33E+01	2.24E+02	2.63E+02	1.00E+33	-1.03E+00	1.07E+00	1.57E+00	2.00E+00	-3.72E+00	6.12E+00	5.93E+00	positive	-2.11E+00	6.42E+00	6.37E+30	positive	NA	NA	NA	positive	MW-40-162
MW-43-40	C19	2/4/2011	14:05	2.03E+03	4.32E+02	3.96E+02	1.00E+33	1.38E+00	1.98E+00	1.30E+00	2.00E+00	4.46E+00	7.30E+00	8.61E+00	positive	4.22E-00	7.36E+00	9.25E+30	positive	NA	NA	NA	positive	MW-43-40
MW-41-63	C18	2/4/2011	13:57	1.42E+03	4.44E+02	4.00E+02	3.34E+33	6.92E+00	1.46E+00	1.16E+00	2.00E+00	1.45E+00	5.30E+00	6.03E+00	positive	2.59E-00	8.08E+00	7.42E+30	positive	NA	NA	NA	positive	MW-41-63
MW-42-49	C20	2/4/2011	11:57	1.49E+03	5.14E+02	3.82E+02	3.16E+34	2.52E+01	3.34E+00	1.11E+00	9.10E+01	3.81E+00	4.42E+05	2.75E+01	6.55E+04	1.42E-00	8.70E+00	7.87E+30	positive	3.10E+02	3.14E+01	2.00E+01	6.35	MW-42-49
MW-42-78	C19	3/4/2011	10:58	5.92E+02	4.30E+02	3.84E+02	1.00E+33	8.92E-01	1.47E+00	1.02E+00	2.00E+00	-2.03E+00	6.72E+00	6.95E+00	positive	8.03E-02	6.70E+00	7.41E+30	positive	3.00E+03	1.73E+01	1.90E+01	positive	MW-42-78
MW-42-26	C18	2/4/2011	12:08	2.54E+02	2.96E+02	2.96E+02	1.00E+33	-1.06E+00	1.40E+00	2.10E+00	2.00E+00	-2.72E+00	1.26E+01	7.08E+00	positive	-2.09E+00	6.94E+00	6.24E+30	positive	NA	NA	NA	positive	MW-42-26
MW-2-62	C18	2/5/2011	13:15	1.82E+02	2.76E+02	3.00E+02	1.00E+33	7.75E 01	1.74E+00	1.15E+00	2.00E+00	6.59E 01	5.08E+00	5.56E+00	positive	2.37E 01	5.16E+00	5.52E+30	positive	NA	NA	NA	positive	MW-42-62
MW-44-66	C19	2/8/2011	10:41	4.57E+03	3.20E+02	3.90E+02	1.00E+33	-2.94E-01	1.50E+00	1.65E+00	2.00E+00	1.76E+00	7.72E+00	5.56E+00	positive	-1.40E+00	7.03E+00	8.45E+30	positive	NA	NA	NA	positive	MW-44-66
MW-44-102	C20	2/8/2011	10:44	3.93E+02	2.20E+02	2.97E+02	1.00E+33	2.63E-01	1.86E+00	2.15E+00	2.00E+00	2.23E-01	4.96E+00	5.47E+00	positive	-2.93E-01	6.02E+00	6.55E+30	positive	NA	NA	NA	positive	MW-44-102
MW-45-42	C23	2/6/2011	16:58	3.62E+03	5.86E+02	6.63E+02	3.94E+33	1.03E+00	1.39E+00	1.48E+00	2.00E+00	-8.53E-01	5.64E+00	5.99E+00	positive	1.42E-00	6.30E+00	7.16E+30	positive	NA	NA	NA	positive	MW-45-42
MW-45-61	C23	2/6/2011	16:15	1.84E+03	5.20E+02	3.98E+02	2.65E+33	-2.25E-01	1.64E+00	1.16E+00	2.00E+00	1.31E+00	4.80E+00	5.41E+00	positive	9.89E-01	5.46E+00	6.15E+30	positive	NA	NA	NA	positive	MW-45-61
MW-46	C23	2/23/2011	12:46	3.47E+03	5.70E+02	3.99E+02	1.84E+33	1.12E+00	1.89E+00	2.16E+00	2.00E+00	-2.22E+00	5.28E+00	5.28E+00	positive	5.21E-01	5.10E+00	5.65E+30	positive	NA	NA	NA	positive	MW-46
MW-49-26	C23	1/28/2011	13:57	3.17E+03	6.30E+02	4.29E+02	6.52E+33	1.30E+01	1.80E+00	2.11E+00	2.79E+01	3.59E-01	1.04E+01	7.00E+00	positive	-2.43E+00	8.42E+00	8.47E+30	positive	-8.52E+00	1.87E+01	2.20E+01	positive	MW-49-26
MW-49-42	C23	1/28/2011	13:00	2.43E+03	5.58E+02	3.86E+02	4.97E+33	2.30E+01	4.02E+00	2.12E+00	3.12E+01	-1.07E+00	5.48E+00	6.21E+00	positive	-2.45E+00	5.50E+00	5.52E+30	positive	-3.42E+00	1.86E+01	2.18E+01	positive	MW-49-42
MW-9-65	C23	1/28/2011	13:15	1.94E+03	5.32E+02	3.83E+02	3.03E+33	1.15E+01	3.28E+00	2.02E+00	2.62E+01	-6.53E-01	4.96E+00	5.21E+00	positive	7.15E-01	5.20E+00	5.81E+30	positive	-9.01E+00	1.83E+01	2.20E+01	positive	MW-49-65
MW-10-84	C24	2/25/2011	12:36	5.62E+02	3.38E+02	3.82E+02	1.04E+33	2.42E+00	2.24E+00	1.91E+00	1.10E+01	-1.29E+00	5.46E+00	5.98E+00	positive	-9.07E-01	4.42E+00	4.42E+30	positive	7.15E+00	1.82E+01	2.18E+01	positive	MW-10-84
MW-10-66	C20	2/25/2011	12:46	6.18E+02	3.82E+02	3.82E+02	1.04E+33	2.61E+01	1.82E+00	2.12E+00	3.21E+01	2.97E+00	7.08E+00	8.27E+00	positive	2.70E-01	2.00E+00	1.91E+30	positive	2.81E+00	1.81E+01	2.12E+01	positive	MW-10-66
MW-51-40	C18	3/8/2011	10:18	1.09E+03	2.74E+02	2.63E+02	1.00E+33	1.07E+00	1.51E+00	1.41E+00	2.00E+00	-7.07E+00	1.01E+01	1.56E+01	positive	2.42E-00	7.30E+00	8.75E+30	positive	NA	NA	NA	positive	MW-5 -40
MW-51-70	C18	3/8/2011	10:34	1.36E+02	2.46E+02	2.70E+02	1.00E+33	-2.03E-01	1.22E+00	1.53E+00	2.00E+00	2.42E+00	5.42E+00	6.52E+00	positive	-2.74E+00	7.36E+00	6.45E+30	positive	NA	NA	NA	positive	MW-5 -70
MW-51-114	C16	3/8/2011	12:10	5.76E+01	3.10E+02	3.55E+02	1.00E+33	3.91E-01	1.47E+00	1.10E+00	2.00E+00	2.56E+00	7.20E+00	8.14E+00	positive	9.02E-01	5.50E+00	6.28E+30	positive	NA	NA	NA	positive	MW-51-104
MW-51-135	C16	3/8/2011	12:44	8.29E+01	2.24E+02	2.62E+02	1.00E+33	8.62E-01	1.31E+00	1.42E+00	2.00E+00	8.68E-02	6.02E+00	6.77E+00	positive	2.37E-00	5.96E+00	7.38E+30	positive	NA	NA	NA	positive	MW-51-135
MW-51-165	C16	3/8/2011	13:01	0.00E+00	1.96E+02	2.63E+02	1.00E+33	-5.97E-01	1.39E+00	1.98E+00	2.00E+00	2.81E+00	6.54E+00	7.66E+00	positive	5.35E-01	7.76E+00	8.62E+30	positive	NA	NA	NA	positive	MW-51-165
MW-51-185**	C16	3/8/2011	12:30	-1.51E+01	1.43E+02	2.63E+02	1.00E+33	-1.08E-01	1.46E+00	1.91E+00	2.00E+00	-2.71E+01**	1.47E+01	6.28E+00	positive	2.28E-01	5.28E+00	5.74E+30	positive	NA	NA	NA	positive	MW-51- 89**
MW-53-82	C18	3/8/2011	11:53	5.95E+02	3.76E+02	3.72E+02	3.58E+33	1.61E+00	1.82E+00	1.11E+00	4.46E+00	3.61E+00	6.38E+00	7.60E+00	positive	-1.88E+00	7.20E+00	7.25E+30	positive	-7.63E+00	1.59E+01	1.85E+01	positive	MW-53-82
MW-53-120	C22	3/3/2011	12:00	3.84E+03	7.18E+02	3.89E+02	1.05E+34	2.95E+01	3.76E+00	1.13E+00	6.60E+01	2.30E+00	7.32E+00	8.49E+00	positive	-2.43E+00	8.14E+00	8.13E+30	positive	1.00E+01	1.70E+01	1.87E+01	positive	MW-53-120
MW-54-37	C16	2/1/2011	14:10	1.32E+03	4.36E+02	3.73E+02	2.71E+33	4.08E+00	1.77E+00	1.56E+00	9.20E+00	-1.42E+00	5.54E+00	5.67E+00	positive	3.12E-01	6.42E+00	7.04E+30	positive	-2.01E+00	1.59E+01	1.82E+01	positive	MW-54-37
MW-54-53	C16	2/1/2011	14:22	9.52E+02	4.68E+02	3.92E+02	1.48E+34	1.03E+00	1.44E+00	1.32E+00	4.43E+00	-4.28E-01	7.40E+00	8.13E+00	positive	-2.21E+00	6.94E+00	6.68E+30	positive	-4.89E+00	1.66E+01	1.91E+01	positive	MW-54-53
MW-54-125	C16	2/1/2011	14:11	1.03E+03	4.58E+02	3.90E+02	1.39E+34	2.56E+00	1.90E+00	1.68E+00	8.14E+00	-3.55E-01	6.02E+00	6.69E+00	positive	-3.66E-01	5.16E+00	5.75E+30	positive	2.50E+00	1.66E+01	1.87E+01	positive	MW-54-125
MW-54-144	C16	2/1/2011	12:34	1.35E+03	4.36E+02	3.87E+02	2.64E+33	9.31E+00	2.24E+00	1.16E+00	2.53E+01	-9.01E-01	6.48E+00	6.70E+00	positive	-4.22E+00	6.20E+00	6.74E+30	positive	-4.22E+00	1.58E+01	1.82E+01	positive	MW-54-144
MW-54-175	C16	2/1/2011	12:49	1.66E+03	5.06E+02	3.81E+02	5.63E+33	5.81E+00	1.88E+00	1.10E+00	1.22E+01	-2.87E-01	8.10E+00	8.79E+00	positive	1.31E-00	1.00E+01	1.22E+31	positive	-3.41E+00	1.77E+01	2.03E+01	positive	MW-54-175
MW-54-190	C16	2/1/2011	12:25	1.89E+03	5.56E+02	3.90E+02	3.49E+33	1.68E+01	3.36E+00	1.28E+00	4.03E+01	4.59E-01	6.34E+00	7.14E+00	positive	-3.55E+00	5.96E+00	5.21E+30	positive	1.71E+03	1.67E+01	1.89E+01	positive	MW-54-190
MW-55-24	C17	2/3/2011	14:13	1.02E+03	4.48E+02	4.20E+02	2.58E+33	1.09E+01	2.82E+00	1.56E+00	2.97E+01	-3.57E-01	4.92E+00	5.43E+00	positive	4.75E-00	8.74E+00	7.44E+30	positive	-5.31E+00	1.81E+01	2.14E+01	positive	MW-55-24
MW-55-35	C16	2/3/2011	14:16	1.70E+03	4.34E+02	3.86E+02	4.38E+33	1.93E+01	3.42E+00	2.15E+00	4.26E+01	8.33E-01	5.82E+00	6.45E+00	positive	1.33E-00	6.24E+00	7.03E+30	positive	-2.11E+00	1.86E+01	2.17E+01	positive	MW-55-35
MW-55-54	C17	2/3/2011	14:17	8.46E+03	8.52E+02	3.89E+02	1.28E+34	1.91E+01	3.72E+00	1.52E+00	3.93E+01	3.62E+00	5.08E+00	7.00E+00	positive	-6.59E-01	7.44E+00	7.95E+30	positive	-8.12E+00	1.78E+01	2.14E+01	positive	MW-55-54
MW-60-35	C16	2/1/2011	12:17	5.20E+02	3.72E+02	3.68E+02	2.00E+33	9.73E-01	1.63E+00	1.58E+00	2.00E+00	2.06E+00	6.04E+00	7.46E+00	positive	1.22E-01	3.76E+00	4.24E+30	positive	-1.01E+00	1.42E+01	1.84E+01	positive	MW-60-35
MW-60-53	C16	2/1/2011	10:57	3.19E+02	3.70E+02	3.87E+02	2.00E+33	7.44E-01	1.52E+00	1.70E+00	2.00E+00	-2.02E+00	5.68E+00	6.16E+00	positive	1.39E-00	5.96E+00	6.33E+30	positive	-1.38E+00	1.50E+01	1.72E+01	positive	MW-60-53
MW-60-72	C16	2/1/2011	12:54	3.64E+02	3.76E+02	3.84E+02	2.00E+33	2.41E-01	1.45E+00	1.10E+00	2.00E+00	-2.51E-02	9.12E+00	1.01E+01	positive	2.17E-00	8.80E+00	1.07E+31	positive	2.12E+00	1.54E+01	1.75E+01	positive	MW-60-72
MW-63-154	C16	2/1/2011	13:04	3.92E+03	3.79E+02	3.83E+02	2.00E+33	1.14E+00	1.87E+00	1.68E+00	2.00E+00	1.77E+00	6.77E+00	7.79E+00	positive	2.74E-01	7.44E+00	8.75E+30	positive	-3.56E+00	1.79E+01	1.76E+01	positive	MW-60-135
MW-63-154	C16	2/1/2011	12:53	5.44E+02	4.12E+02	3.87E+02	2.00E+33	2.32E-02	8.51E-01	1.07E+00	2.00E+00	-4.12E+00	9.26E+00	8.97E+00	positive	9.91E-01	7.86E+00	9.12E+30	positive	4.61E+00	1.52E+01	1.71E+01	positive	MW-60-154
MW-60-176	C16	2/1/2011	10:31	1.12E+03	4.58E+02	3.82E+02	2.00E+33	2.58E-01	1.49E+00	1.42E+00	2.00E+00	4.82E+00	1.38E+01	6.69E+00	positive	-1.52E+00	8.70E+00	6.74E+30	positive	7.48E+00	1.62E+01	1.79E+01	positive	MW-60-176
MW-62-18	C16	2/24/2011	12:49	1.82E+02	3.50E+02	4.00E+02	2.00E+33	-5.86E-01	1.71E+00	2.13E+00	2.00E+00	2.13E-01	4.74E+00	5.18E+00	positive	3.58E-00	5.46E+00	6.78E+30	positive	NA	NA	NA	positive	MW-62-18
MW-62-37	C16	2/24/2011	12:52	3.05E+02	3.76E+02	4.00E+02	2.00E+33	5.14E-01	1.84E+00	2.13E+00	2.00E+00	1.07E+00	6.06E+00	6.86E+00	positive	-2.84E+00	6.38E+00	6.23E+30	positive	NA	NA	NA	positive	MW-62-37
MW-62-53	C15	2/24/2011	12:57	3.02E+02	3.78E+02	4.03E+02	2.00E+33	8.98E-01	1.94E+03	2.18E+00	2.00E+00	-2.62E-01	4.72E+00	5.23E+00	positive	-1.84E+00	5.58E+00	5.81E+30	positive	NA	NA	NA	positive	MW-62-53
MW-62-71	C16	2/24/2011	12:40	5.32E+02	4.02E+02	4.02E+02	2.00E+33	1.28E-01	1.42E+00	1.49E+00	2.00E+00	4.31E+00	1.38E+01	6.67E+00	positive	-1.36E-01	5.00E+00	5.94E+30	positive	NA	NA	NA	positive	MW-62-71
MW-62-93	C16	2/24/2011	12:39	5.09E+02	4.30E+02	4.02E+02	2.00E+33	9.56E-01	1.83E+03	2.10E+00	2.00E+00	1.61E+00	5.38E+00	6.27E+00	positive	-1.43E+00	5.66E+00	5.83E+30	positive	NA	NA	NA	positive	MW-62-93
MW-62-128	C16	2/24/2011	14:54	5.17E+02	4.30E+02	4.01E+02	2.00E+33	2.15E+00	1.77E+03	1.35E+00	2.42E+00	-1.67E+00	4.72E+00	4.94E+00	positive	1.38E-00	7.04E+00	8.13E+30	positive	NA	NA	NA	positive	MW-62-128
MW-62-152	C16	2/24/2011	15:07	5.55E+02	4.54E+02	4.03E+02	2.00E+33	-1.46E-01	1.45E+03	1.54E+00	2.00E+00	-1.95E+00	6.24E+00	6.60E+00	positive	5.86E-01	6.60E+00	7.55E+30	positive	NA	NA	NA	positive	MW-62-152
MW-63-18	C16	3/2/2011	11:10	4.90E+03	3.58E+02	3.55E+02	2.00E+33	-4.34E-01	1.50E+03	2.13E+00	2.00E+00	1.82E+00	6.73E+00	7.98E+00	positive	2.40E-00	7.38E+00	8.82E+30	positive	NA	NA	NA	positive	MW-63-18
MW-63-34	C16	3/2/2011	10:50	2.93E+02	2.36E+02	2.62E+02	2.00E+33	4.26E-01	1.57E+03	2.11E+00	2.00E+00	7.43E-02	7.96E+00	8.82E+00	positive	-2.10E+00	8.42E+00	8.59E+30	positive	NA	NA	NA	positive	MW-63-34
MW-63-50	C16	3/2/2011	14:21	4.35E+02	3.40E+02	3.44E+02	2.00E+33	1.73E-01	1.62E+03	2.13E+00	2.00E+00	1.12E+00	6.50E+00	7.48E+00	positive	3.54E-00	7.02E+00	8.72E+30	positive	NA	NA	NA	positive	MW-63-50
MW-63-93	C17	3/2/2011	14:14	2.69E+02	3.30E+02	3.94E+02	2.00E+33	3.58E-01	1.75E+03	2.17E+00	2.00E+00	-1.51E+00	8.38E+00	9.05E+00	positive	3.58E-00	7.56E+00	9.52E+30	positive	NA	NA	NA	positive	MW-63-93

J:\IP\GW-12\99\01/5093/609-93 MW_Q4-2011\FINAL\Tables\Q12011 FINAL Table 4 2011 1st Quarter Groundwater Analytical Results.xlsx, Q12011 Table 4

See Page 2 for Notes

IPEC00267144

TABLE 4
2011 1st QUARTER
GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE COLLECTION		ANALYSIS RESULTS[4,5]																		Well ID
				TRITIUM (pCi/L)				Sr-90 (pCi/L)				Cs-137 (pCi/L)				Co-60 (pCi/L)				Ni-63 (pCi/L)				
		Date	Time	Result	Std. Dev.[6]	MDC	LL.[2,7]	Result	Std. Dev.[6]	MDC	LL.[2]	Result	Std. Dev.[6]	MDC	LL.[2]	Result	Std. Dev.[6]	MDC	LL.[2]	Result	Std. Dev.[6]	MDC	LL.[2]	
MW-63-112	G16	3/2/2011	14 15	5 58E+02	5 18E+02	1 96E+03	2 00E+33	1 48E-01	1 60E+00	2 10E+00	2 00E+00	-5 72E-01	6 .0E+00	7 21E+00	positive	1 19E--00	6 56E+00	7 21E+00	positive	NA	NA	NA	positive	MW-63-112
MW-63-121	G16	3/2/2011	11 10	5 03E+02	3 54E+02	1 94E+03	2 00E+33	-6 82E-02	1 55E+00	2 13E+00	2 00E+00	-6 25E-01	6 72E+00	7 20E+00	positive	3 49E-01	6 00E+00	6 67E+00	positive	NA	NA	NA	positive	MW-63-121
MW-63-163	G16	3/2/2011	10 27	6 03E+02	3 76E+02	1 95E+03	2 00E+33	1 37E+00	1 99E+00	2 12E+00	2 00E+00	3 0E+00	5 40E+00	6 62E+00	positive	-2 05E+00	5 72E+00	7 12E+00	positive	NA	NA	NA	positive	MW-63-163
MW-63-174	G16	3/2/2011	10 26	4 13E+02	3 30E+02	1 91E+03	2 00E+33	8 20E-01	1 80E+00	2 13E+00	2 00E+00	3 02E+00	6 96E+00	8 18E+00	positive	2 94E--00	7 86E+00	9 42E+00	positive	NA	NA	NA	positive	MW-63-174
MW-66-21	G16	1/31/2011	16 26	4 17E+02	4 00E+02	4 .0E+03	1 58E+33	5 40E-01	1 72E+00	2 12E+00	2 00E+00	-2 14E-01	5 00E+00	5 58E+00	positive	9 80E-01	6 50E+00	7 42E+00	positive	-1 0E+00	1 24E+01	2 14E+01	positive	MW-66-21
MW-66-36	G15	1/31/2011	15 51	3 0 .E+03	6 73E+02	4 61E+03	7 71E+33	1 38E+00	5 .0E+00	2 .1E+00	1 40E+01	-1 .1E+00	6 .2E+00	7 49E+00	positive	-8 31E-01	6 80E+00	7 15E+30	positive	-4 85E+00	1 79E+01	2 12E+01	positive	MW-66-36
MW-67-39	G16	2/7/2011	13 48	3 82E+03	7 50E+02	4 81E+03	6 52E+33	1 57E+01	3 34E+00	1 13E+00	1 81E+01	8 03E-02	6 .8E+00	6 83E+00	positive	6 64E-01	6 70E+00	7 57E+30	positive	4 43E+00	1 97E+01	2 23E+01	positive	MW-67-39
MW-67-105	G15	2/7/2011	13 57	9 94E+02	4 36E+02	3 86E+03	5 92E+33	5 57E 01	1 64E+00	1 .1E+00	1 58E+00	2 .9E+00	5 .0E+00	5 67E+00	positive	1 .2E+00	4 86E+00	5 81E+30	positive	5 51E+00	1 16E+01	1 .1E+01	positive	MW-67-105
MW-67-173	G16	2/7/2011	14 19	4 47E+03	4 48E+02	4 69E+03	1 61E+33	-2 98E-01	1 68E+00	2 12E+00	2 00E+00	-4 75E-01	5 38E+00	6 83E+00	positive	7 55E-01	6 38E+00	6 75E+30	positive	-7 05E-01	1 88E+01	2 18E+01	positive	MW-67-173
MW-67-219	G15	1/31/2011	14 48	6 4 .E+02	4 18E+02	4 20E+03	2 26E+33	-1 08E+00	1 42E+00	1 57E+00	2 00E+00	9 73E-01	5 80E+00	6 44E+00	positive	2 44E--00	5 46E+00	6 55E+30	positive	-4 51E+00	1 81E+01	2 14E+01	positive	MW-67-219
MW-67-226	G15	1/31/2011	14 31	8 03E+02	4 13E+02	3 87E+03	2 01E+33	-2 57E-02	1 66E+00	2 15E+00	2 00E+00	-2 52E+00	8 .0E+00	8 16E+00	positive	6 49E-01	6 49E+00	7 42E+30	positive	-7 15E-01	1 52E+01	2 22E+01	positive	MW-67-226
MW-67-323	G15	1/31/2011	15 04	3 32E+02	3 70E+02	3 90E+03	1 00E+33	2 58E-01	1 71E+00	2 13E+00	2 00E+00	2 47E-01	5 70E+00	6 35E+00	positive	8 12E-03	5 80E+00	6 35E+30	positive	-5 97E+00	1 50E+01	2 25E+01	positive	MW-67-323
MW-67-340	G15	1/31/2011	14 53	2 75E+02	3 58E+02	3 83E+03	1 01E+33	-7 06E-01	1 51E+00	1 99E+00	2 00E+00	4 38E-01	6 34E+00	7 02E+00	positive	-1 15E+00	6 54E+00	6 88E+30	positive	-5 75E+00	1 85E+01	2 20E+01	positive	MW-67-340
U3-4D	G27	2/7/2011	14 41	6 26E+02	4 14E+02	4 05E+03	1 00E+33	-2 34E-02	1 55E+00	1 95E+00	2 00E+00	1 26E+00	4 72E+00	5 29E+00	positive	8 61E-01	4 84E+00	5 47E+30	positive	NA	NA	NA	positive	U3-4D
U3-T1	L31	2/2/2011	11 11	6 55E+02	4 82E+02	3 92E+03	1 18E+33	1 62E+00	1 90E+00	2 12E+00	2 00E+00	1 38E+00	1 05E+01	1 14E+01	positive	2 12E--00	9 42E+00	1 03E+30	positive	NA	NA	NA	positive	U3-T1
U3-T2	C36	2/22/2011	14 30	2 27E+03	4 32E+02	3 62E+03	2 00E+33	1 82E+00	2 04E+00	2 13E+00	2 00E+00	3 02E+00	6 00E+00	7 29E+00	positive	5 97E-01	7 12E+00	7 83E+30	positive	NA	NA	NA	positive	U3-T2
MH-5 VCPD	C14	2/28/2011	9 47	5 17E+03	6 58E+02	3 66E+03	*	1 90E+00	1 99E+00	1 54E+00	*	3 43E-01	5 04E+00	6 19E+00	*	-1 28E+00	6 18E+00	6 42E+30	*	NA	NA	NA	*	MH-5 VCPD
B-1	G11	2/4/2011	15 09	5 83E+05	5 48E+02	3 63E+03	*	5 41E 02	1 70E+00	2 14E+00	*	2 35E+01	3 22E+01	6 73E+00	*	1 81E+00	7 00E+00	7 42E+30	*	NA	NA	NA	*	B-1
B-6	G11	2/28/2011	11 27	8 39E+03	8 20E+02	3 65E+03	*	6 28E-01	1 78E+00	2 15E+00	*	4 47E+00	5 82E+00	7 02E+00	*	-1 95E+00	6 50E+00	6 88E+30	*	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 with out 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 LL = (Investigation Level) are media-based detection limits assigned to each sampling location which, if exceeded, require further investigation or action. LL's presented here for Sr-90, Cs-137, Co-60 & Ni-63 are established for 2011, based on 2010 averages. See Table #7 below for further 2011 Tritium LL discussion. Positive detections indicate that 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 Shading indicates that the sample result exceeds the Investigation Level
6 Column designated as "Std. Dev." provides the three times 1 sigma uncertainty values
7 To be conservative, the 2011 Tritium LL's were calculated using 2x the 2009 yearly average) because mean increased Tritium activity
at multiple Unit 2 sampling intervals was observed during 2010 in response to the transient surface spill from a temporary rental RWST/RCS processing skid
* indicates storm or inundation drum sampling locations, for which investigation levels are not applicable
** The Q1 2011 MW-40-.00, MW-40-127 and MW-51-185 Cs-137 results were verified by re-analysis. However, based on the available chemistry and Site hydrogeologic data, these values do not appear to be representative of the groundwater conditions at these sampling intervals

See Page 2 for Notes

IPEC00267145

TABLE 4
2011 2nd QUARTER
GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERTY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE COLLECTION		ANALYSIS RESULTS[2]																Well ID
				TRITIUM (pCi/L)				Sr-90 (pCi/L)				Cs-137 (pCi/L)				Co-60 (pCi/L)				Ni-63 (pCi/L)				
		Date	Time	Result	Std. Dev.[3]	MDC	LL[3]	Result	Std. Dev.[3]	MDC	LL[3]	Result	Std. Dev.[3]	MDC	LL[3]	Result	Std. Dev.[3]	MDC	LL[3]	Result	Std. Dev.[3]	MDC	LL[3]	
MW-30-84	Q2-2011	5/5/2011	12:58	7.57E+03	9.16E+02	3.92E+02	1.22E+04	1.61E-01	1.15E+00	1.40E+00	2.00E+00	2.00E+00	8.04E+00	9.35E+00	positive	4.65E-02	7.14E+00	7.76E+00	positive	NA	NA	NA	positive	MW-30-84
MW-30-84	Q2-2011 Mid	7/11/2011	12:45	7.55E+03	1.18E+03	2.22E+02	1.22E+04	-3.75E-11	9.75E-01	1.25E+00	2.00E+00	3.17E-01	7.89E+00	8.89E+00	positive	1.39E+00	1.16E+01	1.59E+01	positive	NA	NA	NA	positive	MW-30-84
MW-31-49	Q2-2011	4/18/2011	12:53	1.38E+03	5.20E+02	4.66E+02	4.28E+04	4.91E-01	1.81E+00	2.05E+00	2.00E+00	-1.82E+00	8.82E+00	9.22E+00	positive	6.17E+00	8.70E+00	1.13E+01	positive	NA	NA	NA	positive	MW-31-49
MW-31-65	Q2-2011	4/18/2011	13:31	1.51E+04	1.45E+03	4.67E+02	3.99E+04	7.23E-01	1.84E+00	2.00E+00	2.00E+00	-3.11E-11	7.62E+00	8.46E+00	positive	1.76E+00	8.74E+00	1.03E+01	positive	NA	NA	NA	positive	MW-31-65
MW-31-85	Q2-2011	4/18/2011	13:..8	3.30E+03	6.30E+02	4.66E+02	1.46E+04	-1.09E+00	1.45E+00	2.05E+00	2.00E+00	-4.50E+00	5.34E+00	9.19E+00	positive	3.84E+00	1.01E+01	1.22E+01	positive	NA	NA	NA	positive	MW-31-85
MW 32 59	Q2-2011	4/27/2011	12:36	3.31E+03	6.36E+02	4.08E+02	3.42E+04	4.03E-01	1.51E+00	1.74E+00	2.00E+00	4.77E+00	8.64E+00	1.04E+01	positive	3.37E+00	9.58E+00	9.50E+00	positive	NA	NA	NA	positive	MW 32 59
MW-32-85	Q2-2011	4/27/2011	13:04	1.14E+04	1.19E+03	5.08E+02	1.63E+04	1.58E+10	1.65E+00	1.75E+00	2.00E+00	-1.23E+00	6.80E+00	7.31E+00	positive	5.30E-01	1.02E+01	1.15E+01	positive	NA	NA	NA	positive	MW-32-85
MW-32-149	Q2-2011	4/27/2011	11:..2	8.59E+02	4.44E+02	4.11E+02	1.00E+03	3.01E-01	1.45E+00	1.67E+00	2.00E+00	2.12E+00	7.44E+00	8.59E+00	positive	9.88E-01	7.76E+00	8.83E+00	positive	NA	NA	NA	positive	MW-32-149
MW-32-173	Q2-2011	4/27/2011	11:37	5.82E+02	4.38E+02	5.08E+02	1.50E+03	6.37E-01	1.54E+00	1.74E+00	2.00E+00	1.00E+00	8.00E+00	9.23E+00	positive	2.47E-01	9.58E+00	1.07E+01	positive	NA	NA	NA	positive	MW-32-173
MW-32-190	Q2-2011	4/27/2011	11:..7	1.21E+03	5.54E+02	5.08E+02	4.21E+03	7.54E-01	1.12E+00	1.32E+00	2.00E+00	2.61E-01	6.68E+00	9.74E+00	positive	-6.60E+00	8.98E+00	6.37E+00	positive	NA	NA	NA	positive	MW-32-190
MW 36 24	Q2-2011	4/28/2011	14:34	3.77E+03	7.06E+02	5.08E+02	9.56E+03	1.38E+10	1.52E+00	1.52E+00	2.00E+00	6.41E-11	7.68E+00	8.47E+00	positive	2.82E+00	7.48E+00	9.35E+00	positive	NA	NA	NA	positive	MW 36 24
MW-36-41	Q2-2011	4/28/2011	15:19	8.17E+03	1.14E+03	5.4E+02	2.10E+04	3.3.E+10	1.75E+00	1.36E+00	7.99E+00	2.18E+00	5.26E+00	1.07E+01	positive	-2.96E-0.	1.04E+01	1.12E+01	positive	NA	NA	NA	positive	MW-36-41
MW-36-52	Q2-2011	4/28/2011	14:18	5.84E+03	9.36E+02	5.5E+02	1.48E+04	3.4.E+10	1.56E+00	1.11E+00	3.14E+00	4.29E+00	8.42E+00	1.03E+01	positive	-2.61E+00	8.50E+00	8.36E+00	positive	NA	NA	NA	positive	MW-36-52
MW-37-22	Q2-2011	4/28/2011	12:05	6.57E+03	9.56E+02	5.4E+02	9.19E+03	8.72E+10	2.91E+00	2.05E+00	2.20E+01	7.12E-01	6.96E+00	7.67E+00	positive	5.14E-01	7.86E+00	8.62E+00	positive	NA	NA	NA	positive	MW-37-22
MW-37-32	Q2-2011	4/28/2011	12:21	4.11E+03	7.38E+02	5.5E+02	9.32E+03	2.62E+11	3.76E+00	1.68E+00	3.54E+01	2.56E+00	1.20E+01	1.42E+01	positive	-1.92E+00	1.09E+01	1.09E+01	positive	NA	NA	NA	positive	MW-37-32
MW 37 40	Q2-2011	4/28/2011	11:31	3.32E+03	8.32E+02	5.33E+02	9.02E+03	2.30E+11	3.66E+00	1.65E+00	3.54E+01	2.10E+00	6.02E+00	1.09E+01	positive	6.47E-01	8.94E+00	1.02E+01	positive	NA	NA	NA	positive	MW 37 40
MW-37-57	Q2-2011	4/28/2011	12:..7	5.81E+03	8.88E+02	5.07E+02	9.62E+03	1.58E+11	3.54E+00	2.00E+00	3.68E+01	2.18E+00	1.72E+01	8.67E+00	positive	-1.42E+00	8.36E+00	8.80E+00	positive	NA	NA	NA	positive	MW-37-57
MW-39-67	Q2-2011	4/26/2011	14:52	1.93E+04	9.54E+02	4.12E+02	1.00E+03	1.76E+10	1.45E+00	1.5E+00	3.30E+00	-8.1.E-11	8.22E+00	8.78E+00	positive	-4.05E+00	9.42E+00	9.00E+00	positive	NA	NA	NA	positive	MW-39-67
MW-39-67	Q2-2011 Mid	7/15/2011	13:42	2.24E+03	6.12E+02	4.46E+02	1.00E+03	2.55E-01	1.11E+00	1.34E+00	3.30E+00	-1.1.E-11	8.28E+00	9.19E+00	positive	-2.42E-02	9.72E+00	1.12E+01	positive	NA	NA	NA	positive	MW-39-67
MW-39-84	Q2-2011	4/26/2011	14:23	4.40E+03	4.12E+02	4.3E+02	1.00E+03	-4.10E-11	1.13E+00	1.5E+00	2.10E+00	-9.2.E-11	7.44E+00	7.68E+00	positive	-4.10E-01	9.74E+00	7.41E+00	positive	NA	NA	NA	positive	MW-39-84
MW 39 84	Q2-2011 Mid	7/15/2011	14:13	3.55E+02	4.17E+02	4.40E+02	1.00E+03	6.51E-01	1.15E+00	1.22E+00	2.10E+00	1.78E+00	7.43E+00	1.71E+01	positive	4.89E+00	9.45E+00	8.20E+00	positive	NA	NA	NA	positive	MW 39 84
MW-39-102	Q2-2011	4/26/2011	14:33	1.43E+04	1.39E+03	4.78E+02	1.00E+03	1.08E+10	1.85E+00	2.05E+00	3.10E+00	9.48E+01	2.08E+01	9.96E+00	positive	6.03E+00	7.96E+00	1.07E+01	positive	NA	NA	NA	positive	MW-39-102
MW-39-102	Q2-2011 Mid	7/15/2011	14:02	1.24E+04	1.20E+03	4.56E+02	1.00E+03	5.83E-01	1.05E+00	1.2E+00	3.10E+00	1.70E+00	8.76E+00	1.02E+01	positive	-8.84E-0.	9.42E+00	9.35E+00	positive	NA	NA	NA	positive	MW-39-182
MW-39-124	Q2-2011	4/26/2011	13:01	1.51E+02	3.70E+02	4.5E+02	1.00E+03	5.21E-01	1.53E+00	1.55E+00	4.50E+00	3.43E+00	6.56E+00	8.57E+00	positive	3.07E+00	7.52E+00	9.27E+00	positive	NA	NA	NA	positive	MW-39-124
MW-39-124	Q2-2011 Mid	7/15/2011	11:44	4.48E+01	2.72E+02	4.39E+02	1.00E+03	8.72E-01	1.13E+00	1.42E+00	4.50E+00	-4.1.E+10	1.15E+01	1.15E+01	positive	1.62E+00	9.52E+00	9.32E+00	positive	NA	NA	NA	positive	MW-39-124
MW 39 183	Q2-2011	4/26/2011	11:35	1.15E+02	3.54E+02	4.02E+02	1.00E+03	1.12E+10	1.56E+00	1.67E+00	2.00E+00	7.46E+00	8.88E+00	1.09E+01	positive	1.52E+00	8.63E+00	8.94E+00	positive	NA	NA	NA	positive	MW 39 183
MW-39-183	Q2-2011 Mid	7/15/2011	11:49	7.32E+01	3.75E+02	4.35E+02	1.00E+03	3.45E-01	1.05E+00	1.15E+00	2.00E+00	2.51E+00	1.08E+01	1.22E+01	positive	-5.37E+00	1.30E+01	1.37E+01	positive	NA	NA	NA	positive	MW-39-183
MW-39-195	Q2-2011	4/26/2011	12:18	2.54E+03	6.34E+02	4.20E+02	1.00E+03	1.88E+10	1.75E+00	1.75E+00	2.00E+00	-2.03E+00	1.11E+01	1.23E+01	positive	4.62E+00	8.70E+00	1.13E+01	positive	NA	NA	NA	positive	MW-39-195
MW-39-195	Q2-2011 Mid	7/15/2011	11:..3	4.19E+03	7.56E+02	4.55E+02	1.00E+03	1.10E+10	1.72E+00	1.93E+00	2.00E+00	2.79E+00	8.46E+00	9.76E+00	positive	6.38E-01	1.01E+01	1.08E+01	positive	NA	NA	NA	positive	MW-39-195
MW-40-27	Q2-2011	4/27/2011	13:29	1.77E+02	3.50E+02	4.07E+02	1.00E+03	1.16E+10	1.46E+00	2.00E+00	1.91E+00	1.40E+00	9.77E+00	1.15E+01	positive	-9.20E-0.	9.60E+00	1.15E+01	positive	NA	NA	NA	positive	MW-40-27
MW-40-27	Q2-2011 Mid	7/27/2011	15:..2	3.59E+01	3.30E+02	3.13E+02	1.00E+03	4.37E-11	1.41E+00	1.92E+00	2.00E+00	2.11E+00	7.35E+00	7.66E+00	positive	1.36E+00	9.03E+00	1.03E+01	positive	NA	NA	NA	positive	MW-40-27
MW-40-46	Q2-2011	4/29/2011	13:11	7.82E+01	3.54E+02	4.05E+02	1.00E+03	-1.35E-01****	1.88E+00	1.75E+00	2.00E+00	-9.9.E-11	8.46E+00	9.08E+00	positive	-5.98E+00	9.84E+00	9.04E+00	positive	NA	NA	NA	positive	MW-40-46
MW-40-46	Q2-2011 Mid	7/27/2011	15:55	1.35E+02	3.39E+02	3.44E+02	1.00E+03	-9.06E-11	1.26E+00	1.86E+00	2.00E+00	2.28E+00	8.85E+00	1.01E+01	positive	5.01E-01	9.30E+00	1.03E+01	positive	NA	NA	NA	positive	MW-40-46
MW-40-81	Q2-2011	4/29/2011	11:08	3.39E+02	4.12E+02	4.36E+02	1.00E+03	1.07E+10	1.55E+00	1.75E+00	2.00E+00	2.05E+00	6.90E+00	8.51E+00	positive	-2.66E-0.	8.04E+00	8.83E+00	positive	NA	NA	NA	positive	MW-40-81
MW-40-81	Q2-2011 Mid	7/27/2011	13:34	-1.18E+02	2.99E+02	3.40E+02	1.00E+03	6.33E-01	1.4E+00	1.9E+00	2.00E+00	-3.4.E-11	7.46E+00	8.67E+00	positive	-1.03E+00	8.67E+00	8.91E+00	positive	NA	NA	NA	positive	MW-40-81
MW-40-103	Q2-2011	4/29/2011	11:27	2.20E+02	4.36E+02	4.20E+02	1.00E+03	2.43E-01	1.42E+00	1.67E+00	2.00E+00	5.53E+00	7.14E+00	9.22E+00	positive	2.29E+00	7.26E+00	9.80E+00	positive	NA	NA	NA	positive	MW-40-180
MW-40-103	Q2-2011 Mid	7/27/2011	13:39	1.17E+02	3.12E+02	3.50E+02	1.00E+03	-9.50E-11	1.41E+00	1.98E+00	2.00E+00	2.79E+00	8.03E+00	1.04E+01	positive	7.10E-01	1.08E+01	1.20E+01	positive	NA	NA	NA	positive	MW-40-180
MW-40-127	Q2-2011	4/29/2011	11:36	-2.27E+01	3.50E+02	4.32E+02	1.00E+03	5.71E-01	1.72E+00	2.05E+00	2.00E+00	-2.1.E-11	8.26E+00	8.83E+00	positive	-1.62E+00	9.68E+00	9.87E+00	positive	NA	NA	NA	positive	MW-40-127
MW-40-127	Q2-2011 Mid	7/27/2011	13:56	1.56E+02	3.15E+02	3.50E+02	1.00E+03	4.81E-01	1.64E+00	1.92E+00	2.00E+00	1.48E+00	9.06E+00	1.03E+01	positive	-8.00E+00	1.02E+01	1.94E+01	positive	NA	NA	NA	positive	MW-40-127
MW-40-162	Q2-2011	4/29/2011	12:20	1.35E+02	3.70E+02	4.35E+02	1.00E+03	8.71E-01	1.34E+00	1.42E+00	2.00E+00	5.54E+00	1.23E+01	1.42E+01	positive	4.43E-01	9.50E+00	1.08E+01	positive	NA	NA	NA	positive	MW-40-184
MW-40-162	Q2-2011 Mid	7/27/2011	14:40	5.54E+00	2.77E+02	3.44E+02	1.00E+03	-8.61E-11	1.52E+00	1.92E+00	2.00E+00	-2.44E+00	7.21E+00	8.54E+00	positive	-9.92E-0.	8.70E+00	9.41E+00	positive	NA	NA	NA	positive	MW-40-184
MW-41-40	Q2-2011	4/20/2011	13:31	4.51E+03	2.36E+02	4.55E+02	1.00E+03	2.32E+10	1.57E+00	1.44E+00	7.28E+01	2.70E+00	6.27E+00	1.06E+01	positive	3.02E+00	1.06E+01	1.25E+01	positive	NA	NA	NA	positive	MW-41-40
MW-41-40	Q2-2011 Mid	7/15/2011	12:10	6.99E+02	4.59E+02	4.41E+02	1.00E+03	2.48E+10	1.35E+00	1.15E+00	7.28E+01	-1.9.E+00	1.09E+01	1.14E+01	positive	-1.11E+00	8.94E+00	9.13E+00	positive	NA	NA	NA	positive	MW-41-40
MW-41-63	Q2-2011	4/20/2011	13:..3	7.58E+02	4.30E+02	4.72E+02	1.00E+03	-7.72E-11	1.51E+00	2.02E+00	7.36E+00	2.53E+00	8.52E+00	1.01E+01	positive	4.02E+00	8.74E+00	1.09E+01	positive	NA	NA	NA	positive	MW-41-63
MW-41-63	Q2-2011 Mid	7/15/2011	12:31	7.14E+02	4.56E+02	4.55E+02	1.00E+03	3.02E+10	1.5E+00	1.3E+00	7.36E+00	2.36E+00	8.88E+00	1.03E+01	positive	4.47E-01	9.81E+00	7.51E+00	positive	NA	NA	NA	positive	MW-41-63
MW-42-45	Q2-2011	4/21/2011	14:04	1.71E+03	5.30E+02	4.08E+02	5.16E+04	5.45E+10	2.15E+00	1.45E+00	9.00E+01	2.15E+04	2.08E+03	2.08E+01	6.50E+04	3.41E+08	9.16E+01	1.05E+01	positive	1.90E+02	2.72E+01	1.73E+01	6.74E+02	MW-42-49
MW-42-78	Q2-2011	4/21/2011	13:45	6.76E+02	4.78E+02	4.77E+02	1.00E+03	4.25E+11	1.15E+00	1.3E+00	2.00E+00	-3.71E+11	6.16E+01	9.83E+01	positive	3.58E+08	8.56E+08	1.11E+01	positive	5.89E-01	1.49E-01	1.72E-01	positive	MW-42-78
MW-43-28	Q2-2011	4/21/2011	11:..5	2.34E+02	4.30E+02	4.72E+02	1.00E+03	1.46E+10	1.9E+00	2.04E+00	2.00E+00	-9.31E-11	8.74E+00	9.22E+00	positive	4.50E+08	8.60E+00	1.09E+01	positive	NA	NA	NA	positive	MW-43-28
MW-43-62	Q2-2011	4/21/2011	11:00	1.35E+02	4.12E+02	4.72E+02	1.00E+03	-4.65E-11	1.67E+00	2.18E+00	2.00E+00	-1.9.E+00	8.08E+00	9.35E+00	positive	-2.34E+00	8.70E+00	8.43E+00	positive	NA	NA	NA	positive	MW-43-62
MW-44-66	Q2-2011	4/26/2011	13:..7	6.57E+02	4.08E+02	4.05E+02	1.00E+03	7.03E-01	1.5E+00	1.4E+00	2.00E+00	-1.1.E-11	5.36E+00	1.03E+01	positive	3.49E+00	1.07E+01	1.31E+01	positive	NA	NA	NA	positive	MW-44-66
MW-44-66	Q2-2011 Mid	7/19/2011	15:39	1.52E+03	1.39E+02	4.32E+02	1.00E+03	-7.04E-11	6.46E-11	1.0E+00	2.00E+00	-4.61E+00	5.66E+00	1.16E+01	positive	-5.76E+03	1.31E+01	9.79E+00	positive	NA	NA	NA	positive	MW-44-66
MW-44-102	Q2-2011	4/26/2011	12:..8	6.70E+02	4.14E+02	3.99E+02	1.00E+03	1.09E+10	1.41E+00	1.45E+00	2.00E+00	3.59E-01	7.47E+00	8.15E+00	positive	-2.06E+01	7.86E+00	7.82E+00	positive	NA	NA	NA	positive	MW-44-102
MW-44-102	Q2-2011 Mid	7/19/2011	10:53	6.38E+02	4.50E+02	4.39E+02	1.00E+03	2.55E-01	1.02E+00	1.15E+00	2.00E+00	1.01E+00	6.63E+00	7.60E+00	positive	1.28E+00	6.27E+00	7.47E+00	positive	NA	NA	NA	positive	MW-44-102
MW-45-42	Q2-2011	4/20/2011	14:09	8.56E+03	1.33E+03	4.68E+02	5.90E+03	1.45E+10	1.5E+00	1.61E+00	2.00E+00	7.04E-01	6.50E+00	7.46E+00	positive	7.13E+00	1.07E+01	1.29E+01	positive	NA	NA	NA	positive	MW-45-42
MW-45-42	Q2-2011 Mid	7/25/2011	13:13	5.46E+04	2.60E+03	4.36E+02	5.90E+03	1.14E+10	1.3E+00	1.3E+00	2.00E+00	1.09E+00	8.41E+00	8.65E+00	positive	-2.66E+00	1.01E+01	1.05E+01	positive	NA	NA	NA	positive	MW-45-42
MW-45-61	Q2-2011	4/28/2011	10:07	2.32E+02	4.12E+02	4.78E+02	2.65E+03	7.21E-01	1.5E+00	1.51E+00	2.00E+00	-4.02E+00	7.76E+00	9.55E+00	positive	-8.47E-0.	7.56E+00	7.91E+00	positive	NA	NA	NA	positive	MW-45-61
MW-45-61	Q2-2011 Mid	7/25/2011	10:00	8.55E+03	8.49E+02	4.30E+02	9.66E+03	9.47E-01	1.1E+00	1.7E+00	2.00E+00	1.42E+00	7.79E+00	6.69E+00	positive	2.07E+00	9.34E+00	9.68E+00	positive	NA	NA	NA	positive	MW-45-61
MW-46	Q2-2011	4/25/2011	11:..9	5.25E+03	7.54E+02	3.95E+02	1.34E+03	1.48E+10	1.72E+00	1.8E+00	2.00E+00	-2.48E+00	7.24E+00	7.06E+00	positive	-4.44E+00	7.44E+00	6.77E+00	positive	NA	NA	NA	positive	MW-46
MW-46	Q2-2011 Mid	7/13/2011	13:39	5.38E+03	7.17E+02	4.26E+02	1.34E+03	8.44E-01	1.15E+00	1.2E+00	2.00E+00	-1.71E+00	8.64E+00	1.04E+01	positive	-8.54E-0.	1.02E+01	1.08E+01	positive	NA	NA	NA	positive	MW-46
MW-47-56	Q2-2011 Mid	7/6/2011	15:12	3.52E+03	6.57E+02	4.42E+02	**	4.65E-01	1.08E+00	1.2E+00	**	-1.56E+00	1.11E+01	1.25E+01	**	1.45E-01	7.41E+00	8.25E+00	**	-1.99E+01	2.78E-01	2.50E-01	**	MW-47-56
MW-47-80	Q2-2011 Mid	7/6/2011	14:27	1.36E+05	3.30E+03	4.08E+02	**	1.93E+10	1.52E+00	1.22E+00	**	-1.27E+00	1.37E+01	8.73E+01	**	-2.43E+01	7.00E+00	7.13E+00	**	3.37E+00	2.59E-01	2.69E-01	**	MW-47-80
MW-49-36	Q2-2011	4/14/2011	11:18	3.79E+03	7.18E+02	4.08E+02	6.93E+03	1.76E+11	3.0E+00	9.8E+00	3.79E+01	4.75E+00	1.07E+01	1.27E+01	positive	4.81E+00	1.20E+01	1.14E+01	positive	1.81E+00	1.50E-01	1.79E-01	positive	MW-49-36
MW-49-42	Q2-2011	4/15/2011	11:55	1.80E+03	6.34E+02	4.78E+02	4.97E+03	1.57E+11	3.34E+00	2.07E+00	3.72E+01	-5.72E+00	7.62E+00	6.17E+00	positive	1.15E-01	7.72E+00	8.33E+00	positive	6.58E+00	1.55E-01	1.73E-01	positive	MW-49-42
MW-49-65	Q2-2011	4/15/2011	11:50	2.38E+03	6.48E+02	4.81E+02	3.03E+03	1.62E+11	3.12E+00	1.65E+00	3.62E+01	2.59E+00	5.66E+00	1.12E+01	positive	4.62E-02	1.01E+01	1.10E+01	positive	4.11E+00	1.49E-01	1.68E-01	positive	MW-49-65
MW-50-42	Q2-2011	5/3/2011	14:05	5.57E+03	2.53E+02	3.61E+02	1.94E+03	9.52E+10	2.42E+00	1.04E+00	1.10E+01	1.91E+00	5.44E+00	1.07E+01	positive	5.79E-01	1.02E+01	1.16E+01	positive	5.86E-01	1.99E-01	1.92E-01	positive	MW-50-42
MW-50-42	Q2-2011 Mid	7/25/2011	12:..8	1.33E+03	4.39E+02	4.42E+02	1.94E+03	5.0.E+10	2.05E+00	2.02E+00	1.10E+01	-1.1.E+00	7.06E+00	8.36E+00	positive	6.63E-02	8.16E+00	9.04E+00	positive	3.31E+00	1.7E-01	1.9E-01	positive	MW-50-42
MW-50-66	Q2-2011	5/3/2011	12:07	4.71E+03	7.47E+02	3.45E+02	5.90E+03	2.63E+11	3.5E+00	1.08E+00	5.24E+01	1.08E+00	1.77E+01	9.05E+00	positive	-2.37E+01	9.06E+00	9.17E+00	positive	8.41E+00	1.70E-01	1.82E-01	positive	MW-50-66
MW-50-66	Q2-2011 Mid	7/25/2011	12:26	6.50E+03	9.73E+02	4.48E+02	9.90E+03	2.6.E+11	4.0E+00	1.3E+00	5.24E+01	-4.5.E-11	7.02E+00	7.74E+00	positive	3.81E+00	8.55E+00	1.07E+01	positive	1.32E+01	1.66E-01	1.81E-01	positive	MW-50-66
MW-51-40	Q2-2011	4/29/2011	10:41	3.53E+02	4.14E+02	4.35E+02	1.00E+03	2.21E-01	1.37E+00	1.55E+00	2.00E+00	-3.4.E+00	5.48E+00	9.62E+00	positive	6.20E+00	1.11E+01	1.40E+01	positive	NA	NA	NA	positive	MW-51-40
MW-51-49	Q2-2011	4/29/2011	10:27	1.11E+02	3.54E+02	4.35E+02	1.00E+03	1.03E+10	1.6.E+00	1.8.E+00	2.00E+00	-4.9.E-11	5.56E+00	8.45E+00	positive	-8.58.E-0.	8.08E+00	8.53E+00	positive	NA	NA	NA	positive	MW-51-49
MW-51-104	Q2-2011	4/29/2011	12:55	1.77E+02	3.90E+02	4.32E+02	1.00E+03	1.4.E+10	1.4E+00	1.4E+00	2.00E+00	-1.9.E+00	1.08E+01	1.25E+01	positive	-6.79E-0.	1.10E+01	1.20E+01	positive	NA	NA	NA	positive	MW-51-104
MW-51-115	Q2-2011	4/29/2011	13:..6	6.10E+02	3.56E+02	4.15E+02	1.00E+03	1.14E+10	1.5E+00	1.6E+00	2.00E+00	-5.53E+00	1.11E+01	1.17E+01	positive	-5.69E-0.	9.00E+00	9.56E+00	positive	NA	NA	NA	positive	MW-51-115
MW-51-163	Q2-2011	4/29/2011	13:..9	4.58E+01	3.56E+02	4.30E+02	1.00E+03	5.27E-01	1.45E+00	1.65E+00	2.00E+00	2.26E+00	8.40E+00	9.72E+00	positive	9.25E-01	7.72E+00	8.87E+00	positive	NA	NA	NA	positive	MW-51-163
MW-51-189	Q2-2011	4/29/2011	12:52	2.32E+02	3.96E+02	4.33E+02	1.00E+03	1.28E+10	1.5E+00	1.57E+00	2.00E+00	-8.0.E-11	5.82E+00	6.25E+00	positive	-5.07E+00	9.48E+00	8.89E+00	positive	NA	NA	NA	positive	MW-51-189
MW-52-11	Q2-2011	4/22/2011	12:..0	3.34E+02	4.38E+02	4.50E+02	1.00E+03	1.24E+01	1.3E+00	1.6E+00	2.00E+00	2.27E+00	1.02E+01	1.17E+01	positive	1.24E+01	9.92E+00	1.24E+01	positive	NA	NA	NA	positive	MW-52-11
MW-52-11	Q2-2011 Mid	7/26/2011	12:32	3.39E+02	3.39E+02	4.21E+02	1.00E+03	1.93E-01	1.45E+00	1.74E+00	2.00E+00	1.71E+00	7.76E+00	9.71E+00	positive	-2.27E+0	8.43E+00	8.63E+00	positive	NA	NA	NA	positive	MW-52-11
MW-52-18	Q2-2011	4/22/2011	12:..6	7.31E+01	3.76E+02	4.35E+02	1.00E+03	1.37E+10	1.3E+00	1.4E+00	2.00E+00	5.81E+00	1.29E+01	9.01E+01	positive	-1.14E+01	9.44E+00	9.90E+00	positive	NA	NA	NA	positive	MW-52-18
MW-52-18	Q2-2011 Mid	7/26/2011	14:39	2.52E+02	3.17E+02	4.22E+02	1.00E+03	1.06E+10	1.62E+00	1.7E+00	2.00E+00	2.80E+00	6.45E+00	8.08E+00	positive	-3.24E+00	8.10E+00	7.84E+00	positive	NA	NA	NA	positive	MW-52-18
MW-52-48	Q2-2011	4/22/2011	12:..8	1.36E+02	3.12E+02	4.36E+02	1.00E+03	1.63E-01	1.37E+00	1.62E+00	2.00E+00	-4.55E+00	7.58E+00	7.31E+00	positive	1.35E+00	7.80E+00	9.17E+00	positive	NA	NA	NA	positive	MW-52-48
MW-52-48	Q2-2011 Mid	7/26/2011	15:08	7.58E+01	3.56E+02	4.21E+02	1.00E+03	4.55E-11	1.4E+00	1.4E+00	2.00E+00	-1.34E+00	8.66E+00	1.07E+01	positive	-7.68E-0.	8.45E+00	1.01E+01	positive	NA	NA	NA	positive	MW-52-48
MW-52-64	Q2-2011	4/22/2011	15:23	-2.26E+01	3.58E+02	4.32E+02	1.00E+03	5.12E-01	1.1E+00	1.2E+00	2.00E+00	1.07E+00	6.72E+00	7.70E+00	positive	-5.05E+0	8.20E+00	6.10E+00	positive	NA	NA	NA	positive	MW-52-64
MW-52-64	Q2-2011 Mid	7/27/2011	10:45	1.35E+02	3.31E+02	4.31E+02	1.00E+03	-4.68E-11	8.47E-11	1.2E+00	2.00E+00	-2.48E+00	7.17E+00	8.34E+00	positive	6.66E-01	8.13E+00	9.05E+00	positive	NA	NA	NA	positive	MW-52-64
MW-52-122	Q2-2011	4/22/2011	10:45	-2.27E+01	3.50E+02	4.33E+02	1.00E+03	1.14E+10

IPEC00267146

TABLE 4
2011 2nd QUARTER
GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE COLLECTION		ANALYSIS RESULTS[2]																Well ID
				TRITIUM (pCi/L)				Sr-90 (pCi/L)				Cs-137 (pCi/L)				Co-60 (pCi/L)				Ni-63 (pCi/L)				
		Date	Time	Result	Std. Dev.[3]	MDC	LL[3]	Result	Std. Dev.[3]	MDC	LL[3]	Result	Std. Dev.[3]	MDC	LL[3]	Result	Std. Dev.[3]	MDC	LL[3]	Result	Std. Dev.[3]	MDC	LL[3]	
MW-53-02	Q2-2011	4/18/201.	12 45	6 24E+02	4 56E+02	4 50E+02	3 02E+03	4 43E-01	1 45E+00	1 67E+00	4 46E+00	-4 57E+00	5 82E+00	9 80E+00	positive	3 12E+00	8 70E+00	1 07E+01	positive	-5 06E-01	1 40E 01	1 72E 01	positive	MW-53-02
MW-53-120	Q2-2011	4/18/201	11 52	4 11E+03	7 72E+02	4 75E+02	1 85E+04	3 55E+01	4 45E+00	1 67E+00	6 68E+01	1 38E+00	5 82E+00	9 98E+00	positive	4 87E-01	9 24E+00	1 02E+01	positive	1 76E+01	1 77E-01	1 67E-01	positive	MW-53-120
MW-54-37	Q2-2011	4/12/201.	12 02	5 16E+03	3 40E+02	4 76E+02	2 71E+03	4 9 .E+10	2 01E+00	1 65E+00	9 20E+00	2 95E+00	5 26E+00	9 69E+00	positive	2 50E+00	8 26E+00	9 96E+00	positive	3 16E+00	1 45E-01	1 65E-01	positive	MW-54-37
MW-54-37	Q2-2011 Mid	7/18/201.	13 45	2 79E+04	1 37E+03	4 42E+02	2 71E+03	4 34E+10	2 15E+00	1 85E+00	9 20E+00	-1 17E+00	6 36E+00	6 58E+00	positive	4 07E+00	9 21E+00	1 09E+01	positive	1 36E+01	1 91E-01	2 07E-01	positive	MW-54-37
MW-54-58	Q2-2011	4/12/201.	12 04	9 34E+02	5 10E+02	4 79E+02	1 48E+03	1 15E+10	1 84E+00	2 01E+00	3 43E+00	1 70E+00	5 58E+00	9 66E+00	positive	1 14E+00	8 74E+00	9 95E+00	positive	5 31E+00	1 58E-01	1 78E-01	positive	MW-54-58
MW-54-58	Q2-2011 Mid	7/18/201.	13 33	2 43E+03	6 12E+02	4 44E+02	1 48E+03	1 49E+10	1 21E+00	1 14E+00	3 43E+00	-1 91E+00	6 82E+00	9 27E+00	positive	2 35E+01	9 09E+00	1 01E+01	positive	1 33E+01	1 97E 01	2 .3E 01	positive	MW-54-58
MW-54-123	Q2-2011	4/12/201	12 12	8 34E+02	4 88E+02	4 77E+02	1 80E+03	9 44E+10	1 99E+00	1 75E+00	8 14E+00	-5 74E+00	5 14E+00	7 68E+00	positive	1 86E+00	8 04E+00	9 55E+00	positive	-3 35E+00	1 48E-01	1 75E-01	positive	MW-54-123
MW-54-123	Q2-2011 Mid	7/18/201.	14 06	5 70E+02	4 44E+02	4 46E+02	1 30E+03	7 15E-01	1 02E+00	1 07E+00	3 14E+00	1 92E+00	5 66E+00	9 03E+00	positive	3 87E-02	6 30E+00	6 97E+00	positive	6 27E+00	1 14E-01	2 04E-01	positive	MW-54-123
MW-54-144	Q2-2011	4/12/201.	9 50	1 48E+03	5 38E+02	4 79E+02	2 64E+03	1 20E+11	2 92E+00	1 81E+00	3 53E+01	6 43E+00	7 44E+00	9 58E+00	positive	-4 65E+00	9 58E+00	8 86E+00	positive	-2 75E+00	1 48E-01	1 74E-01	positive	MW-54-144
MW-54-144	Q2-2011 Mid	7/18/201.	12 18	4 34E+03	7 45E+02	4 42E+02	2 64E+03	1 13E+11	2 44E+00	1 2E+00	2 53E+01	2 37E+00	7 47E+00	8 78E+00	positive	-5 49E+00	8 91E+00	8 88E+00	positive	1 53E+01	1 87E-01	2 03E-01	positive	MW-54-144
MW-54-173	Q2-2011	4/12/201.	9 26	1 26E+03	5 46E+02	4 78E+02	3 02E+03	3 9 .E+10	1 92E+00	1 5E+00	8 22E+01	-1 25E+01	1 38E+01	1 73E+01	positive	5 93E+00	9 66E+00	1 25E+01	positive	-2 71E+00	1 50E 01	1 76E 01	positive	MW-54-173
MW-54-173	Q2-2011 Mid	7/18/201.	12 10	1 48E+03	5 28E+02	4 40E+02	3 63E+03	4 54E+10	1 64E+00	1 11E+00	2 2E+01	3 99E-01	6 84E+00	7 45E+00	positive	1 10E+00	6 51E+00	7 50E+00	positive	-5 43E+00	1 56E-01	1 75E-01	positive	MW-54-173
MW-54-193	Q2-2011	4/12/201.	10 01	2 37E+03	6 18E+02	4 78E+02	3 49E+03	1 90E+11	3 3E+00	1 7E+00	4 03E+01	1 33E+00	7 86E+00	9 23E+00	positive	8 70E-01	9 00E+00	1 00E+01	positive	3 35E-01	1 58E-01	1 62E-01	positive	MW-54-193
MW-54-193	Q2-2011 Mid	7/18/201.	12 .4	2 37E+03	6 36E+02	4 45E+02	3 49E+03	1 75E+11	2 85E+00	1 12E+00	4 03E+01	2 24E+00	1 16E+01	1 29E+01	positive	-2 72E+00	1 18E+01	1 22E+01	positive	-3 86E+00	1 55E-01	1 74E-01	positive	MW-54-193
MW-56-53	Q2-2011	4/27/201.	12 08	1 18E+02	3 48E+02	3 97E+02	1 19E+03	-3 07E-12	1 22E+00	1 6E+00	2 00E+01	2 04E+00	5 80E+00	1 01E+01	positive	-1 64E+01	8 42E+00	8 44E+01	positive	NA	NA	NA	positive	MW-56-53
MW-56-53	Q2-2011 Mid	7/6/2011	12 16	2 32E+02	2 72E+02	2 83E+02	1 19E+03	-3 60E-11	7 89E-01	1 12E+00	2 00E+01	2 92E+00	5 77E+00	9 45E+00	positive	-4 34E+00	8 82E+00	9 56E+00	positive	-4 67E+00	2 28E 01	2 56E 01	positive	MW-56-53
MW-56-83	Q2-2011	4/27/201.	13 46	2 56E+04	3 49E+03	6 39E+03	6 39E+03	3 87E+10	1 65E+00	1 28E+00	3 98E+01	-1 05E+00	1 14E+01	1 33E+01	positive	-1 27E+01	9 50E+00	1 01E+01	positive	NA	NA	NA	positive	MW-56-83
MW-56-83	Q2-2011 Mid	7/6/2011	11 38	8 42E+04	3 54E+03	2 81E+03	6 39E+03	1 45E+10	1 27E+00	1 15E+00	3 98E+01	2 77E+00	2 01E+01	9 44E+01	positive	4 20E-01	8 16E+00	9 20E+01	positive	-1 36E+01	2 .5E-01	2 46E-01	positive	MW-56-83
MW-57-11	Q2-2011	5/4/2011	10 38	6 40E+03	6 14E+02	3 41E+02	8 44E+03	3 1 .E+11	3 62E+00	1 04E+00	4 92E+01	1 74E+00	8 32E+00	9 74E+00	positive	2 05E+00	8 40E+00	9 72E+00	positive	6 20E+00	1 86E-01	1 25E-01	positive	MW-57-11
MW-57-11	Q2-2011 Mid	7/18/201.	11 57	7 36E+03	9 18E+02	4 45E+02	8 44E+03	3 87E+10	5 2E+00	2 11E+00	4 92E+01	3 27E-01	6 88E+00	9 84E+00	positive	-2 34E+01	9 18E+00	9 39E+00	positive	-6 76E+00	1 48E-01	1 67E-01	positive	MW-57-11
MW-57-20	Q2-2011	5/4/2011	10 17	2 32E+04	1 12E+03	3 64E+03	2 04E+03	1 76E+10	1 11E+00	9 44E-01	2 24E+01	1 48E+00	7 52E+00	8 43E+00	positive	-7 32E-0.	8 22E+00	1 02E+01	positive	-5 44E+00	1 48E-01	1 81E-01	positive	MW-57-20
MW-57-20	Q2-2011 Mid	7/18/201.	12 09	5 81E+04	1 34E+03	4 45E+03	2 04E+03	1 27E+10	1 06E+00	1 01E+00	2 24E+01	-5 12E+00	7 71E+00	7 35E+00	positive	9 16E-01	8 67E+00	9 92E+00	positive	-5 69E+00	1 93E-01	2 20E-01	positive	MW-57-20
MW-57-45	Q2-2011	5/4/2011	11 03	1 55E+04	8 48E+02	3 53E+02	2 38E+03	9 05E-01	9 7 .E-11	9 60E-11	2 60E+01	7 40E+00	5 54E+00	1 21E+01	positive	-1 84E+00	9 48E+00	9 59E+00	positive	6 39E+00	1 78E-01	1 88E-01	positive	MW-57-45
MW-57-45	Q2-2011 Mid	7/18/201.	12 16	2 53E+04	1 30E+03	4 47E+02	2 38E+03	1 28E+10	1 32E+00	1 34E+00	2 60E+01	-2 01E-11	8 16E+00	8 83E+00	positive	-7 58E-0.	9 39E+00	9 67E+00	positive	-1 04E+01	1 53E-01	1 74E-01	positive	MW-57-45
MW-58-26	Q2-2011	5/3/2011	9 58	7 22E+02	4 30E+02	4 21E+02	1 00E+03	3 15E-01	1 15E+00	1 32E+00	2 00E+01	2 29E+00	5 80E+00	6 89E+00	positive	-6 42E+01	8 80E+00	8 00E+01	positive	NA	NA	NA	positive	MW-58-26
MW-58-26	Q2-2011 Mid	7/5/2011	13 39	2 59E+03	5 46E+02	4 47E+02	1 00E+03	-3 22E-11	1 1E+00	1 41E+00	2 00E+01	7 41E-01	6 84E+00	7 01E+00	positive	1 22E+00	8 32E+00	6 39E+00	positive	-1 01E+01	1 99E-01	2 25E-01	positive	MW-58-26
MW-58-65	Q2-2011	5/3/2011	10 .1	3 29E+02	3 78E+02	3 97E+02	1 00E+03	-4 47E-11	1 01E+00	1 44E+00	2 00E+01	1 93E+00	5 92E+00	7 00E+00	positive	-7 81E-0.	7 04E+00	7 26E+00	positive	NA	NA	NA	positive	MW-58-65
MW-58-65	Q2-2011 Mid	7/5/2011	13 30	7 26E+02	3 33E+02	2 83E+02	1 00E+03	4 11E-01	9 12E-11	1 0E+00	2 00E+01	5 29E+00	1 05E+01	1 25E+01	positive	1 47E+00	7 53E+00	8 78E+00	positive	3 44E-01	2 03E-01	2 27E-01	positive	MW-58-65
MW-59-32	Q2-2011 Mid	7/20/201.	9 59	1 56E+02	3 30E+02	4 38E+02	**	5 83E-01	1 14E+00	1 27E+00	**	-1 75E+00	7 92E+00	8 02E+00	**	-2 58E+00	9 78E+00	1 02E+01	**	-1 40E+01	1 62E-01	2 07E-01	**	MW-59-32
MW-59-45	Q2-2011 Mid	7/20/201.	9 59	5 24E+02	4 35E+02	4 43E+02	**	-1 01E+00	1 05E+00	1 45E+00	**	1 81E+00	6 52E+00	9 88E+00	**	2 79E+00	9 48E+00	1 15E+01	**	-1 12E+01	1 53E-01	2 08E-01	**	MW-59-45
MW-59-68	Q2-2011 Mid	7/20/201.	10 .4	1 15E+02	3 30E+02	4 42E+02	**	1 11E-01	7 2 .E-11	9 0 .E-11	**	2 03E+00	5 38E+00	1 09E+01	**	6 22E-01	9 87E+00	1 06E+01	**	-1 57E+01	2 .E-01	2 47E-01	**	MW-59-68
MW-60-35	Q2-2011	4/15/201.	11 36	2 33E+02	4 32E+02	4 30E+02	2 00E+03	3 77E-01	1 66E+00	2 0CE+00	3 00E+01	2 46E+00	1 14E+01	8 95E+00	positive	-8 48E-0.	9 58E+00	1 03E+01	positive	2 55E+00	1 42E-01	1 61E-01	positive	MW-60-35
MW-60-53	Q2-2011	4/15/201.	11 37	-5 87E+01	3 36E+02	4 30E+02	2 00E+03	-1 18E-12	1 6E+00	2 04E+00	3 00E+01	2 17E+00	5 90E+00	1 14E+01	positive	-1 11E+01	8 68E+00	8 95E+00	positive	-1 06E+00	1 43E-01	1 66E-01	positive	MW-60-53
MW-60-72	Q2-2011	4/15/201.	13 .2	2 19E+02	3 78E+02	4 .3E+02	2 00E+03	7 12E-01	1 72E+00	1 97E+00	3 00E+01	-3 14E+00	6 54E+00	5 80E+00	positive	-3 30E+00	1 14E+01	1 14E+01	positive	-2 93E+00	1 39E-01	1 63E-01	positive	MW-60-72
MW-60-135	Q2-2011	4/15/201.	13 35	4 14E+02	4 32E+02	4 .2E+02	2 00E+03	6 52E-01	1 9E+00	2 1CE+00	3 00E+01	-5 83E+00	1 39E+01	1 63E+01	positive	-2 48E+01	9 86E+00	1 01E+01	positive	4 94E+00	1 47E-01	1 65E-01	positive	MW-60-135
MW-60-154	Q2-2011	4/15/201.	13 .9	3 30E+02	3 30E+02	4 21E+02	2 00E+03	-4 20E-11	1 55E+00	2 0CE+00	3 00E+01	-3 05E+00	7 62E+00	7 32E+00	positive	-7 23E-0.	6 50E+00	6 79E+00	positive	1 12E+00	1 44E-01	1 64E-01	positive	MW-60-154
MW-60-176	Q2-2011	4/15/201.	13 49	8 29E+02	4 56E+02	4 .8E+02	2 00E+03	8 29E-11	1 41E+00	2 1CE+00	3 00E+01	7 8 .E-12	5 90E+00	1 10E+01	positive	5 35E+00	1 02E+01	1 03E+01	positive	3 40E 01	1 .0E-01	1 62E-01	positive	MW-60-176
MW-62-18	Q2-2011	4/13/201.	11 58	3 25E+02	4 56E+02	4 92E+02	2 00E+03	7 83E-01	1 54E+00	1 71E+00	3 00E+01	-4 38E+00	1 00E+01	1 09E+01	positive	-4 07E-0.	1 06E+01	1 16E+01	positive	NA	NA	NA	positive	MW-62-18
MW-62-18	Q2-2011 Mid	7/22/201.	11 35	2 30E+02	4 12E+02	4 45E+02	2 00E+03	1 26E+10	1 24E+00	1 25E+00	3 00E+01	4 94E+00	5 42E+00	1 14E+01	positive	-1 79E+01	1 05E+01	1 08E+01	positive	-3 83E+00	1 96E-01	2 20E-01	positive	MW-62-18
MW-62-37	Q2-2011	4/13/201.	12 .0	1 56E+02	4 36E+02	4 91E+02	2 00E+03	-1 97E-11	1 0E+00	1 3CE+00	3 00E+01	-4 43E+00	8 32E+00	7 76E+00	positive	-1 68E+01	9 02E+00	9 05E+00	positive	NA	NA	NA	positive	MW-62-37
MW-62-37	Q2-2011 Mid	7/22/201.	12 28	1 13E+02	3 30E+02	4 42E+02	2 00E+03	1 03E+10	1 0E+00	1 7E+00	3 00E+01	-3 04E+00	7 95E+00	8 03E+00	positive	2 90E+00	1 10E+01	1 30E+01	positive	-8 92E+00	1 53E-01	2 09E-01	positive	MW-62-37
MW-62-55	Q2-2011	4/13/201.	11 12	1 57E+02	4 36E+02	4 92E+02	2 00E+03	1 72E+10	1 7E+00	1 8E+00	3 00E+01	3 42E-01	6 78E+00	7 51E+00	positive	3 00E 0.	6 24E+00	6 58E+00	positive	NA	NA	NA	positive	MW-62-55
MW-62-55	Q2-2011 Mid	7/22/201.	10 47	1 50E+02	3 36E+02	4 45E+02	2 00E+03	-4 83E-11	1 0 .E+00	1 5E+00	3 00E+01	4 34E+00	7 86E+00	9 52E+00	positive	1 66E+00	8 85E+00	1 02E+01	positive	-1 60E+01	1 79E-01	2 05E-01	positive	MW-62-55
MW-62-71	Q2-2011	4/13/201.	11 .5	3 39E+02	4 72E+02	5 08E+02	2 00E+03	9 04E-01	1 45E+00	1 5CE+00	3 00E+01	2 33E+00	7 96E+00	9 27E+00	positive	-2 38E+01	8 50E+00	8 56E+00	positive	NA	NA	NA	positive	MW-62-71
MW-62-71	Q2-2011 Mid	7/22/201.	10 .2	4 21E+02	4 26E+02	4 44E+02	2 00E+03	-3 90E-11	1 3 .E+00	1 9CE+00	3 00E+01	-7 25E-12	7 74E+00	8 31E+00	positive	-7 90E-0.	8 28E+00	8 59E+00	positive	-6 70E+00	1 19E-01	2 3E-01	positive	MW-62-71
MW-62-92	Q2-2011	4/13/201.	11 03	5 30E+02	4 78E+02	4 92E+02	2 00E+03	2 87E-01	1 11E+00	1 3CE+00	3 00E+01	-3 87E+00	7 18E+00	7 31E+00	positive	-2 10E+01	8 94E+00	8 88E+00	positive	NA	NA	NA	positive	MW-62-92
MW-62-92	Q2-2011 Mid	7/22/201.	10 .8	5 51E+02	4 35E+02	4 39E+02	2 00E+03	1 12E+00	1 5E+00	2 0CE+00	3 00E+01	5 26E+00	5 42E+00	1 13E+01	positive	-7 26E 0.	9 43E+00	1 05E+01	positive	6 69E+00	1 76E-01	1 99E-01	positive	MW-62-92
MW-62-133	Q2-2011	4/13/201.	14 39	6 31E+02	5 34E+02	5 09E+02	2 00E+03	1 22E+10	1 2E+00	1 3CE+00	3 42E+01	1 29E+00	5 08E+00	1 04E+01	positive	1 71E+00	8 82E+00	1 02E+01	positive	NA	NA	NA	positive	MW-62-133
MW-62-133	Q2-2011 Mid	7/22/201.	11 30	4 56E+02	4 23E+02	4 36E+02	2 00E+03	6 72E-01	1 2E+00	1 3CE+00	3 42E+01	-5 97E-11	7 41E+00	8 13E+00	positive	6 36E+00	9 57E+00	1 23E+01	positive	-1 13E+01	1 79E-01	2 03E-01	positive	MW-62-133
MW-62-182	Q2-2011	4/13/201.	14 44	1 32E+02	4 50E+02	5 03E+02	2 00E+03	-5 04E-11	1 05E+00	1 4CE+00	3 00E+01	5 54E+00	8 70E+00	1 09E+01	positive	-9 44E-0.	1 08E+01	1 15E+01	positive	NA	NA	NA	positive	MW-62-182
MW-62-182	Q2-2011 Mid	7/22/201.	12 02	2 80E+02	4 20E+02	4 54E+02	2 00E+03	2 01E-01	1 22E+00	1 4CE+00	3 00E+01	6 48E-01	7 41E+00	8 36E+00	positive	-5 94E-0.	7 65E+00	8 31E+00	positive	-2 27E+00	1 56E-01	1 75E-01	positive	MW-62-182
MW-63-18	Q2-2011	4/19/201.	10 35	7 23E+01	4 38E+02	5 05E+02	2 00E+03	3 13E-11	1 12E+00	1 6CE+00	3 00E+01	8 69E-01	6 01E+00	8 92E+00	positive	5 22E+00	8 16E+00	7 75E+00	positive	NA	NA	NA	positive	MW-63-18
MW-63-18	Q2-2011 Mid	7/21/201.	10 26	2 86E+02	3 29E+02	4 29E+02	2 00E+03	6 51E-02	1 15E+00	1 5CE+00	3 00E+01	2 40E+00	7 62E+00	9 09E+00	positive	2 37E+00	7 53E+00	9 30E+00	positive	-8 91E+00	1 69E-01	1 92E-01	positive	MW-63-18
MW-63-34	Q2-2011	4/19/201.	10 35	3 34E+02	4 50E+02	4 87E+02	2 00E+03	-1 13E+00	1 22E+00	1 8CE+00	3 00E+01	4 36E+00	6 34E+00	9 94E+00	positive	3 72E+00	8 28E+00	1 02E+01	positive	NA	NA	NA	positive	MW-63-34
MW-63-34	Q2-2011 Mid	7/21/201.	10 08	3 34E+02	4 38E+02	4 39E+02	2 00E+03	2 33E-01	1 17E+00	1 4CE+00	3 00E+01	-1 34E+00	5 03E+00	9 54E+00	positive	1 66E-01	7 89E+00	8 63E+00	positive	-1 26E+01	1 58E-01	1 47E-01	positive	MW-63-34
MW-63-50	Q2-2011	4/19/201.	11 35	1 58E+02	4 36E+02	4 09E+02	2 00E+03	7 71E-01	1 35E+00	1 5CE+00	3 00E+01	-3 44E+00	5 76E+00	9 29E+00	positive	3 72E+00	8 18E+00	1 03E+01	positive	NA	NA	NA	positive	MW-63-50
MW-63-50	Q2-2011 Mid	7/21/201.	11 25	2 39E+02	3 39E+02	4 41E+02	2 00E+03	6 50E 11	8 62E-11	1 3CE+00	3 00E+01	3 46E 01	7 56E+00	8 55E+00	positive	2 77E+00	8 64E+00	1 05E+01	positive	2 89E+00	1 51E-01	1 69E-01	positive	MW-63-50
MW-63-93	Q2-2011	4/19/201.	11 27	9 54E+01	4 42E+02	5 05E+02	2 00E+03	-4 30E-12	1 14E+00	1 44E+00	3 00E+01	5 05E+00	5 92E+00	1 03E+01	positive	-4 35E-0.	6 80E+00	7 25E+00	positive	NA	NA	NA	positive	MW-63-93
MW-63-93	Q2-2011 Mid	7/21/201.	11 32	4 17E+02	4 20E+02	4 40E+02	2 00E+03	-4 28E-11	1 0CE+00	1 4CE+00	3 00E+01	-3 58E+00	5 10E+00	7 77E+00	positive	-6 11E+01	7 92E+00	5 51E+00	positive	6 50E-01	1 71E-01	1 90E-01	positive	MW-63-93
MW-63-112	Q2-2011	4/19/201.	11 15	4 22E+02	4 58E+02	4 92E+02	2 00E+03	-7 96E-11	1 0CE+00	1 4CE+00	3 00E+01	4 96E+00	1 05E+01	1 25E+01	positive	1 64E+00	1 17E+01	1 36E+01	positive	NA	NA	NA	positive	MW-63-1.2
MW-63-112	Q2-2011 Mid	7/21/201.	11 40	6 31E+02	4 44E+02	4 44E+02	2 00E+03	2 22E-01	1 12E+00	1 3CE+00	3 00E+01	-3 41E-11	1 06E+01	1 11E+01	positive	6 03E+00	1 21E+01	1 54E+01	positive	-1 22E+00	1 77E-01	1 98E-01	positive	MW-63-1.2
MW-63-121	Q2-2011	4/19/201.	9 51	5 77E+02	4 31E+02	4 91E+02	2 00E+03	4 11E-01	1 18E+00	1 3CE+00	3 00E+01	1 03E+00	6 92E+00	7 17E+01	positive	1 09E+01	9 86E+00	5 99E+01	positive	NA	NA	NA	positive	MW-63-121
MW-63-121	Q2-2011 Mid	7/21/201.	9 58	1 33E+03	5 28E+02	4 45E+02	2 00E+03	-3 05E-11	1 3CE+00	1 7AE+00	3 00E+01	6 3E-03	7 44E+00	8 17E+00	positive	-3 19E+01	1 05E+01	1 07E+01	positive	1 12E+00	1 14E-01	2 05E-01	positive	MW-63-121
MW-63-163	Q2-2011	4/19/201.	9 49	4 32E+02	4 34E+02	5 03E+02	2 00E+03	1 1 .E+10	1 82E+00	2 0CE+00	3 00E+01	4 43E-01	6 94E+00	9 98E+00	positive	4 78E+00	1 02E+01	1 26E+01	positive	NA	NA	NA	positive	MW-63-163
MW-63-163	Q2-2011 Mid	7/21/201.	10 09	5 38E+02	4 26E+02	4 36E+02	2 00E+03	-6 14E-11	1 01E+00	1 4CE+00	3 00E+01	-3 47E-11	7 47E+00	8 17E+00	positive	4 07E-01	7 53E+00	8 66E+00	positive	-8 69E+00	1 47E-01	1 67E-01	positive	MW-63-163
MW-63-174	Q2-2011	4/19/201.	9 32	1 50E+02	4 40E+02	5 04E+02	2 00E+03	-7 87E-11	9 72E-11	1 4CE+00	3 00E+01	-3 41E+00	6 32E+00	7 72E+00	positive	-9 85E-0.	6 58E+00	9 20E+00	positive	NA	NA	NA	positive	MW-63-174
MW-63-171	Q2-2011 Mid	7/21/201.	9 57	4 18E+02	4 17E+02	4 36E+02	2 00E+03	6 95E-01	1 85E+00	2 1CE+00	3 00E+01	3 57E+00	5 10E+00	8 27E+00	positive	1 67E-01	1 09E+01	1 09E+01	positive	2 55E+00	1 33E-01	1 59E-01	positive	MW-63-171
MW-65-48	Q2-2011 Mid	7/7/2011	12 .9	8 59E+01	2 43E+02	2 35E+02	**	5 73E-01	1 04E+00	1 15E+00	**	4 10E+00	5 03E+00	1 09E+01	**	-1 15E+01	1 12E+01	1 18E+01	**	-5 93E+00	2 39E-01	2 69E-01	**	MW-65-48
MW-65-80	Q2-2011 Mid	7/13/201.	10 .2	8 54E+01	2 41E+02	2 84E+02	**	1 25E-01	9 2 .E-11	1 12E+00	**	-2 33E+00	5 12E+00	9 46E+00	**	2 88E+00	1 15E+01	1 34E+01	**	-1 27E+01	2 80E-01	2 59E-01	**	MW-65-80
MW-66-21	Q2-2011	4/14/201.	13 43	9 30E+01	3 38E+02	4 46E+02	1 33E+03	6 73E-01	1 64E+00	1 8CE+00	3 07E+01	-4 7CE+00	6 74E+00	8 45E+00	positive	6 94E+00	9 82E+00	1 25E+01	positive	1 31E+00	1 51E-01	1 72E-01	positive	MW-66-21
MW-66-36	Q2-2011	4/14/201.	12 53	3 52E+03	7 16E+02	4 79E+02	7 31E+03	1 06E+11	2 8 .E+00	1 9 .E+00	4 0 .E-11	-5 0 .E-01	7 24E+00	8 14E+00	positive	5 40E-01	7 92E+00	9 01E+00	positive	6 10E-01	1 58E-01	1 79E-01	positive	MW-66-36
MW 67 35	Q2-2011	4/14/201.	13 35	3 78E+03	7 14E+02	4 .7E+02	6 52E+03	1 25E+11	3 7E+00	2 1CE+00	8 1E+01	-5 33E+00	1 78E+01	1 96E+01	positive	3 71E+00	9 54E+00	1 14E+01	positive	6 39E+00	1 7E-01	1 63E-01	positive	MW 67 39
MW-67-105	Q2-2011	4/14/201.	13 43	1 10E+03	4 34E+02	4 .2E+02	3 92E+03	2 71E-01	1 2E+00	2 1IE+00	4 38E+01	-3 9 .E-11	6 66E+00	1 05E+01	positive	-9 91E-0.	7 24E+00	7 88E+00	positive	5 71E+00	1 55E-01	1 73E-01	positive	MW-67-105
MW-67-173	Q2-2011	4/14/201.	14 09	5 72E+02	4 20E+02	4 .0E+02	1 61E+03	-2 56E-11	1 65E+00	1 95E+00	2 00E+01	5 04E+00	5 64E+00	1 17E+01	positive	-5 27E+01	1 03E+01	6 85E+01	positive	7 50E+00	1 32E-01	1 34E-01	positive	MW-67-173
MW-67-213	Q2-2011	4/14/201.	10 49	1 37E+03	4 78E+02	4 .2E+02	2 26E+03	-7 57E-11	9 50E-11	1 5CE+00	2 00E+01	-2 7CE+00	6 62E+00	6 47E+00	positive	4 16E+00	9 78E+00	1 20E+01	positive	2 35E+00	1 43E-01	1 62E-01	positive	MW-67-2.9
MW-67-273	Q2-2011	4/14/201.	10 53	1 36E+03	4 34E+02	4 .9E+02	2 01E+03	3 43E-01	1 22E+00	1 45E+00	2 00E+01	-5 3CE+00	6 78E+00	6 12E+00	positive	1 62E+00	1 02E+01	1 15E+01	positive	5 62E-01	1 42E-01	1 63E-01	positive	MW-67-276
MW 67 333	Q2-2011	4/14/201.	11 33	4 36E+02	4 36E+02	4 .3E+02	1 00E+03	1 05E+10	1 5CE+00	1 6CE+00	3 00E+01	2 02E+00	6 36E+00	9 63E+00	positive	1 13E+01	7 80E+00	8 31E+00	positive	3 21E 01	1 30E-01	1 50E-01	positive	MW 67 333
MW-67-343	Q2-2011	4/14/201.	11 .7	6 56E+02	4 32E+02	4 .3E+02	1 01E+03	2 63E-01	1 1CE+00	1 4CE+00	3 00E+01	5 89E+00	6 02E+00	1 12E+01	positive	4 57E+00	9 02E+00	1 15E+01	positive	7 58E+00	1 4E-01	1 71E

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TABLE 4
2011 2nd QUARTER
GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERTY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE COLLECTION		ANALYSIS RESULTS[2]																				Well ID
		TRITIUM (pCi/L)						Sr-90 (pCi/L)				Cs-137 (pCi/L)				Co-60 (pCi/L)				Ni-63 (pCi/L)				
		Date	Time	Result	Std. Dev.[7]	MDC	I.L.[3,7]	Result	Std. Dev.[4]	MDC	I.L.[3]	Result	Std. Dev.[4]	MDC	I.L.[3]	Result	Std. Dev.[4]	MDC	I.L.[3]	Result	Std. Dev.[4]	MDC	I.L.[3]	
U3-T2	Q2-2011 Mid	7/6/2011	10:55	2.57E+03	6.35E+02	2.30E+02	2.30E+03	4.75E-01	1.51E+00	1.5CE+00	2.00E+00	2.772+00	1.08E+01	1.19E+01	positive	-1.06E+00	1.02E+01	1.07E+01	positive	NA	NA	NA	positive	U3-T2
UI-CSS	Q2-2011	5/4/2011	13:34	6.38E+03	6.34E+02	3.40E+03	3.17E+03	1.6 E+11	2.70E+00	1.01E+00	2.08E+01	1.297+00	5.36E+00	9.79E+00	positive	7.12E+00	9.42E+00	1.24E+01	positive	-1.05E+01	1.55E-01	1.54E-01	positive	UI-CSS
UI-CSS	Q2-2011 Mid	7/8/2011	13:33	1.38E+04	1.10E+03	2.79E+02	5.17E+03	3.90E+10	1.82E+00	1.3CE+00	2.08E+01	3.84E-02	5.18E+00	1.01E+01	positive	-3.60E+00	9.96E+00	1.06E+01	positive	-3.20E+00	2.89E-01	2.34E-01	positive	UI-CSS
MH-5 VCFD	Q2-2011	4/22/201.	13:37	1.25E+04	1.10E+03	4.46E+02	*	8.17E-01	1.85E+00	2.08E+00	*	-3.21E+00	5.36E+00	8.43E+00	*	-1.60E+00	9.06E+00	9.51E+00	*	NA	NA	NA	*	MH-5 VCFD
MH-5 VCFD	Q2-2011 Mid	7/7/2011	14:39	2.47E+03	7.32E+02	2.83E+02	*	-3.05E-11	8.0 E-11	1.11E+00	*	9.24E-01	7.95E+00	8.84E+00	*	5.11E-01	8.49E+00	9.13E+00	*	NA	NA	NA	*	MH-5 VCFD
MH-5 VCFD	Q2-2011 Mid	7/12/201.	12:46	9.36E+03	1.23E+03	2.81E+02	*	9.12E-01	1.0CE+00	1.0CE+00	*	-1.17E+01	1.33E+01	1.52E+01	*	-1.19E+00	9.99E+00	1.06E+01	*	NA	NA	NA	*	MH-5 VCFD
MH-5 VCFD	Q2-2011 Mid	7/20/201	10:48	2.89E+03	7.42E+02	3.35E+02	*	-4.57E-11	1.01E+00	1.47E+00	*	1.797+00	6.30E+00	7.26E+00	*	-5.61E+01	8.34E+00	8.34E+00	*	NA	NA	NA	*	MH-5 VCFD
MH-5 VCFD	Q2-2011 Mid	7/26/201.	12:50	1.86E+03	6.33E+02	3.33E+02	*	-7.10E-11	9.45E-01	1.45E+00	*	2.815+00	7.47E+00	8.99E+00	*	-8.33E-0.	9.66E+00	1.03E+01	*	NA	NA	NA	*	MH-5 VCFD
LAF-002	Q2-2011	5/2/2011	12:50	6.59E+01	3.34E+02	3.43E+02	positive	1.10E+10	1.55E+00	1.6CE+00	positive	-5.8CE-01	7.86E+00	8.57E+00	positive	-6.46E-0.	7.24E+00	7.65E+00	positive	-3.48E-01	1.60E-01	1.63E-01	positive	LAF-002
B-1	Q2-2011	4/25/201.	10:50	8.10E+03	9.22E+02	4.53E+02	*	-6.21E-11	1.79E+00	2.05E+00	*	2.052+01	1.33E+01	1.03E+01	*	3.18E+00	9.06E+00	1.11E+01	*	NA	NA	NA	*	B-1
B-6	Q2-2011	4/27/201.	9:48	2.28E+03	6.18E+02	4.23E+02	*	-6.09E-11	1.5CE+00	2.05E+00	*	-1.31E-01	5.56E+00	9.08E+00	*	4.73E+00	1.0CE+01	1.32E+01	*	NA	NA	NA	*	B-6
B-6	Q2-2011 Mid	7/8/2011	11:05	5.39E+02	3.54E+02	2.82E+02	*	1.32E+10	1.5CE+00	1.6CE+00	*	6.097+00	1.58E+01	8.04E+00	*	-5.64E+01	8.97E+00	8.84E+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 for Sr-90, Cs-137, Co-60 & Ni-63 are established for 2011 based on 2010 averages. See Note #7 below for further 2011 Tritium I.L. discussion. Positive detections indicate that the the result is greater than MDC and greater than or equal to 2 times the 1 sigma uncertainty

4 NA indicates that the constituent was not analyzed

5 Shading indicates that the sample result exceeds the investigation Level

6 Column designated as "Std. Dev." provides the three times 1 sigma uncertainty values

7 To be conservative, the 2011 Tritium I.L.s were calculated using (2x the 2009 yearly average) because an increased tritium activity in multiple Unit 3 sampling intervals was observed during 2010 in response to the transient surface spill from a temporary reveal RWST/RCS processing skid

* Indicates storm or foundation drain sampling...locations, for which investigation levels are not applicable

** Indicates 2011 I.L.s not computed for this well due to absence of 2008 through 2010 data

*** 2011 Tritium I.L. calculated based on the 2010 rolling average due to absence of 2009 data

**** The Q2 2011 MW-40-46 preliminary Sr-90 result was 2.83 pCi/L and exceeded the I.L. However, after re-analysis, the sample was below the detection limit which suggests the preliminary result was likely a false positive. A shift in the MDC for the preliminary result could have possibly resulted from contaminated laboratory equipment, modified count time, or changes in sample preparation

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TABLE 4
2011 3rd QUARTER
GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE COLLECTION		ANALYSIS RESULTS[2,3]																Well ID
				TRITIUM (pCi/L)				Sr-90 (pCi/L)				Cs-137 (pCi/L)				Co-60 (pCi/L)				Ni-63 (pCi/L)				
		Date	Time	Result	Std. Dev.[4]	MDC	LL[3,7]	Result	Std. Dev.[5]	MDC	LL[3]	Result	Std. Dev.[4]	MDC	LL[3]	Result	Std. Dev.[4]	MDC	LL[3]	Result	Std. Dev.[4]	MDC	LL[3]	
MW-31-49	Q3-2011	8/5/2011	10:47	4.96E+03	7.80E+02	4.16E+02	4.28E+04	-2.63E-02	1.34E+00	1.58E+00	2.00E+00	6.39E+00	3.70E+00	1.13E+01	positive	5.20E-01	1.00E+00	1.16E+01	positive	NA	NA	NA	positive	MW-31-49
MW-31-63	Q3-2011	8/5/2011	11:29	1.63E+04	1.13E+03	4.18E+02	3.99E+04	-1.30E-01	1.71E+00	2.02E+00	2.00E+00	-2.83E-01	9.87E+00	1.12E+01	positive	2.13E+00	9.24E+00	1.08E+01	positive	NA	NA	NA	positive	MW-31-63
MW-31-85	Q3-2011	8/5/2011	11:27	4.82E+03	7.74E+02	4.22E+02	1.46E+04	1.39E-01	1.40E+00	1.63E+00	2.00E+00	-0.79E-01	3.25E+00	8.03E+00	positive	-4.79E+00	9.57E+00	9.27E+00	positive	NA	NA	NA	positive	MW-31-85
MW-32-59	Q3-2011	8/5/2011	12:30	2.06E+04	1.47E+03	4.19E+02	3.42E+04	1.64E+00	1.56E+00	1.71E+00	2.00E+00	-3.73E+00	3.34E+00	8.04E+00	positive	-1.35E+00	8.79E+00	9.24E+00	positive	NA	NA	NA	positive	MW-32-59
MW-32-85	Q3-2011	8/5/2011	13:36	1.14E+04	1.12E+03	4.20E+02	1.62E+04	1.14E-01	1.54E+00	1.92E+00	2.00E+00	5.46E+00	5.87E+00	8.72E+00	positive	-1.21E+00	6.69E+00	6.57E+00	positive	NA	NA	NA	positive	MW-32-85
MW-32-149	Q3-2011	8/5/2011	11:10	5.86E+02	1.17E+02	4.21E+02	1.00E+03	4.80E-01	1.31E+00	2.06E+00	2.00E+00	9.91E-01	2.60E+00	9.30E+00	positive	2.75E+00	7.41E+00	9.28E+00	positive	NA	NA	NA	positive	MW-32-149
MW-32-173	Q3-2011	8/5/2011	11:11	5.69E+02	1.17E+02	4.12E+02	1.50E+03	6.34E-01	1.18E+00	1.66E+00	2.00E+00	9.59E-01	5.36E+00	6.55E+00	positive	1.55E+00	1.10E+00	1.14E+01	positive	NA	NA	NA	positive	MW-32-173
MW-32-190	Q3-2011	8/5/2011	11:15	1.44E+03	5.16E+02	4.20E+02	4.21E+03	7.59E-01	1.54E+00	1.82E+00	2.00E+00	2.02E+00	7.23E+00	8.43E+00	positive	1.28E+00	9.34E+00	1.06E+01	positive	NA	NA	NA	positive	MW-32-190
MW-36-24	Q3-2011	8/16/2011	13:34	1.12E+03	5.01E+02	4.51E+02	2.56E+03	2.34E-01	9.96E-01	1.18E+00	2.00E+00	-2.89E+00	7.71E+00	7.54E+00	positive	7.10E-01	7.89E+00	8.75E+00	positive	NA	NA	NA	positive	MW-36-24
MW-36-41	Q3-2011	8/16/2011	14:18	5.90E+03	3.87E+02	4.55E+02	2.10E+04	1.74E+00	1.26E+00	1.13E+00	2.99E+00	-1.75E+00	3.91E+00	9.83E+00	positive	4.43E+00	9.15E+00	1.15E+01	positive	NA	NA	NA	positive	MW-36-41
MW-36-52	Q3-2011	8/16/2011	14:52	4.69E+03	7.59E+02	4.43E+02	1.48E+04	2.93E+00	1.57E+00	1.36E+00	5.14E+00	3.55E+00	3.22E+00	9.81E+00	positive	-1.33E+00	9.33E+00	9.74E+00	positive	NA	NA	NA	positive	MW-36-52
MW-37-22	Q3-2011	8/16/2011	10:35	4.52E+03	7.56E+02	4.53E+02	9.19E+03	7.59E+00	2.77E+00	1.35E+00	2.20E+01	3.10E+00	7.26E+00	8.77E+00	positive	-9.99E-01	7.35E+00	7.48E+00	positive	NA	NA	NA	positive	MW-37-22
MW-37-32	Q3-2011	8/16/2011	11:00	5.23E+03	7.95E+02	4.52E+02	9.32E+03	1.68E+01	2.37E+00	1.13E+00	5.54E+01	-2.53E+00	8.34E+00	7.53E+00	positive	-6.39E+00	9.06E+00	8.10E+00	positive	NA	NA	NA	positive	MW-37-32
MW-37-40	Q3-2011	8/16/2011	11:24	5.03E+03	7.86E+02	4.53E+02	9.02E+03	1.95E+01	3.18E+00	1.17E+00	2.84E+01	-2.08E+00	8.25E+00	8.54E+00	positive	1.79E+00	7.35E+00	8.59E+00	positive	NA	NA	NA	positive	MW-37-40
MW-37-57	Q3-2011	8/16/2011	10:55	5.11E+03	7.96E+02	4.59E+02	9.62E+03	2.15E+01	3.27E+00	1.30E+00	3.68E+01	-1.82E+00	7.92E+00	9.15E+00	positive	-1.34E+00	6.39E+00	6.57E+00	positive	NA	NA	NA	positive	MW-37-57
MW-39-67	Q3-2011 Mid	8/29/2011	13:47	1.49E+04	1.26E+03	4.51E+02	1.00E+03	1.08E+00	1.18E+00	1.20E+00	3.30E+00	2.22E+00	7.77E+00	8.94E+00	positive	4.82E+00	8.25E+00	1.05E+01	positive	NA	NA	NA	positive	MW-39-67
MW-39-84	Q3-2011 Mid	8/29/2011	13:56	2.38E+02	4.14E+02	4.54E+02	1.00E+03	8.64E-01	1.30E+00	1.00E+00	2.10E+00	5.15E+00	1.54E+01	9.85E+00	positive	-1.20E+00	9.99E+00	1.04E+01	positive	NA	NA	NA	positive	MW-39-84
MW-39-102	Q3-2011 Mid	8/29/2011	14:11	1.30E+04	1.32E+03	4.41E+02	1.00E+03	-7.38E-01	1.20E+00	1.60E+00	8.10E+00	-3.14E+00	7.92E+00	7.72E+00	positive	4.66E+00	7.83E+00	1.04E+01	positive	NA	NA	NA	positive	MW-39-102
MW-39-124	Q3-2011 Mid	8/29/2011	10:54	-1.02E+01	3.75E+02	4.45E+02	1.00E+03	3.16E-01	1.12E+00	1.30E+00	4.50E+00	-7.05E+00	1.06E+01	1.01E+01	positive	7.76E+00	1.13E+01	1.46E+01	positive	NA	NA	NA	positive	MW-39-124
MW-39-183	Q3-2011 Mid	8/29/2011	10:45	1.14E+02	3.81E+02	4.33E+02	1.00E+03	1.10E+00	1.13E+00	1.10E+00	2.00E+00	-3.70E+00	1.05E+01	1.05E+01	positive	5.90E+00	9.54E+00	1.22E+01	positive	NA	NA	NA	positive	MW-39-183
MW-39-195	Q3-2011 Mid	8/29/2011	10:51	1.72E+04	1.35E+03	4.43E+02	1.00E+03	4.98E-02	7.50E-01	9.59E-01	2.00E+00	7.98E-01	7.62E+00	8.55E+00	positive	2.43E+00	8.19E+00	9.86E+00	positive	NA	NA	NA	positive	MW-39-195
MW-41-40	Q3-2011	8/4/2011	14:39	5.94E+02	3.57E+02	3.53E+02	1.00E+03	1.70E+00	1.37E+00	1.93E+00	7.28E+00	4.91E-01	5.97E+00	6.61E+00	positive	-6.02E-02	8.16E+00	8.30E+00	positive	NA	NA	NA	positive	MW-41-40
MW-41-63	Q3-2011	8/4/2011	14:20	6.60E+02	3.60E+02	3.51E+02	1.00E+03	1.91E+00	1.95E+00	1.96E+00	7.36E+00	1.64E+00	7.89E+00	8.72E+00	positive	-1.43E+00	7.29E+00	7.72E+00	positive	NA	NA	NA	positive	MW-41-63
MW-42-49	Q3-2011	8/1/2011	12:50	1.78E+02	3.90E+02	3.74E+02	3.16E+04	2.60E+00	1.92E+00	1.82E+00	5.00E+01	1.57E+04	1.92E+03	2.15E+01	65750	3.58E+00	8.40E+00	1.01E+01	positive	2.80E+02	3.48E+01	2.12E-01	5735	MW-42-49
MW-42-78	Q3-2011	8/1/2011	12:50	1.97E+02	3.57E+02	3.72E+02	1.00E+03	-1.16E-01	1.13E+00	1.49E+00	2.00E+00	5.85E-01	7.90E+00	7.65E+00	positive	-5.68E-01	9.45E+00	1.03E+01	positive	1.02E+00	1.17E+01	1.21E-01	positive	MW-42-78
MW-43-28	Q3-2011	8/4/2011	11:15	2.26E+02	3.26E+02	3.59E+02	1.00E+03	-1.34E-01	1.42E+00	1.87E+00	2.00E+00	4.00E+00	7.35E+00	9.02E+00	positive	-3.51E+00	9.33E+00	9.21E+00	positive	NA	NA	NA	positive	MW-43-28
MW-43-62	Q3-2011	8/4/2011	11:35	1.66E+02	3.21E+02	3.55E+02	1.00E+03	-2.14E-01	1.51E+00	1.93E+00	2.00E+00	-1.62E+00	7.95E+00	8.01E+00	positive	-2.98E+00	8.13E+00	8.75E+00	positive	NA	NA	NA	positive	MW-43-62
MW-44-66	Q3-2011	8/22/2011	12:08	4.76E+02	4.32E+02	4.45E+02	1.00E+03	1.13E-01	9.03E-01	1.11E+00	2.00E+00	-7.41E+00	3.73E+00	6.89E+00	positive	-3.14E+00	9.09E+00	9.07E+00	positive	NA	NA	NA	positive	MW-44-66
MW-44-102	Q3-2011 Mid	8/22/2011	10:43	1.25E+04	1.47E+03	4.57E+02	1.00E+03	-1.10E-01	9.69E-01	1.28E+00	2.00E+00	-9.22E+00	5.69E+00	6.65E+00	positive	8.99E+00	1.50E+00	1.08E+01	positive	NA	NA	NA	positive	MW-44-102
MW-45-42	Q3-2011 Mid	8/25/2011	13:58	2.72E+04	1.63E+03	4.50E+02	3.90E+03	1.47E-01	9.15E-01	1.10E+00	2.00E+00	5.75E-01	1.12E+01	1.05E+01	positive	-7.52E+00	1.06E+01	8.89E+00	positive	NA	NA	NA	positive	MW-45-42
MW-45-61	Q3-2011 Mid	8/25/2011	10:48	2.91E+04	1.68E+03	4.54E+02	3.65E+03	7.01E-01	1.16E+00	1.66E+00	2.00E+00	-8.68E-01	7.46E+00	7.91E+00	positive	1.84E+00	6.63E+00	7.89E+00	positive	NA	NA	NA	positive	MW-45-61
MW-46	Q3-2011	8/17/2011	11:36	1.30E+03	5.72E+02	4.56E+02	1.94E+03	8.77E-01	1.21E+00	1.29E+00	2.00E+00	3.43E-01	7.86E+00	8.82E+00	positive	-1.10E+00	7.50E+00	7.97E+00	positive	NA	NA	NA	positive	MW-46
MW-47-56	Q3-2011 Mid	8/18/2011	12:39	2.42E+02	3.76E+02	2.06E+02	****	1.03E+00	1.28E+00	1.31E+00	**	-8.54E-01	1.13E+01	1.25E+01	**	3.86E+00	8.64E+00	1.07E+01	**	-2.22E+00	1.75E+01	2.00E-01	**	MW-47-56
MW-47-80	Q3-2011 Mid	8/18/2011	11:36	1.37E+03	4.00E+02	2.18E+02	**	8.23E-01	1.22E+00	1.29E+00	**	-3.83E+00	9.30E+00	8.63E+00	**	-6.32E-01	8.79E+00	9.27E+00	**	-1.12E+00	1.88E+01	2.13E-01	**	MW-47-80
MW-49-26	Q3-2011	8/10/2011	10:46	5.97E+03	3.39E+02	2.09E+02	6.52E+03	1.56E+01	2.58E+00	1.34E+00	2.79E+01	-1.94E+00	9.06E+00	9.33E+00	positive	2.94E+00	8.31E+00	1.00E+01	positive	-1.77E+01	2.04E+01	2.27E-01	positive	MW-49-26
MW-49-42	Q3-2011	8/10/2011	11:16	5.83E+03	3.21E+02	1.96E+02	4.97E+03	1.61E+01	3.24E+00	1.64E+00	3.72E+01	-1.22E+00	8.79E+00	9.69E+00	positive	-3.72E+00	8.79E+00	8.23E+00	positive	-1.40E+01	1.81E+01	2.12E-01	positive	MW-49-42
MW-49-65	Q3-2011	8/10/2011	10:55	2.42E+03	3.10E+02	2.00E+02	3.03E+03	1.41E+01	2.75E+00	1.42E+00	2.62E+01	1.12E-01	7.77E+00	8.41E+00	positive	-4.19E+00	9.00E+00	8.02E+00	positive	-6.91E+01	1.91E+01	2.65E-01	positive	MW-49-65
MW-50-42	Q3-2011	8/19/2011	12:10	5.52E+02	3.42E+02	2.00E+02	1.04E+03	9.47E+00	2.50E+00	1.31E+00	1.10E+01	2.17E+00	3.01E+00	9.07E+00	positive	4.72E+00	9.91E+00	1.22E+01	positive	-7.08E+00	1.91E+01	2.30E-01	positive	MW-50-42
MW-50-66	Q3-2011	8/19/2011	12:12	1.15E+03	3.42E+02	2.01E+02	5.00E+03	2.57E+01	4.25E+00	1.65E+00	5.24E+01	2.97E+00	3.46E+00	1.01E+01	positive	1.73E+00	9.03E+00	1.05E+01	positive	-8.92E+00	1.80E+01	2.11E-01	positive	MW-50-66
MW-51-40	Q3-2011	7/28/2011	11:43	2.78E+01	3.09E+02	3.52E+02	1.00E+03	2.51E-01	1.37E+00	1.85E+00	2.00E+00	2.58E+00	1.35E+01	1.63E+01	positive	3.37E+00	9.33E+00	9.05E+00	positive	NA	NA	NA	positive	MW-51-40
MW-51-79	Q3-2011	7/28/2011	11:55	1.95E+01	3.09E+02	3.60E+02	1.00E+03	1.36E-01	1.53E+00	1.96E+00	2.00E+00	2.20E+00	8.28E+00	9.43E+00	positive	5.24E-01	9.27E+00	9.93E+00	positive	NA	NA	NA	positive	MW-51-79
MW-51-104	Q3-2011	7/28/2011	9:51	1.64E+03	3.18E+02	3.51E+02	1.00E+03	8.86E-01	1.26E+00	1.94E+00	2.00E+00	1.15E-01	5.82E+00	6.81E+00	positive	3.12E+00	8.10E+00	7.98E+00	positive	NA	NA	NA	positive	MW-51-104
MW-51-135	Q3-2011	7/28/2011	10:04	-5.63E+01	2.96E+02	3.49E+02	1.00E+03	8.06E-01	1.71E+00	1.92E+00	2.00E+00	4.41E+00	8.22E+00	9.88E+00	positive	1.32E+00	9.36E+00	1.05E+01	positive	NA	NA	NA	positive	MW-51-135
MW-51-147	Q3-2011	7/28/2011	10:18	1.20E+02	3.18E+02	3.54E+02	1.00E+03	-7.15E-01	1.26E+00	1.96E+00	2.00E+00	5.36E-01	7.77E+00	8.41E+00	positive	3.60E+00	9.69E+00	1.17E+01	positive	NA	NA	NA	positive	MW-51-163
MW-51-189	Q3-2011	7/28/2011	10:42	-5.65E+00	3.03E+02	3.53E+02	1.00E+03	3.69E-02	1.58E+00	1.95E+00	2.00E+00	2.36E+00	1.07E+01	1.02E+01	positive	2.52E+00	1.01E+01	1.17E+01	positive	NA	NA	NA	positive	MW-51-189
MW-51-82	Q3-2011	8/1/2011	11:11	7.16E+02	3.86E+02	3.71E+02	3.83E+03	-5.57E-01	7.86E-01	1.06E+00	4.46E+00	-2.46E+00	7.38E+00	7.34E+00	positive	-3.40E-01	8.49E+00	9.05E+00	positive	8.27E+00	1.80E+01	1.98E-01	positive	MW-53-82
MW-53-120	Q3-2011	8/1/2011	10:00	4.44E+03	5.15E+02	3.71E+02	1.05E+04	3.30E+01	5.22E+00	1.94E+00	6.60E+01	-2.07E+00	3.40E+00	8.67E+00	positive	-5.10E-01	9.36E+00	1.01E+01	positive	1.45E+01	1.00E+01	1.07E-01	positive	MW-53-120
MW-54-37	Q3-2011	8/15/2011	9:25	1.12E+04	1.75E+03	1.93E+02	2.71E+03	2.75E-01	1.50E+00	1.88E+00	5.20E+00	5.03E-01	5.69E+00	7.53E+00	positive	3.36E+00	7.56E+00	9.28E+00	positive	-1.05E+01	1.66E+01	1.96E-01	positive	MW-54-37
MW-54-58	Q3-2011	8/15/2011	9:47	4.25E+03	5.63E+02	2.02E+02	1.48E+03	-1.92E-01	9.75E-01	1.31E+00	3.43E+00	-1.08E+00	3.63E+00	8.12E+00	positive	-8.43E-01	9.45E+00	1.01E+01	positive	2.37E+00	1.84E+01	2.07E-01	positive	MW-54-58
MW-54-123	Q3-2011	8/15/2011	9:55	1.21E+03	3.75E+02	2.00E+02	1.30E+03	3.74E+00	2.33E+00	1.78E+00	8.14E+00	5.50E-01	3.46E+00	9.31E+00	positive	-5.09E-01	8.88E+00	9.49E+00	positive	-3.43E+00	1.94E+01	2.22E-01	positive	MW-54-123
MW-54-144	Q3-2011	8/15/2011	11:44	2.27E+03	2.23E+02	1.96E+02	3.64E+03	1.01E+01	2.75E+00	1.62E+00	2.53E+01	4.07E+00	9.39E+00	1.13E+01	positive	4.25E-01	9.81E+00	1.08E+01	positive	-5.13E+00	1.89E+01	2.18E-01	positive	MW-54-144
MW-54-173	Q3-2011	8/15/2011	11:50	1.50E+03	4.06E+02	1.97E+02	3.63E+03	4.32E+00	1.94E+00	1.48E+00	1.22E+01	-1.36E+00	1.01E+01	1.05E+01	positive	-7.70E-01	1.21E+01	1.33E+01	positive	-7.41E+00	2.05E+01	2.42E-01	positive	MW-54-173
MW-54-190	Q3-2011	8/15/2011	12:00	2.31E+03	5.88E+02	2.00E+02	3.49E+03	1.89E+01	3.39E+00	1.22E+00	4.03E+01	-3.96E+00	3.63E+00	7.57E+00	positive	-4.58E+00	8.73E+00	8.11E+00	positive	-5.67E+00	1.96E+01	2.30E-01	positive	MW-54-190
MW-55-24	Q3-2011	8/12/2011	12:12	1.71E+03	4.35E+02	2.01E+02	2.58E+03	1.29E+01	3.21E+00	1.59E+00	2.97E+01	-4.43E+00	7.32E+00	6.85E+00	positive	5.14E-01	7.95E+00	8.82E+00	positive	6.75E+00	2.09E+01	2.34E-01	positive	MW-55-24
MW-55-35	Q3-2011	8/12/2011	12:15	2.94E+03	5.56E+02	2.01E+02	4.38E+03	1.63E+01	3.18E+00	1.50E+00	4.26E+01	4.22E-01	7.50E+00	8.42E+00	positive	-1.40E+00	8.31E+00	8.83E+00	positive	-1.22E+01	2.17E+01	2.60E-01	positive	MW-55-35
MW-55-54	Q3-2011	8/12/2011	12:09	8.53E+03	9.24E+02	2.00E+02	1.28E+04	2.20E+01	3.36E+00	1.17E+00	3.93E+01	7.03E+00	3.73E+00	1.03E+01	positive	-2.52E+00	8.07E+00	7.92E+00	positive	-2.57E+00	1.96E+01	2.27E-01	positive	MW-55-54
MW-56-53	Q3-2011 Mid	8/26/2011	11:06	2.47E+02	3.96E+02	4.32E+02	1.19E+03	-6.50E-01	7.17E-01	1.13E+00	2.00E+00	1.31E+00	8.97E+00	1.03E+01	positive	2.45E+00	7.50E+00	9.03E+00	positive	NA	NA	NA	positive	MW-56-53
MW-56-83	Q3-2011 Mid	8/26/2011	10:56	1.05E+04	1.41E+03	4.43E+02	6.39E+03	3.12E+00	1.51E+00	1.37E+00	3.98E+00	-2.12E+00	8.13E+00	8.21E+00	positive	-6.41E-01	8.67E+00	9.15E+00	positive	NA	NA	NA	positive	MW-56-83
MW-57-11	Q3-2011 Mid	8/19/2011	9:49	7.27E+03	3.58E+02	2.02E+02	8.44E+03	2.08E+01	3.21E+00	1.24E+00	4.92E+01	4.45E+00	7.50E+00	9.07E+00	positive	2.31E+00	7.74E+00	9.17E+00	positive	4.92E-01	2.06E+01	2.36E-01	positive	MW-57-11
MW-57-20	Q3-2011 Mid	8/19/2011	9:54	2.47E+04	1.55E+03	1.93E+02	3.04E+03	1.90E+00	1.58E+00	1.56E+00	2.24E+00	-2.01E+00	7.35E+00	7.65E+00	positive	1.68E+00	8.07E+00	9.48E+00	positive	3.14E+00	1.98E+01	2.25E-01	positive	MW-57-20
MW-57-45	Q3-2011 Mid	8/19/2011	10:19	2.46E+04	1.56E+03	2.02E+02	2.38E+03	4.31E-01	1.31E+00	1.15E+00	2.60E+00	-5.69E+00	1.03E+01	1.04E+01	positive	2.03E+00	8.04E+00	9.53E+00	positive	2.27E+00	2.09E+01	2.38E-01	positive	MW-57-45
MW-58-26	Q3-2011 Mid	8/26/2011	14:47	2.47E+04	1.70E+03	1.99E+02	1.00E+03	-6.17E-02	7.95E-01	1.05E+00	2.00E+00	2.59E-01	7.65E+00	8.47E+00	positive	3.25E-01	8.82E+00	9.22E+00	positive	NA	NA	NA	positive	MW-58-26
MW-58-65****	Q3-2011 Mid	8/26/2011	14:04	1.10E+04	1.42E+03	2.01E+02	1.00E+03	5.51E-01****	1.18E+00	1.80E+00	2.00E+00	-1.08E+00	9.08E+00	9.65E+00	positive	-1.34E+00	1.01E+01	1.04E+01	positive	NA	NA	NA	positive	MW-58-65****
MW-59-52	Q3-2011 Mid	8/24/2011	14:22	2.74E+02	2.72E+02	2.71E+02	**	7.95E-01	1.15E+00	1.40E+00	**	-2.52E+00	1.05E+01	1.15E+01	**	2.65E+00	8.25E+00	9.93E+00	**	-6.65E+00	2.16E+01	2.54E-01	**	MW-59-52
MW-59-45	Q3-2011 Mid	8/24/2011	14:32	1.24E+03	4.92E+02	2.64E+02	**	1.13E-01	1.11E+00	1.33E+00	**	-1.32E+00	8.37E+00	8.81E+00	**	4.22E+00	9.42E+00	1.18E+01	**	1.31E+00	1.07E+01	1.20E-01	**	MW-59-45
MW-59-68	Q3-2011 Mid	8/24/2011	14:09	2.61E+02	3.83E+02	2.66E+02	**	-5.46E-01	7.35E-01	1.14E+00	**	-5.62E+00	8.52E+00	9.36E+00	**	1.36E+00	9.05E+00	1.03E+01	**	4.96E+00	1.28E+01	1.42E-01	**	MW-59-68
MW-60-35	Q3-2011	8/10/2011	10:54	4.99E+02	2.69E+02	2.00E+02	2.00E+03	-5.84E-01	7.74E-01	1.17E+00	2.00E+00	2.11E+00	5.96E+00	8.23E+00	positive	-1.34E+00	1.05E+01	1.10E+01	positive	NA	NA	NA	positive	MW-60-35
MW-60-53	Q3-2011	8/10/2011	11:45	5.16E+02	2.70E+02	1.99E+02	2.00E+03	1.38E+00	1.39E+00	1.45E+00	2.00E+00	5.77E-01	1.34E+01	8.73E+00	positive	-5.16E-01	1.07E+01	1.15E+01	positive	NA	NA	NA	positive	MW-60-53
MW-60-72	Q3-2011	8/10/2011	13:25	2.91E+02	2.23E+02	1.95E+02	2.00E+03	1.22E-01	9.33E-01	1.14E+00	2.00E+00	-4.08E+00	9.63E+00	1.03E+01	positive	4.20E+00	8.40E+00	1.06E+01	positive	NA	NA	NA	positive	MW-60-72
MW-60-135	Q3-2011	8/10/2011	13:51	4.00E+02	2.46E+02	1.95E+02	2.00E+03	-2.00E-01	9.70E-01	1.25E+00	2.00E+00	-7.37E+00	9.39E+00	8.24E+00	positive	-6.27E+00	1.07E+01	9.07E+00	positive	NA	NA	NA	positive	MW-60-135
MW-60-154	Q3-2011	8/10/2011	13:22	5.09E+02	2.81E+02	1.97E+02	2.00E+03	-5.00E-02	1.12E+00	1.40E+00	2.00E+00	-1.03E+00	3.01E+00	8.47E+00	positive	2.90E+00	9.03E+00	1.07E+01	positive	NA	NA	NA	positive	MW-60-154
MW-60-176	Q3-2011	8/10/2011	14:12	5.72E+02	3.42E+02	2.00E+02	2.00E+03	1.79E-01	9.21E-01	1.22E+00	2.00E+00	3.87E+00	7.79E+00	7.27E+00	positive	1.71E-01	8.91E+00	9.60E+00	positive	NA	NA	NA	positive	MW-60-176
MW-62-18	Q3-2011	8/3/2011	10:18	7.04E+02	3.39E+02	3.53E+02	2.00E+03	2.03E-01	1.37E+00	1.74E+00	2.00E+00	1.12E+00	3.70E+00	9.13E+00	positive	4.76E+00	9.81E+00	1.21E+01	positive	NA	NA	NA	positive	MW-62-18
MW-62-37	Q3-2011	8/3/2011	10:35	5.09E+02	3.33E+02	3.52E+02	2.00E+03	1.53E+00	1.81E+00	1.96E+00	2.00E+00	3.02E+00	6.69E+00	8.03E+00	positive	2.71E+00	8.55E+00	1.01E+01	positive	NA	NA	NA	positive	MW-62-37

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Q32011 FINal Table 4 - 2011 3rd Quarter Groundwater Analytical Results.xlsx
Q32011 Table 4

See Page 2 for Notes

IPEC00267149

TABLE 4
2011 3rd QUARTER
GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE COLLECTION		ANALYSIS RESULTS[2,3]																	Well ID
		TRITIUM (pCi/L)						Sr-90 (pCi/L)				Cs-137 (pCi/L)				Co-60 (pCi/L)				Ni-63 (pCi/L)				
		Date	Time	Result	Std. Dev.[4]	MDC	LL[3,7]	Result	Std. Dev.[5]	MDC	LL[3]	Result	Std. Dev.[4]	MDC	LL[3]	Result	Std. Dev.[4]	MDC	LL[3]	Result	Std. Dev.[4]	MDC	LL[3]	
MW-62-55	Q3-2011	8/9/2011	12:44	4.12E+02	3.42E+02	3.08E+02	2.00E+03	1.52E-01	1.46E+00	1.70E+00	2.00E+00	2.87E+00	7.29E+00	9.04E+00	positive	5.15E+00	8.76E+00	1.06E+01	positive	NA	NA	NA	positive	MW-62-55
MW-62-71	Q3-2011	8/8/2011	11:58	5.14E+02	3.65E+02	3.07E+02	2.00E+03	3.49E-01	1.39E+00	1.65E+00	2.00E+00	-7.31E-01	1.01E+01	1.13E+01	positive	2.51E+00	1.04E+01	1.20E+01	positive	NA	NA	NA	positive	MW-62-71
MW-62-92	Q3-2011	8/8/2011	12:10	5.61E+02	3.78E+02	3.03E+02	2.00E+03	-3.26E-01	1.39E+00	1.52E+00	2.00E+00	3.82E+00	1.46E+01	9.22E+00	positive	-5.35E+00	1.17E+01	1.15E+01	positive	NA	NA	NA	positive	MW-62-92
MW-62-138	Q3-2011	8/8/2011	10:08	1.42E+03	5.46E+02	3.34E+02	2.00E+03	1.53E+00	1.59E+00	1.73E+00	2.42E+00	2.51E-01	9.48E+00	1.03E+01	positive	1.53E+00	8.40E+00	9.73E+00	positive	NA	NA	NA	positive	MW-62-138
MW-62-182	Q3-2011	8/8/2011	10:20	2.84E+02	3.86E+02	3.02E+02	2.00E+03	2.04E-01	1.47E+00	1.72E+00	2.00E+00	-5.99E+00	1.20E+01	1.14E+01	positive	-2.96E-01	1.13E+01	1.24E+01	positive	NA	NA	NA	positive	MW-62-182
MW-63-18	Q3-2011	8/8/2011	10:02	2.90E+02	3.13E+02	3.03E+02	2.00E+03	-1.29E-01	1.20E+00	1.57E+00	2.00E+00	1.70E+00	5.87E+00	7.90E+00	positive	3.80E+00	8.38E+00	1.05E+01	positive	NA	NA	NA	positive	MW-63-18
MW-63-34	Q3-2011	8/8/2011	10:14	2.61E+02	3.30E+02	3.02E+02	2.00E+03	1.90E-01	1.37E+00	1.66E+00	2.00E+00	8.95E+00	9.05E+00	1.15E+01	positive	-7.29E-01	8.16E+00	8.53E+00	positive	NA	NA	NA	positive	MW-63-34
MW-63-50	Q3-2011	8/8/2011	11:38	2.50E+02	3.32E+02	3.09E+02	2.00E+03	-8.45E-01	1.10E+00	1.60E+00	2.00E+00	8.12E+00	1.18E+01	1.44E+01	positive	4.49E+00	8.52E+00	1.14E+01	positive	NA	NA	NA	positive	MW-63-50
MW-63-95	Q3-2011	8/8/2011	11:50	1.84E+02	3.12E+02	3.38E+02	2.00E+03	4.25E-02	1.31E+00	1.63E+00	2.00E+00	1.61E+00	7.26E+00	7.83E+00	positive	-2.55E+00	7.71E+00	8.38E+00	positive	NA	NA	NA	positive	MW-63-95
MW-63-112	Q3-2011	8/8/2011	12:01	5.82E+02	4.59E+02	3.36E+02	2.00E+03	1.83E-01	1.31E+00	1.67E+00	2.00E+00	2.07E+00	7.35E+00	8.45E+00	positive	2.13E+00	7.26E+00	7.10E+00	positive	NA	NA	NA	positive	MW-63-112
MW-63-121	Q3-2011	8/8/2011	10:03	1.92E+03	5.09E+02	3.29E+02	2.00E+03	9.09E-01	1.49E+00	1.62E+00	2.00E+00	5.79E+00	9.27E+00	9.03E+00	positive	6.01E+00	8.16E+00	1.09E+01	positive	NA	NA	NA	positive	MW-63-121
MW-63-163	Q3-2011	8/8/2011	10:06	2.41E+02	3.54E+02	3.08E+02	2.00E+03	7.99E-02	1.35E+00	1.69E+00	2.00E+00	5.51E-01	8.40E+00	9.38E+00	positive	2.23E+00	1.03E+01	1.20E+01	positive	NA	NA	NA	positive	MW-63-163
MW-63-174	Q3-2011	8/8/2011	10:18	6.09E+02	3.92E+02	3.09E+02	2.00E+03	6.96E-01	1.49E+00	1.68E+00	2.00E+00	4.15E+00	9.15E+00	8.83E+00	positive	4.51E+00	8.19E+00	1.05E+01	positive	NA	NA	NA	positive	MW-63-174
MW-66-21	Q3-2011	8/8/2011	10:55	7.84E+02	3.90E+02	3.73E+02	1.73E+03	8.00E-01	1.44E+00	1.59E+00	2.07E+00	-2.25E+00	8.16E+00	8.11E+00	positive	3.27E-01	7.05E+00	7.73E+00	positive	6.75E+00	9.00E+00	9.51E+00	positive	MW-66-21
MW-66-36	Q3-2011	8/8/2011	10:49	5.90E+03	5.91E+02	3.71E+02	7.71E+03	8.60E+00	2.50E+00	1.61E+00	1.40E+01	-3.96E+00	1.17E+01	1.07E+01	positive	1.48E+00	1.26E+01	1.46E+01	positive	2.85E+00	1.53E+01	1.71E+01	positive	MW-66-36
MW-67-39	Q3-2011	8/8/2011	12:26	5.62E+03	5.76E+02	3.73E+02	6.52E+03	5.31E+00	2.39E+00	1.98E+00	1.81E+01	-3.01E+00	8.34E+00	8.17E+00	positive	-7.13E+00	8.22E+00	7.50E+00	positive	5.96E+00	1.77E+01	1.50E+01	positive	MW-67-39
MW-67-105	Q3-2011	8/8/2011	12:48	1.42E+03	4.38E+02	3.74E+02	3.92E+03	7.40E-01	1.71E+00	1.92E+00	4.38E+00	-4.93E-01	7.77E+00	8.35E+00	positive	-6.18E+00	8.67E+00	7.26E+00	positive	6.67E+00	1.25E+01	1.38E+01	positive	MW-67-105
MW-67-173	Q3-2011	8/8/2011	12:53	6.13E+02	3.75E+02	3.72E+02	1.61E+03	-3.44E-01	1.55E+00	1.94E+00	2.00E+00	-1.95E+00	8.37E+00	9.15E+00	positive	1.25E+00	8.70E+00	9.80E+00	positive	4.91E+00	1.20E+01	1.53E+01	positive	MW-67-173
MW-67-219	Q3-2011	8/8/2011	10:33	1.11E+03	4.17E+02	3.73E+02	2.26E+03	3.18E-02	1.51E+00	1.90E+00	2.00E+00	3.34E-01	7.41E+00	8.13E+00	positive	-6.37E+00	9.30E+00	8.11E+00	positive	1.06E+01	1.64E+01	1.79E+01	positive	MW-67-219
MW-67-276	Q3-2011	8/8/2011	10:45	8.99E+02	3.90E+02	3.63E+02	2.01E+03	-3.98E-01	1.38E+00	1.82E+00	2.00E+00	-3.33E-01	8.67E+00	9.53E+00	positive	1.65E+00	9.24E+00	1.07E+01	positive	1.22E+01	1.91E+01	2.10E+01	positive	MW-67-276
MW-67-322	Q3-2011	8/8/2011	10:53	5.09E+02	3.51E+02	3.73E+02	1.00E+03	1.75E+00	1.35E+00	1.91E+00	2.00E+00	-6.64E-01	5.66E+00	7.23E+00	positive	4.13E+00	8.82E+00	1.09E+01	positive	-9.62E+00	2.15E+01	2.43E+01	positive	MW-67-322
MW-67-340	Q3-2011	8/8/2011	10:43	4.19E+02	3.60E+02	3.72E+02	1.01E+03	-5.52E-01	1.49E+00	1.89E+00	2.00E+00	-9.17E-01	7.92E+00	8.61E+00	positive	-4.93E+00	1.06E+01	1.00E+01	positive	6.17E+00	1.84E+01	2.05E+01	positive	MW-67-340
MW-103	Q3-2011 Mid	8/29/2011	11:25	1.78E+03	5.73E+02	2.62E+02	**	-7.81E-01	7.89E-01	1.24E+00	**	-1.84E-01	1.19E+01	1.21E+01	**	-4.10E+00	1.13E+01	1.10E+01	**	2.65E+00	1.16E+01	1.30E+01	**	MW-103
MW-109	Q3-2011 Mid	8/26/2011	13:49	5.26E+03	7.56E+02	2.59E+02	**	5.48E-01	1.31E+00	1.12E+00	**	2.37E+00	7.65E+00	8.94E+00	**	3.72E+00	9.60E+00	1.17E+01	**	-8.72E-01	8.73E+00	1.00E+01	**	MW-109
U3-3	Q3-2011 Mid	8/29/2011	13:09	1.03E+03	4.56E+02	2.65E+02	**	-5.04E-01	6.63E-01	1.06E+00	**	-2.50E+00	8.55E+00	7.82E+00	**	-3.59E+00	7.74E+00	7.12E+00	**	NA	NA	NA	**	U3-3
U3-4D	Q3-2011	7/29/2011	11:05	6.73E+02	4.02E+02	3.01E+02	1.00E+03	1.23E-01	1.58E+00	1.90E+00	2.00E+00	5.66E+00	8.43E+00	1.05E+01	positive	-2.58E+00	9.30E+00	9.06E+00	positive	NA	NA	NA	positive	U3-4D
U3-4S	Q3-2011	7/29/2011	10:06	4.67E+02	3.84E+02	3.43E+02	1.00E+03***	2.34E-01	1.54E+00	1.90E+00	2.00E+00	9.15E+00	1.58E+01	9.23E+00	positive	7.33E-01	1.02E+01	1.17E+01	positive	NA	NA	NA	positive	U3-4S
U3-T1	Q3-2011	8/22/2011	14:40	1.00E+03	3.42E+02	1.95E+02	1.00E+03	-6.26E-02	1.10E+00	1.37E+00	2.00E+00	-4.61E-01	8.70E+00	8.45E+00	positive	-2.52E+00	8.31E+00	8.23E+00	positive	NA	NA	NA	positive	U3-T1
U3-T2	Q3-2011	7/29/2011	12:32	2.65E+03	7.06E+02	3.34E+02	2.08E+03	1.05E+00	1.31E+00	1.99E+00	2.00E+00	-5.43E-01	8.49E+00	9.21E+00	positive	2.63E+00	8.91E+00	1.07E+01	positive	NA	NA	NA	positive	U3-T2
U1-NCD	Q3-2011	9/15/2011	11:45	5.86E+03	5.39E+02	3.99E+02	*	9.08E+01	7.30E+00	1.54E+00	*	4.77E+03	5.42E+02	8.81E+00	*	3.36E+00	4.68E+00	5.97E+00	*	1.14E+02	2.09E+01	1.82E+01	*	U1-NCD
U1-SFDS	Q3-2011	9/15/2011	11:35	2.09E+03	5.25E+02	4.00E+02	*	7.79E+00	2.54E+00	1.39E+00	*	9.23E+00	5.72E+00	6.71E+00	*	1.14E+00	6.27E+00	7.16E+00	*	-4.97E+00	1.70E+01	1.55E+01	*	U1-SFDS
I-2	Q3-2011	8/12/2011	15:13	2.34E+02	2.15E+02	2.00E+02	1.00E+03***	-5.95E-01	7.44E-01	1.16E+00	2.00E+00	5.11E+00	1.19E+01	1.35E+01	positive	-2.57E-01	9.24E+00	1.02E+01	positive	NA	NA	NA	positive	I-2
MH-3 VCED	Q3-2011	8/3/2011	14:12	2.90E+03	5.51E+02	3.51E+02	*	-4.45E-01	1.01E+00	1.50E+00	*	-6.13E-01	1.01E+01	1.11E+01	*	-6.71E+00	1.45E+01	1.29E+01	'	NA	NA	NA	*	MH-3 VCED
MH-3 VCED	Q3-2011	8/11/2011	12:59	2.74E+04	1.63E+03	2.02E+02	*	6.43E-01	1.19E+00	1.52E+00	*	-2.20E+00	7.41E+00	7.65E+00	*	1.85E+00	5.85E+00	7.52E+00	'	NA	NA	NA	*	MH-3 VCED
MH-3 VCED	Q3-2011	8/18/2011	9:30	2.09E+04	1.85E+03	2.84E+02	*	9.64E-01	1.55E+00	1.70E+00	^	1.91E+00	7.96E+00	9.03E+00	*	-5.10E+00	9.60E+00	9.34E+00	'	NA	NA	NA	*	MH-3 VCED
MH-3 VCED	Q3-2011 Mid	8/24/2011	11:01	1.40E+04	1.15E+03	2.55E+02	*	5.99E-01	1.30E+00	1.46E+00	^	-2.36E+00	7.86E+00	8.21E+00	*	5.46E+00	7.96E+00	9.92E+00	*	NA	NA	NA	*	MH-3 VCED
MH-3 VCED	Q3-2011 Mid	8/30/2011	13:55	2.57E+04	1.83E+03	2.05E+02	*	9.19E-01	1.31E+00	1.40E+00	^	1.76E+00	7.23E+00	8.47E+00	*	-1.59E+00	7.86E+00	7.79E+00	'	NA	NA	NA	*	MH-3 VCED
B-1	Q3-2011	8/17/2011	13:17	7.56E+02	3.03E+02	1.96E+02	*	-6.00E-02	9.87E-01	1.22E+00	*	1.51E+01	1.49E+01	7.22E+00	*	-4.01E-01	7.02E+00	7.34E+00	'	NA	NA	NA	*	B-1
B-6	Q3-2011	7/29/2011	10:52	6.42E+02	4.14E+02	3.38E+02	^	-2.59E-01	1.39E+00	1.79E+00	^	1.60E+00	7.76E+00	8.72E+00	^	4.72E+00	9.07E+00	7.82E+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 depth: within sampling intervals (location of pump intake) have been established at location of most transmissive zone to the extent possible.

3 LL's (Investigation Levels) are predetermined detection limits assigned to each sampling location which, if reached or exceeded, require further investigation or action. LL's presented here for Sr-90, CS-137, Co-60 & Ni-63 are established for 2011 based on 2010 averages. See Note #7 below for further 2011 Tritium LL discussion. Positive detections indicate that 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 Shading indicates that the sample result exceeds the Investigation Level.

6 Column designated as "Std. Dev." provides the three times 1 sigma uncertainty values.

7 To be conservative, the 2011 Tritium LL's were calculated using (for the 2009 yearly average) because an increased Tritium activity

7 To be conservative, the 2011 Tritium investigation levels were calculated using (for the 2009 rolling averages due to an increased Tritium activity
in multiple Unit 2 sampling intervals during 2010 in response to the transient surface spill from a temporary rental RWSTR/CO processing skid

^ Indicates storm or foundation drain sampling locations, for which investigation levels are not applicable

** Indicates 2011 LL is not computed for this well due to absence of 2003 through 2010 data

*** 2011 Tritium LL calculated based on the 2010 rolling average due to absence of 2009 data

**** The Post-Q3 2011 MW-58-65 preliminary Sr-90 result was 3.64 pCi/L and exceeded the LL. However, after re-analysis, the sample was below the detection limit which suggests the preliminary result was likely a false positive. A shift in the MDC for the preliminary result could have possibly resulted from contaminated laboratory equipment, modified count time, or changes in sample preparation.

IPEC00267150

TABLE 4
2011 4th QUARTER
GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE COLLECTION		ANALYSIS RESULTS[2,3]																				Well ID
				TRITIUM (pCi/L)				Sr-90 (pCi/L)				Cs-137 (pCi/L)				Co-60 (pCi/L)				Ni-63 (pCi/L)				
		Date	Time	Result	Std. Dev.[4]	MDC	LLD[3,5]	Result	Std. Dev.[4]	MDC	LLD[3]	Result	Std. Dev.[4]	MDC	LLD[3]	Result	Std. Dev.[4]	MDC	LLD[3]	Result	Std. Dev.[4]	MDC	LLD[3]	
MW-31-49	Q4-2011	11/21/2011	0:32	1.54E+04	9.78E+02	3.41E+02	4.28E+01	3.16E-01	1.08E+00	1.45E+00	2.00E+00	0.00E+00	1.46E+01	5.96E+00	1.08E+01	2.55E+03	9.54E+00	1.08E+01	positive	NA	NA	NA	NA	MW-31-49
MW-31-63	Q4-2011	11/21/2011	1:14	7.23E+03	9.00E+02	2.35E+02	3.99E+04	1.16E-00	1.42E+00	1.40E+00	2.00E+00	-2.74E+00	9.45E+00	1.09E+01	1.20E+01	2.93E+00	8.19E+00	1.20E+01	positive	NA	NA	NA	NA	MW-31-63
MW-31-85	Q4-2011	11/21/2011	1:25	5.49E+03	6.33E+02	3.45E+02	1.46E+04	9.56E-01	1.41E+00	1.50E+00	2.00E+00	-3.23E+00	9.21E+00	1.04E+01	1.22E+01	-6.05E-0.	9.57E+00	1.22E+01	positive	NA	NA	NA	NA	MW-31-85
MW-32-39	Q4-2011	11/17/2011	4:15	2.91E+04	1.74E+03	2.25E+02	3.42E+04	-1.18E+00	1.58E+00	2.33E+00	2.00E+00	-3.91E+00	-1.01E+01	1.18E+01	1.21E+01	-1.58E+03	9.84E+00	1.21E+01	positive	NA	NA	NA	NA	MW-32-39
MW-32-45	Q4-2011	11/17/2011	5:05	8.88E+03	7.65E+02	3.41E+02	1.63E+04	4.37E-01	1.52E+00	1.82E+00	2.00E+00	-1.21E+00	9.38E+00	1.80E+00	1.09E+01	-1.58E+03	9.06E+00	1.09E+01	positive	NA	NA	NA	NA	MW-32-45
MW-32-149	Q4-2011	11/17/2011	2:05	5.91E+02	3.45E+02	3.41E+02	1.00E+03	3.34E-01	1.46E+00	1.72E+00	2.00E+00	5.23E+00	9.74E+00	7.86E+00	1.12E+01	3.57E+00	8.07E+00	1.12E+01	positive	NA	NA	NA	NA	MW-32-149
MW-32-173	Q4-2011	11/17/2011	2:01	5.06E+02	3.33E+02	3.34E+02	1.50E+03	7.33E-02	9.03E-01	1.24E+00	2.00E+00	2.87E+00	9.12E+00	1.13E+01	positive	-. 50E-0.	9.93E+00	1.26E+01	positive	NA	NA	NA	NA	MW-32-173
MW-32-190	Q4-2011	11/17/2011	2:03	1.46E+03	4.05E+02	3.35E+02	4.21E+03	-7.57E-01	8.37E-01	1.41E+00	2.00E+00	.30E+00	6.57E+00	5.93E+00	positive	-4.42E-0.	6.24E+00	7.93E+00	positive	NA	NA	NA	NA	MW-32-190
MW-36-24	Q4-2011	12/7/2011	1:04	0.00E+00	4.20E+02	4.95E+02	2.56E+03	-3.36E-01	1.29E+00	1.70E+00	2.00E+00	.75E+00	9.26E+00	5.17E+00	6.00E+00	-1.38E+03	6.00E+00	7.29E+00	positive	NA	NA	NA	NA	MW-36-24
MW-36-41	Q4-2011	12/7/2011	3:09	2.63E+03	6.51E+02	4.78E+02	2.10E+04	9.80E-01	1.71E+00	1.89E+00	2.00E+00	1.15E-02	9.17E+00	5.00E+00	positive	-9.23E-0.	7.80E+00	1.01E+01	positive	NA	NA	NA	NA	MW-36-41
MW-36-52	Q4-2011	12/7/2011	1:35	4.76E+03	8.10E+02	4.91E+02	1.48E+01	5.13E-00	1.66E+00	1.24E+00	8.14E+01	2.89E+00	9.74E+00	1.01E+01	5.68E+00	9.03E+00	1.31E+01	positive	NA	NA	NA	NA	MW-36-52
MW-37-22	Q4-2011	11/23/2011	1:33	4.97E+03	8.28E+02	4.95E+02	9.19E+03	8.12E-00	2.57E+00	1.38E+00	2.28E+01	2.26E+00	9.12E+00	1.19E+01	-1.41E+03	7.35E+00	9.09E+00	positive	NA	NA	NA	NA	MW-37-22
MW-37-32	Q4-2011	11/23/2011	1:19	4.33E+03	7.80E+02	4.91E+02	9.32E+03	1.16E-01	3.21E+00	1.52E+00	3.54E+01	7.81E+00	9.00E+00	1.28E+01	-6.59E+03	8.76E+00	8.06E+00	positive	NA	NA	NA	NA	MW-37-32
MW-37-40	Q4-2011	11/23/2011	1:45	5.22E+03	8.28E+02	4.81E+02	9.02E+03	1.70E-01	3.45E+00	1.47E+00	2.84E+01	.06E+00	.43E+01	7.71E+00	5.11E-01	7.29E+00	1.00E+01	positive	NA	NA	NA	NA	MW-37-40
MW-37-57	Q4-2011	11/23/2011	1:22	4.87E+03	8.16E+02	4.91E+02	9.62E+03	1.18E-01	3.50E+00	1.81E+00	3.66E+01	-6.01E-01	8.28E+00	1.01E+01	3.00E+00	9.12E+00	1.27E+01	positive	NA	NA	NA	NA	MW-37-57
MW-39-67	Q4-2011	12/1/2011	4:01	6.03E+03	8.13E+02	4.95E+02	1.30E+03	2.77E-00	1.50E+00	1.76E+00	3.38E+00	3.91E+00	9.24E+00	1.02E+01	3.97E+00	8.07E+00	9.37E+00	positive	NA	NA	NA	NA	MW-39-67
MW-39-84	Q4-2011	12/1/2011	4:17	1.39E+02	4.32E+02	4.88E+02	1.00E+03	3.42E-00	2.03E+00	1.92E+00	2.10E+00	-1.55E+00	6.48E+00	7.42E+00	positive	-1.71E+03	8.82E+00	1.05E+01	positive	NA	NA	NA	NA	MW-39-84
MW-39-102	Q4-2011	12/1/2011	4:13	1.15E+03	5.25E+02	4.77E+02	9.00E+03	2.77E-00	2.16E+00	1.95E+00	8.18E+00	.42E+00	9.68E+00	5.90E+00	-2.95E+03	6.99E+00	7.97E+00	positive	NA	NA	NA	NA	MW-39-102
MW-39-124	Q4-2011	12/1/2011	1:42	1.73E+02	4.35E+02	4.89E+02	1.00E+03	-2.58E-01	1.41E+00	1.82E+00	4.58E+00	5.72E-01	7.95E+00	5.19E+00	2.71E+00	7.89E+00	9.85E+00	positive	NA	NA	NA	NA	MW-39-124
MW-39-163	Q4-2011	12/1/2011	1:20	-8.12E+01	4.11E+02	4.92E+02	1.00E+03	1.94E-01	1.42E+00	1.40E+00	2.40E+00	-4.81E+00	.98E+00	1.09E+01	4.17E+00	8.10E+00	1.04E+01	positive	NA	NA	NA	NA	MW-39-163
MW-39-195	Q4-2011	12/1/2011	1:23	5.55E+02	3.58E+02	4.87E+02	1.00E+03	3.80E-01	1.46E+00	1.75E+00	2.00E+00	2.12E+00	9.93E+00	1.03E+01	positive	5.51E-01	9.48E+00	1.22E+01	positive	NA	NA	NA	NA	MW-39-195
MW-40-27	Q4-2011	12/9/2011	1:53	2.24E+01	4.20E+02	4.91E+02	1.00E+03	1.74E-01	1.46E+00	1.77E+00	2.00E+00	7.82E-01	9.02E+00	5.97E+00	3.19E+00	7.14E+00	1.03E+01	positive	NA	NA	NA	NA	MW-40-27
MW-40-46	Q4-2011	12/9/2011	2:03	9.00E+01	4.17E+02	4.77E+02	1.00E+03	2.37E-01	1.42E+00	1.92E+00	2.00E+00	.26E+00	9.41E+00	6.39E+00	-9.20E-0.	6.39E+00	8.16E+00	positive	NA	NA	NA	NA	MW-40-46
MW-40-81	Q4-2011	12/9/2011	0:23	-8.05E-01	4.02E+02	4.85E+02	1.00E+03	3.77E-01	1.51E+00	1.79E+00	2.00E+00	4.66E-01	2.64E+00	1.18E+01	1.07E+00	1.07E+0.	1.39E+01	positive	NA	NA	NA	NA	MW-40-81
MW-40-100	Q4-2011	12/9/2011	0:45	4.82E+01	4.29E+02	5.02E+02	1.00E+03	1.14E-00	1.72E+00	1.41E+00	2.00E+00	.52E+00	9.98E+00	9.35E+00	1.01E+01	2.80E-01	1.77E+00	1.01E+01	positive	NA	NA	NA	NA	MW-40-100
MW-40-127	Q4-2011	12/9/2011	0:43	5.65E+01	4.08E+02	4.71E+02	1.00E+03	1.17E-00	1.50E+00	1.51E+00	2.00E+00	1.12E+00	8.91E+00	1.04E+01	positive	.355E+00	9.18E+00	1.04E+01	positive	NA	NA	NA	NA	MW-40-127
MW-40-162	Q4-2011	12/9/2011	1:02	-2.08E-01	3.42E+02	4.05E+02	1.00E+03	6.39E-01	1.55E+00	1.95E+00	2.08E+00	.06E+00	8.43E+00	1.07E+01	-4.71E+03	1.17E+0.	1.30E+01	positive	NA	NA	NA	NA	MW-40-162
MW-41-40	Q4-2011	11/28/2011	4:25	6.16E+02	5.13E+02	5.14E+02	1.00E+03	6.33E-01	1.73E+00	1.95E+00	7.26E+00	6.21E+00	8.16E+00	1.13E+01	-4.82E+03	9.81E+00	1.11E+01	positive	NA	NA	NA	NA	MW-41-40
MW-41-63	Q4-2011	11/28/2011	4:08	6.41E+02	5.22E+02	5.22E+02	1.00E+03	6.76E-01	1.73E+00	1.95E+00	7.36E+00	-7.77E-01	7.20E+00	1.56E+00	positive	-9.03E-0.	7.41E+00	9.17E+00	positive	NA	NA	NA	NA	MW-41-63
MW-42-49	Q4-2011	11/30/2011	1:13	1.40E+03	5.48E+02	5.12E+02	3.16E+04	8.76E-01	1.82E+00	9.08E+01	3.03E+03	1.03E+01	1.49E+00	1.49E+01	0.58E+00	-1.75E+01	1.76E+00	9.18E+00	positive	5.71E+01	1.37E+01	1.45E+01	0.04E+02	MW-42-49
MW-42-78	Q4-2011	11/30/2011	1:31	3.23E+02	4.65E+02	5.01E+02	1.00E+03	5.16E-02	1.15E+00	1.69E+00	2.00E+00	2.97E+00	7.32E+00	1.03E+00	positive	1.37E-01	7.71E+00	9.93E+00	positive	2.26E+01	1.12E+01	1.35E+01	positive	MW-42-78
MW-43-78	Q4-2011	11/22/2011	1:23	1.21E+02	3.60E+02	4.05E+02	1.00E+03	1.40E-00	1.51E+00	1.95E+00	2.08E+10	-9.87E-02	5.58E+00	7.14E+00	positive	.967E+00	8.07E+00	8.55E+01	positive	NA	NA	NA	NA	MW-43-78
MW-43-62	Q4-2011	11/22/2011	2:22	2.01E+02	3.72E+02	4.11E+02	1.00E+03	9.55E-01	1.78E+00	1.96E+00	2.08E+10	-1.41E+01	.42E+01	1.67E+01	1.94E+00	1.06E+0.	1.41E+01	positive	NA	NA	NA	NA	MW-43-62
MW-44-66	Q4-2011	12/8/2011	2:03	3.70E+02	3.84E+02	4.04E+02	1.00E+03	-8.25E-01	1.44E+00	1.94E+00	2.08E+10	.99E+00	7.35E+00	5.30E+00	2.32E+00	7.56E+00	1.04E+01	positive	NA	NA	NA	NA	MW-44-66
MW-44-104	Q4-2011	12/7/2011	2:15	1.05E+03	4.56E+02	4.67E+02	1.00E+03	-2.13E-01	1.52E+00	1.93E+00	2.08E+10	-7.79E-02	6.73E+00	1.04E+01	-3.88E+0.	9.33E+00	1.13E+01	positive	NA	NA	NA	NA	MW-44-104
MW-45-42	Q4-2011	11/28/2011	5:02	1.65E+03	6.27E+02	5.13E+02	5.29E+03	8.10E-01	1.75E+00	1.95E+00	2.08E+10	.21E+00	9.94E+00	7.69E+00	-2.64E+03	9.56E+00	7.84E+00	positive	NA	NA	NA	NA	MW-45-42
MW-45-61	Q4-2011	11/28/2011	1:44	2.06E+03	6.72E+02	5.15E+02	2.65E+03	4.76E-01	1.70E+00	1.97E+00	2.08E+10	3.29E-01	7.41E+00	5.39E+00	-8.81E-0.	9.42E+00	1.19E+01	positive	NA	NA	NA	NA	MW-45-61
MW-46	Q4-2010	10/20/2011	3:35	2.25E+03	6.66E+02	3.45E+02	1.94E+03	3.95E-01	1.20E+00	1.52E+00	2.00E+10	-4.36E+00	8.19E+00	1.94E+00	-1.03E+03	8.07E+00	1.01E+01	positive	NA	NA	NA	NA	MW-46
MW-47-56	Q4-2010	10/28/2011	1:35	5.31E+03	8.52E+02	4.95E+02	**	-6.21E-01	8.79E-01	1.40E+00	**	.34E+00	8.85E+00	1.07E+01	**	2.06E-01	1.01E+0.	1.29E+01	**	-6.21E+01	1.34E+01	1.44E+01	**	MW-47-56
MW-47-80	Q4-2010	10/28/2011	3:24	9.66E+04	3.41E+03	5.07E+02	**	4.13E+00	1.58E+00	1.38E+00	**	-1.35E+00	6.54E+00	9.15E+00	**	1.21E+00	6.43E+00	8.68E+01	**	3.54E+00	1.31E+01	1.40E+01	**	MW-47-80
MW-49-26	Q4-2011	11/4/2011	1:53	4.92E+03	8.27E+02	5.06E+02	6.52E+03	1.27E-01	2.55E+00	1.25E+00	2.75E+01	2.60E+00	.11E+01	7.92E+00	positive	5.17E+00	8.84E+00	1.17E+01	positive	-2.75E+01	1.36E+01	1.44E+01	positive	MW-49-26
MW-49-42	Q4-2011	11/4/2011	1:43	4.91E+03	8.19E+02	4.93E+02	4.97E+03	2.11E-01	3.00E+00	1.51E+00	3.72E+11	5.96E-01	.87E+01	1.10E+01	positive	.917E+00	1.04E+0.	1.20E+01	positive	4.77E+00	1.30E+01	1.45E+01	positive	MW-49-42
MW-49-65	Q4-2011	11/4/2011	1:47	4.24E+03	7.23E+02	4.84E+02	3.03E+03	2.12E-01	3.00E+00	1.47E+00	2.62E+11	-4.27E+00	8.88E+00	9.45E+00	1.15E+01	-6.56E-0.	9.45E+00	1.15E+01	positive	7.03E-01	1.21E+01	1.36E+01	positive	MW-49-65
MW-50-42	Q4-2011	10/27/2011	0:48	9.99E+02	5.25E+02	4.92E+02	1.04E+03	3.12E-01	4.44E+00	1.54E+00	1.10E+11	.76E+00	7.11E+00	5.22E+00	-2.60E+03	8.01E+00	9.51E+00	positive	-5.76E+01	1.21E+01	1.41E+01	positive	MW-50-42
MW-50-66	Q4-2011	10/27/2011	0:53	7.83E+03	9.65E+02	4.94E+02	9.90E+03	2.06E-01	4.35E+00	1.39E+00	5.24E+11	-6.44E-01	8.64E+00	1.02E+01	1.01E+0.	1.01E+0.	1.49E+01	positive	-4.90E+01	1.36E+01	1.42E+01	positive	MW-50-66
MW-51-40	Q4-2011	12/12/2011	0:45	1.86E+02	3.06E+02	3.23E+02	1.00E+03	-7.34E-01	1.58E+00	1.74E+00	2.00E+10	-5.52E+00	8.49E+00	5.48E+00	positive	4.82E+00	7.89E+00	1.18E+01	positive	-2.40E+01	1.32E+01	1.38E+01	positive	MW-51-40
MW-51-79	Q4-2011	12/12/2011	1:09	1.50E+02	2.95E+02	3.23E+02	1.00E+03	-1.38E-01	1.42E+00	1.90E+00	2.08E+10	-3.27E+00	7.98E+00	5.95E+00	positive	1.81E-0.	7.62E+00	9.88E+01	positive	-1.12E+01	1.13E+01	1.37E+01	positive	MW-51-79
MW-51-104	Q4-2011	12/12/2011	2:12	1.48E+02	2.91E+02	3.24E+02	1.00E+03	1.13E-00	1.76E+00	1.85E+00	2.08E+10	-3.81E+00	9.12E+00	1.01E+01	positive	9.25E+00	9.60E+00	1.43E+01	positive	-3.91E+01	1.33E+01	1.51E+01	positive	MW-51-104
MW-51-135	Q4-2011	12/12/2011	2:53	1.32E+02	2.93E+02	3.33E+02	1.00E+03	2.67E-01	1.64E+00	1.94E+00	2.08E+10	6.83E+00	9.42E+00	1.28E+01	-.733E+03	8.40E+00	9.41E+00	positive	-6.68E+01	1.18E+01	1.35E+01	positive	MW-51-135
MW-51-163	Q4-2011	12/12/2011	2:23	1.11E+02	3.05E+02	3.35E+02	1.00E+03	1.58E-00	1.81E+00	1.94E+00	2.08E+10	2.45E+00	8.94E+00	1.16E+01	-4.50E-0.	8.34E+00	1.06E+01	positive	-3.59E+01	1.42E+01	1.68E+01	positive	MW-51-163
MW-51-189	Q4-2011	12/12/2011	2:23	-5.77E-01	2.30E+02	3.23E+02	1.00E+03	-3.34E-01	1.43E+00	1.91E+00	2.08E+10	-4.45E+00	8.18E+00	5.53E+00	positive	5.34E+00	8.34E+00	1.13E+01	positive	-9.34E+01	1.34E+01	2.22E+01	positive	MW-51-189
MW-53-82	Q4-2011	11/2/2011	1:25	2.27E+02	4.90E+02	5.01E+02	1.85E+03	-2.47E-01	1.99E+00	1.49E+00	4.44E+10	-1.15E+00	6.78E+00	7.87E+00	positive	-8.95E-0.	8.73E+00	1.07E+01	positive	-4.95E-01	1.34E+01	1.41E+01	positive	MW-53-82
MW-53-120	Q4-2011	11/2/2011	1:55	8.02E+03	9.27E+02	4.67E+02	1.05E+04	4.15E-01	5.16E+00	1.52E+00	6.68E+11	4.60E+00	8.52E+00	1.15E+01	-. 89E-0.	7.89E+00	1.03E+01	positive	2.58E+00	1.33E+01	2.7E+01	positive	MW-53-120
MW-54-37	Q4-2011	12/6/2011	0:37	-1.40E+04	1.02E+03	3.73E+02	1.71E+03	4.48E-00	2.27E+00	1.92E+00	9.28E+10	-5.22E+00	9.72E+00	1.03E+01	-4.84E-01	8.94E+00	1.14E+01	positive	-5.68E+01	1.25E+01	1.43E+01	positive	MW-54-37
MW-54-58	Q4-2011	12/6/2011	0:23	4.83E+03	8.45E+02	5.07E+02	1.90E+03	1.10E-00	1.20E+00	1.91E+00	3.42E+10	3.42E+00	2.13E+00	2.14E+00	1.42E+00	4.56E+00	5.85E+00	positive	2.36E+00	1.25E+01	1.40E+01	positive	MW-54-58
MW-54-123	Q4-2011	12/6/2011	0:27	2.02E+02	3.00E+02	3.27E+02	1.72E+03	1.15E-00	1.68E+00	1.95E+00	6.11E+10	-1.21E+00	7.38E+00	4.87E+00	1.04E+00	5.01E+00	6.00E+00	positive	5.31E+00	1.32E+01	1.41E+01	positive	MW-54-123
MW-54-144	Q4-2011	12/6/2011	0:25	6.65E+03	9.24E+02	5.07E+02	1.54E+03	9.15E-00	2.99E+00	1.96E+00	2.51E+11	3.64E-01	9.58E+00	6.45E+00	-.977E+01	5.58E+00	6.68E+00	positive	-9.77E+01	1.22E+01	1.18E+01	positive	MW-54-144
MW-54-173	Q4-2011	12/6/2011	0:25	2.32E+03	6.66E+02	3.25E+02	3.63E+03	4.72E-00	2.22E+00	1.97E+00	1.22E+11	-8.31E-01	4.83E+00	5.47E+00	5.05E-01	5.19E+00	6.34E+00	positive	-2.75E+01	1.24E+01	1.41E+01	positive	MW-54-173
MW-54-190	Q4-2011	12/6/2011	0:38	6.27E+03	8.22E+02	3.65E+02	3.49E+03	1.21E-01	2.32E+00	1.90E+00	4.03E+11	5.15E-01	3.87E+00	4.56E+00	1.47E+00	4.11E+00	5.26E+00	positive	3.28E+00	1.21E+01	1.34E+01	positive	MW-54-190
MW-55-24	Q4-2011	11/14/2011	1:25	2.51E+03	6.66E+02	4.95E+02	2.58E+03	2.35E-01	4.18E+00	1.56E+00	2.97E+11	0.00E+00	3.49E+00	1.07E+01	-7.45E+01	1.05E+01	1.50E+01	positive	-7.45E+01	1.25E+01	2.15E+01	positive	MW-55-24
MW-55-35	Q4-2011	11/14/2011	1:23	2.79E+03	6.04E+02	5.03E+02	4.30E+03	2.22E-01	3.59E+00	1.60E+00	4.26E+11	3.04E-01	7.08E+00	6.07E+00	4.90E+01	8.22E+00	1.06E+01	positive	4.79E+00	1.37E+01	2.89E+01	positive	MW-55-35
MW-55-54	Q4-2011	11/14/2011	1:07	5.97E+03	8.25E+02	4.67E+02	1.38E+04	1.75E-01	3.77E+00	1.46E+00	5.91E+11	-2.67E+00	8.67E+00	1.04E+01	3.60E+00	6.69E+00	1.01E+01	positive	1.57E+00	1.32E+01	2.7E+01	positive	MW-55-54
MW-56-53	Q4-2011	10/31/2011	2:13	6.15E+01	4.41E+02	5.09E+02	1.19E+03	5.32E-02	1.19E+00	1.39E+00	2.08E+10	4.08E+00	9.36E+00	1.24E+01	4.41E+00	8.22E+00	1.26E+01	positive	4.76E+00	1.34E+01	2.7E+01	positive	MW-56-53
MW-56-83	Q4-2011	10/31/2011	2:03	7.25E+04	2.80E+03	5.11E+02	6.39E+03	9.41E-01	1.49E+00	1.61E+00	3.96E+10	2.19E+00	7.29E+00	5.56E+00	2.43E+00	8.94E+00	1.22E+01	positive	-3.01E+01	2.14E+01	2.44E+01	positive	MW-56-83
MW-58-26	Q4-2011	11/15/2011	4:22	-4.42E-01	4.31E+02	5.21E+02	1.00E+03	-4.56E-01	8.38E-01	1.25E+00	2.08E+10	.04E+00	9.95E+00	1.19E+01	1.04E+00	9.42E+00	1.24E+01	positive	NA	NA	NA	NA	MW-58-26
MW-58-65	Q4-2011	11/15/2011	4:05	1.75E+03	4.22E+02	5.42E+02	1.00E+03	2.82E-01	1.71E+00	2.03E+00	2.08E+10	-1.87E+00	8.82E+00	5.54E+00	-7.70E-0.	7.23E+00	8.96E+00	positive	NA	NA	NA	NA	MW-58-65
MW-60-35	Q4-2011	12/7/2011	1:21	1.74E+02	4.07E+02	3.00E+03	3.94E-01	1.27E+00	1.86E+00	2.08E+10	-8.20E-01	9.39E+00	1.15E+01	7.86E+00	1.17E+01	2.63E+00	7.86E+00	1.17E+01	positive	NA	NA	NA	NA	MW-60-35
MW-60-53	Q4-2011	12/2/2011	1:45	2.65E+02	3.30E+02	3.33E+02	2.00E+03	9.40E-02	1.69E+00	1.97E+00	2.08E+10	4.62E-01	4.68E+00	5.62E+00	-9.95E-0.	4.83E+00	5.65E+00	positive	NA	NA	NA	NA	MW-60-53
MW-60-72	Q4-2011	12/2/2011	0:01	3.08E+02	3.75E+02	4.01E+02	2.00E+03	8.41E-01	1.73E+00	1.93E+00	2.08E+10	-2.15E+00	6.99E+00	5.20E+00	-1.72E+03	8.28E+00	1.01E+01	positive	NA	NA	NA	NA	MW-60-72
MW-60-135	Q4-2011	12/2/2011	0:13	3.05E+02	3.81E+02	4.05E+02	2.00E+03	-1.48E-01	1.62E+00	1.91E+00	2.08E+10	-1.51E+00	7.68E+00	5.43E+00	4.05E+00	7.48E+00	1.13E+01	positive	NA	NA	NA	NA	MW-60-135
MW-60-154	Q4-2011	12/2/2011	0:13	6.27E+02	5.22E+02	5.23E+02	2.00E+03	-1.77E-01	1.54E+00	1.96E+00	2.08E+10	.25E+00	9.33E+00	1.17E+01	1.00E+0.	1.13E+01	positive	NA	NA	NA	NA	MW-60-154
MW-60-176	Q4-2011	12/2/2011	0:27	1.10E+03	6.97E+02	5.11E+02	3.00E+03	-1.17E+00	1.41E+00	1.95E+00	2.08E+10	7.34E-01	6.68E+00	1.20E+01	1.01E+0.	1.35E+01	1.36E+01	positive	NA	NA	NA	NA	MW-60-176
MW-62-.8	Q4-2011	10/21/2011	0:14	6.50E+02	3.54E+02	3.45E+02	2.00E+03	-1.89E+00	1.66E+00	2.27E+00	2.08E+10	-1.15E+00	6.87E+00	8.23E+00	-8.37E-0.	8.82E+00	1.11E+01	positive	-8.37E+01	1.34E+01	1.42E+01	positive	MW-62-18
MW-62-37	Q4-2011	10/21/2011	0:02	3.74E+02	3.33E+02	3.47E+02	2.00E+03	-3.34E-01	1.02E+00	2.05E+00	2.08E+10	5.93E-01	8.19E+00	5.98E+00	-1.66E+03	8.07E+00	9.72E+00	positive	NA	NA	NA	NA	MW-62-37
MW-62-53	Q4-2011	10/21/2011	0:17	4.82E+02	3.39E+02	3.42E+02	2.00E+03	-1.78E-02	1.42E+00	1.61E+00	2.08E+10	.84E+00	6.66E+00	3.55E+00	.49E+00	7.05E+00	1.01E+01	positive	NA	NA	NA	NA	MW-62-53
MW-62-71	Q4-2011	10/21/2011	0:44	4.68E+02	3.36E+02	3.42E+02	2.00E+03	-1.43E-01	1.29E+00	1.69E+00	2.08E+10	3.75E-01	3.96E+00	1.13E+01	2.06E+00	2.84E+00	1.32E+01	positive	NA	NA	NA	NA	MW-62-71
MW-62-87	Q4-2011	10/21/2011	0:42	5.51E+02	3.45E+02	3.40E+02	2.00E+03	4.45E-01	1.27E+00	1.48E+00	2.08E+10	3.15E-01	9.59E+00	1.17E+01	1.88E-01	9.18E+00	1.27E+01	positive	NA	NA	NA	NA	MW-62-87
MW-62-138	Q4-2011	10/21/2011	1:29	9.01E+03	9.57E+02	2.26E+02	2.00E+03	1.14E-00	1.48E+00	1.50E+00	2.42E+10	-5.81E+00	.01E+01	1.10E+01	.455E+01	1.03E+0.	1.33E+01	positive	NA	NA	NA	NA	MW-62-138
MW-62-182	Q4-2011	10/21/2011	1:37	6.88E+02	3.42E+02	3.27E+02	2.00E+03	-2.48E-01	1.45E+00	1.90E+00	2.08E+10	-4.81E+00	.22E+01	1.34E+01	-1.67E+03	1.06E+0.	1.27E+01	positive	NA	NA	NA	NA	MW-62-182
MW-63-.8	Q4-2011	10/18/2011	1:34	2.59E+02	2.94E+02	2.21E+02	2.00E+03	1.61E-00	1.42E+00	1.83E+00	2.08E+10	.31E+00	8.26E+00	1.07E+01	1.47E+00	1.09E+0.	1.44E+01	positive	NA	NA	NA	NA	MW-63-.8
MW-63-34	Q4-2011	10/18/2011	1:37	4.20E+02	3.36E+02	3.45E+02	2.00E+03	-4.71E-01	1.27E+00	1.70E+00	2.08E+10	-3.77E+00	8.31E+00	5.14E+00	2.21E+00	7.62E+00	1.11E+01	positive	NA	NA	NA	NA	MW-63-34
MW-63-50	Q4-2011	10/18/2011	3:55	3.14E+02	3.61E+02	3.85E+02	2.00E+03	4.47E-01	1.63E+00	1.94E+00	2.08E+10	-9.08E-01	.09E+01	1.29E+01	-.697E+03	1.00E+0.	1.34E+01	positive	NA	NA	NA	NA	MW-63-50
MW-63-93	Q4-2011	10/18/2011	4:14	5.04E+02	3

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TABLE 4
2011 4th QUARTER
GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERTY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE COLLECTION		ANALYSIS RESULTS[4,5]																	Well ID
				TRITIUM (pCi/L)				Sr-90 (pCi/L)				Cs-137 (pCi/L)				Co-60 (pCi/L)				Ni-63 (pCi/L)				
		Date	Time	Result	Std. Dev.[6]	MDC	LL[3,7]	Result	Std. Dev.[6]	MDC	LL[3]	Result	Std. Dev.[6]	MDC	LL[3]	Result	Std. Dev.[6]	MDC	LL[3]	Result	Std. Dev.[6]	MDC	LL[3]	
MW-67-105	Q4-2011	11/29/2011	4 10	1 09E+03	5 94E+02	4 72E+02	3 92E+03	1 12E 00	1 74E+00	1 90E+00	4 20E+10	-1 52E+80	8 73E+00	1 01E+01	positive	-1 41E+03	8 73E+00	1 04E+01	positive	3 55E+00	1 37E+01	2 20E+01	positive	MW-67-105
MW-67-173	Q4-2011	11/29/2011	4 23	5 88E+02	4 74E+02	4 78E+02	1 61E+03	1 13E+00	1 62E+00	1 56E+00	2 00E+10	-1 48E+80	9 87E+00	1 14E+01	positive	-1 48E+03	1 08E+0	1 30E+01	positive	7 19E+00	1 18E+01	1 99E+01	positive	MW-67-173
MW-67-219	Q4-2011	11/29/2011	0 41	1 20E+03	4 92E+02	4 45E+02	2 26E+03	3 4E-01	1 42E+00	1 63E+00	2 00E+10	-1 12E+81	1 14E+01	1 19E+01	positive	1 99E+00	7 65E+00	1 12E+01	positive	1 32E+01	1 13E+01	1 23E+01	positive	MW-67-2 9
MW-67-276	Q4-2011	11/29/2011	0 57	1 06E+03	5 25E+02	4 84E+02	2 01E+03	1 99E-01	1 70E+00	1 95E+00	2 00E+10	-2 95E+80	1 01E+01	1 19E+01	positive	-7 14E-0	8 82E+00	1 11E+01	positive	6 48E+00	1 19E+01	1 31E+01	positive	MW-67-276
MW-67-323	Q4-2011	11/29/2011	0 57	3 62E+02	4 56E+02	4 85E+02	1 00E+03	7 61E-01	1 71E+00	1 91E+00	2 00E+10	-3 91E+80	9 81E+00	1 15E+01	positive	1 58E+00	5 43E+00	8 36E+00	positive	1 56E+01	2 34E+01	2 56E+01	positive	MW-67-323
MW-67-340	Q4-2011	11/29/2011	0 45	2 62E+02	4 68E+02	4 72E+02	1 01E+03	-5 30E-01	1 53E+00	1 87E+00	2 00E+10	-7 67E+80	7 53E+00	2 09E+00	positive	1 23E+00	8 82E+00	1 14E+01	positive	1 70E+00	1 36E+01	1 7E+01	positive	MW-67-3-0
MW-111	Q4-2011	11/11/2011	1 33	1 11E+04	1 42E+03	3 31E+02	6 15E+04	1 19E-00	1 53E+00	1 62E+00	2 00E+10	-2 0 .E+1	7 11E+00	8 62E+00	1 16E+01	2 75E+00	8 97E+00	1 21E+01	positive	NA	NA	NA	positive	MW-111
I-2	Q4-2011	12/8/2011	4 15	-3 49E-01	3 45E+02	4 09E+02	1 00E-03***	-2 39E-01	1 56E+00	1 92E+00	2 00E+10	-2 35E+80	8 76E+00	1 00E+01	positive	-2 122+03	8 46E+00	1 04E+01	positive	NA	NA	NA	positive	I-2
U3-4S	Q4-2011	11/16/2011	1 28	7 52E+02	4 41E+02	3 32E+02	1 00E-03***	9 35E-01	1 38E+00	1 47E+00	2 00E+10	-2 00E+80	9 27E+00	1 12E+01	positive	1 63E+00	7 80E+00	1 08E+01	positive	NA	NA	NA	positive	U3-4S
U3-4D	Q4-2011	11/16/2011	2 55	3 50E+02	3 63E+02	3 81E+02	1 00E+03	3 7E-01	1 38E+00	1 64E+00	2 00E+10	-9 83E-01	8 82E+00	1 07E+01	positive	-8 21E-0	9 27E+00	1 17E+01	positive	NA	NA	NA	positive	U3-4D
U3-T1	Q4-2011	10/19/2011	1 39	7 69E+02	4 02E+02	3 64E+02	1 00E+03	1 39E-01	1 19E+00	1 45E+00	2 00E+10	-3 93E-01	9 51E+00	1 17E+01	positive	-1 12E-01	9 12E+00	1 17E+01	positive	NA	NA	NA	positive	U3-T1
U3-T2	Q4-2011	10/19/2011	0 23	2 88E+03	5 62E+02	3 26E+02	3 26E+03	-8 79E-02	1 15E+00	1 47E+00	2 00E+10	-4 81E+80	1 02E+01	1 09E+01	positive	-5 13E+03	1 12E+0	1 23E+01	positive	NA	NA	NA	positive	U3-T2
U1-CSS	Q4-2011	10/27/2011	3 02	1 70E+03	5 64E+02	4 77E+02	5 17E+03	7 32E-01	1 28E+00	1 39E+00	2 00E+11	-2 81E+80	8 07E+00	8 99E+00	positive	1 05E+00	7 08E+00	9 69E+00	positive	-8 01E+0(	1 78E+01	2 07E+01	positive	U1-CSS
J1-3CD	Q4-2011	10/3/2011	3 23	1 13E+04	1 03E+03	3 35E+02	*	1 78E-01	3 72E+00	1 74E+00	*	5 92E+03	8 04E+02	1 43E+01	*	1 93E+00	7 20E+00	9 97E+0(	*	1 36E+02	2 21E+01	1 36E+01	*	U1-3CD
J1-3CD	Q4-2011	12/26/2011	2 45	2 32E+03	5 13E+02	3 76E+02	*	1 49E-01	5 52E+00	3 33E+00	*	7 73E+03	9 75E+02	1 84E+01	*	-1 01E+03	9 48E+00	1 17E+01	*	1 36E+02	2 79E+01	1 38E+01	*	U1-3CD
U1-3FD3	Q4-2011	10/5/2011	9 00	2 02E+03	5 01E+02	3 35E+02	*	5 54E 00	2 23E+00	1 97E+00	*	4 27E+03	9 96E+00	1 25E+01	*	-(39E+03	8 94E+00	9 49E+0(	*	2 36E+01	1 37E+01	2 00E+01	*	U1-3FD3
U1-3FD8	Q4-2011	12/28/2011	8 19	1 10E+02	3 21E+02	3 61E+02	*	2 66E-00	2 22E+00	2 08E+00	*	-3 33E+80	9 87E+00	1 13E+01	*	-7 75E-01	1 02E+0.	1 33E+01	*	4 44E+0(	1 47E+01	1 73E+01	*	U1-3FD8
B-6	Q4-2011	10/20/2011	2 01	1 70E+02	3 48E+02	3 87E+02	*	-1 55E-01	1 57E+00	1 98E+00	*	-3 07E+80	7 65E+00	8 33E+00	*	1 53E+00	8 34E+00	1 10E+01	*	NA	NA	NA	*	B-6
MH-5 VCFD	Q4-2011	10/17/2011	0 07	1 48E+04	1 09E+03	3 85E+02	*	-5 57E-01	1 17E+00	1 65E+00	*	-5 51E+0(	7 68E+00	9 98E+00	*	-(77E+03	7 92E+00	9 24E+0(	*	NA	NA	NA	*	MH-5 VCFD
MH-5 VCFD	Q4-2011	10/31/2011	4 23	2 40E+04	1 37E+03	3 85E+02	*	1 16E-00	1 72E+00	1 87E+00	*	5 56E+0(	1 15E+01	1 61E+01	*	-(37E-01	1 09E+0.	1 53E+01	*	NA	NA	NA	*	MH-5 VCFD
LAF-002	Q4-2011	12/13/2011	0 31	6 96E+01	4 14E+02	4 79E+02	positive	1 03E-00	1 47E+00	1 75E+00	positive	-3 87E+80	9 48E+00	1 11E+01	positive	5 21E+00	8 73E+00	1 29E+01	positive	6 36E+00	1 11E+01	1 32E+01	positive	LAF-002

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 Water.no 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 well bores

2 Sampling depths within sampling intervals (location of pump intake) have been established at location of most transmissive zone to the extent possible

3 LLs (Investigation Levels) are predetermined detection limits assigned to each sampling location which, if reached or exceeded, require further investigation or action LLs presented here for Sr-90, CS-137, Co-60 & Ni-63 are established for 2011 based on 20.0 averages See Note #7 below for further 2011 Tritium LL calculation 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 Shading indicates that the sample result exceeds the Investigation Level

6 Column designated as "Std. Dev" provides the three times 1 sigma uncertainty values

7 To be conservative, the 2011 Tritium LLs were calculated using (2x the 2009 yearly average) because an increased Tritium activity in multiple Unit 2 sampling intervals was observed during 2010 in response to the transient surface spill from a temporary rental RWST/RCO processing skid

* Indicates storm or foundation drain sampling locations, for which investigation levels are not applicable

** Indicates 20.1 LL not computed for the well due to absence of 2008 through 2010 data

*** 2011 Tritium LL calculated based on the 2010 rolling average due to absence of 2009 data

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

Well ID[1, 4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-30-69	004	59 3	6 4	8/18/2006	14 45	2 20E+05	4 23E+03	1 10E+C3	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	MW-30-69
	005	59 3	6 4	11/29/2006	10 45	1 36E+05	1 85E+03	5 30E+C2	2 50E+00	8 40E-01	8 10E-01	3 13E+03	3 30E+01	5 00E-00	1 20E+00	2 28E+0C	2 50E+00	1 15E+0:	1 26E+01	1 40E+C1	
	006	59 3	6 4	1/16/2007	14 05	8 17E+04	8 73E+03	6 34E+C2	-1 50E-01	1 47E+00	1 60E+00	0 00E+00	2 10E+00	2 42E-00	-4 30E-01	2 07E+0C	2 50E+00	7 37E+00	1 94E+01	2 20E+C1	
	007	59 3	6 4	6/12/2007	10 20	2 97E+05	8 73E+03	6 34E+C2	-2 53E-01	4 19E-01	6 45E-01	3 93E-31	3 75E+00	4 09E-00	6 88E-C2	4 08E+0C	5 94E+00	NA	NA	NA	
	008	59 3	6 4	7/18/2007	9 55	8 21E+04	2 45E+03	7 00E+C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	59 3	6 4	8/ /2007	11 44	1 28E+05	3 09E+03	6 40E+C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	011	59 3	6 4	8/8/2007	10 00	9 96E+04	2 99E+03	6 32E+C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	012	59 3	6 4	9/15/2007	11 00	2 33E105	6 99E103	6 33E1C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	013	59 3	6 4	9/21/2007	9 45	1 37E+05	3 21E+03	7 05E+C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	014	59 3	6 4	8/30/2007	11 37	9 80E+04	2 94E+03	7 03E+C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	015	59 3	6 4	9/19/2007	11 00	9 20E+04	2 75E+03	7 02E+C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	016	59 3	6 4	10/23/C007	11 48	1 32E+05	3 93E+03	4 24E+C2	2 52E-01	6 16E-01	7 12E-01	2 42E+00	5 76E+00	4 45E-00	-5 09E-01	3 66E+0C	3 06E+00	NA	NA	NA	
	017	59 3	6 4	2/4/2008	13 00	1 87E+05	5 51E+03	3 95E+C2	1 57E-01	6 98E-01	8 57E-01	1 26E+00	3 05E+00	3 55E-00	-6 00E-01	3 63E+0C	3 28E+00	NA	NA	NA	
	018	59 3	6 4	5/6/2008	11 00	1 53E+05	3 01E+03	4 06E+C2	3 54E-01	3 96E-01	6 71E-01	4 94E-31	1 83E+00	3 21E-00	-5 70E-01	1 71E+0C	2 73E+00	NA	NA	NA	
	019	59 3	6 4	6/6/2008	11 01	7 56E+04	2 02E+03	3 06E+C2	2 02E-01	3 20E-01	5 59E-01	-9 82E-01	2 10E+00	3 27E-00	4 91E-C1	2 44E+0C	2 85E+00	NA	NA	NA	
	020	59 3	6 4	8/5/2008	11 22	1 99E+05	3 92E+03	4 92E+C2	2 09E-01	3 07E-01	5 54E-01	-1 57E-01	1 42E+00	2 38E-00	1 11E+00	1 28E+0C	2 33E+00	NA	NA	NA	
	021	59 3	6 4	9/3/2008	11 29	8 53E+04	2 03E+03	5 50E+C2	-3 12E-01	5 12E-01	9 72E-01	-1 88E+00	2 22E+00	3 35E-00	N A	NA	NA	NA	NA	NA	
	022	59 3	6 4	11/7/2008	10 27	9 55E104	2 05E103	3 06E1C2	4 09E-01	5 53E-01	6 31E-01	7 03E-31	3 00E100	3 65E 00	-: 07E-01	2 65E10C	2 05E100	NA	NA	NA	
	023	59 3	6 4	1/30/2009	11 00	1 37E+05	2 51E+03	1 98E+C2	-8 74E-02	3 58E-01	9 73E-01	-1 18E+00	2 61E+00	2 65E-00	1 06E+00	2 70E+0C	3 24E+00	NA	NA	NA	
	024	59 3	6 4	4/27/2009	10 27	1 30E+05	3 65E+03	4 02E+C2	-1 54E-01	4 28E-01	6 31E-01	1 49E+00	7 11E+00	4 74E-00	-2 78E-01	4 19E+0C	4 66E+00	NA	NA	NA	
	025	59 3	6 4	6/ /2009	12 02	8 20E+04	3 21E+03	3 77E+C2	3 12E-01	5 63E-01	6 32E-01	2 16E+00	9 80E+00	6 53E-00	8 26E-C1	6 47E+0C	7 42E+00	NA	NA	NA	
	026	59 3	6 4	8/6/2009	12 16	1 54E+05	4 77E+03	2 96E+C2	6 79E-02	6 10E-01	7 41E-01	-2 09E+00	8 32E+00	7 30E-00	-2 07E+00	9 44E+0C	9 70E+00	NA	NA	NA	
	027	59 3	6 4	9/12/2009	10 45	9 91E+04	2 91E+03	2 67E+C2	-3 43E-02	6 45E-01	8 50E-01	-9 52E-01	5 52E+00	6 11E-00	4 45E+00	6 13E+0C	7 88E+00	NA	NA	NA	
	028	59 3	6 4	11/9/2009	11 21	9 01E+04	2 63E+03	1 78E+C2	-4 26E-01	6 63E-01	8 14E-01	-1 87E-01	5 47E+00	6 22E-00	-2 47E-01	6 03E+0C	6 76E+00	NA	NA	NA	
	029	59 3	6 4	1/27/2010	11 30	1 25E+05	3 99E+03	6 15E+C2	3 42E-02	7 18E-01	8 33E-01	-3 23E-01	3 36E+00	3 68E-00	2 05E-C1	3 17E+0C	3 57E+00	NA	NA	NA	
	030	59 3	6 4	2/24/2010	12 35	1 36E+05	2 01E+03	2 02E+C2	-7 42E-02	3 5~E-01	5 30E-01	3 84E-31	3 79E+00	4 23E-00	-1 38E+00	3 65E+0C	3 73E+00	NA	NA	NA	
	031	59 3	6 4	4/29/2010	12 05	1 51E+05	4 67E+03	2 78E+C2	-1 31E-01	7 76E-01	9 40E-01	-2 22E+00	5 33E+00	5 29E-00	2 60E+00	5 27E+0C	6 28E+00	NA	NA	NA	
	032	59 3	6 4	6/9/2010	12 32	1 52E105	4 43E103	4 00E1C2	2 56E-01	4 79E-01	5 40E-01	-1 23E100	6 55E100	7 22E 00	-: 72E-01	5 45E10C	5 99E100	NA	NA	NA	
	033	59 3	6 4	7/28/2010	12 33	1 28E+05	3 72E+03	1 80E+C2	9 14E-02	5 24E-01	6 85E-01	-5 08E-01	9 69E+00	1 09E-01	1 67E+00	7 66E+0C	9 20E+00	NA	NA	NA	
	034	59 3	6 4	8/20/2010	15 08	1 11E+05	3 24E+03	2 07E+C2	3 53E-01	7 86E-01	9 38E-01	-3 14E+00	5 22E+00	5 17E-00	-2 41E+00	5 25E+0C	5 08E+00	NA	NA	NA	
	035	59 3	6 4	9/8/2010	12 35	1 23E+05	3 65E+03	4 47E+C2	1 93E-01	4 41E-01	5 14E-01	-1 13E+00	4 42E+00	4 87E-00	1 40E+00	4 72E+0C	5 73E+00	NA	NA	NA	
	036	59 3	6 4	11/5/2010	11 56	1 25E+05	1 83E+03	4 34E+C2	9 69E-01	8 79E-01	1 94E+00	-3 63E+00	3 94E+00	7 79E-00	-5 01E+00	5 09E+0C	9 47E+00	NA	NA	NA	
	037	59 3	6 4	2/9/2011	12 17	1 01E+05	2 13E+03	2 98E+C2	1 62E+00	1 93E+00	2 00E+00	1 87E+00	5 80E+00	6 74E-00	-: 13E-01	5 88E+0C	6 44E+00	NA	NA	NA	
	038	59 3	6 4	3/31/2011	11 38	1 38E+05	3 43E+03	4 72E+C2	-6 11E-01	1 63E+00	2 15E+00	2 48E+00	7 96E+00	9 14E-00	-1 41E+00	6 70E+0C	6 46E+00	NA	NA	NA	
	039	59 3	6 4	5/5/2011	12 08	1 13E+05	3 43E+03	3 99E+C2	2 40E+00	1 37E+00	1 23E+00	2 46E+00	8 92E+00	1 03E-01	2 21E+00	9 58E+0C	1 16E+01	NA	NA	NA	
	040	59 3	6 4	7/11/2011	12 05	1 19E+05	4 23E+03	2 83E+C2	-6 14E-02	7 62E-01	1 00E+00	3 56E+00	1 07E+01	1 24E-01	2 40E+00	1 19E+01	1 46E+01	NA	NA	NA	
	041	59 3	6 4	8/9/2011	10 49	1 14E+05	3 43E+03	4 22E+C2	1 02E+00	1 70E+00	1 92E+00	-7 03E-01	1 03E+01	1 12E-01	-2 42E+00	1 08E+0C	8 50E+00	NA	NA	NA	
	042	59 3	6 4	11/30/201:	11 20	2 12E104	3 09E103	4 07E1C2	-4 56E-01	1 51E100	1 96E100	1 05E100	7 71E100	9 27E 00	2 82E100	7 41E10C	1 11E101	NA	NA	NA	
MW-30-84	001	83 3	-8 1	8/22/2006	13 15	1 25E+04	2 48E+03	1 61E+C3	-1 50E-01	9 83E-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 3	-8 1	11/29/2006	14 30	1 01E+04	1 59E+03	1 10E+C3	-9 40E-01	7 86E-01	8 70E-01	2 96E+02	1 68E+01	5 00E-00	-3 00E-01	3 90E+0C	4 80E+00	4 10E+00	1 17E+01	1 30E+C1	
	003	83 3	-8 1	1/17/2007	9 45	7 33E+03	7 53E+02	5 30E+C2	4 80E-01	1 56E+00	1 60E+00	1 18E+00	2 61E+00	2 90E-00	0 00E+00	2 91E+0C	3 40E+00	NA	NA	NA	
	004	83 3	-8 1	6/12/2007	10 19	7 79E+03	9 47E+02	4 42E+C2	-1 49E-01	4 44E-01	6 41E-01	-1 05E+00	2 29E+00	2 41E-00	-6 93E-01	2 38E+0C	2 54E+00	-3 57E+00	1 74E+01	2 03E+C1	
	005	83 3	-8 1	7/18/2007	10 25	4 80E+03	7 23E+02	7 00E+C2	NA	NA	NA	NA	NA	NA	N A	NA	NA	NA	NA	NA	
	006	83 3	-8 1	7/25/2007	13 00	5 02E+03	4 43E+02	2 43E+C2	1 56E-01	3 09E-01	3 48E-01	2 83E+00	3 38E+00	2 84E-00	2 03E+00	2 91E+0C	3 57E+00	NA	NA	NA	
	007	83 3	-8 1	10/23/C007	12 49	4 27E+03	7 33E+02	4 03E+C2	5 95E-01	5 53E-01	5 59E-01	1 56E+00	2 81E+00	3 38E-00	-1 17E+00	3 72E+0C	3 27E+00	NA	NA	NA	
	008	83 3	-8 1	2/4/2008	14 16	4 34E+03	2 61E+02	1 32E+C2	-4 36E-01	4 55E-01	7 47E-01	-1 02E+00	2 55E+00	2 73E-00	-4 32E-01	2 97E+0C	2 75E+00	NA	NA	NA	
	009	83 3	-8 1	5/6/2008	13 40	4 18E+03	2 83E+02	2 20E+C2	3 26E-01	3 86E-01	6 31E-01	4 43E-31	2 37E+00	4 02E-00	-1 91E+00	2 23E+0C	2 69E+00	NA	NA	NA	
	010	83 3	-8 1	6/6/2008	12 10	3 25E+03	5 33E+02	5 04E+C2	1 54E-01	2 44E-01	4 34E-01	-2 27E-01	2 16E+00	2 57E-00	2 05E+00	2 21E+0C	4 52E+00	NA	NA	NA	
	020	83 3	-8 1	8/5/2008	14 40	4 31E+03	2 23E+02	1 94E+C2	2 77E-01	2 84E-01	4 57E-01	-1 87E-01	1 44E+00	2 35E-00	-: 04E-01	2 12E+0C	2 66E+00	NA	NA	NA	
	021	83 3	-8 1	9/3/2008	11 59	3 78E+03	5 13E+02	5 35E+C2	-4 52E-02	4 61E-01	9 36E-01	-3 02E-01	1 73E+00	2 89E-02	N A	NA	NA	NA	NA	NA	
	013	83 3	-8 1	11/7/2008	10 50	5 25E+03	3 23E+02	1 64E+C2	1 07E-02	5 72E-01	7 51E-01	5 64E-31	4 63E+00	5 37E-00	2 13E+00	5 34E+0C	6 53E+00	NA	NA	NA	
	014	83 3	-8 1	1/30/2009	11 21	4 59E+03	5 43E+02	1 99E+C2	9 38E-02	5 9~E-01	7 19E-01	8 97E+00	4 34E+00	3 02E-00	-8 43E-02	3 39E+0C	3 81E+00	NA	NA	NA	
	015	83 3	-8 1	4/27/2009	14 30	5 34E+03	9 03E+02	4 11E+C2	-1 19E-01	4 70E-01	6 29E-01	1 13E+00	6 54E+00	4 35E-00	1 33E+00	3 72E+0C	4 5CE+00	NA	NA	NA	
	016	83 3	-8 1	6/ /2009	13 25	5 83E+03	9 02E+02	3 76E+C2	1 34E-01	7 19E-01	8 22E-01	3 90E-31	1 01E+01	6 75E-00	8 79E-C2	6 06E+0C	6 8CE+00	NA	NA	NA	
	017	83 3	-8 1	8/6/2009	12 58	7 76E+03	5 05E+02	1 60E+C2	6 08E-02	7 4~E-01	9 19E-01	1 88E+00	4 82E+00	5 65E-00	-: 55E+00	6 12E+0C	4 95E+00	NA	NA	NA	
	018	83 3	-8 1	9/12/2009	12 22	6 75E+03	3 89E+02	1 53E+C2	-6 42E-02	7 20E-01	8 91E-01	1 76E+00	9 09E+00	5 02E-00	-7 70E-01	5 29E+0C	5 82E+00	NA	NA	NA	
	019	83 3	-8 1	11/9/2009	12 27	6 27E103	3 33E102	9 70E1C1	8 04E-02	7 33E-01	9 42E-01	2 06E-31	5 92E100	6 74E 00	-: 17E100	5 33E10C	4 9CE100	NA	NA	NA	
	020	83 3	-8 1	1/27/2010	12 15	6 50E+03	1 07E+03	6 37E+C2	1 54E 01	2 43E-01	4 32E 01	3 93E-31	3 06E+00	3 41E-00	8 46E 01	3 03E+0C	3 15E+00	NA	NA	NA	
	021	83 3	-8 1	2/24/2010	12 44	6 94E+03	3 63E+02	1 69E+C2	1 20E-01	4 22E-01	5 56E-01	1 17E+00	4 58E+00	5 35E-00	1 09E-C1	4 74E+0C	5 54E+00	NA	NA	NA	
	022	83 3	-8 1	4/29/2010	13 46	9 56E+03	5 43E+02	1 48E+C2	4 08E-01	8 33E-01	9 56E-01	-3 84E-01	5 71E+00	6 35E-00	2 19E+00	5 36E+0C	6 57E+00	NA	NA	NA	
	023	83 3	-8 1	6/8/2010	12 19	9 40E+03	4 37E+02	2 14E+C2	2 01E-01	4 85E-01	5 52E-01	7 20E-31	5 49E+00	6 21E-00	-4 01E+00	6 36E+0C	6 10E+00	NA	NA	NA	
	024	83 3	-8 1	7/28/2010	13 07	9 26E+03	5 09E+02	1 01E+C2	4 48E-01	7 63E-01	8 52E-01	-1 45E+00	9 30E+00	1 02E-01	-3 03E-01	9 79E+0C	1 08E+01	NA	NA	NA	
	025	83 3	-8 1	8/20/2010	16 51	1 30E+04	5 57E+02	1 29E+C2	5 65E-01	8 70E-01	9 53E-01	3 22E+00	6 27E+00	7 54E-00	-3 97E+00	6 69E+0C	6 2CE+00	NA	NA	NA	
	026	83 3	-8 1	9/8/2010	13 14	1 01E+04	4 32E+02	2 10E+C2	3 18E-01	6 20E-01	7 35E-01	-1 43E+00	6 18E+00	6 74E-00	-4 19E-01	7 65E+0C	8 58E+00	NA	NA	NA	
	027	83 3	-8 1	11/6/2010	12 55	1 32E+04	4 83E+02	3 87E+C2	5 25E-01	1 06E+00	-3 0~E+00	4 23E+00	8 55E-00	-5 22E+00	4 86E+0C	8 2CE+00	NA	NA	NA		
	028	83 3	-8 1	2/9/2011	12 57	9 20E+03	8 85E+02	3 79E+C2	1 12E+00	1 82E+00	1 98E+00	5 89E-31	4 74E+00	5 22E-00	1 09E+00	5 76E+0C	6 45E+00	NA	NA	NA	
	029	83 3	-8 1	3/31/2011	12 03	9 34E103	1 05E103	4 74E1C2	-4 70E-01	1 6CE100	2 13E100	5 00E-31	1 12E101	1 21E 01	-3 04E100	9 40E10C	9 12E100	NA	NA	NA	
	030	83 3	-8 1	5/5/2011	12 58	7 57E+03	9 45E+02	3 92E+C2	1 64E 01	1 15E+00	1 40E+00	3 00E+00	8 04E+00	9 35E-00	4 65E C2	7 14E+0C	7 7CE+00	NA	NA	NA	
	031	83 3	-8 1	7/11/2011	12 45	7 55E+03	1 03E+03	2 82E+C2	-3 75E-01	9 75E-01	1 29E+00	2 17E-31	7 89E+00	8 82E-00	1 39E+01	1 16E+01	1 55E+01	NA	NA	NA	
	032	83 3	-8 1	8/9/2011	11 16	7 26E+03	7 05E+02	3 54E+C2	-1 22E+00	1 28E+00	1 92E+00	-1 67E+00	7 08E+00	7 43E-00	-5 28E+00	9 63E+0C	9 46E+00	NA	NA	NA	
	033	83 3	-8 1	11/30/201:	11 37	7 24E+03	9 39E+02	4 80E+C2	5 31E-02	1 45E+00	1 81E+00	-1 63E+00	9 48E+00	1 09E-01	-1 64E+00	1 05E+01	1 26E+01	NA	NA	NA	
MW-31-45	001	48 3	26 8	11/27/2006	11 45	2 98E+02	1 74E+02	1 70E+C2	0 00E+00	1 29E+00	1 40E+00	NA	NA	NA	1 30E+00	3 60E+0C	4 0CE+00	1 42E+02	1 65E+02	1 80E+C2	MW-31-49
	002	48 3	26 8	1/18/2007	9 13	1 20E+03	5 73E+02	5 30E+C2	3 00E-01	1 62E+00	1 80E+00	NA	NA	NA	-2 1CE+00	8 10E+0C	9 5CE+00	NA	NA	NA	
	003	48 3	26 8	6/12/2007	14 24	1 48E+03	5 24E+02	4 37E+C2	-1 51E-01	5 49E-01	7 52E-01	1 83E-31	2 12E+00	2 35E-00	1 26E-C1	2 01E+0C	2 26E+00	0 00E+00	1 11E+01	1 29E+C1	
	004	48 3	26 8	8/2/2007	10 23	1 19E+04	1 21E+03	5 43E+C2	-5 17E-01	1 89E-01	9 52E-01	8 83E+01	1 35E+01	1 51E-00	1 80E-C1	3 65E+0C	4 11E+00	NA	NA	NA	
	005	48 3	26 8	9/11/2007	13 10	6 98E+03	3 27E+02	1 59E+C2	-2 26E-01	4 23E-01	6 21E-01	-1 23E+00	3 04E+00	3 24E-00	0 00E+00	4 96E+0C	4 75E+00	NA	NA	NA	

IPEC00267153

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[4]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-31-49	006	48.3	26.8	10/24/2007	15:50	8.77E+03	9.99E+02	4.00E+02	5.14E-02	4.26E-01	5.86E-01	-6.76E-01	3.94E+00	5.57E+00	1.35E+00	3.21E+00	5.57E+00	NA	NA	NA	MW-31-49
	007	48.3	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	48.3	26.8	6/6/2008	15:05	3.34E+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	3.02E+00	NA	NA	NA	
	010	48.3	26.8	8/7/2008	12:43	5.94E+02	1.33E+02	1.92E+02	2.39E-01	2.67E-01	4.43E-01	7.07E-31	1.30E+00	2.23E+00	7.08E-01	1.49E+00	2.56E+00	NA	NA	NA	
	011	48.3	26.8	8/30/2008	11:55	1.36E+04	8.61E+02	5.53E+02	4.76E-01	4.80E-01	8.36E-01	1.27E+00	3.63E+00	3.09E+00	NA	NA	NA	NA	NA	NA	
	012	48.3	26.8	10/30/2008	11:30	6.43E+02	2.23E+02	1.71E+02	7.64E-02	7.71E-01	1.23E-01	1.39E+00	6.27E+00	7.25E-00	-9.09E-01	6.40E+00	6.88E+00	NA	NA	NA	
	013	48.3	26.8	11/18/2008	11:15	7.77E+02	1.72E+02	1.62E+02	4.11E-01	6.30E-01	9.97E-01	1.12E+00	4.18E+00	5.03E+00	5.78E-01	4.93E+00	5.84E+00	NA	NA	NA	
	014	48.3	26.8	2/9/2009	11:05	1.11E+04	7.83E+02	1.99E+02	1.38E-01	3.00E-01	3.37E-01	-1.67E-01	2.97E+00	3.35E+00	-4.61E-01	2.85E+00	3.14E+00	NA	NA	NA	
	015	48.3	26.8	4/14/2009	10:36	4.34E+04	1.42E+03	1.56E+02	4.85E-01	5.63E-01	5.27E-01	-5.01E-01	6.13E+00	4.12E-00	1.44E+00	3.90E+00	4.67E+00	NA	NA	NA	
	016	48.3	26.8	5/29/2009	11:42	9.34E+03	1.12E+03	3.77E+02	5.72E-01	5.72E-01	6.24E-01	7.86E-01	9.50E+00	6.33E+00	1.49E+00	6.63E+00	7.11E+00	NA	NA	NA	
	017	48.3	26.8	7/21/2009	11:53	7.36E+02	2.61E+02	2.27E+02	1.91E-01	5.01E-01	5.26E-01	-1.35E+00	3.38E+00	3.63E-00	1.04E+00	3.09E+00	4.66E+00	NA	NA	NA	
	019	48.3	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	48.3	26.8	10/22/2009	12:58	4.58E+04	8.63E+02	1.63E+02	5.63E-01	8.72E-01	9.57E-01	2.29E-31	6.17E+00	6.84E+00	-4.70E-01	6.15E+00	6.61E+00	NA	NA	NA	
	021	48.3	26.8	1/26/2010	12:07	4.46E+02	1.35E+02	1.12E+02	1.88E-01	7.59E-01	9.35E-01	-4.18E-01	5.33E+00	4.07E-00	-1.34E+00	3.84E+00	5.96E+00	NA	NA	NA	
	022	48.3	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	5.12E+00	1.18E+00	4.83E+00	5.71E+00	NA	NA	NA	
	023	48.3	26.8	4/14/2010	10:42	1.16E+04	3.93E+02	1.00E+02	1.18E-01	4.62E-01	5.72E-01	-2.95E+00	8.54E+00	9.02E-00	5.25E-03	8.91E+00	9.95E+00	NA	NA	NA	
	024	48.3	26.8	6/7/2010	11:30	1.73E+04	5.79E+02	2.22E+02	3.41E-01	7.97E-01	9.18E-01	-3.83E+00	7.42E+00	7.51E+00	1.82E+00	6.72E+00	8.03E+00	NA	NA	NA	
	025	48.3	26.8	7/27/2010	14:43	5.46E+04	1.29E+03	1.21E+02	3.05E-01	4.71E-01	5.22E-01	2.74E+00	1.17E+01	1.42E-01	2.23E+00	8.03E+00	9.96E+00	NA	NA	NA	
	026	48.3	26.8	8/23/2010	12:11	4.11E+03	3.55E+02	1.23E+02	1.62E-01	7.09E-01	9.57E-01	-1.21E+00	5.42E+00	5.91E-00	-3.35E-02	5.10E+00	5.00E+00	NA	NA	NA	
	027	48.3	26.8	9/7/2010	13:49	1.34E+05	3.02E+03	1.68E+02	1.15E-01	2.83E-01	4.23E-01	3.35E+00	5.52E+00	6.62E-00	2.16E+00	5.97E+00	7.26E+00	NA	NA	NA	
	028	48.3	26.8	11/3/2010	11:55	3.35E+04	9.81E+02	1.15E+02	-3.34E-02	4.26E-01	5.51E-01	-2.87E+00	8.51E+00	8.97E-00	2.22E+00	8.87E+00	1.06E+01	NA	NA	NA	
	029	48.3	26.8	2/9/2011	13:12	1.26E+03	3.43E+02	2.98E+02	-5.51E-01	1.76E+00	2.14E+00	1.39E+00	5.22E+00	6.02E-00	4.84E-01	5.26E+00	5.91E+00	NA	NA	NA	
	030	48.3	26.8	3/30/2011	12:33	4.31E+03	7.84E+02	4.65E+02	1.77E+00	2.04E+00	2.16E+00	-2.34E+00	7.80E+00	8.17E-00	-5.38E-01	9.18E+00	1.02E+01	NA	NA	NA	
	031	48.3	26.8	4/18/2011	12:53	1.38E+03	5.23E+02	4.66E+02	4.98E-01	1.81E+00	2.09E+00	-1.82E+00	8.82E+00	9.22E-00	6.17E+00	8.70E+00	1.13E+01	NA	NA	NA	
	033	48.3	26.8	8/5/2011	10:47	4.98E+03	7.83E+02	4.16E+02	-2.53E-02	1.34E+00	1.58E+00	6.39E+00	8.76E+00	1.12E-01	5.20E-01	1.06E+01	1.16E+01	NA	NA	NA	
	034	48.3	26.8	11/21/2011	10:32	1.54E+04	9.73E+02	3.42E+02	-3.16E-01	1.08E+00	1.45E+00	0.00E+00	1.14E+01	9.95E-00	-3.55E+00	9.24E+00	1.08E+01	NA	NA	NA	
MW-31-63	031	53.3	12.3	11/27/2006	12:19	6.89E+03	1.44E+03	1.10E+03	5.30E-01	1.26E+00	1.40E+00	1.59E+02	9.60E+00	3.62E-00	6.98E-01	4.94E+00	5.41E+00	4.10E+01	1.17E+02	1.30E+02	MW-31-63
	002	53.3	12.3	1/18/2007	9:22	1.41E+04	9.01E+02	2.20E+02	-6.50E-01	1.20E+00	1.70E+00	-4.00E-01	3.32E+00	3.52E-00	-4.50E-01	2.91E+00	3.50E+00	NA	NA	NA	
	003	53.3	12.3	6/12/2007	14:20	5.30E+03	7.05E+02	4.30E+02	4.72E-01	6.34E-01	6.70E-01	-5.01E-01	1.92E+00	2.02E-00	-8.76E-02	1.97E+00	2.20E+00	3.37E+00	1.09E+01	2.17E+01	
	004	53.3	12.3	8/3/2007	11:15	4.26E+01	2.27E+03	5.53E+02	1.11E-01	7.81E-01	9.53E-01	1.20E+00	3.56E+00	4.18E-00	3.09E-02	4.71E+00	4.23E+00	NA	NA	NA	
	005	53.3	12.3	9/11/2007	13:25	3.77E+04	1.13E+03	2.20E+02	-1.87E-01	4.55E-01	6.15E-01	-4.39E-01	3.51E+00	3.85E-00	-8.66E-01	3.99E+00	3.44E+00	NA	NA	NA	
	006	53.3	12.3	10/24/2007	14:55	3.58E+04	1.94E+03	4.00E+02	-1.53E-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	53.3	12.3	1/16/2008	11:32	1.24E+04	7.35E+02	1.80E+02	-6.38E-02	5.34E-01	7.44E-01	-2.49E-01	4.04E+00	4.42E-00	-9.08E-01	4.19E+00	4.32E+00	NA	NA	NA	
	009	53.3	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	3.35E-00	2.47E+00	2.31E+00	4.45E+00	NA	NA	NA	
	010	53.3	12.3	8/7/2008	11:22	1.76E+04	4.17E+02	1.94E+02	-2.12E-01	2.61E-01	5.39E-01	-1.86E-01	1.28E+00	2.15E-00	3.73E-01	1.43E+00	2.45E+00	NA	NA	NA	
	011	53.3	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-31	2.35E+00	4.04E-00	NA	NA	NA	NA	NA	NA	
	012	53.3	12.3	10/30/2008	12:14	2.30E+04	1.03E+03	1.73E+02	2.28E-01	3.32E-01	6.32E-01	2.22E+00	6.18E+00	7.31E-00	-1.14E+00	7.20E+00	7.77E+00	NA	NA	NA	
	013	53.3	12.3	11/18/2008	11:26	2.55E+04	8.07E+02	1.84E+02	3.95E-01	7.46E-01	8.36E-01	1.02E-32	5.89E+00	6.01E-00	-5.18E-01	6.24E+00	6.97E+00	NA	NA	NA	
	014	53.3	12.3	2/9/2009	11:53	1.28E+04	8.32E+02	1.27E+02	6.43E-01	6.44E-01	6.32E-01	-1.22E+00	3.42E+00	3.63E-00	-7.46E-01	3.06E+00	4.17E+00	NA	NA	NA	
	015	53.3	12.3	4/14/2009	12:07	3.24E+01	1.13E+03	1.48E+02	2.95E-01	6.81E-01	7.75E-01	1.76E+00	6.68E+00	7.45E-00	2.23E+00	3.87E+00	4.76E+00	NA	NA	NA	
	016	53.3	12.3	5/29/2009	12:34	3.16E+04	9.51E+02	1.95E+02	5.59E-01	5.58E-01	6.37E-01	1.79E+00	1.07E+01	7.17E-00	7.44E-01	6.45E+00	7.35E+00	NA	NA	NA	
	017	53.3	12.3	7/21/2009	12:50	1.45E+04	8.23E+02	2.31E+02	1.95E-01	7.52E-01	9.11E-01	3.43E-31	3.90E+00	4.37E-00	-1.56E+00	3.88E+00	3.75E+00	NA	NA	NA	
	018	53.3	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	-1.33E+00	6.76E+00	6.17E-00	6.92E-01	5.01E+00	5.74E+00	NA	NA	NA	
	019	53.3	12.3	9/14/2009	12:45	1.41E+04	5.43E+02	1.55E+02	8.11E-01	8.72E-01	9.25E-01	-1.95E+00	4.75E+00	5.05E-00	-1.40E+00	5.07E+00	6.25E+00	NA	NA	NA	
	020	53.3	12.3	10/22/2009	13:20	2.30E+04	5.85E+02	1.67E+02	1.10E+00	9.45E-01	7.37E-01	1.92E-31	5.92E+00	6.75E-00	2.27E+00	6.42E+00	7.75E+00	NA	NA	NA	
	021	53.3	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	3.56E+00	3.52E+00	NA	NA	NA	
	022	53.3	12.3	3/5/2010	12:17	7.55E+04	1.11E+03	1.72E+02	1.20E-01	3.38E-01	4.32E-01	2.51E+00	4.49E+00	5.38E+00	-2.85E+00	4.62E+00	4.24E+00	NA	NA	NA	
	023	53.3	12.3	4/14/2010	13:05	1.84E+04	5.43E+02	1.08E+02	-1.30E-01	4.43E-01	6.51E-01	-4.58E+00	9.18E+00	9.12E-00	2.75E-01	9.97E+00	1.12E+01	NA	NA	NA	
	024	53.3	12.3	6/7/2010	12:19	5.11E+04	1.53E+03	2.23E+02	3.68E-01	8.04E-01	9.11E-01	-3.29E+00	5.94E+00	7.22E-00	5.47E-01	6.12E+00	7.05E+00	NA	NA	NA	
	025	53.3	12.3	7/27/2010	15:54	6.17E+01	1.83E+03	1.27E+02	5.51E-01	6.45E-01	6.39E-01	1.81E+00	8.27E+00	8.91E-00	1.22E+00	7.33E+00	8.76E+00	NA	NA	NA	
	026	53.3	12.3	8/23/2010	13:11	6.59E+04	1.95E+03	1.60E+02	4.60E-01	7.63E-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	53.3	12.3	9/7/2010	15:28	4.55E+04	1.41E+03	1.46E+02	3.99E-01	7.26E-01	8.18E-01	4.03E-31	4.75E+00	5.31E-00	-1.47E+00	5.45E+00	5.56E+00	NA	NA	NA	
	028	53.3	12.3	11/3/2010	12:32	2.95E+04	9.02E+02	1.14E+02	3.31E-01	6.30E-01	7.13E-01	-2.24E+00	9.63E+00	1.02E-01	3.44E+00	8.40E+00	1.07E+01	NA	NA	NA	
	029	53.3	12.3	2/9/2011	13:14	2.46E+04	1.13E+03	2.98E+02	4.29E-01	1.78E+00	2.08E+00	-1.42E+00	6.46E+00	6.81E-00	-2.31E+00	6.42E+00	6.26E+00	NA	NA	NA	
	030	53.3	12.3	3/30/2011	13:13	1.33E+04	1.14E+03	4.53E+02	1.49E+00	1.87E+00	2.02E+00	8.76E-31	9.00E+00	9.97E-00	-1.92E-01	7.26E+00	7.92E+00	NA	NA	NA	
	031	53.3	12.3	4/18/2011	13:21	1.81E+04	1.43E+03	4.67E+02	1.26E-01	1.84E+00	2.08E+00	-3.10E-01	1.62E+00	8.45E-00	1.76E+00	8.44E+00	1.05E+01	NA	NA	NA	
	033	53.3	12.3	8/5/2011	11:29	1.53E+04	1.31E+03	4.18E+02	-1.30E-01	1.71E+00	2.02E+00	-2.83E-01	9.87E+00	1.12E-01	2.13E+00	9.24E+00	1.08E+01	NA	NA	NA	
	034	53.3	12.3	11/21/2011	11:14	7.23E+03	9.03E+02	2.36E+02	1.36E+00	1.42E+00	1.40E+00	-2.72E+00	9.45E+00	1.02E-01	2.93E+00	9.19E+00	1.02E+01	NA	NA	NA	
MW-31-95	031	84.3	-9.2	11/27/2006	12:20	4.52E+02	1.71E+02	1.70E+02	1.50E-01	1.44E+00	1.60E+00	1.52E+02	8.40E+00	3.22E-00	2.10E-01	2.19E+00	2.50E+00	2.30E+01	2.39E+01	1.00E+02	MW-31-95
	002	84.3	-9.2	1/18/2007	9:16	2.56E+03	6.01E+02	5.20E+02	-5.90E-01	1.55E+00	1.30E+00	-4.92E+00	8.70E+00	1.02E-01	-6.00E-01	8.70E+00	1.02E+01	8.35E+00	2.11E+01	2.39E+01	
	003	84.3	-9.2	6/12/2007	14:05	3.17E+02	1.67E+02	1.69E+02	-3.33E-01	6.62E-01	9.31E-01	3.99E-31	2.76E+00	1.91E-00	-5.71E-01	1.69E+00	1.88E+00	NA	NA	NA	
	004	84.3	-9.2	8/2/2007	10:58	2.59E+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	84.3	-9.2	9/11/2007	13:20	4.32E+03	3.32E+02	1.82E+02	6.86E-01	7.48E-01	7.23E-01	-7.04E-01	3.04E+00	3.25E-00	-3.07E+00	3.68E+00	3.24E+00	NA	NA	NA	
	006	84.3	-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-31	2.90E+00	3.38E-00	4.76E-01	2.75E+00	3.19E+00	NA	NA	NA	
	007	84.3	-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	4.88E-00	1.90E+00	3.80E+00	4.62E+00	NA	NA	NA	
	009	84.3	-9.2	6/6/2008	15:26	5.95E+03	6.53E+02	5.05E+02	1.52E-01	3.11E-01	5.59E-01	-8.01E-01	2.20E+00	3.40E-00	1.91E+00	2.45E+00	4.56E+00	NA	NA	NA	
	010	84.3	-9.2	8/7/2008	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	84.3	-9.2	8/30/2008	12:06	8.34E+03	7.03E+02	5.52E+02	4.46E-01	4.67E-01	9.10E-01	-5.50E-01	1.90E+00	3.07E-00	NA	NA	NA	NA	NA	NA	
	012	84.3	-9.2	10/30/2008	12:09	3.89E+03	4.52E+02	1.67E+02	4.08E-01	7.33E-01	8.35E-01	5.63E+00	6.17E+00	4.73E-00	7.82E+00	6.98E+00	6.56E+00	NA	NA	NA	
	013	84.3	-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	4.75E-00	2.84E+00	3.82E+00	5.15E+00	NA	NA	NA	
	014	84.3	-9.2	2/9/2009	11:22	7.37E+03	6.54E+02	2.07E+02	3.89E-01	5.56E-01	6.16E-01	1.27E+00	3.50E+00	4.05E-00	1.09E+00	3.77E+00	4.73E+00	NA	NA	NA	
	015	84.3	-9.2	4/14/2009	11:41	1.88E+04	8.49E+02	1.50E+02	5.35E-01	7.01E-01	7.54E-01	-6.49E-01	5.24E+00	3.49E-00	1.11E+00	3.50E+00	4.14E+00	NA	NA	NA	
	016	84.3	-9.2	5/29/2009	12:50	8.35E+03	1.09E+03	3.75E+02	1.84E-01	8.01E-01	9.30E-01	8.20E-31	1.04E+01	6.95E-00	6.97E-01	6.57E+00	7.51E+00	NA	NA	NA	
	017	84.3	-9.2	7/21/2009	12:13	2.96E+03	4.13E+02	2.29E+02	-2.28E-01	5.61E-01	8.38E-01	-2.54E+00	5.04E+00	4.22E-00	2.26E+00	3.71E+00	4.75E+00	NA	NA	NA	
	018	84.3	-9.2	9/1/2009	10:52	3.52E+03	3.03E+02	2.12E+02	4.12E-01	6.15E-01	6.31E-01	-8.48E-01	4.46E+00	4.89E-00	-5.30E-03	6.12E+00	6.86E+00	NA	NA	NA	
	019	84.3	-9.2	9/14/2009	12:05	5.14E+03	3.43E+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	

IPEC00267154

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

Well ID[1, 4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-31-85	020	84.3	-9.2	10/22/2009	12:54	4.50E+03	3.05E+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	MW-31-85
	021	84.3	-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	5.45E+00	NA	NA	NA	
	022	84.3	-9.2	3/5/2010	11:49	2.59E+03	2.52E+02	1.68E+02	1.39E-01	3.31E-01	3.38E-01	1.93E+00	4.34E+00	5.05E-00	4.40E-01	4.46E+00	5.01E+00	NA	NA	NA	
	023	84.3	-9.2	4/14/2010	12:09	4.85E+03	2.63E+02	9.99E+01	-1.42E-01	4.23E-01	6.36E-01	3.84E+00	6.90E+00	8.62E-00	1.40E-01	6.13E+00	6.84E+00	NA	NA	NA	
	024	84.3	-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	6.81E+00	NA	NA	NA	
	025	84.3	-9.2	7/27/2010	15:22	6.70E+03	4.34E+02	1.00E+02	3.55E-01	4.72E-01	5.34E-01	-3.93E+00	8.82E+00	9.22E-00	2.50E+00	8.43E+00	9.93E+00	NA	NA	NA	
	026	84.3	-9.2	8/23/2010	12:10	5.27E+03	3.93E+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	
	027	84.3	-9.2	9/7/2010	14:14	6.21E+03	5.24E+02	1.44E+02	-3.52E-01	4.43E-01	6.35E-01	-1.54E+00	5.68E+00	6.11E-00	2.71E+00	6.42E+00	7.79E+00	NA	NA	NA	
	028	84.3	-9.2	11/3/2010	12:00	6.36E+03	4.15E+02	1.14E+02	2.41E-01	4.03E-01	5.47E-01	-1.35E+00	8.03E+00	9.62E-00	-2.66E-01	1.03E+01	1.15E+01	NA	NA	NA	
	029	84.3	-9.2	2/9/2011	13:03	4.83E+03	6.81E+02	3.82E+02	3.26E-01	1.79E+00	2.18E+00	3.19E+00	5.96E+00	7.08E-00	3.14E+00	6.06E+00	7.36E+00	NA	NA	NA	
	030	84.3	-9.2	3/30/2011	12:55	7.75E+03	4.65E+02	4.52E+02	9.37E-01	1.81E+00	2.00E+00	5.90E+00	1.31E+01	8.15E-00	6.43E+00	8.88E+00	1.17E+01	NA	NA	NA	
	031	84.3	-9.2	4/18/2011	13:18	3.38E+03	6.95E+02	4.66E+02	-1.09E+00	1.46E+00	2.09E+00	-4.53E+00	9.34E+00	9.19E-00	3.84E+00	1.01E+01	1.22E+01	NA	NA	NA	
	033	84.3	-9.2	8/5/2011	11:27	4.82E+03	7.74E+02	4.22E+02	1.39E-01	1.40E+00	1.63E+00	-8.79E-01	8.25E+00	8.80E-00	-4.79E+00	9.57E+00	8.27E+00	NA	NA	NA	
	034	84.3	-9.2	11/21/2011	11:25	5.49E+03	6.33E+02	3.45E+02	9.56E-01	1.41E+00	1.50E+00	-3.23E+00	9.21E+00	1.04E-01	-6.05E-01	9.57E+00	1.22E+01	NA	NA	NA	
MW-32-48	035	NA	NA	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
	036	NA	NA	4/28/2010	11:28	6.18E+04	1.83E+03	1.75E+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	
	037	NA	NA	7/27/2010	12:52	3.59E+03	3.23E+02	9.94E+01	3.59E-01	8.37E-01	9.90E-01	1.54E-31	7.00E+00	8.04E-00	-3.86E+00	7.74E+00	7.51E+00	NA	NA	NA	
	038	NA	NA	8/24/2010	14:03	5.90E+03	3.51E+02	2.10E+02	3.55E-01	6.33E-01	7.39E-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	58.3	18.3	1/19/2007	9:30	7.57E+03	7.53E+02	5.20E+02	6.30E-01	1.47E+00	1.60E+00	-9.60E-01	1.90E+00	2.32E-00	4.90E-01	2.28E+00	2.60E+00	NA	NA	NA	MW-32-59
	002	58.3	18.3	6/28/2007	14:25	2.40E+04	7.37E+02	1.97E+02	1.55E-01	5.90E-01	7.27E-01	1.71E+00	3.51E+00	3.32E-00	1.42E+00	3.07E+00	3.34E+00	NA	NA	NA	
	003	58.3	18.3	8/13/2007	13:07	1.42E+04	6.03E+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	3.70E+00	3.65E+00	NA	NA	NA	
	031	58.3	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	58.3	18.3	1/18/2008	13:25	1.37E+04	9.11E+02	1.86E+02	4.67E-01	6.96E-01	7.57E-01	9.98E-31	4.25E+00	4.79E-00	1.99E+00	3.81E+00	4.65E+00	NA	NA	NA	
	003	58.3	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	58.3	18.3	6/9/2008	12:10	2.85E+03	4.81E+02	5.06E+02	-3.39E-01	3.64E-01	7.51E-01	-1.22E+00	1.94E+00	2.98E-00	-7.10E-01	2.43E+00	3.91E+00	NA	NA	NA	
	005	58.3	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-31	1.97E+00	3.33E-00	-1.08E+00	2.48E+00	3.26E+00	NA	NA	NA	
	006	58.3	18.3	9/2/2008	13:52	2.44E+03	4.59E+02	3.53E+02	2.39E-01	3.59E-01	9.44E-01	7.77E-31	1.85E+00	3.21E-00	NA	NA	NA	NA	NA	NA	
	007	58.3	18.3	10/24/2008	13:59	4.13E+02	2.01E+02	1.73E+02	1.63E-01	6.00E-01	7.44E-01	-3.50E-01	7.21E+00	7.32E-00	-1.32E+00	6.29E+00	6.65E+00	NA	NA	NA	
	008	58.3	18.3	2/4/2009	15:46	1.70E+04	1.03E+03	1.90E+02	-1.31E-01	5.72E-01	7.59E-01	1.01E-31	3.54E+00	3.41E-00	2.70E+00	3.41E+00	4.34E+00	NA	NA	NA	
	009	58.3	18.3	4/27/2009	15:54	6.43E+01	3.03E+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	58.3	18.3	6/9/2009	13:59	6.69E+03	9.63E+02	3.77E+02	3.26E-01	4.73E-01	5.25E-01	-1.72E-01	9.63E+00	6.41E-00	-7.66E-01	5.63E+00	6.08E+00	NA	NA	NA	
	011	58.3	18.3	8/3/2009	15:04	8.85E+02	2.07E+02	1.55E+02	1.87E-02	6.31E-01	7.31E-01	1.61E-21	5.47E+00	6.24E-00	9.57E-01	5.47E+00	6.44E+00	NA	NA	NA	
	012	58.3	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-32	4.61E+00	5.09E-00	-2.25E+00	5.87E+00	5.60E+00	NA	NA	NA	
	013	58.3	18.3	9/15/2009	14:33	5.92E+03	3.69E+02	1.55E+02	-4.42E-01	6.95E-01	9.22E-01	1.35E+00	4.70E+00	5.42E-00	-1.17E-01	5.10E+00	5.67E+00	NA	NA	NA	
	014	58.3	18.3	10/22/2009	13:37	5.51E+03	3.33E+02	1.66E+02	-5.42E-01	6.43E-01	9.30E-01	5.15E-31	5.36E+00	6.05E-00	-3.05E+00	7.18E+00	7.04E+00	NA	NA	NA	
	015	58.3	18.3	1/28/2010	14:01	8.92E+04	3.45E+03	6.35E+02	4.07E-02	3.15E-01	4.34E-01	1.02E+00	4.07E+00	4.72E-00	3.06E+00	3.93E+00	4.92E+00	NA	NA	NA	
	016	58.3	18.3	3/4/2010	13:23	8.81E+04	1.05E+03	1.67E+02	1.21E-01	6.31E-01	7.30E-01	5.60E-31	5.36E+00	4.45E-00	-1.48E+00	5.22E+00	6.34E+00	NA	NA	NA	
	017	58.3	18.3	4/28/2010	11:30	6.83E+04	2.03E+03	1.88E+02	-3.10E-01	3.63E-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	
	010	58.3	18.3	6/9/2010	14:53	1.55E+05	4.53E+03	4.92E+02	4.10E-01	7.75E-01	0.75E-01	-9.71E-01	6.12E+00	6.75E-00	1.40E+00	6.66E+00	7.23E+00	NA	NA	NA	
	019	58.3	18.3	7/27/2010	13:00	6.54E+01	1.91E+03	1.33E+02	1.50E-01	4.83E-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	58.3	18.3	8/24/2010	14:22	5.78E+03	3.43E+02	2.10E+02	-9.37E-02	6.14E-01	8.37E-01	3.27E+00	5.84E+00	7.14E-00	-7.01E+00	6.60E+00	6.75E+00	NA	NA	NA	
	021	58.3	18.3	9/9/2010	13:57	7.44E+04	2.13E+03	1.67E+02	4.21E-01	7.20E-01	8.33E-01	1.68E+00	5.43E+00	6.39E-00	-1.58E+00	5.38E+00	5.54E+00	NA	NA	NA	
	022	58.3	18.3	11/3/2010	12:08	1.58E+04	6.65E+02	1.16E+02	2.02E-01	6.15E-01	7.14E-01	6.67E+00	7.98E+00	1.03E-01	1.19E+00	9.11E+00	1.06E+01	NA	NA	NA	
	023	58.3	18.3	3/-/2011	11:28	4.39E+03	6.42E+02	3.59E+02	1.25E+00	1.45E+00	1.55E+00	5.56E-31	5.82E+00	6.63E-00	-4.41E-01	7.00E+00	7.58E+00	NA	NA	NA	
	024	58.3	18.3	3/31/2011	12:46	3.37E+04	1.95E+03	5.07E+02	-2.13E-01	1.15E+00	1.31E+00	8.24E-31	8.92E+00	9.95E-00	1.99E-02	1.02E+01	1.11E+01	NA	NA	NA	
	025	58.3	18.3	4/27/2011	12:26	3.31E+03	6.35E+02	4.08E+02	4.03E-01	1.50E+00	1.74E+00	4.77E+00	8.64E+00	1.04E-01	-3.37E+00	9.58E+00	9.50E+00	NA	NA	NA	
	027	58.3	18.3	8/5/2011	12:50	2.66E+04	1.47E+03	4.15E+02	1.64E+00	1.66E+00	1.71E+00	-3.78E+00	8.84E+00	8.08E-00	-1.02E+00	8.39E+00	9.04E+00	NA	NA	NA	
	028	58.3	18.3	11/17/2011	14:12	2.91E+04	1.74E+03	2.26E+02	-1.28E+00	1.58E+00	2.33E+00	-3.91E+00	1.01E+01	1.15E-01	-1.58E+00	9.84E+00	1.21E+01	NA	NA	NA	
MW-32-95	001	85.3	85.3	1/19/2007	9:40	1.12E+04	6.43E+02	5.30E+02	3.20E-01	1.47E+00	1.60E+00	1.57E+00	2.92E+00	2.32E-00	3.12E+00	2.92E+00	4.20E+00	NA	NA	NA	MW-32-95
	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-31	2.81E+00	3.15E-00	6.90E-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	4.21E-01	6.25E-01	8.85E-31	2.97E+00	3.45E-00	-1.85E-02	3.23E+00	3.63E+00	NA	NA	NA	
	035	85.3	85.3	1/18/2008	14:50	1.37E+04	6.93E+02	1.83E+02	-3.33E-01	4.38E-01	7.35E-01	3.57E-31	2.64E+00	2.67E-00	-5.37E-01	1.97E+00	2.13E+00	NA	NA	NA	
	036	85.3	85.3	5/5/2008	14:10	8.36E+03	2.64E+02	1.81E+02	-6.55E-02	3.89E-01	7.59E-01	1.95E+00	2.16E+00	3.95E-00	-3.64E-01	2.06E+00	3.27E+00	NA	NA	NA	
	037	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	
	038	85.3	85.3	7/31/2008	14:35	7.48E+03	2.88E+02	1.95E+02	1.76E-01	3.85E-01	6.24E-01	2.14E-31	2.06E+00	3.52E-00	1.07E+00	1.88E+00	2.45E+00	NA	NA	NA	
	039	85.3	85.3	9/2/2008	14:40	8.05E+03	6.93E+02	3.52E+02	1.42E-01	4.15E-01	7.55E-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	8.52E+03	6.63E+02	1.72E+02	1.13E-01	4.56E-01	5.50E-01	1.39E+00	5.70E+00	6.62E-00	3.00E+00	5.09E+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	7.74E-01	8.90E-01	1.88E-31	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	4.68E+00	4.90E+00	NA	NA	NA	
	013	85.3	85.3	6/9/2009	15:11	8.37E+03	1.04E+03	3.76E+02	-1.55E-01	6.43E-01	7.50E-01	-1.78E+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-31	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	5.65E-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	7.31E-01	3.62E-31	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	7.52E-01	7.18E-31	9.07E+00	9.43E-00	6.79E+00	8.05E+00	8.05E+00	NA	NA	NA	
	021	85.3	85.3	6/9/2010	12:03	1.20E+04	4.05E+02	2.14E+02	3.30E-01	7.56E-01	8.56E-01	-1.92E+00	5.57E+00	6.05E-00	-7.73E-01	5.63E+00	6.36E+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	6.31E-01	7.37E-01	1.38E+00	7.47E+00	8.62E-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	4.84E+02	2.10E+02	-3.76E-01	4.75E-01	7.72E-01	-6.66E-01	5.96E+00	6.62E-00	-1.15E+00	5.52E+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	8.86E-01	1.43E+00	6.27E+00	6.92E-00	-1.25E-01	5.49E+00	6.16E+00	NA	NA	NA	
	025	85.3	85.3	11/3/2010	12:45	1.49E+04	6.43E+02	1.16E+02	3.80E-01	4.90E-01	5.86E-01	5.89E+00	9.60E+00	1.18E-01	-5.55E+00	8.51E+00	7.61E+00	NA	NA	NA	
	026	85.3	85.3	3/-/2011	12:05	1.34E+04	1.41E+03	2.62E+02	3.81E-01	1.41E+00	1.63E+00	7.79E-31	8.26E+00	9.35E-00	4.73E+00	9.72E+00	1.24E+01	NA	NA	NA	
	027	85.3	85.3	3/31/2011	13:18	1.32E+04	1.27E+03	5.07E+02	-1.52E-01	1.20E+00	1.56E+00	-6.56E-01	7.26E+00	7.61E-00	3.80E+00	8.28E+00	1.02E+01	NA	NA	NA	
	028	85.3	85.3	4/27/2011	13:04	1.14E+04	1.19E+03	5.10E+02	1.58E+00	1.69E+00	1.75E+00	-1.23E+00	6.80E+00	7.31E-00	5.30E-01	1.02E+01	1.15E+01	NA	NA	NA	
	030	85.3	85.3	8/5/2011	13:36	1.14E+04	1.12E+03	4.20E+02	1.34E-01	1.64E+00	1.92E+00	5.40E+00	6.87E+00	8.79E-00	-1.21E+00	6.69E+00	6.57E+00	NA	NA	NA	

IPEC00267155

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

Well ID[1, 4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-32-85	001	85 3	-53 7	11/7/2011	15 08	8 88E+03	7 65E+02	3 42E+02	4 57E-01	1 56E+00	1 32E+00	-1 23E+00	7 38E+00	8 82E+00	-1 88E+00	9 06E+00	1 06E+01	NA	NA	NA	MW-32-85
MW-32-131	001	130 8	-53 7	1/19/2007	9 45	1 13E+04	8 43E+02	5 30E+02	-1 03E+00	1 47E+00	1 70E+00	-6 00E-02	2 04E+00	2 32E-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 32E+02	1 83E+02	1 97E+02	-1 39E-01	5 13E-01	5 94E-01	-1 45E+00	5 09E+00	4 92E+00	5 80E-01	3 76E+00	4 36E+00	NA	NA	NA	
	003	130 8	-53 7	8/13/2007	11 15	1 29E+02	1 73E+02	1 87E+02	2 69E-01	7 33E-01	8 51E-01	-8 09E-01	4 86E+00	4 85E+00	-1 15E+00	3 29E+00	5 22E+00	NA	NA	NA	
	004	130 8	-53 7	10/26/2007	10 11	3 74E+02	2 33E+02	2 42E+02	2 47E-01	6 03E-01	7 36E-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-31	2 19E+00	2 21E+00	-8 46E-02	1 98E+00	2 18E+00	NA	NA	NA	
	006	130 8	-53 7	5/5/2008	12 35	1 03E+03	1 35E+02	1 83E+02	-2 39E-01	3 96E-01	7 77E-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-31	3 10E+00	3 51E+00	1 05E-01	3 03E+00	3 99E+00	NA	NA	NA	MW-32-149
	005	149 3	-72 2	1/18/2008	11 18	1 15E+03	2 62E+02	1 85E+02	3 04E-01	8 25E-01	9 53E-01	2 04E+00	4 29E+00	3 03E 00	-8 74E-01	2 02E+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 24E 01	2 99E+00	2 67E+00	3 71E+00	2 04E+00	2 12E+00	2 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 44E-01	6 30E-01	1 06E+00	1 65E+00	2 87E+00	1 42E+00	1 76E+00	2 81E+00	NA	NA	NA	
	008	149 3	-72 2	10/24/2008	10 28	5 03E+02	2 13E+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 55E+02	1 13E+02	1 17E+02	4 53E-01	6 75E-01	7 34E-01	5 44E-31	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 43E-01	9 20E-01	1 35E+00	4 26E+00	2 84E+00	-4 83E-02	2 54E+00	2 57E+00	NA	NA	NA	
	011	149 3	-72 2	6/3/2009	12 05	2 24E+02	1 53E+02	1 62E+02	-2 36E-01	6 60E-01	7 38E-01	-2 63E+00	1 02E+01	6 78E+00	2 12E+00	7 04E+00	8 40E+00	NA	NA	NA	
	012	149 3	-72 2	8/3/2009	12 43	3 90E+02	1 73E+02	1 57E+02	9 42E-02	6 51E-01	7 30E-01	2 88E+00	6 63E+00	7 77E+00	-9 46E-01	8 34E+00	7 75E+00	NA	NA	NA	
	013	149 3	-72 2	8/31/2009	11 29	4 57E+02	2 03E+02	2 15E+02	-2 31E-01	5 07E-01	6 30E-01	-1 45E+00	5 66E+00	6 05E+00	-1 71E-01	4 84E+00	5 32E+00	NA	NA	NA	
	014	149 3	-72 2	9/15/2009	12 39	1 99E+02	1 43E+02	1 54E+02	-9 37E-02	7 77E-01	9 22E-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 25E+02	1 53E+02	1 67E+02	-9 56E-02	4 01E-01	5 33E-01	-6 75E+00	2 40E+00	7 45E 00	-5 08E-01	8 24E+00	8 42E+00	NA	NA	NA	
	016	149 3	-72 2	1/28/2010	11 47	5 28E+03	9 31E+02	4 30E+02	2 02E 01	7 48E 01	8 33E 01	2 15E+00	3 71E+00	4 43E+00	4 50E C1	4 17E+00	4 73E+00	NA	NA	NA	
	017	149 3	-72 2	4/28/2010	13 50	6 50E+03	4 57E+02	1 47E+02	3 03E-01	7 08E-01	8 24E-01	1 98E+00	6 88E+00	7 55E+00	5 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 35E-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 38E+02	1 01E+02	1 14E-01	3 57E-01	4 33E-01	7 24E-31	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 50E+03	2 73E+02	2 10E+02	1 04E-01	6 64E-01	8 13E-01	1 04E-31	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 73E+02	1 27E+02	2 27E-01	7 72E-01	9 22E-01	3 68E+00	7 83E+00	9 15E+00	1 24E+00	8 52E+00	1 00E+01	NA	NA	NA	
	022	149 3	-72 2	11/3/2010	16 09	1 55E+03	2 24E+02	1 12E+02	4 08E-01	5 02E-01	5 49E-01	-1 02E+01	1 08E+01	1 15E-01	3 36E+00	7 71E+00	9 94E+00	NA	NA	NA	
	023	149 3	-72 2	3/7/2011	13 37	1 30E+03	4 43E+02	2 68E+02	-7 71E-01	1 66E+00	2 15E+00	7 23E-31	3 42E+00	6 32E+00	2 08E+00	6 00E+00	7 35E+00	NA	NA	NA	
	024	149 3	-72 2	5/31/2011	11 33	8 99E+02	5 34E+02	3 09E+02	-2 31E-01	1 10E+00	1 49E+00	2 52E+00	9 30E+00	1 09E+01	2 31E+00	9 92E+00	1 18E+01	NA	NA	NA	
	025	149 3	-72 2	4/27/2011	11 12	8 69E+02	4 44E+02	4 11E+02	3 00E-01	1 43E+00	1 67E+00	2 12E+00	7 44E+00	8 52E 00	5 08E-01	7 76E+00	8 03E+00	NA	NA	NA	
	027	149 3	-72 2	8/5/2011	11 10	9 86E+02	4 71E+02	4 21E+02	4 80E 01	1 81E+00	2 06E+00	9 94E 01	9 60E+00	9 32E+00	2 75E+00	7 71E+00	9 28E+00	NA	NA	NA	
	028	149 3	-72 2	11/7/2011	12 05	5 91E+02	3 45E+02	3 41E+02	3 84E-01	1 46E+00	1 72E+00	-5 25E+00	7 74E+00	7 85E+00	2 57E+00	8 07E+00	1 12E+01	NA	NA	NA	
MW-32-165	001	165	-85 9	1/19/2007	9 50	1 25E+04	8 73E+02	5 70E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-32-165
	002	165	-85 9	6/28/2007	13 06	5 81E+02	2 03E+02	1 97E+02	-2 32E-01	7 33E-01	9 70E-01	8 54E-31	2 85E+00	2 94E-00	-8 16E-01	2 46E+00	2 60E+00	NA	NA	NA	
	003	165	-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	5 92E-31	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 53E-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 59E+03	1 52E+02	1 82E+02	1 11E-02	3 52E-01	7 39E-01	1 59E-31	2 18E+00	3 64E+00	2 48E-01	2 48E+00	2 91E+00	NA	NA	NA	
	004	172 8	-95 7	7/31/2008	10 52	1 38E+03	1 43E+02	1 92E+02	6 80E-01	4 26E-01	7 11E-01	-1 17E+00	1 28E+00	2 47E-00	1 00E-01	1 05E+00	2 96E+00	NA	NA	NA	
	005	172 8	-95 7	9/2/2008	11 30	2 72E+02	2 72E+02	5 48E+02	1 85E-01	4 64E-01	9 41E-01	-1 02E+00	2 67E+00	3 03E 00	NA	NA	NA	NA	NA	NA	
	006	172 8	-95 7	10/24/2008	10 25	1 38E+03	2 67E+02	1 74E+02	1 05E 01	3 60E 01	4 36E 01	8 63E 31	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 23E+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 59E-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	8/3/2009	12 37	4 93E+02	1 77E+02	1 55E+02	-4 57E-02	3 89E-01	5 13E-01	3 21E+00	5 34E+00	6 45E-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 39E-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 63E+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 59E+00	6 57E+00	NA	NA	NA	
	013	172 8	-95 7	10/22/2009	15 36	4 31E+02	1 63E+02	1 63E+02	-1 01E-02	3 85E-01	4 95E-01	-2 45E-01	5 87E+00	6 61E-00	5 81E-01	5 20E+00	6 64E+00	NA	NA	NA	
	014	172 8	-95 7	1/28/2010	11 42	1 33E+03	6 92E+02	6 63E+02	1 67E-01	7 37E-01	8 74E-01	-4 43E+00	7 32E+00	7 64E-00	2 11E+00	4 42E+00	2 30E+00	NA	NA	NA	
	015	172 8	-95 7	4/29/2010	15 45	1 54E+03	2 43E+02	1 46E+02	4 63E-01	5 34E-01	5 40E-01	4 59E+00	5 45E+00	6 77E-00	-8 00E-01	4 92E+00	5 21E+00	NA	NA	NA	
	016	172 8	-95 7	6/9/2010	12 23	2 34E+03	2 65E+02	2 08E+02	3 04E 01	5 97E 01	6 31E 01	9 18E 01	6 63E+00	7 22E-00	5 09E C1	6 78E+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 63E+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	5 94E-01	4 84E+00	5 77E+00	NA	NA	NA	
	020	172 8	-95 7	11/3/2010	15 53	1 40E+03	2 15E+02	1 14E+02	1 65E-02	4 38E-01	5 24E-01	3 87E+00	1 76E+01	9 62E-00	-2 94E+00	9 88E+00	1 01E+01	NA	NA	NA	
	021	172 8	-95 7	3/7/2011	13 13	9 20E+02	4 12E+02	2 61E+02	-4 04E-01	1 12E+00	1 45E+00	5 99E+00	6 06E+00	7 73E-00	-2 04E+00	7 26E+00	7 55E+00	NA	NA	NA	
	022	172 8	-95 7	5/31/2011	11 35	8 41E+02	5 22E+02	5 04E+02	2 46E-01	1 27E+00	1 54E+00	6 57E+00	1 58E+01	8 25E-00	2 19E+00	8 22E+00	9 96E+00	NA	NA	NA	
	023	172 8	-95 7	4/27/2011	11 27	5 82E+02	4 93E+02	5 08E+02	6 37E-01	1 54E+00	1 74E+00	0 00E+00	2 00E+01	9 23E-00	2 47E-01	9 58E+00	1 07E+01	NA	NA	NA	
	025	172 8	-95 7	9/5/2011	11 11	5 59E+02	4 17E+02	4 12E+02	6 34E-01	1 43E+00	1 66E+00	-9 50E-01	6 36E+00	6 55E 00	-1 55E+00	1 10E+01	1 14E+01	NA	NA	NA	
	026	172 8	-95 7	11/7/2011	12 01	5 56E+02	3 33E+02	3 34E+02	7 82E 02	9 63E 01	1 24E+00	2 87E+00	9 12E+00	1 13E-01	1 50E 01	9 03E+00	1 26E+01	NA	NA	NA	
MW-32-190	001	190 3	-113 7	1/19/2007	9 55	1 12E+04	8 43E+02	5 20E+02	4 20E-01	1 50E+00	1 70E+00	2 60E-31	1 26E+00	1 43E-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 27E+02	1 87E+02	-5 39E-02	6 13E-01	8 20E-01	1 52E+00	3 07E+00	3 64E-00	-1 29E+00	3 27E+00	3 87E+00	NA	NA	NA	
	003	190 3	-113 7	8/13/2007	11 25	1 72E+03	2 67E+02	2 03E+02	-3 55E-01	8 12E-01	1 04E+00	5 21E-31	2 49E+00	2 93E-00	-1 15E+00	2 38E+00	2 39E+00	NA	NA	NA	
	004	190 3	-113 7	10/26/2007	9 53	9 76E+03	4 83E+02	1 93E+02	-5 55E-01	7 75E-01	9 73E-01	-6 17E-01	3 07E+00	3 27E-00	-7 94E-01	3 38E+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 59E-01	5 57E-31	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 58E-01	4 28E-01	8 16E-01	-1 13E+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 55E+02	1 94E+02	5 21E-01	3 85E-01	5 51E-01	-8 54E-01	1 55E+00	2 55E-00	2 22E+00	1 71E+00	2 80E+00	NA	NA	NA	
	008	190 3	-113 7	9/2/2008	11 40	3 81E+03	5 23E+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	10/24/2008	10 31	3 35E+03	4 31E+02	1 73E+02	3 30E-03	5 75E-01	7 41E-01	5 02E-31	5 33E+00	5 93E 00	3 05E+00	5 03E+00	7 10E+00	NA	NA	NA	
	010	190 3	-113 7	2/4/2009	13 45	2 69E+03	4 25E+02	1 98E+02	2 74E 01	5 57E 01	6 17E 01	3 60E 32	2 67E+00	2 95E-00	1 71E C1	3 02E+00	3 44E+00	NA	NA	NA	
	011	190 3	-113 7	4/27/2009	13 24	2 54E+03	6 63E+02	4 09E+02	-2 51E-02	5 55E-01	6 30E-01	-6 89E-01	4 01E+00	2 67E-00	5 11E-01	2 30E+00	2 69E+00	NA	NA	NA	
	012	190 3	-113 7	6/2/2009	12 01	1 95E+03	5 75E+02	3 78E+02	8 61E-02	5 09E-01	5 30E-01	3 64E-31	1 02E+01	6 77E-00	1 76E+00	5 20E+00	6 67E+00	NA	NA	NA	
	013	190 3	-113 7	8/3/2009	12 45	2 28E+03	2 75E+02	1 56E+02	1 36E-01	5 64E-01	6 59E-01	9 65E-32	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 23E+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 53E+03	2 13E+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 39E-01	-1 94E-02	4 23E+00	4 82E-00	1 29E+00	4 62E+00	5 46E+00	NA	NA	NA	

See Page 34 for Notes

IPEC00267156

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

Well ID[1, 4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-32-190	018	190.3	-113.7	3/4/2010	12:42	1.98E+03	2.11E+02	1.67E+02	4.99E-03	5.73E-01	7.57E-01	-6.41E-01	3.29E+00	3.72E+00	3.53E+00	3.74E+00	4.67E+00	NA	NA	NA	MW-32-190
	019	190.3	-113.7	4/28/2010	15:51	1.59E+03	2.43E+02	1.49E+02	-2.22E-01	7.01E-01	9.35E-01	1.82E+00	5.66E+00	6.65E+00	-2.37E+00	5.58E+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	5.04E+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	-8.87E-02	3.52E-01	5.36E-01	5.23E-01	7.98E+00	9.15E+00	-2.62E+00	7.77E+00	7.60E+00	NA	NA	NA	
	022	190.3	-113.7	8/24/2010	11:37	1.59E+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	5.00E-01	4.96E+00	5.87E+00	NA	NA	NA	
	023	190.3	-113.7	9/9/2010	11:34	1.55E+03	2.43E+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	7.96E+00	NA	NA	NA	
	024	190.3	-113.7	11/3/2010	16:07	1.53E+03	2.23E+02	1.17E+02	-9.74E-02	4.35E-01	5.32E-01	2.12E+00	9.02E+00	1.07E-01	-2.46E+00	9.21E+00	9.36E+00	NA	NA	NA	
	025	190.3	-113.7	3/1/2011	13:24	1.54E+03	5.32E+02	2.64E+02	7.65E-01	1.20E+00	1.29E+00	2.74E+00	5.52E+00	6.57E-00	4.88E+00	7.04E+00	8.72E+00	NA	NA	NA	
	026	190.3	-113.7	3/31/2011	11:47	1.41E+03	5.75E+02	5.02E+02	-7.72E-01	1.15E+00	1.67E+00	3.73E-01	7.96E+00	9.01E-00	5.11E+00	1.04E+01	1.30E+01	NA	NA	NA	
	027	190.3	-113.7	4/27/2011	11:17	1.21E+03	5.61E+02	5.10E+02	7.54E-01	1.13E+00	1.20E+00	8.61E-01	8.68E+00	9.76E-00	6.60E+00	8.98E+00	6.37E+00	NA	NA	NA	
	029	190.3	-113.7	8/5/2011	11:15	1.44E+03	5.15E+02	4.70E+02	7.59E-01	1.64E+00	1.83E+00	2.02E+00	7.23E+00	8.43E-00	1.28E+00	9.24E+00	1.06E+01	NA	NA	NA	
	030	190.3	-113.7	11/7/2011	12:03	1.46E+03	4.05E+02	3.36E+02	-7.57E-01	8.83E-01	1.41E+00	1.30E+00	6.57E+00	8.59E-00	-4.42E-01	6.24E+00	7.93E+00	NA	NA	NA	
MW-33	001	192	-0.4	12/5/2005	8:00	1.42E+05	4.25E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-33
	002	192	-0.4	12/9/2005	11:38	1.99E+05	5.97E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	192	-0.4	12/29/2005	11:30	2.20E+05	6.63E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	192	-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	192	-0.4	1/13/2006	12:10	2.32E+05	6.93E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	006	192	-0.4	1/20/2006	10:40	2.26E+05	6.73E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	007	192	-0.4	1/27/2006	11:10	2.42E+05	7.25E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	008	192	0.4	2/3/2006	12:15	2.50E+05	2.81E+04	6.33E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	009	192	-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	192	-0.4	2/16/2006	13:55	2.51E+05	2.91E+04	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	011	192	-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	192	-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	
	014	192	-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	
	015	192	-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	5.95E-31	8.72E+00	9.58E-00	-6.11E+00	8.63E+00	8.02E+00	NA	NA	NA	
	017	192	-0.4	7/3/2006	9:30	2.54E+05	2.01E+04	3.85E+03	4.38E-01	1.37E+00	1.52E+00	-6.85E-01	1.17E+01	1.27E-01	-2.24E+00	1.38E+01	1.21E+01	NA	NA	NA	
	018	192	-0.4	8/4/2006	8:15	1.94E+05	2.54E+04	1.87E+03	NA	NA	NA	-6.31E+00	6.31E+00	7.84E-00	-1.14E+00	7.52E+00	6.60E+00	NA	NA	NA	
	019	192	-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	9.99E-00	3.71E+00	7.21E+00	9.66E+00	NA	NA	NA	
	020	192	0.4	6/15/2007	15:48	9.26E+04	3.23E+03	3.61E+02	2.32E-01	2.86E-01	4.35E-01	2.78E-01	3.82E+00	3.75E-00	1.64E+00	3.74E+00	3.39E+00	8.12E-01	1.16E+01	1.37E+01	
	021	192	-0.4	8/3/2007	10:20	2.30E+04	7.03E+02	2.04E+02	5.80E-01	8.49E-01	9.83E-01	8.18E-31	2.37E+00	2.88E-00	2.45E-01	2.13E+00	2.46E+00	NA	NA	NA	
	022	192	-0.4	4/28/2008	15:00	5.85E+04	1.15E+03	2.58E+02	1.69E-01	2.97E-01	5.22E-01	1.08E-21	1.87E+00	3.12E-00	-4.51E-02	2.12E+00	3.45E+00	NA	NA	NA	
	023	192	-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-31	1.61E+00	2.88E-00	NA	NA	NA	NA	NA	NA	
	024	192	-0.4	4/29/2009	15:12	3.44E+04	1.33E+03	1.72E+02	2.74E-01	5.39E-01	6.29E-01	-1.05E+00	8.93E+00	5.95E-00	1.83E+00	5.72E+00	6.77E+00	NA	NA	NA	
	025	192	-0.4	2/2/2010	13:15	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	
	026	192	-0.4	4/15/2010	13:54	6.31E+04	1.05E+03	1.76E+02	-1.77E-01	6.66E-01	8.35E-01	-3.35E+00	7.39E+00	7.21E-00	-5.17E+00	7.74E+00	6.17E+00	NA	NA	NA	
	027	192	-0.4	8/30/2010	14:29	3.59E+03	3.42E+02	1.26E+02	1.64E-01	3.24E-01	3.59E-01	7.78E-31	2.64E+00	6.35E-00	-3.08E-01	2.07E+00	2.68E+00	NA	NA	NA	
	028	192	-0.4	9/11/2010	13:28	3.56E+03	3.23E+02	1.27E+02	9.96E-03	9.38E-01	9.28E-01	-1.33E+00	4.86E+00	5.14E-00	1.12E+00	5.10E+00	5.92E+00	NA	NA	NA	
MW-34	001	189	-0.4	12/5/2005	12:53	6.39E+04	1.92E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-34
	002	189	0.4	12/9/2005	10:35	1.21E+05	3.63E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	189	-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	189	-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	189	-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	189	-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	189	-0.4	1/27/2006	10:50	2.12E+05	6.35E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	008	189	-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	189	-0.4	2/7/2006	15:15	1.74E+05	2.53E+04	6.37E+02	9.22E-02	3.78E-01	4.57E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	189	-0.4	2/16/2006	13:55	1.99E+05	2.53E+04	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	011	189	-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	189	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	189	-0.4	5/17/2006	13:15	3.54E+04	5.53E+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	189	-0.4	6/26/2006	10:20	1.35E+04	8.52E+02	3.41E+02	3.71E-01	6.49E-01	7.79E-01	1.83E+00	7.85E+00	8.95E-00	5.84E+00	7.34E+00	9.37E+00	NA	NA	NA	
	015	189	-0.4	7/26/2006	10:20	4.37E+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	-2.56E-01	5.64E+00	6.78E+00	NA	NA	NA	
	016	189	-0.4	8/24/2006	12:18	6.59E+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	189	-0.4	9/21/2006	9:45	1.51E+04	2.73E+03	5.86E+02	0.00E+00	1.12E+00	1.31E+00	5.09E-32	1.69E+00	1.85E-00	-2.10E-01	1.65E+00	1.75E+00	NA	NA	NA	
	018	189	-0.4	10/5/2007	10:21	2.22E+04	1.44E+02	2.15E+02	5.94E-02	1.08E-01	9.34E-01	-1.55E+00	4.55E+00	4.44E-00	2.12E+00	4.40E+00	4.01E+00	NA	NA	NA	
MW-35	001	19	-0.4	12/5/2005	13:50	4.23E+04	3.13E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-35
	002	19	-0.4	12/9/2005	10:17	7.50E+04	2.23E+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	8.25E+01	2.47E+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	1.15E+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	1.65E+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	9.34E+04	1.74E+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	5.52E+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+01	6.15E+03	8.72E+02	4.70E-01	7.53E-01	7.77E-01	6.46E+00	2.07E+01	1.61E-01	3.04E+00	1.77E+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	-2.38E-01	6.66E-01	8.59E-01	-1.34E+00	1.01E+01	1.03E-01	-2.45E+00	8.92E+00	9.36E+00	NA	NA	NA	
	015	19	-0.4	7/26/2006	9:30	4.53E+04	7.15E+03	9.17E+02	6.26E-01	1.30E+00	1.41E+00	-3.15E-01	1.96E+01	1.82E-00	2.44E-01	1.49E+01	1.69E+01	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	5.53E+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	1.34E+03	1.77E+02	2.19E+02	2.34E-01	2.96E-01	5.33E-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	-1.03E+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	-1.37E-01	4.52E-01	6.73E-01	1.52E+00	5.67E+00	6.71E-00	-1.24E+00	6.33E+00	6.84E+00	NA	NA	NA	

IPEC00267157

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

Well ID[1, 4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-36-24	001	161	-43	2/7/2006	17 00	NA	NA	NA	1 79E+00	5 48E-01	5 53E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-36-24
	002	161	-43	2/27/2006	9 45	3 34E+04	9 95E+03	6 36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	161	-43	3/23/2006	16 00	3 42E+04	3 81E+03	1 86E+03	9 99E-01	6 42E-01	6 42E-01	-3 85E+00	1 01E+01	1 05E-01	5 02E+00	9 53E+00	1 22E+01	6 41E+0:	1 59E+01	1 53E+C1	
	004	161	-43	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	161	-43	6/5/2006	12 20	2 22E+02	1 53E+02	1 51E+C2	3 70E-01	7 66E-01	9 31E-01	3 99E+00	1 03E+01	1 21E-01	6 90E-C2	1 02E+01	1 12E+21	NA	NA	NA	
	006	161	-43	8/28/2006	10 30	2 45E+02	1 83E+02	1 71E+C2	NA	NA	NA	-1 04E+00	3 27E+00	3 32E-00	1 66E+00	3 06E+00	4 15E+00	NA	NA	NA	
	007	161	-43	6/27/2007	10 40	1 54E+02	1 73E+02	1 93E+C2	5 90E-01	7 92E-01	8 46E-01	3 31E-31	2 81E+00	3 17E-00	4 00E-C1	3 03E+00	3 45E+00	NA	NA	NA	
	008	161	-43	8/8/2007	13 45	1 53E+02	1 83E+02	2 04E+C2	-5 32E-01	6 81E-01	9 31E-01	1 53E-31	3 40E+00	3 77E-00	3 50E+00	3 40E+00	4 17E+00	-7 40E+00	2 10E+01	2 54E+C1	
	009	161	-43	10/10/2007	10 06	2 36E102	1 91E102	2 01E1C2	8 56E-02	7 60E-01	9 26E-01	7 20E-31	2 91E100	3 37E 00	3 11E-C1	3 01E100	3 47E100	NA	NA	NA	
	010	161	-43	1/23/2008	14 18	2 16E+03	2 33E+02	1 70E+C2	1 03E 01	3 12E 01	3 76E 01	2 92E 32	2 39E+00	2 67E-00	4 8 E 01	2 37E+00	2 57E+00	NA	NA	NA	
	011	161	-43	7/24/2008	13 57	1 70E+03	1 92E+02	1 63E+C2	3 38E-01	3 75E-01	6 24E-01	3 97E-31	2 09E+00	3 61E-00	-5 4*E-01	2 77E+00	3 85E+00	NA	NA	NA	
	012	161	-43	11/10/2008	15 33	2 01E+02	1 53E+02	1 61E+C2	5 52E-01	7 53E-01	8 34E-01	0 00E+00	6 81E+00	4 45E-00	2 72E+00	3 84E+00	5 41E+00	NA	NA	NA	
	013	161	-43	1/22/2009	12 48	2 37E+02	1 15E+02	1 06E+C2	-6 26E-01	7 37E-01	9 48E-01	5 41E-31	2 88E+00	3 34E-00	3 15E-C1	3 35E+00	3 82E+00	NA	NA	NA	
	014	161	-43	5/7/2009	13 55	4 98E+02	1 93E+02	1 62E+C2	-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	161	-43	8/4/2009	16 09	2 92E+03	3 23E+02	1 55E+C2	4 60E-01	6 62E-01	7 29E-01	-2 97E-01	5 12E+00	4 95E-00	7 76E-C1	5 67E+00	6 40E+00	NA	NA	NA	
	016	161	-43	10/28/2009	15 48	1 47E+03	2 03E+02	1 61E+C2	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	
	017	161	-43	2/1/2010	13 49	9 50E+02	5 97E+02	6 16E+C2	7 81E-01	8 04E-01	8 46E-01	2 13E+00	3 24E+00	3 82E-00	0 00E+00	4 13E+00	4 27E+00	NA	NA	NA	
	018	161	-43	4/28/2010	14 14	3 53E+03	3 39E+02	1 45E+C2	1 91E-01	5 60E-01	6 57E-01	1 17+E00	5 87E+00	6 85E-00	2 13E+00	5 66E+00	6 86E+00	NA	NA	NA	
	019	161	-43	7/29/2010	12 04	2 54E102	1 17E102	1 00E1C2	2 45E-01	3 04E-01	4 23E-01	3 09E-31	2 00E100	1 12E 01	-2 61E100	1 10E101	1 26E121	NA	NA	NA	
	020	161	-43	11/4/2010	16 15	2 52E+03	2 82E+02	1 13E+C2	3 79E 01	5 81E 01	6 12E 01	3 42E+00	9 88E+00	1 17E-01	1 80E+00	1 16E+01	1 26E+21	NA	NA	NA	
	021	161	-43	2/28/2011	12 37	2 56E+02	3 54E+02	3 81E+C2	-8 87E-02	1 67E+00	2 08E+00	4 58E-31	5 26E+00	5 75E-00	-3 09E-01	4 54E+00	5 03E+00	NA	NA	NA	
	022	161	-43	4/28/2011	14 34	3 07E+03	7 23E+02	5 19E+C2	1 38E+00	1 53E+00	1 59E+00	-6 43E-01	7 68E+00	8 47E-00	2 82E+00	7 48E+00	9 35E+00	NA	NA	NA	
	023	161	-43	8/16/2011	13 34	1 12E+03	5 01E+02	4 51E+C2	2 34E-01	9 96E-01	1 18E+00	-2 83E+00	7 71E+00	7 54E-00	7 10E-C1	7 09E+00	8 75E+00	NA	NA	NA	
	024	161	-43	12/7/2011	11 04	0 30E+03	4 23E+02	4 96E+C2	-3 36E-01	1 25E+00	1 70E+00	1 75E+00	7 26E+00	9 17E-00	-1 36E+00	6 60E+00	7 29E+00	NA	NA	NA	
MW-36-41	001	37	-25 2	2/10/2006	11 10	4 75E+04	1 24E+04	6 38E+C2	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+C2	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 63E+03	1 86E+C3	3 48E+00	3 46E-01	4 16E-01	-5 91E+00	1 39E+01	1 43E-01	2 91E+00	1 33E+01	1 74E+21	4 3/E+0:	1 63E+01	1 62E+C1	
	004	37	-25 2	4/5/2006	12 55	NA	NA	NA	3 23E+00	6 22E-01	7 22E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	37	-25 2	6/5/2006	11 30	2 25E104	3 17E103	6 01E1C2	2 30E100	6 55E-01	6 10E-01	-3 37E 100	1 27E101	1 33E 01	6 21E-C2	1 03E101	1 13E121	NA	NA	NA	
	006	37	-25 2	8/28/2006	10 10	2 21E+01	3 02E+03	6 45E+C2	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 53E+02	1 74E+C2	2 18E+00	1 17E+00	9 35E-01	4 30E-31	4 61E+00	1 74E-00	1 36E+00	2 91E+00	3 67E+00	NA	NA	NA	
	008	37	-25 2	8/8/2007	14 40	1 13E+04	7 23E+02	1 64E+C2	4 63E+00	1 14E+00	7 31E-01	-2 59E-01	6 14E+00	4 09E-00	1 04E-C1	3 03E+00	3 26E+00	NA	NA	NA	
	009	37	-25 2	8/4/2009	14 29	1 01E+04	5 64E+02	1 57E+C2	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+C2	5 14E+00	1 15E+00	7 26E-01	-2 95E-01	4 17E+00	4 72E-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 33E+03	6 06E+C2	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 83E+02	1 50E+C2	5 55E+00	1 30E+00	5 74E-01	1 38E+00	6 43E+00	6 92E-00	8 55E-C1	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+C2	1 88E+00	7 41E-01	5 17E-01	-1 84E+00	5 35E+00	6 45E-00	4 07E+00	6 12E+00	7 15E+00	NA	NA	NA	
	014	37	-25 2	11/4/2010	16 55	1 22E+04	5 73E+02	1 10E+C2	3 54E+00	9 13E-01	6 12E-01	7 03E-31	8 76E+00	1 01E-01	3 09E+00	8 28E+00	1 00E+21	NA	NA	NA	
	015	37	-25 2	2/28/2011	13 53	9 74E103	6 03E102	2 27E1C2	4 11E+00	1 07E+00	1 52E-00	1 21E+00	5 26E+00	6 07E-00	1 50E+00	5 68E+00	6 65E+00	NA	NA	NA	
	016	37	-25 2	4/28/2011	15 39	8 17E+03	1 01E+03	5 14E+C2	3 31E+00	1 75E+00	1 36E+00	2 18E+00	9 26E+00	1 07E-01	2 96E 01	1 01E+01	1 12E+21	NA	NA	NA	
	017	37	-25 2	8/16/2011	14 18	5 90E+03	8 37E+02	4 55E+C2	1 74E+00	1 26E+00	1 13E+00	1 75E+00	8 91E+00	9 88E-00	4 43E+00	9 15E+00	1 15E+21	NA	NA	NA	
	018	37	-25 2	12/7/2011	13 09	2 53E+03	6 51E+02	4 78E+C2	9 00E-01	1 71E+00	1 89E+00	1 19E-32	7 17E+00	9 02E-00	-5 23E-01	7 86E+00	1 01E+21	NA	NA	NA	
MW-36-52	001	497	-37 9	2/10/2006	10 30	2 24E+04	8 55E+03	6 38E+C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-36-52
	002	497	-37 9	2/27/2006	12 05	2 57E+04	9 14E+03	6 36E+C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	497	-37 9	3/24/2006	16 00	2 58E+04	3 47E+03	1 87E+C3	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+21	1 18E+0:	1 44E+01	1 54E+C1	
	004	497	-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	497	-37 9	6/5/2006	11 30	2 40E+04	5 63E+03	6 40E+C2	4 42E+00	8 83E-01	5 53E-01	3 49E+00	1 02E+01	1 21E-01	4 88E-A1	1 04E+01	1 12E+21	NA	NA	NA	
	006	497	-37 9	8/28/2006	10 00	1 41E+04	2 13E+03	3 35E+C2	NA	NA	NA	4 06E-31	6 32E+00	7 35E-00	-2 69E-01	5 23E+00	5 69E+00	NA	NA	NA	
	007	497	-37 9	6/27/2007	11 45	1 21E+04	4 03E102	1 25E1C2	2 62E100	1 09E100	2 32E-01	-3 02E-01	2 77E+00	2 22E 00	5 25E-C1	2 61E+00	2 14E130	NA	NA	NA	
	008	497	-37 9	8/8/2007	14 15	1 25E+01	1 21E+03	4 60E+C2	2 26E+00	1 00E+00	2 32E 01	1 30E+00	2 97E+00	3 51E-00	8 8E 01	3 31E+00	3 55E+00	4 37E+00	2 14E+01	2 47E+C1	
	009	497	-37 9	1/24/2008	14 13	1 13E+04	4 47E+02	1 71E+C2	4 65E+00	9 69E-01	4 24E-01	-2 89E-01	2 01E+00	2 25E-00	4 08E-C1	1 86E+00	2 20E+00	NA	NA	NA	
	010	497	-37 9	7/24/2008	16 00	1 26E+04	7 65E+02	3 74E+C2	5 67E+00	1 42E-01	4 73E-01	-4 79E-01	2 24E+00	3 69E-00	2 77E-C2	2 11E+00	3 53E+00	NA	NA	NA	
	011	497	-37 9	11/10/2008	16 53	1 10E+04	4 43E+02	1 63E+C2	8 27E+00	1 24E+00	3 39E-01	-3 85E-01	3 86E+00	4 21E-00	1 36E+00	4 67E+00	5 65E+00	NA	NA	NA	
	012	497	-37 9	1/22/2009	12 59	6 79E+03	6 03E+02	2 06E+C2	3 37E+00	8 99E-01	6 37E-01	-6 07E-01	2 96E+00	3 24E-00	1 65E+00	3 24E+00	4 05E+00	NA	NA	NA	
	013	497	-37 9	5/7/2009	15 07	6 36E+03	5 33E+02	1 63E+C2	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	497	-37 9	8/4/2009	12 02	8 51E+05	5 51E+02	1 62E+C2	4 10E+00	1 05E+00	5 40E-01	1 90E-31	7 86E+00	6 95E-00	-1 51E+00	7 25E+00	7 05E+00	NA	NA	NA	
	015	497	-37 9	10/28/2009	15 39	8 23E+03	3 92E+02	1 67E+C2	3 51E+00	1 05E+00	6 91E-01	1 28E+00	4 38E+00	4 95E-00	3 63E+00	4 05E+00	5 13E+00	NA	NA	NA	
	016	497	-37 9	2/1/2010	15 28	5 97E103	1 03E103	6 42E1C2	2 12E100	6 07E-01	4 50E-01	-3 34E100	6 50E100	6 35E 00	-1 10E100	3 75E100	4 07E130	NA	NA	NA	
	017	497	-37 9	4/28/2010	15 46	8 49E+03	5 03E+02	1 47E+C2	5 36E+00	1 35E+00	6 35E 01	2 29E+00	5 31E+00	6 27E-00	2 98E+00	4 90E+00	6 12E+00	NA	NA	NA	
	018	497	-37 9	7/29/2010	12 24	7 77E+03	4 45E+02	1 00E+C2	-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+21	NA	NA	NA	
	019	497	-37 9	11/4/2010	15 55	7 78E+03	4 43E+02	1 10E+C2	4 73E+00	1 11E+00	6 76E-01	1 15E-31	5 89E+00	6 52E-00	-2 29E+00	7 09E+00	7 79E+00	NA	NA	NA	
	020	497	-37 9	2/28/2011	12 43	3 14E+03	4 92E+02	3 37E+C2	1 33E+00	2 00E+00	2 14E+00	-6 03E+00	5 58E+00	4 82E-00	-2 66E+00	5 94E+00	5 65E+00	NA	NA	NA	
	021	497	-37 9	4/28/2011	14 38	5 84E+03	9 05E+02	5 15E+C2	3 41E+00	1 56E+00	1 11E+00	4 25E+00	8 42E+00	1 03E-01	-2 61E+00	8 50E+00	8 36E+00	NA	NA	NA	
	022	497	-37 9	8/16/2011	14 52	4 59E+03	7 59E+02	4 48E+C2	2 53E+00	1 57E+00	1 36E+00	3 59E+00	8 22E+00	9 83E-00	-1 83E+00	9 33E+00	9 74E+00	NA	NA	NA	
	023	497	-37 9	12/7/2011	11 36	4 76E+03	8 11E+02	4 91E+C2	5 23E+00	1 96E+00	1 24E+00	2 89E+00	7 74E+00	1 01E-01	5 68E+00	9 03E+00	1 31E+21	NA	NA	NA	
MW-37-22	001	17	-2	2/24/2006	9 50	1 01E+04	5 92E+03	6 39E+C2	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	2/20/2006	10 20	1 20E104	2 03E103	1 31E1C3	2 37E100	8 91E-01	9 44E-01	2 41E100	1 92E101	1 95E 01	3 60E100	1 50E101	1 77E121	4 24E10:	1 43E101	1 47E1C1	
	003	17	2	3/10/2006	10 35	2 32E+01	2 57E+03	1 28E+C3	4 70E+00	9 9*E 01	7 37E 01	1 61E+00	1 46E+01	1 63E-01	5 65E+00	1 29E+01	1 57E+21	2 38E+0:	1 27E+01	1 33E+C1	
	004	17	-2	3/27/2006	10 35	3 49E+04	3 73E+03	1 81E+C3	4 65E+00	8 76E-01	6 27E-01	2 75E-31	4 68E+00	5 21E-00	1 45E-C1	4 48E+00	4 97E+00	5 43E+0:	1 53E+01	1 52E+C1	
	005	17	-2	6/27/2006	10 25	1 75E+04	8 55E+02	3 40E+C2	9 57E+00	1 70E+00	7 37E-01	3 20E+00	6 92E+00	8 07E-00	-8 0*E-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+C2	1 42E+01	1 80E+00	9 11E-01	-3 84E-02	8 51E+00	9 42E-00	-1 03E+00	7 63E+00	7 69E+00	NA	NA	NA	
	007	17	-2	6/27/2007	10 50	4 25E+03	3 35E+02	1 94E+C2	1 49E+01	2 13E+00	8 72E-01	-2 25E+00	4 88E+00	3 50E-00	-1 12E+00	3 24E+00	3 34E+00	NA	NA	NA	
	008	17	-2	8/7/2007	10 55	2 79E+03	2 69E+02	1 89E+C2	1 83E+01	2 07E+00	8 57E-01	2 74E+00	3 93E+00	4 22E-00	4 23E-C1	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+C2	2 29E+01	2 28E+00	4 57E-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+C2	8 73E+00	1 27E+00	4 53E-01	-2 0*E+00	2 96E+00	2 85E-00	2 34E-C1	3 08E+00	3 49E+00	NA	NA	NA	

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2011 FINAL Table 5 - Historic Groundwater Analytical Results.xlsx,
2011 Table 5

See Page 34 for Notes

IPEC00267158

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

Well ID[1, 4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-37-22	011	17	-2	7/04/2008	11 20	4 33E+03	2 23E+02	1 95E+02	1 22E+01	1 25E+00	7 14E-01	4 37E-01	2 13E+00	3 65E-00	2 97E+00	2 87E+00	4 83E+00	NA	NA	NA	MW-37-22
	012	17	-2	11/ 0/2008	12 20	2 58E+03	3 92E+02	1 74E+02	1 0E+01	1 8E+00	4 3E-01	2 8 E+00	4 96E+00	5 95E-00	-2 8E-01	4 53E+00	4 88E+00	NA	NA	NA	
	013	17	-2	1/21/2009	14 27	5 27E+03	5 35E+02	2 05E+02	8 61E+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/ /2009	12 16	3 85E+03	7 92E+02	4 73E+02	9 37E+00	1 37E+00	4 31E-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 5E+00	4 37E-01	4 22E-32	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 93E+02	1 62E+02	1 24E+01	1 51E+00	4 36E-01	-5 18E-02	5 66E+00	6 32E-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 4E+00	4 27E-01	3 10E-31	3 98E+00	4 49E-00	-4 43E-01	4 21E+00	4 99E+00	NA	NA	NA	
	018	17	-2	4/27/2010	13 23	9 30E+03	4 23E+02	2 09E+02	1 29E+01	1 68E+00	6 44E-01	-1 03E+00	5 73E+00	5 64E-00	1 34E+00	4 41E+00	5 25E+00	NA	NA	NA	
	019	17	-2	8/5/2010	14 06	3 70E 03	3 25E 02	2 00E 02	5 19E 00	1 33E 00	9 19E-01	-1 63E 00	7 62E 00	8 22E 00	4 53E 00	7 33E 00	9 76E 00	NA	NA	NA	
	020	17	-2	11/4/2010	14 28	4 46E+03	3 57E+02	1 12E+02	1 38E+01	1 33E+00	5 33E 01	2 25E+00	7 33E+00	7 68E-00	1 24E+00	9 31E+00	1 0E+01	NA	NA	NA	
	021	17	-2	1/27/2011	15 19	6 74E+03	6 13E+02	2 98E+02	1 14E+01	1 59E+00	1 68E+00	-2 13E+00	4 74E+00	4 94E-00	2 59E+00	5 38E+00	6 55E+00	NA	NA	NA	
	022	17	-2	4/28/2011	12 05	6 87E+03	9 65E+02	5 14E+02	8 72E+00	2 90E+00	2 05E+00	7 12E-31	6 96E+00	7 67E-00	5 14E-01	7 86E+00	8 62E+00	NA	NA	NA	
	023	17	-2	8/16/2011	10 35	4 52E+03	7 55E+02	4 53E+02	7 59E+00	2 07E+00	1 32E+00	3 10E+00	7 26E+00	8 77E-00	-9 99E-01	7 35E+00	7 48E+00	NA	NA	NA	
	024	17	-2	11/23/2011	11 33	4 97E+03	8 23E+02	4 96E+02	8 02E+00	2 57E+00	1 38E+00	2 26E+00	9 12E+00	1 19E-01	-1 41E+00	7 55E+00	9 05E+00	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 45E+00	2 22E+00	1 27E+01	1 93E+01	2 17E-01	1 50E+01	1 90E+01	2 20E+01	3 41E+0	1 46E+01	1 48E+01	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	
	003	29	-14	3/10/2006	12 50	2 83E+04	2 72E+03	1 28E+03	1 72E+01	1 35E+00	1 90E+00	1 43E+01	1 59E+01	1 78E-01	1 51E+00	1 71E+01	1 65E+01	1 13E+0	1 29E+01	1 34E+01	
	004	29	-14	3/27/2006	11 10	1 39E+04	2 61E+03	1 72E+03	1 59E+01	1 59E+00	2 44E+00	1 10E+00	4 72E+00	5 25E-00	-8 56E-01	4 41E+00	4 86E+00	6 09E+00	1 40E+01	1 51E+01	
	005	29	-14	6/27/2006	9 15	7 22E+03	6 63E+02	2 99E+02	2 09E+01	2 64E+00	3 72E+00	-2 37E-01	5 24E+00	6 07E 00	-2 02E-01	4 75E+00	5 72E+00	NA	NA	NA	
	006	29	14	9/29/2006	10 15	1 15E+01	1 83E+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 98E+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 65E+01	2 37E+00	2 31E+00	-1 42E+00	3 86E+00	3 38E-00	1 63E+00	3 38E+00	4 14E+00	NA	NA	NA	
	008	29	-14	8/7/2007	10 56	3 81E+03	2 97E+02	1 87E+02	1 69E+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/ 5/2007	14 36	2 49E+03	2 33E+02	1 69E+02	2 13E+01	2 15E+00	2 66E+00	8 79E-31	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 55E-01	1 09E+00	2 70E+00	3 15E-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 53E-01	-4 08E-01	1 58E+00	2 18E-00	-1 46E-01	2 04E+00	2 58E+00	NA	NA	NA	
	012	29	-14	11/ 0/2008	12 20	2 89E+03	4 01E+02	1 71E+02	1 68E+01	1 93E+00	3 49E-01	1 7 E+00	3 33E+00	6 24E-00	4 09E-01	5 27E+00	6 14E+00	NA	NA	NA	
	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 42E-00	1 12E-01	3 52E+00	3 49E+00	NA	NA	NA	
	014	29	-14	5/ /2009	12 13	4 33E+03	8 65E+02	4 72E+02	1 72E+01	1 90E+00	6 54E-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 23E+02	2 25E+02	2 38E+01	2 17E+00	6 75E 01	6 60E 01	3 35E+00	3 65E-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 83E+02	1 61E+02	2 20E+01	2 04E+00	7 31E-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 59E+03	1 05E+03	6 73E+02	2 03E+01	1 85E+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 93E+02	2 10E+02	1 87E+01	2 28E+00	6 59E-01	5 83E-31	5 87E+00	6 72E-00	-2 27E+00	4 88E+00	4 69E+00	NA	NA	NA	
	019	29	-14	8/5/2010	14 00	4 80E+03	3 69E+02	9 97E+01	1 41E+01	1 85E+00	5 42E-01	-5 93E+00	8 89E+00	8 07E-00	-3 93E-01	8 67E+00	9 54E+00	NA	NA	NA	
	020	29	-14	11/4/2010	13 14	5 99E+03	4 22E+02	1 17E+02	-2 91E-01	6 15E-01	7 91E-01	-4 11E+00	7 41E+00	7 07E-00	1 54E+00	7 68E+00	9 04E+00	NA	NA	NA	
	021	29	-14	1/27/2011	15 09	4 57E+03	5 23E+02	2 98E+02	1 49E+01	3 02E+00	1 74E+00	4 20E-31	6 12E+00	6 85E-00	1 72E+00	6 60E+00	7 76E+00	NA	NA	NA	
	022	29	-14	4/28/2011	12 21	4 11E+03	7 93E+02	5 15E+02	2 42E+01	2 76E+00	1 68E+00	3 26E+00	1 20E+01	1 42E-01	-1 92E+00	1 09E+01	1 05E+01	NA	NA	NA	
	023	29	-14	8/16/2011	11 00	5 23E+03	7 93E+02	4 52E+02	1 68E+01	2 87E+00	1 13E+00	-2 53E+00	8 34E+00	7 53E-00	-6 09E+00	9 66E+00	8 16E+00	NA	NA	NA	
	024	29	-14	11/23/2011	11 19	4 33E+03	7 03E+02	4 91E+02	1 26E+01	2 21E+00	1 32E+00	7 02E+00	9 00E+00	1 23E-01	-6 59E+00	9 76E+00	9 06E+00	NA	NA	NA	
MW-37-40	001	39 2	2/ 2	2/24/2006	11 35	1 88E+01	7 41E+03	6 39E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-37-40
	002	39 2	-2 2	2/28/2006	11 40	1 47E+04	2 13E+03	1 32E+03	3 66E+00	1 23E+00	1 19E+00	1 79E+01	1 71E+01	1 95E-01	1 53E+00	1 64E+01	1 81E+01	5 55E+0	1 65E+01	1 61E+01	
	002	39 2	-2 2	2/28/2006	11 40	NA	NA	NA	4 51E+00	1 23E+00	1 08E+00	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	39 2	-2 2	3/10/2006	10 25	1 70E+04	2 33E+03	1 29E+03	1 35E+01	1 32E+00	7 28E-01	5 5 E+00	1 45E+01	1 62E-01	1 99E+00	1 47E+01	1 62E+01	1 24E+0	1 35E+01	1 44E+01	
	004	39 2	-2 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 35E+00	6 37E+00	1 35E+01	1 47E+01	
	006	39 2	-2 2	6/27/2006	10 15	1 42E+04	1 13E+03	3 89E+02	2 44E+01	1 71E+00	7 33E-01	8 68E+00	7 68E+00	9 25E-00	-4 36E+00	6 70E+00	6 6E+00	NA	NA	NA	
	007	39 2	-2 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-31	3 36E+00	3 91E-00	-1 07E+00	3 15E+00	5 22E+00	NA	NA	NA	
	008	39 2	-2 2	8/7/2007	13 40	5 65E+03	5 51E+02	1 88E+02	9 16E+00	1 51E+00	6 27E-01	1 10E+00	5 12E+00	5 71E-00	-2 48E-01	5 26E+00	5 70E+00	NA	NA	NA	
	009	39 2	-2 2	10/ 5/2007	15 00	5 59E+03	3 03E+02	1 69E+02	5 58E+00	1 23E+00	7 45E-01	7 63E-31	2 91E+00	3 35E-00	2 99E-01	2 82E+00	3 32E+00	NA	NA	NA	
	010	39 2	-2 2	2/ /2008	17 20	6 73E+03	3 17E+02	1 23E+02	2 40E+01	8 54E+00	3 45E+00	3 09E-31	2 63E+00	2 95E 00	-3 76E-01	2 75E+00	2 94E+00	-4 35E+00	1 44E+01	1 76E+01	
	011	39 2	2/ 2	7/24/2008	13 12	5 24E+03	2 43E+02	1 91E+02	1 31E+00	1 41E 01	5 27E 01	1 13E+00	1 52E+00	2 48E-00	1 35E+00	2 11E+00	2 76E+00	NA	NA	NA	
	012	39 2	-2 2	11/ 0/2008	16 17	5 49E+03	5 45E+02	1 76E+02	1 13E+00	5 31E-01	3 33E-01	3 61E-31	6 03E+00	6 88E-00	5 04E+00	7 42E+00	9 27E+00	NA	NA	NA	
	013	39 2	-2 2	1/22/2009	13 05	4 91E+03	5 13E+02	2 00E+02	3 47E+00	8 85E-01	5 59E-01	-2 64E+00	3 78E+00	3 27E-00	2 67E+00	3 34E+00	4 08E+00	NA	NA	NA	
	014	39 2	-2 2	5/ /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	-2 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	-2 2	10/28/2009	13 48	4 52E+03	2 83E+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 25E+00	NA	NA	NA	
	017	39 2	-2 2	1/29/2010	12 52	4 70E+03	8 82E+02	4 55E+02	1 26E+01	1 44E+00	4 29E-01	7 58E-31	5 10E+00	5 65E-00	-1 25E+00	4 93E+00	5 38E+00	NA	NA	NA	
	018	39 2	-2 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 5 E+00	4 54E+00	4 41E-00	-3 32E-02	5 03E+00	5 51E+00	NA	NA	NA	
	019	39 2	-2 2	8/5/2010	14 25	7 00E+03	4 43E+02	2 99E+02	1 43E+01	1 74E+00	4 31E-01	3 15E-31	7 05E+00	9 00E 00	3 02E+00	7 44E+00	9 31E+00	NA	NA	NA	
	020	39 2	2/ 2	11/4/2010	12 06	6 61E+03	4 23E+02	1 15E+02	1 28E+01	1 92E+00	6 32E 01	2 77E+00	9 58E+00	1 03E-01	2 01E+00	8 29E+00	8 35E+00	NA	NA	NA	
	021	39 2	-2 2	1/27/2011	13 35	5 27E+03	7 42E+02	3 82E+02	1 53E+01	2 34E+00	1 35E+00	1 95E+00	5 84E+00	6 78E-00	2 03E+00	6 84E+00	7 92E+00	NA	NA	NA	
	022	39 2	-2 2	4/28/2011	11 31	3 39E+03	8 07E+02	5 33E+02	2 10E+01	3 66E+00	1 68E+00	4 10E+00	9 02E+00	1 09E-01	6 47E-01	8 94E+00	1 02E+01	NA	NA	NA	
	023	39 2	-2 2	8/16/2011	11 24	5 03E+03	7 85E+02	4 53E+02	1 55E+01	2 18E+00	1 17E+00	-2 03E+00	8 25E+00	8 54E-00	1 79E+00	7 35E+00	8 59E+00	NA	NA	NA	
	024	39 2	-2 2	11/23/2011	11 46	5 22E+03	8 23E+02	4 83E+02	1 50E+01	2 45E+00	1 47E+00	1 06E+00	1 43E+01	7 71E-00	5 11E-01	7 29E+00	1 0E+01	NA	NA	NA	
MW-37-57	001	53 2	-38 2	2/24/2006	10 30	1 50E+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	1 33E+04	2 05E+00	1 32E+03	2 22E+01	1 75E+00	1 05E+00	1 8 E+00	2 14E+01	2 44E-01	5 22E+00	1 82E+01	2 14E+01	2 91E+0	1 50E+01	1 54E+01	
	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	
	003	53 2	-38 2	3/10/2006	11 45	1 91E+04	2 43E+03	1 29E+03	2 29E+01	1 74E+00	7 58E-01	1 46E+00	1 76E+01	1 77E-01	1 53E+01	1 73E+01	1 34E+0	1 33E+01	1 43E+01		
	004	53 2	-38 2	3/27/2006	13 55	1 59E+04	2 04E+03	1 31E+03	1 65E+01	1 35E+00	6 50E-01	2 52E+00	5 25E+00	5 03E 00	3 94E+00	4 60E+00	5 53E+00	3 71E+00	1 37E+01	1 49E+01	
	005	53 2	-38 2	6/27/2006	9 35	1 48E+04	3 43E+03	6 83E+02	2 73E+01	1 85E+00	8 15E 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 35E+04	1 74E+03	4 52E+02	1 61E+01	1 89E+00	7 27E-01	-3 33E+00	8 04E+00	7 81E-00	2 69E+00	8 95E+00	1 07E+01	NA	NA	NA	
	007	53 2	-38 2	6/27/2007	12 20	5 89E+03	3 83E+02	1 95E+02	2 47E+01	2 03E+00	8 34E-01	2 40E+00	3 51E+00	4 32E-00	-9 58E-02	4 67E+00	4 84E+00	NA	NA	NA	
	008	53 2	-38 2	8/7/2007	12 55	6 58E+03	3 63E+02	1 88E+02	2 33E+01	2 15E+00	5 31E-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/ 5/2007	15 00	4 88E+03	2 85E+02	1 68E+02	2 78E+01	2 49E+00	5 53E-01	3 62E-31	2 67E+00	2 72E-00	1 20E-01	2 40E+00	2 77E+00	NA	NA	NA	
	010	53 2	-38 2	2/ /2008	16 31	6 53E+03	3 14E+02	1 33E+02	2 89E+01	3 20E+00	9 52E-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/ 0/2008	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 82E-00	5 78E-01	7 18E+00	8 14E+00	NA	NA	NA	

IPEC00267159

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[4]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-37-57	013	53.2	-36.2	1/31/2006	14:22	5.94E+03	5.21E+02	2.07E+02	1.59E+01	1.97E+00	6.58E-01	3.77E-02	3.44E+00	3.83E-00	1.05E+00	3.71E+00	4.35E+00	NA	NA	NA	MW-37-57
	014	53.2	-36.2	5/1/2009	12:39	5.94E+03	5.24E+02	1.61E+02	2.49E+01	2.15E+00	5.59E-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	-36.2	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	-36.2	10/28/2009	12:00	4.20E+03	2.81E+02	1.62E+02	2.68E+01	2.58E+00	8.37E-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	-36.2	1/29/2010	15:43	5.37E+03	9.03E+02	4.31E+02	1.76E+01	1.82E+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	-36.2	4/27/2010	17:28	5.20E+03	3.53E+02	2.16E+02	1.50E+01	2.15E+00	6.50E-01	-5.03E+00	7.63E+00	7.24E-00	1.71E+00	6.43E+00	7.85E+00	NA	NA	NA	
	019	53.2	-36.2	8/9/2010	13:59	7.30E+03	4.52E+02	2.94E+01	1.73E+01	1.69E+00	5.57E-01	-2.15E+00	7.37E+00	7.75E-00	-6.91E-01	8.96E+00	9.77E+00	NA	NA	NA	
	020	53.2	-36.2	11/4/2010	13:49	6.72E+03	4.41E+02	1.15E+02	1.57E+01	2.13E+00	5.70E-01	6.72E+00	1.22E+01	9.04E-00	-3.06E+00	7.95E+00	7.32E+00	NA	NA	NA	
	021	53.2	-36.2	1/27/2011	15:26	5.53E+03	5.75E+02	2.95E+02	2.02E+01	2.60E+00	1.96E+00	-3.70E-01	6.34E+00	6.92E-00	-1.36E+00	5.64E+00	5.60E+00	NA	NA	NA	
	022	53.2	-36.2	4/28/2011	13:17	5.81E+03	8.93E+02	5.07E+02	1.58E+01	5.54E+00	2.00E+00	5.18E+00	1.72E+01	8.67E-00	1.42E+00	8.36E+00	8.80E+00	NA	NA	NA	
	023	53.2	-36.2	8/16/2011	10:55	5.11E+03	7.93E+02	4.59E+02	2.15E+01	3.27E+00	1.30E+00	1.82E+00	7.92E+00	9.15E-00	-1.34E+00	6.79E+00	6.57E+00	NA	NA	NA	
	024	53.2	-36.2	11/23/2011	11:22	4.87E+03	8.15E+02	4.91E+02	1.88E+01	3.90E+00	1.31E+00	-6.08E-01	8.28E+00	1.01E-01	3.00E+00	9.12E+00	1.27E+01	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	9.25E+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	1.21E+03	4.53E+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	4.42E+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	13:30	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	1.30E+02	3.32E+02	3.46E+02	1.25E-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	1.17E+02	4.11E+02	4.54E+02	NA	NA	NA	2.91E+00	8.74E+00	6.51E-00	2.48E+00	7.74E+00	6.05E+00	NA	NA	NA	
	010	25.4	-11.1	2/23/2006	13:25	2.53E+03	4.93E+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	7.52E+02	1.77E+02	1.70E+02	NA	NA	NA	5.90E-01	2.10E+00	2.43E-00	1.20E+00	2.07E+00	2.26E+00	NA	NA	NA	
	014	25.4	-11.1	6/21/2006	9:48	9.16E+02	4.33E+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	5.55E+00	1.10E+00	5.70E+00	6.40E+00	
	015	25.4	-11.1	7/6/2006	12:00	5.93E+02	4.23E+02	4.52E+02	-3.70E-01	4.50E-01	5.20E-01	3.40E+00	1.02E+01	7.72E-00	2.98E+00	8.95E+00	7.41E+00	NA	NA	NA	
	016	25.4	-11.1	8/7/2006	13:23	2.13E+02	1.83E+02	1.74E+02	3.00E-02	6.30E-01	7.10E-01	2.26E+00	6.47E+00	9.31E-00	-1.22E-01	6.30E+00	9.33E+00	2.02E+01	2.94E+01	3.13E+01	
	017	25.4	-11.1	9/7/2006	11:30	3.53E+02	1.82E+02	1.67E+02	-5.30E-01	7.80E-01	8.70E-01	3.81E-01	7.68E+00	8.63E-00	-4.46E-01	6.20E+00	9.42E+00	NA	NA	NA	
	018	25.4	-11.1	11/22/2006	10:30	1.70E+02	4.03E+02	4.50E+02	-7.00E-02	6.60E-01	7.30E-01	3.13E+00	9.38E+00	7.14E-00	3.00E+00	9.25E+00	7.53E+00	NA	NA	NA	
	019	25.4	-11.1	2/12/2007	9:58	2.24E+03	6.03E+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	1.71E+00	1.80E+00	NA	NA	NA	
	020	25.4	-11.1	8/16/2007	11:30	6.34E+02	1.58E+02	1.44E+02	-9.21E-02	6.95E-01	8.35E-01	1.27E+00	3.07E+00	3.65E-00	2.48E+00	3.01E+00	3.96E+00	NA	NA	NA	
	021	25.4	-11.1	4/22/2008	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	
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-31	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	8/7/2007	16:30	3.25E+02	1.85E+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	1.25E+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	10/28/2008	12:53	4.13E+02	2.01E+02	1.99E+02	3.31E+00	1.12E+00	7.74E-01	-1.28E+00	2.46E+00	3.95E-00	-1.24E-01	2.38E+00	6.08E+00	NA	NA	NA	
	006	67	13	4/9/2009	14:55	3.38E+02	1.67E+02	1.50E+02	3.35E+00	9.66E-01	6.21E-01	-8.08E-01	5.12E+00	3.41E-00	5.19E-01	3.60E+00	4.21E+00	NA	NA	NA	
	007	67	13	11/5/2009	15:11	4.41E+02	1.23E+02	2.04E+01	2.37E+00	7.72E-01	5.20E-01	-6.24E-01	5.07E+00	5.45E-00	5.05E+00	5.21E+00	6.22E+00	NA	NA	NA	
	008	67	13	5/4/2010	15:23	3.79E+02	2.01E+02	2.13E+02	1.26E+00	6.66E-01	6.33E-01	1.66E-31	5.42E+00	6.14E-00	1.30E+00	6.75E+00	7.87E+00	NA	NA	NA	
	009	67	13	7/27/2010	14:26	2.96E+02	1.13E+02	9.90E+01	1.73E+00	6.06E-01	3.30E-01	2.96E+00	6.33E+00	7.80E-00	-5.65E+00	7.25E+00	5.04E+00	NA	NA	NA	
	010	67	13	11/5/2010	16:28	3.74E+02	1.83E+02	3.88E+02	1.56E+00	9.36E-01	1.94E+00	-1.74E+00	3.99E+00	8.42E-00	-3.17E+00	4.38E+00	8.38E+00	NA	NA	NA	
	011	67	13	4/26/2011	14:52	1.39E+04	9.64E+02	4.18E+02	1.74E+00	1.45E+00	1.50E+00	-8.12E-01	8.22E+00	8.78E-00	-4.05E+00	9.42E+00	9.00E+00	NA	NA	NA	
	012	67	13	7/15/2011	13:42	2.24E+03	6.12E+02	4.40E+02	2.55E-01	1.16E+00	1.34E+00	-1.15E-01	8.28E+00	9.19E-00	-2.42E-02	9.72E+00	1.12E+01	NA	NA	NA	
	013	67	13	8/29/2011	13:47	1.49E+04	1.24E+03	4.51E+02	1.68E+00	1.18E+00	1.20E+00	2.23E+00	7.77E+00	8.94E-00	4.82E+00	8.25E+00	1.05E+01	NA	NA	NA	
	014	67	13	12/1/2011	14:04	1.03E+03	5.13E+02	4.75E+02	2.37E+00	1.90E+00	1.76E+00	-3.99E+00	9.24E+00	1.02E-01	-3.39E+00	8.07E+00	9.37E+00	NA	NA	NA	
MW-39-84	001	83.5	-3.5	5/22/2007	10:38	5.21E+02	1.84E+02	1.25E+02	1.12E+00	1.22E-01	5.57E-01	-9.03E-02	1.53E+00	1.69E-00	2.61E-01	1.53E+00	1.81E+00	-1.68E+00	9.95E+00	1.15E+01	MW-39-84
	002	83.5	-3.5	8/7/2007	12:30	2.52E+02	1.77E+02	1.91E+02	7.97E-01	7.18E-01	7.30E-01	3.53E-31	3.07E+00	3.44E-00	-1.11E+00	3.29E+00	3.76E+00	NA	NA	NA	
	003	83.5	-3.5	1/17/2008	13:25	1.43E+02	1.73E+02	1.84E+02	1.78E+00	9.47E-01	7.34E-01	-2.74E+00	2.95E+00	2.95E-00	6.36E-01	2.94E+00	3.50E+00	NA	NA	NA	
	004	83.5	3.5	5/1/2008	14:10	1.50E+02	1.13E+02	1.96E+02	2.23E+00	7.07E-01	8.23E-01	2.12E-01	2.24E+00	2.67E-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	1.83E+02	1.99E+02	1.74E+00	6.90E-01	5.36E-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	1.43E+02	1.50E+02	2.05E+00	7.71E-01	6.31E-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	1.15E-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	5.52E-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	1.33E+02	1.01E+02	8.43E-01	6.21E-01	5.35E-01	-3.32E+00	6.79E+00	6.90E-00	2.43E+00	6.95E+00	8.54E+00	NA	NA	NA	
	010	83.5	-3.5	11/5/2010	16:58	2.51E+02	2.11E+02	4.59E+02	1.10E+00	8.81E-01	1.36E+00	3.58E+00	4.41E+00	1.05E-01	1.47E+00	4.82E+00	1.24E+01	NA	NA	NA	
	011	83.5	-3.5	4/26/2011	14:25	4.40E+02	4.02E+02	4.13E+02	-2.03E-01	1.15E+00	1.50E+00	-9.39E-01	7.42E+00	7.84E-00	-4.02E-01	6.92E+00	7.41E+00	NA	NA	NA	
	012	83.5	-3.5	7/15/2011	14:33	3.55E+02	4.17E+02	4.40E+02	6.54E-01	1.15E+00	1.27E+00	-1.73E+00	1.43E+01	1.71E-01	-4.05E+00	9.45E+00	9.20E+00	NA	NA	NA	
	013	83.5	3.5	8/29/2011	13:56	2.38E+02	4.11E+02	4.54E+02	8.65E-01	1.00E+00	1.00E+00	5.19E+00	1.54E+01	9.85E-00	1.20E+00	9.99E+00	1.04E+01	NA	NA	NA	
	014	83.5	-3.5	12/1/2011	14:17	1.89E+02	4.22E+02	4.88E+02	3.12E+00	2.09E+00	1.31E+00	-1.59E+00	6.48E+00	7.42E-00	-1.71E+00	8.02E+00	1.05E+01	NA	NA	NA	
MW-39-102	001	101.5	-21.5	5/22/2007	10:40	8.35E+02	2.13E+02	1.29E+02	1.32E+00	7.13E-01	6.21E-01	-3.99E-02	1.81E+00	1.99E-00	6.54E-01	1.28E+00	2.11E+00	6.39E-01	1.15E+01	1.32E+01	MW-39-102
	002	101.5	-21.5	8/7/2007	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	3.62E-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-31	2.37E+00	2.88E-00	7.91E-01	3.45E+00	2.96E+00	NA	NA	NA	
	004	101.5	-21.5	4/30/2008	14:56	5.33E+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	1.58E+02	1.83E+02	2.00E+02	1.23E+00	7.18E-01	5.92E-01	5.57E-31	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	15:58	2.20E+02	1.56E+02	1.51E+02	2.40E+00	8.22E-01	6.51E-01	-8.17E-02	5.07E+00	5.56E-00	1.30E+00	5.32E+00	5.80E+00	NA	NA	NA	
	007	101.5	-21.5	11/5/2009	15:12	2.57E+02	1.03E+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+00	6.36E-01	6.97E-01	-2.43E+00	5.49E+00	5.72E-00	-5.10E-01	6.30E+00	6.91E+00	NA	NA	NA	
	009	101.5	-21.5	7/23/2010	14:52	2.39E+02	1.43E+02	1.49E+02	4.65E+00	9.93E-01	4.71E-01	1.02E+00	6.35E+00	6.98E-00	3.68E+00	5.55E+00	7.42E+00	NA	NA	NA	
	010	101.5	-21.5	11/5/2010	16:12	3.51E+02	1.83E+02	3.84E+02	1.40E+00	9.06E-01	1.32E+00	2.98E+00	3.39E+00	9.21E-00	1.12E+00	3.52E+00	6.22E+00	NA	NA	NA	
	011	101.5	-21.5	4/26/2011	14:33	1.43E+04	1.03E+03	4.19E+02	1.68E+00	1.85E+00	2.03E+00	4.48E+01	2.08E+01	9.85E-00	6.03E+00	7.96E+00	1.07E+01	NA	NA	NA	
	012	101.5	-21.5	7/15/2011	14:02	1.24E+04	1.23E+03	4.36E+02	5.88E-01	1.09E+00	1.20E+00	3.70E+00	8.76E+00	1.02E-01	-6.84E-01	9.42E+00	9.35E+00	NA	NA	NA	
	013	101.5	-21.5	8/29/2011	14:11	1.90E+04	1.37E+03	4.41E+02	-7.38E-01	1.26E+00	1.60E+00	-3.14E+00	7.92E+00	7.72E-00	4.66E+00	7.83E+00	1.04E+01	NA	NA	NA	
	014	101.5	-21.5	12/1/2011	14:10	1.12E+03	5.25E+02	4.77E+02	2.77E+00	2.06E+00	1.95E+00	1.42E+00	7.68E+00	9.92E-00	-2.95E+00	6.99E+00	7.97E+00	NA	NA	NA	
MW-39-124	001	124	-44	5/22/2007	9:50	2.51E+02	1.43E+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	8/7/2007	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	3.05E-00	4.97E-01	3.17E+00	3.61E+00	NA	NA	NA	

IPEC00267160

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-39-124	003	124	-44	1/17/2008	15 40	1 57E+02	1 64E+02	1 73E+02	1 48E+00	9 71E-01	8 50E-01	5 51E-31	2 61E+00	3 02E-00	9 85E-01	2 03E+00	2 55E+00	NA	NA	NA	MW-39-124
	004	124	-44	4/30/2008	15 24	2 15E+02	9 53E+01	1 53E+02	1 79E+00	6 60E-01	8 21E-01	-1 23E+00	2 13E+00	3 42E-00	5 87E-01	2 19E+00	3 85E+00	-1 13E+01	1 42E+01	2 52E+01	
	005	124	-44	10/22/2008	14 00	2 31E+02	1 83E+02	2 00E+02	9 42E-01	6 47E-01	5 54E-01	1 03E+00	6 64E+00	7 61E-00	1 633+00	6 98E+00	8 11E+00	NA	NA	NA	
	006	124	-44	4/9/2009	11 46	1 98E+02	1 53E+02	1 50E+02	9 16E-01	6 33E-01	6 39E-01	-9 45E-02	5 16E+00	3 44E-00	-1 55E-01	3 30E+00	5 67E+00	NA	NA	NA	
	007	124	-44	11/5/2009	12 56	2 58E+02	1 09E+02	1 00E+02	1 67E+00	8 68E-01	7 56E-01	-6 47E-01	5 88E+00	6 55E-00	4 433+00	7 04E+00	8 98E+00	NA	NA	NA	
	008	124	-44	5/4/2010	12 32	3 38E+02	1 92E+02	2 06E+02	5 90E-01	8 13E-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 23E+00	7 71E-01	5 21E-01	-1 11E+00	8 32E+00	9 28E-00	-4 37E-01	9 73E+00	1 10E+01	NA	NA	NA	
	010	124	-44	11/5/2010	12 46	3 73E+02	1 83E+02	3 80E+02	1 17E+00	8 83E-01	1 93E+00	-6 43E+00	6 71E+00	1 01E-01	-1 31E-01	4 98E+00	1 10E+01	NA	NA	NA	
	011	124	-44	4/26/2011	13 01	1 51E102	3 70E102	4 15E102	5 20E-01	1 37E100	1 55E100	9 13E100	0 56E100	0 57E 00	3 07E100	7 52E100	9 27E100	NA	NA	NA	
	012	124	-44	7/15/2011	11 44	2 30E+01	3 72E+02	4 39E+02	8 78E 01	1 19E+00	1 27E+00	4 13E+00	1 13E+01	1 15E-01	1 82E+00	9 51E+00	9 57E+00	NA	NA	NA	
	013	124	-44	8/29/2011	10 54	-1 02E+01	3 75E+02	4 45E+02	3 76E-01	1 12E+00	1 30E+00	-7 05E+00	1 06E+01	1 01E-01	7 76E+00	1 13E+01	1 46E+01	NA	NA	NA	
	014	124	-44	12/1/2011	11 42	1 73E+02	4 35E+02	4 89E+02	-2 58E-01	1 41E+00	1 82E+00	5 73E-31	7 95E+00	9 19E-00	2 71E+00	7 89E+00	9 85E+00	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	5 42E-31	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	8/7/2007	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	2 343+00	4 56E+00	5 46E+00	NA	NA	NA	
	003	182.5	-102 5	1/17/2008	11 55	4 55E+01	1 55E+02	1 82E+02	8 29E-01	6 17E-01	5 32E-01	-3 72E-01	3 51E+00	3 92E-00	0 003+00	2 03E+00	2 20E+00	NA	NA	NA	
	004	182.5	-102 5	4/30/2008	15 03	1 12E+02	1 05E+02	1 77E+02	1 12E+00	5 66E-01	7 33E-01	1 45E-31	2 45E+00	4 14E-00	7 95E-01	2 60E+00	4 48E+00	1 33E+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 45E-01	7 29E-01	8 35E-01	-4 13E+00	6 88E+00	7 09E-00	-3 08E+00	7 77E+00	7 39E+00	NA	NA	NA	
	006	182.5	-102 5	4/9/2009	11 45	2 30E+01	1 23E+02	1 50E+02	2 13E-01	6 65E-01	7 51E-01	3 94E-31	6 71E+00	4 47E-00	0 00E-01	3 77E+00	4 33E+00	NA	NA	NA	
	007	182.5	-102 5	11/5/2009	12 57	9 35E101	9 23E101	9 07E101	3 71E-01	7 14E-01	9 35E-01	1 63E100	2 42E100	6 01E 00	1 94E100	6 13E100	7 46E100	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 47E 01	6 20E 01	2 11E+00	6 52E+00	7 73E-00	2 36E+00	7 59E+00	6 96E+00	NA	NA	NA	
	009	182.5	-102 5	7/22/2010	11 38	1 37E+02	1 13E+02	1 19E+02	2 08E-01	4 19E-01	4 79E-01	-4 67E+00	8 88E+00	9 01E-00	-5 06E+00	9 62E+00	8 96E+00	NA	NA	NA	
	010	182.5	-102 5	11/5/2010	12 53	-8 02E+01	1 61E+02	3 88E+02	4 19E-01	7 56E-01	1 77E+00	1 45E+00	4 83E+00	1 12E-01	3 58E+00	4 93E+00	1 19E+01	NA	NA	NA	
	011	182.5	-102 5	4/26/2011	11 35	1 15E+02	3 54E+02	4 02E+02	1 12E+00	1 56E+00	1 67E+00	6 46E+00	8 88E+00	1 09E-01	-1 52E+00	8 68E+00	8 94E+00	NA	NA	NA	
	012	182.5	-102 5	7/15/2011	11 49	7 32E+01	3 75E+02	4 35E+02	3 45E-01	1 03E+00	1 19E+00	2 51E+00	1 08E+01	1 22E-01	-2 37E+00	1 30E+01	1 37E+01	NA	NA	NA	
	013	182.5	-102 5	8/29/2011	10 45	1 14E+02	3 81E+02	4 33E+02	1 10E+00	1 13E+00	1 10E+00	-3 73E+00	1 05E+01	1 05E-01	5 90E+00	9 54E+00	1 22E+01	NA	NA	NA	
	014	182.5	-102 5	12/1/2011	11 26	-8 23E+01	4 11E+02	4 97E+02	1 34E-01	1 45E+00	1 80E+00	-2 81E+00	1 34E+01	1 59E-01	4 19E+00	8 16E+00	1 46E+01	NA	NA	NA	
MW-39-195	001	195	-1 5	5/22/2007	12 43	2 55E+02	1 53E+02	1 33E+02	1 50E+00	6 90E-01	6 39E-01	9 00E+00	7 67E+00	4 34E-00	1 54E+00	4 82E+00	4 82E+00	-2 52E+00	7 93E+00	1 15E+01	MW-39-195
	002	195	-1 5	8/7/2007	12 00	2 20E+02	1 73E+02	1 82E+02	2 92E-01	6 23E-01	6 52E-01	-4 08E-02	4 14E+00	4 05E-00	-2 70E-01	4 26E+00	4 30E+00	NA	NA	NA	
	003	195	-1 5	1/17/2008	17 20	2 53E101	1 64E102	1 04E102	8 97E-01	8 51E-01	8 30E-01	7 57E-31	4 00E100	4 05E 00	0 15E-01	3 42E100	4 01E100	NA	NA	NA	
	004	195	1 5	4/30/2008	16 10	2 74E+02	1 53E+02	2 36E+02	1 21E+00	5 53E 01	8 29E 01	1 17E+00	2 28E+00	3 71E-00	9 23E 02	2 78E+00	4 21E+00	2 59E+00	1 45E+01	2 51E+01	
	005	195	-1 5	10/22/2008	14 26	1 77E+02	1 88E+02	2 00E+02	8 81E-01	7 23E-01	6 38E-01	4 14E+00	5 57E+00	6 99E-00	1 81E+00	6 26E+00	7 96E+00	NA	NA	NA	
	006	195	-1 5	4/9/2009	12 08	7 46E+01	1 32E+02	1 48E+02	6 89E-01	6 66E-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	-1 5	11/5/2009	13 03	1 39E+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	-1 5	5/4/2010	13 14	6 99E+01	1 64E+02	1 84E+02	6 21E-01	6 54E-01	6 32E-01	-1 55E+00	6 42E+00	6 85E-00	-1 59E-01	6 84E+00	7 63E+00	NA	NA	NA	
	009	195	-1 5	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-31	8 64E+00	9 43E-00	-9 78E-01	8 93E+00	9 62E+00	NA	NA	NA	
	010	195	-1 5	11/5/2010	13 25	2 16E+02	1 85E+02	4 09E+02	1 52E-01	9 35E-01	1 73E+00	-3 21E+00	4 09E+00	6 54E-00	8 703+00	4 38E+00	1 20E+01	NA	NA	NA	
	011	195	-1 5	4/26/2011	12 38	7 44E+01	8 04E+02	4 20E+02	1 88E+00	1 75E+00	1 59E+00	-2 08E+00	1 11E+01	1 25E-01	4 62E+00	8 10E+00	1 13E+01	NA	NA	NA	
	012	195	-1 5	7/15/2011	11 13	4 19E+03	7 53E+02	4 32E+02	1 10E+00	1 73E+00	1 32E+00	2 79E+00	8 46E+00	9 72E-00	6 38E-01	1 01E+01	1 08E+01	NA	NA	NA	
	013	195	-1 5	8/29/2011	10 51	1 72E104	1 31E103	4 43E102	4 90E-02	9 56E-01	9 55E-01	7 29E-31	7 62E100	9 55E 00	2 432100	0 10E100	0 96E100	NA	NA	NA	
	014	195	1 5	12/1/2011	11 28	5 13E+03	8 23E+02	4 87E+02	3 00E 01	1 46E+00	1 75E+00	2 12E+00	7 98E+00	1 03E-01	5 51E C1	9 78E+00	1 22E+01	NA	NA	NA	
MW-40-27	001	26.7	46 5	6/5/2007	11 00	1 56E+02	1 53E+02	1 63E+02	-7 32E-04	6 48E-01	8 50E-01	2 70E-32	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 52E+02	1 59E+02	1 69E+02	3 32E-01	5 90E-01	6 52E-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 73E+02	1 82E+02	-4 39E-01	4 49E-01	7 34E-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 05E+02	1 72E+02	3 66E-01	4 20E-01	7 35E-01	5 03E-31	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 83E+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	NA	NA	NA	
	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 32E-01	5 23E-31	3 41E+00	3 85E-00	1 46E+00	2 90E+00	3 58E+00	-1 86E+00	1 80E+01	2 09E+01	
	007	26.7	46 5	4/15/2009	14 17	1 48E+02	1 45E+02	1 56E+02	-5 52E-01	7 85E-01	9 53E-01	-1 14E-01	6 86E+00	4 57E-00	-6 06E-02	3 42E+00	2 81E+00	-2 80E+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 03E-01	4 49E-01	4 50E+00	8 49E+00	5 93E-00	-1 64E+00	5 34E+00	2 88E+00	NA	NA	NA	
	009	26.7	46 5	11/17/2009	14 57	1 17E+02	9 33E101	9 75E101	-6 51E-01	7 14E-01	9 71E-01	1 06E100	4 59E100	5 44E 00	-5 53E100	5 23E100	5 10E100	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 99E-00	2 86E+00	6 71E+00	8 36E+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 29E-01	-1 37E+00	4 00E+00	4 35E-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 25E+02	1 24E+02	2 23E-01	6 54E-01	7 73E-01	1 95E+00	4 50E+00	5 45E-00	-1 03E+00	4 72E+00	5 12E+00	NA	NA	NA	
	013	26.7	46 5	11/29/2010	15 23	2 36E+02	1 43E+02	1 44E+02	1 10E-01	7 98E-01	9 53E-01	3 16E-31	3 38E+00	3 75E-00	1 013+00	3 63E+00	4 18E+00	NA	NA	NA	
	014	26.7	46 5	3/8/2011	12 55	1 85E+02	2 59E+02	2 65E+02	1 58E-01	1 37E+00	1 61E+00	3 72E-31	6 78E+00	7 39E-00	2 833+00	8 56E+00	9 96E+00	NA	NA	NA	
	015	26.7	46 5	4/29/2011	13 29	1 77E+02	3 65E+02	4 07E+02	1 18E+00	1 74E+00	1 87E+00	1 91E+00	8 40E+00	9 77E-00	-9 20E-01	9 86E+00	1 15E+01	NA	NA	NA	
	016	26.7	46 5	7/21/2011	15 12	3 59E+01	3 01E+02	3 45E+02	-4 51E-01	1 40E+00	1 95E+00	-2 18E+00	7 85E+00	7 64E-00	1 36E+00	9 05E+00	1 05E+01	NA	NA	NA	
	017	26.7	46 5	12/9/2011	11 50	2 24E+01	4 23E+02	4 90E+02	1 74E-01	1 46E+00	1 77E+00	7 86E-31	7 02E+00	8 97E-00	3 193+00	7 34E+00	1 03E+01	NA	NA	NA	
MW-40-46	001	46.2	27	6/5/2007	11 50	1 42E102	1 53E102	1 66E102	-3 17E-01	5 02E-01	6 30E-01	7 90E-31	3 59E100	3 92E 00	-2 35E100	2 70E100	2 27E100	NA	NA	NA	MW-40-46
	002	46.2	27	7/23/2007	12 15	9 98E+01	1 53E+02	1 71E+02	3 50E 01	5 61E 01	6 35E 01	9 08E 01	3 79E+00	4 02E-00	1 72E+00	3 07E+00	2 90E+00	NA	NA	NA	
	003	46.2	27	10/22/2007	14 45	-1 59E+01	1 52E+02	1 74E+02	-2 14E-02	5 10E-01	6 35E-01	-3 80E-01	3 72E+00	3 55E-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 57E-01	8 75E-01	-1 21E+00	2 84E+00	3 07E-00	1 16E+00	2 58E+00	2 82E+00	NA	NA	NA	
	005	46.2	27	8/11/2008	13 35	1 58E+02	1 04E+02	1 71E+02	-3 35E-01	3 77E-01	8 39E-01	1 23E-31	1 99E+00	3 31E-00	1 092+00	2 05E+00	3 64E+00	4 34E+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-31	6 58E+00	7 49E-00	1 833+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 57E-01	8 08E-31	2 88E+00	3 39E-00	-1 15E+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 15E+02	5 81E-01	5 81E-01	6 35E-01	-1 08E+00	7 61E+00	7 52E-00	-1 86E+00	6 52E+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 52E-01	-9 97E-01	4 25E+00	4 70E-00	1 093+00	4 54E+00	5 35E+00	NA	NA	NA	
	011	46.2	27	2/4/2010	14 59	9 20E101	1 62E102	1 82E102	6 20E-01	7 56E-01	7 95E-01	2 03E100	4 53E100	5 35E 00	1 372100	4 90E100	5 90E100	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	1 192+00	3 10E+00	3 95E+00	NA	NA	NA	
	013	46.2	27	8/26/2010	14 56	1 24E+02	1 23E+02	1 29E+02	-1 33E-01	5 11E-01	7 19E-01	7 02E-31	6 92E+00	6 91E-00	5 483+00	6 17E+00	9 36E+00	NA	NA	NA	
	014	46.2	27	11/29/2010	16 36	1 93E+02	1 47E+02	1 48E+02	6 60E-02	7 89E-01	9 38E-01	5 87E-31	3 83E+00	4 28E-00	2 063+00	3 99E+00	4 74E+00	NA	NA	NA	
	015	46.2	27	3/8/2011	12 58	2 48E+02	2 74E+02	2 63E+02	1 03E-01	8 58E-01	1 07E+00	2 82E+00	8 00E+00	9 18E-00	7 993+00	8 54E+00	1 19E+01	NA	NA	NA	
	016	46.2	27	4/29/2011	13 31	7 82E+01	3 54E+02	4 05E+02	-1 35E-01**	1 88E+00	1 77E+00	-9 96E-01	8 46E+00	9 02E-00	-3 98E+00	9 04E+00	9 04E+00	NA	NA	NA	
	017	46.2	27	7/27/2011	15 55	1 35E+02	3 09E+02	3 44E+02	-9 96E-01	1 26E+00	1 86E+00	2 28E+00	8 85E+00	1 01E-01	5 01E-C1	9 30E+00	1 03E+01	NA	NA	NA	
	018	46.2	27	12/9/2011	12 03	9 30E+01	4 17E+02	4 77E+02	2 87E-01	1 62E+00	1 92E+00	1 26E+00	7 41E+00	9 45E-00	-9 20E-01	6 39E+00	8 16E+00	NA	NA	NA	
MW-40-81	001	80.7	-7 5	6/5/2007	12 37	1 53E+02	1 59E+02	1 63E+02	-2 23E-02	6 98E-01	9 11E-01	-1 03E+00	3 09E+00	3 22E-00	-4 70E-03	3 72E+00	3 62E+00	NA	NA	NA	MW-40-81

IPEC00267161

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-40-81	002	80.7	-7.5	7/23/2007	13:00	6.99E+01	1.57E+02	1.77E+02	2.45E-01	6.00E-01	6.34E-01	-7.08E-01	4.95E+00	5.22E+00	2.31E+00	3.81E+00	4.95E+00	NA	NA	NA	MW-40-81
	003	80.7	-7.5	10/2/2007	10:52	6.99E+01	1.53E+02	1.73E+02	-9.55E-02	5.05E-01	7.10E-01	5.47E-31	4.00E+00	4.43E+00	7.73E-01	4.02E+00	4.64E+00	NA	NA	NA	
	004	80.7	-7.5	1/7/2008	14:35	1.29E+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	1.05E+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	3.34E+01	1.61E+02	1.93E+02	-1.34E-01	4.11E-01	6.38E-01	2.00E+00	5.28E+00	6.24E+00	-8.66E-01	6.55E+00	7.32E+00	-2.38E+00	2.33E+01	2.69E+01	
	007	80.7	-7.5	1/19/2009	10:38	1.51E+02	1.37E+02	1.48E+02	2.92E-01	5.70E-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	1.53E+02	1.35E+02	-3.34E-02	6.47E-01	8.17E-01	-1.93E+00	7.17E+00	4.75E+00	3.78E+00	4.87E+00	5.06E+00	-1.26E+01	2.01E+01	2.42E+01	
	009	80.7	-7.5	7/20/2009	11:28	2.13E+02	1.93E+02	2.14E+02	-2.23E-02	4.83E-01	5.48E-01	-7.78E-01	4.98E+00	5.55E+00	-1.11E+00	5.24E+00	5.49E+00	NA	NA	NA	
	010	80.7	-7.5	11/17/2009	13:51	9.11E+01	0.03E+01	9.45E+01	-1.50E-01	6.63E-01	8.17E-01	-4.31E+00	6.00E+00	5.15E+00	2.03E+00	3.76E+00	4.01E+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	-9.19E-03	4.06E+00	5.42E+00	NA	NA	NA	
	012	80.7	-7.5	4/15/2010	12:15	1.29E+02	1.37E+02	1.47E+02	4.95E-01	7.05E-01	7.79E-01	1.72E+00	4.20E+00	4.95E+00	1.08E+01	3.89E+00	4.36E+00	NA	NA	NA	
	013	80.7	-7.5	8/26/2010	11:05	9.38E+01	1.14E+02	1.24E+02	2.45E-01	5.25E-01	6.36E-01	-3.95E+00	5.24E+00	4.95E+00	-2.64E+00	4.68E+00	4.20E+00	NA	NA	NA	
	014	80.7	-7.5	11/29/2010	12:03	2.48E+02	1.53E+02	1.47E+02	1.13E-03	6.45E-01	7.35E-01	-9.67E-01	4.38E+00	4.79E+00	-4.37E-01	4.83E+00	5.28E+00	NA	NA	NA	
	015	80.7	-7.5	3/8/2011	10:17	2.33E+02	2.63E+02	2.63E+02	8.50E-01	1.51E+00	1.67E+00	1.26E+00	1.06E+01	7.71E+00	-1.45E+00	6.08E+00	6.16E+00	NA	NA	NA	
	016	80.7	-7.5	4/29/2011	11:08	3.39E+02	4.12E+02	4.36E+02	1.07E+00	1.58E+00	1.70E+00	3.00E+00	6.90E+00	8.51E+00	-2.66E-01	8.04E+00	8.83E+00	NA	NA	NA	
	017	80.7	-7.5	7/27/2011	13:24	-1.18E+02	2.83E+02	3.48E+02	8.36E-01	1.70E+00	1.90E+00	-3.22E-01	6.48E+00	6.87E+00	-1.05E+00	8.07E+00	8.91E+00	NA	NA	NA	
	018	80.7	-7.5	12/9/2011	10:23	-8.05E+01	4.02E+02	4.86E+02	3.77E-01	1.51E+00	1.79E+00	4.69E-31	2.64E+01	1.18E+01	1.07E+00	1.07E+01	1.35E+01	NA	NA	NA	
MW-40-100	001	100.2	-27	6/5/2007	11:12	1.76E+02	1.61E+02	1.64E+02	3.40E-01	6.13E-01	6.94E-01	-1.92E+00	3.06E+00	3.04E+00	-1.96E+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	6.13E-01	6.26E-01	-4.67E-01	1.91E+00	2.12E+00	1.70E-01	1.94E+00	2.22E+00	NA	NA	NA	
	003	100.2	-27	10/2/2007	11:03	5.95E+01	1.53E+02	1.73E+02	7.39E-02	5.75E-01	7.59E-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	1.57E+02	1.81E+02	-7.59E-02	5.85E-01	8.10E-01	3.13E-31	2.27E+00	2.69E+00	8.84E-02	2.25E+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	9.31E-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	5.33E-01	-1.18E-01	1.59E+00	2.68E+00	6.30E-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	8.56E+01	1.73E+02	1.95E+02	1.13E-01	6.37E-01	7.33E-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	1.33E+02	1.48E+02	1.06E-01	6.03E-01	7.25E-01	5.13E-31	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	2.52E+02	1.55E+02	1.35E+02	6.63E-02	5.52E-01	6.32E-01	-2.12E+00	6.60E+00	4.43E+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	1.55E+02	1.97E+02	2.18E+02	-1.75E-01	3.63E-01	7.04E-01	4.36E-31	5.52E+00	6.32E+00	7.10E-01	5.23E+00	6.62E+00	NA	NA	NA	
	012	100.2	-27	11/17/2009	14:34	7.32E+01	9.03E+01	9.83E+01	9.08E-02	6.51E-01	7.90E-01	-1.03E+00	4.96E+00	4.12E+00	1.40E+00	3.72E+00	4.20E+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	7.03E-01	8.35E-01	-7.50E-01	4.26E+00	4.62E+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	1.38E+02	1.46E+02	1.38E-01	5.31E-01	7.18E-01	2.83E-01	3.54E+00	3.96E+00	2.16E+00	3.32E+00	4.08E+00	NA	NA	NA	
	015	100.2	-27	8/26/2010	11:09	1.34E+02	1.37E+02	1.45E+02	-2.33E-01	3.95E-01	6.21E-01	8.87E-31	6.15E+00	7.17E+00	6.51E-01	5.61E+00	6.53E+00	NA	NA	NA	
	016	100.2	-27	11/29/2010	12:12	1.34E+02	1.43E+02	1.46E+02	-2.12E-01	6.70E-01	8.39E-01	-1.46E-01	4.05E+00	4.53E+00	3.11E-01	4.26E+00	4.81E+00	NA	NA	NA	
	017	100.2	-27	3/8/2011	10:27	5.17E+01	2.14E+02	2.64E+02	2.52E-02	1.30E+00	1.58E+00	2.46E+01*	1.35E+01	7.65E+00	-1.40E+00	7.88E+00	8.30E+00	NA	NA	NA	
	018	100.2	-27	4/29/2011	11:27	2.70E+02	4.05E+02	4.38E+02	2.46E-01	1.42E+00	1.67E+00	5.53E+00	7.14E+00	9.23E+00	2.99E+00	7.96E+00	9.86E+00	NA	NA	NA	
	019	100.2	-27	7/27/2011	13:29	1.37E+02	3.12E+02	3.50E+02	-9.50E-01	1.41E+00	1.98E+00	2.29E+00	9.03E+00	1.04E+01	7.10E-01	1.08E+01	1.20E+01	NA	NA	NA	
	020	100.2	-27	12/9/2011	10:28	4.85E+01	4.29E+02	5.00E+02	1.64E+00	1.37E+00	1.41E+00	1.85E+00	7.98E+00	9.93E+00	8.66E-01	7.77E+00	1.01E+01	NA	NA	NA	
MW-40-127	001	127.2	-54	6/5/2007	12:30	1.51E+02	1.62E+02	1.63E+02	2.60E-01	5.02E-01	5.71E-01	7.51E-31	2.98E+00	3.41E+00	-3.29E-03	2.94E+00	3.26E+00	NA	NA	NA	MW-40-127
	002	127.2	-54	7/23/2007	12:12	4.26E+01	1.44E+02	1.68E+02	3.83E-01	5.13E-01	5.73E-01	-1.17E+00	1.67E+00	1.75E+00	2.94E-01	1.59E+00	1.77E+00	NA	NA	NA	
	003	127.2	-54	10/2/2007	11:30	2.23E+01	1.44E+02	1.64E+02	1.01E-01	4.97E-01	6.24E-01	-2.22E+00	2.00E+00	4.05E+00	-1.51E+00	1.72E+00	2.72E+00	NA	NA	NA	
	004	127.2	-54	1/7/2008	12:30	9.75E+01	1.43E+02	1.79E+02	5.17E-01	6.83E-01	7.23E-01	5.45E-31	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	3.77E+01	9.15E+01	1.63E+02	-4.34E-01	5.36E-01	9.58E-01	5.97E-31	2.23E+00	3.43E+00	1.36E+00	2.00E+00	3.67E+00	NA	NA	NA	
	007	127.2	-54	8/11/2008	10:34	1.58E+02	1.04E+02	1.70E+02	1.65E-01	2.41E-01	4.19E-01	1.24E-31	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	1.73E+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	9.30E-01	-1.23E+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	7.56E-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	1.93E+02	2.18E+02	3.38E-01	6.30E-01	7.11E-01	-3.30E-02	6.03E+00	6.42E+00	1.15E+00	5.50E+00	6.36E+00	NA	NA	NA	
	012	127.2	-54	11/17/2009	14:32	1.44E+02	9.35E+01	9.85E+01	2.64E-01	6.96E-01	7.95E-01	1.55E+00	5.58E+00	6.42E+00	-9.95E-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	6.75E-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	12:13	1.26E+02	1.34E+02	1.47E+02	5.12E-03	3.56E-01	4.51E-01	2.92E+00	2.92E+00	2.95E+00	2.22E+00	2.22E+00	2.10E+01	NA	NA	NA	
	015	127.2	-54	8/26/2010	11:16	1.36E+02	1.43E+02	1.47E+02	2.23E-02	2.79E-01	3.57E-01	5.02E+00	7.95E+00	8.28E+00	6.43E-01	6.78E+00	7.48E+00	NA	NA	NA	
	016	127.2	-54	11/29/2010	12:26	1.27E+02	1.33E+02	1.45E+02	7.34E-01	9.03E-01	9.73E-01	-1.53E-01	4.82E+00	5.43E+00	1.12E+00	4.78E+00	5.06E+00	NA	NA	NA	
	017	127.2	-54	3/8/2011	10:41	1.33E+02	2.43E+02	2.64E+02	1.03E+00	1.40E+00	1.51E+00	5.07E+01*	1.64E+01	7.63E+00	3.45E-01	7.18E+00	7.96E+00	NA	NA	NA	
	018	127.2	-54	4/29/2011	11:26	-2.27E+01	3.63E+02	4.32E+02	5.72E-01	1.78E+00	2.05E+00	-2.13E-01	8.26E+00	8.83E+00	-1.62E+00	9.68E+00	9.87E+00	NA	NA	NA	
	019	127.2	-54	7/27/2011	13:56	1.56E+02	3.15E+02	3.50E+02	4.81E-01	1.64E+00	1.92E+00	1.48E+00	9.06E+00	1.03E+01	-8.00E+00	1.02E+01	1.94E+01	NA	NA	NA	
	020	127.2	-54	12/9/2011	10:40	5.55E+01	4.03E+02	4.71E+02	1.27E+00	1.50E+00	1.51E+00	-1.25E+00	8.91E+00	1.04E+01	-3.35E+00	9.18E+00	1.04E+01	NA	NA	NA	
MW-40-162	001	161.7	-38.5	6/5/2007	14:45	1.40E+02	1.55E+02	1.64E+02	2.94E-01	4.52E-01	5.34E-01	-1.67E+00	5.53E+00	4.95E+00	-5.85E-01	4.68E+00	4.56E+00	NA	NA	NA	MW-40-162
	002	161.7	-38.5	7/23/2007	17:40	2.59E+01	1.43E+02	1.73E+02	1.19E-01	4.47E-01	5.37E-01	-2.51E-01	2.81E+00	1.75E+00	7.27E-01	1.45E+00	1.68E+00	NA	NA	NA	
	003	161.7	-38.5	10/2/2007	12:54	4.45E+01	1.43E+02	1.69E+02	-5.40E-02	6.20E-01	8.19E-01	-1.11E+00	4.47E+00	4.05E+00	-1.01E+00	3.21E+00	3.47E+00	NA	NA	NA	
	004	161.7	-38.5	1/7/2008	13:10	1.96E+01	1.54E+02	1.82E+02	7.92E-02	3.63E-01	4.19E-01	1.17E-31	2.52E+00	2.87E+00	3.63E-01	2.00E+00	2.72E+00	NA	NA	NA	
	005	161.7	-38.5	8/11/2008	11:44	2.80E+02	1.03E+02	1.75E+02	7.70E-02	4.19E-01	5.31E-01	5.23E-31	2.43E+00	4.15E+00	3.15E+00	2.07E+00	4.11E+00	-5.27E+00	1.23E+01	2.16E+01	
	006	161.7	-38.5	10/28/2008	13:15	1.12E+02	1.27E+02	1.96E+02	2.80E-01	6.35E-01	7.35E-01	-2.03E+00	5.84E+00	6.25E+00	2.11E+00	6.08E+00	7.29E+00	3.75E+00	1.79E+01	2.04E+01	
	007	161.7	-38.5	1/19/2009	11:47	1.37E+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	-38.5	4/13/2009	12:25	1.42E+02	1.37E+02	1.38E+02	3.28E-01	4.96E-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	-38.5	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	-38.5	11/17/2009	15:15	2.37E+01	8.52E+01	9.80E+01	-4.58E-01	6.48E-01	8.27E-01	9.73E-31	5.70E+00	6.47E+00	3.59E+00	5.43E+00	6.97E+00	NA	NA	NA	
	011	161.7	-38.5	2/4/2010	11:57	2.20E+01	1.54E+02	1.82E+02	8.54E-02	5.94E-01	7.38E-01	4.51E-31	4.82E+00	5.45E+00	5.50E-01	4.44E+00	5.12E+00	NA	NA	NA	
	012	161.7	-38.5	4/15/2010	14:50	1.33E+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	-38.5	8/26/2010	12:25	1.32E+02	1.53E+02	1.48E+02	5.09E-01	7.23E-01	7.75E-01	7.14E-31	6.23E+00	7.03E+00	3.52E+00	6.70E+00	8.32E+00	NA	NA	NA	
	014	161.7	-38.5	11/29/2010	12:45	6.10E+01	1.27E+02	1.45E+02	5.51E-03	6.55E-01	7.24E-01	3.69E-31	4.34E+00	4.91E+00	3.43E-01	4.77E+00	5.03E+00	NA	NA	NA	
	015	161.7	-38.5	3/8/2011	11:02	8.33E+01	2.24E+02	2.65E+02	-1.03E+00	1.07E+00	1.37E+00	-3.72E+00	6.12E+00	5.93E+00	-2.11E+00	6.42E+00	6.37E+00	NA	NA	NA	
	016	161.7	-38.5	4/29/2011	12:26	1.76E+02	3.73E+02	4.33E+02	8.71E-01	1.34E+00	1.46E+00	4.56E+00	1.23E+01	1.47E+01	4.43E-01	9.50E+00	1.08E+01	NA	NA	NA	
	017	161.7	-38.5	7/27/2011	14:40	5.54E+03	2.97E+02	3.44E+02	-8.51E-01	1.58E+00	1.98E+00	-2.44E+00	9.21E+00	8.54E+00	-6.95E-01	8.50E+00	9.41E+00	NA	NA	NA	
	018	161.7	-38.5	12/9/2011	11:02	-2.60E+01	3.42E+02	4.06E+02	6.89E-01	1.75E+00	1.95E+00	1.06E+00	8.43E+00	1.07E+01	-4.71E+00	1.17E+01	1.32E+01	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
	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	
	004	34.4	20.5	6/12/2006	9:50	6.76E+02	2.03E+02	1.51E+02	3.58E+00	6.83E-01	5.31E-01	5.30E+00	1.02E+01	1.19E+01	5.42E-02	9.32E+00	1.02E+01	NA	NA	NA	

IPEC00267162

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-41-40	005	34.4	20.5	7/14/2006	8:45	9.83E+02	2.64E+02	2.07E+02	7.12E+00	5.83E+00	2.09E+00	3.44E+00	1.29E+01	1.63E-01	-5.31E+00	1.07E+01	1.29E+01	NA	NA	NA	MW-41-40
	006	34.4	20.5	8/16/2006	13:15	4.47E+02	1.95E+02	1.68E+02	NA	NA	NA	7.39E-31	6.84E+00	8.78E-00	1.70E-01	5.45E+00	7.51E+00	NA	NA	NA	
	007	34.4	20.5	11/3/2006	12:55	4.25E+02	1.33E+02	1.30E+02	4.64E+00	8.70E-01	6.90E-01	5.00E-31	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	5.59E+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	5.56E+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	1.83E+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	7.23E+02	5.92E+02	5.51E+00	1.10E+00	4.21E-01	3.07E+00	6.33E+00	7.05E-00	-3.96E+00	8.64E+00	8.46E+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	4.20E+00	7.29E+00	4.85E-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	7.34E-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	11/3/2009	13:08	3.15E+02	1.11E+02	9.85E+01	4.00E+00	1.10E+00	8.26E-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	8.99E-01	4.46E-01	-3.97E+00	8.45E+00	8.75E-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	-2.55E+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	
	018	34.4	20.5	10/25/2010	16:06	2.43E+03	2.73E+02	1.17E+02	4.08E+00	1.16E+00	6.72E-01	3.32E+00	5.63E+00	6.87E-00	-1.99E+00	6.74E+00	6.96E+00	NA	NA	NA	
	019	34.4	20.5	2/14/2011	14:05	2.33E+03	4.02E+02	2.98E+02	1.15E+01	2.68E+00	1.33E+00	4.60E+00	7.30E+00	8.61E-00	4.22E+00	7.56E+00	9.28E+00	NA	NA	NA	
	020	34.4	20.5	4/20/2011	13:51	4.51E+03	7.35E+02	4.55E+02	2.32E+00	1.57E+00	1.44E+00	2.20E+00	9.22E+00	1.05E-01	3.02E+00	1.06E+01	1.25E+01	NA	NA	NA	
	021	34.4	20.5	7/15/2011	12:30	6.99E+02	4.59E+02	4.41E+02	2.48E+00	1.35E+00	1.19E+00	-1.95E+00	1.09E+01	1.14E-01	-1.11E+00	8.94E+00	9.13E+00	NA	NA	NA	
	022	34.4	20.5	8/4/2011	14:39	5.94E+02	3.57E+02	3.53E+02	1.70E+00	1.87E+00	1.28E+00	4.91E-31	5.97E+00	6.61E-00	-6.02E-02	8.36E+00	8.86E+00	NA	NA	NA	
	023	34.4	20.5	11/20/2011	14:25	6.16E+02	5.13E+02	5.14E+02	6.83E-01	1.73E+00	1.95E+00	6.21E+00	8.16E+00	1.13E-01	-4.02E+00	9.01E+00	1.11E+01	NA	NA	NA	
MW-41-63	001	59.5	-4.6	4/12/2006	14:45	7.21E+02	2.03E+02	1.53E+02	5.49E+00	2.21E+00	1.60E+00	5.93E-31	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	3.51E+02	2.07E+02	1.92E+02	5.22E+00	1.53E+00	1.10E+00	7.91E-32	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	2.58E+02	1.67E+02	1.52E+02	8.45E-01	5.28E-01	5.36E-01	8.20E-21	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	8.34E-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	1.83E+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	11/3/2006	13:10	1.57E+02	1.35E+02	1.30E+02	2.06E+00	6.60E-01	6.50E-01	-1.63E+00	4.50E+00	5.72E-00	0.00E+00	5.40E+00	6.60E+00	3.30E+00	5.60E+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	3.47E+02	2.04E+02	1.99E+02	3.22E+00	9.03E-01	5.31E-01	-2.88E+00	3.40E+00	3.22E-00	1.52E-01	3.43E+00	3.87E+00	NA	NA	NA	
	009	59.5	-4.6	1/22/2008	10:02	3.23E+02	2.72E+02	2.93E+02	3.76E+00	1.13E+00	8.22E-01	0.00E+00	3.33E+00	1.88E-00	2.24E-02	1.14E+00	1.88E+00	NA	NA	NA	
	010	59.5	-4.6	10/22/2008	12:34	6.21E+02	5.73E+02	5.92E+02	5.60E+00	1.13E+00	4.41E-01	2.60E+00	5.50E+00	6.71E-00	5.04E-01	6.00E+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	8.89E-01	3.87E-01	4.19E-31	6.80E+00	4.53E-00	1.22E+00	4.19E+00	4.98E+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	8.03E-01	4.53E-01	-8.28E-01	3.60E+00	3.85E-00	-5.58E-01	3.19E+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	5.22E-01	1.07E+00	3.63E+00	4.24E-00	-4.65E-01	4.35E+00	4.86E+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	5.85E-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	1.63E+02	1.43E+02	4.79E+00	1.05E+00	6.23E-01	-2.71E+00	8.29E+00	8.77E-00	1.61E+00	7.93E+00	9.55E+00	NA	NA	NA	
	017	59.5	-4.6	10/25/2010	12:59	5.36E+02	1.53E+02	1.14E+02	4.25E+00	1.15E+00	7.17E-01	1.06E+00	6.08E+00	7.07E-00	2.87E+00	5.85E+00	7.23E+00	NA	NA	NA	
	018	59.5	-4.6	2/14/2011	13:57	1.23E+03	4.44E+02	3.80E+02	6.52E+00	1.46E+00	1.06E+00	1.24E+00	9.30E+00	6.03E-00	2.69E+00	6.06E+00	7.42E+00	NA	NA	NA	
	019	59.5	-4.6	4/20/2011	13:13	7.58E+02	4.59E+02	4.72E+02	-7.72E-01	1.21E+00	2.03E+00	3.53E+00	8.22E+00	1.01E-01	4.02E+00	8.74E+00	1.09E+01	NA	NA	NA	
	020	59.5	-4.6	7/15/2011	12:51	7.14E+02	4.52E+02	4.35E+02	3.03E+00	1.50E+00	1.30E+00	2.36E+00	7.71E+00	9.03E-00	4.47E-01	6.01E+00	7.51E+00	NA	NA	NA	
	021	59.5	-4.6	8/4/2011	14:20	6.90E+02	3.63E+02	3.51E+02	1.51E+00	1.95E+00	1.96E+00	1.67E+00	7.89E+00	8.72E-00	1.43E+00	7.29E+00	7.72E+00	NA	NA	NA	
	022	59.5	-4.6	11/28/2011	14:08	6.41E+02	5.22E+02	5.22E+02	6.76E-01	1.73E+00	1.95E+00	-7.79E-01	7.20E+00	8.55E-00	-9.03E-01	7.41E+00	9.17E+00	NA	NA	NA	
MW-42-45	001	42.6	27.1	3/23/2006	11:15	2.53E+03	6.63E+02	5.89E+02	5.19E+01	1.72E+00	4.38E-01	1.02E+05	7.14E+02	1.02E-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	4.43E+02	2.37E+02	2.10E+01	9.96E-01	3.57E-01	6.55E+03	1.24E+02	2.75E-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	7.83E+02	7.37E+02	1.09E+02	2.16E+00	4.39E-01	3.13E+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	5.03E+02	3.74E+02	7.73E+01	4.04E+00	6.37E-01	1.90E+04	1.85E+03	1.31E-01	4.29E+00	3.71E+00	4.82E+00	1.33E+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	6.32E-01	3.69E+04	3.14E+03	1.83E-01	1.59E+01	6.25E+00	5.61E+00	1.17E+03	4.94E+01	1.88E+01	
	008	42.6	27.1	12/21/2007	16:11	1.82E+03	5.25E+02	4.13E+02	3.54E+01	2.13E+00	9.11E-01	3.88E+04	2.93E+03	2.02E-01	0.00E+00	4.13E+00	5.01E+00	5.01E+02	3.01E+01	2.68E+01	
	010	42.6	27.1	5/13/2008	13:20	3.24E+03	2.53E+02	1.44E+02	2.53E+01	1.54E+00	5.45E-01	1.41E+04	7.89E+02	1.47E-01	1.69E+01	4.47E+00	4.67E+00	7.34E+02	2.83E+01	2.19E+01	
	011	42.6	27.1	9/4/2008	14:24	3.16E+03	2.63E+02	1.91E+02	3.55E+01	1.72E+00	5.55E-01	1.06E+04	6.13E+02	1.22E-01	-8.47E-03	2.69E+00	4.52E+00	3.13E+02	2.69E+01	2.61E+01	
	012	42.6	27.1	9/5/2008	12:52	1.32E+01	8.35E+02	5.08E+02	2.56E+02	2.98E+00	4.22E-01	2.21E+04	1.38E+03	1.58E-01	NA	NA	NA	4.52E+02	2.17E+01	2.03E+01	
	013	42.6	27.1	10/31/2008	13:27	2.90E+03	3.77E+02	1.63E+02	9.61E+01	4.34E+00	4.16E-01	1.78E+04	1.58E+03	1.88E-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	2.44E+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	3.05E+04	8.01E+03	2.65E-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	3.23E+02	1.89E+02	2.58E+02	6.63E+00	5.59E-01	3.63E+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	1.41E+03	2.25E+02	1.79E+02	4.83E+00	1.06E+00	5.50E-01	5.42E+03	4.31E+02	9.57E+00	-1.12E+00	4.84E+00	4.62E+00	1.46E+02	2.51E+01	2.55E+01	
	019	42.6	27.1	10/27/2009	15:34	1.75E+03	2.21E+02	1.67E+02	1.51E+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	1.34E+02	3.04E+01	2.44E+01	
	020	42.6	27.1	2/16/2010	16:49	9.79E+02	1.73E+02	1.53E+02	1.24E+02	5.92E+00	7.33E-01	6.52E+04	7.07E+03	3.33E-01	-9.02E-01	6.01E+00	6.75E+00	7.10E+02	4.05E+01	2.10E+01	
	021	42.6	27.1	4/16/2010	12:59	1.30E+03	4.23E+02	3.71E+02	2.40E+01	2.31E+00	8.33E-01	2.87E+04	2.85E+03	2.92E-01	8.37E-01	1.06E+01	1.23E+01	2.36E+02	2.93E+01	2.07E+01	
	022	42.6	27.1	7/20/2010	11:38	1.59E+03	2.34E+02	1.24E+02	1.19E+01	1.53E+00	2.90E-01	1.87E+04	2.45E+03	2.52E-01	7.33E-01	6.44E+00	7.77E+00	1.77E+02	2.97E+01	2.18E+01	
	023	42.6	27.1	10/27/2010	12:23	1.28E+03	2.03E+02	1.64E+02	1.51E+01	2.31E+00	8.27E-01	2.39E+04	2.94E+03	2.93E-01	-1.67E+00	9.27E+00	1.03E+01	2.24E+02	2.66E+01	2.10E+01	
	024	42.6	27.1	3/4/2011	11:37	1.49E+03	5.14E+02	3.88E+02	2.32E+01	3.34E+00	1.11E+00	3.30E+04	4.42E+03	2.75E-01	1.42E+00	6.78E+00	7.87E+00	3.32E+02	3.04E+01	2.00E+01	
	025	42.6	27.1	4/21/2011	14:04	1.71E+03	5.83E+02	4.80E+02	5.45E+00	2.18E+00	1.45E+00	2.15E+04	2.88E+03	2.08E-01	3.41E+00	9.16E+00	1.05E+01	1.20E+02	2.72E+01	1.73E+01	
	027	42.6	27.1	8/1/2011	12:50	7.78E+02	3.93E+02	3.74E+02	2.60E+00	1.92E+00	1.32E+00	1.57E+04	1.92E+03	2.15E-01	3.58E+00	8.40E+00	1.01E+01	2.30E+02	3.43E+01	2.02E+01	
	028	42.6	27.1	11/3/2011	11:13	1.40E+03	5.73E+02	5.00E+02	8.98E-01	1.51E+00	1.65E+00	3.03E+03	3.90E+02	1.29E-01	-1.75E+00	7.56E+00	9.16E+00	5.77E+01	1.57E+01	1.45E+01	
MW-42-78	001	74	-4.3	3/24/2006	9:45	1.28E+03	5.84E+02	5.75E+02	3.09E+01	3.90E-01	4.38E-01	4.46E+03	1.36E+02	2.22E-01	1.08E+01	1.21E+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	3.56E+01	1.39E+01	1.43E+01	
	003	74	-4.3	6/19/2007	14:40	3.70E+02	1.03E+02	1.08E+02	3.03E-01	5.34E-01	5.70E-01	6.28E+01	1.21E+01	4.11E-00	2.31E+00	3.40E+00	4.00E+00	2.40E+00	1.32E+01	1.52E+01	
	006	74	-4.3	10/4/2007	13:25	4.34E+02	1.91E+02	1.94E+02	2.33E-01	3.09E-01	3.13E-01	3.07E+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	1.83E+02	1.96E+02	-2.51E-01	6.81E-01	9.82E-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	1.53E+02	1.91E+02	3.91E-01	2.55E-01	3.76E-01	2.77E+00	2.00E+01	3.75E-00	-6.44E-01	2.10E+00	3.29E+00	-7.52E-01	1.57E+01	2.68E+01	
	010	74	-4.3	10/31/2008	13:34	5.52E+02	2.12E+02	1.65E+02	4.17E-02	3.01E-01	3.37E-01	3.31E-31	5.68E+00	6.34E-00	8.32E-01	6.72E+00	7.68E+00	3.59E+00	1.77E+01	2.02E+01	
	011	74	-4.3	1/30/2009	11:22	3.55E+02	2.13E+02	2.00E+02	4.40E-01	6.45E-01	7.13E-01	5.70E-31	3.32E+00	3.88E-00	-1.89E-01	3.57E+00	3.99E+00	NA	NA	NA	
	012	74	-4.3	4/17/2009	10:49	2.74E+02	1.83E+02	1.89E+02	4.67E-01	6.74E-01	7.47E-01	1.61E+00	5.85E+00	3.92E-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	5.07E-31	3.40E+00	3.94E-00	8.71E-01	3.31E+00	3.94E+00	-7.92E+00	1.93E+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	4.05E-00	-1.12E+00	3.62E+00	3.74E+00	-8.49E-01	1.94E+01	2.25E+01	

See Page 34 for Notes

IPEC00267163

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-42-78	015	74	-43	7/16/2010	16 19	3 57E+02	1 49E+02	1 52E+02	-1 14E-01	4 87E-01	6 30E-01	3 92E+00	5 46E+00	6 77E-00	-1 84E-01	4 93E+00	6 57E+00	-9 55E+00	1 76E+01	2 08E+01	MW-42-78
	016	74	-43	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	-43	7/30/2010	12 23	6 31E+02	1 71E+02	1 31E+02	2 78E-02	3 03E-01	3 35E-01	-1 17E-01	7 56E+00	8 33E-00	-7 43E-01	7 04E+00	7 42E+00	1 96E+00	1 31E+01	1 52E+01	
	018	74	-43	10/27/2010	13 56	6 13E+02	1 74E+02	1 64E+02	-1 14E-01	4 79E-01	5 37E-01	-1 02E+00	8 69E+00	9 51E+00	-5 11E+00	8 41E+00	7 24E+00	-4 24E+00	1 80E+01	2 09E+01	
	019	74	-43	3/4/2011	10 58	5 98E+02	4 05E+02	3 84E+02	8 92E-01	1 47E+00	1 60E+00	-2 03E+00	6 72E+00	6 99E-00	6 03E-02	6 70E+00	7 41E+00	0 00E+00	1 73E+01	1 96E+01	
	020	74	-43	4/21/2011	13 45	6 26E+02	4 73E+02	4 77E+02	4 25E-01	1 13E+00	1 32E+00	-9 71E-01	9 16E+00	9 83E-00	3 58E+00	8 56E+00	1 11E+01	5 89E-01	1 49E+01	1 72E+01	
	022	74	-43	8/1/2011	12 50	3 97E+02	3 57E+02	3 72E+02	-1 16E-01	1 13E+00	1 49E+00	5 85E-01	7 98E+00	7 65E+00	-5 66E-01	9 45E+00	1 03E+01	1 02E+00	1 17E+01	1 31E+01	
	023	74	-43	11/3/2011	11 31	3 23E+02	4 63E+02	5 02E+02	-5 46E-02	1 13E+00	1 49E+00	-2 93E+00	7 32E+00	8 03E-00	1 37E-01	7 74E+00	9 98E+00	-2 26E+00	1 13E+01	1 32E+01	
MW-42-28	002	23 5	25 3	4/12/2006	12 45	3 46E102	1 70E102	1 50E1C2	2 40E-02	7 40E-01	0 36E-01	-1 44E100	2 52E100	2 54E 00	1 56E100	2 24E100	2 56E100	NA	NA	NA	MW-42-28
	003	23 5	25 3	5/25/2006	12 10	1 20E+02	1 88E+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 72E+00	1 06E+01	NA	NA	NA	
	004	23 5	25 3	6/12/2006	12 45	2 30E+02	1 67E+02	1 52E+02	1 39E-01	4 27E-01	5 27E-01	2 80E+00	6 93E+00	7 82E-00	-7 55E-01	5 93E+00	6 39E+00	NA	NA	NA	
	005	23 5	25 3	7/12/2006	9 40	1 29E+02	1 83E+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	
	006	23 5	25 3	8/16/2006	12 10	2 50E+02	1 88E+02	1 72E+02	NA	NA	NA	5 47E-31	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 36E-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 56E-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 36E+02	2 82E+02	2 96E+02	1 46E-01	6 06E-01	7 38E-01	1 88E+00	2 16E+00	2 65E-00	1 46E+00	2 51E+00	3 03E+00	8 84E+00	1 76E+01	1 99E+01	
	010	23 5	25 3	10/31/2008	14 17	2 55E+02	1 53E+02	1 66E+02	-1 26E-01	3 97E-01	5 56E-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 63E+02	1 51E+02	-1 43E-01	5 66E-01	7 32E-01	5 41E-31	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 30E102	1 44E102	1 56E1C2	-2 45E-02	4 13E-01	5 46E-01	1 19E100	6 04E100	7 03E 00	-1 16E100	6 23E100	6 64E100	NA	NA	NA	
	013	23 5	25 3	11/10/2009	14 10	1 73E+02	9 72E+01	9 64E+C1	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	3/3/2010	17 30	2 13E+02	1 59E+02	1 68E+C2	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+C2	-7 48E-02	5 52E-01	7 53E-01	-2 66E-01	5 61E+00	6 35E-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+C2	-6 43E-02	3 00E-01	5 33E-01	5 80E+00	7 53E+00	9 75E-00	-1 44E+00	9 49E+00	1 01E+01	NA	NA	NA	
	017	23 5	25 3	10/25/2010	11 29	1 95E+02	1 17E+02	1 13E+C2	-1 98E-01	5 01E-01	6 94E-01	3 36E+00	5 00E+00	6 09E-00	-5 01E-01	5 43E+00	5 84E+00	NA	NA	NA	
	018	23 5	25 3	2/15/2011	13 08	2 54E+02	2 83E+02	2 99E+C2	-1 06E+00	1 40E+00	2 00E+00	5 73E-32	1 26E+01	7 05E-00	-3 84E+00	6 84E+00	6 54E+00	NA	NA	NA	
	019	23 5	25 3	4/21/2011	11 15	2 34E+02	4 33E+02	4 72E+C2	1 46E+00	1 96E+00	2 04E+00	-9 31E-01	8 74E+00	9 22E-00	4 50E+00	8 60E+00	1 05E+01	NA	NA	NA	
	020	23 5	25 3	8/4/2011	11 15	2 66E+02	5 24E+02	5 50E+C2	-1 34E-01	1 42E+00	1 82E+00	4 00E+00	7 35E+00	9 02E-00	-2 51E+00	9 23E+00	9 21E+00	NA	NA	NA	
	021	23 5	25 3	11/22/2011	11 23	1 21E+02	3 63E+02	4 02E+C2	1 40E+00	1 81E+00	1 92E+00	-9 87E-02	5 08E+00	7 14E-00	-5 90E+00	5 08E+00	8 07E+00	NA	NA	NA	
MW-42-62	002	51	-22	4/12/2006	11 55	2 30E102	1 65E102	1 50E1C2	4 24E-01	4 63E-01	4 33E-01	3 27E100	4 04E100	3 73E 00	1 02E100	3 90E100	3 47E100	NA	NA	NA	MW-42-62
	003	51	22	5/25/2006	12 30	1 24E+02	1 77E+02	1 82E+C2	3 23E 01	1 64E+00	1 77E+00	1 21E+00	1 26E+01	1 35E-01	2 10E+00	9 81E+00	1 02E+01	NA	NA	NA	
	004	51	-22	6/12/2006	12 40	1 29E+02	1 43E+02	1 38E+C2	1 25E+00	5 56E-01	5 36E-01	4 97E+00	7 07E+00	7 98E-00	-6 81E-01	7 19E+00	7 85E+00	NA	NA	NA	
	005	51	-22	7/12/2006	10 05	2 34E+01	1 53E+02	1 65E+C2	4 76E-01	1 46E+00	1 54E+00	1 34E+01	1 10E+01	1 35E-01	3 73E-C1	1 01E+01	1 11E+01	NA	NA	NA	
	006	51	-22	8/16/2006	11 55	1 38E+02	1 67E+02	1 70E+C2	NA	NA	NA	2 23E-31	9 10E-01	1 01E-00	-1 95E-01	8 33E-01	9 13E-01	NA	NA	NA	
	007	51	-22	6/19/2007	9 36	1 97E+02	1 83E+02	2 02E+C2	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+C1	
	008	51	-22	8/13/2007	12 42	1 14E+02	1 73E+02	1 92E+C2	1 29E-01	6 90E-01	8 27E-01	-1 13E+00	3 65E+00	3 89E-00	1 53E-C1	3 31E+00	3 80E+00	NA	NA	NA	
	009	51	-22	1/25/2008	10 57	1 23E+02	1 74E+02	1 93E+C2	1 00E+00	6 47E-01	5 52E-01	4 31E-31	2 42E+00	2 39E-00	-1 11E+00	2 07E+00	2 10E+00	3 76E+00	1 67E+01	1 91E+C1	
	010	51	-22	10/31/2008	13 16	2 63E+02	1 53E+02	1 66E+C2	1 97E-01	4 12E-01	4 74E-01	-3 60E-03	6 43E+00	6 95E-00	2 09E+00	6 30E+00	7 68E+00	NA	NA	NA	
	011	51	-22	4/7/2009	13 59	1 34E+02	1 43E+02	1 52E+C2	6 85E-01	5 68E-01	5 94E-01	1 18E+01	6 15E+00	4 12E-00	-4 55E-01	3 89E+00	4 22E+00	NA	NA	NA	
	012	51	-22	7/31/2009	12 52	1 18E102	1 44E102	1 59E1C2	8 03E-01	4 72E-01	3 54E-01	-9 40E-01	5 09E100	5 42E 00	-2 26E-01	7 25E100	6 57E100	NA	NA	NA	
	013	51	22	11/10/2009	12 02	1 96E+02	1 01E+02	9 84E+C1	1 24E+00	7 10E 01	6 57E 01	3 69E 31	5 16E+00	5 75E-00	4 87E 01	5 54E+00	5 94E+00	NA	NA	NA	
	014	51	-22	3/3/2010	14 46	1 31E+02	1 57E+02	1 68E+C2	3 51E-01	3 93E-01	4 75E-01	1 66E+00	4 61E+00	5 43E-00	1 35E+00	4 75E+00	5 61E+00	NA	NA	NA	
	015	51	-22	4/19/2010	13 17	2 16E+02	1 33E+02	1 47E+C2	6 35E-01	7 10E-01	7 15E-01	-1 03E+00	4 44E+00	4 92E-00	1 30E+00	4 68E+00	5 52E+00	NA	NA	NA	
	016	51	-22	7/20/2010	15 07	5 97E+01	1 33E+02	1 51E+C2	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	
	017	51	-22	10/25/2010	11 06	9 76E+01	1 03E+02	1 12E+C2	3 69E-01	7 10E-01	8 33E-01	5 94E-31	6 27E+00	6 81E-00	-6 69E-01	5 37E+00	5 81E+00	NA	NA	NA	
	018	51	-22	2/15/2011	13 15	1 82E+02	2 75E+02	3 00E+C2	7 75E-01	1 74E+00	1 95E+00	5 59E-31	5 08E+00	5 55E-00	-2 37E-01	5 16E+00	5 52E+00	NA	NA	NA	
	019	51	-22	4/21/2011	11 00	1 35E+02	4 12E+02	4 72E+C2	-4 55E-01	1 67E+00	2 18E+00	-1 93E+00	9 08E+00	9 35E-00	-2 34E+00	8 70E+00	8 43E+00	NA	NA	NA	
	021	51	-22	8/4/2011	11 35	1 36E+02	3 21E+02	3 53E+C2	-2 14E-01	1 61E+00	1 95E+00	-1 62E+00	7 95E+00	8 03E-00	-2 36E+00	8 13E+00	8 05E+00	NA	NA	NA	
	022	51	-22	11/22/2011	12 22	2 31E+02	3 72E+02	4 10E+C2	9 55E-01	1 73E+00	1 86E+00	-1 43E+01	1 42E+01	1 07E-01	1 94E+00	1 06E+01	1 41E+01	NA	NA	NA	
MW-44-66	001	52 4	31 1	3/29/2006	14 05	3 38E102	1 91E102	1 73E1C2	7 28E-02	1 53E100	1 67E100	5 54E-31	1 05E101	1 17E 01	-5 67E100	1 02E101	1 05E101	NA	NA	NA	MW-44-66
	002	52 4	31 1	5/24/2006	9 05	2 37E+02	1 97E+02	1 92E+C2	7 71E 01	1 11E 01	1 15E 01	3 07E 01	8 97E+00	9 62E-00	1 85E+00	9 06E+00	1 11E+01	NA	NA	NA	
	003	52 4	31 1	7/20/2006	11 15	8 97E+02	2 27E+02	1 63E+C2	7 55E-01	1 29E+00	1 31E+00	3 54E+01	1 74E+01	9 59E-00	6 74E-C1	7 77E+00	8 48E+00	NA	NA	NA	
	004	52 4	31 1	6/29/2007	15 00	2 58E+02	1 73E+02	1 84E+C2	-4 25E-01	7 28E-01	9 34E-01	2 64E-31	3 03E+00	3 47E-00	7 78E-C1	3 40E+00	3 98E+00	NA	NA	NA	
	005	52 4	31 1	8/14/2007	13 10	4 17E+02	1 93E+02	2 00E+C2	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	52 4	31 1	10/31/2007	13 30	5 13E+02	1 82E+02	1 81E+C2	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	52 4	31 1	1/24/2008	12 55	2 91E+02	2 03E+02	2 12E+C2	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	52 4	31 1	4/30/2008	15 58	1 51E+02	1 14E+02	1 96E+C2	4 71E-02	4 06E-01	7 59E-01	-8 72E-02	2 06E+00	5 55E-00	5 13E-C1	2 44E+00	2 27E+00	NA	NA	NA	
	009	52 4	31 1	7/25/2008	12 18	5 50E+02	2 55E+02	3 75E+C2	3 07E-01	3 68E-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	52 4	31 1	10/23/2008	13 17	3 10E102	1 61E102	1 66E1C2	3 23E-01	3 03E-01	3 92E-01	-3 23E100	5 21E100	5 30E 00	-1 55E100	5 73E100	6 02E100	NA	NA	NA	
	011	52 4	31 1	2/3/2009	9 40	2 36E+02	1 93E+02	1 97E+C2	1 52E 01	7 98E 01	8 35E 01	1 96E+00	3 53E+00	4 13E-00	3 09E+00	3 06E+00	4 12E+00	NA	NA	NA	
	012	52 4	31 1	4/29/2009	13 32	3 10E+02	1 93E+02	2 06E+C2	2 20E-01	4 85E-01	5 59E-01	-7 47E-01	6 28E+00	4 25E-00	-1 51E-01	4 29E+00	4 97E+00	NA	NA	NA	
	013	52 4	31 1	7/29/2009	12 56	7 44E+02	2 01E+02	1 88E+C2	6 54E-01	7 67E-01	8 18E-01	8 84E-32	6 04E+00	6 77E-00	1 80E+00	5 78E+00	6 69E+00	NA	NA	NA	
	014	52 4	31 1	11/5/2009	16 27	7 15E+02	1 37E+02	9 71E+C1	3 23E-01	6 00E-01	6 79E-01	-4 93E+00	8 65E+00	7 62E-00	8 01E-C1	4 83E+00	5 53E+00	NA	NA	NA	
	015	52 4	31 1	2/23/2010	16 08	4 37E+02	1 73E+02	1 70E+C2	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	52 4	31 1	6/10/2010	15 30	4 75E+02	1 83E+02	1 92E+C2	2 16E-01	6 75E-01	7 33E-01	-1 54E+00	5 91E+00	6 37E-00	-1 91E+00	6 06E+00	6 25E+00	NA	NA	NA	
	017	52 4	31 1	7/22/2010	15 47	1 75E+02	1 41E+02	1 47E+C2	2 76E-01	5 63E-01	6 43E-01	-3 75E+00	6 86E+00	6 84E-00	1 20E+00	8 52E+00	9 73E+00	NA	NA	NA	
	018	52 4	31 1	10/26/2010	14 46	3 10E+02	1 24E+02	1 11E+C2	-1 07E-01	4 50E-01	5 95E-01	4 23E-31	6 24E+00	7 11E-00	-2 70E+00	7 27E+00	7 27E+00	NA	NA	NA	
	019	52 4	31 1	2/18/2011	10 41	4 57E+02	3 93E+02	3 99E+C2	-2 94E-01	1 59E+00	1 95E+00	1 74E+00	7 72E+00	8 55E-00	-1 40E+00	7 92E+00	8 46E+00	NA	NA	NA	
	020	52 4	31 1	4/20/2011	13 17	6 37E102	4 20E102	4 03E1C2	7 05E-01	1 52E100	1 70E100	-1 14E-01	9 36E100	1 03E 01	3 29E100	1 07E101	1 31E101	NA	NA	NA	
	021	52 4	31 1	7/19/2011	15 39	1 52E+03	5 43E+02	4 32E+C2	7 24E 01	6 43E 01	1 06E+00	1 61E+00	9 66E+00	1 15E-01	5 76E+00	1 11E+01	9 79E+00	NA	NA	NA	
	022	52 4	31 1	8/22/2011	12 08	4 76E+02	4 32E+02	4 45E+C2	1 13E-01	9 03E-01	1 11E+00	-7 41E+00	8 73E+00	6 89E-00	-3 14E+00	9 09E+00	9 07E+00	NA	NA	NA	
	023	52 4	31 1	12/8/2011	12 00	3 70E+02	3 84E+02	4 04E+C2	-8 75E-01	1 44E+00	1 94E+00	1 99E+00	7 35E+00	9 33E-00	2 32E+00	7 76E+00	1 04E+01	NA	NA	NA	
MW-44-102	001	80	13 5	6/13/2006	10 35	2 53E+02	2 01E+02	1 96E+C2	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+C2	-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 51E+02	2 33E+02	1 81E+C2	NA	NA	NA	-4 04E+00	8 10E+00	7 75E-00	-2 00E+00	7 01E+00	6 82E+00	NA	NA	NA	
	004	80	13 5	9/13/2006	11 30	2 57E+02	1 94E+02	2 00E+C2	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 75E+02	1 83E+C2	-1 33E-01	4 81E-01	6 39E-01	1 88E+00	2 15E+00	2 63E-00	6 41E-C1	2 02E+00	2 38E+00	-4 92E+00	1 31E+01	1 58E+C1	

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-44-102	006	80	13 5	8/14/2007	14 55	2 84E+02	1 83E+02	1 99E+02	1 97E-01	7 63E-01	8 39E-01	-1 45E+00	2 76E+00	2 77E+00	-1 35E+00	2 79E+00	2 73E+00	NA	NA	NA	MW-44-102
	007	80	13 5	10/31/2007	12 01	3 54E+02	1 75E+02	1 82E+02	-2 58E-01	7 75E-01	9 50E-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 14E-01	6 34E-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 26E+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 45E+02	2 75E+02	-2 33E-02	5 83E-01	3 31E-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 63E+02	1 65E+02	2 01E-01	4 65E-01	5 44E-01	1 72E+00	6 24E+00	7 22E+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-31	3 39E+00	4 02E+00	-9 65E-01	3 23E+00	3 74E+00	NA	NA	NA	
	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 33E-01	9 69E-31	8 27E+00	5 51E+00	-2 07E-01	5 18E+00	5 82E+00	NA	NA	NA	
	014	00	13 5	7/29/2009	12 00	4 50E102	1 95E102	1 89E1C2	4 34E-01	6 99E-01	7 73E-01	-4 62E-02	6 13E100	6 75E 00	-3 50E-01	5 65E100	5 42E100	NA	NA	NA	
	015	80	13 5	11/5/2009	15 23	5 15E+02	1 25E+02	9 78E+C1	7 80E 01	9 47E 01	8 12E 01	1 01E+00	5 22E+00	4 51E+00	7 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 30E-01	2 38E+00	1 02E+01	1 18E+01	-1 83E+00	8 85E+00	9 25E+00	NA	NA	NA	
	019	80	13 5	10/26/2010	13 32	4 47E+02	1 42E+02	1 12E+02	2 42E-01	5 47E-01	6 33E-01	-2 73E+00	5 49E+00	5 54E+00	6 85E-01	5 38E+00	6 11E+00	NA	NA	NA	
	020	80	13 5	2/18/2011	10 44	3 93E+02	2 93E+02	2 97E+02	2 63E-01	1 86E+00	2 15E+00	2 22E-31	4 96E+00	5 47E+00	-2 95E-01	6 02E+00	6 58E+00	NA	NA	NA	
	021	80	13 5	4/26/2011	12 18	6 70E+02	4 14E+02	3 99E+02	1 09E+00	1 41E+00	1 49E+00	3 59E-31	7 42E+00	8 15E+00	-2 06E+00	7 86E+00	7 82E+00	NA	NA	NA	
	022	80	13 5	7/19/2011	10 53	6 88E+02	4 53E+02	4 39E+02	2 55E-01	1 02E+00	1 19E+00	1 03E+00	6 63E+00	7 62E+00	1 28E+00	6 27E+00	7 47E+00	NA	NA	NA	
	023	80	13 5	8/22/2011	10 43	8 25E+02	4 77E+02	4 57E+02	-1 10E-01	9 69E-01	1 28E+00	-3 22E+00	6 69E+00	6 03E+00	8 99E+00	7 70E+00	1 08E+01	NA	NA	NA	
	024	00	13 5	12/1/2011	12 18	1 35E103	4 53E102	4 07E1C2	-2 13E-01	1 52E100	1 93E100	-7 91E-02	8 73E100	1 04E 01	-5 08E-01	9 23E100	1 15E101	NA	NA	NA	
MW-45-42	001	37	16 6	4/4/2006	17 20	5 18E+02	2 32E+02	2 17E+C2	8 83E 01	5 95E 01	5 25E 01	1 41E+01	1 35E+01	1 51E+01	4 36E 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+C2	9 78E-01	1 14E+00	1 18E+00	-7 97E+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+C2	1 02E+00	6 80E-01	7 49E-01	9 06E-32	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 13E+02	2 00E+C2	0 00E+00	1 45E+00	1 59E+00	1 22E+00	8 17E+00	9 27E+00	2 33E+00	9 02E+00	1 13E+01	NA	NA	NA	
	005	37	16 6	8/11/2006	10 00	3 16E+03	5 51E+02	2 71E+C2	NA	NA	NA	-1 16E-01	1 51E+00	1 64E+00	-4 26E-01	1 40E+00	1 54E+00	NA	NA	NA	
	006	37	16 6	9/13/2006	11 50	4 15E+03	7 32E+02	3 27E+C2	NA	NA	NA	-1 53E+00	5 85E+00	6 00E+00	-1 46E+00	5 39E+00	5 27E+00	NA	NA	NA	
	007	37	16 6	11/13/2006	13 20	5 25E+02	1 33E+02	1 40E+C2	-7 10E-01	7 56E-01	8 50E-01	3 70E+00	5 40E+00	5 62E+00	5 00E-01	6 90E+00	8 30E+00	3 00E-01	3 60E+00	4 10E+C0	
	008	37	16 6	6/21/2007	13 02	2 82E+03	6 27E+02	4 36E+C2	-6 08E-02	6 23E-01	7 06E-01	1 51E-31	4 14E+00	4 59E+00	2 51E+00	4 82E+00	4 08E+00	3 58E+00	1 30E+01	1 49E+C1	
	009	37	16 6	8/13/2007	11 30	1 16E+03	1 83E+02	1 47E+C2	-3 79E-01	7 74E-01	9 47E-01	1 93E+00	2 70E+00	3 41E+00	1 19E+00	2 60E+00	2 23E+00	NA	NA	NA	
	010	37	16 6	10/5/2007	11 05	2 22E103	3 05E102	1 50E1C2	3 55E-01	5 10E-01	5 56E-01	9 00E100	4 13E100	1 92E 00	3 65E-01	1 94E100	2 21E100	NA	NA	NA	
	011	37	16 6	1/25/2008	12 15	1 44E+03	3 93E+02	2 96E+C2	2 08E 01	5 15E 01	6 33E 01	1 60E+00	2 43E+00	2 88E+00	5 96E C1	2 31E+00	2 66E+00	NA	NA	NA	
	012	37	16 6	5/7/2008	15 15	1 13E+03	1 51E+02	1 96E+C2	-4 10E-02	3 11E-01	6 29E-01	5 65E-31	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+C2	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+C2	4 62E-01	5 11E-01	5 29E-01	-1 64E+00	5 07E+00	5 25E+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+C2	-1 78E-01	4 41E-01	6 54E-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 53E+02	4 08E+C2	2 63E-01	5 33E-01	6 38E-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 53E+02	2 31E+C2	5 09E-02	7 67E-01	9 17E-01	4 63E-31	5 25E+00	5 43E+00	1 22E+00	3 69E+00	4 48E+00	NA	NA	NA	
	018	37	16 6	11/10/2009	14 49	2 30E+03	2 24E+02	1 04E+C2	6 11E-02	6 18E-01	7 50E-01	4 88E-31	4 44E+00	5 17E+00	-8 74E-01	5 17E+00	3 86E+00	NA	NA	NA	
	019	37	16 6	2/17/2010	12 55	3 56E+03	2 83E+02	1 66E+C2	6 43E-01	5 02E-01	4 75E-01	2 03E+00	4 29E+00	5 12E+00	-3 44E-01	4 55E+00	4 74E+00	NA	NA	NA	
	020	37	16 6	4/20/2010	16 13	2 22E103	3 05E102	1 51E1C2	2 96E-01	6 23E-01	7 22E-01	2 29E100	6 79E100	7 63E 00	-7 47E100	6 46E100	5 27E100	NA	NA	NA	
	021	37	16 6	7/19/2010	15 38	3 59E+03	3 35E+02	1 43E+C2	5 08E 01	6 10E 01	6 17E 01	1 07E+00	7 75E+00	8 85E+00	1 87E+00	7 10E+00	7 11E+00	NA	NA	NA	
	022	37	16 6	10/27/2010	15 59	2 74E+03	2 93E+02	1 13E+C2	9 55E-02	5 19E-01	6 23E-01	1 35E+00	6 04E+00	6 99E+00	-1 65E+00	5 70E+00	5 86E+00	NA	NA	NA	
	023	37	16 6	2/16/2011	16 58	8 12E+03	7 85E+02	3 63E+C2	1 03E+00	1 35E+00	1 48E+00	-8 53E-01	5 64E+00	5 99E+00	1 42E+00	6 30E+00	7 17E+00	NA	NA	NA	
	024	37	16 6	4/20/2011	14 09	8 56E+03	1 03E+03	4 65E+C2	1 45E+00	1 56E+00	1 61E+00	7 04E-31	6 50E+00	7 45E+00	7 13E+00	1 07E+01	1 25E+01	NA	NA	NA	
	025	37	16 6	7/25/2011	13 23	3 94E+04	2 07E+03	4 36E+C2	1 14E+00	1 30E+00	1 37E+00	3 09E+00	7 41E+00	8 65E+00	-2 66E+00	1 01E+01	1 05E+01	NA	NA	NA	
	026	37	16 6	8/23/2011	13 58	2 72E+04	1 63E+03	4 50E+C2	1 77E-01	9 15E-01	1 10E+00	8 73E-31	1 12E+01	1 05E+01	-7 52E+00	1 06E+01	8 89E+00	NA	NA	NA	
	027	37	16 6	11/28/2011	15 03	1 55E+03	6 27E+02	5 10E+C2	8 10E-01	1 75E+00	1 95E+00	1 21E+00	5 94E+00	7 69E+00	-2 64E+00	6 96E+00	7 84E+00	NA	NA	NA	
MW-45-61	001	58	-44	4/4/2006	17 00	2 48E+02	2 13E+02	2 23E+C2	1 82E-01	5 03E-01	5 89E-01	3 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	-44	5/25/2006	9 10	1 71E+03	3 57E+02	2 37E+C2	5 63E-01	8 81E-01	1 03E+00	7 70E-31	9 14E+00	1 02E+01	3 35E+00	1 06E+01	1 31E+01	NA	NA	NA	
	003	58	-44	6/12/2006	11 00	1 22E+03	2 31E+02	1 56E+C2	4 81E-01	5 95E-01	6 90E-01	-4 63E+00	6 63E+00	7 11E 00	5 35E-02	6 43E100	5 55E100	NA	NA	NA	
	004	58	-44	7/20/2006	12 50	3 72E+02	1 83E+02	1 66E+C2	0 00E+00	1 36E+00	1 59E+00	3 98E 01	5 08E+00	5 32E+00	1 33E+00	3 96E+00	5 02E+00	NA	NA	NA	
	005	58	-44	8/11/2006	9 45	1 35E+03	2 83E+02	1 91E+C2	NA	NA	NA	6 43E+00	9 17E+00	1 15E-01	-8 33E-01	9 10E+00	9 75E+00	NA	NA	NA	
	006	58	-44	9/13/2006	9 30	1 45E+03	3 09E+02	2 04E+C2	NA	NA	NA	-6 55E+00	7 21E+00	5 92E+00	-3 06E+00	7 25E+00	6 87E+00	NA	NA	NA	
	007	58	-44	11/13/2006	11 20	9 57E+02	1 44E+02	1 40E+C2	1 73E+00	7 50E-01	7 50E-01	-3 00E-01	4 50E+00	5 32E+00	-3 20E+00	4 50E+00	6 30E+00	2 50E+00	5 60E+00	7 30E+C0	
	008	58	-44	6/21/2007	12 55	1 47E+03	5 42E+02	4 34E+C2	-7 02E-02	7 47E-01	9 57E-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+C1	
	009	58	-44	8/15/2007	11 55	1 50E+03	1 83E+02	1 41E+C2	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 55E+00	NA	NA	NA	
	010	58	-44	10/5/2007	11 30	2 15E+03	3 05E+02	1 52E+C2	4 87E-01	5 23E-01	5 56E-01	-1 78E-01	1 43E+00	1 55E+00	6 59E-02	1 46E+00	1 62E+00	NA	NA	NA	
	011	58	-44	1/25/2008	11 55	2 96E+03	4 83E+02	2 96E+C2	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 15E+00	NA	NA	NA	
	012	50	-44	5/7/2008	10 10	2 21E103	1 03E102	1 95E1C2	6 93E-01	4 90E-01	7 56E-01	3 16E-31	2 07E100	3 25E 00	-1 25E100	2 25E100	2 53E100	NA	NA	NA	
	013	58	-44	7/25/2008	13 51	1 80E+03	3 45E+02	3 76E+C2	2 36E 01	2 45E 01	4 75E 01	1 82E+00	1 91E+00	2 82E+00	7 83E C1	1 91E+00	2 40E+00	NA	NA	NA	
	014	58	-44	10/22/2008	9 33	1 27E+03	6 35E+02	5 90E+C2	1 99E-01	5 82E-01	6 31E-01	-1 52E+00	5 07E+00	5 32E+00	1 04E+00	5 73E+00	6 55E+00	NA	NA	NA	
	015	58	-44	2/2/2009	13 13	1 36E+03	3 24E+02	1 99E+C2	-1 47E-01	7 61E-01	9 47E-01	3 99E-31	3 59E+00	4 27E+00	2 30E-01	3 23E+00	3 66E+00	NA	NA	NA	
	016	58	-44	4/23/2009	10 20	1 46E+03	5 43E+02	4 05E+C2	-1 37E-01	6 17E-01	8 36E-01	-4 72E-01	4 17E+00	2 78E+00	1 13E+00	2 54E+00	3 01E+00	NA	NA	NA	
	017	58	-44	7/24/2009	11 56	1 11E+03	2 93E+02	2 29E+C2	1 01E-01	8 04E-01	9 52E-01	-5 29E-01	3 33E+00	3 69E+00	6 08E-01	3 24E+00	3 82E+00	NA	NA	NA	
	018	58	-44	11/9/2009	12 53	1 37E+03	1 77E+02	1 05E+C2	3 44E-01	5 20E-01	5 74E-01	-4 63E-01	5 99E+00	6 72E+00	-3 73E+00	7 04E+00	6 99E+00	NA	NA	NA	
	019	58	-44	2/17/2010	12 55	1 44E+03	2 13E+02	1 68E+C2	3 08E-01	3 86E-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	-44	4/20/2010	11 13	9 89E+02	2 25E+02	1 45E+C2	2 11E-01	4 70E-01	8 89E-01	-8 78E-02	7 91E+00	8 84E+00	-2 82E+00	8 40E+00	8 72E+00	NA	NA	NA	
	021	58	-44	7/19/2010	13 28	1 30E+03	2 07E+02	1 48E+C2	4 07E-01	5 04E-01	5 30E-01	-2 93E+00	8 29E+00	8 61E+00	-2 24E+00	8 68E+00	9 24E+00	NA	NA	NA	
	022	50	-44	10/22/2010	11 54	1 51E103	2 22E102	1 12E1C2	3 50E-01	5 53E-01	6 35E-01	-2 92E100	5 70E100	5 94E 00	1 19E-01	6 92E100	7 73E100	NA	NA	NA	
	023	58	-44	2/16/2011	16 15	1 34E+03	5 23E+02	3 98E+C2	2 25E 01	1 64E+00	1 96E+00	1 38E+00	4 80E+00	5 41E+00	5 89E C1	5 46E+00	6 15E+00	NA	NA	NA	
	024	58	-44	4/20/2011	10 07	2 33E+03	6 12E+02	4 74E+C2	2 72E-01	1 34E+00	1 51E+00	-4 02E+00	7 75E+00	7 55E+00	4 47E-01	7 56E+00	7 91E+00	NA	NA	NA	
	025	58	-44	7/25/2011	10 00	5 53E+03	8 43E+02	4 33E+C2	9 47E-01	1 15E+00	1 25E+00	1 42E+00	5 79E+00	6 66E+00	2 07E+00	8 34E+00	9 68E+00	NA	NA	NA	
	026	58	-44	8/23/2011	10 48	5 91E+03	8 13E+02	4 34E+C2	7 01E-01	1 16E+00	1 26E+00	-8 68E-01	7 44E+00	7 99E+00	1 84E+00	6 63E+00	7 89E+00	NA	NA	NA	
	027	58	-44	11/28/2011	11 44	2 36E+03	6 72E+02	5 16E+C2	4 76E-01	1 76E+00	1 97E+00	3 83E-31	7 41E+00	9 39E+00	-6 01E-01	9 42E+00	1 19E+01	NA	NA	NA	
MW-46	002	10 5	7 6	4/12/2006	17 15	1 38E+03	2 81E+02	1 76E+C2	6 24E-01	4 82E-01	4 39E-01	9 28E-31	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 30E+02	1 71E+03	6 33E+C2	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	
	033	10 5	7 6	5/24/2006	12 55	6 23E+02	2 24E+02	1 87E+C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

IPEC00267165

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[4]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-46	004	10 5	7 6	6/13/2006	13 10	6 79E+01	1 83E+02	1 91E+02	3 46E-01	1 04E+00	1 73E+00	9 58E+00	7 28E+00	8 29E-00	-9 79E-01	8 73E+00	8 81E+00	NA	NA	NA	MW-46
	005	10 5	7 6	7/12/2006	13 23	7 86E+02	2 35E+02	1 92E+02	5 77E-01	1 21E+00	1 23E+00	3 98E+00	9 37E+00	1 09E-01	4 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 04E+00	5 97E+00	NA	NA	NA	
	007	10 5	7 6	9/13/2006	13 15	1 47E+03	3 33E+02	2 19E+02	NA	NA	NA	3 73E-31	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 03E-31	3 92E+00	4 37E-00	8 52E-02	3 65E+00	4 05E+00	-1 05E+00	1 52E+01	1 78E+01	
	009	10 5	7 6	8/7/2007	11 35	6 52E+02	3 53E+02	2 44E+02	7 89E-02	3 66E-01	4 49E-01	5 63E-31	3 52E+00	3 82E-00	6 33E-02	2 43E+00	2 77E+00	NA	NA	NA	
	010	10 5	7 6	10/22/2007	14 20	1 57E+03	5 27E+02	4 01E+02	2 77E-01	4 72E-01	5 44E-01	4 68E-31	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 04E+00	2 84E-00	1 73E+00	2 01E+00	3 31E+00	NA	NA	NA	
	012	10 5	7 6	4/29/2008	16 00	5 21E102	1 53E102	2 20E1C2	4 10E-01	3 51E-01	5 54E-01	7 07E-31	2 12E100	3 75E 00	4 57E-01	2 24E100	3 90E100	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	5 05E 31	1 96E+00	3 38E-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 87E-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 30E+03	2 83E+02	1 96E+02	-1 30E-01	6 23E-01	7 32E-01	-1 63E+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 53E-01	9 83E-34	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 38E-01	-1 07E-01	3 07E+00	3 43E-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 43E-00	-3 04E+00	6 12E+00	5 78E+00	NA	NA	NA	
	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	
	020	10 5	7 6	4/12/2010	11 32	7 52E+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 53E+02	1 46E+02	1 80E-01	5 63E-01	6 39E-01	1 28E-31	7 65E+00	8 12E-00	-1 36E+00	7 96E+00	8 34E+00	NA	NA	NA	
	022	10 5	7 6	10/20/2010	13 25	3 13E103	3 03E102	1 13E1C2	3 76E-01	5 09E-01	5 45E-01	-2 05E100	5 05E100	5 03E 00	2 90E100	6 01E100	6 22E100	NA	NA	NA	
	023	10 5	7 6	2/23/2011	12 46	2 47E+03	5 73E+02	3 98E+C2	1 12E+00	1 89E+00	2 06E+00	2 22E+00	5 28E+00	5 28E-00	5 21E C1	5 30E+00	5 66E+00	NA	NA	NA	
	024	10 5	7 6	4/25/2011	11 19	5 25E+03	7 54E+02	3 95E+C2	1 48E+00	1 72E+00	1 80E+00	-2 43E+00	7 24E+00	7 05E-00	-2 44E+00	7 24E+00	6 77E+00	NA	NA	NA	
	025	10 5	7 6	7/13/2011	13 29	3 38E+03	7 17E+02	2 86E+C2	8 44E-01	1 15E+00	1 26E+00	3 71E+00	8 64E+00	1 04E-01	-9 54E-01	1 02E+01	1 08E+01	NA	NA	NA	
	026	10 5	7 6	8/17/2011	11 36	3 30E+03	6 72E+02	4 50E+C2	8 77E-01	1 21E+00	1 29E+00	3 43E-31	7 86E+00	8 82E-00	-1 10E+00	7 50E+00	7 97E+00	NA	NA	NA	
	027	10 5	7 6	10/20/2011	13 35	2 28E+03	4 63E+02	3 46E+C2	3 95E-01	1 30E+00	1 52E+00	-4 36E+00	8 19E+00	8 94E-00	-1 03E+00	8 07E+00	1 01E+01	NA	NA	NA	
MW-47-56	002	53 2	17 1	4/13/2006	12 05	7 50E+02	2 22E+02	1 67E+02	2 27E+00	7 65E-01	7 30E-01	8 27E-32	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 95E+C2	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 25E+01	NA	NA	NA	
	004	53 2	17 1	8/20/2007	10 07	3 29E+02	1 93E+02	1 85E+C2	3 93E-01	5 22E-01	5 10E-01	9 00E+00	6 66E+00	3 37E-00	3 75E+00	3 11E+00	4 15E+00	NA	NA	NA	
	004	53 2	17 1	6/20/2007	10 07	NA	NA	NA	NA	NA	NA	9 00E+00	4 28E+00	3 77E-00	1 03E+00	3 17E+00	3 73E+00	3 31E+00	1 33E+01	1 91E+C1	
	005	53 2	17 1	9/10/2007	11 00	2 70E102	1 03E102	2 02E1C2	5 07E-01	8 04E-01	8 21E-01	-3 04E-01	3 40E100	3 75E 00	1 40E-01	2 94E100	3 37E100	NA	NA	NA	
	006	53 2	17 1	7/6/2011	15 32	3 52E+03	6 57E+02	4 48E+C2	4 63E 01	1 08E+00	1 22E+00	1 55E+00	1 11E+01	1 22E-01	1 45E C1	7 71E+00	8 25E+00	1 99E+01	2 17E+01	2 50E+C1	
	007	53 2	17 1	8/18/2011	12 39	5 47E+03	2 74E+02	2 00E+C2	1 03E+00	1 29E+00	1 31E+00	-8 54E-01	1 13E+01	1 25E-01	3 86E+00	8 64E+00	1 07E+01	-2 22E+00	1 75E+01	2 00E+C1	
	008	53 2	17 1	10/28/2011	11 36	5 31E+03	8 52E+02	4 99E+C2	-6 21E-01	8 79E-01	1 40E+00	1 34E+00	8 85E+00	1 07E-01	2 06E-C1	1 01E+01	1 25E+01	-6 21E+00	1 24E+01	1 44E+C1	
MW-47-80	001	74	-37	4/13/2006	11 45	2 33E+03	4 23E+02	2 29E+C2	2 73E+00	7 35E-01	6 53E-01	-5 82E-01	4 48E+00	5 14E-00	2 25E-C1	3 91E+00	4 76E+00	NA	NA	NA	MW-47-80
	002	74	-37	7/18/2006	8 51	1 87E+03	3 87E+02	2 58E+C2	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	-37	6/19/2007	11 00	2 36E+03	5 94E+02	3 58E+C2	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 13E+01	1 38E+C1	
	004	74	-37	8/10/2007	12 21	3 51E+03	7 23E+02	4 52E+C2	3 55E+00	1 21E+00	9 35E-01	-9 39E-02	3 21E+00	3 55E-00	-8 20E-02	3 18E+00	3 50E+00	NA	NA	NA	
	005	74	-37	1/16/2011	14 37	1 86E+03	3 53E+03	4 50E+C2	1 52E+00	1 53E+00	1 22E+00	-1 51E+00	8 37E+00	8 73E-00	-2 43E+00	7 80E+00	7 15E+00	3 37E+00	2 52E+01	2 89E+C1	
	006	74	-37	8/10/2011	11 30	1 37E+03	4 03E+03	2 16E+C2	8 23E-01	1 22E+00	1 29E+00	-5 83E+00	9 30E+00	8 60E-00	-6 32E-01	8 29E+00	9 27E+00	-1 15E+00	1 83E+01	2 12E+C1	
	007	74	-37	10/20/2011	13 24	2 68E103	3 21E103	5 07E1C2	2 13E-00	1 56E100	1 10E100	-1 33E100	6 54E100	7 21E 00	1 21E100	6 45E100	8 05E100	3 54E100	1 31E101	1 46E1C1	
MW-48-23	001	20 4	5	2/8/2006	10 10	1 56E+02	3 25E+02	3 42E+C2	1 93E 01	5 04E 01	5 24E 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	4/17/2006	9 58	1 74E+02	4 03E+02	4 52E+C2	-1 10E-01	3 96E-01	4 40E-01	3 25E+00	9 75E+00	7 25E-00	2 49E+00	7 47E+00	6 18E+00	NA	NA	NA	
	003	20 4	-5	4/27/2006	13 42	2 38E+02	1 94E+02	2 03E+C2	-2 50E-02	4 58E-01	5 34E-01	-1 83E+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 25E+02	4 46E+C2	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	2 95E+02	4 14E+02	4 53E+C2	3 10E-01	9 88E-01	1 26E+00	1 09E+00	5 21E+00	5 82E-00	3 08E+00	5 41E+00	5 96E+00	NA	NA	NA	
	005	20 4	-5	6/9/2006	11 15	7 37E+02	2 09E+02	1 56E+C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	20 4	-5	6/9/2006	11 15	6 38E+01	4 39E+02	6 24E+C2	3 70E-01	3 60E-01	4 30E-01	2 58E+00	7 76E+00	5 90E-00	3 25E+00	9 74E+00	7 61E+00	1 50E+01	1 53E+01	1 62E+C1	
	006	20 4	-5	7/6/2006	12 00	4 21E+02	4 17E+02	4 52E+C2	-2 20E-01	4 20E-01	4 90E-01	2 55E+00	7 64E+00	5 94E-00	2 60E+00	7 39E+00	2 78E+00	NA	NA	NA	
	007	20 4	-5	8/8/2006	10 30	1 24E+02	1 63E+02	1 72E+C2	7 00E-02	6 30E-01	7 30E-01	1 93E+00	4 76E+00	5 55E-00	1 99E+00	4 41E+00	3 37E+00	NA	NA	NA	
	008	20 4	-5	9/5/2006	10 05	2 44E+01	1 57E102	1 72E1C2	-6 30E-02	7 00E-01	8 00E-01	-2 02E100	7 05E100	8 12E 00	1 05E-01	2 53E100	1 02E101	NA	NA	NA	
	009	20 4	-5	11/22/2006	9 23	1 57E+02	4 03E+02	4 50E+C2	7 30E 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 77E+02	1 63E+02	1 70E+C2	-1 50E-01	1 53E+00	1 70E+00	3 70E-31	1 80E+00	2 05E-00	8 30E-01	2 07E+00	2 36E+00	NA	NA	NA	
	011	20 4	-5	8/16/2007	11 00	3 93E+02	1 64E+02	1 61E+C2	-3 34E-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 30E+01	4 25E+02	4 73E+C2	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+C1	4 02E+02	4 52E+C2	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+C2	1 77E+02	2 04E+C2	-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 59E+02	4 02E+02	4 46E+C2	-1 20E-01	3 60E-01	4 10E-01	1 53E+00	4 05E+00	2 95E-00	2 31E+00	6 94E+00	5 00E+00	NA	NA	NA	
	005	36	-20 6	6/9/2006	11 30	5 96E+02	1 33E+03	6 24E+C2	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	
	005	36	-20 6	6/9/2006	11 30	1 43E102	1 07E102	1 66E1C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	36	-20 6	6/9/2006	11 30	1 56E+02	4 11E+02	4 53E+C2	2 10E+00	4 50E 01	4 90E 01	2 40E+00	7 20E+00	4 95E-00	1 14E+00	1 24E+01	8 50E+00	4 58E+00	1 35E+01	1 46E+C1	
	006	36	-20 6	7/6/2006	8 45	1 47E+02	4 03E+02	4 52E+C2	1 70E-01	8 10E-01	8 30E-01	2 10E+00	6 31E+00	4 44E-00	4 21E+00	1 26E+01	9 77E+00	NA	NA	NA	
	007	36	-20 6	8/8/2006	10 20	1 79E+01	1 55E+02	1 69E+C2	6 00E-02	6 90E-01	7 30E-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+C2	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 52E+02	4 11E+02	4 50E+C2	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+C2	-1 40E-01	1 38E+00	1 50E+00	-6 10E-01	1 26E+00	1 52E-00	-4 70E-01	1 38E+00	1 66E+00	NA	NA	NA	
	011	36	-20 6	8/16/2007	11 07	1 29E+02	1 59E+02	1 75E+C2	4 11E-02	6 21E-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	5/22/2006	16 50	1 54E+04	2 81E+03	1 82E+C3	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	9 40E+03	1 53E+03	4 96E+C2	9 03E+00	9 40E-01	5 43E-01	2 65E+00	7 87E+00	9 09E-00	1 53E+00	5 99E+00	6 92E+00	NA	NA	NA	
	003	19 1	-4 4	5/19/2006	14 55	1 42E104	6 75E103	6 25E1C2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	19 1	-4 4	6/6/2006	9 55	1 40E+01	2 15E+03	4 95E+C2	1 41E+01	1 17E+00	5 30E 01	6 1E+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 20E+04	2 05E+03	1 51E+C3	1 26E+01	2 67E+00	1 51E+00	1 38E+00	8 45E+00	9 43E-00	-1 98E+00	8 42E+00	9 92E+00	NA	NA	NA	
	006	19 1	-4 4	8/7/2006	9 28	1 87E+04	1 13E+03	6 16E+C3	NA	NA	NA	-5 98E+00	6 06E+00	4 56E-00	-3 09E+00	5 34E+00	4 31E+00	3 57E+01	3 09E+01	3 26E+C1	
	007	19 1	-4 4	8/28/2006	12 30	1 10E+04	1 12E+03	7 68E+C2	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 33E+03	1 00E+C3	1 55E+01	1 95E+00	7 70E-01	8 00E-31	3 00E+00	3 42E-00	-3 00E-01	4 20E+00	5 00E+00	8 40E+00	2 04E+01	2 20E+C1	
	009	19 1	-4 4	6/26/2007	12 30	7 76E+03	3 43E+02	1 79E+C2	1 27E+01	1 40E+00	7 13E-01	1 36E+00	2 55E+00	2 88E-00	-8 28E-01	2 23E+00	2 31E+00	-1 92E+00	1 23E+01	1 50E+C1	
	010	19 1	-4 4	8/9/2007	11 17	6 72E+03	9 53E+02	4 62E+C2	1 43E+01	2 16E+00	9 36E-01	4 09E-31	3 72E+00	4 23E-00	2 50E+00	3 51E+00	4 54E+00	7 93E-01	2 07E+01	2 42E+C1	
	011	19 1	-4 4	1/28/2008	16 28	4 21E+03	5 75E+02	2 98E+C2	2 29E+01	2 40E+00	8 52E-01	-1 12E+00	1 95E+00	2 07E-00	4 31E-C1	1 97E+00	2 29E+00	5 16E+00	1 53E+01	1 75E+C1	

See Page 34 for Notes

IPEC00267166

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

Well ID[1, 4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[4]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-49-26	012	19.1	-44	4/25/2008	10:45	5.70E+03	3.13E+02	1.44E+02	1.51E+01	1.37E+00	5.59E-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	MW-49-26
	013	19.1	-44	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	-44	11/5/2008	15:54	3.47E+03	4.55E+02	1.91E+02	1.53E+01	2.06E+00	6.10E-01	-1.35E+00	5.03E+00	5.25E-00	-3.17E-01	4.65E+00	5.10E+00	2.96E+00	1.77E+01	2.02E+01	
	015	19.1	-44	2/6/2009	13:03	3.10E+03	2.65E+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+0:	2.21E+01	2.42E+01	
	016	19.1	-44	5/6/2009	10:46	3.20E+03	4.03E+02	1.80E+02	1.50E+01	1.85E+00	4.30E-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	-44	8/7/2009	10:50	3.56E+03	2.97E+02	1.75E+02	1.73E+01	1.64E+00	6.79E-01	-9.22E-01	3.27E+00	3.47E-00	-1.44E+00	3.66E+00	3.66E+00	4.77E+00	1.95E+01	2.22E+01	
	018	19.1	-44	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-31	6.13E+00	6.91E-00	0.00E+00	5.38E+00	5.38E+00	-4.26E+00	1.77E+01	2.06E+01	
	019	19.1	-44	2/22/2010	14:35	2.82E+03	2.73E+02	1.74E+02	1.36E+01	1.92E+00	8.52E-01	2.49E+00	5.76E+00	6.85E-00	-1.91E-01	5.38E+00	6.41E+00	-6.01E+00	1.84E+01	2.16E+01	
	020	19.1	-44	4/23/2010	14:42	3.30E+03	3.33E+02	1.30E+02	1.55E+01	2.44E+00	8.19E-01	2.02E+00	7.32E+00	8.02E-00	-2.20E-01	9.32E+00	1.01E+01	-7.20E+00	1.95E+01	2.26E+01	
	021	19.1	-44	8/11/2010	11:27	3.03E+03	3.03E+02	1.27E+02	1.38E+01	1.44E+00	3.56E-01	7.91E-01	1.14E+01	1.15E-01	1.86E+00	1.10E+01	1.15E+01	3.27E-01	1.61E+01	1.92E+01	
	022	19.1	-44	11/1/2010	14:23	2.59E+03	3.01E+02	4.76E+02	-3.47E-01	9.56E-01	2.34E+00	4.62E+00	4.84E+00	1.15E-01	1.18E+00	3.96E+00	9.11E+00	-1.79E+00	1.09E+01	2.29E+01	
	023	19.1	-44	1/28/2011	13:37	3.17E+03	6.00E+02	4.25E+02	1.30E+01	2.86E+00	2.01E+00	3.39E-31	1.04E+01	7.00E-00	-2.43E+00	6.42E+00	6.44E+00	-4.38E+00	1.87E+01	2.20E+01	
	024	19.1	-44	4/15/2011	11:58	3.29E+03	7.13E+02	4.80E+02	1.26E+01	3.06E+00	1.91E+00	4.75E+00	1.07E+01	1.27E-01	4.03E+00	1.20E+01	1.47E+01	1.31E+00	1.50E+01	1.72E+01	
	025	19.1	-44	8/10/2011	10:46	3.97E+03	6.39E+02	2.00E+02	1.26E+01	2.89E+00	1.34E+00	-1.94E+00	9.06E+00	9.33E-00	2.94E+00	8.51E+00	1.00E+01	-1.77E+01	2.04E+01	2.57E+01	
	026	19.1	-44	11/4/2011	11:50	4.92E+03	8.37E+02	5.06E+02	1.27E+01	2.95E+00	1.25E+00	2.60E+00	1.11E+01	7.92E-00	5.17E+00	8.04E+00	1.17E+01	-2.73E+00	1.26E+01	1.44E+01	
MW-49-42	001	38.1	-23.4	3/22/2006	16:45	1.13E+04	2.55E+03	1.83E+03	1.54E+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	9.39E+03	1.49E+03	4.90E+02	1.20E+01	9.57E-01	4.54E-01	2.10E+00	1.39E+01	1.55E-01	3.96E+00	1.40E+01	1.63E+01	NA	NA	NA	
	003	38.1	-23.4	5/19/2006	15:07	8.83E+03	5.38E+03	6.29E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	38.1	-23.4	6/6/2006	16:10	8.20E+03	1.32E+03	3.06E+02	1.63E+01	1.27E+00	5.57E-01	2.08E+00	1.37E+01	1.53E-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	1.52E+01	3.23E+00	1.49E+00	2.01E+00	1.14E+01	1.32E-01	1.61E+00	1.06E+01	1.11E+01	NA	NA	NA	
	006	38.1	-23.4	8/7/2006	9:40	8.80E+03	9.63E+02	6.16E+02	NA	NA	NA	-4.27E+00	9.33E+00	8.64E-00	-1.94E+00	8.58E+00	8.99E+00	8.36E+00	9.86E+00	1.05E+01	
	007	38.1	-23.4	8/28/2006	12:40	8.59E+03	9.57E+02	6.10E+02	NA	NA	NA	-8.31E-02	1.05E+01	1.15E-01	-6.74E+00	9.40E+00	6.18E+00	NA	NA	NA	
	008	38.1	-23.4	11/5/2006	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	2.63E-00	1.18E+00	2.34E+00	2.62E+00	2.50E+00	5.70E+00	6.20E+00	
	009	38.1	-23.4	6/26/2007	12:30	4.44E+03	2.93E+02	1.86E+02	2.08E+01	1.65E+00	6.22E-01	-3.62E-01	4.56E+00	4.32E-00	-2.05E+00	3.66E+00	3.54E+00	-5.19E+00	1.30E+01	1.54E+01	
	010	38.1	-23.4	8/9/2007	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	2.54E+01	2.57E+00	5.58E-01	8.68E-31	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	3.80E+03	2.54E+02	1.44E+02	2.33E+01	1.94E+00	5.24E-01	4.01E-31	1.82E+00	2.15E-00	2.91E-01	2.17E+00	2.18E+00	-1.03E+00	1.17E+01	2.04E+01	
	013	38.1	-23.4	7/30/2008	15:00	2.52E+03	1.43E+02	1.30E+02	2.16E+01	1.41E+00	6.39E-01	4.49E-31	1.29E+00	2.77E-00	7.90E-01	1.70E+00	2.05E+00	-2.72E+00	1.29E+01	2.24E+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	7.31E-01	-1.27E+00	6.33E+00	6.92E-00	-1.23E+00	6.10E+00	7.46E+00	4.70E+00	1.04E+01	2.02E+01	
	015	38.1	-23.4	2/6/2009	9:57	2.25E+03	2.43E+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	1.37E+00	7.25E+00	4.88E-00	1.78E-01	4.17E+00	4.46E+00	-7.79E+00	1.67E+01	1.94E+01	
	017	38.1	-23.4	8/7/2009	10:55	2.58E+03	2.63E+02	1.79E+02	1.75E+01	1.92E+00	6.26E-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	2.73E+02	1.88E+02	1.74E+01	1.91E+00	7.50E-01	5.14E-31	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	2.43E+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	3.25E+02	1.43E+02	1.75E+01	2.28E+00	7.31E-01	-5.63E+00	6.62E+00	6.01E-00	-1.68E+00	7.58E+00	7.64E+00	-3.23E+00	2.13E+01	2.51E+01	
	021	38.1	-23.4	8/11/2010	11:00	2.27E+03	2.72E+02	1.30E+02	1.65E+01	1.67E+00	3.31E-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	
	022	38.1	-23.4	11/1/2010	14:13	2.39E+03	2.73E+02	4.02E+02	1.59E+01	1.63E+00	1.12E+00	8.43E-31	6.79E+00	9.77E-00	3.75E+00	9.42E+00	1.30E+01	4.30E+00	1.84E+00	1.80E+01	
	023	38.1	-23.4	1/28/2011	13:00	2.45E+03	5.38E+02	3.86E+02	2.50E+01	4.02E+00	2.02E+00	-1.07E+00	5.74E+00	6.21E-00	-2.45E+00	5.20E+00	5.32E+00	-3.20E+00	1.86E+01	2.18E+01	
	024	38.1	-23.4	4/15/2011	11:55	1.70E+03	6.04E+02	4.78E+02	1.57E+01	2.34E+00	2.07E+00	-6.72E+00	7.62E+00	6.17E-00	1.15E-01	7.72E+00	8.33E+00	6.58E+00	1.58E+01	1.73E+01	
	025	38.1	-23.4	8/10/2011	11:16	3.83E+03	6.21E+02	1.96E+02	1.61E+01	3.24E+00	1.64E+00	1.22E+00	8.94E+00	9.62E-00	3.72E+00	8.79E+00	8.23E+00	1.40E+01	1.81E+01	2.15E+01	
	026	38.1	-23.4	11/4/2011	11:43	4.91E+03	8.19E+02	4.90E+02	2.11E+01	3.90E+00	1.51E+00	5.99E-31	1.83E+01	1.13E-01	-3.91E+00	1.04E+01	1.20E+01	4.77E+00	1.80E+01	1.45E+01	
MW-49-65	001	60	-45.4	3/22/2006	16:55	5.43E+03	2.13E+03	1.82E+03	1.65E+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	9.33E+02	3.84E+02	1.13E+01	8.98E-01	4.28E-01	-2.85E+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	4.33E+03	6.29E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	60	-45.4	6/6/2006	16:40	4.32E+03	7.23E+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	4.53E+03	1.73E+03	1.52E+03	1.56E+01	3.24E+00	1.86E+00	-2.75E+00	6.49E+00	6.88E-00	1.84E+00	6.45E+00	7.36E+00	NA	NA	NA	
	006	60	-45.4	8/7/2006	10:00	5.76E+03	8.43E+02	6.14E+02	NA	NA	NA	-1.23E+00	6.84E+00	7.48E-00	-6.52E-01	8.18E+00	9.76E+00	5.70E+00	1.06E+01	1.12E+01	
	007	60	-45.4	8/28/2006	12:35	5.54E+03	8.43E+02	6.16E+02	NA	NA	NA	-4.07E+00	9.28E+00	9.98E-00	-1.27E+00	7.42E+00	7.60E+00	NA	NA	NA	
	008	60	-45.4	11/5/2006	13:46	3.94E+03	1.23E+03	1.00E+03	1.62E+01	2.31E+00	9.40E-01	3.12E+00	2.61E+00	2.93E-00	3.00E-01	2.07E+00	2.45E+00	-1.00E+00	5.90E+00	6.70E+00	
	009	60	-45.4	6/26/2007	12:30	2.52E+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	3.55E+00	4.30E+00	5.75E+00	7.43E+00	1.41E+01	1.68E+01	
	010	60	-45.4	8/9/2007	11:20	2.41E+03	6.47E+02	4.60E+02	2.08E+01	2.40E+00	9.11E-01	3.44E-31	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	3.05E+00	1.31E+0:	1.95E+01	2.20E+01	
	012	60	-45.4	4/25/2008	13:13	1.93E+03	1.85E+02	1.96E+02	1.50E+01	6.62E-01	3.54E-01	-8.45E-02	1.93E+00	3.28E-00	-1.40E-01	2.29E+00	3.84E+00	6.31E+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	5.37E-01	-4.95E+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	2.13E+02	1.70E+02	1.78E+01	2.10E+00	9.13E-01	-9.15E-01	2.96E+00	3.23E-00	7.61E-01	2.64E+00	2.21E+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-31	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	8/7/2009	12:40	1.54E+03	2.33E+02	1.80E+02	1.24E+01	1.62E+00	7.16E-01	5.00E-31	3.13E+00	3.54E-00	5.17E-01	3.25E+00	2.76E+00	-3.20E+00	1.06E+01	2.15E+01	
	018	60	-45.4	10/29/2009	13:15	1.56E+03	2.33E+02	1.88E+02	1.14E+01	1.53E+00	8.16E-01	1.01E+00	9.45E+00	8.95E-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	2.13E+02	1.74E+02	1.55E+01	2.24E+00	7.71E-01	-6.73E-01	5.14E+00	5.79E-00	1.50E+00	4.23E+00	5.47E+00	-6.55E+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	1.64E+01	1.85E+00	6.87E-01	6.17E+00	1.36E+01	9.13E-00	-2.55E-01	1.17E+01	1.35E+01	-1.79E+01	1.96E+01	2.32E+01	
	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	-2.56E-01	9.88E+00	1.11E+01	-6.74E-01	1.80E+01	2.13E+01	
	022	60	-45.4	11/1/2010	14:18	1.37E+03	2.34E+02	3.97E+02	1.41E+01	1.45E+00	1.34E+00	6.99E+00	6.88E+00	1.07E-01	3.39E-01	5.37E+00	1.16E+01	-3.41E+00	9.31E+00	2.09E+01	
	023	60	-45.4	1/28/2011	13:15	1.94E+03	5.02E+02	3.85E+02	1.15E+01	3.28E+00	2.06E+00	-6.30E-01	4.96E+00	5.21E-00	7.15E-01	5.20E+00	5.81E+00	-9.08E+00	1.83E+01	2.20E+01	
	024	60	-45.4	4/15/2011	11:50	2.38E+03	6.43E+02	4.81E+02	1.62E+01	3.12E+00	1.60E+00	2.59E+00	9.66E+00	1.12E-01	4.62E-02	1.01E+01	1.16E+01	4.11E+00	1.49E+01	1.68E+01	
	025	60	-45.4	8/10/2011	10:55	2.43E+03	5.13E+02	2.00E+02	1.14E+01	2.75E+00	1.42E+00	1.12E-31	7.77E+00	8.42E-00	-4.15E+00	9.10E+00	8.02E+00	-6.91E-01	1.81E+01	2.02E+01	
	026	60	-45.4	11/4/2011	11:47	4.24E+03	7.23E+02	4.64E+02	2.02E+01	3.60E+00	1.47E+00	-4.27E+00	8.88E+00	9.11E-00	-9.45E+00	1.15E+01	7.03E-01	-6.56E+01	1.21E+01	1.36E+01	
MW-50-42	001	42	-27.1	3/22/2006	14:25	9.75E+03	5.73E+02	2.14E+02	1.53E+01	1.12E+00	4.76E-01	-1.32E+00	9.90E+00	1.13E-01	-5.74E-01	8.55E+00	1.02E+01	4.31E+00	1.34E+01	1.46E+01	MW-50-42
	003	42	-27.1	5/19/2006	13:55	1.58E+03	3.91E+03	6.30E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	42	-27.1	5/19/2006	13:55	4.59E+03	7.74E+02	3.53E+02	1.55E+01	1.25E+00	4.77E-01	4.82E+00	8.95E+00	1.13E-01	-4.07E-01	8.17E+00	7.92E+00	NA	NA	NA	
	004	42	-27.1	6/7/2006	9:00	1.79E+07	1.83E+07	1.56E+07	3.64E+00	7.65E-01	6.36E-01	1.15E-31	7.81E+00	8.67E-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	2.13E+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	8/7/2006	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+0:	1.53E+01	1.64E+01	
	007	42	-27.1	8/28/2006	11:50	3.11E+02	1.83E+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	11/5/2006	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	4.33E-00	-9.00E-01	3.00E+00	3.86E+00	-1.20E+00	5.00E+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	7.54E-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	

IPEC00267167

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]													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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-50-42	010	42	-27.1	7/26/2007	11:20	1.45E+02	1.74E+02	1.93E+02	1.64E+01	1.81E+00	5.81E-01	-5.53E+00	4.71E+00	3.65E-00	2.53E+00	3.79E+00	4.37E+00	4.92E+00	1.91E+01	2.19E+01	MW-50-42
	011	42	-27.1	10/8/2007	14:08	1.21E+02	1.75E+02	1.97E+02	2.45E+01	2.52E+00	5.74E-01	3.02E-31	3.38E+00	3.87E-00	6.26E-01	3.75E+00	5.81E+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	4.65E-00	1.77E+00	3.90E+00	6.68E+00	1.71E+0:	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	3.22E-00	5.53E-01	1.91E+00	5.44E+00	1.58E+0:	1.76E+01	2.96E+01	
	015	42	-27.1	11/6/2008	10:44	1.29E+02	1.75E+02	1.92E+02	2.56E+00	9.87E-01	6.35E-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	1.33E+02	1.48E+02	1.56E+00	8.04E-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	1.93E+02	1.72E+02	2.38E+00	8.93E-01	6.96E-01	5.89E-31	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	8/7/2009	13:13	1.30E+03	2.09E+02	1.79E+02	5.33E+00	1.23E+00	7.23E-01	-7.54E-02	3.60E+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	4.29E+02	1.03E+02	1.80E+02	6.73E+00	1.05E+00	4.53E-01	-3.07E+00	1.01E+01	1.12E-01	2.52E-01	6.62E+00	7.45E+00	-1.40E+01	1.06E+01	2.22E+01	
	020	42	-27.1	2/19/2010	13:52	3.73E+02	1.71E+02	1.74E+02	5.56E+00	1.42E+00	8.15E-01	2.91E+00	5.42E+00	6.45E-00	3.03E+00	6.13E+00	7.39E+00	1.37E+01	1.83E+01	2.23E+01	
	021	42	-27.1	4/30/2010	12:34	1.36E+03	2.45E+02	1.68E+02	4.76E+00	1.13E+00	8.38E-01	8.49E-31	7.56E+00	8.38E-00	-1.97E+00	5.09E+00	6.04E+00	-1.48E+01	2.25E+01	2.61E+01	
	022	42	-27.1	8/4/2010	13:11	1.51E+02	1.25E+02	1.28E+02	8.43E+00	1.42E+00	5.53E-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	
	023	42	-27.1	11/2/2010	12:10	8.57E+02	1.83E+02	1.22E+02	3.73E+00	1.31E+00	9.39E-01	2.40E+00	5.71E+00	6.75E-00	2.73E+00	5.58E+00	6.94E+00	-7.36E+00	1.79E+01	2.15E+01	
	024	42	-27.1	2/25/2011	12:36	5.51E+02	3.83E+02	3.85E+02	5.42E+00	2.34E+00	1.91E+00	-1.29E-01	5.46E+00	5.88E-00	-9.07E-01	4.42E+00	5.42E+00	-7.19E+00	1.82E+01	2.18E+01	
	025	42	-27.1	5/3/2011	12:05	3.77E+03	5.53E+02	3.41E+02	9.53E+00	2.20E+00	1.04E+00	1.92E+00	9.44E+00	1.07E-01	5.79E-01	1.02E+01	1.16E+01	5.86E-01	1.69E+01	1.92E+01	
	026	42	-27.1	7/25/2011	12:18	1.03E+03	4.83E+02	4.43E+02	3.61E+00	2.05E+00	2.02E+00	-1.11E+00	7.86E+00	8.35E-00	6.63E-02	8.16E+00	9.04E+00	3.31E+00	1.71E+01	1.91E+01	
	027	42	-27.1	8/19/2011	12:10	9.52E+02	3.42E+02	2.00E+02	9.47E+00	2.60E+00	1.31E+00	2.17E+00	8.01E+00	9.07E-00	4.72E+00	9.61E+00	1.22E+01	-7.08E+00	1.81E+01	2.10E+01	
	028	42	-27.1	10/27/2011	10:48	9.99E+02	5.23E+02	4.92E+02	3.02E+01	4.44E+00	1.54E+00	1.70E+00	7.11E+00	9.22E-00	-2.06E+00	8.01E+00	9.51E+00	-5.76E+00	1.21E+01	1.41E+01	
MW-50-66	001	60	-45.1	3/22/2006	14:50	6.31E+03	4.94E+02	2.13E+02	2.55E+01	1.21E+00	4.30E-01	-7.67E+00	1.60E+01	1.65E-01	-2.15E+00	1.63E+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	1.28E+01	5.93E+03	6.30E+02	NA	NA	NA	3.23E+00	1.06E+01	1.23E-01	7.78E-01	1.32E+01	1.25E+01	NA	NA	NA	
	003	60	-45.1	5/19/2006	15:20	9.51E+03	1.57E+03	4.94E+02	1.55E+01	1.29E+00	5.16E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	60	-45.1	6/7/2006	9:20	1.25E+04	1.65E+03	4.29E+02	1.58E+01	1.18E+00	4.56E-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	8.52E+03	2.03E+03	1.52E+03	2.53E+01	3.75E+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	8/1/2006	9:28	7.93E+03	9.35E+02	6.16E+02	NA	NA	NA	5.59E-31	5.98E+00	6.68E-00	-4.31E+00	6.18E+00	5.00E+00	1.06E+0:	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-32	4.67E+00	5.85E-00	1.34E+00	4.23E+00	5.88E+00	NA	NA	NA	
	008	60	-45.1	11/15/2006	10:37	5.35E+03	1.32E+03	1.00E+03	2.15E+01	2.34E+00	8.10E-01	2.00E-31	3.30E+00	3.75E-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	2.93E+02	1.86E+02	2.93E+01	1.85E+00	5.25E-01	-2.12E+00	2.64E+00	2.47E-00	1.63E-01	2.26E+00	2.74E+00	-6.02E-01	1.52E+01	1.74E+01	
	010	60	-45.1	7/25/2007	11:23	4.50E+03	3.39E+02	2.04E+02	3.10E+01	2.20E+00	5.72E-01	-1.12E+00	4.24E+00	4.13E-00	1.08E-02	3.46E+00	3.94E+00	1.93E+0:	1.86E+01	2.02E+01	
	011	60	-45.1	10/7/2007	14:30	3.35E+03	6.53E+02	3.62E+02	4.74E+01	2.72E+00	7.27E-01	-2.23E+00	4.61E+00	4.35E-00	1.65E+00	4.20E+00	4.96E+00	-3.71E+00	1.53E+01	1.03E+01	
	013	60	-45.1	2/26/2008	13:46	3.74E+03	7.93E+02	5.31E+02	3.58E+01	2.36E+00	7.10E-01	7.87E-31	2.69E+00	3.18E-00	9.54E-01	2.54E+00	2.96E+00	4.37E+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	3.48E+01	1.85E+00	7.31E-01	7.08E-31	2.24E+00	3.87E-00	1.23E+00	2.13E+00	3.88E+00	7.36E+00	1.23E+01	2.17E+01	
	016	60	-45.1	7/31/2008	17:02	2.71E+03	2.43E+02	1.91E+02	3.30E+01	1.55E+00	4.32E-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	2.68E+03	4.17E+02	5.04E+02	3.23E+01	1.66E+00	4.38E-01	-8.81E-01	2.69E+00	3.95E-00	NA	NA	NA	1.22E+0:	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	6.55E-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	2.43E+02	1.73E+02	4.59E+01	3.75E+00	8.56E-01	2.50E+00	5.26E+00	2.61E-00	5.13E-01	2.70E+00	3.17E+00	-5.06E-01	1.93E+01	2.29E+01	
	020	60	-45.1	1/22/2009	16:01	2.30E+03	2.15E+02	1.48E+02	2.75E+01	2.28E+00	4.37E-01	-1.63E+00	4.20E+00	3.99E-00	-1.97E-01	3.32E+00	3.66E+00	-9.33E+00	1.83E+01	2.23E+01	
	021	60	-45.1	5/18/2009	15:16	3.13E+03	7.02E+02	3.88E+02	2.42E+01	2.38E+00	9.13E-01	1.50E-32	5.75E+00	3.88E-00	-9.51E-01	5.26E+00	5.65E+00	1.02E+00	1.70E+01	1.94E+01	
	022	60	-45.1	5/5/2009	16:33	3.45E+03	4.33E+02	1.74E+02	2.82E+01	2.38E+00	6.13E-01	-4.57E+00	8.96E+00	5.97E-00	-6.21E-03	7.67E+00	6.54E+00	-1.93E+00	1.82E+01	2.13E+01	
	023	60	-45.1	8/7/2009	16:12	3.20E+03	2.72E+02	1.72E+02	2.51E+01	2.54E+00	2.11E-01	2.03E-31	3.35E+00	3.82E-00	7.02E-01	3.51E+00	4.14E+00	-1.36E+01	1.03E+01	2.12E+01	
	024	60	-45.1	10/26/2009	14:49	2.86E+03	2.83E+02	1.89E+02	3.00E+01	2.34E+00	5.34E-01	1.11E-31	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	2.77E+02	1.74E+02	2.50E+01	3.04E+00	8.16E-01	-6.04E-01	4.68E+00	5.22E-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	2.59E+01	3.01E+00	8.31E-01	-1.85E+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	
	027	60	-45.1	8/4/2010	16:38	3.51E+03	3.33E+02	1.34E+02	2.65E+01	2.28E+00	4.30E-01	3.52E+00	8.29E+00	9.99E-00	5.22E-01	9.18E+00	1.06E+01	2.37E+00	1.56E+01	1.81E+01	
	028	60	-45.1	11/2/2010	12:30	3.72E+03	3.33E+02	1.20E+02	2.33E+01	2.71E+00	9.50E-01	-1.37E+00	6.21E+00	6.79E-00	-1.67E+00	6.95E+00	7.30E+00	3.25E-01	1.83E+01	2.18E+01	
	029	60	-45.1	2/25/2011	12:36	3.76E+03	6.13E+02	3.83E+02	2.61E+01	4.02E+00	2.13E+00	2.94E+00	7.20E+00	8.24E-00	6.79E-01	8.00E+00	9.10E+00	-2.80E+00	1.81E+01	2.12E+01	
	030	60	-45.1	5/3/2011	12:07	4.73E+03	6.12E+02	3.45E+02	2.63E+01	3.30E+00	1.08E+00	0.00E+00	1.77E+01	9.05E-00	-2.32E+00	9.06E+00	9.12E+00	8.43E+00	1.70E+01	1.88E+01	
	031	60	-45.1	7/25/2011	12:26	6.50E+03	8.15E+02	4.48E+02	2.61E+01	4.13E+00	1.59E+00	-4.59E-01	7.02E+00	7.74E-00	3.81E+00	8.52E+00	1.02E+01	1.02E+0:	1.66E+01	1.81E+01	
	032	60	-45.1	8/19/2011	12:12	7.15E+03	8.43E+02	2.00E+02	2.27E+01	4.03E+00	1.62E+00	3.97E+00	8.46E+00	1.01E-01	1.73E+00	9.03E+00	1.05E+01	-8.92E+00	1.80E+01	2.11E+01	
	033	60	-45.1	10/27/2011	10:53	7.23E+03	9.07E+02	4.94E+02	2.66E+01	4.35E+00	1.55E+00	-6.42E-01	0.64E+00	1.02E-01	1.01E+01	1.45E+01	1.01E+01	-4.90E+00	1.66E+01	1.92E+01	
MW-51-40	001	397	23	5/30/2007	11:45	1.98E+02	1.65E+02	1.68E+02	5.30E-01	6.73E-01	9.32E-01	1.04E-31	3.48E+00	3.77E-00	1.61E+00	3.23E+00	3.77E+00	NA	NA	NA	MW-51-40
	002	397	23	7/24/2007	15:30	2.23E+02	1.59E+02	1.60E+02	7.09E-02	4.71E-01	5.88E-01	1.65E-32	3.39E+00	3.85E-00	-1.32E+00	4.10E+00	4.13E+00	NA	NA	NA	
	004	397	23	11/9/2007	15:40	1.47E+02	1.55E+02	1.70E+02	-8.16E-02	3.81E-01	4.52E-01	1.68E+00	2.96E+00	3.52E-00	-5.71E-02	3.15E+00	3.45E+00	NA	NA	NA	
	005	397	23	1/8/2008	10:47	5.86E+01	1.55E+02	1.79E+02	1.57E-01	6.71E-01	8.32E-01	1.83E-32	2.66E+00	2.93E-00	7.71E-01	2.75E+00	2.87E+00	NA	NA	NA	
	007	397	23	5/30/2008	10:27	1.41E+02	1.01E+02	1.60E+02	3.71E-01	5.67E-01	9.57E-01	3.19E-31	2.03E+00	3.41E-00	2.18E+00	2.36E+00	3.50E+00	NA	NA	NA	
	008	397	23	8/8/2008	14:40	3.29E+02	1.63E+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	397	23	10/27/2008	15:11	1.58E+02	1.85E+02	1.95E+02	1.84E-02	4.26E-01	5.57E-01	4.51E-31	4.28E+00	4.88E-00	-1.93E+00	6.55E+00	6.55E+00	-5.03E+00	2.11E+01	2.46E+01	
	010	397	23	1/20/2009	14:50	2.37E+01	1.63E+02	1.92E+02	1.92E-01	7.95E-01	9.70E-01	9.89E-31	2.81E+00	3.25E-00	1.05E+00	2.75E+00	3.30E+00	-8.95E+00	1.67E+01	1.87E+01	
	011	397	23	5/7/2009	14:27	2.23E+02	1.75E+02	1.81E+02	1.02E-01	6.01E-01	9.27E-01	1.10E+00	7.00E+00	4.72E-00	-1.14E+00	5.00E+00	5.06E+00	-1.06E+00	1.03E+01	2.11E+01	
	012	397	23	8/13/2009	13:42	2.57E+02	1.73E+02	1.79E+02	6.59E-02	5.69E-01	6.39E-01	3.99E-31	3.35E+00	3.41E-00	1.00E+00	3.01E+00	3.56E+00	-5.55E+00	1.93E+01	2.27E+01	
	013	397	23	11/18/2009	14:26	1.55E+02	1.32E+02	1.41E+02	-2.16E-01	6.35E-01	8.39E-01	-1.42E+00	5.66E+00	6.03E-00	-1.14E+00	6.25E+00	6.92E+00	-5.68E+00	1.93E+01	2.30E+01	
	014	397	23	2/5/2010	14:31	7.54E+01	1.74E+02	1.98E+02	-5.43E-02	6.58E-01	8.54E-01	1.75E+00	4.09E+00	4.77E-00	-2.91E+00	5.31E+00	6.42E+00	NA	NA	NA	
	015	397	23	4/8/2010	13:58	9.55E+01	1.32E+02	1.44E+02	-1.34E-01	7.30E-01	8.38E-01	8.94E-31	8.25E+00	9.55E-00	-1.94E+00	9.38E+00	9.55E+00	NA	NA	NA	
	016	397	23	8/25/2010	16:29	1.70E+02	1.07E+02	1.03E+02	-4.31E-02	3.11E-01	4.19E-01	-2.43E+00	6.17E+00	6.53E-00	1.46E+00	5.21E+00	6.37E+00	NA	NA	NA	
	017	397	23	11/30/2010	12:54	1.48E+02	1.41E+02	1.44E+02	1.46E-01	6.05E-01	7.12E-01	1.54E+00	4.28E+00	4.95E-00	1.72E+00	4.17E+00	4.95E+00	NA	NA	NA	
	018	397	23	3/8/2011	10:18	1.22E+02	2.34E+02	2.67E+02	1.07E+00	1.51E+00	1.61E+00	-7.97E+00	1.21E+01	1.35E-01	2.42E+00	7.50E+00	8.76E+00	NA	NA	NA	
	019	397	23	4/29/2011	10:41	3.58E+02	4.14E+02	4.35E+02	2.26E-01	1.47E+00	1.59E+00	-5.43E+00	9.48E+00	9.62E-00	6.20E+00	1.11E+01	1.40E+01	NA	NA	NA	
	020	397	23	7/28/2011	11:43	3.78E+01	3.03E+02	3.52E+02	-2.51E-01	1.37E+00	1.35E+00	-2.53E+00	1.35E+01	1.68E-01	-3.37E+00	9.33E+00	9.05E+00	NA	NA	NA	
	021	397	23	12/2/2011	10:43	1.30E+02	3.03E+02	3.20E+02	-7.34E-01	1.50E+00	1.94E+00	-5.53E+00	0.49E+00	9.43E-00	4.02E+00	7.09E+00	1.10E+01	-3.40E+00	1.39E+01	1.50E+01	
MW-51-79	001	787	11	5/30/2007	12:42	9.89E+01	1.55E+02	1.72E+02	2.36E-01	6.96E-01	9.35E-01	2.20E+00	3.63E+00	3.90E-00	3.52E-01	3.21E+00	3.76E+00	NA	NA	NA	MW-51-79
	002	787	-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	3.89E+00	4.21E-00	-2.83E-01	4.51E+00	4.98E+00	NA	NA	NA	
	004	787	-11	11/9/2007	16:18	5.30E+01	1.53E+02	1.71E+02	-4.27E-02	2.99E-01	3.52E-01	2.66E+00	2.97E+00	3.55E-00	-2.41E-01	4.09E+00	4.45E+00	NA	NA	NA	
	005	787	-11	1/8/2008	10:08	9.26E+01	1.59E+02	1.79E+02	-4.54E-01	7.01E-01	9.74E-01	-7.91E-01	2.22E+00	2.42E-00	2.58E-01	2.37E+00	2.76E+00	NA	NA	NA	
	007	787	-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	4.82E-00	-5.13E-01	2.70E+00	4.31E+00	NA	NA	NA	
	008	787	-11	8/8/2008	12:55	1.51E+02	1.31E+02	2.01E+02	2.03E-01	2.99E-01	5.18E-01	9.63E-31	2.17E+00	3.82E-00	5.64E-01	2.30E+00	3.96E+00	-1.07E+01	1.07E+01	1.93E+01	
	009	787	-11	10/27/2008	13:30	1.14E+01	1.62E+02	1.99E+02	3.14E-03	6.14E-01	7.35E-01	8.42E-31	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	787	-11	1/20/2009	15:21	1.21E+02	1.33E+02	1.48E+02	-1.71E-01	3.11E-01	5.32E-01	5.93E-31	5.57E+00	3.65E-00	-2.94E-01	3.21E+00	3.56E+00	1.58E+0:	1.73E+01	1.90E+01	

See Page 34 for Notes

IPEC00267168

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-51-79	011	787	-11	5/7/2009	15:10	6.19E+01	1.43E+02	1.81E+02	6.97E-01	7.58E-01	8.39E-01	5.17E-01	7.68E+00	5.17E+00	2.33E+00	5.79E+00	6.97E+00	-6.40E+00	1.73E+01	2.00E+01	MW-51-79
	012	787	-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	787	-11	11/30/2009	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	8.07E+00	2.96E-01	1.63E+01	1.94E+01	
	014	787	-11	2/5/2010	14:40	1.37E+02	1.83E+02	1.99E+02	-1.36E-01	6.10E-01	8.44E-01	3.61E-32	3.39E+00	3.74E+00	7.57E-01	3.57E+00	4.08E+00	NA	NA	NA	
	015	787	-11	4/8/2010	14:21	6.44E+01	1.33E+02	1.51E+02	4.88E-01	8.07E-01	9.32E-01	4.30E+00	8.89E+00	1.11E+01	4.52E+00	1.00E+01	1.28E+01	NA	NA	NA	
	016	787	-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	7.75E+00	1.58E+00	6.71E+00	7.88E+00	NA	NA	NA	
	017	787	-11	11/30/2010	13:08	3.11E+01	1.21E+02	1.44E+02	-1.12E-01	4.32E-01	5.24E-01	-8.30E-01	4.13E+00	4.54E+00	5.98E-01	4.02E+00	4.66E+00	NA	NA	NA	
	018	787	-11	3/8/2011	10:34	1.36E+02	2.43E+02	2.70E+02	-2.23E-01	1.22E+00	1.35E+00	2.42E+00	5.42E+00	5.92E+00	-2.74E+00	7.36E+00	6.42E+00	NA	NA	NA	
	019	787	-11	4/29/2011	10:57	1.17E+02	3.03E+02	4.33E+02	1.03E+00	1.67E+00	1.82E+00	-4.93E-01	7.56E+00	8.23E+00	-8.30E-01	8.03E+00	8.53E+00	NA	NA	NA	
	020	787	-11	7/28/2011	11:55	1.93E+01	3.02E+02	3.60E+02	1.26E-01	1.63E+00	1.96E+00	2.20E+00	8.28E+00	9.43E+00	5.29E-01	9.27E+00	9.93E+00	NA	NA	NA	
	021	787	-11	12/2/2011	11:09	1.50E+02	2.95E+02	3.29E+02	-1.38E-01	1.52E+00	1.80E+00	-3.25E+00	7.98E+00	8.95E+00	-3.01E-01	7.62E+00	9.88E+00	-1.12E+00	1.13E+01	1.27E+01	
MW-51-104	001	1037	-36	5/30/2007	11:05	5.71E+01	1.43E+02	1.71E+02	-6.74E-02	7.59E-01	9.30E-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	1037	-36	7/24/2007	17:06	9.97E+01	1.47E+02	1.64E+02	3.62E-01	4.86E-01	5.41E-01	-4.23E+00	4.62E+00	3.92E+00	1.42E+00	4.44E+00	5.33E+00	NA	NA	NA	
	004	1037	-36	11/9/2007	14:35	5.17E+01	1.53E+02	1.70E+02	-2.40E-01	3.18E-01	3.36E-01	-1.25E+00	2.85E+00	2.92E+00	1.15E+00	2.61E+00	3.18E+00	NA	NA	NA	
	005	1037	-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	2.25E+00	-3.84E-01	2.54E+00	2.56E+00	NA	NA	NA	
	006	1037	-36	8/8/2008	10:50	2.82E+02	1.55E+02	2.08E+02	-2.56E-01	4.00E-01	7.22E-01	1.56E+00	2.03E+00	3.62E+00	-1.21E-01	2.07E+00	3.38E+00	-4.19E+00	1.34E+01	2.36E+01	
	007	1037	-36	10/27/2008	10:07	1.21E+02	1.39E+02	1.49E+02	1.39E-01	4.97E-01	6.13E-01	3.63E+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	1037	-36	1/20/2009	10:46	9.92E+01	1.38E+02	1.48E+02	9.07E-03	3.78E-01	5.34E-01	-1.38E+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	1037	-36	5/7/2009	11:48	1.11E+02	1.61E+02	1.70E+02	-1.53E-01	6.36E-01	7.29E-01	-9.75E-01	5.79E+00	3.05E+00	4.67E-01	3.51E+00	4.01E+00	-1.35E+01	2.36E+01	2.71E+01	
	010	1037	36	8/12/2009	11:14	2.91E+02	1.71E+02	1.80E+02	1.27E-01	3.65E-01	4.86E-01	8.06E-31	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	1037	-36	11/18/2009	11:34	1.44E+02	1.38E+02	1.48E+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	3.38E+00	1.69E+01	1.84E+01	
	012	1037	-36	2/5/2010	11:44	-1.96E+01	1.73E+02	1.99E+02	3.73E-03	6.18E-01	8.24E-01	3.36E-23	7.17E+00	6.23E+00	1.95E+00	5.38E+00	6.45E+00	NA	NA	NA	
	013	1037	-36	4/8/2010	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	9.75E+00	NA	NA	NA	
	014	1037	-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-31	5.75E+00	6.63E+00	-2.70E-01	4.96E+00	5.47E+00	NA	NA	NA	
	015	1037	-36	11/30/2010	9:55	8.54E+01	1.33E+02	1.47E+02	3.74E-01	7.18E-01	8.12E-01	-1.43E-01	3.99E+00	4.55E+00	2.19E-01	4.56E+00	5.05E+00	NA	NA	NA	
	016	1037	-36	3/8/2011	12:10	5.76E+01	3.13E+02	3.55E+02	8.91E-01	1.47E+00	1.60E+00	2.54E+00	7.20E+00	8.14E+00	5.02E-01	5.50E+00	6.24E+00	NA	NA	NA	
	017	1037	-36	4/29/2011	12:35	1.97E+02	3.93E+02	4.32E+02	1.41E+00	1.43E+00	1.48E+00	-1.93E+00	1.03E+01	1.25E+01	-6.75E+00	1.10E+01	1.20E+01	NA	NA	NA	
	018	1037	-36	7/28/2011	9:51	1.54E+02	3.13E+02	3.51E+02	-8.36E-01	1.20E+00	1.34E+00	-1.12E+01	6.18E+00	6.84E+00	-3.12E+00	8.10E+00	7.95E+00	NA	NA	NA	
	019	1037	-36	12/2/2011	12:12	1.40E+02	2.91E+02	3.24E+02	1.23E+00	1.76E+00	1.95E+00	-3.01E+00	9.12E+00	1.01E+01	9.25E+00	9.60E+00	1.43E+01	-3.91E+00	1.33E+01	1.51E+01	
MW-51-135	001	1352	-67.5	5/30/2007	13:00	8.24E+01	1.53E+02	1.70E+02	4.58E-01	5.53E-01	8.10E-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	1352	-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	4.35E+00	3.42E-01	3.50E+00	3.84E+00	NA	NA	NA	
	004	1352	-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	3.72E+00	-3.14E-01	3.29E+00	3.66E+00	NA	NA	NA	
	005	1352	-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	5.30E-32	1.88E+00	2.09E+00	1.43E-02	1.71E+00	1.96E+00	NA	NA	NA	
	006	1352	-67.5	8/8/2008	11:50	2.29E+02	1.39E+02	1.99E+02	5.09E-02	2.40E-01	4.57E-01	-1.08E+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	1352	-67.5	10/27/2008	10:05	7.58E+01	1.73E+02	1.99E+02	2.72E-04	5.05E-01	6.53E-01	-1.74E+00	5.26E+00	5.63E+00	3.92E+00	6.09E+00	7.65E+00	-2.05E-01	1.74E+01	2.01E+01	
	008	1352	-67.5	1/20/2009	11:02	1.31E+02	1.35E+02	1.48E+02	-3.34E-01	3.41E-01	5.34E-01	-6.92E-01	3.89E+00	4.31E+00	5.34E-01	3.66E+00	5.66E+00	-1.08E+01	1.76E+01	2.10E+01	
	009	1352	-67.5	5/7/2009	11:53	2.44E+01	1.43E+02	1.71E+02	8.54E-02	4.71E-01	5.75E-01	3.08E+00	7.04E+00	4.62E+00	-1.33E+01	5.71E+00	4.08E+00	-2.11E+01	2.24E+01	2.69E+01	
	010	1352	-67.5	8/12/2009	11:22	9.34E+01	1.61E+02	1.75E+02	-1.52E-01	4.93E-01	6.27E-01	-1.17E+00	3.75E+00	3.74E+00	2.68E+00	3.50E+00	4.25E+00	-1.50E+01	1.81E+01	2.17E+01	
	011	1352	-67.5	11/18/2009	11:35	1.30E+02	1.32E+02	1.43E+02	-5.82E-01	6.06E-01	6.17E-01	-1.52E+01	4.53E+00	5.17E+00	2.00E+00	5.09E+00	6.12E+00	1.30E+00	1.64E+01	1.88E+01	
	012	1352	-67.5	2/5/2010	11:48	4.89E+01	1.71E+02	1.98E+02	7.74E-02	6.50E-01	8.21E-01	1.07E-02	3.90E+00	4.35E+00	4.59E-02	4.51E+00	5.16E+00	NA	NA	NA	
	013	1352	-67.5	4/8/2010	11:06	5.86E+01	1.31E+02	1.50E+02	-2.39E-02	5.99E-01	7.35E-01	-7.04E-03	8.73E+00	9.88E+00	-4.95E-01	1.04E+01	1.19E+01	NA	NA	NA	
	014	1352	-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	6.82E+00	1.74E+00	6.62E+00	7.77E+00	NA	NA	NA	
	015	1352	-67.5	11/30/2010	9:57	9.53E+01	1.38E+02	1.45E+02	4.21E-01	7.13E-01	7.98E-01	-5.11E-01	4.18E+00	4.61E+00	-2.98E-01	4.20E+00	4.58E+00	NA	NA	NA	
	016	1352	-67.5	3/8/2011	12:44	8.29E+01	2.24E+02	2.62E+02	8.62E-01	1.31E+00	1.42E+00	8.60E-32	6.02E+00	6.77E+00	2.37E+00	5.96E+00	7.38E+00	NA	NA	NA	
	017	1352	-67.5	4/29/2011	13:16	0.00E+03	3.65E+02	4.35E+02	1.14E+00	1.52E+00	1.63E+00	2.52E+00	1.01E+01	1.17E+01	-5.69E-01	9.00E+00	9.56E+00	NA	NA	NA	
	018	1352	-67.5	7/28/2011	10:04	-5.63E+01	2.95E+02	3.49E+02	8.06E-01	1.71E+00	1.92E+00	4.41E+00	8.22E+00	9.83E+00	1.32E+00	9.56E+00	1.05E+01	NA	NA	NA	
	019	1352	-67.5	12/2/2011	12:50	1.32E+02	2.95E+02	3.53E+02	2.67E-01	1.64E+00	1.98E+00	6.88E+00	9.42E+00	1.25E+01	-2.78E+00	8.40E+00	9.41E+00	-6.68E+00	1.13E+01	1.52E+01	
MW-51-163	001	1627	-55	5/30/2007	14:40	1.18E+02	1.53E+02	1.69E+02	3.29E-01	1.13E+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	1627	-55	7/24/2007	14:05	4.29E+01	1.44E+02	1.66E+02	1.05E-01	4.58E-01	5.31E-01	-2.43E-01	3.44E+00	3.73E+00	3.25E-01	3.43E+00	3.63E+00	NA	NA	NA	
	004	1627	-55	11/9/2007	13:32	7.30E+01	1.53E+02	1.71E+02	2.08E-01	2.85E-01	3.12E-01	1.41E-31	3.54E+00	3.51E+00	1.11E+00	3.01E+00	3.11E+00	NA	NA	NA	
	005	1627	-55	1/8/2008	13:57	-1.99E+01	1.47E+02	1.82E+02	4.40E-01	8.23E-01	9.29E-01	-1.74E+00	2.66E+00	2.45E+00	8.69E-02	2.15E+00	2.44E+00	NA	NA	NA	
	006	1627	-55	8/8/2008	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	3.55E+00	3.78E-01	1.97E+00	3.39E+00	4.33E+00	1.26E+01	2.15E+01	
	007	1627	-55	10/27/2008	10:20	5.58E+01	1.67E+02	1.95E+02	2.55E-01	5.76E-01	6.57E-01	-1.73E+00	6.18E+00	6.74E+00	5.42E-01	5.38E+00	6.25E+00	2.11E+00	1.83E+01	2.14E+01	
	008	1627	-55	1/20/2009	11:44	4.50E+01	1.33E+02	1.48E+02	-1.96E-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	1627	-55	5/7/2009	12:09	5.58E+01	1.53E+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	1627	-55	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-31	5.43E+00	4.25E+00	-2.23E+00	5.06E+00	4.79E+00	1.89E+01	2.08E+01	
	011	1627	-55	11/18/2009	11:33	9.48E+01	1.29E+02	1.43E+02	6.98E-02	6.65E-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	1627	-55	2/5/2010	11:46	6.10E+01	1.74E+02	1.90E+02	-1.32E-01	5.76E-01	8.21E-01	-9.29E-01	9.12E+00	7.94E+00	-1.95E+00	6.03E+00	6.07E+00	NA	NA	NA	
	013	1627	-55	4/8/2010	11:31	5.35E+01	1.27E+02	1.46E+02	7.55E-02	6.06E-01	8.13E-01	2.99E+00	8.55E+00	8.74E+00	1.50E+00	7.94E+00	1.10E+01	NA	NA	NA	
	014	1627	-55	8/25/2010	13:51	8.26E+01	9.73E+01	1.05E+02	-1.38E-01	3.99E-01	5.31E-01	3.91E+00	6.72E+00	8.11E+00	8.67E-01	6.22E+00	7.26E+00	NA	NA	NA	
	015	1627	-55	11/30/2010	10:07	9.01E+01	1.31E+02	1.44E+02	-3.11E-01	6.96E-01	9.94E-01	1.23E+00	8.07E+00	4.14E+00	3.80E-01	3.94E+00	4.43E+00	NA	NA	NA	
	016	1627	-55	3/8/2011	13:01	0.00E+03	1.95E+02	2.63E+02	-5.97E-01	1.39E+00	1.98E+00	2.81E+00	6.54E+00	7.65E+00	5.35E-01	7.76E+00	8.69E+00	NA	NA	NA	
	017	1627	-55	4/29/2011	13:19	4.58E+01	3.65E+02	4.30E+02	5.27E-01	1.45E+00	1.65E+00	2.26E+00	8.40E+00	9.72E+00	5.25E-01	7.72E+00	8.87E+00	NA	NA	NA	
	018	1627	-55	7/28/2011	10:18	1.20E+02	3.13E+02	3.54E+02	-7.15E-01	1.26E+00	1.96E+00	5.34E-31	7.71E+00	8.41E+00	3.60E+00	9.69E+00	1.17E+01	NA	NA	NA	
	019	1627	-55	12/2/2011	12:26	1.71E+02	3.03E+02	3.32E+02	1.58E+00	1.81E+00	1.94E+00	2.25E+00	8.94E+00	1.15E+01	-8.56E-01	8.52E+00	1.08E+01	-3.59E+00	1.22E+01	1.38E+01	
MW-51-189	001	1892	-121.5	5/30/2007	14:00	1.81E+02	1.67E+02	1.71E+02	-2.38E-02	8.90E-01	1.11E+00	-3.62E-02	3.98E+00	3.82E+00	4.56E+00	3.57E+00	4.65E+00	NA	NA	NA	MW-51-189
	002	1892	-121.5	7/24/2007	13:15	9.49E+01	1.43E+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	1892	-121.5	10/2/2007	12:20	8.45E+03	1.70E+02	1.96E+02	-5.30E-02	2.10E-01	2.50E-01	1.38E+01	5.45E+00	2.92E+00	-4.14E-01	2.79E+00	3.04E+00	NA	NA	NA	
	004	1892	-121.5	11/9/2007	13:05	6.26E+00	1.43E+02	1.71E+02	1.93E-01	3.61E-01	4.38E-01	3.07E+00	3.27E+00	4.07E+00	8.07E-02	3.65E+00	4.05E+00	NA	NA	NA	
	005	1892	-121.5	1/8/2008	13:10	-4.92E+00	1.44E+02	1.77E+02	-3.17E-02	7.01E-01	8.20E-01	1.35E+00	2.13E+00	2.43E+00	1.42E+00	1.98E+00	2.41E+00	NA	NA	NA	
	006	1892	-121.5	8/8/2008	11:17	1.10E+02	8.97E+01	1.43E+02	-1.43E-01	3.85E-01	6.50E-01	-2.27E+00	2.13E+00	3.12E+00	-1.75E+00	2.20E+00	3.52E+00	-5.89E+00	1.15E+01	2.04E+01	
	007	1892	-121.5	10/27/2008	10:11	7.59E+01	1.74E+02	1.99E+02	5.61E-01	7.16E-01	7.51E-01	5.11E-31	6.38E+00	7.32E+00	3.04E+00	6.13E+00	7.60E+00	-6.95E+00	1.84E+01	2.17E+01	
	008	1892	-121.5	1/20/2009	11:33	3.32E+01	1.33E+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	4.26E+00	-8.33E+00	1.79E+01	2.11E+01	
	009	1892	-121.5	5/7/2009	11:55	2.36E+01	1.52E+02	1.81E+02	1.44E-01	5.33E-01	6.41E-01	1.70E+00	9.39E+00	6.25E+00	-1.22E+00	5.79E+00	6.11E+00	-3.36E+00	1.86E+01	2.14E+01	
	010	1892	-121.5	8/12/2009	11:11	2.75E+01	1.33E+02	1.60E+02	7.76E-01	8.83E-01	9.41E-01	9.35E-31	3.82E+00	4.47E+00	1.47E+00	3.84E+00	4.66E+00	-1.98E+00	2.14E+01	2.47E+01	
	011	1892	-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	6.75E+00	-2.88E-01	5.82E+00	6.43E+00	-9.17E+00	1.92E+01	2.26E+01	

IPEC00267169

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-51-189	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	6.33E-01	1.25E+00	5.70E+00	6.65E+00	-2.35E+00	6.75E+00	6.51E+00	NA	NA	NA	MW-51-189
	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	8.25E+00	NA	NA	NA	
	014	189.2	-121.5	9/25/2010	13:13	5.86E+01	9.33E+01	1.04E+02	4.40E-02	5.97E-01	7.55E-01	2.87E+00	5.64E+00	6.69E+00	-8.01E-01	5.05E+00	6.25E+00	NA	NA	NA	
	015	189.2	-121.5	11/30/2010	9:56	6.91E+01	1.29E+02	1.46E+02	1.93E-01	7.99E-01	9.31E-01	-7.45E-01	4.51E+00	4.95E+00	-3.16E-01	4.61E+00	5.06E+00	NA	NA	NA	
	016	189.2	-121.5	3/8/2011	12:30	-1.50E+01	1.93E+02	2.68E+02	-3.36E-01	1.46E+00	1.97E+00	2.77E+01*	1.47E+01	6.28E+00	2.28E-01	5.28E+00	5.75E+00	NA	NA	NA	
	017	189.2	-121.5	4/29/2011	12:52	2.32E+02	3.95E+02	4.33E+02	1.28E+00	1.50E+00	1.57E+00	-8.07E-01	5.82E+00	6.25E+00	-5.07E+00	9.48E+00	8.89E+00	NA	NA	NA	
	018	189.2	-121.5	7/28/2011	10:42	-5.69E+00	3.03E+02	3.53E+02	3.69E-02	1.66E+00	1.95E+00	2.36E+00	1.07E+01	1.02E+01	2.52E+00	1.01E+01	1.17E+01	NA	NA	NA	
	019	189.2	-121.5	12/22/2011	12:23	-5.57E+01	2.33E+02	3.29E+02	-3.34E-01	1.43E+00	1.91E+00	-4.42E+00	8.10E+00	8.53E+00	1.93E+00	8.34E+00	1.13E+01	-9.34E+00	1.94E+01	2.22E+C1	
MW-52-11	001	10	6.8	6/20/2007	12:35	1.47E+02	1.63E+02	1.84E+02	-3.50E-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	1.23E+01	1.54E+C1	MW-52-11
	002	10	6.8	8/6/2007	16:18	7.71E+01	1.73E+02	1.94E+02	5.13E-01	6.12E-01	9.38E-01	2.15E+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	3.35E+00	-2.15E+00	3.72E+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-21	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	5.52E-01	2.14E+00	5.99E+00	6.97E+00	-2.04E+00	5.91E+00	6.08E+00	NA	NA	NA	
	006	10	6.8	4/22/2011	12:10	3.34E+02	4.03E+02	4.35E+02	1.29E-01	1.35E+00	1.60E+00	2.27E+00	1.02E+01	1.17E-01	5.08E+00	9.92E+00	1.24E+01	NA	NA	NA	
	007	10	6.8	7/26/2011	12:32	3.39E+02	3.92E+02	4.21E+02	1.86E-01	1.45E+00	1.74E+00	1.71E+00	8.76E+00	9.71E-00	-2.27E+00	8.43E+00	8.63E+00	NA	NA	NA	
MW-52-18	001	17.5	-2.6	5/24/2007	10:44	1.52E+02	1.52E+02	1.65E+02	-2.20E-01	4.96E-01	7.30E-01	5.53E-31	3.19E+00	3.74E-00	3.13E+00	3.30E+00	4.22E+00	-1.09E+00	9.82E+00	1.14E+C1	MW-52-18
	002	17.5	-2.6	8/6/2007	13:45	9.73E+01	1.74E+02	1.96E+02	-7.71E-02	6.92E-01	8.93E-01	-1.48E+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	10:15	2.29E+02	2.01E+02	2.17E+02	-6.52E-02	5.57E-01	7.37E-01	-1.47E-02	7.89E+00	5.22E+00	8.60E-01	4.69E+00	5.24E+00	NA	NA	NA	
	005	17.5	-2.6	5/5/2010	16:19	3.21E+02	1.71E+02	1.83E+02	8.00E-02	4.19E-01	5.26E-01	1.60E+00	5.61E+00	6.44E-00	5.40E-01	5.22E+00	6.22E+00	NA	NA	NA	
	006	17.5	-2.6	4/22/2011	12:16	7.21E+01	3.75E+02	4.35E+02	1.37E+00	1.39E+00	1.42E+00	3.81E+00	1.29E+01	9.01E-00	1.45E+00	9.74E+00	9.96E+00	NA	NA	NA	
	007	17.5	-2.6	7/26/2011	14:39	2.52E+02	3.87E+02	4.29E+02	1.66E+00	1.69E+00	1.76E+00	3.80E+00	6.45E+00	8.08E-00	-2.24E+00	8.10E+00	7.84E+00	NA	NA	NA	
MW-52-48	001	48	-33.1	5/24/2007	11:35	7.22E+01	1.43E+02	1.67E+02	-3.51E-01	7.44E-01	1.01E+00	3.66E-21	2.94E+00	3.32E-00	-9.91E-01	3.03E+00	3.11E+00	-2.74E+00	8.16E+00	9.55E+C0	MW-52-48
	002	48	-33.1	8/6/2007	14:00	1.15E+02	1.75E+02	1.96E+02	-5.59E-01	4.83E-01	7.33E-01	7.05E-31	3.24E+00	3.75E-00	4.31E-01	3.29E+00	3.75E+00	NA	NA	NA	
	004	48	-33.1	5/7/2009	11:35	1.43E+02	9.84E+01	1.00E+02	4.55E-02	6.02E-01	7.32E-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	1.50E+02	1.65E+02	1.82E+02	6.40E-01	6.58E-01	6.30E-01	-6.17E-01	6.04E+00	6.72E-00	-1.90E-01	5.13E+00	5.67E+00	NA	NA	NA	
	006	48	-33.1	4/22/2011	12:18	1.36E+02	3.82E+02	4.36E+02	1.69E-01	1.37E+00	1.62E+00	-4.52E+00	7.58E+00	7.31E-00	1.35E+00	7.80E+00	9.17E+00	NA	NA	NA	
	007	48	-33.1	7/26/2011	13:08	7.88E+01	3.65E+02	4.21E+02	2.28E-01	1.20E+00	1.46E+00	2.34E+00	9.60E+00	1.07E-01	-1.68E-01	8.35E+00	1.01E+01	NA	NA	NA	
MW-52-64	001	64	-49.1	5/24/2007	14:44	3.82E+02	1.72E+02	1.98E+02	3.20E-01	7.63E-01	9.77E-01	-1.03E+00	3.42E+00	3.43E-00	6.00E-01	3.24E+00	3.12E+00	-2.85E+00	9.12E+00	1.07E+C1	MW-52-64
	002	64	-49.1	8/6/2007	15:50	3.72E+01	1.71E+02	1.96E+02	-1.70E-02	7.22E-01	9.23E-01	5.10E-31	3.50E+00	3.63E-00	1.00E+00	6.00E+00	4.12E+00	NA	NA	NA	
	004	64	-49.1	5/7/2009	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	4.35E+00	1.24E+00	4.25E+00	4.80E+00	NA	NA	NA	
	005	64	-49.1	5/5/2010	12:52	7.57E+01	1.61E+02	1.81E+02	-2.23E-01	7.07E-01	9.13E-01	-1.17E+00	5.21E+00	4.95E-00	1.49E+00	4.05E+00	4.96E+00	NA	NA	NA	
	006	64	-49.1	4/22/2011	15:23	-2.26E+01	3.53E+02	4.32E+02	5.12E-01	1.13E+00	1.27E+00	1.87E+00	6.72E+00	7.72E-00	-8.05E+00	8.28E+00	6.18E+00	NA	NA	NA	
	007	64	-49.1	7/27/2011	10:45	1.35E+02	3.81E+02	4.31E+02	-4.58E-01	8.67E-01	1.27E+00	2.48E+00	7.17E+00	8.34E-00	6.66E-01	8.13E+00	9.05E+00	NA	NA	NA	
MW-52-113	004	NA	NA	4/30/2009	12:03	1.15E+02	1.03E+02	1.06E+02	-3.34E-01	4.29E-01	6.39E-01	2.00E+00	8.58E+00	5.72E-00	1.27E+00	4.68E+00	5.65E+00	NA	NA	NA	MW-52-113
MW-52-122	001	122	-107.1	5/24/2007	14:55	6.78E+01	1.47E+02	1.66E+02	-4.34E-01	6.62E-01	9.54E-01	2.52E+00	3.59E+00	3.62E-00	-1.76E+00	3.38E+00	3.25E+00	-1.94E+00	9.63E+00	1.13E+C1	MW-52-122
	002	122	-107.1	8/6/2007	12:05	4.42E+01	1.71E+02	1.96E+02	-4.19E-01	7.10E-01	9.50E-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	13:23	8.81E+01	8.63E+01	1.44E+02	1.21E-01	2.94E-01	5.22E-01	-1.23E+00	2.00E+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	9.46E+01	1.64E+02	1.84E+02	1.59E-01	4.66E-01	5.50E-01	3.04E-32	5.33E+00	6.01E-00	-3.23E+00	6.25E+00	6.14E+00	NA	NA	NA	
	007	122	-107.1	7/26/2011	13:36	-2.19E+01	3.43E+02	4.19E+02	1.05E-01	1.17E+00	1.47E+00	-5.42E+00	7.02E+00	7.52E-00	0.00E-01	6.04E+00	7.02E+00	NA	NA	NA	
MW-52-162	001	161.5	-145.6	5/24/2007	11:55	2.82E+02	1.95E+02	2.03E+02	5.15E-01	4.81E-01	8.12E-01	5.80E-01	3.59E+00	3.22E-00	1.59E+00	3.15E+00	3.88E+00	7.54E-01	9.75E+00	1.13E+C1	MW-52-162
	002	161.5	-145.6	8/6/2007	11:30	2.11E+02	1.83E+02	1.95E+02	1.53E-02	4.79E-01	6.13E-01	3.61E-32	3.44E+00	3.77E-00	-3.73E-02	3.12E+00	3.52E+00	NA	NA	NA	
	003	161.5	-145.6	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	-145.6	4/30/2009	12:06	4.92E+02	4.53E+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	-145.6	5/5/2010	12:39	2.50E+02	1.70E+02	1.83E+02	-7.36E-02	4.15E-01	5.56E-01	-1.54E+00	5.52E+00	5.95E-00	3.03E+00	5.68E+00	7.13E+00	NA	NA	NA	
	006	161.5	-145.6	4/22/2011	10:18	1.85E+02	3.84E+02	4.29E+02	-7.50E-01	9.50E-01	1.42E+00	1.47E+00	8.40E+00	9.68E-00	1.95E-02	1.00E+01	1.10E+01	NA	NA	NA	
	007	161.5	-145.6	7/26/2011	11:33	5.16E+02	4.23E+02	4.22E+02	3.77E-03	1.21E+00	1.57E+00	4.29E-32	8.34E+00	9.09E-00	-2.32E+00	9.87E+00	1.00E+01	NA	NA	NA	
MW-52-181	001	181.	-165.1	5/24/2007	12:06	2.48E+02	1.94E+02	2.04E+02	-5.15E-01	5.01E-01	7.58E-01	-5.55E-01	3.50E+00	3.52E+00	-2.81E-01	3.44E+00	4.15E+00	-2.23E-01	1.01E+01	1.17E+C1	MW-52-181
	002	181.	-165.1	8/6/2007	11:40	1.19E+02	1.77E+02	1.97E+02	5.84E-02	5.50E-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.	-165.1	4/29/2008	10:24	1.56E+02	8.77E+01	1.44E+02	1.62E-01	2.44E-01	4.32E-01	1.02E+00	2.25E+00	3.05E-00	4.11E-01	2.12E+00	4.63E+00	NA	NA	NA	
	004	181.	-165.1	4/30/2009	12:07	1.47E+02	9.95E+01	1.01E+02	4.25E-02	5.36E-01	7.13E-01	2.57E+00	5.83E+00	3.88E-00	1.51E+00	4.17E+00	5.27E+00	NA	NA	NA	
	005	181.	-165.1	5/5/2010	12:47	2.18E+02	1.73E+02	1.84E+02	2.80E-01	4.79E-01	4.57E-01	-2.64E-01	5.64E+00	6.37E-00	-2.38E+00	6.40E+00	6.61E+00	NA	NA	NA	
	006	181.	-165.1	4/22/2011	10:22	2.45E+02	3.95E+02	4.33E+02	1.18E+00	1.42E+00	1.48E+00	6.46E+01	2.68E+01	1.22E-01	-1.05E+00	1.22E+01	1.32E+01	NA	NA	NA	
	007	181.	-165.1	7/26/2011	11:43	2.41E+02	3.87E+02	4.22E+02	3.57E-01	1.28E+00	1.54E+00	-1.92E+00	7.50E+00	7.52E-00	-1.27E+00	9.39E+00	9.97E+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+C1	MW-53-82
	001	75	-4.7	8/23/2006	12:50	1.32E+04	1.11E+03	6.12E+02	NA	NA	NA	9.33E-31	5.78E+00	6.37E-00	1.36E+00	5.70E+00	6.30E+00	NA	NA	NA	
	002	75	-4.7	11/9/2006	11:15	4.54E+02	1.43E+02	1.40E+02	8.00E-02	8.10E-01	9.30E-01	-1.23E+00	3.00E+00	5.63E-00	-1.30E+00	4.00E+00	4.20E+00	4.60E+00	4.60E+00	4.60E+C0	
	003	75	-4.7	6/22/2007	15:30	8.58E+03	1.05E+03	4.31E+02	3.58E+00	1.45E+00	1.04E+00	3.8.E+00	3.78E+00	4.53E-00	1.95E+00	3.62E+00	4.63E+00	4.53E+00	1.54E+01	1.77E+C1	
	004	75	-4.7	9/9/2007	11:31	7.76E+02	2.03E+02	2.04E+02	-3.41E-02	6.07E-01	8.32E-01	5.29E-31	2.33E+00	2.75E-00	-1.05E+00	2.17E+00	2.17E+00	-2.21E+00	1.95E+01	2.36E+C1	
	005	75	-4.7	10/24/2007	13:53	1.11E+03	1.71E+02	2.03E+02	2.35E-01	3.11E-01	3.13E-01	3.07E-31	2.71E+00	3.05E-00	1.06E+00	2.74E+00	2.38E+00	1.59E+00	1.09E+01	2.41E+C1	
	006	75	-4.7	1/21/2008	12:52	9.42E+02	1.85E+02	1.71E+02	2.29E-01	4.23E-01	4.27E-01	9.00E+00	5.42E+00	3.23E-00	-1.36E+00	2.84E+00	3.34E+00	1.85E+01	1.85E+01	2.11E+C1	
	008	75	-4.7	8/4/2008	12:25	1.21E+03	1.84E+02	1.91E+02	6.95E-01	3.04E-01	3.44E-01	2.79E+00	2.26E+00	4.15E-00	2.55E-02	2.34E+00	3.58E+00	1.25E+01	1.24E+01	2.09E+C1	
	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	7.55E-00	-1.78E+00	6.33E+00	6.63E+00	-4.83E+00	1.65E+01	1.92E+C1	
	010	75	-4.7	1/26/2009	12:00	4.26E+03	3.05E+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	8.34E+00	1.64E+01	1.84E+C1	
	011	75	-4.7	4/14/2009	14:58	1.75E+03	3.14E+02	1.36E+02	-3.33E-01	7.29E-01	8.27E-01	7.76E+00	6.60E+00	4.42E-00	1.28E-01	4.34E+00	4.84E+00	-1.09E+00	1.85E+01	2.16E+C1	
	012	75	-4.7	7/21/2009	16:26	9.82E+02	2.67E+02	2.04E+02	1.67E-01	8.31E-01	9.31E-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+C1	
	013	75	-4.7	10/27/2009	12:01	6.54E+02	1.95E+02	1.87E+02	-1.39E-01	3.56E-01	4.26E-01	1.5.E+00	2.90E+00	3.42E-00	2.42E+00	4.13E+00	4.85E+00	-9.46E+00	1.79E+01	2.10E+C1	
	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	-9.96E-01	4.75E+00	4.91E+00	-1.24E+01	1.76E+01	2.09E+C1	
	015	75	-4.7	4/15/2010	15:14	4.71E+03	6.53E+02	3.96E+02	4.06E-01	7.37E-01	9.29E-01	4.40E+00	1.27E+01	1.51E-01	-1.95E+00	1.13E+01	1.13E+01	1.39E+00	1.09E+01	2.19E+C1	
	016	75	-4.7	7/30/2010	12:32	2.35E+03	2.65E+02	1.27E+02	3.34E-01	3.83E-01	4.30E-01	3.03E+00	8.36E+00	8.45E-00	1.90E+00	8.00E+00	1.45E+01	1.77E+01	2.23E+01		
	017	75	-4.7	10/27/2010	12:07	2.59E+03	2.73E+02	1.10E+02	8.07E-01	7.90E-01	8.25E-01	-3.74E-02	5.82E+00	6.57E-00	1.14E+01	6.23E+00	7.05E+00	NA	NA	NA	
	018	75	-4.7	3/3/2011	11:53	5.95E+02	3.75E+02	3.73E+02	1.61E+00	1.83E+00	1.91E+00	3.67E+00	6.18E+00	7.67E-00	-1.88E+00	7.09E+00	7.25E+00	-7.68E+00	1.59E+01	1.85E+C1	
	019	75	-4.7	4/18/2011	12:45	6.24E+02	4.53E+02	4.50E+02	4.40E-01	1.45E+00	1.67E+00	-4.57E+00	9.82E+00	9.83E-00	3.12E+00	8.58E+00	1.07E+01	-5.86E-01	1.43E+01	1.72E+C1	
	021	75	-4.7	8/1/2011	11:11	7.16E+02	3.84E+02	3.71E+02	-5.52E-01	7.86E-01	1.06E+00	-2.45E+00	7.38E+00	7.34E-00	-3.40E-01	8.49E+00	9.05E+00	8.23E+00	1.80E+01	1.98E+C1	
	022	75	-4.7	11/2/2011	11:26	2.27E+02	4.53E+02	5.00E+02	-2.42E-01	1.05E+00	1.49E+00	-1.12E+00	6.78E+00	7.87E-00	-6.95E-01	8.73E+00	1.07E+01	-4.95E-01	1.24E+01	1.41E+C1	
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	9.43E-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	3.12E-00	-3.50E-01	2.76E+00	3.30E+00	2.71E+0:	1.32E+01	1.30E+C1	

IPEC00267170

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

Well ID[1, 4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]													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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-53-120	003	-109.8	-39.5	6/27/2007	14:22	9.51E+03	1.11E+03	4.32E+02	3.47E+01	5.69E+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	1.33E+01	1.47E+01	MW-53-120
	004	-109.8	-39.5	8/9/2007	12:45	8.35E+03	1.02E+03	4.59E+02	3.70E+01	5.18E+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	
	005	-109.8	-39.5	10/24/2007	13:38	7.40E+03	9.23E+02	4.02E+02	3.61E+01	5.27E+00	4.32E-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	
	006	-109.8	-39.5	1/21/2008	10:43	7.48E+03	3.43E+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	5.21E+03	3.33E+02	1.43E+02	3.11E+01	1.73E+00	6.73E-01	-1.32E+00	1.98E+00	3.12E-00	1.333+00	2.15E+00	2.99E+00	2.22E+01	1.23E+01	2.08E+01	
	009	-109.8	-39.5	8/4/2008	10:15	5.80E+03	3.45E+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	2.23E+00	2.26E+00	2.55E+01	1.30E+01	2.11E+01	
	010	-109.8	-39.5	9/5/2008	10:55	5.76E+03	5.92E+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	5.77E+03	5.39E+02	1.66E+02	2.33E+01	2.04E+00	3.30E-01	2.73E+00	4.75E+00	5.74E-00	0.000+00	9.13E+00	9.22E+00	5.32E+00	1.69E+01	1.93E+01	
	012	-109.8	-39.5	11/17/2008	10:31	5.34E+03	3.23E+02	1.72E+02	4.25E+01	5.63E+00	6.74E-01	3.25E-31	4.72E+00	5.23E-00	-1.96E-02	4.09E+00	4.42E+00	2.12E+01	2.03E+01	2.21E+01	
	013	-109.8	-39.5	1/26/2009	12:43	5.36E+03	3.23E+02	1.92E+02	2.64E+01	2.37E+00	7.50E-01	3.60E-01	4.53E+00	5.12E-00	2.322+00	4.34E+00	5.36E+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	2.27E+01	2.07E+00	7.43E-01	-9.24E-02	2.48E+00	1.65E-00	-7.87E-01	1.66E+00	1.58E+00	1.14E+01	1.73E+01	1.91E+01	
	015	-109.8	-39.5	4/14/2009	13:08	5.55E+03	5.43E+02	1.36E+02	2.56E+01	2.15E+00	5.56E-01	-2.25E+00	6.15E+00	4.12E-00	-6.33E-01	3.86E+00	4.10E+00	8.56E+00	1.83E+01	2.07E+01	
	016	-109.8	-39.5	7/21/2009	13:18	5.40E+03	5.13E+02	2.07E+02	4.00E-01	5.44E-01	5.23E-01	-1.63E+00	3.42E+00	3.59E-00	3.123+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	5.35E+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	6.31E+00	1.86E+01	2.10E+01	
	018	-109.8	-39.5	2/16/2010	11:51	4.56E+03	2.87E+02	1.53E+02	3.54E+01	3.35E+00	7.41E-01	-4.00E-01	5.82E+00	6.54E-00	-3.20E-01	6.23E+00	6.96E+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	2.65E+00	9.36E-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	3.33E+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	
	021	-109.8	-39.5	10/27/2010	12:48	3.91E+03	3.33E+02	1.11E+02	2.56E+01	2.91E+00	7.32E-01	2.32E+00	5.07E+00	6.02E-00	-9.52E-01	5.46E+00	7.76E+00	NA	NA	NA	
	022	-109.8	-39.5	3/3/2011	12:00	3.34E+03	7.13E+02	3.09E+02	2.55E+01	2.76E+00	1.13E+00	2.30E+00	7.32E+00	0.42E-00	-2.43E+00	0.13E+00	0.13E+00	1.30E+01	1.70E+01	1.87E+01	
	023	-109.8	-39.5	4/18/2011	11:52	4.11E+03	7.72E+02	4.75E+02	3.55E+01	4.56E+00	1.67E+00	1.38E+00	8.83E+00	9.99E-00	4.87E-01	9.24E+00	1.02E+01	1.76E+01	1.77E+01	1.87E+01	
	025	-109.8	-39.5	8/19/11	10:00	4.44E+03	6.15E+02	3.71E+02	3.30E+01	5.22E+00	1.94E+00	-2.07E+00	8.49E+00	8.67E-00	-5.16E-01	9.76E+00	1.01E+01	1.45E+01	1.07E+01	1.07E+01	
	026	-109.8	-39.5	11/2/2011	11:56	8.22E+03	9.27E+02	4.67E+02	4.05E+01	5.16E+00	1.52E+00	4.60E+00	8.52E+00	1.15E-01	-1.89E-01	7.89E+00	1.03E+01	2.58E+01	1.93E+01	2.17E+01	
MW-54-37	001	36.5	-23.4	5/3/2007	16:19	8.31E+02	3.14E+02	3.02E+02	1.25E+01	2.12E+00	7.34E-01	2.44E+00	3.63E+00	4.42E-00	-1.43E+00	2.71E+00	2.51E+00	6.39E+00	1.93E+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	10/9/2007	13:25	1.04E+03	4.25E+02	3.66E+02	6.19E+00	1.37E+00	6.14E-01	5.04E-31	3.30E+00	3.84E-00	6.61E-01	3.54E+00	4.15E+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	7.43E-32	2.81E+00	3.11E-00	1.033+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	5.10E+00	1.44E+00	5.39E-01	-9.28E-01	2.12E+00	3.27E-00	-8.38E-01	2.26E+00	4.05E+00	3.37E+00	1.24E+01	2.12E+01	
	006	36.5	-23.4	7/22/2008	17:00	9.50E+02	1.03E+02	1.31E+02	6.20E+00	7.70E-01	4.23E-01	1.34E+00	2.22E+00	3.94E-00	-4.41E-01	2.09E+00	3.34E+00	1.42E+00	1.26E+01	2.92E+01	
	007	36.5	-23.4	11/1/2008	13:16	1.25E+03	2.07E+02	1.73E+02	7.33E+00	1.45E+00	5.76E-01	-2.53E+00	6.27E+00	6.07E-00	2.812+00	5.14E+00	6.50E+00	2.40E+00	1.92E+01	2.21E+01	
	008	36.5	-23.4	2/3/2009	15:34	1.16E+03	1.89E+02	1.64E+02	5.53E+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	2.73E+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	2.25E+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	3.25E+02	2.37E+02	5.53E+00	1.18E+00	6.38E-01	-3.76E-01	3.94E+00	4.22E-00	8.01E-01	4.42E+00	4.53E+00	5.30E+00	2.11E+01	2.41E+01	
	011	36.5	-23.4	11/3/2009	14:35	1.50E+03	2.99E+02	2.00E+02	5.77E+00	1.09E+00	4.56E-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	5.55E-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	6.57E-01	-3.67E+00	8.43E+00	8.55E-00	1.693+00	9.49E+00	1.14E+01	3.51E+00	2.07E+01	2.36E+01	
	014	36.5	-23.4	8/4/2010	14:32	1.21E+03	2.13E+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	
	015	36.5	-23.4	11/23/2010	14:47	1.43E+03	2.27E+02	1.26E+02	4.21E+00	1.42E+00	9.34E-01	-2.02E+00	5.46E+00	5.82E-00	-6.89E-01	6.25E+00	6.93E+00	-2.26E+00	1.81E+01	2.15E+01	
	016	36.5	-23.4	2/7/2011	14:10	1.33E+03	4.83E+02	3.76E+02	4.68E+00	1.77E+00	1.26E+00	-1.42E+00	5.24E+00	5.67E-00	3.12E-01	6.62E+00	7.04E+00	-2.81E+00	1.52E+01	1.82E+01	
	017	36.5	-23.4	4/12/2011	12:02	5.16E+03	8.43E+02	4.76E+02	4.51E+00	2.00E+00	1.02E+00	2.92E+00	0.26E+00	0.26E-00	2.502+00	0.26E+00	1.16E+00	1.43E+01	1.65E+01	
	018	36.5	-23.4	7/18/2011	13:45	2.79E+01	1.67E+03	4.43E+02	4.34E+00	2.19E+00	1.35E+00	1.17E+00	6.36E+00	6.58E-00	4.072+00	9.21E+00	1.05E+01	1.56E+01	1.91E+01	2.07E+01	
	019	36.5	-23.4	8/15/2011	9:25	3.13E+04	1.75E+03	1.98E+02	2.75E+01	1.60E+00	1.88E+00	5.08E-31	6.69E+00	7.58E-00	3.362+00	7.56E+00	9.28E+00	-1.05E+01	1.66E+01	1.96E+01	
	020	36.5	-23.4	12/6/2011	10:37	1.40E+04	1.02E+03	3.73E+02	4.48E+00	2.07E+00	1.92E+00	-6.25E+00	9.72E+00	1.03E-01	4.84E-01	8.94E+00	1.14E+01	-5.68E+00	1.25E+01	1.43E+01	
MW-54-58	031	57.5	-44.4	5/3/2007	16:45	7.50E+02	3.11E+02	3.02E+02	2.22E+00	9.99E-01	7.32E-01	-3.77E-01	2.81E+00	3.07E-00	1.15E-01	2.71E+00	3.05E+00	7.50E+00	1.83E+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	10/9/2007	13:35	5.51E+02	2.03E+02	1.94E+02	4.38E-01	8.43E-01	9.56E-01	-2.08E-01	3.03E+00	3.42E-00	3.56E-01	2.96E+00	3.35E+00	2.39E+00	1.59E+01	1.81E+01	
	004	57.5	-44.4	1/15/2008	13:45	6.47E+02	4.43E+02	4.18E+02	2.32E+00	1.05E+00	8.13E-01	2.16E+00	4.59E+00	3.18E-00	-9.34E-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	1.34E+02	1.43E+02	1.69E+00	4.91E-01	5.77E-01	8.60E-31	2.13E+00	3.70E-00	1.663+00	2.46E+00	4.54E+00	9.78E-01	1.27E+01	2.00E+01	
	006	57.5	-44.4	7/22/2008	17:02	5.78E+02	9.64E+01	1.31E+02	1.71E+00	5.24E-01	6.47E-01	3.78E-31	2.07E+00	3.59E-00	-1.41E-01	2.07E+00	4.23E+00	1.37E+00	1.69E+01	2.82E+01	
	007	57.5	-44.4	11/1/2008	13:02	6.29E+02	1.03E+02	1.74E+02	2.02E+00	1.65E+00	5.27E-01	-7.43E-01	3.71E+00	3.02E-00	-1.72E+00	3.50E+00	3.31E+00	3.91E+00	1.91E+01	2.15E+01	
	008	57.5	-44.4	2/3/2009	14:53	6.82E+02	1.71E+03	1.66E+02	1.58E+00	8.55E-01	7.24E-01	9.58E-31	2.78E+00	3.22E-00	4.22E-01	2.94E+00	3.36E+00	3.05E+00	1.95E+01	2.27E+01	
	009	57.5	-44.4	5/6/2009	12:13	6.58E+02	2.74E+02	1.78E+02	2.10E+00	8.60E-01	6.24E-01	2.19E+00	6.09E+00	4.05E-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	11/3/2009	14:54	8.38E+02	2.43E+02	2.03E+02	1.51E+00	7.62E-01	6.33E-01	3.24E+00	5.67E+00	6.89E-00	-1.36E+00	5.29E+00	5.52E+00	7.35E+00	1.83E+01	2.07E+01	
	012	57.5	-44.4	2/11/2010	11:48	9.34E+02	1.74E+02	1.53E+02	1.38E+00	8.76E-01	7.29E-01	3.86E-31	5.50E+00	6.29E-00	1.083+00	7.15E+00	7.82E+00	-1.32E+01	1.83E+01	2.23E+01	
	013	57.5	-44.4	5/3/2010	14:23	1.11E+03	2.23E+02	1.42E+02	1.44E+00	8.33E-01	6.31E-01	5.00E-31	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	14:45	7.51E+02	1.74E+02	1.28E+02	1.66E+00	6.88E-01	6.20E-01	-3.93E+00	9.51E+00	9.85E-00	8.15E-01	1.14E+01	1.32E+01	-5.88E-01	1.44E+01	1.70E+01	
	015	57.5	-44.4	11/23/2010	14:55	8.21E+02	1.83E+02	1.23E+02	2.67E+00	1.13E+00	9.76E-01	3.83E+00	6.50E+00	7.88E-00	2.753+00	6.77E+00	8.00E+00	-3.94E+00	1.86E+01	2.21E+01	
	016	57.5	-44.4	2/7/2011	14:22	9.50E+02	4.53E+02	3.92E+02	1.60E+00	1.34E+00	1.20E+00	-4.20E-02	7.14E+00	7.94E-00	-2.21E+00	8.04E+00	8.02E+00	-4.69E+00	1.60E+01	1.92E+01	
	017	57.5	-44.4	4/12/2011	12:09	9.24E+02	5.23E+02	4.79E+02	1.15E+00	1.84E+00	2.01E+00	1.70E+00	8.58E+00	9.66E-00	1.142+00	8.74E+00	9.05E+00	5.31E+00	1.53E+01	1.78E+01	
	018	57.5	-44.4	7/18/2011	13:33	2.48E+03	6.12E+02	4.44E+02	1.49E+00	1.21E+00	1.14E+00	-1.92E+00	8.85E+00	9.27E-00	2.35E-01	9.09E+00	1.01E+01	1.33E+01	1.97E+01	2.13E+01	
	019	57.5	-44.4	8/15/2011	9:47	4.73E+03	6.63E+02	2.07E+02	-1.32E-01	9.75E-01	1.31E+00	-1.08E+00	8.61E+00	8.19E-00	-8.43E-01	9.45E+00	1.01E+01	2.37E+00	1.84E+01	2.07E+01	
	020	57.5	-44.4	12/6/2011	10:23	4.83E+03	6.43E+02	3.70E+02	1.60E+00	1.80E+00	1.91E+00	9.43E-31	4.23E+00	5.14E-00	1.723+00	4.56E+00	5.85E+00	2.56E+00	1.25E+01	1.40E+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	8.36E-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	9.53E+02	4.29E+02	3.69E+02	1.35E+01	1.47E+00	8.37E-01	0.00E+00	4.68E+00	4.49E-00	2.963+00	4.02E+00	5.06E+00	-3.63E+00	1.86E+01	2.17E+01	
	003	123	-109.9	10/9/2007	12:09	7.51E+02	3.87E+02	3.62E+02	1.16E+01	1.88E+00	8.13E-01	4.02E-32	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	5.53E+02	4.26E+02	4.18E+02	9.56E+00	1.92E+00	7.51E-01	8.26E-31	3.48E+00	3.98E-00	4.41E-01	3.90E+00	3.42E+00	6.36E+00	2.22E+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	5.88E-01	-1.23E+00	2.22E+00	3.42E-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	-2.02E-01	2.22E+00	3.72E-00	-2.93E+00	2.52E+00	4.33E+00	1.57E+01	2.73E+01		
	007	123	-109.9	11/1/2008	11:03	5.80E+02	1.77E+02	1.71E+02	1.26E+01	2.10E+00	7.36E-01	6.72E-01	5.14E+00	5.51E-00	2.633+00	4.29E+00	5.62E+00	-1.68E+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	5.51E+00	1.15E+00	5.70E-01	2.93E-31	3.98E+00	3.58E-00	5.33E-02	3.69E+00	3.52E+00	9.09E-01	2.06E+01	2.30E+01	
	009	123	-109.9	5/6/2009	12:40	6.94E+02	2.23E+02	1.78E+02	3.64E+00	1.00E+00	5.36E-01	-1.78E+00	5.94E+00	3.96E-00	2.063+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	5.28E-31	3.50E+00	4.05E-00	2.36E-01	3.27E+00	3.76E+00	1.79E+00	2.11E+01	2.41E+01	
	011	123	-109.9	11/3/2009	14:59	7.49E+02	2.43E+02	2.04E+02	3.77E+00	1.13E+00	8.78E-01	1.12E-31	1.25E+01	7.48E-00	6.153+00	9.53E+00	7.53E+00	-1.31E+01	2.13E+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	7.54E-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	1.05E+01	-6.51E+00	1.94E+01	2.25E+01	
	014	123	-109.9	8/4/2010	14:49	7.83E+02	1.83E+02	1.28E+02	2.58E+00	7.55E-01	4.15E-01	1.53E+00	9.99E+00	1.15E-01	-9.37E-01	8.21E+00	8.72E+00	-5.12E+00	1.64E+01	1.97E+01	

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2011 FINAL Table 5 - Historic Groundwater Analytical Results.xlsx,
2011 Table 5

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[4]													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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-54-123	015	123	-109.9	11/23/2010	15:12	8.12E+02	1.83E+02	1.22E+02	7.65E+00	1.46E+00	9.15E-01	2.19E+00	6.74E+00	7.78E-00	-1.25E+00	6.18E+00	6.69E+00	9.76E+00	1.91E+01	2.15E+01	MW-54-123
	016	123	-109.9	2/../2011	14:11	1.38E+03	4.63E+02	3.90E+02	2.56E+00	1.35E+00	1.08E+00	-3.56E-01	6.02E+00	6.69E-00	-3.66E-03	5.16E+00	5.75E+00	2.50E+00	1.66E+01	1.87E+01	
	017	123	-109.9	4/12/2011	12:22	8.24E+02	4.93E+02	4.77E+02	3.44E+00	1.96E+00	1.72E+00	-5.24E+00	8.14E+00	7.63E-00	1.86E+00	8.04E+00	9.55E+00	-3.35E+00	1.43E+01	1.75E+01	
	018	123	-109.9	7/18/2011	14:06	5.70E+02	4.44E+02	4.46E+02	7.16E-01	1.02E+00	1.07E+00	1.92E+00	9.66E+00	1.05E-01	3.87E-02	6.30E+00	6.97E+00	6.27E+00	1.84E+01	2.04E+01	
	019	123	-109.9	8/15/2011	9:55	1.21E+03	3.75E+02	2.00E+02	3.74E+00	2.03E+00	1.78E+00	5.50E-31	8.46E+00	9.31E-00	-5.09E-01	8.88E+00	9.45E+00	-3.43E+00	1.94E+01	2.22E+01	
	020	123	-109.9	12/6/2011	10:37	3.92E+03	6.03E+02	3.71E+02	1.55E+00	1.84E+00	1.95E+00	-1.21E+00	4.38E+00	4.89E-00	1.04E+00	5.01E+00	6.06E+00	5.31E+00	1.23E+01	1.41E+01	
MW-54-144	021	144	-133.9	5/3/2007	14:31	1.34E+03	5.64E+02	4.68E+02	1.11E+01	2.42E+00	6.97E-01	-1.34E+00	3.62E+00	3.75E-00	5.23E-01	3.36E+00	3.84E+00	4.54E+00	1.63E+01	1.93E+01	MW-54-144
	022	144	-133.9	7/31/2007	13:33	1.89E+03	5.07E+02	2.66E+02	1.52E+01	1.98E+00	6.71E-01	-1.12E+00	2.90E+00	3.03E-00	1.02E-02	3.33E+00	3.77E+00	-6.13E+00	1.89E+01	2.23E+01	
	023	144	-133.9	10/../2007	12:12	1.54E+03	4.73E+02	3.62E+02	1.50E+01	2.15E+00	7.59E-01	3.53E-31	2.05E+00	3.35E-00	-4.41E-01	3.30E+00	3.86E+00	4.35E-01	1.54E+01	1.70E+01	
	024	144	-133.9	1/15/2008	11:22	1.40E+03	5.31E+02	4.16E+02	1.53E+01	2.34E+00	8.18E-01	3.67E+00	5.04E+00	4.39E-00	4.86E-02	3.96E+00	4.34E+00	9.31E+00	2.21E+01	2.54E+01	
	025	144	-133.9	5/7/2008	10:20	1.15E+03	1.64E+02	1.43E+02	1.59E+01	1.31E+00	7.15E-01	-9.63E-01	2.26E+00	3.61E-00	-1.06E+00	2.77E+00	3.65E+00	-2.00E+00	1.21E+01	2.11E+01	
	026	144	-133.9	7/22/2008	15:35	1.13E+03	1.13E+02	1.31E+02	1.69E+01	1.23E+00	5.31E-01	1.57E+00	1.91E+00	3.48E-00	-4.98E-01	2.43E+00	3.45E+00	1.11E+0:	1.69E+01	2.87E+01	
	027	144	-133.9	11/../2008	11:06	1.14E+03	2.03E+02	1.72E+02	2.02E+01	2.27E+00	4.59E-01	-6.18E-01	3.90E+00	4.33E-00	5.67E-01	5.17E+00	5.96E+00	4.38E+00	2.09E+01	2.39E+01	
	028	144	-133.9	2/3/2009	12:41	1.13E+03	2.03E+02	1.77E+02	1.44E+01	1.74E+00	6.51E-01	-5.38E-03	3.15E+00	3.45E-00	-2.00E-02	2.91E+00	3.20E+00	2.21E+00	2.37E+01	2.76E+01	
	029	144	-133.9	5/6/2009	10:23	1.45E+03	2.91E+02	1.78E+02	1.46E+01	1.85E+00	5.35E-01	-1.95E+00	4.97E+00	3.31E-00	5.27E-01	3.55E+00	5.90E+00	-5.83E+00	1.91E+01	2.21E+01	
	030	144	-133.9	8/4/2009	11:10	1.29E+03	3.13E+02	2.35E+02	1.43E+01	1.74E+00	7.22E-01	5.70E-31	2.91E+00	3.33E-00	-1.51E+00	3.72E+00	3.66E+00	1.41E+0:	2.24E+01	2.50E+01	
	031	144	-133.9	11/../2009	12:13	1.40E+03	2.83E+02	2.03E+02	1.51E+01	1.83E+00	7.72E-01	-1.63E+00	4.38E+00	4.54E-00	-1.71E+00	3.12E+00	5.42E+00	-5.64E+00	1.92E+01	2.24E+01	
	032	144	-133.9	2/10/2010	10:37	1.20E+03	1.83E+02	1.53E+02	1.44E+01	2.07E+00	7.30E-01	-5.02E-01	9.22E+00	1.01E-01	-1.77E+00	7.02E+00	7.26E+00	-1.11E+01	1.83E+01	2.23E+01	
	033	144	-133.9	5/3/2010	11:41	1.20E+03	2.43E+02	1.45E+02	1.17E+01	2.04E+00	6.23E-01	-3.03E+00	7.11E+00	7.03E-00	-4.66E+00	8.03E+00	6.97E+00	-6.23E+00	2.11E+01	2.46E+01	
	034	144	-133.9	8/4/2010	11:44	1.44E+03	2.23E+02	1.33E+02	1.17E+01	1.42E+00	4.70E-01	3.96E+00	1.13E+01	1.41E-01	1.72E+00	8.79E+00	1.06E+01	1.78E+00	1.89E+01	2.21E+01	
	035	144	-133.9	11/23/2010	12:30	1.34E+03	2.15E+02	1.21E+02	1.08E+01	1.36E+00	5.33E-01	1.02E+00	7.83E+00	8.59E-00	-3.87E+00	6.48E+00	5.93E+00	2.80E+00	1.91E+01	2.21E+01	
	036	144	-133.9	2/../2011	12:34	1.35E+03	4.95E+02	3.87E+02	9.31E+00	2.24E+00	1.06E+00	-9.04E-01	6.14E+00	6.72E-00	-6.36E-01	6.20E+00	6.74E+00	-4.27E+00	1.53E+01	1.82E+01	
	037	144	-133.9	4/12/2011	9:50	1.48E+03	5.63E+02	4.79E+02	1.20E+01	2.92E+00	1.81E+00	6.43E+00	7.44E+00	9.59E-00	-4.68E+00	9.58E+00	8.86E+00	-2.75E+00	1.43E+01	1.74E+01	
	038	144	-133.9	7/18/2011	12:38	4.34E+03	7.41E+02	4.43E+02	1.13E+01	2.44E+00	1.26E+00	3.37E+00	7.47E+00	8.73E-00	-3.45E+00	8.91E+00	8.88E+00	1.53E+0:	1.87E+01	2.03E+01	
	039	144	-133.9	8/15/2011	11:44	5.27E+03	7.23E+02	1.96E+02	1.10E+01	2.75E+00	1.62E+00	4.07E+00	9.39E+00	1.12E-01	4.25E-01	9.81E+00	1.08E+01	-5.13E+00	1.89E+01	2.18E+01	
	040	144	-133.9	12/6/2011	13:25	6.35E+03	7.44E+02	3.71E+02	9.05E+00	2.95E+00	1.96E+00	8.64E-31	5.58E+00	6.45E-00	3.97E-01	5.58E+00	6.68E+00	-2.77E+00	1.22E+01	1.38E+01	
MW-54-173	041	172.5	-159.4	5/3/2007	14:43	1.90E+03	6.27E+02	4.71E+02	2.19E+01	2.64E+00	8.31E-01	-4.52E-01	3.82E+00	4.15E-00	1.34E+00	4.27E+00	4.27E+00	3.30E+00	1.94E+01	2.21E+01	MW-54-173
	042	172.5	-159.4	7/31/2007	13:40	2.38E+03	5.94E+02	2.68E+02	1.42E+01	1.85E+00	8.25E-01	7.90E-31	2.63E+00	3.13E-00	7.75E-01	2.22E+00	2.74E+00	3.92E+00	1.81E+01	2.07E+01	
	043	172.5	-159.4	10/../2007	12:14	1.21E+03	5.07E+02	2.63E+02	1.40E+01	2.07E+00	6.31E-01	1.05E+00	3.22E+00	3.72E-00	-3.06E-01	2.07E+00	3.10E+00	1.37E+00	1.49E+01	1.70E+01	
	044	172.5	-159.4	1/15/2008	11:15	1.84E+03	5.81E+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	3.46E+00	4.79E+00	2.30E+01	2.65E+01	
	045	172.5	-159.4	5/7/2008	10:35	2.11E+03	2.13E+02	1.42E+02	1.22E+01	1.18E+00	9.16E-01	-6.44E-01	2.22E+00	3.65E-00	1.71E+00	2.10E+00	4.01E+00	4.47E+00	1.23E+01	2.10E+01	
	046	172.5	-159.4	7/22/2008	15:51	2.25E+03	1.33E+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	7.36E+00	1.59E+01	2.72E+01	
	047	172.5	-159.4	11/../2008	11:07	1.56E+03	2.24E+02	1.75E+02	1.61E+01	2.12E+00	7.21E-01	1.51E-31	4.23E+00	4.77E-00	-5.84E-01	3.93E+00	4.19E+00	3.34E+00	1.92E+01	2.20E+01	
	048	172.5	-159.4	2/3/2009	12:19	1.98E+03	5.45E+02	3.85E+02	1.02E+01	1.45E+00	5.23E-01	-1.52E+00	3.03E+00	3.08E-00	-2.37E+00	3.20E+00	2.94E+00	4.31E+00	2.37E+01	2.76E+01	
	049	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-31	5.16E+00	3.44E-00	1.02E+00	2.63E+00	3.14E+00	-1.38E+00	1.92E+01	2.20E+01	
	050	172.5	-159.4	8/4/2009	11:15	1.87E+03	3.55E+02	2.34E+02	9.19E+00	1.51E+00	7.24E-01	1.49E+00	3.33E+00	3.92E-00	-6.51E-01	2.98E+00	3.14E+00	3.59E+00	2.19E+01	2.49E+01	
	051	172.5	-159.4	11/../2009	12:04	1.33E+03	3.13E+02	2.03E+02	7.42E+00	1.23E+00	7.36E-01	7.50E-31	6.35E+00	7.32E-00	-1.25E+00	7.47E+00	6.86E+00	-1.70E+00	1.91E+01	2.20E+01	
	052	172.5	-159.4	2/10/2010	10:34	1.51E+03	2.03E+02	1.53E+02	7.51E+00	1.23E+00	7.14E-01	2.09E+00	5.21E+00	6.13E-00	1.33E+00	5.65E+00	6.72E+00	-9.09E+00	2.13E+01	2.50E+01	
	053	172.5	-159.4	5/3/2010	11:42	2.23E+03	2.04E+02	1.42E+02	6.03E+00	1.42E+00	5.34E-01	-3.07E-01	8.07E+00	9.74E-00	2.77E+00	7.02E+00	9.75E+00	-1.60E+00	2.03E+01	2.33E+01	
	054	172.5	-159.4	8/4/2010	12:09	1.53E+03	2.31E+02	1.30E+02	5.57E+00	1.02E+00	3.24E-01	7.43E+00	8.07E+00	7.12E-00	4.86E-01	9.76E+00	1.08E+01	1.31E+00	1.63E+01	1.99E+01	
	055	172.5	-159.4	11/23/2010	12:25	1.51E+03	2.23E+02	1.24E+02	4.65E+00	1.26E+00	8.17E-01	-1.84E+00	7.05E+00	7.31E-00	-1.82E+00	6.23E+00	6.51E+00	2.22E+00	1.84E+01	2.14E+01	
	056	172.5	-159.4	2/../2011	12:29	1.56E+03	5.25E+02	3.81E+02	5.81E+00	1.88E+00	1.10E+00	-2.87E-01	8.00E+00	8.79E-00	1.01E+00	1.06E+01	1.20E+01	-5.49E+00	1.77E+01	2.05E+01	
	057	172.5	-159.4	4/12/2011	9:56	1.26E+03	5.45E+02	4.78E+02	3.51E+00	1.92E+00	1.58E+00	-1.22E+01	1.38E+01	1.53E-01	5.93E+00	9.66E+00	1.25E+01	-2.17E+00	1.50E+01	1.76E+01	
	058	172.5	-159.4	7/18/2011	12:20	1.48E+03	5.23E+02	4.40E+02	4.54E+00	1.64E+00	1.11E+00	2.97E-31	6.84E+00	7.45E-00	1.10E+00	6.51E+00	7.50E+00	-5.43E+00	1.56E+01	1.75E+01	
	059	172.5	-159.4	8/15/2011	11:50	1.50E+03	4.03E+02	1.97E+02	4.32E+00	1.94E+00	1.48E+00	-1.35E+00	1.01E+01	1.05E-01	-7.70E-01	1.21E+01	1.33E+01	-7.41E+00	2.03E+01	2.42E+01	
	060	172.5	-159.4	12/6/2011	13:26	2.32E+03	6.65E+02	3.26E+02	4.72E+00	2.32E+00	1.97E+00	-8.33E-01	4.83E+00	5.47E-00	5.05E-01	5.19E+00	6.34E+00	-2.75E+00	1.24E+01	1.41E+01	
MW-54-190	061	190	-175.9	5/3/2007	15:00	1.57E+03	6.25E+02	4.71E+02	1.52E+01	2.56E+00	7.30E-01	1.82E+00	3.23E+00	3.93E-00	5.52E-01	2.90E+00	3.34E+00	1.34E+00	1.88E+01	2.18E+01	MW-54-190
	062	190	-175.9	7/31/2007	13:45	2.25E+03	6.12E+02	2.66E+02	1.79E+01	2.13E+00	7.59E-01	-2.13E+00	3.35E+00	3.12E-00	5.32E-01	3.09E+00	3.67E+00	-3.07E+00	1.66E+01	1.94E+01	
	063	190	-175.9	10/../2007	12:20	2.13E+03	5.24E+02	2.60E+02	2.04E+01	2.44E+00	7.77E-01	-1.04E+00	3.45E+00	3.07E-00	3.45E-01	4.05E+00	3.33E+00	-3.30E+00	1.71E+01	1.97E+01	
	064	190	-175.9	1/15/2008	11:37	2.24E+03	6.25E+02	4.16E+02	1.93E+01	2.54E+00	8.15E-01	5.43E-31	2.64E+00	3.11E-00	3.89E-01	2.58E+00	2.50E+00	9.23E+00	2.42E+01	2.75E+01	
	065	190	-175.9	5/7/2008	10:30	1.84E+03	1.93E+02	1.43E+02	1.65E+01	1.40E+00	7.38E-01	8.19E-31	1.98E+00	3.45E-00	6.81E-01	1.95E+00	3.51E+00	6.17E+00	1.75E+01	2.13E+01	
	066	190	-175.9	7/22/2008	15:50	1.25E+03	1.15E+02	1.30E+02	2.13E+01	1.37E+00	5.50E-01	8.45E-31	1.98E+00	3.41E-00	-1.64E+00	2.06E+00	3.02E+00	-8.42E+00	1.61E+01	2.92E+01	
	067	190	-175.9	11/../2008	11:09	1.44E+03	2.13E+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	
	068	190	-175.9	2/3/2009	12:35	1.43E+03	4.83E+02	3.80E+02	1.50E+01	1.85E+00	3.35E-01	-1.13E+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	
	069	190	-175.9	5/6/2009	10:27	1.50E+03	3.05E+02	1.80E+02	1.58E+01	2.07E+00	4.19E-01	2.31E+00	7.22E+00	4.81E-00	-8.96E-01	3.86E+00	4.04E+00	-2.80E+00	1.94E+01	2.23E+01	
	070	190	-175.9	8/4/2009	11:20	1.44E+03	5.62E+02	2.36E+02	1.58E+01	2.00E+00	6.71E-01	-7.49E-01	5.31E+00	5.53E-00	9.28E-01	5.99E+00	6.56E+00	-1.51E+00	2.14E+01	2.47E+01	
	071	190	-175.9	11/../2009	12:17	2.21E+03	3.27E+02	2.03E+02	1.58E+01	1.94E+00	4.40E-01	1.53E+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	
	072	190	-175.9	2/10/2010	10:32	1.57E+03	1.93E+02	1.54E+02	2.35E+01	2.07E+00	6.73E-01	2.04E+00	4.93E+00	6.01E-00	1.64E-01	5.19E+00	5.77E+00	-9.59E+00	1.63E+01	1.99E+01	
	073	190	-175.9	5/3/2010	12:01	1.71E+03	2.67E+02	1.44E+02	2.22E+01	2.61E+00	6.32E-01	3.88E+00	1.05E+01	1.25E-01	3.30E+00	1.11E+01	1.14E+01	6.89E+00	2.21E+01	2.60E+01	
	074	190	-175.9	8/4/2010	12:34	1.50E+03	2.33E+02	1.28E+02	1.57E+01	1.51E+00	2.27E-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	
	075	190	-175.9	11/23/2010	12:22	1.34E+03	2.55E+02	1.27E+02	1.59E+01	1.85E+00	7.17E-01	-9.64E-01	6.04E+00	6.61E-00	-2.29E+00	6.21E+00	6.79E+00	-3.18E-01	1.81E+01	2.14E+01	
	076	190	-175.9	2/../2011	12:25	1.89E+03	5.55E+02	3.90E+02	1.68E+01	3.34E+00	1.28E+00	4.59E-31	6.34E+00	7.14E-00	-3.55E+00	5.96E+00	5.21E+00	1.71E+00	1.67E+01	1.89E+01	
	077	190	-175.9	4/12/2011	10:01	2.27E+03	6.13E+02	4.78E+02	1.50E+01	3.38E+00	1.77E+00	3.33E+00	7.86E+00	9.23E-00	8.70E-01	9.00E+00	1.00E+01	3.35E-01	1.53E+01	1.82E+01	
	078	190	-175.9	7/18/2011	12:14	2.37E+03	6.05E+02	4.45E+02	1.75E+01	2.85E+00	1.12E+00	2.24E+00	1.16E+01	1.29E-01	-2.72E+00	1.18E+01	1.22E+01	-3.86E+00	1.55E+01	1.74E+01	
	079	190	-175.9	8/15/2011	12:00	3.31E+03	5.83E+02	2.00E+02	1.69E+01	3.39E+00	1.22E+00	-3.99E+00	8.61E+00	7.57E-00	-4.68E+00	8.73E+00	8.11E+00	-5.67E+00	1.96E+01	2.30E+01	
	080	190	-175.9	12/6/2011	13:38	8.77E+03	8.22E+02	3.68E+02	1.81E+01	5.72E+00	1.90E+00	5.15E-31	3.87E+00	4.55E-00	1.47E+00	4.11E+00	5.26E+00	5.58E+00	1.21E+01	1.34E+01	
MW-55-24	001	16	2.3	11/9/2006	13:20	2.30E+03	1.11E+03	1.00E+03	1.68E+01	2.40E+00	1.90E+00	-7.00E-01	4.50E+00	5.82E-00	4.00E-01	5.40E+00	6.76E+00	1.10E+00	5.40E+00	6.00E+00	MW-55-24
	002	16	2.3	6/20/2007	11:20	3.30E+03	2.93E+02	1.87E+02	3.25E+01	3.51E+00	1.60E+00	0.00E+00	4.00E+00	3.72E-00	3.01E+00	4.60E+00	NA	NA	NA		
	003	16	2.3	8/2/2007	11:17	2.71E+03	7.23E+02	5.47E+02	2.31E+01	2.67E+00	9.19E-01	4.91E-01	2.79E+00	3.02E-00	2.94E+00	3.47E+00	7.94E+00	1.91E+01	2.31E+01		
	004	16	2.3	10/../2007	10:15	2.20E+03	5.34E+02	3.69E+02	2.29E+01	2.61E+00	8.43E-01	5.26E-31	3.63E+00	4.21E-00	3.46E-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	2.76E+01	2.44E+00	9.24E-01	3.33E+00	3.26E+00	2.52E-00	1.04E+00	1.75E+00	2.51E+00	1.44E+0:	1.87E+01	2.10E+01	
	006	16	2.3	4/25/2008	14:15	1.35E+03	1.59E+02	1.44E+02	2.55E+01	1.57E+00	4.39E-01	1.08E+00	2.31E+00	4.02E-00	-9.35E-01	2.55E+00	4.02E+00	1.25E+00	1.14E+01	1.97E+01	
	007	16	2.3	8/../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	1.68E+01	1.80E+00	5.55E-01	1.30E+00	5.13E+00	5.92E-00	-3.45E+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	4.43E+02	3.84E+02	1.69E+01	1.74E+00	3.35E-01	1.90E+00	2.88E+00	3.50E-00	1.35E+00	3.34E+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	4.38E+00	1.95E+01	2.22E+01	

IPEC00267172

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

Well ID[1, 4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-55-34	011	16	23	8/5/2009	13:52	1.59E+03	3.39E+02	2.37E+02	3.07E+01	5.52E+00	7.22E-01	-7.90E-01	3.74E+00	3.61E+00	1.05E+00	2.02E+00	3.52E+00	4.33E+00	2.23E+01	2.59E+01	MW-55-34
	012	16	23	11/2/2006	13:01	1.38E+03	2.27E+02	1.88E+02	1.53E+01	1.95E+00	7.59E-01	1.03E+01	9.51E+00	5.52E+00	3.87E+00	5.63E+00	7.18E+00	-7.44E+00	1.53E+01	1.80E+01	
	013	16	23	2/18/2010	14:01	2.21E+03	2.43E+02	1.74E+02	2.06E+01	2.46E+00	7.38E-01	4.99E+00	4.18E+00	5.27E+00	7.07E-01	4.22E+00	4.92E+00	-8.06E+00	1.86E+01	2.18E+01	
	014	16	23	4/21/2010	14:08	1.52E+03	4.65E+02	3.90E+02	1.54E+01	2.05E+00	8.38E-01	-1.91E+00	7.13E+00	7.45E+00	6.66E-01	9.22E+00	1.03E+01	-7.52E-01	1.79E+01	2.07E+01	
	015	16	23	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	8.22E+00	9.55E+00	1.17E+01	1.64E+01	1.81E+01	
	016	16	23	11/1/2010	14:10	1.39E+03	2.09E+02	1.65E+02	1.08E+01	1.96E+00	9.92E-01	-2.29E-01	8.10E+00	9.04E+00	-4.71E+00	7.93E+00	6.54E+00	7.36E+00	1.83E+01	2.12E+01	
	017	16	23	2/3/2011	14:13	1.32E+03	4.43E+02	4.20E+02	1.09E+01	2.82E+00	1.96E+00	-3.57E-01	4.92E+00	5.43E+00	4.75E+00	8.74E+00	7.44E+00	-5.31E+00	1.81E+01	2.14E+01	
	018	16	23	8/12/2011	12:12	1.71E+03	4.33E+02	2.01E+02	1.29E+01	3.21E+00	1.59E+00	-4.41E+00	7.32E+00	6.85E+00	2.14E-01	7.95E+00	6.82E+00	6.73E+00	2.09E+01	2.34E+01	
	019	16	23	11/14/2011	11:26	2.57E+03	6.65E+02	4.90E+02	2.33E+01	4.00E+00	1.56E+00	0.00E+00	8.40E+00	1.07E-01	3.56E+00	1.03E+01	1.50E+01	-7.45E+00	1.07E+01	2.17E+01	
MW-55-35	001	32	13.8	11/9/2006	13:40	9.04E+03	1.53E+03	1.00E+03	4.04E+01	4.80E+00	3.30E+00	1.13E+00	3.30E+00	3.90E+00	5.00E-01	3.30E+00	4.10E+00	4.80E+00	5.40E+00	5.80E+00	MW-55-35
	002	32	-13.8	6/28/2007	11:50	9.99E+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	8/2/2007	11:20	3.58E+03	7.91E+02	5.33E+02	3.40E+01	3.45E+00	8.35E-01	9.33E-01	3.19E+00	3.24E+00	7.69E-01	2.23E+00	2.70E+00	2.20E+00	1.96E+01	2.28E+01	
	004	32	-13.8	10/16/2007	10:02	5.39E+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	2.25E+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	1.50E+03	1.85E+02	1.42E+02	3.44E+01	1.86E+00	6.11E-01	1.46E+00	2.26E+00	4.05E+00	2.34E+00	2.40E+00	4.61E+00	5.22E+00	1.25E+01	2.14E+01	
	007	32	-13.8	8/7/2008	10:47	1.73E+03	2.03E+02	1.91E+02	2.54E+01	1.42E+00	4.38E-01	3.51E-31	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	4.23E+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	3.21E+01	2.79E+00	6.32E-01	-4.02E+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	9/5/2009	13:40	2.33E+03	4.12E+02	2.30E+02	4.14E+01	2.00E+00	7.20E-01	-1.22E+00	3.52E+00	3.45E+00	2.60E-01	3.25E+00	3.75E+00	-2.60E+00	2.26E+01	2.61E+01	
	011	32	-13.8	11/2/2006	12:34	2.37E+03	2.61E+02	1.88E+02	2.66E+01	2.40E+00	7.17E-01	5.51E-31	4.23E+00	4.95E+00	2.97E+00	4.76E+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	2.63E+02	1.74E+02	3.10E+01	3.29E+00	7.35E-01	-2.47E+00	4.86E+00	5.08E+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	2.21E+03	4.92E+02	3.90E+02	2.63E+01	2.44E+00	7.34E-01	-4.25E+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	8/6/2010	13:15	1.89E+03	2.45E+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	9.65E+00	1.22E+01	9.55E+00	1.62E+01	1.81E+01	
	015	32	-13.8	11/1/2010	14:26	1.57E+03	2.12E+02	1.62E+02	1.13E+01	1.97E+00	9.17E-01	-2.41E+00	8.88E+00	9.45E+00	5.36E-01	8.18E+00	9.32E+00	6.22E+00	1.79E+01	2.03E+01	
	016	32	-13.8	2/3/2011	14:16	1.70E+03	4.84E+02	3.86E+02	1.53E+01	3.42E+00	2.05E+00	8.32E-31	5.82E+00	6.45E+00	1.03E+00	6.24E+00	7.03E+00	-2.16E+00	1.86E+01	2.17E+01	
	017	32	-13.8	8/12/2011	12:15	2.94E+03	5.53E+02	2.01E+02	1.63E+01	3.18E+00	1.50E+00	4.22E-31	7.50E+00	8.42E+00	-1.40E+00	8.31E+00	8.83E+00	-1.22E+01	2.17E+01	2.60E+01	
	018	32	-13.8	11/14/2011	11:23	2.79E+03	6.84E+02	3.00E+02	2.55E+01	3.95E+00	1.60E+00	2.04E-31	7.08E+00	8.01E+00	3.96E-01	8.22E+00	1.06E+01	4.72E+00	1.87E+01	2.05E+01	
MW-55-54	001	47	-28.8	11/9/2006	13:30	1.31E+04	1.63E+03	1.00E+03	2.28E+01	1.35E+00	8.10E-01	1.00E+00	3.90E+00	3.82E+00	-3.22E+00	4.20E+00	5.70E+00	1.71E+00	4.80E+00	5.40E+00	MW-55-54
	002	47	-28.8	6/20/2007	11:40	1.04E+04	4.70E+02	1.04E+02	2.47E+01	2.05E+00	9.35E-01	1.30E-31	3.00E+00	3.43E-00	-4.62E-01	3.27E+00	3.46E+00	NA	NA	NA	
	003	47	-28.8	8/3/2007	12:00	9.21E+03	1.12E+03	5.51E+02	2.22E+01	2.38E+00	9.10E-01	1.02E+00	3.69E+00	3.83E+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	1.13E+04	9.95E+02	3.61E+02	2.33E+01	2.46E+00	6.15E-01	-9.80E-01	2.83E+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	7.33E+02	2.97E+02	2.28E+01	2.40E+00	5.39E-01	-8.47E-01	2.16E+00	2.32E+00	-1.25E+00	2.81E+00	2.20E+00	1.39E+01	1.86E+01	2.09E+01	
	006	47	-28.8	4/25/2008	10:35	5.96E+03	3.33E+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	7.59E+00	1.25E+01	2.13E+01	
	007	47	-28.8	8/7/2008	10:38	6.31E+03	3.59E+02	1.91E+02	2.32E+01	1.36E+00	3.56E-01	5.53E-31	2.07E+00	3.52E+00	1.29E+00	1.79E+00	3.30E+00	1.32E+01	1.26E+01	2.08E+01	
	008	47	-28.8	10/21/2008	10:21	7.76E+03	6.65E+02	1.96E+02	1.54E+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	3.59E-01	-3.34E-01	3.11E+00	3.45E+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	10:50	7.00E+03	5.52E+02	1.80E+02	3.47E+01	2.50E+00	6.43E-01	3.50E-31	6.93E+00	4.62E+00	-1.20E+00	4.43E+00	4.33E+00	2.36E+00	1.77E+01	2.04E+01	
	011	47	-28.8	9/3/2009	13:22	5.47E+03	5.43E+02	2.32E+02	2.65E+01	2.43E+00	6.13E-01	-1.02E-01	2.70E+00	3.04E+00	-1.82E+00	3.19E+00	3.17E+00	8.36E+00	2.34E+01	2.66E+01	
	012	47	-28.8	11/2/2006	12:33	5.22E+03	3.65E+02	1.97E+02	2.23E+01	2.12E+00	4.76E-01	1.12E+00	5.73E+00	6.54E+00	2.82E+00	6.20E+00	7.55E+00	-2.72E+00	1.91E+01	2.22E+01	
	013	47	-28.8	2/18/2010	14:05	8.33E+03	4.13E+02	1.74E+02	1.47E+01	2.22E+00	7.51E-01	1.15E+00	3.60E+00	3.91E+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	8.88E-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	1.53E+01	1.88E+00	3.96E-01	-1.51E+00	7.77E+00	8.25E+00	1.82E+00	7.26E+00	8.71E+00	-1.77E-01	1.41E+01	1.65E+01	
	016	47	-28.8	11/1/2010	13:36	8.58E+03	3.95E+02	1.57E+02	1.53E+01	1.72E+00	6.48E-01	-3.03E+00	7.29E+00	7.24E+00	9.59E-01	7.50E+00	8.63E+00	1.12E-01	1.77E+01	2.04E+01	
	017	47	-28.8	2/3/2011	14:17	8.46E+03	8.53E+02	3.89E+02	1.51E+01	3.78E+00	1.95E+00	3.62E+00	5.80E+00	7.00E+00	-6.59E-01	7.44E+00	7.93E+00	-8.13E+00	1.73E+01	2.14E+01	
	018	47	-28.8	8/12/2011	12:09	8.53E+03	9.24E+02	2.00E+02	2.20E+01	3.36E+00	1.17E+00	7.03E+00	8.73E+00	1.08E-01	-2.52E+00	8.07E+00	7.92E+00	-2.57E+00	1.96E+01	2.27E+01	
	019	47	-28.8	11/14/2011	11:07	5.97E+03	8.23E+02	4.67E+02	1.75E+01	3.57E+00	1.46E+00	-2.65E+00	8.67E+00	1.04E-01	3.60E+00	6.69E+00	1.03E+01	1.52E+00	1.92E+01	2.17E+01	
MW-56-53	001	52	18.5	1/4/2007	9:59	7.80E+02	5.43E+02	5.10E+02	-9.70E-02	1.80E-01	8.80E-01	1.56E+01	4.80E+00	4.22E+00	2.00E+00	3.60E+00	2.86E+00	-3.70E+00	5.60E+00	7.80E+00	MW-56-53
	002	52	18.3	6/20/2007	10:51	2.89E+02	1.72E+02	1.82E+02	-4.49E-02	5.50E-01	6.50E-01	-5.30E-01	4.40E+00	4.11E+00	2.93E+00	4.68E+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	1.05E+02	2.03E+02	-5.56E-01	6.10E-01	9.24E-01	3.21E-31	2.70E+00	3.21E-00	3.29E-02	2.56E+00	3.05E+00	NA	NA	NA	
	004	52	18.3	1/31/2008	12:30	2.53E+02	1.27E+02	1.31E+02	5.70E-01	8.81E-01	9.77E-01	3.38E-31	3.69E+00	3.87E-00	5.97E-01	3.78E+00	3.96E+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	-5.47E+00	7.44E+00	6.73E+00	NA	NA	NA	
	006	52	18.3	4/16/2009	11:43	5.30E+02	1.95E+02	1.96E+02	-8.46E-02	6.21E-01	7.53E-01	5.63E-31	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	1.33E+02	1.03E+02	2.94E-01	6.00E-01	6.31E-01	5.47E-31	6.74E+00	7.52E-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	3.63E+00	7.63E+00	9.44E-00	-1.55E+00	8.91E+00	9.68E+00	NA	NA	NA	
	009	52	18.3	11/5/2010	12:48	4.54E+02	1.83E+02	1.82E+02	1.27E+00	8.67E-01	1.86E+00	3.71E+00	4.39E+00	1.05E-01	-1.74E+00	4.89E+00	5.96E+00	NA	NA	NA	
	010	52	18.3	4/21/2011	12:08	1.18E+02	5.43E+02	5.97E+02	-5.01E-02	1.23E+00	1.60E+00	3.04E+00	8.50E+00	1.01E-01	-1.64E+00	8.42E+00	8.44E+00	NA	NA	NA	
	011	52	18.3	7/6/2011	12:58	2.03E+02	2.75E+02	2.83E+02	-3.58E-01	7.89E-01	1.12E+00	3.72E+00	7.77E+00	9.45E-00	-4.34E+00	8.82E+00	9.56E+00	-4.67E+00	2.23E+01	2.56E+01	
	012	52	18.3	8/26/2011	11:06	2.47E+02	3.97E+02	4.32E+02	-6.50E-01	7.17E-01	1.13E+00	3.12E+00	8.97E+00	1.02E-01	2.45E+00	7.50E+00	9.03E+00	NA	NA	NA	
	013	52	18.3	10/31/2011	12:13	6.15E+01	1.41E+02	5.09E+02	5.82E-02	1.09E+00	1.39E+00	4.08E+00	9.36E+00	1.24E-01	4.41E+00	8.22E+00	1.26E+01	4.96E+00	1.94E+01	2.17E+01	
MW-56-83	001	74	-3.7	9/9/2006	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	1.15E-01	5.23E+00	6.87E+00	NA	NA	NA	MW-56-83
	002	74	-3.7	11/9/2006	10:20	1.55E+03	1.35E+02	1.40E+02	7.00E-02	7.20E-01	8.10E-01	7.70E-31	2.70E+00	3.17E-00	-2.20E-01	2.91E+00	3.50E+00	3.80E+00	5.40E+00	5.80E+00	
	003	74	-3.7	1/4/2007	13:20	1.28E+03	5.73E+02	5.20E+02	2.30E+00	9.00E-01	8.30E-01	1.18E+01	4.80E+00	4.43E-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	5.75E+02	4.30E+02	1.67E+00	1.15E+00	1.09E+00	1.47E-31	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	2.38E+03	7.91E+02	5.91E+02	2.13E+00	1.45E-01	4.44E-01	-1.13E+00	4.62E+00	4.95E-00	5.29E+00	5.78E+00	8.03E+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	5.03E-33	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	2.45E+02	1.02E+02	2.70E+00	8.12E-01	4.70E-01	2.01E+00	5.22E+00	6.13E-00	-1.15E+00	5.50E+00	6.35E+00	NA	NA	NA	
	010	74	-3.7	4/20/2010	14:51	1.93E+03	2.95E+02	1.48E+02	1.59E+00	1.05E+00	8.74E-01	2.01E+00	8.03E+00	9.48E-00	1.05E+00	8.71E+00	9.04E+00	NA	NA	NA	
	011	74	-3.7	11/15/2010	14:37	2.74E+03	2.63E+02	3.84E+02	1.02E+00	9.09E-01	1.50E+00	-2.51E+00	3.87E+00	7.83E-00	-2.67E+00	3.90E+00	7.34E+00	NA	NA	NA	
	012	74	-3.7	4/27/2011	13:46	7.54E+04	2.43E+03	4.19E+03	3.87E+00	1.60E+00	1.28E+00	-1.03E+00	1.14E+01	1.33E-01	-1.27E+00	9.70E+00	1.01E+01	NA	NA	NA	
	013	74	-3.7	7/6/2011	11:58	8.42E+04	3.54E+03	2.81E+03	1.45E+00	1.27E+00	1.19E+00	2.77E+00	2.01E+01	9.44E-00	4.20E-01	8.16E+00	9.20E+00	-1.36E+01	2.15E+01	2.46E+01	
	014	74	-3.7	8/26/2011	10:56	1.25E+05	3.12E+03	4.42E+03	3.12E+00	1.61E+00	1.37E+00	-2.12E+00	8.13E+00	8.21E-00	-6.41E-01	8.67E+00	9.15E+00	NA	NA	NA	
	015	74	-3.7	10/31/2011	12:00	7.25E+04	2.83E+03	5.11E+02	9.41E-01	1.45E+00	1.61E+00	2.19E+00	7.29E+00	9.55E-00	2.43E+00	8.94E+00	1.22E+01	-3.01E+00	2.14E+01	2.44E+01	
MW-57-11	001	10	5	6/22/2007	12:17	4.51E+03	8.13E+02	4.36E+02	4.55E+01	3.96E+00	7.77E-01	2.29E+00	6.04E+00	4.31E-00	3.69E-02	3.87E+00	4.37E+00	2.24E+00	1.79E+01	1.91E+01	MW-57-11
	002	10	5	8/6/2007	12:30	4.29E+03	3.21E+06	1.97E+02	3.79E+01	6.77E+00	5.86E-01	1.15E+00	3.78E+00	4.15E-00	3.95E-03	3.01E+00	3.41E+00	-5.75E-01	2.16E+01	2.50E+01	

IPEC00267173

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-57-11	003	10	[illegible]	5/5/2008	10:43	2.17E+03	2.29E+02	2.65E+02	2.27E+01	1.95E+00	9.38E-01	8.71E-31	2.21E+00	3.88E-00	2.87E+00	2.56E+00	4.47E+00	-1.12E+00	1.35E+01	2.34E+01	MW-57-11
	004	10	5	11/2/2008	10:55	3.28E+03	2.75E+02	1.73E+02	4.16E+01	3.35E+00	7.54E-01	3.34E+00	7.25E+00	4.75E-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	1.93E+01	2.25E+01	
	006	10	5	5/4/2010	12:36	3.27E+03	3.43E+02	1.72E+02	2.46E+01	3.00E+00	8.46E-01	3.07E-31	6.20E+00	6.51E+00	1.85E-01	5.09E+00	5.67E+00	-1.79E+01	2.21E+01	2.56E+01	
	007	10	5	5/4/2011	10:28	6.40E+03	6.84E+02	3.41E+02	3.11E+01	2.62E+00	1.04E+00	3.74E+00	8.32E+00	9.74E-00	2.05E+00	8.40E+00	9.72E+00	6.20E+00	1.66E+01	1.85E+01	
	008	10	5	7/19/2011	11:57	7.36E+03	9.13E+02	4.45E+02	3.67E+01	5.26E+00	2.11E+00	3.27E-31	8.88E+00	9.84E-00	-2.34E+00	9.18E+00	9.39E+00	-6.76E+00	1.43E+01	1.67E+01	
	009	10	5	8/19/2011	9:49	7.27E+03	8.53E+02	2.02E+02	2.08E+01	1.21E+00	1.34E+00	4.48E+00	7.50E+00	9.07E-00	2.31E+00	7.74E+00	9.17E+00	4.92E-01	2.06E+01	2.36E+01	
MW-57-20	001	19	-4	6/22/2007	12:30	1.55E+03	5.53E+02	4.32E+02	1.56E+00	1.07E+00	9.57E-01	-1.38E+00	3.69E+00	3.93E-00	-8.51E-01	3.84E+00	4.77E-01	1.36E+01	1.59E+01	MW-57-20	
	002	19	-4	9/6/2007	12:15	9.26E+02	2.15E+02	1.26E+02	1.23E+00	6.67E-01	5.73E-01	1.21E+00	3.52E+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	1.33E+00	2.16E-01	2.35E-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	11/2/2008	11:30	1.51E+03	2.13E+02	1.72E+02	3.16E+00	1.30E+00	1.14E+00	-1.91E+00	3.94E+00	3.87E-00	-4.37E-01	3.72E+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	-2.03E+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	-2.22E-01	7.54E+00	8.56E+00	-6.07E+00	2.19E+01	2.51E+01	
	007	19	-4	5/4/2011	10:37	2.03E+04	1.15E+03	3.44E+02	1.74E+00	1.11E+00	9.49E-01	1.48E+00	7.52E+00	8.43E-00	-7.32E-01	9.22E+00	1.02E+01	-5.44E+00	1.64E+01	1.91E+01	
	008	19	-4	7/18/2011	12:09	3.81E+04	1.94E+03	4.43E+02	1.27E+00	1.08E+00	1.01E+00	-5.13E+00	7.71E+00	7.35E-00	5.16E-01	8.67E+00	9.92E+00	-5.69E+00	1.93E+01	2.20E+01	
	009	19	-4	8/19/2011	9:54	2.47E+04	1.55E+03	1.98E+02	1.50E+00	1.68E+00	1.36E+00	-2.01E+00	7.35E+00	7.66E-00	1.68E+00	8.07E+00	9.48E+00	3.14E+00	1.93E+01	2.25E+01	
MW-57-45	001	40	-25	8/24/2006	9:30	4.00E+03	6.93E+02	3.17E+02	1.68E+01	3.51E+00	2.11E+00	-5.40E-01	6.75E+00	7.35E-00	1.19E+00	6.35E+00	7.56E+00	8.89E+00	9.09E+00	9.70E+00	MW-57-45
	001	40	-25	8/24/2006	9:30	4.36E+03	8.83E+02	7.71E+02	NA	NA	NA	-2.85E-01	4.41E+00	4.83E-00	-1.81E-01	3.89E+00	4.37E+00	NA	NA	NA	
	002	40	-25	6/22/2007	12:55	9.55E+02	4.05E+02	4.35E+02	1.50E+00	1.05E+00	6.55E-01	-1.97E-01	3.40E+00	3.02E-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	8.73E-01	6.29E-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	5.55E+02	1.38E+02	1.97E+02	2.56E+00	2.91E-01	3.58E-01	-1.35E-01	1.68E+00	2.84E-00	-4.61E-01	1.66E+00	2.69E+00	-3.60E+00	9.83E+00	1.67E+01	
	005	40	-25	11/2/2008	13:22	1.13E+03	2.01E+02	1.73E+02	1.20E+00	6.79E-01	5.97E-01	1.72E-31	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	1.00E-31	5.64E+00	3.75E-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	2.13E+02	1.72E+02	1.30E+00	9.43E-01	8.55E-01	5.16E-32	5.31E+00	5.85E-00	-2.99E-01	4.77E+00	5.16E+00	7.57E-01	2.26E+01	2.58E+01	
	008	40	-25	5/4/2011	11:03	1.35E+04	9.43E+02	3.43E+02	9.06E-01	9.74E-01	9.50E-01	7.40E+00	9.54E+00	1.21E-01	-1.84E+00	9.48E+00	9.56E+00	6.39E+00	1.73E+01	1.98E+01	
	009	40	-25	7/18/2011	12:36	2.53E+04	1.63E+03	4.47E+02	1.28E+00	1.32E+00	1.34E+00	-2.08E-01	8.16E+00	8.83E-00	-7.58E-01	9.29E+00	9.67E+00	-1.04E+01	1.53E+01	1.74E+01	
	010	40	-25	8/19/2011	10:19	2.46E+04	1.53E+03	2.02E+02	4.31E-01	1.01E+00	1.15E+00	-3.69E+00	1.03E+01	1.04E-01	2.03E+00	8.04E+00	9.53E+00	2.21E+00	2.09E+01	2.38E+01	
MW-58-26	001	20	-54	11/16/2006	13:21	2.60E+01	1.59E+02	1.60E+02	3.70E-01	7.58E-01	8.20E-01	7.27E+01	8.40E+00	4.52E-00	9.00E-01	3.30E+00	4.30E+00	-3.20E+00	9.70E+00	6.40E+00	MW-58-26
	002	20	-54	1/5/2007	0:57	2.60E+02	1.03E+02	1.00E+02	-9.00E-02	7.56E-01	0.50E-01	2.34E+00	2.97E+00	3.22E-00	5.50E-01	2.73E+00	3.10E+00	-3.90E+00	6.30E+00	7.40E+00	
	003	20	54	6/21/2007	11:10	5.27E+02	2.03E+02	1.86E+02	1.04E+00	6.09E-01	5.25E-01	1.62E+00	2.42E+00	2.85E-00	3.91E-01	2.72E+00	2.66E+00	1.37E+00	1.24E+01	1.45E+01	
	004	20	-54	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	3.88E-00	4.20E-01	3.01E+00	3.51E+00	NA	NA	NA	
	005	20	-54	1/22/2008	13:20	2.95E+02	1.62E+02	1.70E+02	-1.43E-01	4.65E-01	6.50E-01	9.19E-31	2.31E+00	2.67E-00	-5.41E-02	2.57E+00	2.61E+00	NA	NA	NA	
	006	20	-54	11/7/2008	13:39	2.38E+02	1.55E+02	1.63E+02	2.31E-01	6.60E-01	7.90E-01	-3.33E+00	6.24E+00	5.42E-00	-3.23E-01	4.58E+00	4.84E+00	NA	NA	NA	
	007	20	-54	2/3/2009	12:49	5.19E+02	2.35E+02	1.98E+02	-8.35E-03	5.27E-01	6.33E-01	1.40E+00	2.76E+00	3.29E-00	1.45E-01	3.09E+00	3.31E+00	NA	NA	NA	
	008	20	-54	4/24/2009	12:21	4.13E+02	1.43E+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	-54	10/23/2009	13:10	4.23E+02	1.67E+02	1.68E+02	4.74E-01	6.36E-01	6.35E-01	1.68E+00	5.05E+00	5.98E-00	2.49E+00	5.68E+00	6.94E+00	NA	NA	NA	
	010	20	-54	4/30/2010	14:12	5.03E+02	1.83E+02	1.82E+02	2.92E-01	5.41E-01	6.20E-01	4.20E-31	5.39E+00	6.27E-00	5.40E-01	5.25E+00	6.68E+00	NA	NA	NA	
	011	20	-54	11/1/2010	12:12	3.56E+02	1.73E+02	1.44E+02	4.13E-01	7.69E-01	8.92E-01	1.96E+00	3.81E+00	4.51E-00	2.96E+00	3.75E+00	4.76E+00	NA	NA	NA	
	012	20	-54	5/3/2011	9:50	7.22E+02	4.30E+02	4.21E+02	3.15E-01	1.13E+00	1.32E+00	2.22E+00	5.90E+00	6.02E-00	-6.42E+00	7.02E+00	8.00E+00	NA	NA	NA	
	013	20	-54	7/5/2011	13:29	1.86E+03	5.45E+02	4.47E+02	3.25E-01	1.10E+00	1.41E+00	7.41E-31	6.84E+00	7.61E-00	1.22E+00	7.32E+00	8.36E+00	1.01E+01	1.99E+01	2.25E+01	
	014	20	-54	8/26/2011	14:47	2.47E+03	5.13E+02	1.99E+02	-6.17E-02	7.95E-01	1.05E+00	2.39E-31	7.65E+00	8.47E-00	3.25E-01	8.22E+00	9.22E+00	NA	NA	NA	
	015	20	-54	11/15/2011	14:22	4.77E+03	7.23E+02	2.31E+02	-4.32E-01	8.28E-01	1.25E+00	1.06E+00	1.99E+01	8.99E-00	2.18E+00	9.42E+00	1.24E+01	-3.05E+00	1.22E+01	1.39E+01	
MW-58-65	001	54	-39.4	11/16/2006	13:18	-9.60E+01	1.59E+02	1.60E+02	-6.30E-02	7.20E-01	8.10E-01	2.20E+00	3.00E+00	3.32E-00	-9.00E-01	4.20E+00	4.96E+00	-3.40E+00	5.90E+00	7.80E+00	MW-58-65
	002	54	-39.4	1/5/2007	9:25	5.50E+02	5.43E+02	5.20E+02	1.60E-01	8.10E-01	8.30E-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	-1.30E-01	3.96E-01	5.50E-01	-2.19E-01	2.37E+00	2.65E-00	-2.89E+00	3.17E+00	2.36E+00	2.30E+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	3.35E+00	NA	NA	NA	
	005	54	-39.4	1/22/2008	12:00	3.18E+02	1.62E+02	1.69E+02	1.21E-01	5.35E-01	7.22E-01	5.54E-31	5.93E+00	5.96E-00	-1.42E-01	5.02E+00	NA	NA	NA	NA	
	006	54	-39.4	11/7/2008	13:55	2.81E+02	1.52E+02	1.62E+02	8.19E-01	8.77E-01	8.32E-01	9.13E-32	3.38E+00	3.88E-00	-1.58E+00	3.21E+00	2.96E+00	NA	NA	NA	
	007	54	-39.4	2/3/2009	12:05	2.75E+02	2.03E+02	1.92E+02	6.60E-01	8.06E-01	9.56E-01	-9.45E-01	3.21E+00	3.41E-00	1.91E+00	3.10E+00	2.95E+00	NA	NA	NA	
	008	54	39.4	4/24/2009	11:52	2.33E+02	1.67E+02	1.78E+02	3.36E-01	4.65E-01	6.58E-01	9.67E-32	3.86E+00	2.57E-00	1.89E-01	2.76E+00	2.72E+00	NA	NA	NA	
	009	54	-39.4	10/23/2009	12:53	2.37E+02	1.55E+02	1.65E+02	6.33E-01	6.12E-01	6.29E-01	7.13E-31	5.70E+00	6.47E-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	
	011	54	-39.4	11/1/2010	13:53	4.81E+02	1.83E+02	1.45E+02	7.15E-01	7.72E-01	8.31E-01	2.61E-31	3.71E+00	4.18E-00	3.74E+00	4.41E+00	5.45E+00	NA	NA	NA	
	012	54	-39.4	5/3/2011	10:11	3.29E+02	3.73E+02	3.97E+02	-4.47E-01	1.03E+00	1.44E+00	1.93E+00	5.92E+00	7.00E-00	-7.81E-01	7.04E+00	7.26E+00	NA	NA	NA	
	013	54	-39.4	7/5/2011	13:30	7.26E+02	3.93E+02	2.83E+02	4.19E-01	9.12E-01	1.03E+00	5.29E+00	1.05E+01	1.25E-01	1.47E+00	7.73E+00	8.78E+00	3.44E-01	2.03E+01	2.27E+01	
	014	54	-39.4	8/26/2011	14:04	1.10E+03	4.62E+02	2.61E+02	6.31E-01***	1.82E+00	1.60E+00	-1.05E+00	9.00E+00	9.65E-00	-1.54E+00	1.01E+01	1.04E+01	NA	NA	NA	
	015	54	-39.4	11/15/2011	14:05	1.75E+03	4.32E+02	3.42E+02	3.02E-01	1.71E+00	2.03E+00	-1.89E+00	8.82E+00	9.54E-00	-7.70E-01	7.23E+00	8.96E+00	NA	NA	NA	
MW-59-32	001	27	-12.5	11/16/2006	11:05	2.30E+01	1.77E+02	1.80E+02	-6.30E-02	7.20E-01	7.90E-01	3.60E-31	2.91E+00	3.30E-00	3.00E-01	4.20E+00	4.96E+00	-2.60E+00	5.60E+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	7.56E-01	8.30E-01	1.50E+00	3.60E+00	4.13E-00	1.30E+00	3.90E+00	4.16E+00	1.90E+00	5.90E+00	8.10E+00	
	003	27	-12.5	6/21/2007	15:25	4.57E+02	4.23E+02	4.36E+02	-6.58E-02	6.73E-01	9.11E-01	5.01E-31	2.96E+00	4.55E-00	-4.19E-01	4.26E+00	4.71E+00	-4.77E-01	1.24E+01	1.45E+01	
	004	27	-12.5	7/31/2007	14:35	1.69E+02	1.53E+02	1.63E+02	2.00E-01	6.75E-01	7.36E-01	2.26E-31	3.30E+00	3.73E-00	3.97E-01	3.75E+00	NA	NA	NA	NA	
	005	27	-12.5	7/20/2011	9:59	1.56E+02	3.93E+02	4.38E+02	5.88E-01	1.14E+00	1.27E+00	-1.79E+00	7.92E+00	8.02E-00	-2.58E+00	9.78E+00	1.02E+01	-1.40E+01	1.82E+01	2.07E+01	
	006	27	-12.5	8/24/2011	14:22	4.74E+02	2.72E+02	2.17E+02	7.95E-01	1.13E+00	1.20E+00	-2.52E+00	1.05E+01	1.13E-01	2.65E+00	8.25E+00	9.93E+00	-6.65E+00	2.16E+01	2.54E+01	
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	8.30E-01	3.74E+01	8.70E+00	6.22E-00	2.60E+00	4.20E+00	4.56E+00	-1.60E+00	5.70E+00	6.60E+00	MW-59-45
	002	42	-27.5	1/5/2007	9:48	8.30E+01	1.83E+02	1.80E+02	0.00E+00	7.56E-01	8.70E-01	1.49E+02	1.26E+01	4.90E-00	2.00E-01	3.90E+00	4.66E+00	-2.50E+00	7.50E+00	8.60E+00	
	003	42	-27.5	6/21/2007	15:25	7.54E+02	4.53E+02	4.34E+02	-2.74E-01	6.86E-01	9.10E-01	-1.10E-01	2.50E+00	2.88E-00	8.14E-02	2.16E+00	2.43E+00	7.74E-01	1.41E+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	5.96E-01	7.35E-01	4.43E-31	3.52E+00	3.72E-00	7.64E-01	3.35E+00	3.84E+00	NA	NA	NA	
	005	42	-27.5	7/20/2011	9:59	5.24E+02	4.35E+02	4.43E+02	-1.01E+00	1.05E+00	1.49E+00	1.01E+00	9.52E+00	9.03E-00	2.79E+00	9.40E+00	1.15E+01	-1.12E+01	1.03E+01	2.00E+01	
	006	42	-27.5	8/24/2011	14:32	1.34E+03	4.92E+02	2.64E+02	1.13E-01	1.11E+00	1.33E+00	1.32E+00	8.37E+00	8.81E-00	4.22E+00	9.12E+00	1.18E+01	1.31E+00	1.07E+01	1.20E+01	
MW-59-68	001	58	-43.5	11/16/2006	11:30	5.50E+01	1.74E+02	1.80E+02	1.20E-01	7.20E-01	8.10E-01	1.15E+02	1.11E+01	5.63E-00	1.00E+00	3.60E+00	4.26E+00	-2.80E+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	3.00E-01	8.16E-01	8.30E-01	6.76E+01	6.60E+00	4.13E-00	8.00E-01	3.60E+00	4.16E+00	1.20E+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	5.26E-31	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-31	2.88E+00	2.95E-00	3.72E-01	2.77E+00	3.17E+00	NA	NA	NA	
	005	58	-43.5	7/20/2011	10:14	1.15E+02	3.93E+02	4.42E+02	1.10E-01	7.26E-01	9.31E-01	2.83E+00	9.33E+00	1.09E-01	8.22E-01	9.87E+00	1.06E+01	-1.57E+01	2.17E+01	2.47E+01	
	006	58	-43.5	8/24/2011	14:09	2.51E+02	2.83E+02	2.66E+02	-5.46E-01	7.35E-01	1.14E+00	-5.62E+00	8.52E+00	7.69E-00	1.56E+00	9.03E+00	1.03E+01	4.94E+00	1.23E+01	1.42E+01	
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	5.23E-01	7.52E-01	1.41E+00	4.84E+00	3.32E-00	2.45E+00	3.72E+00	4.67E+00	0.00E+00	1.81E+01	2.12E+01	MW-60-35

IPEC00267174

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-60-35	002	34.9	-22.4	7/27/2007	13 07	7.51E+02	2.43E+02	1.78E+02	6.48E-02	3.80E-01	4.56E-01	5.99E-31	4.26E+00	3.23E-00	-3.31E-01	3.07E+00	3.39E+00	NA	NA	NA	MW-60-35
	003	34.9	-22.4	10/9/2007	13 20	1.34E+02	1.43E+02	1.51E+02	3.01E-01	5.97E-01	6.78E-01	1.51E+00	6.06E+00	3.54E-00	0.003E+00	2.64E+00	2.61E+00	NA	NA	NA	
	004	34.9	-22.4	1/14/2008	17 05	7.78E+01	1.53E+02	1.78E+02	5.05E-01	8.10E-01	8.93E-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	-8.72E-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	3.52E-00	-1.19E+00	2.07E+00	2.20E+00	NA	NA	NA	
	007	34.9	-22.4	11/5/2008	15 03	1.42E+02	1.83E+02	1.99E+02	1.62E-01	5.01E-01	6.39E-01	-2.33E+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	2.20E+02	1.83E+02	1.96E+02	3.81E-01	8.23E-01	9.42E-01	-1.23E+00	3.09E+00	3.11E-00	-3.21E-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	6.43E-01	7.50E-01	1.11E+00	8.76E+00	5.84E-00	7.57E-01	5.00E+00	6.58E+00	NA	NA	NA	
	010	34.9	-22.4	8/11/2009	14 41	2.50E102	1.42E102	1.53E102	3.16E-01	4.41E-01	4.71E-01	2.47E100	5.67E100	6.63E 00	3.46E100	6.30E100	7.50E100	5.77E100	1.79E101	2.03E101	
	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	7.83E-01	-1.33E+00	6.15E+00	5.99E-00	-1.00E+00	3.76E+00	4.07E+00	-1.11E+01	1.83E+01	2.21E+01	
	013	34.9	-22.4	5/10/2010	15 58	2.85E+02	1.45E+02	1.35E+02	2.89E-02	5.05E-01	6.56E-01	-1.73E+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	6.43E-01	7.39E-01	3.02E-31	5.73E+00	6.47E-00	-1.36E+00	6.23E+00	6.68E+00	-4.52E+00	2.14E+01	2.52E+01	
	015	34.9	-22.4	11/8/2010	13 25	2.44E+02	1.85E+02	4.00E+02	-5.33E-01	6.54E-01	1.73E+00	9.47E-31	4.80E+00	1.08E-01	-4.28E-01	4.56E+00	9.75E+00	-1.11E+01	3.47E+00	1.92E+01	
	016	34.9	-22.4	2/11/2011	12 17	3.20E+02	3.72E+02	3.88E+02	9.73E-01	1.63E+00	1.78E+00	2.69E+00	6.24E+00	7.45E-00	1.22E-01	3.76E+00	4.24E+00	-1.61E+00	1.62E+01	1.84E+01	
	017	34.9	-22.4	4/15/2011	11 36	2.33E+02	4.32E+02	4.80E+02	3.77E-01	1.66E+00	2.00E+00	2.46E+00	1.14E+01	8.95E-00	-8.48E-01	9.58E+00	1.03E+01	2.55E+00	1.42E+01	1.61E+01	
	018	34.9	-22.4	8/10/2011	10 54	4.99E+02	2.69E+02	2.00E+02	-5.34E-01	7.74E-01	1.17E+00	2.1 E+00	6.90E+00	8.28E-00	-1.04E+00	1.03E+01	1.10E+01	NA	NA	NA	
	019	34.9	-22.4	12/2/2011	11 21	1.74E+02	3.63E+02	4.07E+02	3.94E-01	1.72E+00	1.98E+00	-8.20E-01	9.33E+00	1.11E-01	2.63E+00	7.86E+00	1.12E+01	NA	NA	NA	
MW-60-53	001	53.4	-40.9	5/8/2007	11 52	5.32E101	1.53E102	1.82E102	-4.22E-01	5.52E-01	0.26E-01	-2.03E100	4.06E100	4.07E 00	2.15E-01	3.59E100	4.12E100	3.50E100	1.04E101	2.12E101	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 31	3.01E+00	3.31E-00	7.87E-01	3.55E+00	3.75E+00	NA	NA	NA	
	003	53.4	-40.9	10/9/2007	12 22	1.13E+02	1.44E+02	1.56E+02	6.79E-01	6.56E-01	6.79E-01	-2.11E+00	3.39E+00	3.51E-00	-2.62E-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	-1.59E-01	5.28E-01	7.59E-01	-1.13E+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	9.83E+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	1.83E+02	1.99E+02	-1.35E-01	5.82E-01	8.17E-01	8.77E-31	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	1.72E+02	1.98E+02	4.81E-01	8.09E-01	9.30E-01	-1.23E+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	6.64E-02	6.72E-01	8.32E-01	7.73E-31	1.18E+01	7.89E-00	-2.04E+00	8.30E+00	9.85E+00	0.00E+00	2.59E+01	2.81E+01	
	010	53.4	-40.9	8/11/2009	14 26	2.28E+02	2.69E+02	2.00E+02	-5.34E-01	7.74E-01	1.17E+00	2.1 E+00	6.90E+00	8.28E-00	-1.04E+00	1.03E+01	1.10E+01	-3.23E+00	1.71E+01	2.00E+01	
	011	53.4	-40.9	10/30/2009	14 12	1.47E102	1.47E102	1.61E102	1.24E-01	4.95E-01	6.12E-01	-2.06E-01	6.03E100	7.53E 00	-3.34E-02	6.96E100	7.65E100	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	7.30E 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	1.53E+02	1.41E+02	-9.37E-02	4.95E-01	6.32E-01	8.10E-31	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	1.53E+02	1.60E+02	-2.34E-02	4.83E-01	6.34E-01	-8.42E+00	7.92E+00	7.72E-00	-2.64E+00	6.03E+00	6.02E+00	-8.48E+00	1.93E+01	2.37E+01	
	015	53.4	-40.9	11/8/2010	12 22	2.49E+02	1.83E+02	3.96E+02	-4.58E-01	4.20E-01	1.32E+00	4.54E-31	4.11E+00	9.15E-00	2.23E+00	3.57E+00	8.75E+00	1.10E+01	3.93E+00	1.96E+01	
	016	53.4	-40.9	2/11/2011	10 57	3.19E+02	3.73E+02	3.87E+02	7.44E-01	1.52E+00	1.70E+00	-2.03E+00	5.88E+00	6.15E-00	1.39E+00	7.96E+00	8.33E+00	-1.39E+00	1.50E+01	1.72E+01	
	017	53.4	-40.9	4/15/2011	11 37	-5.87E+01	3.95E+02	4.80E+02	-1.18E-02	1.60E+00	2.04E+00	2.17E+00	9.90E+00	1.14E-01	-1.11E+00	8.68E+00	8.95E+00	-1.06E+00	1.43E+01	1.66E+01	
	018	53.4	-40.9	8/10/2011	11 45	5.16E+02	2.73E+02	1.99E+02	1.18E+00	1.35E+00	1.45E+00	5.77E-31	1.34E+01	8.78E-00	-5.16E-01	1.07E+01	1.15E+01	NA	NA	NA	
	019	53.4	-40.9	12/2/2011	11 46	2.50E+02	3.53E+02	3.53E+02	2.60E-02	1.69E+00	1.97E+00	4.62E-31	4.68E+00	5.62E-00	-2.92E-01	4.83E+00	5.62E+00	NA	NA	NA	
MW-60-72	001	72.4	-59.9	5/8/2007	12 17	-9.26E+00	1.23E+02	1.82E+02	2.87E-01	8.13E-01	9.71E-01	1.61E+00	4.72E+00	3.33E-00	5.40E-01	3.21E+00	2.82E+00	8.28E-01	1.69E+01	1.97E+01	MW-60-72
	002	72.4	-59.9	7/27/2007	13 22	1.10E102	1.64E102	1.01E102	-2.27E-01	4.92E-01	5.76E-01	4.77E-31	2.06E100	4.51E 00	1.10E100	2.34E100	2.12E100	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	7.43E 31	3.78E+00	4.27E-00	6.12E C1	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	5.47E-33	3.33E+00	3.55E-00	8.47E-01	2.97E+00	3.54E+00	NA	NA	NA	
	005	72.4	-59.9	4/24/2008	12 20	1.55E+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	1.57E+02	1.55E+02	1.69E+02	-4.16E-01	7.19E-01	9.50E-01	-6.54E-01	3.00E+00	3.33E-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	5.30E-01	6.30E-01	2.68E+00	5.88E+00	4.62E-00	4.36E+00	6.15E+00	7.86E+00	-2.42E+00	1.79E+01	2.04E+01	
	011	72.4	-59.9	10/30/2009	11 08	1.73E+02	1.43E+02	1.61E+02	4.02E-02	3.89E-01	4.33E-01	-3.13E+00	5.89E+00	5.99E-00	2.57E+00	7.02E+00	8.32E+00	NA	NA	NA	
	012	72.4	-59.9	3/1/2010	11 31	1.27E+02	1.53E102	1.74E102	-5.29E-02	5.52E-01	7.30E-01	-6.03E+00	0.01E100	7.73E 00	-1.02E+00	8.03E100	9.26E100	-4.05E+00	1.94E101	2.26E101	
	013	72.4	-59.9	5/10/2010	12 11	3.21E+02	1.53E+02	1.40E+02	1.57E 02	5.49E 01	7.10E 01	3.65E+00	1.29E+01	1.58E-01	7.77E+00	1.16E+01	1.16E+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	
	015	72.4	-59.9	11/16/2010	13 17	-2.51E+01	1.63E+02	3.98E+02	5.83E-02	5.15E-01	1.33E+00	2.12E+00	5.34E+00	1.25E-01	-3.92E+00	5.67E+00	1.05E+01	-1.14E+01	3.32E+00	1.89E+01	
	016	72.4	-59.9	2/10/2011	12 54	3.54E+02	3.75E+02	3.84E+02	2.41E-01	1.45E+00	1.70E+00	-5.10E-02	9.12E+00	1.01E-01	2.27E+00	8.84E+00	1.07E+01	2.12E+00	1.54E+01	1.75E+01	
	017	72.4	-59.9	4/15/2011	13 12	2.19E+02	3.73E+02	4.13E+02	7.12E-01	1.72E+00	1.97E+00	-5.14E+00	6.54E+00	5.80E-00	-3.30E+00	1.14E+01	1.14E+01	-2.93E+00	1.39E+01	1.63E+01	
	018	72.4	-59.9	8/10/2011	13 25	2.91E+02	2.23E+02	1.95E+02	1.22E-01	9.33E-01	1.14E+00	-4.03E+00	9.63E+00	1.00E-01	4.20E+00	8.40E+00	1.06E+01	NA	NA	NA	
	019	72.4	-59.9	12/2/2011	10 01	5.38E+02	5.53E+02	4.01E+02	8.41E-01	1.43E+00	1.95E+00	-2.14E+00	6.99E+00	8.22E-00	-1.72E+00	8.38E+00	1.01E+01	NA	NA	NA	
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	11 00	3.92E102	2.03E102	1.01E102	-2.13E-01	3.09E-01	4.59E-01	2.70E-32	2.70E100	3.07E 00	1.70E-01	2.03E100	2.04E100	NA	NA	NA	
	003	134.9	-122.4	10/9/2007	14 20	5.30E+02	1.83E+02	1.50E+02	2.59E 01	4.44E 01	6.31E 01	1.55E+00	3.40E+00	3.52E-00	8.89E 02	3.57E+00	3.94E+00	NA	NA	NA	
	004	134.9	-122.4	1/14/2008	14 19	3.79E+02	1.83E+02	1.74E+02	1.70E-01	6.13E-01	8.52E-01	-1.33E+00	3.14E+00	3.25E-00	4.22E-01	3.17E+00	3.55E+00	NA	NA	NA	
	005	134.9	-122.4	4/24/2008	12 31	5.85E+02	1.33E+02	1.93E+02	-1.38E-02	3.13E-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	6.42E-00	-3.93E+00	6.25E+00	5.96E+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	1.83E+02	1.71E+02	-1.77E-01	6.12E-01	7.45E-01	-3.22E+00	1.31E+01	8.75E-00	3.12E-01	6.81E+00	7.64E+00	NA	NA	NA	
	010	134.9	-122.4	8/11/2009	10 52	5.46E+02	1.64E+02	1.69E+02	4.65E-01	5.88E-01	6.16E-01	1.76E+00	5.36E+00	4.03E-00	4.56E-01	3.51E+00	3.95E+00	-5.72E+00	1.74E+01	2.03E+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	7.31E-01	1.73E+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	3.14E102	1.63E102	1.75E102	1.21E-01	5.95E-01	7.32E-01	5.09E-31	4.11E100	4.72E 00	-5.10E100	7.25E100	5.27E100	-1.29E100	1.09E101	2.10E101	
	013	134.9	-122.4	5/10/2010	12 21	4.18E+02	1.93E+02	1.65E+02	9.16E 02	6.05E 01	8.55E 01	1.55E+00	7.70E+00	9.03E-00	6.68E C3	8.27E+00	9.36E+00	8.62E+00	2.04E+01	2.38E+01	
	014	134.9	-122.4	8/17/2010	12 09	1.87E+02	1.33E+02	1.43E+02	-2.74E-01	5.38E-01	7.27E-01	-3.45E+00	8.41E+00	9.07E-00	-1.52E+00	6.30E+00	6.76E+00	8.77E-01	2.11E+01	2.45E+01	
	015	134.9	-122.4	11/16/2010	13 22	2.41E+02	1.83E+02	3.96E+02	-4.36E-02	7.65E-01	1.88E+00	2.16E-31	5.37E+00	1.27E-01	1.02E+00	4.73E+00	1.03E+01	8.67E-01	8.57E+00	1.90E+01	
	016	134.9	-122.4	2/10/2011	13 04	3.98E+02	3.73E+02	3.83E+02	1.14E+00	1.82E+00	1.98E+00	1.72E+00	6.72E+00	7.79E-00	2.24E-01	7.44E+00	8.25E+00	-3.56E+00	1.52E+01	1.76E+01	
	017	134.9	-122.4	4/15/2011	13 25	4.14E+02	4.02E+02	4.12E+02	6.52E-01	1.90E+00	2.16E+00	-6.83E+00	1.39E+01	1.63E-01	-2.48E+00	9.86E+00	1.01E+01	4.54E+00	1.47E+01	1.65E+01	
	018	134.9	-122.4	8/10/2011	13 51	4.30E+02	2.43E+02	1.96E+02	-2.08E-01	9.78E-01	1.25E+00	-7.37E+00	9.39E+00	8.24E-00	-6.27E+00	1.07E+01	9.07E+00	NA	NA	NA	
	019	134.9	-122.4	12/2/2011	10 10	3.25E+02	3.81E+02	4.08E+02	-1.48E-01	1.62E+00	1.97E+00	-1.37E-02	7.68E+00	9.43E-00	2.05E+00	8.28E+00	1.13E+01	NA	NA	NA	
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-31	3.46E+00	3.85E-00	1.46E+00	3.75E+00	4.46E+00	5.52E-01	1.63E+01	1.97E+01	MW-60-154

IPEC00267175

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[4]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-60-154	002	154.4	-141.9	7/27/2007	16:18	4.52E+02	2.09E+02	1.79E+02	-1.15E-01	3.46E-01	4.39E-01	8.09E-31	4.23E+00	4.65E-00	3.74E+00	2.47E+00	3.80E+00	NA	NA	NA	MW-60-154
	003	154.4	-141.9	10/9/2007	14:23	5.30E+02	1.83E+02	1.50E+02	-1.32E-02	4.96E-01	6.33E-01	-1.63E+00	3.50E+00	3.68E-00	2.20E-01	3.30E+00	5.76E+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	4.45E-00	2.92E-01	4.35E+00	6.02E+00	NA	NA	NA	
	005	154.4	-141.9	4/24/2008	12:36	4.53E+02	1.23E+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	5.75E+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	2.56E-01	3.30E-01	-8.80E-01	2.67E+00	3.58E-00	4.30E-01	1.89E+00	5.25E+00	NA	NA	NA	
	007	154.4	-141.9	11/6/2008	11:19	6.87E+02	1.15E+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	7.99E-01	8.96E-01	7.14E-31	3.02E+00	3.45E-00	1.01E+00	3.54E+00	6.13E+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	6.38E-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	7.13E-01	9.59E-01	-3.93E-01	5.04E+00	5.67E-00	-2.95E+00	6.06E+00	5.34E+00	1.77E+00	1.00E+01	2.00E+01	
	011	154.4	-141.9	10/30/2009	10:56	4.29E+02	1.59E+02	1.61E+02	4.48E-01	8.40E-01	9.50E-01	1.31E+01	7.70E+00	6.69E-00	1.32E-01	6.57E+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	5.47E-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	7.31E-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	1.53E+02	1.45E+02	-2.33E-01	5.00E-01	6.51E-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	
	015	154.4	-141.9	11/6/2010	13:40	4.58E+02	1.94E+02	3.98E+02	3.29E-01	8.30E-01	1.94E+00	-5.23E+00	4.02E+00	7.52E-00	-2.29E-01	5.09E+00	1.11E+01	-4.54E+00	7.93E+00	1.78E+01	
	016	154.4	-141.9	2/10/2011	12:53	5.44E+02	4.02E+02	3.87E+02	2.32E-02	8.50E-01	1.07E+00	-4.12E+00	9.26E+00	8.97E-00	5.91E-01	7.86E+00	9.12E+00	4.51E+00	1.52E+01	1.71E+01	
	017	154.4	-141.9	4/15/2011	13:19	3.36E+02	3.95E+02	4.21E+02	-4.30E-01	1.53E+00	2.02E+00	-2.02E+00	7.62E+00	7.82E-00	-7.25E-01	6.50E+00	6.79E+00	1.52E+00	1.44E+01	1.64E+01	
	018	154.4	-141.9	8/10/2011	13:22	5.89E+02	2.81E+02	1.97E+02	-5.38E-02	1.13E+00	1.40E+00	-1.03E+00	8.01E+00	8.47E-00	2.98E+00	9.03E+00	1.07E+01	NA	NA	NA	
	019	154.4	-141.9	12/2/2011	10:18	6.27E+02	5.22E+02	5.23E+02	-1.47E-01	1.24E+00	1.90E+00	1.12E+00	9.33E+00	1.17E-01	-3.69E+00	1.00E+01	1.13E+01	NA	NA	NA	
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-31	4.54E+00	4.33E-00	1.14E+00	3.90E+00	3.90E+00	7.59E+00	1.73E+01	1.96E+01	MW-60-176
	002	175.9	-163.4	7/27/2007	17:35	8.49E+02	2.42E+02	1.78E+02	4.50E-01	5.98E-01	7.37E-01	2.00E+00	3.29E+00	4.02E-00	1.76E+00	3.35E+00	3.03E+00	NA	NA	NA	
	003	175.9	-163.4	10/9/2007	14:57	7.97E+02	2.01E+02	1.53E+02	-5.93E-02	5.11E-01	6.54E-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	6.58E+02	2.23E+02	1.83E+02	-7.58E-02	7.89E-01	1.04E+00	2.22E-31	3.99E+00	4.52E-00	5.49E-01	3.54E+00	4.06E+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	5.38E-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	6.86E-01	7.58E-01	-2.42E-01	3.27E+00	3.55E-00	5.10E-01	3.29E+00	5.74E+00	-1.22E+01	2.06E+01	2.44E+01	
	009	175.9	-163.4	5/5/2009	11:18	1.34E+03	2.64E+02	1.72E+02	2.40E-01	6.00E-01	6.90E-01	-4.13E+00	8.45E+00	7.63E-00	1.23E+00	6.29E+00	6.29E+00	NA	NA	NA	
	010	175.9	-163.4	8/11/2009	11:49	1.23E+03	1.94E+02	1.69E+02	-2.36E-02	3.44E-01	4.52E-01	5.71E+00	4.89E+00	4.89E-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	1.32E+03	1.03E+02	1.61E+02	-2.27E-01	4.66E-01	6.27E-01	3.59E-31	5.25E+00	5.95E-00	2.31E+00	5.27E+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	3.95E-01	7.93E+00	7.26E+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	-3.79E-01	4.55E-01	6.29E-01	-5.66E-01	8.13E+00	9.07E-00	5.92E-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	9.31E-01	1.23E-31	6.43E+00	7.32E-00	1.35E+00	5.80E+00	6.97E+00	0.00E+00	2.13E+01	2.48E+01	
	015	175.9	-163.4	11/6/2010	14:06	8.33E+02	2.13E+02	3.97E+02	9.07E-01	9.42E-01	2.10E+00	-1.97E+00	4.38E+00	9.04E-00	2.85E+00	4.70E+00	1.12E+01	-6.40E+00	7.91E+00	1.78E+01	
	016	175.9	-163.4	2/10/2011	10:31	1.12E+03	4.63E+02	3.85E+02	2.58E-01	1.45E+00	1.74E+00	4.88E+00	1.13E+01	6.69E-00	-1.75E+00	6.70E+00	6.74E+00	7.24E+00	1.62E+01	1.79E+01	
	017	175.9	-163.4	4/15/2011	13:49	8.99E+02	4.65E+02	4.18E+02	-8.39E-01	1.41E+00	2.10E+00	-7.83E-02	9.90E+00	1.10E-01	-2.35E+00	1.02E+01	1.03E+01	-2.40E-01	1.40E+01	1.62E+01	
	018	175.9	-163.4	8/10/2011	14:12	9.72E+02	3.42E+02	2.00E+02	-1.79E-01	9.21E-01	1.22E+00	-3.87E+00	7.74E+00	7.27E-00	-1.71E-01	8.91E+00	9.60E+00	NA	NA	NA	
	019	175.9	-163.4	12/2/2011	10:27	1.30E+03	5.57E+02	5.15E+02	-1.13E+00	1.41E+00	1.95E+00	7.64E-31	9.60E+00	1.22E-01	1.35E+00	1.01E+01	1.36E+01	NA	NA	NA	
MW-62-18	001	13.5	1.2	5/17/2007	13:10	4.52E+02	1.83E+02	1.52E+02	2.98E-02	5.23E-01	7.27E-01	-5.10E-01	2.61E+00	2.99E-00	1.00E-01	2.79E+00	3.19E+00	4.51E+00	1.92E+01	1.74E+01	MW-62-18
	002	13.5	1.2	7/26/2007	15:45	5.20E+02	2.13E+02	1.78E+02	4.68E-01	4.97E-01	5.35E-01	2.04E-31	2.75E+00	4.35E-00	5.00E+00	4.08E+00	5.00E+00	NA	NA	NA	
	003	13.5	1.2	10/10/2007	13:50	3.76E+02	1.73E+02	1.55E+02	1.68E+00	6.65E-01	4.37E-01	0.00E+00	3.39E+00	1.87E-00	7.17E-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	8.77E-01	1.18E+00	4.73E+00	4.45E-00	5.74E-01	3.38E+00	3.96E+00	NA	NA	NA	
	006	13.5	1.2	8/6/2008	12:55	2.59E+02	1.41E+02	2.25E+02	5.31E-01	3.30E-01	4.39E-01	9.69E-32	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	4.38E+02	1.65E+02	1.66E+02	5.23E-01	6.03E-01	6.37E-01	-3.09E-02	5.10E+00	5.62E-00	-3.91E+00	5.25E+00	4.70E+00	NA	NA	NA	
	008	13.5	1.2	1/23/2009	11:55	4.54E+02	1.39E+02	1.07E+02	1.09E+00	6.47E-01	6.30E-01	9.88E-31	2.55E+00	3.05E-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	2.15E+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	5.28E+00	NA	NA	NA	
	011	13.5	1.2	11/2/2009	15:56	2.58E+02	1.15E+02	1.05E+02	3.30E-01	4.05E-01	8.34E-01	-1.84E+00	6.40E+00	5.82E-00	-4.68E+00	7.00E+00	6.68E+00	NA	NA	NA	
	012	13.5	1.2	2/9/2010	12:19	2.87E+02	1.83E+02	1.96E+02	5.26E-01	6.40E-01	6.54E-01	-1.57E+00	5.87E+00	6.19E-00	-2.90E+00	7.62E+00	7.61E+00	NA	NA	NA	
	013	13.5	1.2	4/13/2010	15:17	2.94E+02	1.34E+02	1.42E+02	2.74E-02	6.16E-01	7.27E-01	-1.42E+00	4.05E+00	4.32E-00	-1.56E+00	4.96E+00	5.20E+00	NA	NA	NA	
	014	13.5	1.2	8/3/2010	13:00	1.14E+02	1.32E+02	1.44E+02	6.60E-01	6.55E-01	6.30E-01	3.08E+00	8.40E+00	1.03E-01	5.07E+00	1.03E+01	1.32E+01	NA	NA	NA	
	015	13.5	1.2	11/9/2010	11:57	7.48E+01	1.71E+02	3.86E+02	-1.35E-02	6.10E-01	1.54E+00	7.87E+00	4.59E+00	1.07E-01	-6.86E-01	4.79E+00	1.01E+01	NA	NA	NA	
	016	13.5	1.2	2/24/2011	12:49	1.81E+02	3.63E+02	4.00E+02	-3.36E-01	1.71E+00	2.13E+00	2.12E-31	4.74E+00	5.13E-00	3.58E+00	5.46E+00	6.78E+00	NA	NA	NA	
	017	13.5	1.2	4/13/2011	11:58	3.25E+02	4.55E+02	4.92E+02	7.82E-01	1.54E+00	1.71E+00	-4.33E+00	1.00E+01	1.09E-01	-4.07E-01	1.06E+01	1.16E+01	NA	NA	NA	
	018	13.5	1.2	7/22/2011	11:35	2.30E+02	4.02E+02	4.45E+02	1.26E+00	1.24E+00	1.25E+00	4.94E+00	9.42E+00	1.14E-01	-1.75E+00	1.05E+01	1.06E+01	-3.83E+00	1.96E+01	2.20E+01	
	019	13.5	1.2	8/3/2011	10:18	4.34E+02	3.33E+02	3.53E+02	2.03E-01	1.37E+00	1.74E+00	-1.12E+00	8.70E+00	9.13E-00	4.76E+00	9.81E+00	1.21E+01	NA	NA	NA	
	020	13.5	1.2	10/21/2011	10:14	6.50E+02	5.54E+02	5.42E+02	-1.09E+00	1.66E+00	2.27E+00	-1.14E+00	6.87E+00	8.25E-00	-8.51E-01	8.82E+00	1.11E+01	NA	NA	NA	
MW-62-37	001	34.5	-19.8	5/17/2007	11:10	2.97E+02	1.73E+02	1.59E+02	3.30E-01	8.28E-01	9.56E-01	9.81E-31	2.00E+00	2.37E-00	-1.12E+00	2.25E+00	2.31E+00	1.31E+0.	1.81E+01	2.04E+01	MW-62-37
	002	34.5	-19.8	7/26/2007	15:35	2.50E+02	1.73E+02	1.75E+02	-2.57E-01	4.14E-01	5.10E-01	-6.68E-02	2.04E+00	2.94E-00	-4.22E-01	2.00E+00	2.01E+00	NA	NA	NA	
	003	34.5	-19.8	10/10/2007	14:50	3.32E+02	1.53E+02	1.47E+02	1.57E-01	4.47E-01	6.10E-01	3.12E-31	1.81E+00	2.02E-00	9.67E-01	1.74E+00	1.93E+00	NA	NA	NA	
	004	34.5	-19.8	1/30/2008	13:55	3.97E+02	1.63E+02	1.71E+02	1.34E-01	6.05E-01	7.24E-01	8.83E-31	4.43E+00	4.62E-00	-2.10E-01	3.87E+00	4.15E+00	NA	NA	NA	
	006	34.5	-19.8	8/6/2008	12:00	3.94E+02	1.13E+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	1.46E+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-31	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	9.22E-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	3.95E-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	-3.58E-01	6.75E-01	8.31E-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	11/2/2009	15:27	2.11E+02	1.01E+02	1.05E+02	-5.41E-01	4.01E-01	8.58E-01	-8.35E+00	1.00E+01	1.01E-01	-1.08E+00	7.15E+00	7.12E+00	NA	NA	NA	
	012	34.5	-19.8	2/9/2010	15:40	3.93E+02	1.95E+02	1.98E+02	-1.30E-01	4.96E-01	6.56E-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	7.31E-01	-2.42E+00	3.60E+00	4.07E-00	1.34E+00	4.04E+00	4.00E+00	NA	NA	NA	
	014	34.5	-19.8	8/3/2010	12:52	1.21E+02	1.43E+02	1.47E+02	1.52E-02	5.47E-01	6.35E-01	9.69E-01	8.78E+00	9.72E-00	5.33E+00	9.12E+00	7.92E+00	NA	NA	NA	
	015	34.5	-19.8	11/9/2010	11:56	6.39E+01	1.73E+02	3.85E+02	7.62E-01	6.69E-01	1.47E+00	-3.46E-02	4.49E+00	9.91E-00	3.83E+00	4.28E+00	1.07E+01	NA	NA	NA	
	016	34.5	-19.8	2/24/2011	12:52	3.75E+02	3.75E+02	4.00E+02	5.74E-01	1.84E+00	2.13E+00	1.07E+00	6.06E+00	6.85E-00	-2.84E+00	6.18E+00	6.28E+00	NA	NA	NA	
	017	34.5	-19.8	4/13/2011	12:10	1.56E+02	4.35E+02	4.91E+02	-1.37E-01	1.08E+00	1.37E+00	-4.43E+00	8.32E+00	7.75E-00	-1.68E+00	9.02E+00	9.05E+00	NA	NA	NA	
	018	34.5	-19.8	7/22/2011	12:28	1.15E+02	3.93E+02	4.42E+02	1.03E+00	1.60E+00	1.73E+00	-3.64E+00	7.95E+00	8.03E-00	2.96E+00	1.10E+01	1.32E+01	-8.92E+00	1.85E+01	2.09E+01	
	019	34.5	-19.8	8/3/2011	10:35	3.29E+02	3.33E+02	3.52E+02	1.23E+00	1.81E+00	1.96E+00	3.02E+00	6.69E+00	8.03E-00	2.71E+00	8.55E+00	1.01E+01	NA	NA	NA	
	020	34.5	-19.8	10/21/2011	10:02	3.74E+02	3.33E+02	3.47E+02	-3.24E-01	1.60E+00	2.05E+00	5.93E-31	8.19E+00	9.98E-00	-1.66E+00	8.07E+00	9.72E+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	8.36E-01	5.50E-31	3.40E+00	3.85E-00	-9.12E-01	3.42E+00	3.74E+00	-5.00E+00	1.40E+01	1.68E+01	MW-62-53

IPEC00267176

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[4]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
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	7.35E-01	0.00E+00	4.67E+00	2.53E+00	-8.44E-01	2.77E+00	2.45E+00	NA	NA	NA	MW-62-53
	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	9/6/2008	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	4.38E+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	7.15E+00	NA	NA	NA	
	007	53.1	-40.3	1/23/2009	12:44	3.56E+02	2.15E+02	2.06E+02	4.53E-01	7.68E-01	8.50E-01	2.27E-31	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	-5.39E-01	6.65E-01	9.19E-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	7.97E-01	8.34E-01	3.00E-32	3.13E+00	3.55E+00	3.78E-01	3.24E+00	3.73E+00	NA	NA	NA	
	010	53.1	-40.3	11/2/2009	13:38	2.81E+02	1.09E+02	1.01E+02	3.54E-01	6.43E-01	7.27E-01	2.51E-31	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	1.90E+02	-1.50E-01	4.35E-01	6.51E-01	-9.19E-01	5.07E+00	6.32E+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	1.41E+02	1.47E+02	1.34E-02	5.67E-01	7.57E-01	1.33E+00	3.35E+00	3.87E+00	1.52E+00	5.03E+00	7.08E+00	NA	NA	NA	
	013	53.1	-40.3	8/3/2010	12:20	1.59E+02	1.43E+02	1.47E+02	3.73E-01	5.61E-01	6.83E-01	2.99E+00	1.11E+01	1.33E+01	2.39E-01	7.18E+00	8.24E+00	NA	NA	NA	
	014	53.1	-40.3	11/9/2010	12:49	2.25E+02	1.77E+02	3.88E+02	8.32E-02	6.79E-01	1.59E+00	-4.23E+00	4.83E+00	9.52E+00	-2.68E+00	5.26E+00	1.04E+01	NA	NA	NA	
	015	53.1	-40.3	2/24/2011	12:57	3.38E+02	3.73E+02	4.03E+02	8.98E-01	1.94E+00	2.18E+00	-2.62E-01	4.72E+00	5.23E+00	-1.84E+00	5.58E+00	5.81E+00	NA	NA	NA	
	016	53.1	-40.3	4/13/2011	11:32	1.57E+02	4.35E+02	4.92E+02	1.72E+00	1.79E+00	1.84E+00	5.42E-31	6.78E+00	7.51E+00	-3.00E-01	6.24E+00	6.58E+00	NA	NA	NA	
	017	53.1	-40.3	7/22/2011	10:47	1.50E+02	3.95E+02	4.45E+02	-4.33E-01	1.07E+00	1.58E+00	4.34E+00	7.86E+00	9.52E+00	1.66E+00	8.85E+00	1.02E+01	-1.60E+01	1.79E+01	2.05E+01	
	018	53.1	-40.3	8/3/2011	12:44	4.12E+02	3.42E+02	3.00E+02	1.52E-01	1.46E+00	1.75E+00	2.87E+00	7.59E+00	9.04E+00	3.15E+00	8.76E+00	1.06E+01	NA	NA	NA	
	019	53.1	-40.3	10/21/2011	10:17	4.82E+02	3.39E+02	3.42E+02	-1.78E-02	1.24E+00	1.61E+00	1.66E+00	6.66E+00	8.55E+00	2.49E+00	7.05E+00	1.01E+01	NA	NA	NA	
MW-62-71	001	71.1	-56.3	5/10/2007	11:35	5.32E+02	2.03E+02	1.71E+02	6.10E-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	-56.3	7/26/2007	12:20	1.51E+02	1.63E+02	1.74E+02	2.15E-01	7.24E-01	8.20E-01	1.11E+00	3.36E+00	3.91E+00	-2.39E-01	3.40E+00	3.90E+00	NA	NA	NA	
	003	71.1	-56.3	10/30/2007	12:23	2.69E+02	1.61E+02	1.55E+02	1.15E-01	5.23E-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	-56.3	1/10/2008	14:04	3.53E+02	1.89E+02	1.94E+02	3.78E-01	5.85E-01	6.46E-01	-7.89E-01	2.51E+00	2.77E+00	-3.78E-02	2.22E+00	2.55E+00	NA	NA	NA	
	006	71.1	-56.3	8/6/2008	11:42	4.54E+02	1.65E+02	2.53E+02	3.31E-01	2.60E-01	3.94E-01	5.85E-31	2.01E+00	3.53E+00	-4.96E-01	2.23E+00	3.66E+00	NA	NA	NA	
	007	71.1	-56.3	10/29/2008	12:00	5.12E+02	1.73E+02	1.66E+02	3.70E-01	4.81E-01	5.33E-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	-56.3	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	-56.3	4/15/2009	12:06	4.78E+02	1.83E+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	1.83E+01	2.20E+01	
	010	71.1	-56.3	7/22/2009	12:52	3.52E+02	2.31E+02	2.32E+02	5.54E-01	7.81E-01	8.59E-01	-1.03E+00	3.46E+00	3.75E+00	8.91E-01	3.86E+00	4.50E+00	NA	NA	NA	
	011	71.1	-56.3	11/2/2009	12:40	4.38E+02	1.24E+02	1.02E+02	3.02E-01	6.66E-01	7.37E-01	2.53E+00	5.28E+00	6.35E+00	-1.15E+00	6.35E+00	6.71E+00	NA	NA	NA	
	012	71.1	-56.3	2/9/2010	13:20	4.56E+02	2.03E+02	1.99E+02	4.07E-01	4.72E-01	4.39E-01	4.29E+00	6.66E+00	6.42E+00	-2.80E+00	5.27E+00	6.05E+00	NA	NA	NA	
	013	71.1	-56.3	4/13/2010	13:45	3.77E+02	2.15E+02	2.30E+02	-2.24E-01	5.64E-01	8.12E-01	-6.51E-01	4.44E+00	4.05E+00	-2.24E+00	5.00E+00	4.62E+00	NA	NA	NA	
	014	71.1	-56.3	8/3/2010	11:30	3.25E+02	1.73E+02	1.77E+02	2.74E-01	3.75E-01	4.12E-01	2.08E+00	8.37E+00	8.99E+00	1.86E+00	9.87E+00	1.16E+01	NA	NA	NA	
	015	71.1	-56.3	11/9/2010	11:02	4.17E+02	1.88E+02	3.82E+02	-6.74E-02	6.03E-01	1.52E+00	-6.58E-01	3.90E+00	8.41E+00	-4.59E+00	5.63E+00	1.06E+01	NA	NA	NA	
	016	71.1	-56.3	2/24/2011	12:40	5.38E+02	4.05E+02	4.03E+02	1.28E-01	1.22E+00	1.48E+00	4.10E+00	1.18E+01	6.67E+00	-2.36E-01	5.00E+00	5.47E+00	NA	NA	NA	
	017	71.1	-56.3	4/13/2011	11:15	3.39E+02	4.72E+02	5.08E+02	9.04E-01	1.45E+00	1.58E+00	2.33E+00	7.96E+00	9.27E+00	-2.38E+00	8.50E+00	8.56E+00	NA	NA	NA	
	018	71.1	-56.3	7/22/2011	10:12	4.21E+02	4.25E+02	4.44E+02	-3.90E-01	1.36E+00	1.90E+00	-7.29E-02	7.74E+00	8.31E+00	-7.90E-01	8.28E+00	8.59E+00	-6.70E+00	1.89E+01	2.13E+01	
	019	71.1	-56.3	8/3/2011	11:58	5.14E+02	3.67E+02	3.07E+02	3.49E-01	1.39E+00	1.65E+00	-7.31E-01	1.01E+01	1.12E+01	2.51E+00	1.04E+01	1.20E+01	NA	NA	NA	
	020	71.1	-56.3	10/21/2011	9:44	4.58E+02	3.35E+02	3.42E+02	-1.43E-01	1.25E+00	1.69E+00	8.75E-31	9.06E+00	1.13E+01	2.06E+00	9.84E+00	1.32E+01	NA	NA	NA	
MW-62-92	001	91.6	-76.8	5/10/2007	11:18	7.30E+02	2.13E+02	1.68E+02	7.11E-01	9.42E-01	9.85E-01	-1.26E+00	4.63E+00	3.32E+00	7.43E-01	3.12E+00	2.72E+00	-1.73E+00	1.50E+01	1.65E+01	MW-62-92
	002	91.6	-76.8	7/26/2007	12:32	4.37E+02	2.07E+02	1.80E+02	-2.38E-02	3.39E-01	3.94E-01	-3.59E-31	3.15E+00	3.63E+00	8.32E-01	3.38E+00	3.92E+00	NA	NA	NA	
	003	91.6	-76.8	10/30/2007	12:15	4.28E+02	1.73E+02	1.50E+02	-1.21E-01	4.77E-01	6.54E-01	5.22E-31	1.88E+00	2.01E+00	1.85E+00	1.00E+00	2.21E+00	NA	NA	NA	
	004	91.6	-76.8	1/10/2008	11:09	3.94E+02	1.93E+02	1.94E+02	1.38E-01	6.59E-01	7.30E-01	3.75E-31	2.94E+00	3.39E+00	5.37E-01	3.17E+00	3.62E+00	NA	NA	NA	
	006	91.6	-76.8	8/6/2008	11:49	4.95E+02	1.59E+02	2.38E+02	2.43E-01	3.29E-01	5.54E-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	-76.8	10/29/2008	12:10	4.82E+02	1.63E+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	-76.8	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-31	4.58E+00	4.88E+00	1.88E+00	3.83E+00	4.74E+00	NA	NA	NA	
	009	91.6	-76.8	4/15/2009	12:15	6.38E+02	2.05E+02	1.38E+02	1.09E-01	5.42E-01	6.50E-01	3.13E-31	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	-76.8	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-31	3.39E+00	3.95E+00	-9.42E-01	3.40E+00	3.57E+00	NA	NA	NA	
	011	91.6	-76.8	11/2/2009	12:43	4.33E+02	1.23E+02	1.02E+02	3.91E-01	7.75E-01	8.76E-01	5.13E-31	5.25E+00	5.91E+00	2.98E-01	5.25E+00	5.86E+00	NA	NA	NA	
	012	91.6	-76.8	2/9/2010	13:20	5.27E+02	2.05E+02	1.98E+02	4.06E-01	6.20E-01	6.33E-01	-2.81E+00	7.55E+00	6.43E+00	2.57E+00	6.50E+00	7.81E+00	NA	NA	NA	
	013	91.6	-76.8	4/13/2010	13:38	5.96E+02	1.52E+02	1.44E+02	1.77E-01	6.88E-01	8.34E-01	1.10E+00	3.72E+00	4.24E+00	7.23E-03	3.75E+00	4.13E+00	NA	NA	NA	
	014	91.6	-76.8	8/3/2010	11:32	3.12E+02	1.63E+02	1.76E+02	4.11E-01	5.37E-01	5.70E-01	-3.42E+00	0.00E+00	9.23E+00	-4.29E+00	0.00E+00	9.36E+00	NA	NA	NA	
	015	91.6	-76.8	11/9/2010	11:15	4.82E+02	1.88E+02	3.86E+02	9.75E-01	1.77E+00	1.95E+00	2.95E+00	5.42E+00	1.17E+01	1.77E+00	6.84E+00	1.12E+01	NA	NA	NA	
	016	91.6	-76.8	2/24/2011	12:39	5.79E+02	4.03E+02	4.02E+02	9.56E-01	1.85E+00	2.06E+00	1.68E+00	5.38E+00	6.27E+00	-1.45E+00	5.68E+00	5.86E+00	NA	NA	NA	
	017	91.6	-76.8	4/13/2011	11:03	5.36E+02	4.73E+02	4.92E+02	2.87E-01	1.11E+00	1.30E+00	-2.87E+00	7.18E+00	7.31E+00	-2.10E+00	8.94E+00	8.88E+00	NA	NA	NA	
	018	91.6	-76.8	7/22/2011	10:18	5.51E+02	4.35E+02	4.39E+02	-1.12E+00	1.52E+00	2.06E+00	5.26E+00	9.42E+00	1.13E+01	-7.24E-02	9.48E+00	1.05E+01	-6.69E+00	1.76E+01	1.99E+01	
	019	91.6	-76.8	8/3/2011	12:10	5.51E+02	3.73E+02	3.03E+02	-3.26E-01	1.09E+00	1.52E+00	3.82E+00	1.46E+01	9.22E+00	-5.05E+00	1.17E+01	1.15E+01	NA	NA	NA	
	020	91.6	-76.8	10/21/2011	9:42	5.51E+02	3.45E+02	3.42E+02	4.45E-01	1.27E+00	1.48E+00	3.13E-31	9.39E+00	1.17E+01	1.88E+01	9.18E+00	1.22E+01	NA	NA	NA	
MW-62-138	001	138.1	-123.3	5/10/2007	10:22	4.55E+02	1.93E+02	1.74E+02	8.79E-01	8.16E-01	8.30E-01	1.73E+00	4.17E+00	3.25E+00	-1.40E+00	3.42E+00	3.55E+00	-4.93E+00	1.52E+01	1.64E+01	MW-62-138
	002	138.1	-123.3	7/26/2007	15:55	5.38E+02	2.19E+02	1.82E+02	5.26E-01	5.79E-01	6.39E-01	5.88E-32	3.51E+00	3.95E+00	6.39E-01	3.93E+00	4.54E+00	NA	NA	NA	
	003	138.1	-123.3	10/30/2007	14:46	7.70E+02	2.03E+02	1.54E+02	0.37E-01	6.30E-01	6.95E-01	9.00E+00	2.07E+00	2.93E+00	-1.15E+00	2.44E+00	2.50E+00	NA	NA	NA	
	004	138.1	-123.3	1/10/2008	16:05	7.59E+02	1.82E+02	1.74E+02	7.34E-01	4.32E-01	3.52E-01	1.39E-31	3.36E+00	3.88E+00	1.05E-01	3.77E+00	3.91E+00	NA	NA	NA	
	006	138.1	-123.3	8/6/2008	11:41	5.33E+02	1.53E+02	2.29E+02	1.21E+00	4.13E-01	5.31E-01	8.24E-31	2.44E+00	4.27E+00	3.95E-01	2.41E+00	4.20E+00	NA	NA	NA	
	007	138.1	-123.3	10/29/2008	12:25	7.50E+02	1.87E+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	8.69E+00	NA	NA	NA	
	008	138.1	-123.3	1/23/2009	12:50	6.26E+02	2.43E+02	2.04E+02	2.46E+00	8.21E-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	-123.3	4/15/2009	12:38	7.72E+02	2.13E+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	-123.3	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	4.52E+00	3.36E-01	3.63E+00	4.16E+00	NA	NA	NA	
	011	138.1	-123.3	11/2/2009	15:11	5.76E+02	1.35E+02	1.07E+02	2.83E+00	7.96E-01	4.32E-01	1.05E+00	7.42E+00	8.35E+00	7.24E-02	7.92E+00	8.71E+00	NA	NA	NA	
	012	138.1	-123.3	2/9/2010	15:54	7.81E+02	2.13E+02	1.99E+02	8.78E-01	6.50E-01	6.24E-01	2.22E+00	5.05E+00	6.02E+00	-2.56E+00	4.79E+00	6.02E+00	NA	NA	NA	
	013	138.1	-123.3	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	5.96E+00	-2.36E+00	6.71E+00	5.83E+00	NA	NA	NA	
	014	138.1	-123.3	8/3/2010	14:09	5.91E+02	1.02E+02	1.76E+02	1.47E+00	7.40E-01	6.56E-01	3.03E+00	7.26E+00	6.95E+00	-1.73E+00	7.35E+00	7.35E+00	NA	NA	NA	
	015	138.1	-123.3	11/9/2010	14:31	3.31E+02	2.07E+02	4.46E+02	1.35E+00	6.18E-01	1.57E+00	1.42E+00	6.04E+00	8.57E+00	2.51E+00	4.63E+00	1.11E+01	NA	NA	NA	
	016	138.1	-123.3	2/24/2011	14:54	5.17E+02	4.03E+02	4.01E+02	2.15E+00	1.77E+00	1.75E+00	-1.67E+00	4.72E+00	4.94E+00	1.88E+00	7.04E+00	9.15E+00	NA	NA	NA	
	017	138.1	-123.3	4/13/2011	14:39	6.31E+02	5.04E+02	5.09E+02	1.27E+00	1.79E+00	1.37E+00	1.29E+00	9.08E+00	1.04E+01	1.71E+00	8.89E+00	1.02E+01	NA	NA	NA	
	018	138.1	-123.3	7/22/2011	11:50	4.56E+02	4.23E+02	4.36E+02	6.72E-01	1.20E+00	1.32E+00	-5.97E-01	7.41E+00	8.13E+00	6.36E+00	9.57E+00	1.23E+01	-1.13E+01	1.79E+01	2.03E+01	
	019	138.1	-123.3	8/3/2011	10:08	1.42E+03	5.43E+02	3.34E+02	1.53E+00	1.69E+00	1.73E+00	2.51E-31	9.48E+00	1.05E+01	1.35E+00	8.40E+00	9.73E+00	NA	NA	NA	
	020	138.1	-123.3	10/21/2011	11:29	3.31E+03	5.97E+02	2.36E+02	1.24E+00	1.46E+00	1.50E+00	-5.83E+00	1.01E+01	1.12E+01	2.45E-01	1.03E+01	1.33E+01	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-32	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	2.05E+02	1.82E+02	-9.56E-02	2.73E-01	3.26E-01	-1.15E+00	3.10E+00	3.25E+00	6.21E-01	2.70E+00	3.15E+00	NA	NA	NA	

IPEC00267177

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-62-182	003	182 1	-169 3	10/ 0/2007	14 42	4 94E+02	1 83E+02	1 54E+02	-1 48E-01	4 40E-01	5 39E-01	5 04E-01	1 91E+00	1 91E+00	6 45E-01	1 07E+00	2 23E+00	NA	NA	NA	MW-62-182
	004	182 1	-169 3	1/10/2008	11 15	4 70E+02	1 63E+02	1 71E+02	8 15E-02	5 13E-01	6 33E-01	-1 17E-01	2 96E+00	2 99E+00	5 22E-01	1 31E+00	2 33E+00	NA	NA	NA	
	006	182 1	-169 3	9/6/2008	13 54	3 99E+02	1 52E+02	2 34E+02	5 30E-02	3 33E-01	6 16E-01	8 43E-01	2 19E+00	3 05E+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 73E+02	1 66E+02	4 40E-02	3 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 23E+02	2 05E+02	-1 35E-01	4 56E-01	6 38E-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	2 11E+00	-6 59E+00	1 83E+01	2 17E+01	
	010	182 1	-169 3	7/22/2009	17 00	4 56E+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	-8 12E-01	2 73E+00	2 70E+00	NA	NA	NA	
	011	182 1	-169 3	11/ 2/2009	15 15	5 10E+02	1 27E+02	1 03E+02	1 53E-01	5 44E-01	6 82E-01	-3 03E+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 59E+02	2 13E+02	2 10E+02	-2 03E-01	3 12E-01	4 21E-01	2 56E-01	5 40E+00	6 25E 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 51E 01	2 81E 01	3 93E+00	4 57E+00	3 69E C1	4 09E+00	4 65E+00	NA	NA	NA	
	014	182 1	-169 3	8/3/2010	14 07	2 78E+02	1 63E+02	1 75E+02	2 87E-01	7 07E-01	8 80E-01	-5 53E+00	1 24E+01	1 51E-01	-9 29E-01	8 00E+00	8 64E+00	NA	NA	NA	
	015	182 1	-169 3	11/9/2010	14 43	4 76E+02	1 83E+02	3 87E+02	1 02E+00	6 73E-01	1 46E+00	-2 35E+00	4 16E+00	8 55E+00	1 99E+00	5 26E+00	1 21E+01	NA	NA	NA	
	016	182 1	-169 3	2/24/2011	15 07	3 55E+02	3 84E+02	4 03E+02	-1 46E-01	1 45E+00	1 96E+00	-1 95E+00	6 24E+00	6 60E+00	5 86E-01	6 60E+00	7 33E+00	NA	NA	NA	
	017	182 1	-169 3	4/13/2011	14 44	1 92E+02	4 53E+02	5 03E+02	-5 34E-01	1 05E+00	1 45E+00	5 54E+00	8 70E+00	1 09E-01	-9 44E-01	1 08E+01	1 15E+01	NA	NA	NA	
	018	182 1	-169 3	7/22/2011	12 02	2 90E+02	4 22E+02	4 54E+02	2 09E-01	1 22E+00	1 47E+00	5 43E-31	7 41E+00	8 35E+00	-5 94E-01	7 65E+00	8 31E+00	-2 27E+00	1 56E+01	1 75E+01	
	019	182 1	-169 3	8/3/2011	10 20	5 84E+02	3 84E+02	3 05E+02	2 04E-01	1 47E+00	1 75E+00	-5 99E+00	1 25E+01	1 14E-01	-2 96E-01	1 13E+01	1 24E+01	NA	NA	NA	
	020	182 1	-169 3	10/21/201	11 37	6 88E+02	3 42E+02	3 27E+02	-2 48E-01	1 45E+00	1 90E+00	-4 81E+00	1 22E+01	1 34E-01	-1 67E+00	1 06E+01	1 27E+01	NA	NA	NA	
MW-63-18	001	149	0 7	5/18/2007	10 35	2 30E+02	1 29E+02	1 37E+02	4 75E-02	5 31E-01	6 92E-01	3 59E-31	2 44E+00	2 07E+00	1 11E+00	2 05E+00	2 74E+00	7 30E+00	1 61E+01	1 82E+01	MW-63-18
	002	149	0 7	7/30/2007	13 10	2 30E102	1 74E102	1 89E102	-2 10E-01	3 91E-01	4 50E-01	1 90E100	2 65E100	3 03E 00	-1 31E100	2 50E100	2 53E100	NA	NA	NA	
	003	149	0 7	10/ 1/2007	12 43	1 49E+02	1 55E+02	1 71E+02	3 08E 01	6 23E 01	7 12E 01	1 52E+00	2 63E+00	3 15E+00	1 41E 01	2 52E+00	2 74E+00	NA	NA	NA	
	004	149	0 7	1/9/2008	14 55	1 23E+02	1 59E+02	1 73E+02	-6 84E-02	5 55E-01	7 88E-01	3 55E+00	3 29E+00	3 47E+00	1 97E+00	2 94E+00	3 75E+00	NA	NA	NA	
	005	149	0 7	4/23/2008	14 50	2 57E+02	1 53E+02	2 43E+02	2 31E-02	4 68E-01	8 52E-01	8 04E-31	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	149	0 7	7/30/2008	11 13	1 79E+02	1 23E+02	1 91E+02	3 29E+00	5 61E-01	4 58E-01	-1 71E-02	1 75E+00	2 97E+00	-1 16E+00	2 04E+00	2 49E+00	NA	NA	NA	
	007	149	0 7	11/5/2008	10 53	3 20E+02	1 59E+02	1 65E+02	3 25E-01	6 20E-01	7 33E-01	1 31E-31	5 91E+00	6 75E+00	-1 52E+00	5 73E+00	6 04E+00	NA	NA	NA	
	008	149	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-32	2 64E+00	3 01E+00	1 02E+00	2 87E+00	3 87E+00	NA	NA	NA	
	009	149	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	149	0 7	7/30/2009	14 26	3 30E+02	1 83E+02	1 89E+02	-2 47E-01	2 76E-01	4 10E-01	2 08E+00	3 42E+00	6 31E+00	3 42E-01	5 39E+00	6 85E+00	NA	NA	NA	
	011	149	0 7	11/3/2009	12 19	1 24E+02	1 43E+02	1 61E+02	-2 72E-02	5 64E-01	7 37E-01	-9 25E-01	5 29E+00	5 73E+00	1 74E+00	5 20E+00	6 00E+00	NA	NA	NA	
	012	149	0 7	2/9/2010	13 40	3 30E102	1 63E102	1 70E102	5 29E-01	7 74E-01	8 34E-01	5 00E100	4 35E100	5 44E 00	4 46E-01	4 41E100	5 00E100	NA	NA	NA	
	013	149	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 31	5 22E+00	5 91E+00	3 24E+00	6 03E+00	7 56E+00	NA	NA	NA	
	014	149	0 7	8/10/2010	12 08	1 97E+02	1 53E+02	1 73E+02	-1 55E-02	3 48E-01	4 77E-01	-6 04E-01	7 20E+00	8 11E+00	-2 17E+00	6 42E+00	6 45E+00	NA	NA	NA	
	015	149	0 7	11/2/2010	12 22	1 97E+02	1 13E+02	1 13E+02	1 31E-01	6 83E-01	8 18E-01	1 81E+00	5 46E+00	6 42E-00	3 45E+00	6 55E+00	8 07E+00	NA	NA	NA	
	016	149	0 7	3/2/2011	11 10	4 90E+02	3 53E+02	3 55E+02	-4 34E-01	1 50E+00	2 03E+00	1 82E+00	6 78E+00	7 90E+00	2 40E+00	7 38E+00	8 82E+00	NA	NA	NA	
	017	149	0 7	4/19/2011	10 35	7 23E+01	4 33E+02	5 05E+02	-3 13E-01	1 13E+00	1 49E+00	8 69E-31	8 04E+00	8 92E-00	-3 22E+00	8 16E+00	7 75E+00	NA	NA	NA	
	018	149	0 7	7/21/2011	10 26	2 96E+02	3 99E+02	4 29E+02	6 58E-02	1 15E+00	1 50E+00	2 40E+00	7 62E+00	9 09E-00	2 37E+00	7 53E+00	9 30E+00	-8 91E+00	1 69E+01	1 92E+01	
	019	149	0 7	8/3/2011	10 02	2 90E+02	3 15E+02	3 03E+02	-1 29E-01	1 20E+00	1 57E+00	1 70E+00	6 87E+00	7 90E-00	3 80E+00	8 58E+00	1 05E+01	NA	NA	NA	
	020	149	0 7	10/ 8/201	11 34	2 39E+02	2 34E+02	2 20E+02	1 26E+00	1 74E+00	1 38E+00	1 53E+00	8 28E+00	1 07E+01	1 72E+00	1 09E+01	1 44E+01	NA	NA	NA	
MW-63-34	001	315	-17 3	5/18/2007	13 03	2 58E+02	1 53E+02	1 52E+02	-1 92E-01	5 43E-01	7 77E-01	4 19E-31	2 21E+00	2 51E-00	-3 21E-01	2 05E+00	2 44E+00	1 37E+00	1 54E+01	1 80E+01	MW-63-34
	002	315	-17 3	7/30/2007	13 25	2 20E102	1 72E102	1 90E102	-1 54E-01	2 34E-01	4 32E-01	1 73E-31	2 66E100	3 55E 00	1 90E-01	2 46E100	2 54E100	NA	NA	NA	
	003	315	-17 3	10/ 1/2007	12 50	2 31E+02	1 61E+02	1 74E+02	2 75E 01	4 47E 01	6 73E 01	6 24E 01	3 60E+00	3 58E+00	3 81E C1	2 65E+00	3 10E+00	NA	NA	NA	
	004	315	-17 3	1/9/2008	14 20	3 26E+02	1 65E+02	1 71E+02	1 74E-01	5 57E-01	6 34E-01	1 83E+00	3 63E+00	4 44E-00	3 53E-01	3 90E+00	4 35E+00	NA	NA	NA	
	005	315	-17 3	4/23/2008	13 55	4 90E+02	1 63E+02	2 45E+02	3 82E-01	5 68E-01	9 39E-01	1 7 E+00	2 05E+00	3 78E-00	-1 77E+00	3 53E+00	4 15E+00	5 77E+00	1 46E+01	2 49E+01	
	006	315	-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	315	-17 3	11/5/2008	11 03	4 14E+02	3 77E+02	3 85E+02	3 15E-01	6 73E-01	7 78E-01	5 73E-31	5 43E+00	6 12E-00	-1 40E-01	5 17E+00	5 67E+00	NA	NA	NA	
	008	315	-17 3	1/29/2009	12 22	4 20E+02	2 22E+02	1 96E+02	2 20E-01	6 83E-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	315	-17 3	5/4/2009	12 10	3 23E+02	1 75E+02	1 59E+02	2 16E-01	6 03E-01	6 39E-01	5 53E-31	7 29E+00	4 85E+00	1 92E+00	3 42E+00	4 32E+00	NA	NA	NA	
	010	315	-17 3	7/30/2009	14 00	3 53E+02	1 83E+02	1 88E+02	2 57E-01	5 50E-01	6 57E-01	5 66E-31	5 50E+00	5 65E+00	1 70E+00	5 49E+00	6 42E+00	NA	NA	NA	
	011	315	-17 3	11/3/2009	11 02	3 10E+02	1 53E+02	1 62E+02	-3 73E-01	4 06E-01	6 31E-01	-6 69E-02	8 31E+00	9 15E-00	8 03E-01	5 76E+00	6 76E+00	NA	NA	NA	
	012	315	-17 3	2/9/2010	13 19	3 26E+02	1 73E102	1 75E102	2 26E-01	6 73E-01	9 20E-01	-6 36E-01	3 94E 00	4 33E 00	-8 05E-01	4 26E100	4 66E100	NA	NA	NA	
	013	315	-17 3	4/26/2010	13 21	2 89E+02	1 58E+02	1 47E+02	3 34E 01	7 18E 01	9 23E 01	5 64E 01	5 55E+00	5 88E+00	1 05E+00	5 19E+00	5 37E+00	NA	NA	NA	
	014	315	-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 05E-01	3 10E+00	7 21E+00	9 27E+00	NA	NA	NA	
	015	315	-17 3	11/2/2010	13 04	3 41E+02	1 35E+02	1 14E+02	3 11E-01	5 72E-01	6 45E-01	1 16E-31	5 66E+00	6 29E-00	-2 31E+00	6 33E+00	6 51E+00	NA	NA	NA	
	016	315	-17 3	3/2/2011	10 50	2 98E+02	2 85E+02	2 62E+02	-4 29E-01	1 57E+00	2 11E+00	7 43E-32	7 96E+00	8 82E-00	-2 10E+00	8 42E+00	8 59E+00	NA	NA	NA	
	017	315	-17 3	4/19/2011	10 25	3 94E+02	4 63E+02	4 87E+02	-1 13E+00	1 22E+00	1 33E+00	4 36E+00	8 34E+00	9 94E-00	3 72E+00	8 28E+00	1 02E+01	NA	NA	NA	
	018	315	-17 3	7/21/2011	10 08	3 34E+02	4 03E+02	4 39E+02	2 38E-01	1 17E+00	1 42E+00	-1 34E+00	9 03E+00	9 54E-00	1 66E-01	7 89E+00	8 63E+00	-1 26E+01	1 23E+01	1 47E+01	
	019	315	-17 3	8/3/2011	10 14	3 51E+02	3 51E+02	3 02E+02	1 90E-01	1 57E+00	1 66E+00	8 99E+00	9 09E+00	1 12E-01	-1 29E-01	8 16E+00	8 56E+00	NA	NA	NA	
	020	315	-17 3	10/ 8/201	11 39	4 30E+02	3 33E+02	3 46E+02	-4 71E-01	1 27E+00	1 78E+00	-3 77E+00	8 31E+00	9 14E-00	2 21E+00	7 62E+00	1 11E+01	NA	NA	NA	
MW-63-50	001	493	-37 2	5/15/2007	11 40	3 26E102	1 03E102	1 73E102	-9 70E-02	6 15E-01	9 32E-01	-1 33E-01	5 20E100	5 01E 00	6 64E-01	4 23E100	4 01E100	-2 41E100	1 24E101	1 51E101	MW-63-50
	002	493	-37 2	7/25/2007	14 00	2 35E+02	1 83E+02	1 95E+02	1 29E 01	6 03E 01	6 34E 01	2 08E+00	3 18E+00	3 93E-00	1 55E 01	3 19E+00	3 54E+00	NA	NA	NA	
	003	493	-37 2	10/ 1/2007	11 10	2 89E+02	1 62E+02	1 73E+02	-3 41E-01	5 10E-01	7 75E-01	5 21E-31	2 98E+00	3 33E-00	1 56E+00	3 17E+00	3 96E+00	NA	NA	NA	
	004	493	-37 2	1/9/2008	12 32	3 56E+02	1 67E+02	1 77E+02	4 48E-01	7 41E-01	8 76E-01	3 87E-31	2 66E+00	3 07E-00	-1 42E+00	3 34E+00	3 92E+00	NA	NA	NA	
	005	493	-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 13E+00	1 85E+00	2 93E-00	5 01E-01	1 75E+00	3 27E+00	2 43E+00	1 40E+01	2 41E+01	
	006	493	-37 2	7/30/2008	10 29	3 35E+02	1 32E+02	1 91E+02	6 10E-01	4 97E-01	8 32E-01	-1 77E+00	1 83E+00	2 65E-00	-1 22E+00	1 91E+00	2 86E+00	NA	NA	NA	
	007	493	-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	493	-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-32	3 09E+00	3 51E-00	1 37E+00	3 41E+00	4 19E+00	NA	NA	NA	
	009	493	-37 2	5/4/2009	11 51	3 80E+02	1 83E+02	1 65E+02	1 58E-01	5 75E-01	6 59E-01	1 22E+00	6 27E+00	4 15E-00	-2 49E-01	3 98E+00	4 34E+00	NA	NA	NA	
	010	493	-37 2	7/30/2009	11 05	3 35E+02	1 83E+02	1 87E+02	5 40E-01	5 86E-01	5 31E-01	2 00E+00	6 27E+00	7 39E-00	1 36E+00	6 63E+00	7 71E+00	NA	NA	NA	
	011	493	-37 2	11/3/2009	10 42	3 50E102	1 53E102	1 61E102	-5 37E-03	5 31E-01	6 94E-01	2 14E-31	6 01E100	7 54E 00	-1 30E100	7 20E100	7 57E100	NA	NA	NA	
	012	493	-37 2	2/9/2010	12 45	3 34E+02	1 67E102	1 77E102	5 42E 01	7 40E 01	7 22E 01	1 45E+00	3 25E100	3 55E 00	2 99E C1	3 33E+00	3 81E+00	NA	NA	NA	
	013	493	-37 2	4/26/2010	12 06	4 13E+02	1 62E+02	1 45E+02	2 28E-01	5 85E-01	6 32E-01	-5 57E+00	1 01E+01	1 12E-01	-2 82E+00	6 74E+00	6 45E+00	NA	NA	NA	
	014	493	-37 2	8/10/2010	14 32	2 77E+02	1 65E+02	1 75E+02	-2 47E-02	5 47E-01	6 40E-01	-1 37E+00	7 10E+00	7 87E-00	1 73E-01	7 24E+00	8 96E+00	NA	NA	NA	
	015	493	-37 2	11/2/2010	15 07	3 29E+02	1 31E+02	1 12E+02	2 27E-01	6 23E-01	7 23E-01	-2 98E-02	7 72E+00	8 42E-00	2 76E+00	8 00E+00	9 78E+00	NA	NA	NA	
	016	493	-37 2	3/2/2011	14 21	4 35E+02	3 43E+02	3 44E+02	1 73E-01	1 62E+00	2 03E+00	1 13E+00	6 50E+00	7 48E-00	3 64E+00	7 02E+00	8 76E+00	NA	NA	NA	
	017	493	-37 2	4/19/2011	11 25	1 58E+02	4 35E+02	4 89E+02	7 72E-01	1 35E+00	1 53E+00	-6 45E+00	9 76E+00	9 29E-00	3 72E+00	8 18E+00	1 03E+01	NA	NA	NA	
	018	493	-37 2	7/21/2011	11 25	2 29E+02	3 99E+02	4 41E+02	-6 50E-01	8 58E-01	1 39E+00	2 46E-31	7 56E+00	8 55E-00	2 77E+00	8 64E+00	1 05E+01	-2 89E+00	1 51E+01	1 69E+01	
	019	493	-37 2	8/3/2011	11 38	3 50E+02	3 33E+02	3 09E+02	-8 45E-01	1 10E+00	1 60E+00	8 12E+00	1 18E+01	1 44E-01	4 49E+00	8 42E+00	1 14E+01	NA	NA	NA	

See Page 34 for Notes

IPEC00267178

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

Well ID[1, 4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[4]													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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-63-90	090	495	-387	10/18/2011	13 55	3 14E+02	3 63E+02	3 85E+02	4 67E-01	1 68E+00	1 94E+00	-9 09E-01	1 09E+01	1 29E-01	-2 69E+00	1 09E+01	1 34E+01	NA	NA	NA	MW-63-90
MW-63-93	091	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-31	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 83E+02	1 75E+02	8 20E-02	7 29E-01	9 24E-01	1 07E-31	4 80E+00	4 60E+00	5 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	5 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 15E+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 00E-01	8 45E-01	7 74E-31	3 06E+00	3 55E+00	1 05E-01	3 20E+00	3 56E+00	NA	NA	NA	
	006	93	-80 7	4/23/2008	11 23	3 22E+02	1 65E+02	2 65E+02	2 93E-01	5 44E-01	9 35E-01	3 49E-31	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 23E+02	1 92E+02	2 28E-03	2 21E-01	3 36E-01	-4 02E-01	2 01E+00	3 35E+00	-3 19E-01	1 93E+00	3 23E+00	NA	NA	NA	
	008	93	-80 7	11/5/2008	10 14	3 30E+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 02E+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 56E+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 54E+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 43E+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 63E+02	1 77E+02	1 78E-01	6 63E-01	8 36E-01	-1 13E+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 20E-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 21E-01	4 38E-01	6 16E-01	1 24E+00	6 64E+00	7 73E+00	2 61E-01	7 58E+00	8 46E+00	NA	NA	NA	
	016	93	-80 7	11/2/2010	15 08	2 39E+02	1 21E+02	1 11E+02	3 29E-01	5 72E-01	6 42E-01	-4 18E-02	4 95E+00	5 64E+00	3 38E+00	5 80E+00	7 11E+00	NA	NA	NA	
	017	93	-80 7	3/2/2011	14 14	2 59E+02	3 00E+02	2 94E+02	3 30E-01	1 79E+00	2 17E+00	-1 51E+00	8 78E+00	9 05E+00	3 38E+00	7 70E+00	9 50E+00	NA	NA	NA	
	018	93	-80 7	4/19/2011	11 27	9 54E+01	4 42E+02	5 05E+02	-4 30E-02	1 14E+00	1 44E+00	3 31E+00	8 92E+00	1 03E 01	-4 35E+00	6 00E+00	7 25E+00	NA	NA	NA	
	019	93	-80 7	7/21/2011	11 32	4 17E+02	4 23E+02	4 40E+02	4 28E 01	1 06E+00	1 48E+00	3 53E+00	8 10E+00	7 77E+00	6 11E+00	7 93E+00	5 51E+00	6 50E 01	1 71E+01	1 90E+01	
	020	93	-80 7	8/3/2011	11 50	1 84E+02	3 17E+02	3 38E+02	4 25E-02	1 31E+00	1 63E+00	1 67E+00	7 26E+00	7 88E+00	-2 65E+00	7 51E+00	8 38E+00	NA	NA	NA	
	021	93	-80 7	10/18/2011	14 14	5 04E+02	3 73E+02	3 88E+02	5 60E-01	1 37E+00	1 56E+00	7 43E-31	6 45E+00	8 33E+00	3 55E+00	6 87E+00	1 02E+01	NA	NA	NA	
MW-63-112	001	115	-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	115	-99 2	7/25/2007	14 52	2 59E+02	1 83E+02	1 97E+02	6 32E-02	3 46E-01	3 99E-01	5 92E-31	4 14E+00	4 19E+00	-6 35E-01	3 94E+00	4 34E+00	NA	NA	NA	
	003	115	-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	5 50E+00	4 15E+00	NA	NA	NA	
	004	115	-99 2	1/9/2008	10 20	4 59E+02	1 73E+02	1 72E+02	2 19E-01	5 07E-01	5 92E-01	3 90E-31	3 30E+00	3 34E+00	2 87E-01	3 56E+00	3 75E+00	NA	NA	NA	
	005	115	-99 2	4/23/2008	11 08	3 72E+02	1 63E+02	2 65E+02	-3 90E-02	3 96E-01	7 44E-01	4 71E-31	2 80E+00	3 89E+00	4 52E+00	2 98E+00	4 52E+00	-5 00E-01	1 43E+01	2 48E+01	
	006	115	-99 2	7/29/2008	14 20	2 27E+02	1 01E+02	1 63E+02	7 08E-01	5 39E-01	8 56E-01	5 61E-31	1 07E+00	2 66E+00	3 41E+00	1 07E+00	2 66E+00	NA	NA	NA	
	007	115	-99 2	11/4/2008	12 41	2 75E+02	1 92E+02	2 01E+02	4 72E-01	5 06E-01	6 17E-01	1 02E-31	5 63E+00	6 43E 00	-2 75E+00	6 24E+00	7 50E+00	NA	NA	NA	
	008	115	-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 13E+00	2 81E+00	2 86E+00	1 77E+00	3 41E+00	4 13E+00	NA	NA	NA	
	009	115	-99 2	5/4/2009	14 30	4 47E+02	1 94E+02	1 64E+02	1 54E-01	5 99E-01	7 38E-01	-2 83E+00	6 18E+00	4 17E+00	1 38E+00	3 93E+00	4 71E+00	NA	NA	NA	
	010	115	-99 2	7/30/2009	13 54	4 54E+02	1 83E+02	1 89E+02	1 50E-01	5 70E-01	6 78E-01	-5 23E+00	7 61E+00	7 35E-00	4 44E+00	6 98E+00	8 68E+00	NA	NA	NA	
	011	115	-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-31	6 15E+00	6 85E+00	-4 82E+00	7 04E+00	6 72E+00	NA	NA	NA	
	012	115	-99 2	2/8/2010	13 14	3 80E+02	1 73E+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	115	-99 2	4/26/2010	12 39	4 47E+02	1 64E+02	1 42E+02	4 81E-01	5 84E-01	6 36E-01	4 15E+00	6 75E+00	8 37E-00	4 44E+00	7 86E+00	9 87E+00	NA	NA	NA	
	014	115	-99 2	8/10/2010	14 52	3 71E+02	1 73E+02	1 78E+02	2 83E-01	4 31E-01	4 78E-01	-3 03E+00	7 68E+00	7 90E-00	-5 28E+00	9 73E+00	9 11E+00	NA	NA	NA	
	015	115	-99 2	11/2/2010	13 05	3 31E+02	1 24E+02	1 13E+02	6 02E-02	5 22E-01	6 31E-01	-2 24E+00	6 29E+00	6 55E+00	1 96E+00	6 42E+00	7 95E+00	NA	NA	NA	
	016	115	-99 2	3/2/2011	14 12	3 38E+02	3 13E+02	2 96E+02	1 48E-01	1 60E+00	2 00E+00	-3 72E-01	6 70E+00	7 21E-00	1 19E+00	6 36E+00	7 21E+00	NA	NA	NA	
	017	115	-99 2	4/19/2011	11 25	4 22E+02	4 63E+02	4 92E+02	-7 76E-01	1 00E+00	1 47E+00	1 29E 00	1 05E+01	1 25E 01	1 64E+00	1 17E+01	1 36E+01	NA	NA	NA	
	018	115	-99 2	7/21/2011	11 46	6 21E+02	4 41E+02	4 44E+02	2 29E 01	1 13E+00	1 37E+00	8 46E 01	1 06E+01	1 11E-01	6 03E+00	1 21E+01	1 54E+01	1 22E+00	1 77E+01	1 98E+01	
	019	115	-99 2	8/3/2011	12 01	8 87E+02	4 59E+02	3 36E+02	-1 33E-01	1 31E+00	1 67E+00	2 07E+00	7 35E+00	8 45E-00	-5 13E+00	7 26E+00	7 10E+00	NA	NA	NA	
	020	115	-99 2	10/18/2011	14 20	1 34E+03	5 43E+02	3 29E+02	-5 35E-01	1 35E+00	1 87E+00	-1 38E+00	7 53E+00	8 79E-00	1 78E+00	7 02E+00	9 82E+00	NA	NA	NA	
MW-63-121	001	121	-103 7	5/15/2007	13 42	3 11E+02	1 83E+02	1 75E+02	3 00E-01	7 97E-01	9 37E-01	5 30E-31	4 25E+00	4 22E-00	-1 15E+00	3 65E+00	3 87E+00	2 29E+00	1 52E+01	1 77E+01	MW-63-121
	002	121	-103 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 45E+00	1 70E-01	3 46E+00	3 87E+00	NA	NA	NA	
	003	121	-103 7	10/11/2007	13 51	4 52E+02	1 73E+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	-103 7	1/9/2008	10 42	5 40E+02	1 74E+02	1 71E+02	2 06E-02	4 70E-01	6 39E-01	2 54E+00	3 38E+00	4 15E-00	1 09E+00	3 41E+00	4 02E+00	NA	NA	NA	
	005	121	-103 7	4/23/2008	11 17	4 94E+02	1 34E+02	1 98E+02	5 36E-01	4 96E-01	8 34E-01	-3 56E-01	9 40E-01	1 55E+00	-1 53E+00	2 11E+00	1 81E+00	-3 22E+00	1 41E+01	2 46E+01	
	006	121	-103 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-31	2 08E+00	3 57E+00	1 23E+00	2 30E+00	4 11E+00	NA	NA	NA	
	007	121	-103 7	11/4/2008	12 43	4 25E+02	2 05E+02	1 90E+02	3 81E-01	7 56E-01	9 55E-01	-7 07E-01	5 40E+00	5 07E 00	1 20E+00	5 03E+00	7 41E+00	NA	NA	NA	
	008	121	-103 7	1/30/2009	14 41	6 23E+02	2 43E+02	1 97E+02	7 30E 01	5 09E 01	4 17E 01	1 91E+00	3 18E+00	3 92E-00	5 14E C1	2 94E+00	3 45E+00	NA	NA	NA	
	009	121	-103 7	5/4/2009	14 35	5 38E+02	2 04E+02	1 65E+02	7 71E-01	8 55E-01	9 73E-01	-6 65E-02	8 16E+00	5 44E+00	2 35E+00	4 29E+00	5 35E+00	NA	NA	NA	
	010	121	-103 7	7/30/2009	14 03	4 56E+02	1 83E+02	1 89E+02	5 21E-01	5 49E-01	5 56E-01	1 05E+00	4 89E+00	5 53E-00	-2 66E+00	6 67E+00	5 19E+00	NA	NA	NA	
	011	121	-103 7	11/3/2009	11 46	5 21E+02	1 64E+02	1 61E+02	5 66E-01	8 73E-01	9 57E-01	-5 33E+00	9 88E+00	8 44E-00	-2 07E+00	9 35E+00	8 77E+00	NA	NA	NA	
	012	121	-103 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 32E-00	-2 48E-01	5 33E+00	4 92E+00	NA	NA	NA	
	013	121	-103 7	4/26/2010	12 59	6 36E+02	1 83E+02	1 46E+02	4 17E-01	6 09E-01	6 57E-01	3 57E+00	6 06E+00	7 42E-00	1 16E+00	6 13E+00	7 15E+00	NA	NA	NA	
	014	121	-103 7	8/10/2010	11 28	5 99E+02	1 83E+02	1 77E+02	5 67E-01	5 93E-01	6 38E-01	-9 48E-01	8 12E+00	8 95E-00	-6 26E+00	8 66E+00	9 56E+00	NA	NA	NA	
	015	121	-103 7	11/2/2010	11 46	5 20E+02	1 49E+02	1 10E+02	6 38E-01	7 57E-01	8 11E-01	1 17E+00	6 66E+00	7 68E-00	-4 06E+00	7 17E+00	6 83E+00	NA	NA	NA	
	016	121	-103 7	3/2/2011	11 10	5 33E+02	3 54E+02	2 94E+02	-6 32E-02	1 55E+00	2 03E+00	-6 26E-01	6 72E+00	7 22E 00	3 49E-01	6 00E+00	6 67E+00	NA	NA	NA	
	017	121	-103 7	4/19/2011	9 54	5 77E+02	4 81E+02	4 91E+02	4 12E 01	1 13E+00	1 37E+00	1 03E+00	6 92E+00	7 17E-00	1 05E+01	9 86E+00	5 99E+00	NA	NA	NA	
	018	121	-103 7	7/21/2011	9 58	1 33E+03	5 23E+02	4 45E+02	3 35E-01	1 26E+00	1 74E+00	1 63E-33	7 44E+00	8 17E-00	-3 15E+00	1 05E+01	1 07E+01	1 12E+00	1 84E+01	2 05E+01	
	019	121	-103 7	8/3/2011	10 03	1 27E+03	6 03E+02	3 29E+02	9 09E-01	1 45E+00	1 67E+00	-6 73E+00	9 27E+00	9 05E-00	6 01E+00	8 16E+00	1 06E+01	NA	NA	NA	
	020	121	-103 7	10/18/2011	11 27	3 53E+03	8 43E+02	3 33E+02	1 49E+00	1 71E+00	1 75E+00	-6 42E+00	1 26E+01	1 62E-01	2 81E+00	9 33E+00	1 31E+01	NA	NA	NA	
MW-63-163	001	162.5	-153 2	5/15/2007	11 38	5 78E+02	2 13E+02	1 73E+02	-6 43E-02	6 50E-01	8 74E-01	-8 04E-01	2 84E+00	2 59E-00	5 51E-01	2 25E+00	2 64E+00	-9 58E-01	1 44E+01	1 73E+01	MW-63-163
	002	162.5	-153 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 13E+00	5 16E+00	4 39E-00	-4 56E-01	3 75E+00	3 99E+00	NA	NA	NA	
	003	162.5	-153 2	10/11/2007	14 18	3 49E+02	1 63E+02	1 73E+02	7 93E-03	7 98E-01	9 50E-01	-4 46E-01	3 00E+00	3 25E-00	-1 91E-02	2 94E+00	3 30E+00	NA	NA	NA	
	004	162.5	-153 2	1/9/2008	10 51	5 58E+02	1 71E+02	1 72E+02	5 19E-03	5 52E-01	7 17E-01	-4 52E-01	3 50E+00	3 89E-00	2 23E+00	6 11E+00	4 88E+00	NA	NA	NA	
	005	162.5	-153 2	4/23/2008	11 23	4 44E+02	1 73E+02	2 65E+02	1 82E-01	4 33E-01	7 37E-01	8 04E-31	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	-153 2	7/29/2008	14 56	4 40E+02	1 07E+02	1 63E+02	-0 79E-02	2 56E-01	4 37E-01	-2 02E+00	2 34E+00	3 61E 00	9 03E-01	2 59E+00	4 42E+00	NA	NA	NA	
	007	162.5	-153 2	11/4/2008	12 45	6 35E+02	1 85E+02	1 76E+02	1 14E 01	5 53E 01	7 16E 01	1 77E 31	5 37E+00	6 12E-00	7 78E C1	6 21E+00	7 23E+00	NA	NA	NA	
	008	162.5	-153 2	1/29/2009	11 57	5 81E+02	2 43E+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	-153 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 70E+00	3 64E+00	NA	NA	NA	
	010	162.5	-153 2	7/30/2009	13 45	6 96E+02	1 93E+02	1 89E+02	-1 33E-01	3 60E-01	5 36E-01	-2 87E+00	5 47E+00	5 52E-00	-1 49E-01	5 80E+00	6 46E+00	NA	NA	NA	
	011	162.5	-153 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-31	4 56E+00	5 33E-00	6 80E+00	4 98E+00	7 07E+00	NA	NA	NA	
	012	162.5	-153 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	-153 2	4/26/2010	14 30	5 29E+02	1 73E+02	1 43E+02	1 98E-01	5 64E-01	6 75E-01	-1 45E+00	7 71E+00	8 85E-00	-2 98E+00	6 17E+00	5 91E+00	NA	NA	NA	
	014	162.5	-153 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	

IPEC00267179

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-63-163	015	162.5	-153.2	11/2/2010	11:49	4.44E+02	1.41E+02	1.10E+02	7.71E-01	8.38E-01	8.77E-01	-3.99E+00	9.88E+00	1.13E+01	2.94E+00	6.12E+00	7.63E+00	NA	NA	NA	MW-63-163
	016	162.5	-153.2	3/2/2011	10:27	6.35E+02	3.75E+02	2.95E+02	1.37E+00	1.95E+00	2.12E+00	3.09E+00	5.40E+00	6.62E+00	-2.05E+00	7.72E+00	7.72E+00	NA	NA	NA	
	017	162.5	-153.2	4/19/2011	9:49	4.92E+02	4.84E+02	5.03E+02	1.11E+00	1.82E+00	2.00E+00	4.43E-31	8.94E+00	9.98E+00	4.78E+00	1.02E+01	1.26E+01	NA	NA	NA	
	018	162.5	-153.2	7/21/2011	10:09	5.38E+02	4.25E+02	4.36E+02	-6.14E-01	1.01E+00	1.48E+00	-8.47E-01	7.47E+00	8.17E+00	4.07E-01	7.53E+00	8.66E+00	-8.69E+00	1.47E+01	1.67E+01	
	019	162.5	-153.2	8/3/2011	10:06	4.41E+02	3.54E+02	3.08E+02	7.99E-02	1.35E+00	1.69E+00	5.51E-31	8.40E+00	9.33E+00	2.23E+00	1.03E+01	1.20E+01	NA	NA	NA	
	020	162.5	-153.2	10/18/2011	11:37	4.55E+02	3.75E+02	3.80E+02	9.47E-01	1.35E+00	1.43E+00	-4.53E+00	9.51E+00	9.82E+00	-1.96E+00	6.54E+00	7.63E+00	NA	NA	NA	
MW-63-174	021	174	-161.7	5/15/2007	11:54	5.93E+02	2.12E+02	1.73E+02	2.64E-01	1.62E-01	9.34E-01	-6.91E-01	2.52E+00	2.72E+00	8.16E-13	2.49E+00	2.76E+00	1.30E+00	1.23E+01	1.51E+01	MW-63-174
	022	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	5.23E-31	3.98E+00	4.55E+00	-3.03E-01	3.45E+00	3.86E+00	NA	NA	NA	
	023	174	-161.7	10/17/2007	14:22	3.70E+02	1.63E+02	1.72E+02	-2.35E-01	7.14E-01	9.39E-01	1.94E+00	2.90E+00	2.72E+00	-8.59E-01	2.56E+00	2.71E+00	NA	NA	NA	
	024	174	-161.7	1/9/2008	10:45	6.23E+02	1.72E+02	1.72E+02	6.16E-01	6.95E-01	7.24E-01	1.21E+00	3.14E+00	3.33E+00	1.48E+00	3.03E+00	3.77E+00	NA	NA	NA	
	025	174	-161.7	4/23/2008	11:21	4.89E+02	1.77E+02	2.65E+02	-6.32E-02	3.65E-01	7.48E-01	-5.74E-01	2.01E+00	3.32E+00	3.66E-01	2.43E+00	4.19E+00	-2.14E+00	1.44E+01	2.50E+01	
	026	174	-161.7	7/29/2008	14:40	4.49E+02	1.43E+02	1.92E+02	6.56E-02	2.76E-01	4.30E-01	-3.76E-01	2.23E+00	3.71E+00	-1.72E+00	2.65E+00	3.75E+00	NA	NA	NA	
	027	174	-161.7	11/4/2008	12:44	4.77E+02	2.04E+02	1.99E+02	-2.76E-01	5.52E-01	7.33E-01	-2.63E+00	4.83E+00	4.74E+00	1.18E+00	5.45E+00	6.30E+00	NA	NA	NA	
	028	174	-161.7	1/29/2009	11:55	4.92E+02	2.23E+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	5.32E+00	NA	NA	NA	
	029	174	-161.7	5/4/2009	14:28	4.57E+02	1.94E+02	1.63E+02	-2.15E-01	6.62E-01	7.37E-01	1.93E-31	4.58E+00	3.05E+00	-2.66E+00	3.11E+00	5.63E+00	NA	NA	NA	
	030	174	-161.7	7/30/2009	13:05	4.22E+02	1.85E+02	1.89E+02	-1.74E-01	5.20E-01	6.32E-01	1.43E-31	5.52E+00	6.15E+00	1.22E+00	5.79E+00	6.83E+00	NA	NA	NA	
	031	174	-161.7	11/3/2009	13:53	4.98E+02	1.64E+02	1.61E+02	-1.34E-02	7.92E-01	9.21E-01	1.30E+00	6.69E+00	7.83E+00	5.41E+00	6.04E+00	8.21E+00	NA	NA	NA	
	032	174	-161.7	2/8/2010	13:32	5.55E+02	1.74E+02	1.78E+02	3.28E-02	6.23E-01	8.13E-01	-9.48E-02	3.76E+00	4.18E+00	-2.02E+00	3.76E+00	5.88E+00	NA	NA	NA	
	033	174	-161.7	4/26/2010	14:28	4.20E+02	1.71E+02	1.46E+02	-1.59E-02	5.53E-01	7.24E-01	2.68E-100	4.74E+00	5.05E+00	-4.65E+00	5.26E+00	4.32E+00	NA	NA	NA	
	034	174	-161.7	8/10/2010	11:40	3.33E+02	1.63E+02	1.71E+02	3.54E-01	5.43E-01	6.31E-01	3.32E+00	7.07E+00	6.89E+00	1.41E+00	7.04E+00	8.11E+00	NA	NA	NA	
	035	174	-161.7	11/2/2010	11:50	2.93E+02	1.79E+02	1.13E+02	-1.42E-01	4.59E-01	6.16E-01	-6.01E-01	6.03E+00	6.89E+00	2.17E-01	6.42E+00	7.11E+00	NA	NA	NA	
	036	174	-161.7	3/2/2011	10:26	4.13E+02	3.33E+02	2.91E+02	8.20E-01	1.80E+00	2.03E+00	3.65E+00	6.96E+00	8.18E+00	2.34E+00	7.86E+00	9.26E+00	NA	NA	NA	
	037	174	-161.7	4/19/2011	9:52	1.56E+02	4.43E+02	5.04E+02	-7.37E-01	9.72E-01	1.48E+00	-6.41E+00	8.32E+00	7.72E+00	-9.85E-01	8.58E+00	9.26E+00	NA	NA	NA	
	038	174	-161.7	7/21/2011	9:57	4.14E+02	4.17E+02	4.36E+02	6.96E-01	1.85E+00	2.10E+00	-3.57E+00	8.10E+00	8.27E+00	4.67E-01	9.36E+00	1.09E+01	-2.55E+00	1.33E+01	1.49E+01	
	039	174	-161.7	8/3/2011	10:18	6.39E+02	3.93E+02	3.09E+02	6.96E-01	1.45E+00	1.68E+00	-4.15E+00	9.15E+00	8.88E+00	4.51E+00	8.19E+00	1.05E+01	NA	NA	NA	
	040	174	-161.7	10/18/2011	11:42	4.53E+02	3.72E+02	3.80E+02	1.02E+00	1.71E+00	1.86E+00	-6.37E-02	8.43E+00	1.03E+01	-4.33E+00	8.13E+00	9.02E+00	NA	NA	NA	
MW-65-48	041	48.3	26.356	1/4/2007	12:00	2.28E+02	1.83E+02	1.80E+02	0.00E+00	1.88E-01	8.30E-01	1.60E+00	3.60E+00	3.92E+00	-2.00E+00	3.60E+00	5.70E+00	-2.20E+00	5.30E+00	7.30E+00	MW-65-48
	042	48.3	26.356	7/7/2011	12:19	8.59E+01	2.43E+02	2.82E+02	2.73E-01	1.04E+00	1.12E+00	4.18E+00	9.03E+00	1.09E+01	-1.12E+00	1.12E+01	1.18E+01	-5.95E+00	2.39E+01	2.69E+01	
MW-65-90	021	71.4	-1.659	9/8/2006	9:40	3.29E+01	1.62E+02	1.74E+02	4.72E-01	9.00E-01	1.04E+00	-5.15E-01	1.99E+00	2.13E+00	-2.34E-01	1.01E+00	1.19E+00	NA	NA	NA	MW-65-90
	022	71.4	-1.659	1/4/2007	12:35	1.83E+02	1.83E+02	1.80E+02	1.60E-01	7.90E-01	8.70E-01	2.50E-01	2.22E+00	2.52E+00	1.13E+00	2.31E+00	2.86E+00	1.90E+00	5.60E+00	7.40E+00	
	023	71.4	-1.659	7/13/2011	10:12	8.54E+01	2.41E+02	2.84E+02	1.76E-01	9.24E-01	1.12E+00	-2.38E+00	9.12E+00	9.45E+00	2.88E+00	1.15E+01	1.34E+01	-1.27E+01	2.00E+01	2.29E+01	
MW-66-21	021	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-21	3.07E+00	3.51E+00	2.21E+00	3.27E+00	4.26E+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+00	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	2.32E-01	5.53E-31	2.36E+00	4.07E+00	1.86E-02	2.26E+00	3.74E+00	-7.28E+00	3.83E+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	11:30	5.84E+02	2.01E+02	1.64E+02	1.13E+00	6.35E-01	6.55E-01	1.44E+00	4.61E+00	5.42E+00	2.58E+00	5.11E+00	6.41E+00	-5.68E+00	1.72E+01	4.02E+01	
	007	14.1	0	1/27/2009	13:52	4.51E+02	1.74E+02	1.72E+02	2.91E-01	7.26E-01	8.72E-01	1.69E-31	5.43E+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	2.01E+02	2.01E+02	3.45E-01	6.45E-01	7.25E-01	1.69E-31	6.36E+00	4.24E+00	1.72E+00	3.94E+00	4.85E+00	-4.92E+00	1.79E+01	1.92E+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	5.73E-01	4.11E+00	4.84E+00	1.86E+00	1.91E+01	2.22E+01	
	010	14.1	0	7/28/2009	14:10	8.73E+02	2.57E+02	2.01E+02	4.51E-01	6.96E-01	7.54E-01	-4.37E-01	4.04E+00	4.51E+00	8.39E-31	3.65E+00	4.34E+00	8.48E+00	2.07E+01	2.33E+01	
	011	14.1	0	11/17/2009	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	6.25E+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	9.50E+02	2.03E+02	1.75E+02	8.97E-01	7.30E-01	7.14E-01	4.96E-31	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	7.16E+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	
	015	14.1	0	11/10/2010	15:13	3.22E+02	1.64E+02	3.46E+02	2.57E-01	9.74E-01	1.34E+00	6.04E+00	5.26E+00	1.25E+01	-1.91E-01	5.67E+00	1.26E+01	9.56E+00	3.45E+00	1.85E+01	
	016	14.1	0	1/31/2011	16:26	4.77E+02	4.03E+02	4.24E+02	3.48E-01	1.73E+00	2.02E+00	-2.19E-01	9.00E+00	5.55E+00	3.88E-11	6.50E+00	7.25E+00	-1.06E+00	1.84E+01	2.14E+01	
	017	14.1	0	4/14/2011	13:43	9.30E+01	3.83E+02	4.46E+02	6.73E-01	1.64E+00	1.82E+00	-4.73E+00	8.74E+00	8.45E+00	6.94E+00	9.62E+00	1.25E+01	1.31E+00	1.51E+01	1.72E+01	
	018	14.1	0	7/21/2011	10:55	7.34E+02	3.92E+02	3.73E+02	9.00E-01	1.44E+00	1.59E+00	-2.25E+00	8.11E+00	8.27E+00	7.65E+00	7.73E+00	9.57E+00	6.75E+00	2.09E+00	2.91E+00	
	019	14.1	0	11/29/2011	11:08	2.54E+02	3.27E+02	3.32E+02	3.54E-01	1.33E+00	1.49E+00	7.86E-31	6.60E+00	8.51E+00	1.73E+00	7.50E+00	1.01E+01	3.27E+00	1.37E+01	1.56E+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	6.19E-01	-9.84E-01	2.67E+00	2.75E+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	5.53E-01	0.00E+00	8.34E+00	4.32E+00	-2.92E-01	4.34E+00	4.68E+00	1.17E+01	1.83E+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	3.35E+00	7.19E+00	2.36E+01	2.71E+01	
	004	33.6	-19.5	4/21/2008	13:25	6.39E+03	2.83E+02	1.97E+02	1.32E+01	5.27E-01	3.55E-01	-2.89E-01	2.09E+00	3.45E+00	-2.09E+00	3.54E+00	4.13E+00	-3.35E-01	8.93E+00	1.54E+01	
	005	33.6	-19.5	7/29/2008	12:05	5.21E+03	1.91E+02	1.30E+02	1.20E+01	1.06E+00	6.20E-01	2.07E-31	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	2.54E+02	1.67E+02	1.38E+01	1.71E+00	5.25E-01	5.91E-31	4.32E+00	4.92E+00	1.78E+00	5.24E+00	6.25E+00	9.57E-01	1.64E+01	1.88E+01	
	007	33.6	-19.5	1/27/2009	13:07	3.55E+03	7.62E+02	4.41E+02	1.22E+01	1.56E+00	6.13E-01	-1.04E+00	2.88E+00	3.05E+00	6.35E-02	3.27E+00	3.72E+00	1.45E+00	1.70E+01	1.87E+01	
	008	33.6	-19.5	4/20/2009	15:20	4.39E+03	4.34E+02	1.87E+02	1.47E+01	1.42E+00	5.97E-01	5.54E-32	6.44E+00	4.22E+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	3.55E+03	4.13E+02	2.10E+02	7.51E+00	1.21E+00	3.35E-01	3.19E+00	6.23E+00	3.55E+00	6.56E-01	3.65E+00	3.98E+00	6.32E+00	1.92E+01	2.16E+01	
	010	33.6	-19.5	11/17/2009	13:18	4.32E+03	4.44E+02	2.04E+02	6.62E+00	1.24E+00	6.70E-01	3.75E+00	6.95E+00	8.31E+00	-8.32E-01	7.27E+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-31	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	3.54E+03	5.93E+02	3.87E+02	7.05E+00	1.36E+00	7.54E-01	1.79E+00	7.65E+00	9.12E+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	3.38E+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	1.53E+01	1.80E+01	
	014	33.6	-19.5	11/10/2010	12:33	3.13E+03	2.95E+02	3.96E+02	7.43E+00	1.03E+00	1.13E+00	5.42E+00	3.87E+00	9.67E-00	7.18E-01	4.34E+00	9.81E+00	-4.23E+00	9.63E+00	2.16E+01	
	015	33.6	-19.5	1/31/2011	15:51	3.31E+03	6.73E+02	4.61E+02	1.55E+01	3.18E+00	2.11E+00	-1.13E+00	6.12E+00	6.49E+00	-8.31E-01	6.80E+00	7.15E+00	-4.89E+00	1.79E+01	2.12E+01	
	016	33.6	-19.5	4/14/2011	12:53	3.52E+03	7.55E+02	4.79E+02	1.16E+01	2.88E+00	1.95E+00	1.50E-31	7.24E+00	8.14E+00	5.40E-01	7.92E+00	9.01E+00	6.10E-01	1.52E+01	1.79E+01	
	017	33.6	-19.5	8/8/2011	10:49	3.90E+03	5.91E+02	3.74E+02	8.00E+00	2.60E+00	1.61E+00	-3.94E+00	1.11E+01	1.07E-01	1.48E+00	1.26E+01	1.46E+01	2.32E+00	1.53E+01	1.71E+01	
	018	33.6	-19.5	11/29/2011	11:01	3.34E+03	6.73E+02	4.65E+02	1.02E+01	1.77E+00	1.30E+00	5.21E+00	9.70E+00	1.32E-01	1.63E+00	0.04E+00	1.21E+01	0.00E+00	1.94E+01	2.10E+01	
MW-67-39	001	38.3	-25.8	8/31/2007	12:05	4.86E+03	4.31E+02	1.92E+02	1.56E+01	1.84E+00	4.73E-01	1.93E-01	2.02E+00	2.24E-00	9.45E-01	2.00E+00	2.05E+00	NA	NA	NA	MW-67-39
	002	38.3	-25.8	10/17/2007	11:30	5.97E+03	3.73E+02	1.95E+02	2.71E+01	2.44E+00	6.21E-01	1.02E+01	4.11E+00	1.98E-00	3.69E-21	2.07E+00	2.35E+00	2.51E+00	1.63E+01	1.98E+01	
	004	38.3	-25.8	2/25/2008	15:38	4.17E+03	8.23E+02	5.29E+02	2.15E+01	1.77E+00	6.27E-01	-1.15E+00	3.44E+00	3.73E-00	4.39E-01	3.98E+00	4.39E+00	-5.41E-01	2.26E+01	2.63E+01	
	005	38.3	-25.8	7/28/2008	14:07	3.37E+03	1.72E+02	1.30E+02	1.37E+01	1.11E+00	3.97E-01	-1.08E+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	2.65E+02	1.71E+02	1.42E+01	1.69E+00	1.00E+00	1.18E+00	4.61E+00	5.42E-00	7.33E-01	5.04E+00	5.81E+00	8.37E-01	1.63E+01	1.94E+01	
	008	38.3	-25.8	1/27/2009	16:15	3.57E+03	2.91E+02	1.92E+02	1.42E+01	1.71E+00	7.52E-01	-8.03E-01	2.04E+00	2.15E-00	-1.11E-01	2.06E+00	2.25E+00	1.12E+00	1.63E+01	1.87E+01	
	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+00	2.06E+01	2.29E+01	
	010	38.3	-25.8	7/28/2009	15:04	2.59E+03	3.87E+02	2.08E+02	6.37E+00	1.11E+00	3.38E-01	1.90E-31	3.01E+00	3.45E-00	2.33E-01	3.24E+00	3.70E+00	-3.64E+00	1.79E+01	2.06E+01	

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2011 FINAL Table 5 - Historic Groundwater Analytical Results.xlsx,
2011 Table 5

See Page 34 for Notes

IPEC00267180

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-67-39	011	38.3	-25.8	11/12/2009	14:09	2.80E+03	2.43E+02	1.65E+02	1.35E+01	1.83E+00	7.39E-01	-1.23E+00	8.07E+00	8.84E-00	-1.94E+00	1.10E+01	1.07E+01	-3.83E+00	1.49E+01	1.73E+01	MW-67-39
	012	38.3	-25.8	3/3/2010	13:54	2.55E+03	2.63E+02	1.75E+02	1.24E+01	1.85E+00	6.53E-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	3.63E+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	5.59E-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	
	015	38.3	-25.8	11/10/2010	11:49	3.56E+03	3.09E+02	3.95E+02	5.43E+00	8.85E-01	1.10E+00	1.04E+00	3.96E+00	8.88E-00	2.82E+00	4.30E+00	1.04E+01	-1.86E+00	9.87E+00	2.21E+01	
	016	38.3	-25.8	2/7/2011	13:48	3.35E+03	7.63E+02	4.81E+02	1.57E+01	2.34E+00	1.38E+00	3.03E-32	6.18E+00	6.83E-00	6.64E-01	6.78E+00	7.57E+00	4.43E+00	1.97E+01	2.23E+01	
	017	38.3	-25.8	4/14/2011	13:25	3.73E+03	7.14E+02	4.17E+02	1.25E+01	1.76E+00	2.10E+00	4.53E+00	8.78E+00	1.04E-01	3.71E+00	9.54E+00	1.14E+01	6.99E+00	1.47E+01	1.63E+01	
	018	38.3	-25.8	8/8/2011	12:26	3.32E+03	5.73E+02	3.73E+02	5.31E+00	2.39E+00	1.98E+00	-3.01E+00	8.34E+00	8.17E-00	-7.13E+00	8.22E+00	7.56E+00	5.90E+00	1.71E+01	1.90E+01	
	019	38.3	-25.8	11/29/2011	13:59	3.51E+03	0.07E+02	3.31E+02	1.30E+01	2.35E+00	1.94E+00	-1.63E+01	1.32E+01	1.62E-01	-1.72E+00	2.43E+00	1.17E+01	2.59E+00	1.24E+01	1.38E+01	
MW-67-105	001	104.8	-92.3	8/31/2007	12:35	1.86E+03	5.15E+02	3.34E+02	1.11E+00	6.12E-01	5.26E-01	2.26E-31	2.00E+00	2.00E-00	3.06E-01	1.68E+00	1.86E+00	NA	NA	NA	MW-67-105
	002	104.8	-92.3	10/17/2007	11:40	2.54E+03	2.99E+02	1.95E+02	4.27E-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	1.35E+01	1.53E+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	2.88E-00	7.44E-01	3.60E+00	3.70E+00	1.31E+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	1.43E+02	1.37E+02	9.63E-01	3.54E-01	4.16E-01	4.17E-31	1.59E+00	2.78E-00	7.65E-01	1.51E+00	2.78E+00	7.25E+00	1.63E+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	5.66E-01	4.54E-01	-2.48E-01	6.36E+00	7.11E-00	7.75E-02	6.87E+00	7.59E+00	6.32E+00	1.63E+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	3.22E-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	12:15	1.77E+03	3.33E+02	2.09E+02	5.33E-01	4.12E-01	3.58E-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	11/12/2009	14:31	2.12E+03	3.32E+02	2.03E+02	8.49E-01	5.43E-01	4.35E-01	1.63E-31	5.00E+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	2.23E+02	1.79E+02	5.90E-01	7.56E-01	8.35E-01	2.99E-01	4.00E+00	4.38E-00	1.50E+00	4.34E+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	2.63E+02	1.64E+02	1.77E+00	1.01E+00	7.38E-01	4.33E-31	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	2.13E+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	
	014	104.8	-92.3	11/10/2010	11:42	1.14E+03	2.24E+02	3.95E+02	1.41E+00	8.12E-01	1.69E+00	-1.63E+00	3.59E+00	7.64E-00	-3.12E+00	4.14E+00	8.26E+00	1.24E+00	8.56E+00	1.90E+01	
	015	104.8	-92.3	2/7/2011	13:57	9.94E+02	4.25E+02	3.86E+02	3.57E-01	1.64E+00	1.94E+00	2.40E+00	4.84E+00	5.67E-00	-1.22E+00	4.86E+00	4.81E+00	-4.59E+00	1.96E+01	2.31E+01	
	016	104.8	-92.3	4/14/2011	13:43	1.10E+03	4.84E+02	4.12E+02	2.70E-01	1.72E+00	2.11E+00	-3.96E-01	9.66E+00	1.05E-01	-1.91E-01	7.24E+00	7.88E+00	5.71E+00	1.53E+01	1.73E+01	
	017	104.8	-92.3	8/8/2011	12:48	1.42E+03	4.33E+02	3.74E+02	7.40E-01	1.71E+00	1.92E+00	-4.93E-01	7.77E+00	8.35E-00	-6.18E+00	8.67E+00	7.26E+00	6.57E+00	1.25E+01	1.38E+01	
	018	104.8	-92.3	11/29/2011	14:10	1.89E+03	5.94E+02	4.76E+02	1.13E+00	1.48E+00	1.92E+00	-1.53E+00	8.73E+00	1.01E-01	-1.41E+00	8.23E+00	1.04E+01	3.55E+00	1.97E+01	2.20E+01	
MW-67-173	001	172.3	-159.8	8/31/2007	13:04	1.02E+03	4.23E+02	3.37E+02	3.73E-01	3.77E-01	4.12E-01	-1.42E+00	3.06E+00	2.52E-00	-1.19E+00	3.03E+00	2.52E+00	NA	NA	NA	MW-67-173
	002	172.3	-159.8	10/17/2007	12:30	1.21E+03	2.25E+02	1.95E+02	1.48E-01	8.62E-01	1.07E+00	-1.34E+00	3.72E+00	4.01E-00	2.02E+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	5.65E-31	2.82E+00	3.23E-00	3.63E-01	2.54E+00	2.76E+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+03	1.36E+02	1.05E-01	2.66E-01	4.35E-01	-1.27E+00	2.06E+00	3.19E-00	-3.63E-01	2.14E+00	3.45E+00	5.38E+00	1.64E+01	2.84E+01	
	006	172.3	-159.8	11/3/2008	14:37	9.93E+02	2.53E+02	1.66E+02	-3.48E-02	2.59E-01	3.32E-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	2.03E+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	4.13E+02	3.81E+02	-5.37E-01	5.72E-01	6.25E-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	2.23E+02	1.87E+02	2.33E-01	6.84E-01	7.34E-01	-2.73E+00	7.05E+00	4.75E-00	5.39E-01	3.60E+00	4.24E+00	8.40E+00	2.43E+01	2.47E+01	
	010	172.3	-159.8	7/28/2009	15:24	1.35E+03	2.75E+02	2.07E+02	1.59E-01	5.58E-01	6.33E-01	5.46E-31	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	11/12/2009	14:50	8.10E+02	2.43E+02	2.04E+02	1.67E-01	6.93E-01	8.18E-01	2.06E-31	9.81E+00	6.62E-00	-1.52E+00	6.92E+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	1.93E+02	1.80E+02	-2.32E-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	-1.07E+00	1.93E+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	4.07E-01	7.77E-01	-3.23E+00	9.64E+00	1.02E-01	-8.46E-01	1.00E+01	1.11E+01	-7.20E+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	4.47E-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	
	015	172.3	-159.8	11/10/2010	12:04	6.25E+02	2.01E+02	3.97E+02	-9.99E-01	6.33E-01	1.86E+00	4.07E-31	7.80E+00	1.17E-01	-1.17E+00	4.83E+00	1.03E+01	-1.65E+00	8.09E+00	1.81E+01	
	016	172.3	-159.8	2/7/2011	14:13	4.47E+02	4.43E+02	4.65E+02	-2.38E-01	1.68E+00	2.12E+00	-4.75E-01	5.28E+00	5.83E-00	7.55E-01	6.38E+00	5.76E+00	-7.05E-01	1.83E+01	2.18E+01	
	017	172.3	-159.8	4/14/2011	14:09	5.72E+02	4.23E+02	4.10E+02	-2.56E-01	1.69E+00	1.99E+00	3.04E+00	9.64E+00	1.17E-01	-9.27E+00	1.03E+01	6.85E+00	7.50E+00	1.23E+01	1.34E+01	
	018	172.3	-159.8	8/8/2011	12:53	6.13E+02	3.75E+02	3.72E+02	-3.44E-01	1.55E+00	1.84E+00	-1.95E+00	8.79E+00	9.15E-00	1.25E+00	8.70E+00	9.80E+00	4.91E+00	1.20E+01	1.33E+01	
	019	172.3	-159.8	11/29/2011	14:23	5.88E+02	4.74E+02	4.78E+02	1.13E+00	1.62E+00	1.76E+00	-1.43E+00	9.87E+00	1.14E-01	-1.48E+00	1.08E+01	1.30E+01	7.39E+00	1.13E+01	1.29E+01	
MW-67-219	001	218.8	-205.3	8/31/2007	13:43	1.25E+03	4.45E+02	3.30E+02	3.27E-02	3.00E-01	3.47E-01	-1.58E-01	3.04E+00	3.32E-00	5.02E-01	3.09E+00	3.68E+00	NA	NA	NA	MW-67-219
	002	218.8	-205.3	10/17/2007	12:53	9.86E+02	2.22E+02	1.93E+02	-2.27E-01	7.30E-01	1.03E+00	1.48E-31	2.60E+00	2.93E-00	1.58E-01	2.71E+00	2.65E+00	1.21E+01	1.64E+01	2.39E+01	
	004	218.8	-205.3	2/25/2008	11:43	1.23E+03	5.81E+02	5.31E+02	-7.51E-02	4.92E-01	6.12E-01	-1.33E+00	3.03E+00	3.15E-00	1.08E+00	3.15E+00	3.78E+00	1.23E+01	1.81E+01	2.03E+01	
	005	218.8	-205.3	7/29/2008	11:00	1.17E+03	1.15E+03	1.36E+02	-7.49E-02	2.34E-01	4.25E-01	-2.91E-01	1.90E+00	3.33E-00	-2.64E-01	1.02E+00	1.30E+00	5.92E+00	1.63E+01	2.09E+01	
	006	218.8	-205.3	11/3/2008	11:31	1.37E+03	2.93E+02	1.68E+02	8.78E-02	1.69E-01	1.21E-01	1.32E+00	4.93E+00	5.85E-00	4.00E+00	6.30E+00	8.05E+00	2.80E+00	1.63E+01	1.88E+01	
	007	218.8	-205.3	1/27/2009	12:34	9.58E+02	2.81E+02	2.50E+02	-7.56E-02	5.30E-01	7.13E-01	-3.58E-01	1.89E+00	2.15E-00	7.86E-02	1.83E+00	2.06E+00	1.14E+00	2.16E+01	2.43E+01	
	008	218.8	-205.3	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	-205.3	7/28/2009	11:11	9.22E+02	2.61E+02	2.03E+02	1.81E-01	8.09E-01	9.56E-01	2.88E+00	3.99E+00	4.97E-00	1.63E+00	3.76E+00	4.67E+00	1.14E+00	1.66E+01	1.85E+01	
	010	218.8	-205.3	11/12/2009	11:16	1.44E+03	2.83E+02	2.00E+02	-1.39E-01	6.37E-01	7.36E-01	1.78E+00	4.86E+00	5.82E-00	-4.96E-01	6.25E+00	6.96E+00	6.33E+00	1.74E+01	1.97E+01	
	011	218.8	-205.3	3/3/2010	11:23	1.39E+03	2.07E+02	1.79E+02	3.26E-01	7.37E-01	8.53E-01	-2.23E+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	-205.3	5/6/2010	11:51	1.20E+03	2.43E+02	1.66E+02	1.38E-01	6.51E-01	7.71E-01	2.23E+00	8.87E+00	1.03E-01	2.45E+00	7.88E+00	9.26E+00	-7.98E+00	1.93E+01	2.51E+01	
	013	218.8	-205.3	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	-6.15E+00	9.03E+00	8.33E+00	2.34E+00	1.21E+01	1.39E+01	
	014	218.8	-205.3	11/10/2010	13:40	1.15E+03	2.24E+02	3.96E+02	3.53E-01	7.20E-01	1.76E+00	-2.60E-01	3.00E+00	7.62E-00	2.49E-01	3.02E+00	7.05E+00	-4.41E+00	3.04E+00	1.90E+01	
	015	218.8	-205.3	1/31/2011	14:48	6.61E+02	4.13E+02	4.20E+02	1.08E+00	1.42E+00	1.97E+00	2.72E-31	5.80E+00	6.41E-00	2.41E+00	5.46E+00	6.55E+00	4.59E+00	1.81E+01	2.14E+01	
	016	218.8	-205.3	4/14/2011	10:49	1.27E+03	4.73E+02	4.12E+02	-7.57E-01	9.56E-01	1.33E+00	-2.72E+00	6.62E+00	6.47E-00	4.16E+00	9.78E+00	1.20E+01	2.95E+00	1.43E+01	1.62E+01	
	017	218.8	-205.3	8/8/2011	10:33	1.11E+03	4.17E+02	3.73E+02	3.18E-02	1.61E+00	1.90E+00	8.34E-31	7.41E+00	8.13E-00	-6.37E+00	9.50E+00	8.11E+00	1.16E+00	1.64E+01	1.79E+01	
	018	218.8	-205.3	11/29/2011	10:41	1.20E+03	4.92E+02	4.45E+02	3.14E-01	1.42E+00	1.63E+00	-1.12E+01	1.14E+01	1.19E-01	1.99E+00	7.65E+00	1.12E+01	1.02E+00	1.13E+01	1.23E+01	
MW-67-275	001	275.3	-262.8	8/31/2007	12:20	6.79E+02	3.88E+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	4.02E+00	NA	NA	NA	MW-67-275
	002	275.3	-262.8	10/1/2007	13:04	1.11E+03	2.33E+02	1.96E+02	3.82E-02	8.36E-01	9.21E-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	7.38E-01	2.00E+00	3.45E+00	4.21E-00	4.11E+00	4.33E+00	1.38E+00	1.89E+01	2.11E+01		
	005	275.3	-262.8	7/28/2008	11:09	1.16E+03	1.15E+02	1.36E+02	-5.05E-02	2.76E-01	5.47E-01	-8.94E-01	1.98E+00	3.15E-00	2.92E-01	1.97E+00	2.45E+00	7.55E+00	1.62E+01	2.11E+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-31	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	4.35E+02	3.32E-01	5.93E-01	6.56E-01	2.35E-31	3.24E+00	3.75E-00	-1.15E+00	3.74E+00	3.90E+00	1.15E+01	1.63E+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	6.71E-01	1.18E+00	5.45E+00	3.63E-00	2.91E-01	3.63E+00	4.04E+00	2.31E+00	1.07E+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	8.09E-01	4.46E-01	-6.84E-01	5.00E+00	4.61E-00	2.18E+00	3.71E+00	4.70E+00	7.34E+00	1.76E+01	1.98E+01	
	010	275.3	-262.8	11/12/2009	11:23	1.15E+03	1.83E+02	1.65E+02	2.35E-01	8.09E-01	9.59E-01	3.81E-31	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	2.13E+02	1.80E+02	-1.30E-01	5.78E-01	8.23E-01	1.09E+00	3.92E+00	4.54E-00	-5.85E+00	6.67E+00	4.46E+00	1.73E+00	1.92E+01	2.21E+01	
	012	275.3	-262.8	5/6/2010	12:20	1.39E+03	2.33E+02	1.65E+02	-1.16E-01	5.38E-01	7.47E-01	-1.34E+00	7.98E+00	8.72E-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	1.83E+02	1.22E+02	4.00E-01	4.66E-01	4.98E-01	2.56E+00	7.23E+00	8.82E-00	-2.39E+00	8.22E+00	8.27E+00	9.94E+00	1.23E+01	1.42E+01	
	014	275.3	-262.8	11/10/2010	14:16	1.01E+03	2.13E+02	3.96E+02	-7.35E-01	5.64E-01	1.77E+00	1.94E+00	4.26E+00	9.92E-00	-5.48E+00	4.42E+00	7.46E+00	5.46E+00	8.55E+00	1.89E+01	
	015	275.3	-262.8	1/31/2011	14:31	8.75E+02	4.13E+02	3.87E+02	-2.57E-02	1.66E+00	2.03E+00	-2.55E+00	8.76E+00	8.15E-00	6.49E-01	6.48E+00	7.20E+00	-7.18E-01	1.92E+01	2.22E+01	

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2011 FINAL Table 5 - Historic Groundwater Analytical Results.xlsx,
2011 Table 5

See Page 34 for Notes

IPEC00267181

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-67-276	016	276 3	-262 8	4/14/2011	10 53	1 36E+03	4 84E+02	4 19E+02	3 46E-01	1 27E+00	1 45E+00	-5 33E+00	6 78E+00	6 12E+00	1 62E+00	1 07E+01	1 15E+01	5 62E-01	1 47E+01	1 63E+01	MW-67-276
	017	276 3	-262 8	8/8/2011	10 45	8 99E+02	3 93E+02	3 63E+02	-3 38E-01	1 38E+00	1 32E+00	-3 35E-01	8 67E+00	9 58E+00	1 65E+00	9 24E+00	1 07E+01	1 22E+00	1 91E+01	2 10E+01	
MW-67-323	018	275 3	-262 8	11/29/201	10 57	1 36E+03	5 25E+02	4 84E+02	1 99E-01	1 70E+00	1 95E+00	-2 95E+00	1 01E+01	1 19E-01	-7 14E-01	8 02E+00	1 11E+01	6 43E+00	1 19E+01	1 31E+01	
	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 43E+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 52E-01	-2 08E-01	2 97E+00	3 32E+00	1 29E+00	3 50E+00	4 18E+00	6 35E+00	1 83E+01	2 13E+01	
	005	322 3	-309 8	7/28/2008	11 25	3 38E+02	9 03E+01	1 36E+02	-2 38E-01	3 66E-01	7 29E-01	8 29E-31	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 34E+02	2 24E+02	1 64E+02	4 20E-02	3 40E-01	4 37E-01	-3 59E+00	5 21E+00	5 15E+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 55E+02	1 70E+02	1 76E+02	-1 15E-01	4 05E-01	5 35E-01	4 74E-31	3 06E+00	4 42E 00	3 47E-01	3 30E+00	3 06E+00	9 34E+00	1 32E+01	1 47E+01	
	008	322 3	-309 8	4/30/2009	12 20	3 97E+02	1 93E+02	1 87E+02	2 21E 01	9 17E 01	9 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 15E+02	2 07E+02	5 31E-02	3 21E-01	4 17E-01	-1 54E+00	3 31E+00	3 45E+00	2 30E-01	3 29E+00	4 34E+00	2 93E-01	1 79E+01	2 04E+01	
	010	322 3	-309 8	11/ 1/2009	11 34	4 21E+02	1 62E+02	1 65E+02	-3 22E-01	4 86E-01	7 25E-01	-3 01E+00	8 12E+00	8 52E+00	-1 44E+00	8 10E+00	8 57E+00	2 21E+00	1 53E+01	1 74E+01	
	011	322 3	-309 8	3/3/2010	11 31	4 71E+02	1 83E+02	1 80E+02	3 29E-01	7 45E-01	8 53E-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 53E-01	4 58E-01	6 57E-01	-2 50E+00	7 72E+00	7 87E+00	2 97E-01	8 21E+00	9 30E+00	-1 13E+01	1 99E+01	2 33E+01	
	013	322 3	-309 8	8/9/2010	13 23	4 32E+02	1 43E+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	
	014	322 3	-309 8	11/ 0/2010	14 03	3 88E+02	1 83E+02	3 94E+02	1 89E-01	8 21E-01	2 01E+00	2 70E+00	4 61E+00	1 05E-01	3 11E-01	5 07E+00	1 12E+01	-3 22E+00	7 93E+00	1 78E+01	
	015	322 3	-309 8	1/31/2011	15 04	3 38E+02	3 73E+02	3 90E+02	2 58E-01	1 71E+00	2 93E+00	3 47E-31	5 70E+00	6 35E+00	8 12E-03	5 80E+00	6 35E+00	-5 93E+00	1 99E+01	2 23E+01	
	016	322 3	-309 8	4/14/2011	11 33	4 26E+02	4 05E+02	4 13E+02	1 10E+00	1 52E+00	1 62E+00	2 02E+00	8 36E+00	9 62E+00	-1 12E+00	7 80E+00	8 21E+00	-2 21E-01	1 30E+01	1 50E+01	
	017	322 3	-309 8	8/8/2011	10 53	3 39E+02	3 51E+02	3 73E+02	1 75E+00	1 05E+00	1 91E+00	-6 64E-01	6 66E+00	7 23E 00	4 13E+00	8 02E+00	1 02E+01	-9 62E+00	2 15E+01	2 43E+01	
	018	322 3	-309 8	11/29/201	10 57	3 52E+02	4 55E+02	4 86E+02	7 61E 01	1 71E+00	1 91E+00	3 91E+00	9 81E+00	1 15E+01	1 58E+00	9 73E+00	8 36E+00	1 56E+01	2 31E+01	2 56E+01	
MW-67-340	001	339 8	-327 3	8/31/2007	12 54	3 59E+02	1 61E+02	1 60E+02	1 69E-01	2 71E-01	3 34E-01	5 57E-31	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-31	3 46E+00	3 95E+00	-1 22E+00	3 33E+00	3 50E+00	3 39E+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 53E+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 35E+01	1 30E+02	-3 39E-01	2 28E-01	5 49E-01	3 13E-31	2 21E+00	3 81E+00	5 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 59E+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-31	3 72E+00	4 19E+00	-4 00E-01	3 41E+00	3 67E+00	7 78E+00	1 63E+01	1 90E+01	
	008	339 8	-327 3	4/30/2009	12 25	4 86E+02	2 07E+02	1 88E+02	4 53E-01	5 64E-01	6 35E-01	3 18E+00	7 19E+00	4 79E+00	-1 31E-01	5 53E+00	2 85E+00	8 33E+00	2 03E+01	2 29E+01	
	009	339 8	-327 3	7/28/2009	11 20	4 70E+02	2 52E+02	2 08E+02	2 02E-01	6 29E-01	7 70E-01	5 58E-31	3 75E+00	4 34E+00	-3 76E-01	3 50E+00	3 30E+00	-6 02E-01	1 89E+01	2 16E+01	
	010	339 8	-327 3	11/ 1/2009	11 20	5 37E+02	1 63E+02	1 65E+02	-2 77E-01	7 77E-01	9 54E-01	-3 00E-01	5 63E+00	6 15E 00	2 40E+00	6 63E+00	6 33E+00	-9 81E+00	1 49E+01	1 77E+01	
	011	339 8	-327 3	3/3/2010	11 49	5 27E+02	1 83E+02	1 79E+02	1 19E 01	5 03E 01	6 26E 01	1 02E 31	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 03E+02	1 65E+02	-2 13E-01	4 66E-01	7 31E-01	-2 61E+00	7 77E+00	8 17E+00	3 69E-01	8 28E+00	1 00E+01	-5 47E+00	1 94E+01	2 28E+01	
	013	339 8	-327 3	8/9/2010	13 20	4 86E+02	1 55E+02	1 25E+02	-3 31E-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 50E+00	1 45E+01	1 67E+01	
	014	339 8	-327 3	11/ 0/2010	13 53	5 31E+02	1 97E+02	3 95E+02	-8 93E-01	5 00E-01	1 64E+00	1 72E+00	4 50E+00	1 03E-01	-2 97E+00	3 90E+00	7 25E+00	2 25E+00	8 84E+00	1 97E+01	
	015	339 8	-327 3	1/31/2011	14 53	2 75E+02	3 53E+02	3 83E+02	-7 06E-01	1 51E+00	1 99E+00	4 30E-31	6 34E+00	7 02E+00	-1 15E+00	6 54E+00	6 88E+00	-5 79E+00	1 85E+01	2 20E+01	
	016	339 8	-327 3	4/14/2011	11 17	6 56E+02	4 32E+02	4 13E+02	2 62E-01	1 16E+00	1 40E+00	5 89E+00	9 02E+00	1 12E-01	4 57E+00	9 02E+00	1 15E+01	7 58E+00	1 54E+01	1 71E+01	
	017	339 8	-327 3	8/8/2011	10 43	4 19E+02	3 63E+02	3 72E+02	-5 52E-01	1 49E+00	1 89E+00	-9 17E-01	7 92E+00	8 61E+00	-4 93E+00	1 06E+01	1 00E+01	6 17E+00	1 84E+01	2 05E+01	
	018	339 8	-327 3	11/29/201	10 46	5 52E+02	4 63E+02	4 76E+02	-5 30E-01	1 53E+00	1 83E+00	-7 60E+00	7 53E+00	7 02E+00	1 23E+00	8 05E+00	1 14E+01	1 70E+00	1 90E+01	1 17E+01	
MW-107	004	327	110 1	9/28/2005	12 00	3 39E+02	3 87E+02	4 20E+02	NA	NA	NA	3 86E+00	1 16E+01	8 93E-00	NA	NA	NA	NA	NA	NA	MW-107
	001	327	110 1	12/3/2005	11 15	1 28E+02	4 11E+02	4 54E+02	7 65E+00	1 53E+01	1 32E+01	2 55E+00	7 64E+00	5 52E-00	4 11E+00	7 64E+00	1 23E+01	9 27E+00	NA	NA	
	002	327	110 1	4/18/2006	11 15	1 27E+02	4 11E+02	4 51E+02	0 00E+00	3 90E 01	4 10E 01	2 65E+00	7 94E+00	5 62E-00	4 36E+00	1 31E+01	9 21E+00	NA	NA	NA	
	003	327	110 1	6/6/2006	13 30	1 35E+02	1 53E+02	1 56E+02	-2 37E-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	
	035	327	110 1	7/23/2007	14 18	8 92E+01	1 52E+02	1 70E+02	1 66E-01	5 19E-01	5 37E-01	8 13E-31	2 73E+00	1 62E-00	1 03E-01	1 41E+00	1 62E+00	NA	NA	NA	
	036	327	110 1	4/24/2008	15 41	1 91E+02	8 93E+01	1 44E+02	-6 32E-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	
	037	327	110 1	5/30/2008	15 25	4 52E+01	9 02E+01	1 58E+02	6 62E-02	5 51E-01	9 50E-01	1 22E+00	1 88E+00	3 35E-00	5 48E-01	2 20E+00	3 57E+00	NA	NA	NA	
	038	327	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 15E+00	NA	NA	NA	
	039	327	110 1	4/22/2010	10 11	9 57E+01	1 64E+02	1 83E+02	-7 51E-02	5 23E-01	6 74E-01	9 23E-31	6 08E+00	6 99E-00	-1 88E+00	7 25E+00	7 56E+00	NA	NA	NA	
	010	327	110 1	5/2/2011	9 25	3 15E+02	3 53E+02	3 93E+02	8 29E-01	1 25E+00	1 40E+00	-3 53E+00	1 80E+01	1 65E-01	2 59E+00	6 84E+00	8 68E+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 04E+00	7 84E+00	NA	NA	NA	MW-108
	004	8 3	6 2	11/3/2005	12 00	1 77E+02	4 25E+02	4 76E+02	NA	NA	NA	3 41E+00	1 02E+01	7 53E-00	2 65E+00	7 55E+00	6 35E+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 38E 01	3 12E+00	8 86E+00	1 05E-01	1 41E 01	1 23E+01	1 34E+01	NA	NA	NA	
	005	8 3	6 2	7/5/2011	15 08	1 74E+03	4 83E+02	2 90E+02	-9 21E-02	1 29E+00	1 55E+00	4 93E+00	9 84E+00	1 17E-01	-7 54E+00	8 49E+00	7 19E+00	-8 75E+00	2 39E+01	2 62E+01	
	006	8 3	6 2	8/29/2011	11 25	1 78E+03	5 73E+02	2 62E+02	-7 31E-01	7 89E-01	1 34E+00	-1 86E-01	1 19E+01	1 21E-01	-4 10E+00	1 13E+01	1 10E+01	2 55E+00	1 16E+01	1 30E+01	
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 31E+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 83E+02	1 70E+02	2 98E-01	8 24E-01	9 27E-01	2 00E-31	5 68E+00	6 24E-00	-2 50E+00	6 12E+00	6 08E+00	NA	NA	NA	
	005	8 5	6 1	7/5/2011	12 45	2 43E+03	6 45E+02	2 79E+02	2 60E-01	1 25E+00	1 45E+00	2 23E-31	8 67E+00	9 62E-00	-3 82E+00	7 44E+00	6 65E+00	-3 51E+00	3 52E+01	3 92E+01	
	006	8 5	6 1	8/29/2011	13 49	3 26E+03	7 53E+02	2 59E+02	5 48E-01	1 01E+00	1 12E+00	2 37E+00	7 65E+00	8 94E-00	3 72E+00	9 60E+00	1 17E+01	-8 72E-01	8 73E+00	1 00E+01	
MW-111	001	16 5	2 4	9/29/2005	10 00	2 15E+05	2 23E+03	4 20E+02	NA	NA	NA	4 40E+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 25E+05	2 54E+03	6 24E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	002	16 5	2 4	10/ 4/2005	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	
	035	16 5	2 4	11/4/2005	9 00	3 32E+05	9 05E+03	7 00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	036	16 5	2 4	11/22/2005	10 00	1 80E+05	5 43E+03	7 00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	037	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	
	038	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	
	039	16 5	2 4	12/ 5/2005	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/ 9/2005	9 45	1 92E+05	5 72E+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 35E+03	7 00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	012	16 5	2 4	1/9/2006	10 45	1 13E+05	3 32E+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 73E+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	

IPEC00267182

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
MW-111	019	16.5	2.4	3/3/2006	9:00	2.36E+03	7.03E+02	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-111
	020	16.5	2.4	4/7/2006	9:50	1.45E+03	4.35E+02	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	2.52E+05	3.92E+04	2.35E+03	6.23E-01	1.07E+00	1.32E+00	-4.13E+00	1.40E+01	1.45E-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	1.25E-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	3.02E-00	1.21E-01	2.79E+00	3.17E+00	6.34E+00	1.26E+01	1.43E+01	
	025	16.5	2.4	8/3/2007	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	2.06E+00	9.43E-01	6.18E-01	2.60E+00	4.05E+00	3.93E-00	-6.32E-01	2.75E+00	2.63E+00	1.33E+01	1.53E+01	1.73E+01	
	027	16.5	2.4	9/4/2008	14:00	7.39E+04	1.03E+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	6.54E+04	2.03E+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	1.33E+03	1.71E+02	2.17E+00	8.97E-01	7.57E-01	1.51E+00	1.04E+01	6.97E-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	2.53E+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	4.59E+04	1.37E+03	1.40E+02	1.60E+00	1.00E+00	8.32E-01	-5.04E+00	6.84E+00	6.88E-00	-5.62E-01	6.84E+00	7.62E+00	NA	NA	NA	
	035	16.5	2.4	11/1/2010	14:55	4.59E+04	1.34E+03	1.27E+02	3.47E-01	5.90E-01	5.90E-01	-1.99E-01	5.63E+00	6.38E-00	5.49E+00	5.91E+00	7.75E+00	NA	NA	NA	
	036	16.5	2.4	11/17/2011	11:30	1.11E+04	1.42E+03	3.31E+02	1.09E+00	1.23E+00	1.62E+00	-2.01E-01	7.11E+00	8.62E-00	2.75E+00	8.97E+00	1.21E+01	NA	NA	NA	
U3-3	014	NA	NA	7/13/2011	12:28	6.73E+02	3.01E+02	2.01E+02	-3.42E-01	8.13E-01	1.19E+00	-4.64E-01	0.01E+00	0.64E-00	-2.52E+00	0.61E+00	0.22E+00	NA	NA	NA	U3-3
	015	NA	NA	8/29/2011	13:09	1.03E+03	1.55E+02	2.66E+02	5.24E-01	6.63E-01	1.06E+00	2.53E+00	8.55E+00	7.82E-00	3.69E+00	7.74E+00	7.12E+00	NA	NA	NA	
U3-4D	037	25.6	-10.8	10/6/2005	12:00	3.70E+02	4.05E+02	4.38E+02	NA	NA	NA	4.79E+00	1.41E+01	1.01E-01	3.72E+00	1.19E+01	8.56E+00	NA	NA	NA	U3-4D
	038	25.6	-10.8	10/21/2005	12:00	3.99E+02	3.93E+02	4.27E+02	NA	NA	NA	3.13E+00	9.34E+00	6.58E-00	2.98E+00	8.95E+00	6.56E+00	NA	NA	NA	
	039	25.6	-10.8	10/28/2005	12:00	4.35E+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	11/8/2005	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	
	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	
	031	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	
	032	25.6	-10.8	12/30/2005	9:25	4.42E+02	4.33E+02	4.71E+02	NA	NA	NA	3.53E+00	1.06E+01	7.75E-00	3.96E+00	1.19E+01	8.95E+00	NA	NA	NA	
	033	25.6	-10.8	1/13/2006	11:00	5.73E+02	4.33E+02	4.72E+02	NA	NA	NA	3.29E+00	9.86E+00	7.12E-00	3.42E+00	1.03E+01	7.72E+00	NA	NA	NA	
	034	25.6	-10.8	2/15/2006	13:45	2.71E+02	2.30E+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	2.12E+02	1.87E+02	1.48E-01	6.11E-01	7.21E-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	6/27/2006	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	2/7/2008	12:40	3.75E+02	1.35E+02	1.35E+02	-1.78E-01	7.83E-01	9.77E-01	2.83E-21	2.69E+00	3.12E-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-21	1.91E+00	3.35E-00	-1.53E-01	1.73E+00	2.91E+00	NA	NA	NA	
	017	25.6	-10.8	7/28/2008	16:46	4.56E+02	2.53E+02	3.79E+02	-3.57E-01	4.96E-01	9.31E-01	2.89E-21	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	5.58E+02	1.71E+02	1.64E+02	-8.59E-02	8.61E-01	1.11E+00	3.53E-21	4.62E+00	5.17E-00	7.12E-01	4.13E+00	4.75E+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	5.13E-01	6.41E-01	3.86E-21	2.60E+00	3.02E-00	7.58E-01	3.12E+00	3.39E+00	NA	NA	NA	
	020	25.6	-10.8	4/17/2009	15:57	3.32E+02	1.03E+02	1.89E+02	-1.17E-01	2.51E-01	5.11E-01	-2.67E-01	6.20E+00	4.61E-00	4.01E-21	3.32E+00	2.02E+00	NA	NA	NA	
	021	25.6	10.8	8/5/2009	14:06	4.82E+02	1.83E+02	1.89E+02	1.59E-01	5.17E-01	7.34E-01	2.01E+00	5.43E+00	5.08E-00	1.93E+00	5.66E+00	6.65E+00	NA	NA	NA	
	022	25.6	-10.8	11/4/2009	13:15	4.73E+02	1.23E+02	1.06E+02	-8.36E-02	5.49E-01	6.58E-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	8.55E+02	1.85E+02	1.77E+02	-1.50E-02	6.00E-01	7.36E-01	7.15E-21	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	2.05E+02	1.77E+02	-4.58E-02	5.44E-01	7.39E-01	-5.83E+00	9.33E+00	8.95E-00	-2.13E+00	8.04E+00	7.85E+00	NA	NA	NA	
	025	25.6	-10.8	7/23/2010	13:21	6.84E+02	1.85E+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	
	026	25.6	-10.8	10/28/2010	14:04	7.12E+02	1.63E+02	1.13E+02	2.26E-01	4.89E-01	5.51E-01	2.75E+00	5.75E+00	6.97E-00	1.33E+00	7.82E+00	9.00E+00	NA	NA	NA	
	027	25.6	-10.8	2/17/2011	14:41	6.28E+02	4.14E+02	4.05E+02	-8.34E-02	1.55E+00	1.95E+00	1.24E+00	4.72E+00	5.29E-00	8.61E-01	4.84E+00	5.47E+00	NA	NA	NA	
	028	25.6	-10.8	4/25/2011	14:50	7.41E+02	4.35E+02	4.95E+02	1.18E+00	1.58E+00	1.46E+00	-3.17E+00	7.58E+00	7.52E-00	4.81E+00	7.14E+00	8.11E+00	NA	NA	NA	
	029	25.6	-10.8	7/14/2011	11:55	3.88E+02	4.23E+02	4.36E+02	1.24E-01	1.06E+00	1.32E+00	4.78E+00	1.13E+01	1.32E-01	3.12E+00	1.22E+01	1.46E+01	NA	NA	NA	
	030	25.6	-10.8	7/29/2011	11:05	6.73E+02	4.02E+02	3.04E+02	1.23E-01	1.55E+00	1.90E+00	5.66E+00	0.43E+00	1.05E-01	-5.52E+00	2.20E+00	2.06E+00	NA	NA	NA	
	031	25.6	10.8	11/16/2011	12:56	3.50E+02	3.68E+02	3.81E+02	3.17E-01	1.38E+00	1.69E+00	9.88E-01	8.82E+00	1.07E-01	9.21E-01	9.27E+00	1.17E+01	NA	NA	NA	
TR-4S	001	NA	NA	7/27/2010	14:12	3.74E+02	1.74E+02	1.79E+02	3.76E-01	4.15E-01	4.21E-01	9.00E-21	8.51E+00	9.35E-00	1.89E+00	7.75E+00	9.37E+00	NA	NA	NA	TR-4S
	002	NA	NA	10/29/2010	11:40	3.51E+02	1.32E+02	1.10E+02	3.86E-01	5.82E-01	6.43E-01	1.64E+00	5.59E+00	6.52E-00	-2.02E+00	5.91E+00	6.14E+00	NA	NA	NA	
	003	NA	NA	4/25/2011	14:13	1.48E+02	3.73E+02	4.22E+02	6.69E-01	1.27E+00	1.41E+00	5.35E+00	8.82E+00	1.07E-01	1.75E+00	8.92E+00	1.03E+01	NA	NA	NA	
	004	NA	NA	7/14/2011	11:27	3.29E+02	4.11E+02	4.36E+02	1.06E+00	1.33E+00	1.40E+00	-2.41E+00	7.59E+00	7.88E-00	3.25E+00	7.65E+00	9.52E+00	NA	NA	NA	
	005	NA	NA	7/29/2011	10:06	4.57E+02	3.84E+02	3.43E+02	2.84E-01	1.64E+00	1.90E+00	9.19E+00	1.58E+01	9.23E-00	7.83E-01	1.02E+01	1.17E+01	NA	NA	NA	
	006	NA	NA	11/16/2011	11:28	7.52E+02	4.41E+02	5.32E+02	9.55E-01	1.88E+00	1.47E+00	-2.05E+00	9.27E+00	1.12E-01	1.65E+00	1.03E+01	1.08E+01	NA	NA	NA	
U3-T1	007	5.7	2.8	10/7/2005	12:00	1.59E+03	4.23E+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	3.39E+02	3.07E+02	4.27E+02	NA	NA	NA	3.92E+00	1.13E+01	8.60E-00	3.97E+00	1.16E+01	9.03E+00	NA	NA	NA	
	009	5.7	2.8	10/28/2005	12:00	3.40E+02	4.23E+02	4.72E+02	NA	NA	NA	3.55E+00	1.06E+01	8.05E-00	5.35E+00	1.61E+01	1.23E+01	NA	NA	NA	
	010	5.7	2.8	11/4/2005	12:00	1.27E+02	4.23E+02	4.76E+02	NA	NA	NA	4.01E+00	1.20E+01	8.85E-00	3.90E+00	1.17E+01	9.13E+00	NA	NA	NA	
	011	5.7	2.8	11/10/2005	12:00	5.53E+02	4.25E+02	4.61E+02	NA	NA	NA	3.17E+00	9.32E+00	6.89E-00	2.97E+00	8.95E+00	6.99E+00	NA	NA	NA	
	012	5.7	2.8	11/15/2005	12:00	0.30E+03	4.23E+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	4.23E+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	
	031	5.7	2.8	12/15/2005	13:15	3.40E+02	4.23E+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	
	032	5.7	2.8	12/30/2005	10:40	5.29E+02	4.33E+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	
	033	5.7	2.8	1/12/2006	9:50	7.85E+02	4.44E+02	4.72E+02	NA	NA	NA	3.10E+00	9.31E+00	6.88E-00	2.85E+00	8.49E+00	6.40E+00	NA	NA	NA	
	034	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	0.29E-01	1.06E+00	5.49E+00	6.13E-00	-1.01E-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	2.35E+02	1.98E+02	3.36E-01	1.34E+00	1.44E+00	1.15E+00	1.13E+01	1.13E-01	-1.14E+00	1.18E+01	1.26E+01	NA	NA	NA	
	015	5.7	2.8	8/15/2006	11:30	7.56E+02	2.23E+02	1.73E+02	NA	NA	NA	-4.04E+00	6.83E+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	5.26E+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	8/7/2007	13:20	4.90E+02	3.33E+02	2.73E+02	5.21E-02	5.13E-01	6.47E-01	8.49E-21	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	6.29E-01	-1.03E+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	6.25E+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	
	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	7.59E-01	1.21E+00	3.14E+00	3.75E-00	-1.79E-01	3.56E+00	3.93E+00	8.37E+00	1.85E+01	2.09E+01	

IPEC00267183

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]													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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
U3-T1[5]	020	57	28	5/2/2008	15:24	7.39E+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	U3-T1[5]
	021	57	28	7/23/2008	11:16	5.56E+02	2.53E+02	3.79E+02	6.60E-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	57	28	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	7.45E+00	1.51E+00	6.24E+00	7.35E+00	NA	NA	NA	
	023	57	28	1/28/2009	12:00	6.75E+02	2.43E+02	2.04E+02	1.64E+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	57	28	4/10/2009	15:22	3.28E+02	1.65E+02	1.49E+02	3.23E-01	6.69E-01	7.51E-01	1.68E-31	6.03E+00	4.02E+00	1.24E+00	3.39E+00	4.14E+00	NA	NA	NA	
	025	57	28	7/14/2009	11:08	3.99E+02	2.35E+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	57	28	11/3/2009	16:35	3.79E+02	1.13E+02	1.03E+02	3.87E-01	5.92E-01	6.53E-01	-6.81E-01	5.33E+00	5.75E+00	1.33E+00	6.33E+00	7.37E+00	NA	NA	NA	
	027	57	28	2/10/2010	12:02	4.76E+02	1.73E+02	1.78E+02	2.59E-01	6.52E-01	7.38E-01	-1.23E+00	6.23E+00	5.82E+00	2.78E+00	3.74E+00	4.78E+00	NA	NA	NA	
	028	57	28	5/5/2010	16:54	5.20E+02	1.72E+02	1.84E+02	6.45E-02	4.97E-01	5.97E-01	-3.23E+00	8.98E+00	1.04E+01	-8.61E-01	6.62E+00	7.16E+00	NA	NA	NA	
	029	57	28	7/26/2010	12:15	3.84E+02	1.74E+02	1.78E+02	1.20E-02	3.91E-01	4.39E-01	1.07E+00	7.68E+00	9.77E+00	-6.61E-01	6.96E+00	7.49E+00	NA	NA	NA	
	030	57	28	10/27/2010	16:04	3.04E+02	1.23E+02	1.10E+02	4.84E-02	6.34E-01	7.50E-01	-6.56E-01	6.04E+00	6.72E+00	1.50E+00	5.73E+00	6.75E+00	NA	NA	NA	
	031	57	28	2/22/2011	11:11	6.55E+02	4.03E+02	3.92E+02	1.42E+00	1.96E+00	2.02E+00	1.80E+00	1.05E+01	6.14E+00	2.12E+00	6.42E+00	7.54E+00	NA	NA	NA	
	032	57	28	5/6/2011	10:23	7.82E+02	5.15E+02	5.03E+02	-6.43E-02	9.94E-01	1.30E+00	-3.24E+00	9.12E+00	9.22E+00	8.49E-01	1.09E+01	1.21E+01	NA	NA	NA	
	033	57	28	8/22/2011	14:40	1.30E+03	3.42E+02	1.95E+02	-6.26E-02	1.10E+00	1.37E+00	-4.61E-01	8.70E+00	8.45E+00	-2.62E+00	8.31E+00	8.23E+00	NA	NA	NA	
U3-T2	034	57	28	10/19/2011	11:39	7.59E+02	4.05E+02	3.84E+02	1.59E-01	1.15E+00	1.45E+00	-3.93E-01	9.51E+00	1.17E+01	2.12E-01	9.12E+00	1.17E+01	NA	NA	NA	
	012	57	26	10/7/2005	12:00	7.33E+02	3.93E+02	4.15E+02	NA	NA	NA	3.67E+00	1.10E+01	8.05E+00	4.13E+00	1.24E+01	9.35E+00	NA	NA	NA	U3-T2
	013	57	26	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	6.96E+00	NA	NA	NA	
	014	57	26	10/28/2005	12:00	1.28E+03	4.55E+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	57	26	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	57	26	11/7/2005	12:00	1.54E+03	4.59E+02	4.61E+02	NA	NA	NA	3.81E+00	1.14E+01	8.34E+00	3.96E+00	1.19E+01	9.09E+00	NA	NA	NA	
	017	57	26	11/10/2005	12:00	1.13E+03	4.63E+02	4.81E+02	NA	NA	NA	3.37E+00	1.19E+01	8.72E+00	4.15E+00	1.25E+01	9.55E+00	NA	NA	NA	
	018	57	26	12/2/2005	12:00	1.33E+03	4.55E+02	4.64E+02	NA	NA	NA	3.23E+00	6.92E+00	5.23E+00	2.58E+00	7.74E+00	6.11E+00	NA	NA	NA	
	019	57	26	12/15/2005	13:30	1.29E+03	4.63E+02	4.70E+02	NA	NA	NA	3.77E+00	8.30E+00	6.09E+00	2.85E+00	8.55E+00	6.57E+00	NA	NA	NA	
	020	57	26	12/30/2005	10:50	1.59E+03	4.74E+02	4.71E+02	NA	NA	NA	3.81E+00	1.14E+01	8.45E+00	3.49E+00	1.05E+01	8.31E+00	NA	NA	NA	
	003	57	26	1/6/2006	8:45	2.42E+03	4.92E+02	4.66E+02	NA	NA	NA	2.86E+00	8.57E+00	6.55E+00	4.04E+00	1.21E+01	9.30E+00	NA	NA	NA	
	004	57	26	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	57	26	1/20/2006	11:00	1.75E+03	4.55E+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	57	26	1/25/2006	11:10	2.32E+03	4.85E+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	57	26	2/1/2006	11:15	2.13E+03	4.83E+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	57	26	2/17/2006	9:20	1.92E+03	5.03E+02	5.03E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	57	26	3/16/2006	12:00	1.92E+03	3.35E+02	2.04E+02	5.87E-01	9.21E-01	1.00E+00	-7.43E-01	6.36E+00	6.03E+00	-1.22E-01	6.23E+00	6.00E+00	NA	NA	NA	
	011	57	26	5/26/2006	13:15	1.90E+03	3.89E+02	2.48E+02	1.49E+00	1.11E+00	1.01E+00	1.67E+00	1.01E+01	1.22E+01	5.67E+00	9.70E+00	1.25E+01	NA	NA	NA	
	019	57	26	7/10/2006	12:25	1.83E+03	3.73E+02	2.54E+02	7.24E-01	1.72E+00	1.80E+00	2.58E+00	6.90E+00	8.07E+00	1.80E+00	6.69E+00	7.74E+00	NA	NA	NA	
	020	57	26	8/15/2006	10:30	1.58E+03	7.73E+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	57	26	6/12/2007	9:25	1.45E+03	5.19E+02	4.36E+02	-3.39E-01	7.05E-01	9.59E-01	2.03E-31	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	57	26	8/1/2007	14:14	1.25E+03	4.62E+02	2.55E+02	-4.34E-02	5.37E-01	7.11E-01	-1.75E+00	3.23E+00	3.22E+00	1.99E-02	3.54E+00	4.00E+00	NA	NA	NA	
	023	57	26	10/22/2007	15:07	1.17E+03	4.75E+02	4.02E+02	2.36E-01	5.28E-01	6.38E-01	-7.13E-02	2.82E+00	3.11E+00	2.53E+00	3.50E+00	3.81E+00	NA	NA	NA	
	024	57	26	1/22/2008	16:16	1.33E+03	3.83E+02	2.97E+02	4.31E-01	8.54E-01	9.53E-01	7.39E-31	2.97E+00	3.39E+00	-1.14E+00	3.59E+00	2.86E+00	2.78E+00	1.62E+01	1.89E+01	
	025	57	26	2/5/2008	14:44	1.32E+03	1.77E+02	2.22E+02	6.52E-01	3.31E-01	4.70E-01	3.80E-31	2.00E+00	3.55E+00	7.90E-01	1.63E+00	2.08E+00	NA	NA	NA	
	026	57	26	7/23/2008	13:40	9.97E+02	2.83E+02	3.64E+02	2.90E-01	5.19E-01	8.44E-01	3.57E-32	1.72E+00	2.93E+00	-1.02E+00	2.44E+00	3.39E+00	NA	NA	NA	
	027	57	26	10/20/2008	10:36	9.28E+02	5.07E+02	5.00E+02	4.73E-01	4.95E-01	4.25E-01	-4.63E-01	4.02E+00	5.31E+00	-5.02E+00	6.54E+00	6.06E+00	NA	NA	NA	
	028	57	26	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-31	2.42E+00	3.74E+00	4.09E-01	2.30E+00	2.61E+00	NA	NA	NA	
	029	57	26	4/24/2009	11:24	1.38E+03	4.97E+02	4.14E+02	1.16E+00	6.54E-01	4.11E-01	1.62E+00	6.65E+00	4.43E+00	3.79E-01	4.16E+00	4.69E+00	NA	NA	NA	
	030	57	26	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-31	3.69E+00	4.23E+00	-6.32E-01	3.72E+00	4.05E+00	NA	NA	NA	
	031	57	26	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-31	6.63E+00	6.48E+00	-2.05E+00	6.95E+00	6.93E+00	NA	NA	NA	
	032	57	26	2/11/2010	12:43	9.41E+02	1.83E+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	57	26	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	57	26	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	
	035	57	26	10/29/2010	11:22	1.43E+03	2.15E+02	1.11E+02	4.22E-01	6.79E-01	7.30E-01	-6.11E-02	5.42E+00	6.11E+00	3.00E+00	5.47E+00	6.85E+00	NA	NA	NA	
	036	57	26	2/22/2011	14:30	2.27E+03	4.92E+02	3.62E+02	1.82E+00	2.04E+00	2.02E+00	3.63E+00	6.08E+00	7.29E+00	2.97E-01	7.32E+00	7.82E+00	NA	NA	NA	
	037	57	26	5/6/2011	11:41	2.32E+03	6.43E+02	4.15E+02	3.27E-01	1.32E+00	1.58E+00	2.02E+00	7.26E+00	8.74E+00	5.77E-01	9.46E+00	1.02E+01	NA	NA	NA	
	038	57	26	7/8/2011	10:55	2.57E+03	6.63E+02	2.80E+02	4.75E-01	1.31E+00	1.50E+00	3.77E+00	1.08E+01	1.17E+01	1.06E+00	1.03E+01	1.07E+01	NA	NA	NA	
	039	57	26	7/29/2011	12:32	2.55E+03	7.02E+02	3.34E+02	1.05E+00	1.81E+00	1.99E+00	-5.43E-01	8.49E+00	9.21E+00	2.63E+00	8.91E+00	1.07E+01	NA	NA	NA	
	040	57	26	10/7/2011	10:20	2.98E+03	7.62E+02	3.28E+02	-8.79E-02	1.15E+00	1.47E+00	-4.88E+00	1.02E+01	1.09E+01	-5.13E+00	1.12E+01	1.23E+01	NA	NA	NA	
U1-CSS	031	14	61	1/30/2007	11:45	1.76E+03	6.03E+02	5.70E+02	1.55E+01	2.15E+00	1.70E+00	7.00E-31	1.32E+00	1.42E+00	-3.20E-01	1.38E+00	1.66E+00	1.54E+01	2.67E+01	2.90E+01	U1-CSS
	032	14	61	2/27/2007	11:24	4.32E+03	6.93E+02	5.70E+02	1.38E+01	2.31E+00	2.10E+00	1.11E+00	1.95E+00	2.12E+00	7.00E-01	1.95E+00	2.20E+00	-1.30E+00	2.55E+01	2.90E+01	
	033	14	61	6/13/2007	11:39	1.53E+03	5.23E+02	4.35E+02	1.45E+01	1.91E+00	6.24E-01	8.50E-31	3.57E+00	4.15E+00	2.82E+00	4.28E+00	4.93E+00	4.42E+00	1.95E+01	2.22E+01	
	034	14	61	8/6/2007	15:55	2.80E+03	2.81E+02	1.95E+02	2.68E+01	2.43E+00	5.71E-01	2.53E+00	4.30E+00	4.61E+00	2.48E+00	6.14E+00	4.71E+00	NA	NA	NA	
	035	14	61	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	3.35E+00	-6.86E-02	3.33E+00	3.71E+00	NA	NA	NA	
	036	14	61	4/23/2008	15:25	1.77E+03	1.93E+02	1.44E+02	6.74E+00	9.01E-01	7.15E-01	-1.32E+00	2.12E+00	3.22E+00	-7.61E-01	2.60E+00	2.16E+00	NA	NA	NA	
	037	14	61	5/12/2008	14:05	6.88E+02	1.35E+02	1.42E+02	4.63E+00	8.35E-01	9.35E-01	2.50E+00	2.30E+00	4.25E+00	3.09E-01	2.58E+00	3.96E+00	2.18E+00	1.17E+01	2.08E+01	
	038	14	61	9/9/2008	10:24	1.45E+03	3.77E+02	4.98E+02	9.38E+00	9.44E-01	5.43E-01	1.90E+00	2.07E+00	2.75E+00	NA	NA	NA	NA	NA	NA	
	039	14	61	11/6/2008	14:48	2.56E+03	3.85E+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	1.32E+01	1.65E+01	1.85E+01	
	010	14	61	11/9/2008	13:50	2.20E+03	2.33E+02	1.62E+02	9.08E+00	1.38E+00	5.30E-01	2.35E+00	4.04E+00	4.98E+00	8.56E-01	4.63E+00	5.37E+00	NA	NA	NA	
	011	14	61	3/18/2009	13:05	1.57E+03	5.35E+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	61	4/21/2009	13:07	3.28E+03	3.87E+02	1.91E+02	3.56E+01	2.64E+00	7.19E-01	5.73E-31	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	61	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	61	5/4/2010	15:58	1.88E+03	2.74E+02	1.70E+02	8.52E+00	1.81E+00	8.42E-01	4.61E-31	5.87E+00	6.65E+00	5.94E+00	5.22E+00	6.88E+00	-1.79E+01	2.13E+01	2.55E+01	
	015	14	61	11/8/2010	14:56	2.26E+03	2.72E+02	1.26E+02	1.18E+01	1.45E+00	6.34E-01	2.29E+00	5.01E+00	5.93E+00	2.07E+00	5.61E+00	6.76E+00	3.16E-01	1.81E+01	2.13E+01	
	016	14	61	5/4/2011	13:24	6.30E+03	6.04E+02	3.40E+02	1.41E+01	2.70E+00	1.01E+00	3.29E+00	9.30E+00	9.79E+00	7.12E+00	9.42E+00	1.24E+01	-1.05E+01	1.53E+01	1.04E+01	
	017	14	61	7/8/2011	13:33	1.38E+01	1.23E+03	2.75E+02	3.50E+00	1.82E+00	1.30E+00	3.91E-32	9.13E+00	1.01E+01	3.66E+00	9.96E+00	1.06E+01	3.30E+00	3.09E+01	2.34E+01	
	018	14	61	10/27/2011	13:02	1.70E+03	5.64E+02	4.77E+02	7.82E-01	1.29E+00	1.39E+00	-2.83E+00	8.07E+00	8.99E+00	1.05E+00	7.68E+00	9.65E+00	-8.01E+00	1.79E+01	2.07E+01	
U1-NCD	001	NA	NA	5/8/2008	9:45	9.50E+03	3.43E+02	1.96E+02	3.67E+00	2.58E+00	3.57E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	U1-NCD
	002	NA	NA	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	NA	NA	1/12/2009	13:45	2.13E+03	2.43E+02	1.92E+02	4.64E+02	8.90E+00	6.51E-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	NA	NA	4/13/2009	12:15	5.21E+03	5.13E+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	5.05E+01	4.30E+01	

IPEC00267184

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

Well ID[1,4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
U1-NCD	005	NA	NA	7/13/2006	12:30	2.56E+03	3.85E+02	2.08E+02	1.10E+02	4.98E+00	5.34E-01	1.78E+04	1.36E+03	1.39E-01	7.71E-01	3.71E+00	4.30E+00	2.91E+02	2.77E+01	2.12E+01	U1-NCD
	006	NA	NA	10/2/2009	9:40	3.11E+03	2.93E+02	1.88E+02	8.37E+01	3.94E+00	5.22E-01	1.32E+04	9.90E+02	1.62E-01	1.87E+00	6.39E+00	7.72E+00	3.13E+02	3.09E+01	2.30E+01	
	007	NA	NA	1/4/2010	9:00	5.47E+03	3.43E+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	2.03E+01	2.15E+01	
	008	NA	NA	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	1.42E-01	7.51E-01	5.21E+00	6.03E+00	2.90E+02	3.39E+01	2.40E+01	
	009	NA	NA	10/20/2010	13:40	3.34E+03	3.23E+02	1.27E+02	3.68E+01	2.31E+00	6.39E-01	1.20E+04	1.47E+03	9.99E-00	-1.14E+00	4.96E+00	5.42E+00	2.31E+02	3.19E+01	2.23E+01	
	011	NA	NA	9/15/2011	11:45	3.86E+03	6.39E+02	3.99E+02	9.08E+01	7.80E+00	1.54E+00	4.77E+03	6.42E+02	8.81E-00	3.36E+00	4.68E+00	5.97E+00	1.14E+02	2.09E+01	1.82E+01	
	012	NA	NA	10/3/2011	13:20	1.13E+04	1.03E+03	3.35E+02	1.58E+01	2.72E+00	1.74E+00	5.92E+03	8.04E+02	1.43E-01	1.93E+00	7.20E+00	9.97E+00	1.36E+02	2.21E+01	1.86E+01	
	013	NA	NA	12/26/2011	12:45	2.32E+03	5.13E+02	3.74E+02	1.49E+01	2.52E+00	3.33E+00	7.73E+03	9.75E+02	1.84E-01	-1.01E+00	9.43E+00	1.17E+01	1.20E+02	2.79E+01	1.88E+01	
U1-SFDS	001	NA	NA	4/9/2008	0:55	6.28E+02	1.41E+02	1.97E+02	9.50E+00	4.04E-01	4.31E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	U1-SFDS
	002	NA	NA	5/8/2008	9:10	8.81E+02	1.53E+02	1.96E+02	1.40E+01	5.18E-01	3.59E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	NA	NA	10/15/2008	12:45	1.79E+03	1.79E+02	1.67E+02	1.55E+01	1.26E+00	4.56E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	NA	NA	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	NA	NA	4/13/2009	12:30	1.52E+03	2.95E+02	1.37E+02	4.53E+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	NA	NA	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	3.63E-00	-9.95E-02	4.44E+00	4.64E+00	5.10E+00	2.14E+01	2.44E+01	
	007	NA	NA	10/14/2009	9:50	7.04E+02	1.93E+02	1.88E+02	2.51E+01	2.31E+00	5.30E-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	NA	NA	1/6/2010	8:50	5.10E+02	1.83E+02	1.81E+02	1.25E+01	1.46E+00	4.47E-01	3.18E+00	4.07E+00	2.95E-00	-5.94E-01	2.91E+00	3.18E+00	-2.06E+00	1.84E+01	2.15E+01	
	009	NA	NA	7/7/2010	8:45	6.44E+02	1.83E+02	1.45E+02	1.68E+01	2.10E+00	6.32E-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	
	010	NA	NA	10/20/2010	8:45	4.82E+02	1.59E+02	1.26E+02	1.17E+01	1.83E+00	8.74E-01	7.99E+00	7.24E+00	5.75E-00	-8.31E-01	5.24E+00	5.67E+00	9.71E-01	1.86E+01	2.18E+01	
	013	NA	NA	9/15/2011	11:35	2.29E+03	5.25E+02	4.00E+02	7.79E+00	2.54E+00	1.39E+00	2.23E+00	6.72E+00	6.72E-00	1.14E+00	6.27E+00	7.16E+00	-4.27E+00	1.70E+01	1.95E+01	
	014	NA	NA	10/5/2011	9:00	2.32E+03	5.01E+02	3.35E+02	5.54E+00	2.53E+00	1.97E+00	4.27E+00	9.96E+00	1.25E-01	6.39E+00	8.94E+00	9.45E+00	2.06E+0:	1.87E+01	2.00E+01	
	015	NA	NA	12/28/2011	8:19	1.10E+02	3.21E+02	3.61E+02	2.66E+00	2.22E+00	2.08E+00	-3.38E+00	9.87E+00	1.13E-01	3.75E-01	1.10E+01	1.33E+01	-4.44E+00	1.47E+01	1.73E+01	
L-2	001	NA	NA	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	L-2
	002	NA	NA	11/17/2010	14:25	1.74E+02	1.71E+02	3.78E+02	2.25E-01	6.25E-01	1.50E+00	-4.50E-01	5.04E+00	1.10E-01	3.35E+00	5.94E+00	1.40E+01	NA	NA	NA	
	003	NA	NA	8/12/2011	15:13	2.34E+02	2.15E+02	2.00E+02	-5.95E-01	7.44E-01	1.16E+00	5.11E+00	1.19E+01	1.35E-01	-2.57E-01	9.24E+00	1.02E+01	NA	NA	NA	
	004	NA	NA	12/8/2011	14:15	-3.49E+01	3.45E+02	4.09E+02	-2.39E-01	1.56E+00	1.92E+00	-2.35E+00	8.76E+00	1.00E-01	-2.12E+00	8.46E+00	1.04E+01	NA	NA	NA	
RW-1	002	1075	-30	10/25/2006	14:15	2.95E+04	2.23E+03	5.85E+02	3.10E-01	8.79E-01	9.23E-01	1.99E+00	5.23E+00	5.95E-00	4.31E-01	4.74E+00	5.22E+00	NA	NA	NA	RW-1
	001	1075	-30	10/25/2006	11:37	6.41E+04	4.83E+03	8.52E+02	-8.44E-01	1.29E+00	1.32E+00	4.50E-01	4.75E+00	5.43E+00	3.01E-01	4.62E+00	5.32E+00	NA	NA	NA	
	005	1075	-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-31	4.21E+00	5.21E+00	5.21E+00	5.21E+00	6.06E+00	NA	NA	NA	
	003	1075	-30	10/31/2006	12:27	1.27E+05	9.05E+03	1.10E+03	-3.70E-01	9.51E-01	1.02E+00	7.13E-31	4.23E+00	4.71E-00	7.34E-01	3.04E+00	3.61E+00	NA	NA	NA	
	004	1075	30	10/31/2006	15:55	2.53E+01	2.01E+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	1075	-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	3.99E-00	-5.25E-01	4.01E+00	4.19E+00	NA	NA	NA	
	007	1075	-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	2.62E-00	-8.50E-01	2.37E+00	2.96E+00	NA	NA	NA	
MH-5 VCFD[6]	008	1075	-30	11/3/2006	9:00	3.36E+04	2.34E+03	1.00E+03	4.80E-01	7.20E-01	7.30E-01	-1.05E+00	2.19E+00	2.62E-00	8.20E-01	2.40E+00	2.70E+00	NA	NA	NA	MH-5 VCFD[6]
	001	NA	NA	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	3.62E-00	6.39E-02	3.13E+00	3.45E+00	NA	NA	NA	
	002	NA	NA	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	-8.56E-01	2.84E+00	2.93E+00	NA	NA	NA	
	003	NA	NA	10/26/2007	13:30	1.52E+03	2.33E+02	1.84E+02	1.60E-01	6.06E-01	7.10E-01	2.15E-31	2.64E+00	2.95E-00	-6.20E-01	2.90E+00	3.06E+00	NA	NA	NA	
	004	NA	NA	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-31	2.78E+00	3.09E-00	5.97E-01	2.55E+00	2.96E+00	NA	NA	NA	
	005	NA	NA	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	NA	NA	8/24/2009	10:15	1.30E+03	2.45E+02	2.18E+02	5.68E-01	9.64E-01	9.47E-01	8.69E-32	2.58E+00	6.23E-00	2.70E+00	6.31E+00	7.43E+00	NA	NA	NA	
	007	NA	NA	11/16/2009	11:10	6.28E+02	1.39E+02	1.07E+02	3.93E-01	6.37E-01	7.36E-01	-2.36E-01	1.07E+01	1.17E-01	2.72E+00	6.29E+00	7.70E+00	NA	NA	NA	
	008	NA	NA	2/10/2010	13:46	2.20E+02	1.52E+02	1.71E+02	6.25E-02	2.27E-01	4.20E-01	-1.12E+00	4.41E+00	4.02E-00	-1.01E+00	4.11E+00	4.15E+00	NA	NA	NA	
	009	NA	NA	5/17/2010	10:15	4.33E+02	1.73E+02	1.79E+02	3.66E 01	5.81E-01	6.18E 01	2.13E+00	6.00E+00	7.18E-00	4.52E C1	6.63E+00	7.65E+00	NA	NA	NA	
	010	NA	NA	8/5/2010	14:45	7.37E+02	1.83E+02	1.77E+02	5.37E-01	5.67E-01	5.84E-01	7.26E-31	7.72E+00	8.69E-00	-2.26E+00	6.93E+00	7.07E+00	NA	NA	NA	
	011	NA	NA	8/30/2010	13:30	9.96E+03	5.43E+02	1.26E+02	1.25E-01	3.21E-01	3.31E-01	1.50E+00	5.58E+00	6.48E-00	8.08E-01	6.51E+00	7.50E+00	NA	NA	NA	
	012	NA	NA	9/10/2010	15:30	8.80E+02	1.83E+02	1.25E+02	3.60E-01	6.35E-01	7.11E-01	7.21E-31	6.45E+00	7.44E-00	1.23E+00	5.71E+00	6.85E+00	NA	NA	NA	
	013	NA	NA	11/24/2010	11:10	4.50E+02	1.83E+02	1.47E+02	1.36E-01	7.57E-01	8.35E-01	1.75E+00	3.45E+00	4.02E-00	5.48E-01	3.79E+00	4.28E+00	NA	NA	NA	
	014	NA	NA	2/28/2011	9:47	5.17E+03	6.53E+02	3.66E+02	1.50E+00	1.95E+00	1.36E+00	3.43E-31	5.64E+00	6.19E-00	-1.28E+00	6.18E+00	6.45E+00	NA	NA	NA	
	015	NA	NA	4/22/2011	13:37	1.25E+04	1.13E+03	4.46E+02	8.17E-01	1.85E+00	2.08E+00	-3.21E+00	8.36E+00	8.43E-00	-1.60E+00	9.06E+00	9.51E+00	NA	NA	NA	
	018	NA	NA	7/7/2011	14:29	2.97E+03	7.02E+02	2.83E+02	-3.30E-01	8.04E-01	1.11E+00	9.24E-31	7.95E+00	8.84E-00	2.11E-01	8.29E+00	9.15E+00	NA	NA	NA	
	019	NA	NA	7/12/2011	12:46	9.86E+03	1.23E+03	2.81E+02	9.15E-01	1.03E+00	1.06E+00	-1.17E+01	1.33E+01	1.52E-01	-1.19E+00	9.99E+00	1.06E+01	NA	NA	NA	
	020	NA	NA	7/20/2011	10:40	2.29E+03	7.32E+02	3.35E+02	-4.57E-01	1.01E+00	1.47E+00	1.70E+00	6.30E+00	7.26E-00	-2.61E+00	6.24E+00	6.34E+00	NA	NA	NA	
	021	NA	NA	7/26/2011	12:50	1.86E+03	6.03E+02	3.33E+02	7.10E 01	9.45E 01	1.15E+00	2.81E+00	7.47E+00	8.99E-00	8.83E 01	9.66E+00	1.03E+01	NA	NA	NA	
	022	NA	NA	8/3/2011	14:12	3.90E+03	8.31E+02	3.31E+02	-4.45E-01	1.07E+00	1.60E+00	-6.18E-01	1.01E+01	1.15E-01	-6.71E+00	1.43E+01	1.29E+01	NA	NA	NA	
	023	NA	NA	8/11/2011	12:39	2.74E+04	1.65E+03	2.02E+02	6.43E-01	1.19E+00	1.32E+00	-2.23E+00	7.47E+00	7.63E-00	1.85E+00	5.85E+00	7.32E+00	NA	NA	NA	
	024	NA	NA	8/18/2011	9:50	2.29E+04	1.87E+03	2.64E+02	9.64E-01	1.55E+00	1.70E+00	1.90E+00	7.98E+00	9.05E-00	-3.10E+00	9.60E+00	9.54E+00	NA	NA	NA	
	025	NA	NA	8/24/2011	11:01	1.40E+04	1.51E+03	2.58E+02	5.99E-01	1.30E+00	1.46E+00	-2.35E+00	7.86E+00	8.21E-00	3.46E+00	7.98E+00	9.92E+00	NA	NA	NA	
	026	NA	NA	8/30/2011	13:55	3.37E+04	1.83E+03	2.03E+02	9.19E-01	1.31E+00	1.40E+00	1.76E+00	7.23E+00	8.47E-00	-1.69E+00	7.86E+00	7.79E+00	NA	NA	NA	
	027	NA	NA	10/7/2011	10:07	1.48E+04	1.09E+03	2.86E+02	-5.50E-01	1.17E+00	1.65E+00	1.51E+00	7.68E+00	9.95E-00	-2.77E+00	7.92E+00	9.24E+00	NA	NA	NA	
	028	NA	NA	10/31/2011	14:20	2.40E+04	1.37E+03	3.89E+02	1.06E+00	1.72E+00	1.87E+00	5.56E+00	1.15E+01	1.61E-01	3.37E-01	1.09E+01	1.53E+01	NA	NA	NA	
LAF-002	001	NA	-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	NA	-22.3	6/6/2006	12:47	3.98E+01	3.63E+02	6.98E+02	1.38E+00	1.85E+00	1.92E+00	3.83E+00	1.53E+00	1.52E-00	2.21E+00	1.25E+01	1.34E+01	2.84E 01	2.13E+01	2.34E+01	
	003	NA	-22.3	9/19/2006	13:14	4.71E+01	1.52E+02	1.70E+02	4.39E-01	8.96E-01	1.07E+00	5.43E-32	9.05E+00	1.01E+00	-2.76E+00	6.25E+00	6.96E+00	NA	NA	NA	
	004	NA	-22.3	12/4/2006	13:38	-1.20E+01	1.67E+02	1.60E+02	-1.10E-01	7.80E-01	8.50E-01	NA	NA	NA	5.00E-01	5.40E+00	6.30E+00	-2.50E+00	1.70E+00	8.10E+00	
	005	NA	-22.3	3/7/2007	14:45	-8.30E+01	1.55E+02	1.60E+02	8.20E-01	1.50E+00	1.60E+00	3.10E+00	4.80E+00	5.12E-00	-1.20E+00	5.40E+00	7.30E+00	NA	NA	NA	
	006	NA	-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	7.00E-31	2.63E+00	3.04E-00	6.55E-01	2.60E+00	3.04E+00	NA	NA	NA	
	007	NA	-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	NA	-22.3	12/4/2007	10:50	9.30E+01	1.45E+02	1.62E+02	4.89E-01	6.20E-01	6.52E-01	-6.91E-01	4.59E+00	4.37E-00	-2.35E+00	3.72E+00	3.39E+00	NA	NA	NA	
	009	NA	-22.3	4/10/2008	0:00	4.55E+01	8.45E+01	1.44E+02	4.13E-01	8.02E-01	4.36E-01	1.97E+00	2.14E+00	5.95E-00	1.61E+00	2.46E+00	4.56E+00	NA	NA	NA	
	010	NA	-22.3	10/7/2008	10:32	8.19E+01	1.55E+02	1.74E+02	4.05E-01	7.90E-01	9.31E-01	2.36E-31	2.76E+00	3.15E-00	-3.08E-02	3.09E+00	3.46E+00	-4.61E+00	2.01E+01	2.35E+01	
	011	NA	-22.3	4/21/2009	14:24	1.30E+02	1.77E+02	1.89E+02	1.77E-01	5.70E-01	6.58E-01	-1.74E+00	5.94E+00	3.95E-00	3.37E-01	3.99E+00	4.50E+00	2.34E+00	1.92E+01	2.19E+01	
	012	NA	-22.3	11/19/2009	12:35	7.51E+01	1.43E+02	1.65E+02	1.34E 02	5.43E-01	7.29E 01	1.01E-31	8.91E+00	1.02E-01	6.99E+00	9.51E+00	1.27E+01	2.30E+00	1.47E+01	1.68E+01	
	013	NA	-22.3	5/11/2010	13:44	-4.21E+01	1.32E+02	1.63E+02	6.55E-01	9.37E-01	7.79E-01	-1.43E+00	6.90E+00	7.52E-00	1.64E+00	6.08E+00	7.34E+00	-6.88E+00	2.21E+01	2.54E+01	
	014	NA	-22.3	11/22/2010	14:41	1.27E+02	1.13E+02	1.21E+02	1.96E-01	4.67E-01	5.40E-01	-6.13E-01	6.13E+00	6.88E-00	-1.66E+00	5.08E+00	6.15E+00	3.55E+00	1.77E+01	2.05E+01	
	015	NA	-22.3	5/2/2011	12:50	6.59E+01	3.04E+02	3.43E+02	1.16E+00	1.55E+00	1.66E+00	-5.80E-01	7.86E+00	8.57E-00	-6.46E-01	7.24E+00	7.65E+00	-3.48E-01	1.60E+01	1.83E+01	
B-1[5]	016	NA	-22.3	12/13/2011	10:31	6.96E+01	4.14E+02	4.79E+02	1.65E+00	1.67E+00	1.75E+00	-3.83E+00	9.48E+00	1.11E-01	5.21E+00	8.73E+00	1.25E+01	6.36E+00	1.11E+01	1.22E+01	
	001	NA	NA	6/29/2007	12:35	7.93E+02	2.07E+02	1.89E+02	-3.33E-01	6.75E-01	9.30E-01	0.00E+00	7.04E+00	4.44E-00	-9.13E-01	3.30E+00	3.46E+00	NA	NA	NA	B-1[5]

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

Well ID[1, 4]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS[3]														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.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	Result	Std. Dev.[7]	MDC	
B-1[5]	002	NA	NA	8/14/2007	11 30	1 10E+03	2 25E+02	1 90E+C2	1 29E-02	5 93E-01	7 38E-01	0 00E+00	6 71E+00	3 98E−00	9 94E-C1	3 54E+0C	4 16E+00	NA	NA	NA	B-5
	003	NA	NA	10/22/2007	14 49	1 10E+03	4 63E+02	4 01E+C2	-1 56E-01	3 72E-01	5 51E-01	1 68E+01	5 82E+00	3 82E−00	1 332+00	3 23E+0C	3 53E+00	NA	NA	NA	
	004	NA	NA	1/22/2008	13 08	2 77E+02	1 61E+02	1 71E+C2	1 29E-01	5 00E-01	6 12E-01	3 13E-01	2 54E+00	2 88E−00	-9 46E-02	2 72E+0C	3 01E+00	NA	NA	NA	
	005	NA	NA	4/18/2008	18 25	1 17E+03	1 57E+02	2 01E+C2	-1 14E-01	3 81E-01	7 32E-01	2 00E+01	3 70E+00	3 07E−00	-2 48E-01	1 76E+0C	2 97E+00	NA	NA	NA	
	006	NA	NA	6/3/2009	13 30	8 81E+02	1 83E+02	1 62E+C2	7 01E-02	7 09E-01	9 15E-01	9 2E+00	1 11E+01	7 41E−00	-3 25E+00	6 23E+0C	5 86E+00	NA	NA	NA	
	007	NA	NA	2/23/2010	14 10	1 49E+03	2 13E+02	1 69E+C2	4 61E-02	3 00E-01	3 80E-01	4 53E+00	5 45E+00	6 44E−00	-6 69E-01	7 34E+0C	5 88E+00	NA	NA	NA	
	008	NA	NA	4/23/2010	16 44	8 15E+02	1 91E+02	1 85E+C2	2 22E-01	5 20E-01	6 33E-01	9 79E+00	7 91E+00	6 38E−00	5 59E-C1	6 54E+0C	7 21E+00	NA	NA	NA	
	009	NA	NA	8/17/2010	15 40	1 40E+04	6 43E+02	1 27E+C2	1 55E-01	6 43E-01	7 71E-01	2 27E+01	1 06E+01	5 87E−00	2 96E+00	6 00E+0C	7 45E+00	NA	NA	NA	
	010	NA	NA	11/17/2010	11 10	2 37E+03	2 72E+02	3 86E+C2	6 87E-01	7 68E-01	1 72E+00	1 85E+01	6 46E+00	7 93E−00	8 39E-C1	4 22E+0C	9 74E+00	NA	NA	NA	
	011	NA	NA	2/14/2011	15 44	3 82E+03	5 83E+02	3 62E+C2	5 41E-02	1 70E+00	2 14E+00	2 10E+01	1 22E+01	6 77E−00	-1 81E+00	7 00E+0C	7 22E+00	NA	NA	NA	
	012	NA	NA	4/25/2011	10 50	9 10E+03	9 22E+02	4 53E+C2	-6 21E-03	1 74E+00	2 09E+00	2 05E+01	1 33E+01	1 03E- 01	3 10E+00	9 06E+0C	1 11E+01	NA	NA	NA	
	013	NA	NA	8/17/2011	13 17	7 36E+02	3 03E+02	1 96E+C2	-6 00E-02	9 85E-01	1 25E+00	1 5E+01	1 49E+01	7 29E−00	-4 01E-01	7 02E+0C	7 34E+00	NA	NA	NA	
B-6[5]	001	NA	NA	7/5/2007	9:00	4 03E+02	1 67E+02	1 69E+C2	1 01E-01	4 97E-01	5 67E-01	1 29E+00	3 46E+00	4 04E−00	1 09E+00	3 51E+0C	4 15E+00	NA	NA	NA	B-6[6]
	002	NA	NA	8/14/2007	8:30	5 46E+01	1 63E+02	1 92E+C2	3 26E 01	6 20E 01	8 32E 01	5 63E 01	2 97E+00	3 42E−00	2 88E+00	3 31E+0C	3 35E+00	NA	NA	NA	
	003	NA	NA	10/22/2007	11 30	1 37E+02	1 73E+02	1 90E+C2	-7 54E-02	4 34E-01	5 33E-01	2 39E+00	2 33E+00	3 04E−00	1 04E+00	2 46E+0C	3 05E+00	NA	NA	NA	
	004	NA	NA	1/16/2008	16 50	4 72E+02	2 04E+02	1 79E+C2	1 05E-01	7 05E-01	8 33E-01	3 96E+00	4 41E+00	3 32E−00	1 29E+00	3 15E+0C	3 66E+00	NA	NA	NA	
	005	NA	NA	4/25/2008	14 15	5 23E+01	8 45E+01	1 43E+C2	-1 20E-01	2 59E-01	5 25E-01	-2 89E-01	1 96E+00	3 24E−00	-7 50E-01	3 43E+0C	4 21E+00	NA	NA	NA	
	006	NA	NA	6/3/2009	9 40	1 28E+02	1 45E+02	1 63E+C2	1 71E-01	7 08E-01	8 14E-01	1 50E-01	1 19E+01	7 94E−00	1 26E+00	5 79E+0C	6 80E+00	NA	NA	NA	
	007	NA	NA	2/19/2010	9 56	3 78E+02	1 65E+02	1 68E+C2	1 74E-02	3 57E-01	4 59E-01	1 43E+00	4 13E+00	4 84E−00	2 21E-C1	3 96E+0C	4 54E+00	NA	NA	NA	
	008	NA	NA	5/18/2010	9 40	4 48E+01	1 62E+02	1 84E+C2	-1 02E-01	4 47E-01	5 71E-01	5 39E-01	5 58E+00	6 34E−00	2 39E-C1	5 50E+0C	6 27E+00	NA	NA	NA	
	009	NA	NA	8/5/2010	13 43	1 49E+02	1 62E+02	1 79E+C2	1 42E-01	8 02E-01	9 78E-01	2 52E+00	6 51E+00	8 03E−00	-9 21E-02	8 43E+0C	9 57E+00	NA	NA	NA	
	010	NA	NA	11/8/2010	11 45	1 25E+02	1 33E+02	1 43E+C2	1 43E-01	6 60E-01	7 58E-01	9 00E+00	9 04E+00	9 22E−00	-3 26E-01	4 70E+0C	5 28E+00	NA	NA	NA	
	011	NA	NA	2/23/2011	11 27	8 39E+02	3 30E+02	3 65E+C2	6 28E-01	1 73E+00	2 05E+00	4 45E+00	5 02E+00	7 02E- 00	-1 35E+00	6 50E+0C	6 0CE+00	NA	NA	NA	
	012	NA	NA	4/25/2011	9 48	2 58E+03	6 13E+02	4 53E+C2	6 59E 01	1 58E+00	2 09E+00	1 31E 01	8 56E+00	9 08E−00	4 73E+00	1 06E+01	1 35E+01	NA	NA	NA	
	013	NA	NA	7/8/2011	11 05	5 39E+02	3 54E+02	2 82E+C2	1 32E+00	1 56E+00	1 63E+00	6 09E+00	1 58E+01	8 04E−00	-2 64E+00	8 97E+0C	8 84E+00	NA	NA	NA	
	014	NA	NA	7/29/2011	10 52	6 45E+02	4 14E+02	3 38E+C2	-2 59E-01	1 39E+00	1 79E+00	1 60E+00	7 74E+00	8 72E−00	4 72E+00	5 07E+0C	7 82E+00	NA	NA	NA	
	015	NA	NA	10/20/2011	12 01	1 70E+02	3 43E+02	3 87E+C2	-1 55E-01	1 57E+00	1 98E+00	-3 07E+00	7 65E+00	8 33E−00	1 53E+00	8 34E+0C	1 10E+01	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 Since name changes have been made based on altered transducer installations

5 At monitoring well TW TI, sample IDs 0 0 B, 0 0 D, and 0 0 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

6 These locations are storm drains or foundation drains, not monitoring wells

7 Column designated as "Std. Dev." provides the figure taken 1 sigma uncertainty values

* The Q1 2011 MW-40-102, MW-40-127 and MW-51-189 Cs-137 results were verified by re-analysis However, based on the available chemistry and Site hydrogeologic data, these values do not appear to be representative of the groundwater conditions at these sampling intervals

** The Q2 2011 MW-40-45 preliminary Sr-90 result was 2 03 pCi/L and exceeded the IL However, after re-analysis, the sample was below the detection limit which suggests the preliminary result was likely a false positive A shift in the MDC for the preliminary result could have possibly resulted from contaminated laboratory equipment, modified count time, or changes in sample preparation

*** The First Q3 2011 MW 58 65 preliminary Sr 90 result was 3 64 pCi/L and exceeded the IL However, after re-analysis, the sample was below the detection limit which suggests the preliminary result was likely a false positive A shift in the MDC for the preliminary result could have possibly resulted from contaminated laboratory equipment, modified count time, or changes in sample preparation

FIGURES

Figure 1	**Site Location Plan**
Figure 2	**Site Plan**
Figure 3	**Lower Hudson Valley Geologic Map**
Figure 4	**4th Quarter 2011 Current and Potential Future SSC Source Locations**
Figure 5A-Q1	**1st Quarter 2011 Longterm Transducer Monitoring Evaluation Map**
Figure 5A-Q2	**2nd Quarter 2011 Longterm Transducer Monitoring Evaluation Map**
Figure 5A-Q3	**3rd Quarter 2011 Longterm Transducer Monitoring Evaluation Map**
Figure 5A-Q4	**4th Quarter 2011 Longterm Transducer Monitoring Evaluation Map**
Figure 6-Q1	**1st Quarter 2011 Rolling Average Tritium Activity Map**
Figure 6-Q2	**2nd Quarter 2011 Rolling Average Tritium Activity Map**
Figure 6-Q3	**3rd Quarter 2011 Rolling Average Tritium Activity Map**
Figure 6-Q4	**4th Quarter 2011 Rolling Average Tritium Activity Map**
Figure 6A	**Temporal Trends in Unit 2 Rolling Average Tritium Activity Maps**
Figure 6B	**Unit 2 Leak Collection Device Evaluation 4th Quarter 2011**
Figure 7-Q1	**1st Quarter 2011 Rolling Average Strontium-90 Activity Map**
Figure 7-Q2	**2nd Quarter 2011 Rolling Average Strontium-90 Activity Map**
Figure 7-Q3	**3rd Quarter 2011 Rolling Average Strontium-90 Activity Map**
Figure 7-Q4	**4th Quarter 2011 Rolling Average Strontium-90 Activity Map**
Figure 7A	**Sr-90 Baseline Analysis–Unit 1 Defueling Evaluation 4thQuarter 2011**
Figure 8-Q1	**1st Quarter 2011 Rolling Average Cesium, Cobalt, and Nickel Activity Map**
Figure 8-Q2	**2nd Quarter 2011 Rolling Average Cesium, Cobalt, and Nickel Activity Map**
Figure 8-Q3	**3rd Quarter 2011 Rolling Average Cesium, Cobalt, and Nickel Activity Map**
Figure 8-Q4	**4th Quarter 2011 Rolling Average Cesium, Cobalt, and Nickel Activity Map**

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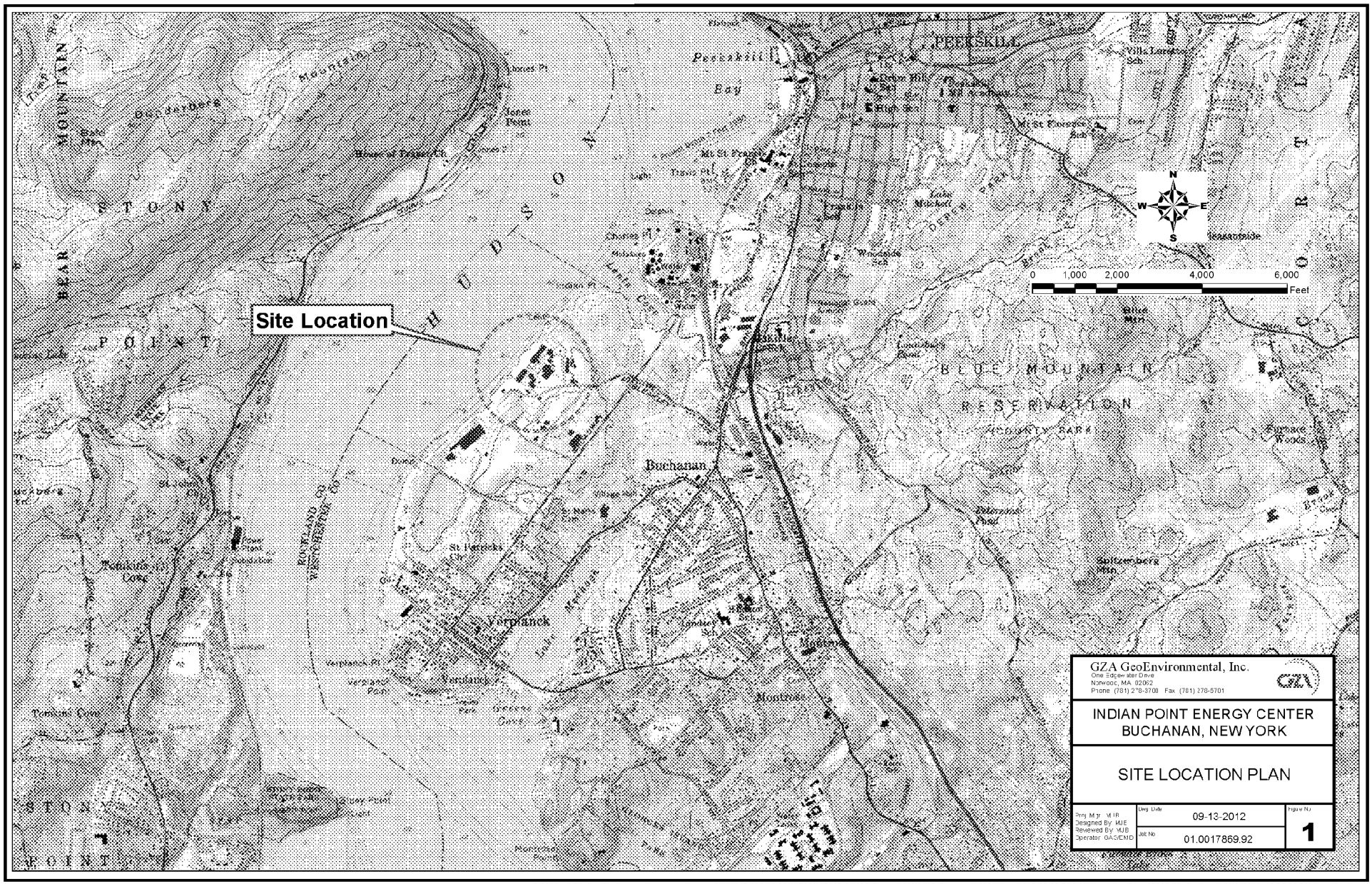

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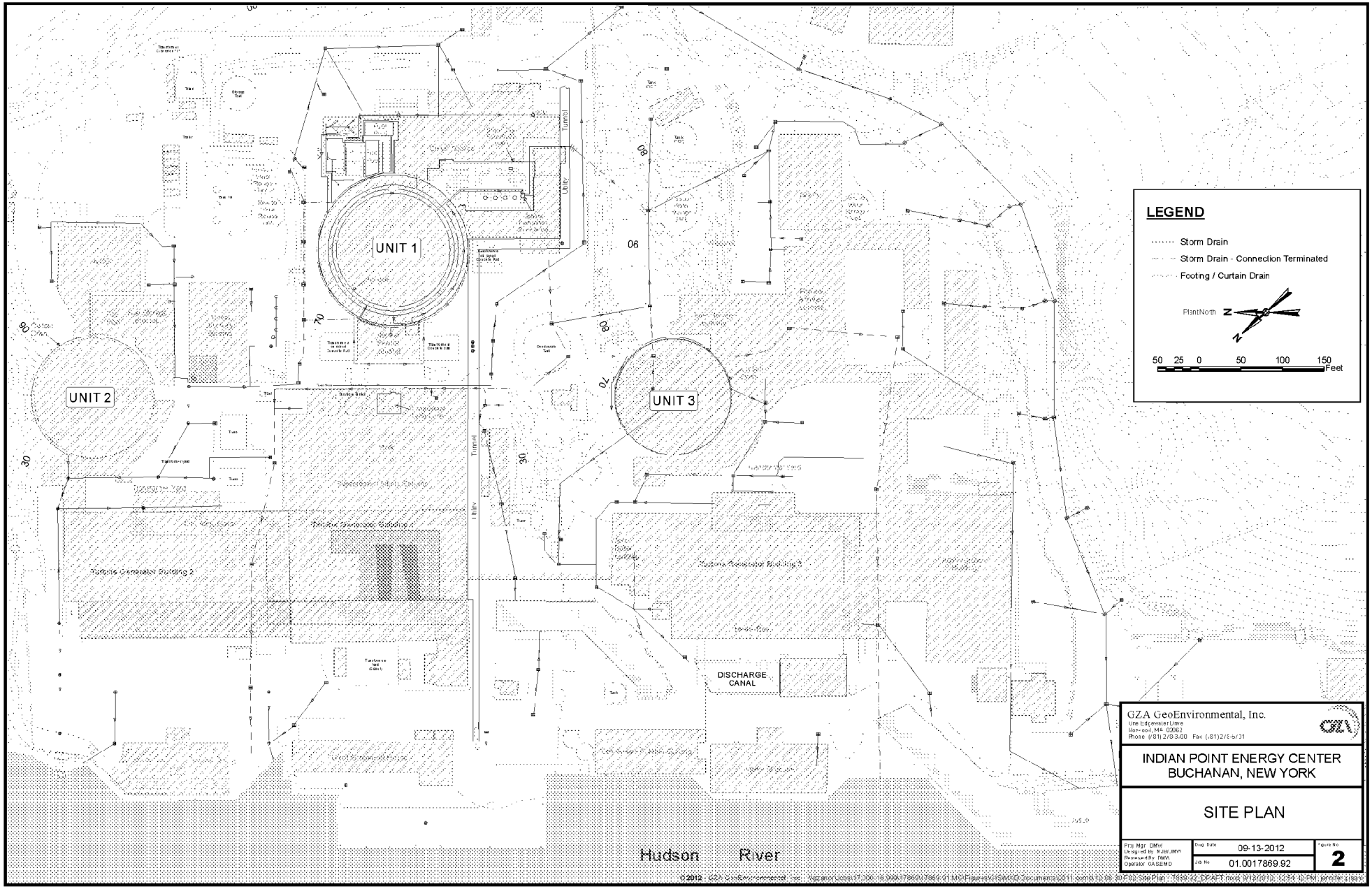

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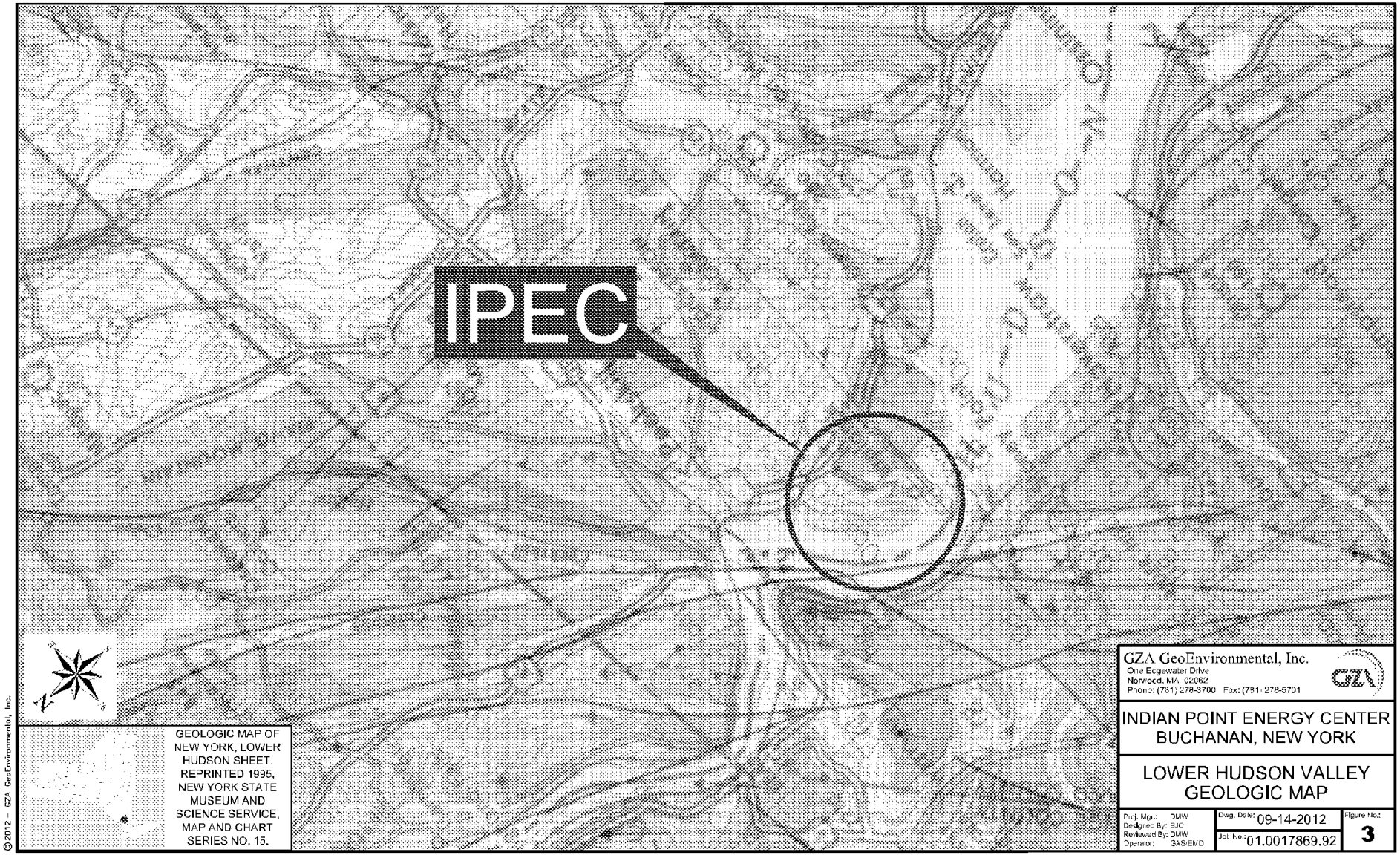

GEOLOGIC MAP OF NEW YORK, LOWER HUDSON SHEET, REPRINTED 1995, NEW YORK STATE MUSEUM AND SCIENCE SERVICE, MAP AND CHART SERIES NO. 15.

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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: GAS/EMD

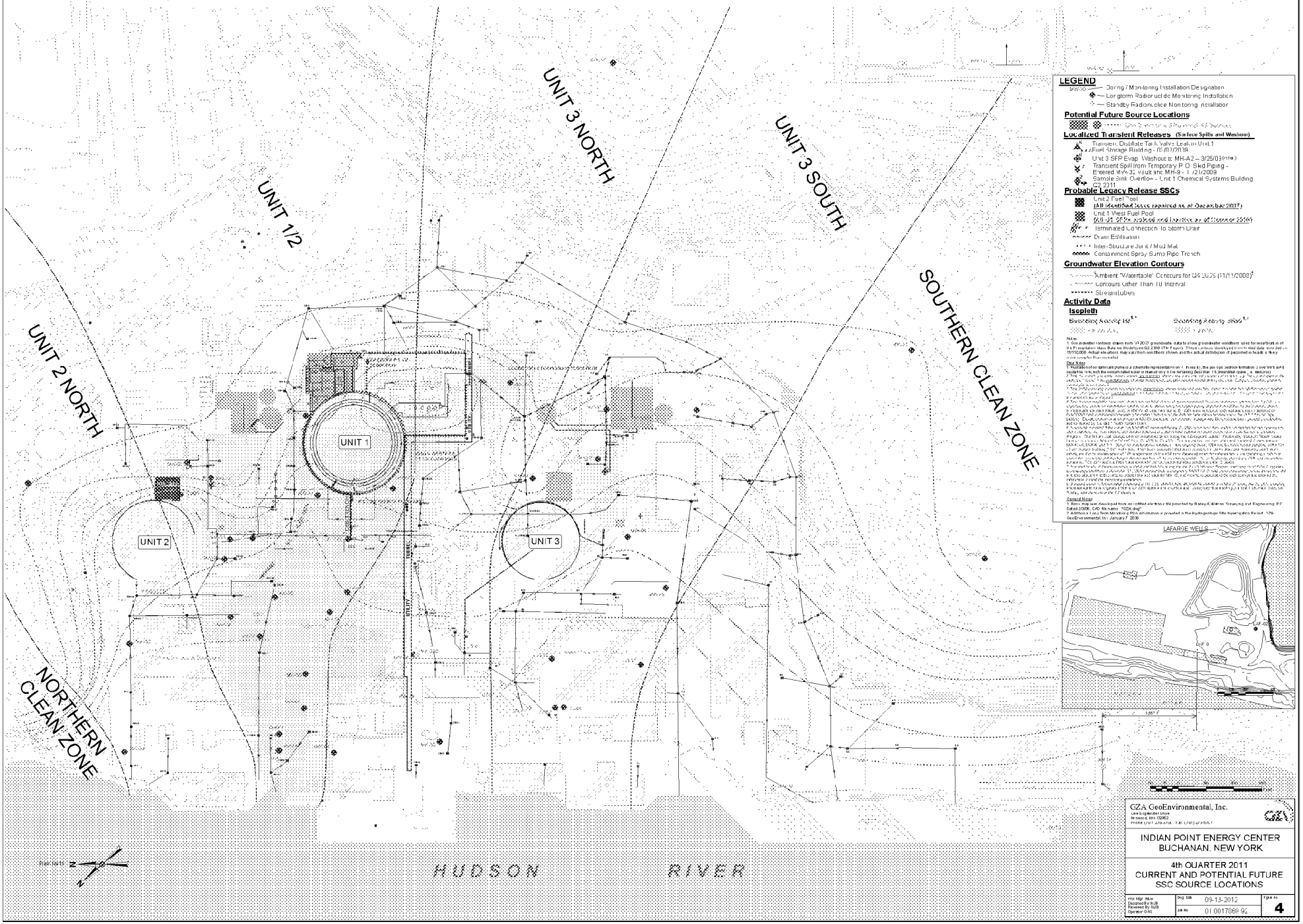
Dwg. Date: 09-14-2012
Job No.: 01.0017869.92

Figure No.: 3

GZA-u:\17,000-18,999\17859\17869-91.MG\Figures\CA00\4Q2011\12-09-14 F03 Lower Hudson Valley Geologic Map 17869-92_FINAL.dwg [FIG-3] September 15, 2012 - 8:42am eloine.donohue

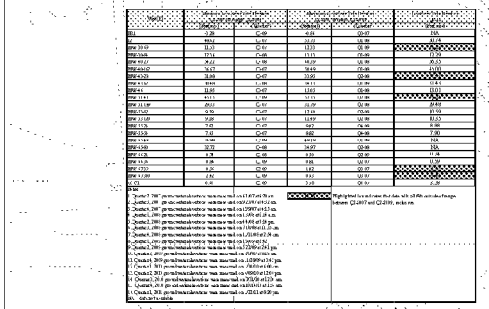
IPEC00267190

4th QUARTER 2011 CURRENT AND POTENTIAL FUTURE SSC SOURCE LOCATIONS



IPEC00267191

1st QUARTER 2011 LONGTERM TRANSDUCER MONITORING EVALUATION MAP



Well	Elevation of Ground Surface (ft)	Elevation of Top of Riser (ft)	Elevation of Screened Interval (ft)		Comments
	GS(ft)	TOR(ft)	Top(ft)	Bot(ft)	
B1	21.28	24.08	-6.45	-20.67	DRY
B2	19.62	19.37	12.02	-3.38	
MW-30-D	19.42	22.47	13.53	-3.37	
MW-30BR	19.51	22.46	11.71	-28.49	
MW-30S	19.42	22.48	14.37	-3.38	
MW-31D	19.43	22.07	10.63	-28.48	
MW-31S	19.49	22.07	13.65	-3.35	
MW-32D	19.66	22.39	14.11	-3.34	
MW-33	13.85	16.67	7.83	-3.17	
MW-33D	13.73	16.69	11.11	-3.27	
MW-34-BR	19.61	22.39	11.61	-28.39	
MW-34D	19.56	22.37	13.16	-3.44	
MW-34S	19.58	22.40	14.67	-3.42	
MW-35D	19.61	22.47	14.62	-3.38	
MW-35S	19.62	22.47	14.62	-3.38	
MW-36D	19.66	22.49	14.07	-3.34	
MW-36S	19.66	22.49	14.07	-3.34	
MW-37D	19.78	22.49	14.07	-3.22	
MW-37S	19.78	22.49	14.07	-3.22	
MW-38D	19.8	22.49	14.07	-3.20	
MW-38S	19.8	22.49	14.07	-3.20	
MW-39D	19.8	22.49	14.07	-3.20	
MW-39S	19.8	22.49	14.07	-3.20	
MW-40D	19.8	22.49	14.07	-3.20	
MW-40S	19.8	22.49	14.07	-3.20	

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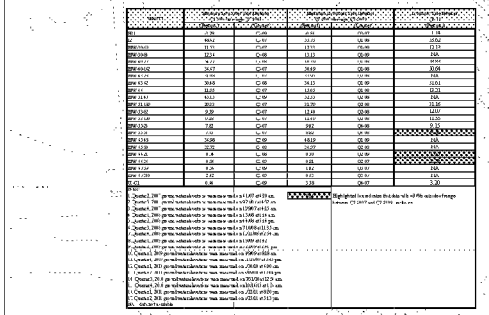
2nd QUARTER 2011 LONGTERM TRANSDUCER MONITORING EVALUATION MAP



Well	Monitoring Interval Elevation (ft NAVD88) Top of Screen	Bottom of Screen	Monitoring Interval Elevation (ft NAVD88) Top of Screen	Bottom of Screen	Transducer Elevation (ft NAVD88)
MW-1	11.26	C-09	10.61	Q3-09	11.18
MW-2	10.62	C-09	10.13	Q3-09	10.62
MW-3/3AR	11.15	C-09	10.51	Q3-09	11.13
MW-3AR	12.11	C-09	11.13	Q3-09	N/A
MW-4/4R	9.77	C-09	10.10	Q3-09	10.00
MW-4A/4D	10.07	C-07	10.03	Q3-09	10.06
MW-4AR	9.99	C-07	9.03	Q3-09	N/A
MW-4D/4E	10.05	C-09	10.13	Q3-09	10.01
MW-5	10.03	C-09	10.03	Q3-09	N/A
MW-5/5R	10.13	C-09	10.23	Q3-09	N/A
MW-5R/5E	10.03	C-09	10.70	Q3-09	10.00
MW-6/6D	9.99	C-07	12.48	Q3-09	12.07
MW-6D/6E	7.48	C-07	10.97	Q3-09	10.50
MW-6S/6	7.02	C-07	9.82	Q3-09	9.41
MW-6S/6I	7.02	C-07	9.82	Q3-09	9.41
MW-6S/6S	10.08	C-09	10.10	Q3-09	N/A
MW-7/7R	10.02	C-09	10.27	Q3-09	10.00
MW-8/8A	6.4	C-09	9.01	Q3-09	N/A
MW-8A/8R	6.28	C-09	9.05	Q3-09	8.97
MW-8R/8P	6.26	C-09	9.82	Q3-09	N/A
MW-8P/8M	7.42	C-09	9.01	Q3-09	N/A
MW-9/9	6.98	C-09	9.78	Q3-09	9.30

Notes:
1. Quarter 1, 2011 groundwater elevation data is 61.67 at 01:00 on 1/1/2011.
2. Quarter 2, 2011 groundwater elevation data is 61.67 at 01:00 on 4/1/2011.
3. Quarter 3, 2011 groundwater elevation data is 61.67 at 01:00 on 7/1/2011.
4. Quarter 4, 2011 groundwater elevation data is 61.67 at 01:00 on 10/1/2011.
5. Quarter 1, 2012 groundwater elevation data is 61.67 at 01:00 on 1/1/2012.
6. Quarter 2, 2012 groundwater elevation data is 61.67 at 01:00 on 4/1/2012.
7. Quarter 3, 2012 groundwater elevation data is 61.67 at 01:00 on 7/1/2012.
8. Quarter 4, 2012 groundwater elevation data is 61.67 at 01:00 on 10/1/2012.
9. Quarter 1, 2013 groundwater elevation data is 61.67 at 01:00 on 1/1/2013.
10. Quarter 2, 2013 groundwater elevation data is 61.67 at 01:00 on 4/1/2013.
11. Quarter 3, 2013 groundwater elevation data is 61.67 at 01:00 on 7/1/2013.
12. Quarter 4, 2013 groundwater elevation data is 61.67 at 01:00 on 10/1/2013.
13. Quarter 1, 2014 groundwater elevation data is 61.67 at 01:00 on 1/1/2014.
14. Quarter 2, 2014 groundwater elevation data is 61.67 at 01:00 on 4/1/2014.
15. Quarter 3, 2014 groundwater elevation data is 61.67 at 01:00 on 7/1/2014.
16. Quarter 4, 2014 groundwater elevation data is 61.67 at 01:00 on 10/1/2014.

Highlighted boxes indicate thicknesses with <5ft saturated range between Q1 2007 and Q3 2010, inclusive.

LEGEND

Monitoring Installations

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

Multiple Screened Intervals w/ Lapse

- **Transducer** Monitored Interval
- Interval no longer monitored with **transducer**
- Single level monitoring location with duplicate **transducers** for redundancy (data from primary transducers shown)
- Maximum quarterly groundwater elevation at time of low river tide measured between Q2 2007 and Q3 2009, inclusive
- Minimum quarterly groundwater elevation at time of low river tide measured between Q1 2007 and Q3 2009, inclusive

Transducer Notes:
* For locations with multilevel depth monitoring, redundancy provided by monitoring more than one depth at same location
† Groundwater transducer data not available for Q2 2011

Potential Future Source Locations

Localized Transient Releases (Surface Spills and Washout)

- Transient: Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2009
- Unit 2 SFP Evap. Washout to MH-A2 – 3/25/09 (est.)
- Transient Spill from Temporary HCO Skid Piping - Entered MW-32 Vault and MH- 9 11/21/2009
- Sample Sink Overflow - Unit 1 Chemical Systems Building Q3 2011

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (**All identified leaks repaired as of December 2007**)
- Unit 1 West Fuel Pool (**NSFP sealed and inactive as of October 2008**)
- Terminated Connector To Storm Drain
- Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Pipe Trench

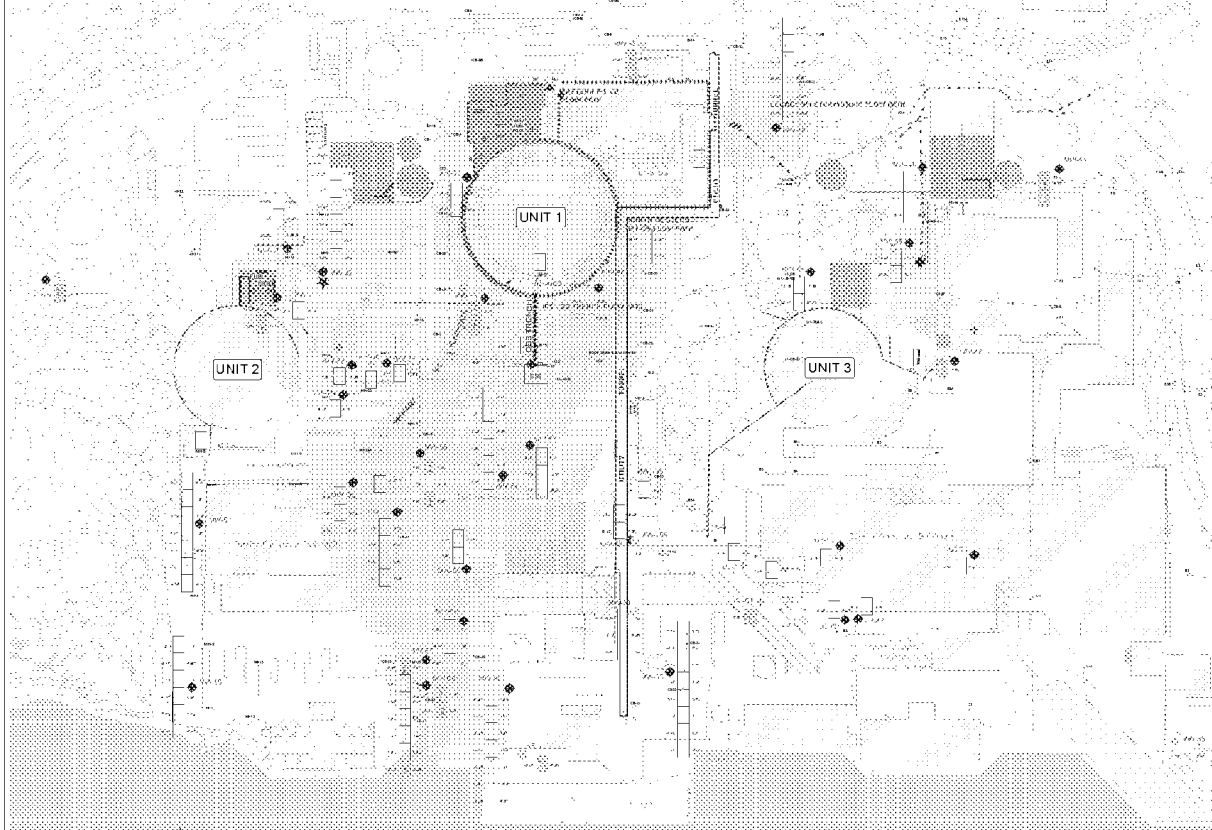
Activity Data

Isopleth

Exceeding Activity 90[1,2] Exceeding Activity 5E-03[1,3]

Data Notes:
1. Isopleths constructed using data collected 2nd quarter 2011 only. Interpolation between data points was performed using a natural neighbor algorithm. Where data points are sparse, isopleths were drawn to reflect the most likely configuration of the plume.
2. Isopleth for 90 pCi/L tritium activity is based on the EPA drinking water standard.
3. Isopleth for 5E-03 pCi/L tritium activity is based on the NRC groundwater protection standard.

General Notes:
1. Base map was developed from an untitled electronic file provided by Kleinfelder, and Watson Surveying and Engineering, P.C., dated 2/2/05. CAD file name "IP2A.dwg"



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INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

2nd QUARTER 2011
LONGTERM TRANSDUCER
MONITORING EVALUATION MAP

Proj. Mgr: MJM Designed by: MJB Reviewed by: MJM Operator: MB	Proj. date: 09-17-2012 Job No: 0 0C17866 92	Figure no.: 5A

IPEC00267193

3rd QUARTER 2011 LONGTERM TRANSDUCER MONITORING EVALUATION MAP

Notes	Monitored Interval (ft bgs)		Measuring Point Elevation (ft NAVD88)		Screen Elevation (ft NAVD88)
	Top	Bottom			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Notes:
1. Quarter 1, 2011 groundwater elevation contour map was prepared using data collected between [illegible].
2. Quarter 2, 2011 groundwater elevation contour map was prepared using data collected between [illegible].
3. Quarter 3, 2011 groundwater elevation contour map was prepared using data collected between [illegible].
4. Quarter 4, 2011 groundwater elevation contour map was prepared using data collected between [illegible].
5. Quarter 1, 2012 groundwater elevation contour map was prepared using data collected between [illegible].
6. Quarter 2, 2012 groundwater elevation contour map was prepared using data collected between [illegible].
7. Quarter 3, 2012 groundwater elevation contour map was prepared using data collected between [illegible].
8. Quarter 4, 2012 groundwater elevation contour map was prepared using data collected between [illegible].
9. Quarter 1, 2013 groundwater elevation contour map was prepared using data collected between [illegible].
10. Quarter 2, 2013 groundwater elevation contour map was prepared using data collected between [illegible].
11. Quarter 3, 2013 groundwater elevation contour map was prepared using data collected between [illegible].
12. Quarter 4, 2013 groundwater elevation contour map was prepared using data collected between [illegible].
13. Quarter 1, 2014 groundwater elevation contour map was prepared using data collected between [illegible].

Highlighted cells indicate data was not collected between Q3 2011 and Q4 2013, inclusive.

LEGEND

Monitoring Installations

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

Multiple Screened Intervals w/ Casing

- **Transducer** Monitored Interval
- Interval no longer monitored with **transducer**
- Single level monitoring location with duplicate **transducers** for redundancy (data from primary transducer shown)
- Maximum quarterly groundwater elevation at this observation well measured between Q2 2007 and Q3 2009, inclusive
- Minimum quarterly groundwater elevation at this observation well measured between Q1 2007 and Q3 2009, inclusive

Transducer Notes:
* For locations with multi-level depth monitoring, redundancy provided by monitoring more than one depth at same location
† Groundwater transducer data not available for Q3 2011

Potential Future Source Locations

[illegible]

Localized Transient Releases (Surface Spills and Washout)

- Transient: Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2009
- Unit 2 SFP Evap. Washout to MH-A2 – 3/25/09 [illegible]
- Transient Spill from Temporary H2O Skid Piping - Entered MW-32 Vault and MH-9 11/21/2009
- Sample Sink Overflow - Unit 1 Chemical Systems Building Q3 2011

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (**All identified leaks repaired as of December 2007**)
- Unit 1 West Fuel Pool (**As of SFP skimmer and transfer pit as of October 2009**)
- Terminated Connector 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]

[illegible]

Data Notes:
1. Historical groundwater activity data collected by non-NRC entities, primarily by personnel from Entergy, Inc., Dominion, Inc., and Riverkeeper, Inc., is not depicted on this figure. Historical groundwater activity data collected by NRC staff is depicted on this figure.
2. Tritium activity data collected between [illegible] is depicted on this figure.
3. Strontium-90 activity data collected between [illegible] is depicted on this figure.

General Notes:
1. Base map was developed from an untitled electronic file provided by Kleinfelder, and Watson Surveying and Engineering, P.C., dated 2008, CAD file name "IP2A.dwg".

UNIT 1

UNIT 2

UNIT 3

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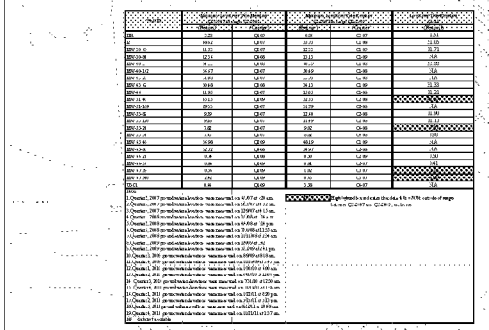
INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

3rd QUARTER 2011
LONGTERM TRANSDUCER
MONITORING EVALUATION MAP

Proj. Mgr.: MJM Designed by: MJB Reviewed by: MJM Operator: MB	Proj. date: 09-17-2012 Job No: 0 0C17866 92	Figure no.: 5A

IPEC00267194

4th QUARTER 2011 LONGTERM TRANSDUCER MONITORING EVALUATION MAP



Well No.	Top of Casing Elevation (ft. NAVD88)		Well Screen Interval Elevation (ft. NAVD88)		Q4 2011 Groundwater Elevation (ft. NAVD88)
	Northing	Easting	Start	Finish	
BW-1	41.80	Q4 09	8.39	-21.61	13.51
BW-2	44.62	Q4 07	12.22	-11.78	13.55
BW-2R-D	41.92	Q4 07	12.13	-21.87	13.73
BW-2R-S	42.21	Q4 06	22.13	-0.87	NA
BW-3	41.81	Q4 10	26.47	6.47	11.78
BW-4/4D	34.27	Q4 07	19.69	-0.31	NA
BW-5	41.87	Q4 10	22.20	2.20	NA
BW-6 S	39.65	Q4 06	29.13	-0.87	13.35
BW-7	41.80	Q4 07	22.63	-0.37	13.55
BW-8 R	39.11	Q4 07	22.22	-2.78	13.55
BW-9 S/D	39.01	Q4 07	23.79	-0.21	13.55
BW-10-R	5.09	Q4 07	22.18	-0.82	13.55
BW-11-MW	39.81	Q4 10	23.37	3.37	13.10
BW-12-R	1.82	Q4 07	9.82	-0.18	NA
BW-13-R	1.71	Q4 10	10.68	0.68	NA
BW-14 R	39.99	Q4 09	49.02	-0.98	NA
BW-15-R	37.22	Q4 08	26.47	6.47	NA
BW-16-D	41.8	Q4 09	8.38	-2.62	13.51
BW-17-D	0.26	Q4 07	1.48	-2.52	NA
BW-17-S	0.26	Q4 07	1.56	-2.44	NA
BW-17-MW	1.76	Q4 07	1.50	-2.50	NA
DW-01	6.16	Q4 09	1.28	-0.72	NA

NAVD

1. Quarter 1, 2007 groundwater elevation was measured on 3/27/07 (29 wells).
2. Quarter 2, 2007 groundwater elevation was measured on 6/27/07 (27 wells).
3. Quarter 3, 2007 groundwater elevation was measured on 9/26/07 (27 wells).
4. Quarter 4, 2007 groundwater elevation was measured on 12/19/07 (28 wells).
5. Quarter 1, 2008 groundwater elevation was measured on 3/27/08 (27 wells).
6. Quarter 2, 2008 groundwater elevation was measured on 6/26/08 (29 wells).
7. Quarter 3, 2008 groundwater elevation was measured on 9/29/08 (30 wells).
8. Quarter 4, 2008 groundwater elevation was measured on 12/30/08 (30 wells).
9. Quarter 1, 2009 groundwater elevation was measured on 3/31/09 (30 wells).
10. Quarter 2, 2009 groundwater elevation was measured on 6/30/09 (30 wells).
11. Quarter 3, 2009 groundwater elevation was measured on 9/30/09 (30 wells).
12. Quarter 4, 2009 groundwater elevation was measured on 12/31/09 (30 wells).
13. Quarter 1, 2010 groundwater elevation was measured on 3/31/10 (30 wells).
14. Quarter 2, 2010 groundwater elevation was measured on 6/30/10 (30 wells).
15. Quarter 3, 2010 groundwater elevation was measured on 9/30/10 (30 wells).
16. Quarter 4, 2010 groundwater elevation was measured on 12/31/10 (30 wells).
17. Quarter 1, 2011 groundwater elevation was measured on 3/31/11 (30 wells).
18. Quarter 2, 2011 groundwater elevation was measured on 6/30/11 (30 wells).
19. Quarter 3, 2011 groundwater elevation was measured on 9/30/11 (30 wells).
20. Quarter 4, 2011 groundwater elevation was measured on 12/31/11 (30 wells).

NA - Not Available

Eight wells not plotted due to NAPL coincidence

Values Q2 07 to Q4 11, inclusive

LEGEND

Monitoring Installations

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

Multiple Screened Intervals w/ Lapse

- **Transducer** Monitored Interval
- Interval no longer monitored with **transducer**
- Single level monitoring location with duplicate **transducers** for redundancy (data from primary transducer shown)
- Maximum quarterly groundwater elevation at time of low river tide measured between Q2 2007 and Q3 2009, inclusive
- Minimum quarterly groundwater elevation at time of low river tide measured between Q1 2007 and Q3 2009, inclusive

Transducer Notes:
- For locations with multilevel depth monitoring, redundancy provided by monitoring more than one depth at same location
- † Secondary transducer data not available for Q4 2011

Potential Future Source Locations

Localized Transient Releases (Surface Spills and Washout)

- Transient: Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2009
- Unit 2 SFP Evap Washout to MH-A2 – 3/25/09 (est.)
- Transient Spill from Temporary HDD Skid Piping - Entered MW-32 Vault and MH- 9 11/21/2009
- Sample Sink Overflow - Unit Chemical Systems Building 03 2011

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (**All identified leaks repaired as of December 2007**)
- Unit 1 West Fuel Pool (**As of 5/09 stopped and inactive as of October 2009**)
- Terminated Connector To Storm Drain
- Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment: Spray Sump Pipe Trench

Activity Data

Isopleth

Exceeding Activity H3[1,2] — Exceeding Activity SR90[1,3]

Data Notes:
1. Isopleths are based upon the most recent data collected from the groundwater monitoring wells listed in Table 2 of the Q4 2011 report, and other wells, as appropriate, to provide adequate coverage of the area of interest. The NRC dated
2. Isopleths are based upon the most recent data collected from the groundwater monitoring wells listed in Table 2 of the Q4 2011 report, and other wells, as appropriate, to provide adequate coverage of the area of interest. The NRC dated
3. Isopleths are based upon the most recent data collected from the groundwater monitoring wells listed in Table 2 of the Q4 2011 report, and other wells, as appropriate, to provide adequate coverage of the area of interest. The NRC dated

General Notes:
1. Base map was developed from an untitled electronic file provided by Kadex and Watson surveying and engineering, P.C. (dated 2008, CAD file name "IP2A.dwg")

UNIT 1

UNIT 2

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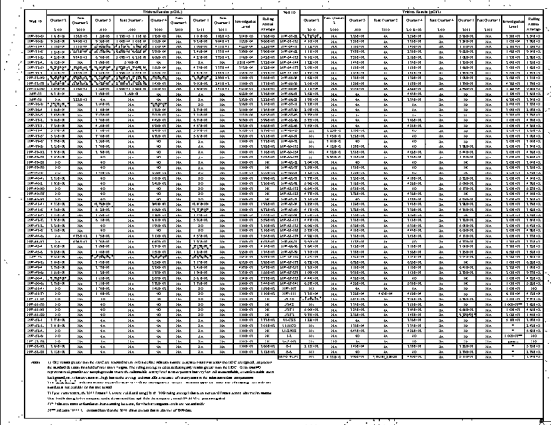
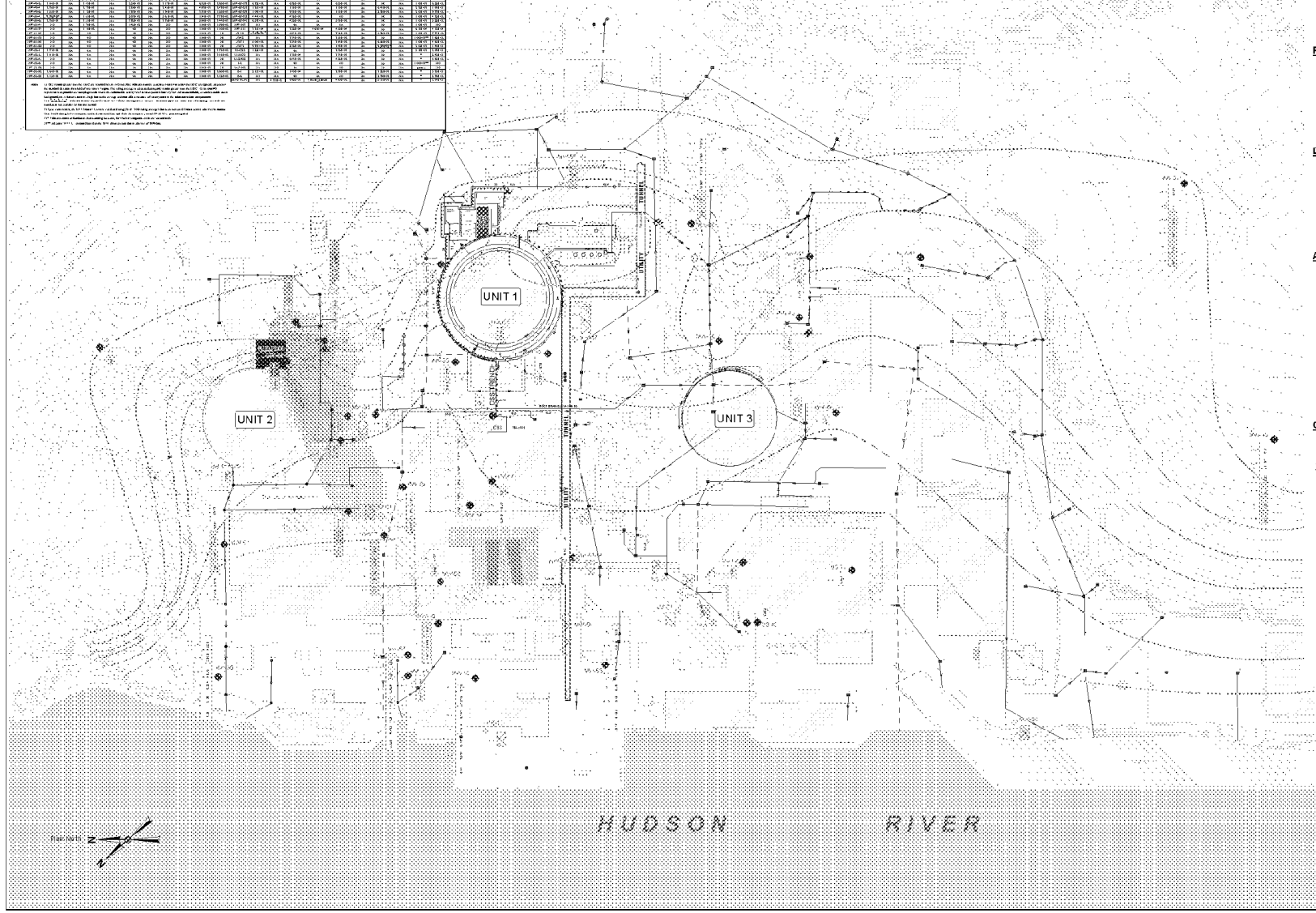
4th QUARTER 2011
LONGTERM TRANSDUCER
MONITORING EVALUATION MAP

Proj. Mgr: MJM Designed by: MJB Reviewed by: MJM Operator: MB	Proj. date: 09-17-2012 Job No: 01.0017886.92	Figure no.: **5A**

IPEC00267195

1st QUARTER 2011 ROLLING AVERAGE TRITIUM 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

Localized Transient Releases (Surface Spills and Washout)

- Transient Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2009
- Unit 3 SFP Evap. Washout in MH-A2 – 3/25/09-mid-April
- Transient Spill from Temporary R.O. Skid Piping - Entered MW-32 Vault and MH-9 - Q4 2009

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (All identified leaks resolved as of December 2007)
- Unit 1 West Fuel Pool (All on-Site drainage and impoundments at Outfall 008 - October 2008)
- Terminated Connection To Storm Drain
- Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Trench

Depth-Specific Data

Average activity of ~3 (3 of ~1000) for each screened interval

Depth

Multiple Screened Intervals

Screened in Soil

Screened in Bedrock

Non-detectable activities for each screened interval at this location for Q4 2010 (11/1/2010)[3]

Activity Data[1,2]

Bar Graphs; Average H3, pCi/L

- No Depth-Specific Samples
- Not Detected (ND)
- ND - 1,000
- 1,000 - 5,000
- 5,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- 100,000 - 200,000
- > 200,000

Isopleths; Average H3 pCi/L

- 5,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- > 100,000

Note: Depth-specific groundwater samples collected from discrete zones in a 20ft section of screened well. Data has been averaged using professional judgement to represent the zone being assessed. Groundwater flow direction is to the west-northwest.

Groundwater Elevation Contours

- Ambient "Watertable" Contours for Q4 2010 (11/11/2010)[4]
- Contours Other Than 10' Interval
- Vadose Zone Contaminant Transport

Notes

1. Groundwater contours drawn from Q4 2010 groundwater data to show groundwater conditions used in recalibration of the Precipitation Mass Balance Model (see Q2 2008 IM Report). These contours developed from limited data recorded on 11/1/2010. Actual elevations may vary from conditions shown and the actual distribution of piezometric heads is likely more complex than indicated.
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]
7. [illegible]

General Note:

1. Base map has been developed from an undated electronic file provided by Dudley and Watson Surveying and Engineering, P.C., dated 2006, CAD file name "IPEA.dwg".

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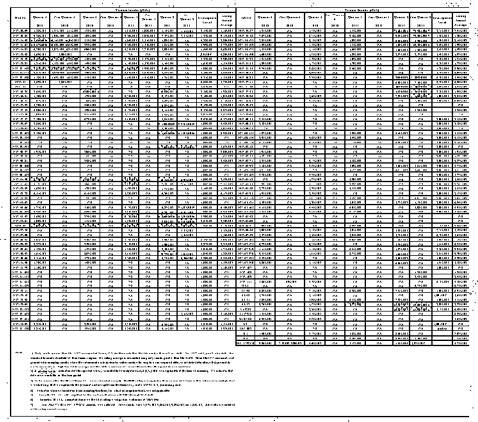
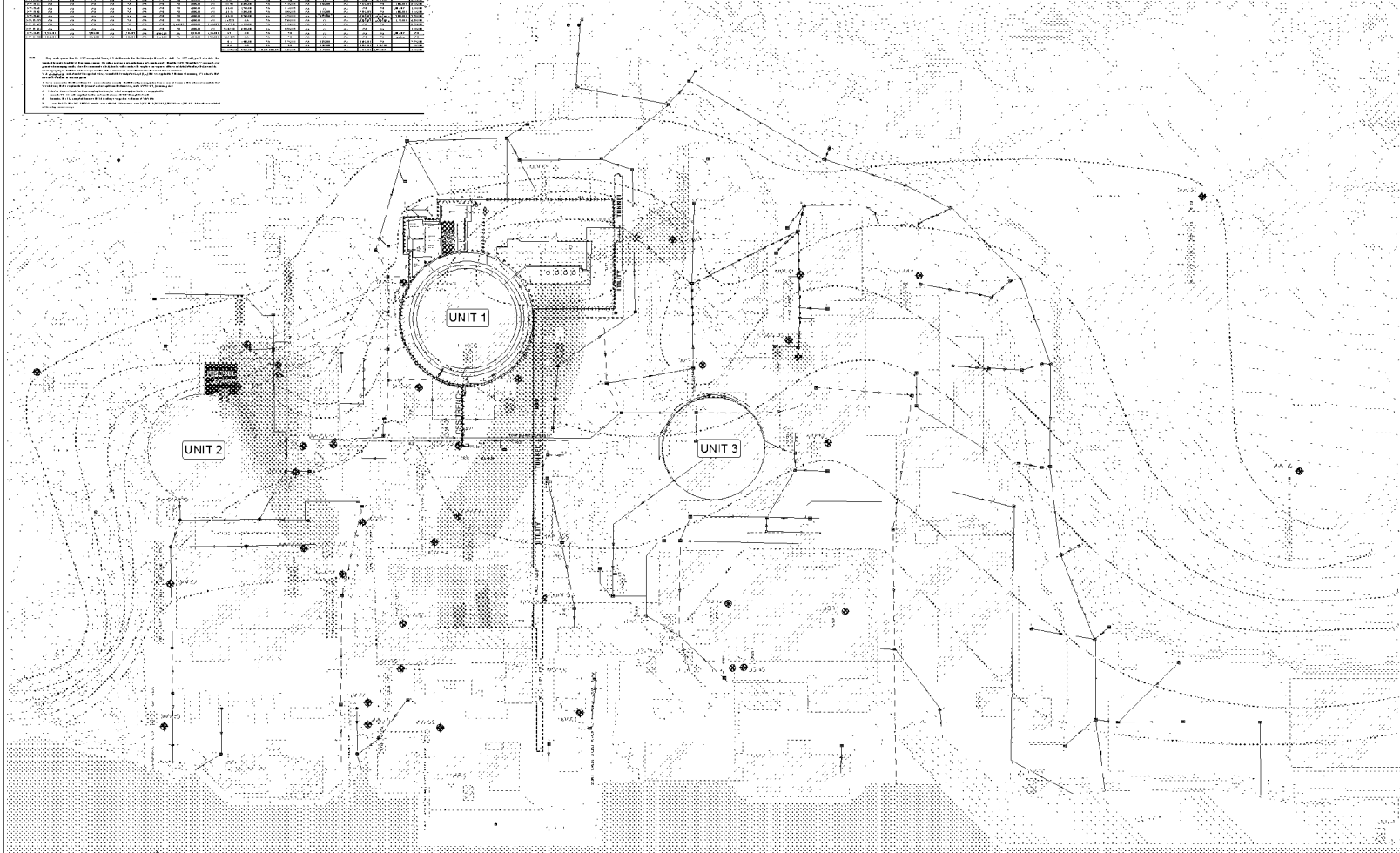
1st QUARTER 2011 ROLLING AVERAGE TRITIUM ACTIVITY MAP

Proj Mgr: MJB Designed by: MJB Reviewed By: MJB Operator: MG	Proj. date: 09-13-2012 Job No: 01.0017369.92	Figure No.: 6-Q1

IPEC00267196

2nd QUARTER 2011 ROLLING AVERAGE TRITIUM 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

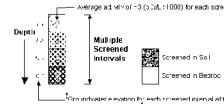
Localized Transient Releases (Surface Spills and Washout)

- Transient Liquid at Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2000
- Unit 3 SFP Evap. Washout to MH-A2 – 3/25/08 (Estimate)
- Transient Spill from Temporary RCA Skid Piping - Entered MW-32 Vault and MH-9 - Q4 2009
- Sample Sink Overflow - Unit 1 Chemical Systems Building Q2 2011

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (All identified leaks repaired as of December 2007)
- Unit 1 West Fuel Pool (All identified leaks repaired as of October 2008)
- Terminated Connection To Storm Drain
- Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Trench

Depth-Specific Data



Activity Data[1,2]

Bar Graphs; Average H3, pCi/L

- No Depth-Specific Samples
- Not Detected (ND)
- ND - 1,000
- 1,000 - 5,000
- 5,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- 100,000 - 200,000
- > 200,000

Isopleths; Average H3 pCi/L

- 5,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- > 100,000

Groundwater Elevation Contours

- Ambient "Waterfable" Contours for Q4 2008 (11/11/2008)[1]
- Contours (Other Than 10' Interval)
- Vadose Zone Contaminant Transport

Notes:

1. Groundwater contours drawn from Q4 2008 groundwater data to show groundwater conditions used for recalibration of the Precipitation Mass Balance Model (see Q2 2009 LTM Report). These contours developed from limited data assembled on 11/11/2008. Actual elevations may vary from conditions shown and the actual distribution of groundwater head is likely more complex than indicated.

Data Notes:

General Notes:

1. Base map was developed from an existing electronic file provided by Badey and Watson Surveying and Engineering, P.C., Dated 2.2.06, CAD file name "GZA.dwg"

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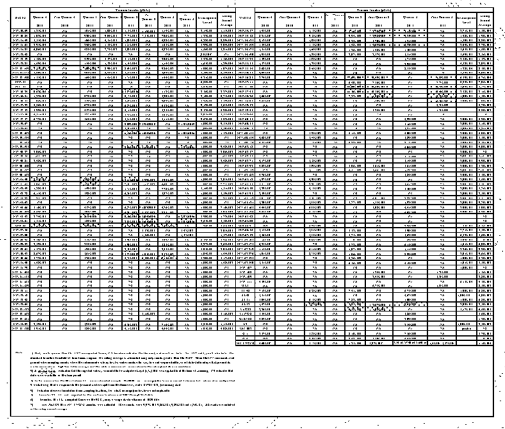
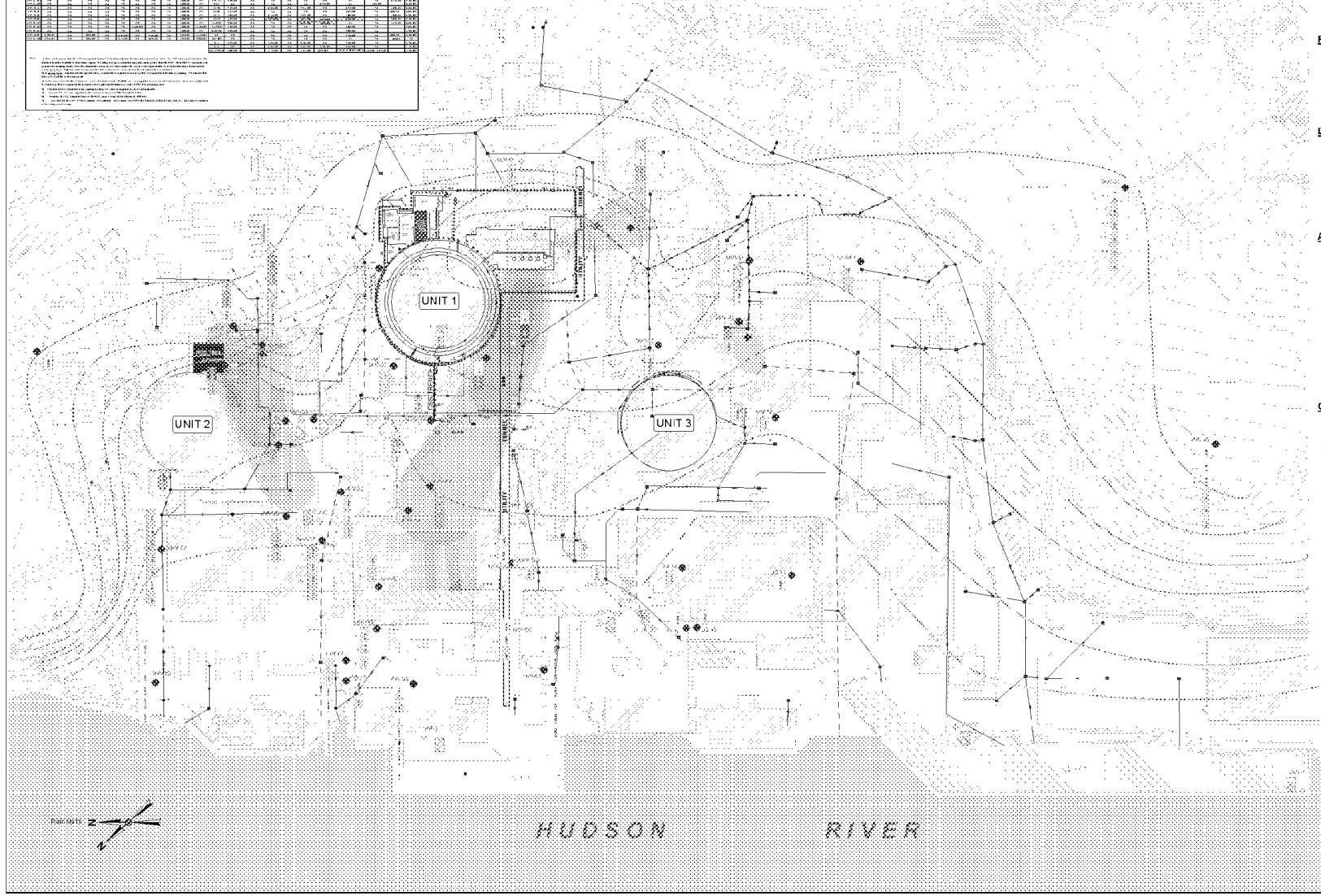
2nd QUARTER 2011 ROLLING AVERAGE TRITIUM ACTIVITY MAP

Proj Mgr: MJB Designed by: MJB Reviewed By: MJB Operator: SAS	Proj. date: 08-17-2012 Job No: 01.0017369.92	Figure No.: 6-Q2

IPEC00267197

3rd QUARTER 2011 ROLLING AVERAGE TRITIUM ACTIVITY MAP





LEGEND

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

Localized Transient Releases (Surface Spills and Washout)

- Transient Liquid at Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2000
- Unit 3 SFP Evap. Washout to MH-A2 – 3/25 (Date Initial)
- Transient Spill from Temporary R.O. Skid Piping - Entered MW-32 Vault and MH-9 - Q4 2009
- Sample Sink Overflow - Unit 1 Chemical Systems Building Q2 2011

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (All Identified Leaks Repaired as of December 2007)
- Unit 1 West Fuel Pool (All Leak-Specific Repairs and Upgrades as of October 2007)
- Terminated Connection To Storm Drain
- Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Trench

Depth-Specific Data

Average activity of ~3 (pCi/L) (1000) for each screened interval

Depth

Multiple Screened Intervals

Screened in Soil

Screened in Bedrock

Well indicated exceeded the specified criteria of this overlay for Q4 2005 (01/01/2006)[3]

Activity Data[1,2]

Bar Graphs; Average H3, pCi/L

- No Depth-Specific Samples
- Not Detected (ND)
- ND - 1,000
- 1,000 - 5,000
- 5,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- 100,000 - 200,000
- > 200,000

Isopleths; Average H3 pCi/L

- 5,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- > 100,000

Note: Isopleths are not shown where the specific radionuclide activity, as results from the geologic heterogeneity and anisotropy of the saturated bedrock aquifer, differs from the general trend of the isopleths by a factor of 5 or greater.

Groundwater Elevation Contours

- Ambient "Waterfable" Contours for Q4 2008 (11/11/2008)[4]
- Contours Other Than 10' Interval
- Vadose Zone Groundwater Flow Transport

Notes:

1. Groundwater contours shown from Q4 2008 groundwater data to show groundwater conditions used for recalibration of the Precipitation Mass Balance Model (see Q2 2009 LTM Report). These contours developed from limited data recorded on 11/11/2008. Actual elevation may vary from conditions shown and the actual distribution of groundwater flow is likely more complex than indicated.

Data Notes:

General Notes:

1. Base map was developed from an existing electronic file provided by Badey and Watson Surveying and Engineering, P.C., Dated 2/2008, CAD file name "GZA.dwg".

Plan North

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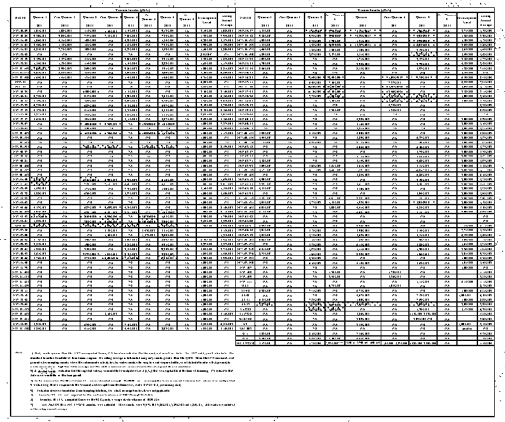
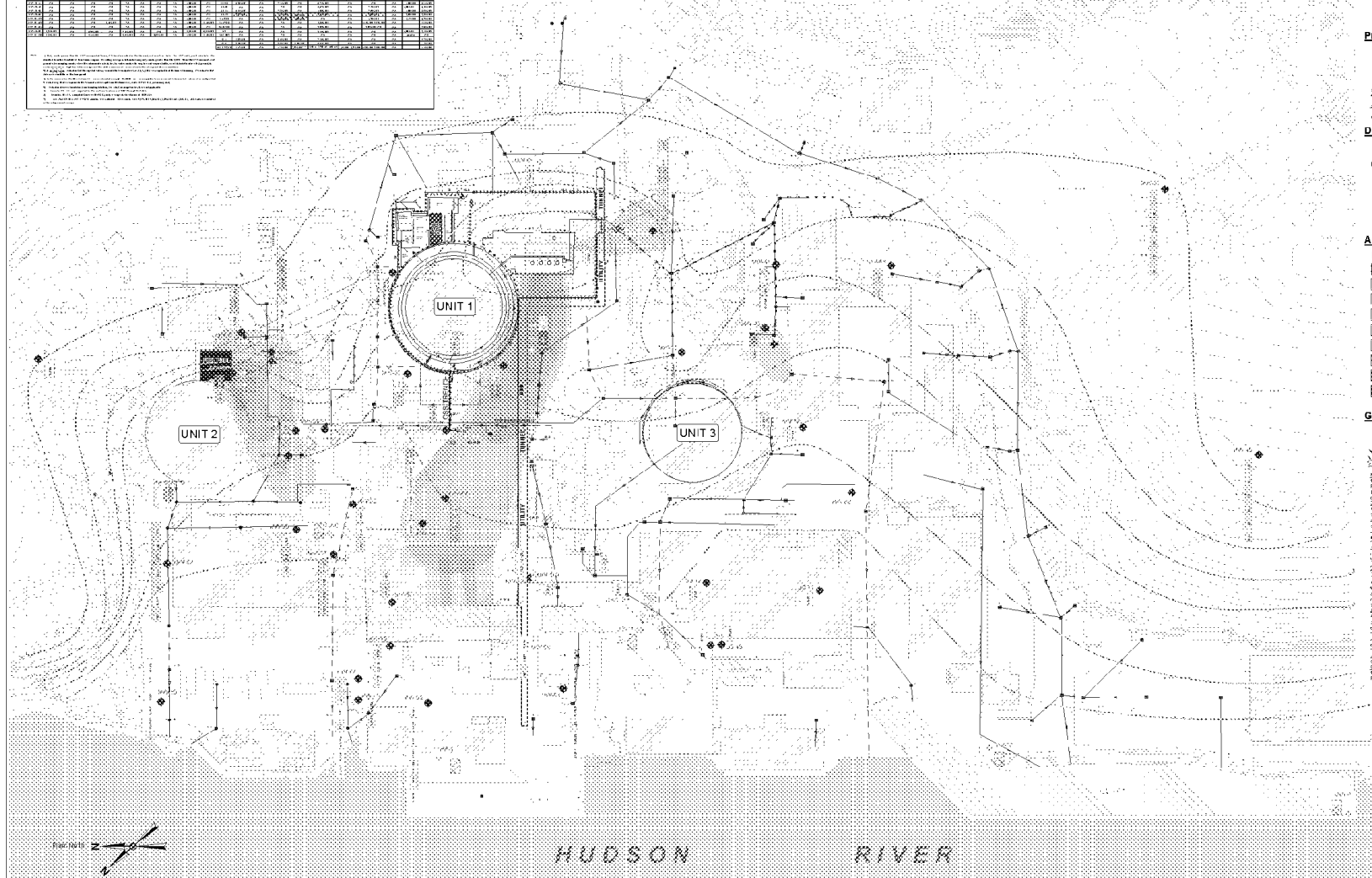
3rd QUARTER 2011 ROLLING AVERAGE TRITIUM ACTIVITY MAP

Proj Mgr: MJB	Dwg date: 09-13-2012	Figure No.:	
Designed by: MJB			
Reviewed By: MJB	Job No: 01.0017369.92		6-Q3
Operator: SAS			

IPEC00267198

4th QUARTER 2011 ROLLING AVERAGE TRITIUM 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

Localized Transient Releases (Surface Spills and Washout)

- Transient Localized Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2000
- Unit 3 SFP Evap. Washout to MH-A2 – 3/25/08 (Estimated)
- Transient Spill from Temporary RCA Skid Piping - Entered MW-32 Vault and MH-9 - Q4 2009
- Sample Sink Overflow - Unit 1 Chemical Systems Building Q2 2011

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (All Identified leaks repaired as of December 2007)
- Unit 1 West Fuel Pool (All Identified leaks repaired 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 ~3 (pCi/L/1000) for each screened interval

Depth

Multiple Screened Intervals

Screened in Soil

Screened in Bedrock

Non-indicated exceptions for wells not screened at same elevation as this cross-section for Q4 2005 (01/01/2006)[3]

Activity Data[1,2]

Bar Graphs: Average H3 pCi/L

- No Depth-Specific Samples
- Not Detected (ND)
- ND - 1,000
- 1,000 - 5,000
- 5,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- 100,000 - 200,000
- > 200,000

Isopleths: Average H3 pCi/L

- 5,000 - 10,000
- 10,000 - 50,000
- 50,000 - 100,000
- > 100,000

Note: Isopleths are not shown where insufficient data exist to construct, e.g., in areas where groundwater elevations are > 20' above the water table, or where concentrations vary by more than 20% over short distances (less than the distance between adjacent wells).

Groundwater Elevation Contours

- Ambient "Waterfable" Contours for Q4 2008 (11/11/2008)[4]
- Contours Other Than 10' Interval
- Vadose Zone Groundwater Transport

Notes

1. Groundwater contours shown from Q4 2008 groundwater data to show groundwater conditions used for recalibration of the Precipitation Mass Balance Model (see Q2 2009 LTM Report). These contours developed from limited data recorded on 11/11/2008. Actual elevations may vary from conditions shown and the actual distribution of isopleths found in reality more complex than indicated.

Data Notes

Drawing Notes

1. Base map was developed from an undated bottom of file provided by Badey and Watson Surveying and Engineering, P.C., Dated 2/2008, CAD file name: "GZA.dwg".

Plan North

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INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

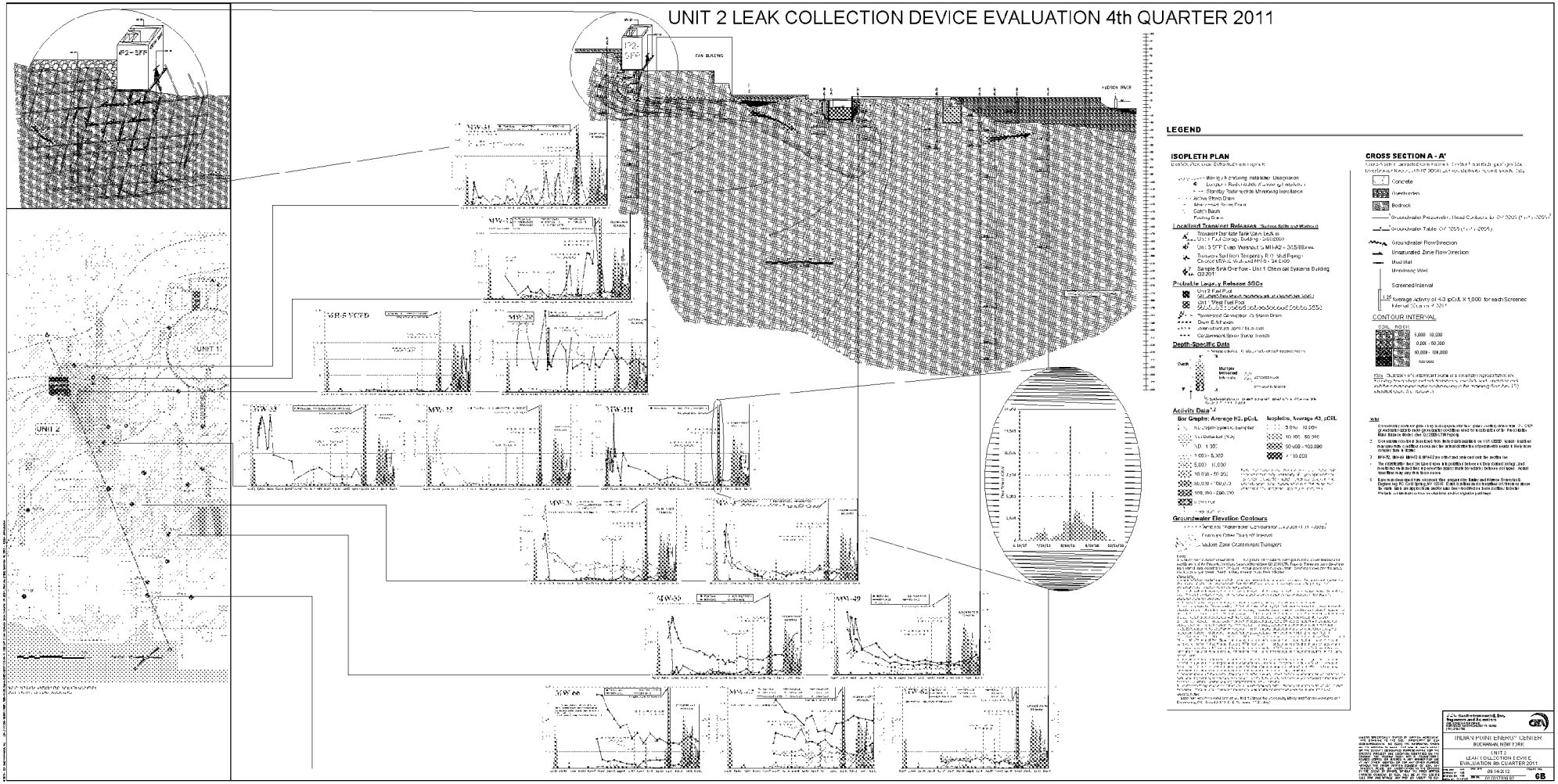
4th QUARTER 2011 ROLLING AVERAGE TRITIUM ACTIVITY MAP

Proj Mgr: MJB Designed by: MJB Reviewed By: MJB Operator: SAS	Orig. date: 09-13-2012 Job No: 01.0017369.92	Figure No.: **6-Q4**	

IPEC00267199

IPEC00267200

UNIT 2 LEAK COLLECTION DEVICE EVALUATION 4th QUARTER 2011



LEGEND

ISOPLETH PLAN

Localized Transient Releases (Before Soils and Washout)

Probable Legacy Release SGCs

Depth-Specific Data

Activity Data[1,2]

Groundwater Elevation Contours

CROSS SECTION A - A'

CONTOUR INTERVAL

COIL	ROCK
5,000 - 10,000	
0 pCi/L - 50,000	
50,000 - 100,000	

Note: Depiction of constituent plume is a simplified representation for illustrative purposes only. Actual plume configuration may be more complex and may vary from that shown.

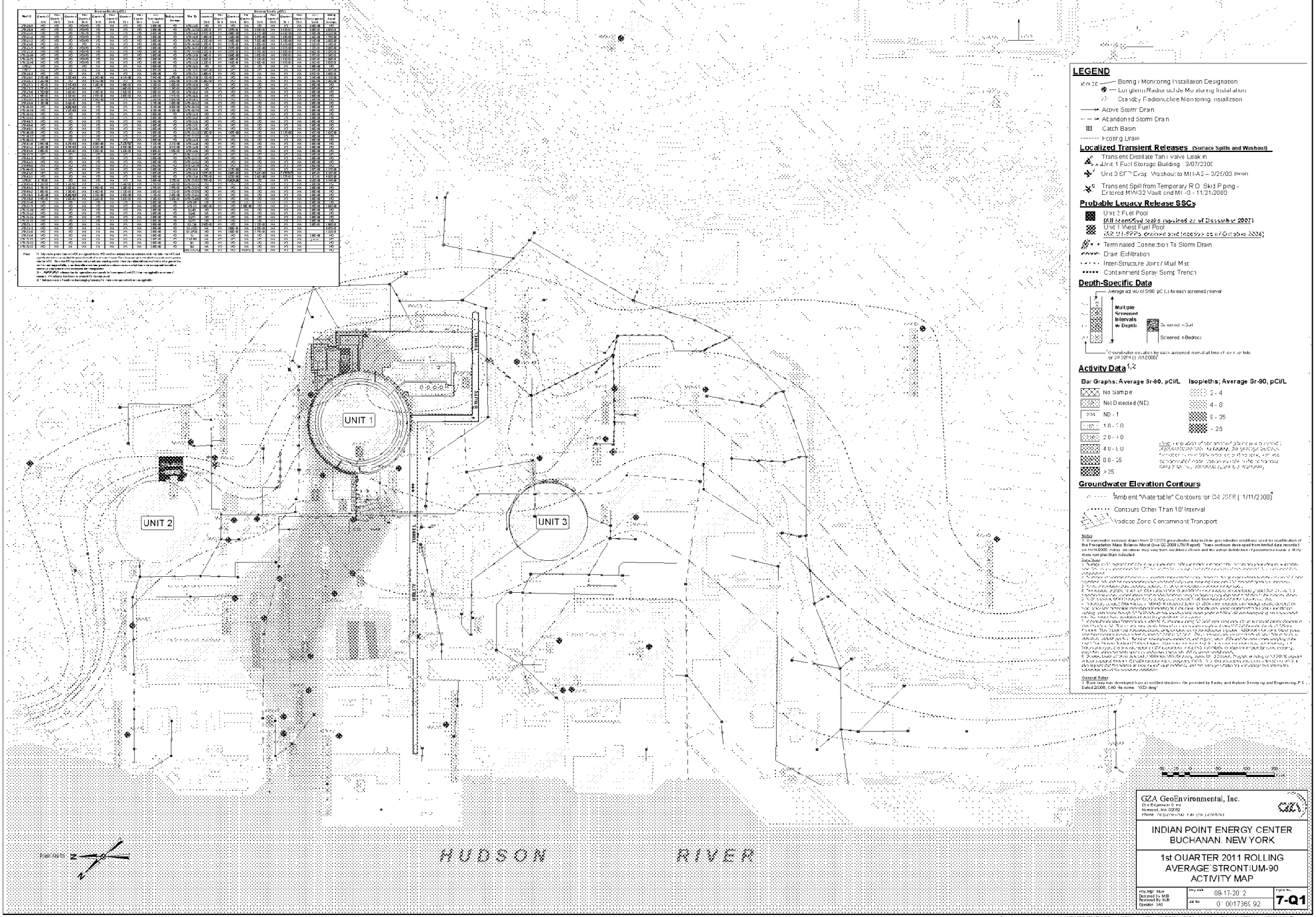
Note:

1. Groundwater monitoring data is only subsequent to the initial groundwater sampling event. Only groundwater data from locations sampled during the 4th quarter 2011 are depicted. Historical data from locations not sampled during the 4th quarter 2011 are not depicted.
2. Concentrations that are below the laboratory method detection limit (MDL) are not depicted. Laboratory method detection limits (MDLs) are variable and can be affected by interferences and/or dilutions necessary to run the analysis.
3. MW-30, MW-49, MW-50 & MW-62 are offset and abbreviated on the profile line.
4. The CROSS-SECTION A-A' is a simplified representation of the geology and groundwater flow conditions based on available data. Actual conditions may vary from those shown.
5. Data acquisition activities related to the August 8th Buildings Explosion & Fire, the October 9th, 2007 Tank 5 Release and the March 2nd, 2010 Tank 1 Release may affect the groundwater flow conditions and/or the distribution of radionuclides in groundwater.

PROJECT	INDIAN POINT ENERGY CENTER BUCHANAN, NEW YORK
TITLE	UNIT 2 LEAK COLLECTION DEVICE EVALUATION 4th QUARTER 2011
DATE	09-14-2012
DRAWING NO.	01101210202
REV.	0B

IPEC00267201

1st QUARTER 2011 ROLLING AVERAGE STRONTIUM-90 ACTIVITY MAP



LEGEND

- MW-32 — Boring / Monitoring Installation Designation
- Long-term Radionuclide Monitoring Installation
- Standby Radionuclide Monitoring Installation
- Active Storm Drain
- Abandoned Storm Drain
- Catch Basin
- Footing Drain

Localized Transient Releases (Surface Spills and Washout)

- Transient Distillate Tank Valve Leak in A/Unit 1 Fuel Storage Building - 3/07/2000
- Unit 3 SFP Evap. Washout to MH-A2 – 3/29/00 (mod)
- Transient Spill from Temporary R.O. Skid Piping - Entered MW-32 Vault and MH -9 - 11/21/2000

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (All identified leaks repaired as of December 2007)
- Unit 1 West Fuel Pool (SR 91-5995 declared and repaired 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 Sr90 (pCi/L) for each screened interval
- Multiple Screened Intervals w Depth
- Screened in Soil
- Screened in Bedrock
- Groundwater elevation for each screened monitoring well at time of survey (e.g. for Q4 2010 (1/11/2008))

Activity Data[1,2]

Bar Graphs; Average Sr-90, pCi/L		Isopleths; Average Sr-90, pCi/L	
	No Sample		2 - 4
	Not Detected (ND)		4 - 8
0.94	ND - 1		8 - 25
1.37	1.0 - 2.0		> 25
3.65	2.0 - 4.0		
	4.0 - 8.0		
	8.0 - 25		
	> 25		

Groundwater Elevation Contours

- Ambient "Water table" Contours for Q4 2010 (1/11/2008)[4]
- Contours Other Than 10' Interval
- Vadose Zone Contaminant Transport

Notes

1. Groundwater contours drawn from Q1 2000 groundwater data to show pre-relocation conditions used for recalibration of the Precipitation Mass Balance Model (see Q2 2009 LTM Report). These contours developed from limited data recorded on 1/11/2000. Actual elevations may vary from as drawn shown and the actual distribution of groundwater mounds is likely more complex than indicated.

Data Qualifiers

General Notes

1. Base map was developed from an unfilled electronic file provided by Badey and Watson Surveying and Engineering, P.C., Dated 2/2005, CAD file name "IPZ2.dwg"

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INDIAN POINT ENERGY CENTER
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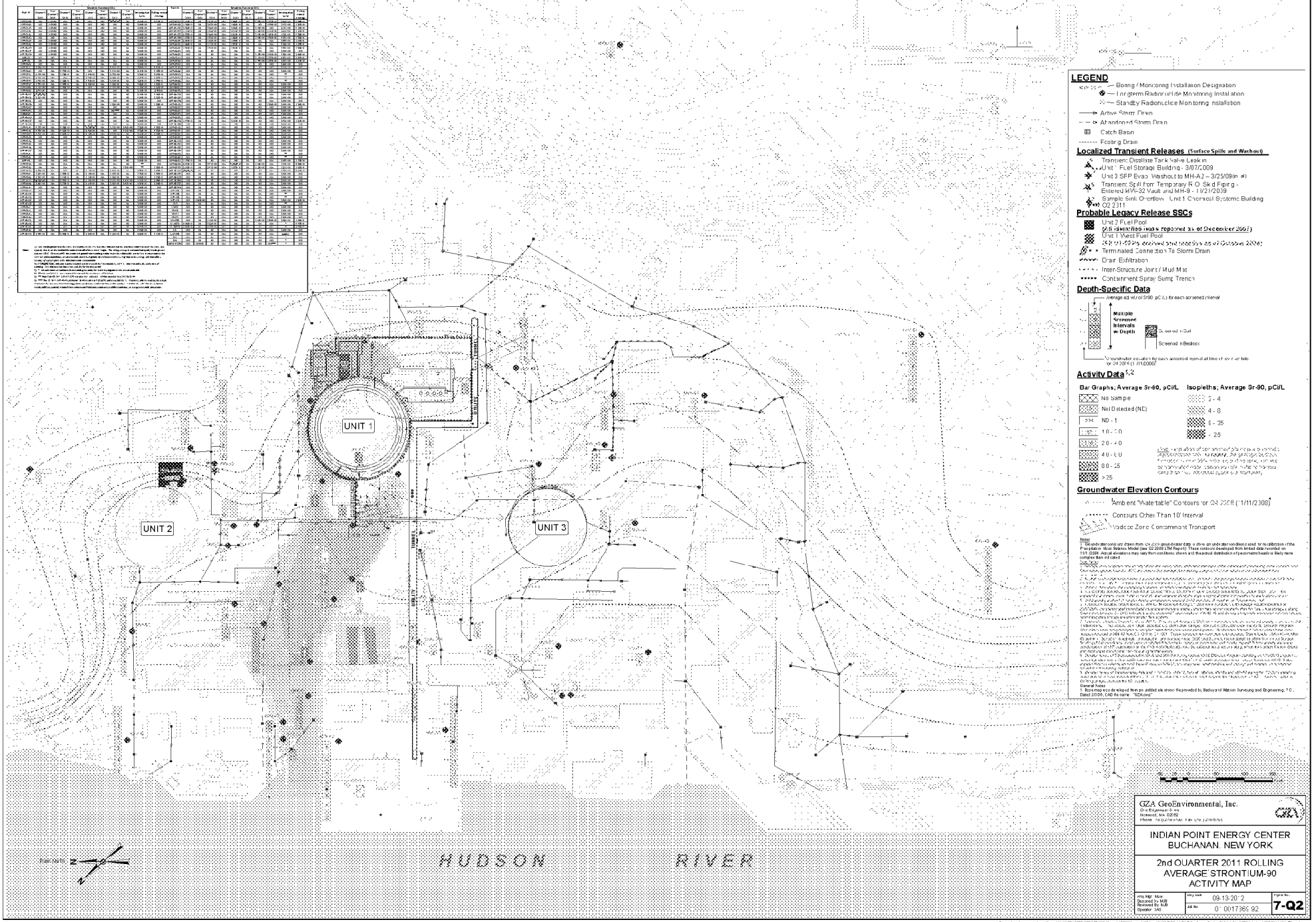
1st QUARTER 2011 ROLLING AVERAGE STRONTIUM-90 ACTIVITY MAP

Proj. Mgr: MJM Designed by: MJB Reviewed by: MJB Operator: MB	Dwg. Date: 09-17-2012 Job No: 01.0017369.92	Figure No.: 7-Q1

IPEC00267202

2nd QUARTER 2011 ROLLING AVERAGE STRONTIUM-90 ACTIVITY MAP



LEGEND

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

Localized Transient Releases (Surface Spills and Washout)

- Transient: Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2009
- Unit 3 SFP Evap. Washout to MH-A2 – 3/25/09(in al)
- Transient: Spill from Temporary R.O. Skid Piping - Entered MH-32 Vault and MH-9 - 11/21/2038
- Sample Sink Overflow - Unit 1 Chemical Systems Building Q2 2011

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (*SFP refurbishment leaks repaired as of December 2007*)
- Unit 1 West Fuel Pool (*SFP #1-SFP5 declared and addressed as of October 2006*)
- Terminated Connection To Storm Drain
- Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Trench

Depth-Specific Data

Average activity of Sr90 (pCi/L) for each screened interval

Multiple Screened Intervals w Depth

Screened in Overburden

Screened in Bedrock

Groundwater elevation for each screened monitoring well at time of river tide on Q4 2011 (11/1/2008)

Activity Data[1,2]

Bar Graphs; Average Sr-90, pCi/L	Isopleths; Average Sr-90, pCi/L
No Sample	2 - 4
Not Detected (ND)	4 - 8
ND - 1	8 - 25
1.0 - 2.0	> 25
2.0 - 4.0	
4.0 - 8.0	
8.0 - 25	
> 25	

Isopleths are based on the most recent data available from monitoring wells screened in the overburden and bedrock. Isopleths may not reflect localized areas of higher activity that may exist between monitoring wells. Isopleths are not drawn in areas where groundwater flow is toward the Hudson River.

Groundwater Elevation Contours

- Ambient "Water table" Contours for Q4 2011 (11/1/2008)[1]
- Contours Other Than 10' Interval
- Vadose Zone Contaminant Transport

Note:

1. Groundwater contours drawn from Q4 2011 groundwater data to show an undisturbed condition used for recalibration of the Precipitation Mass Balance Model (see Q2 2009 LTM Report). These contours developed from limited data recorded on 11/1/2008. Actual elevations may vary from contours shown and theoretical distribution of groundwater is likely more complex than indicated.

General Notes:

1. Base map was developed from an .pdf file received from/provided by Badeyand Watson Surveying and Engineering, P.C. Dated 2/2006. CAD file name: "IPZA.dwg"

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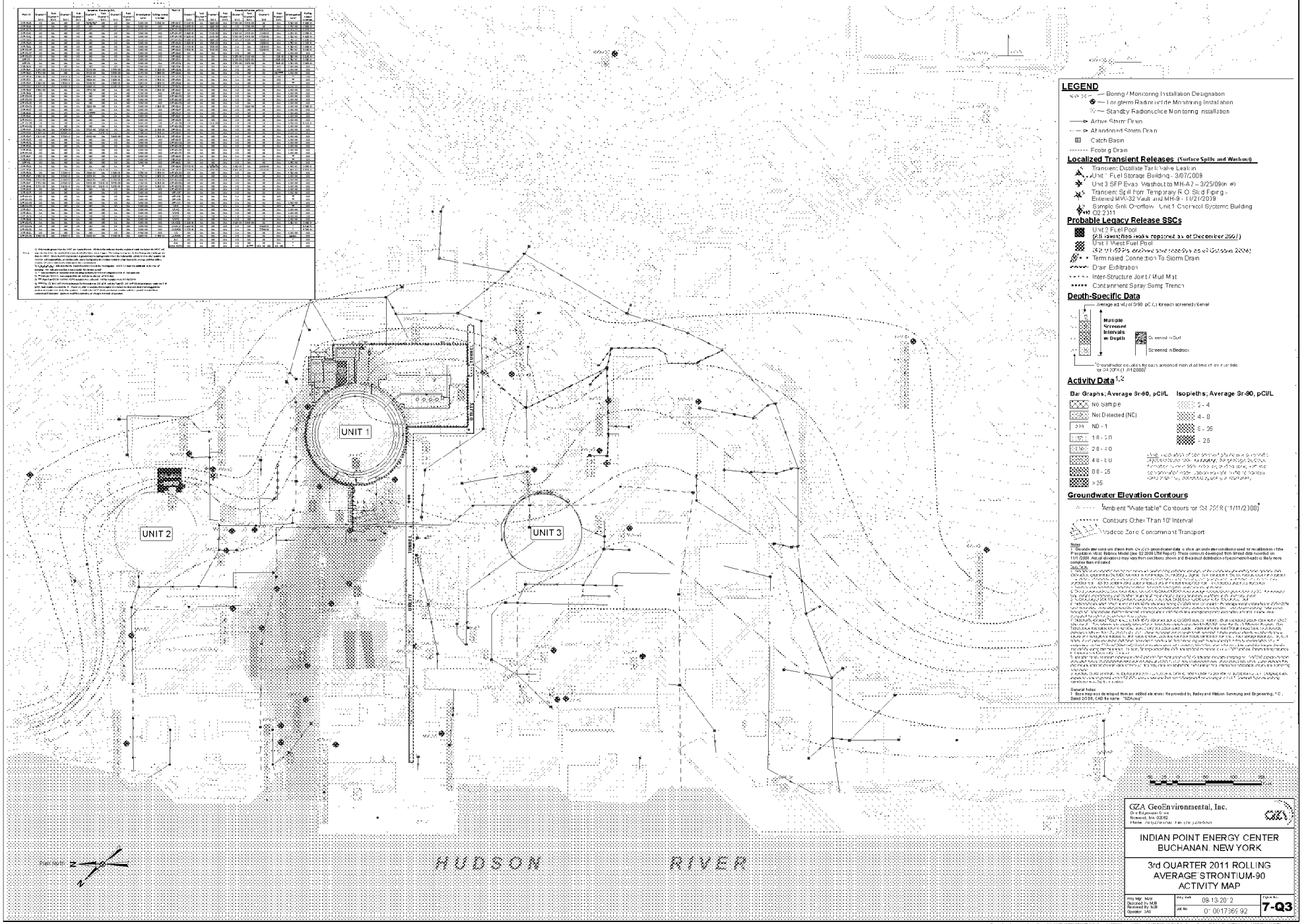
INDIAN POINT ENERGY CENTER BUCHANAN, NEW YORK	
2nd QUARTER 2011 ROLLING AVERAGE STRONTIUM-90 ACTIVITY MAP	
Prep. by: MJM Designed by: MJB Reviewed by: MJB Operator: MB	Proj. Mgr.: MJB Date: 09-13-2012 Job No.: 01.0017369.92
	Figure No.: 7-Q2

IPEC00267203

3rd QUARTER 2011 ROLLING AVERAGE STRONTIUM-90 ACTIVITY MAP



LEGEND

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

Localized Transient Releases (Surface Spills and Washout)

- Transient: Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2008
- Unit 3 SFP Evap. Washout to MH-A2 – 3/25/08(Initial)
- Transient Spill from Temporary R.O. Skid Piping - Entered MH-32 Vault and MH-8 - 11/21/2008
- Sample Sink Overflow - Unit 1 Chemical Systems Building Q2 2011

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (SSC leaching leaks repaired as of December 2007)
- Unit 1 West Fuel Pool (SSC 01-SFP3 declined and ceased as of October 2006)
- Terminated Connection To Storm Drain
- Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Trench

Depth-Specific Data

Average activity of Sr90 (pCi/L) in each screened interval

Multiple Screened Intervals w Depth

Screened in Overburden

Screened in Bedrock

Groundwater elevation for each screened interval at time of activity data collection (Q4 2008 (11/11/2008))

Activity Data[1,2]

Bar Graphs; Average Sr-90, pCi/L	Isopleths; Average Sr-90, pCi/L
No sample	2 - 4
Not Detected (ND)	4 - 8
ND - 1	8 - 25
1 - 2	> 25
2 - 4	
4 - 8	
8 - 25	
> 25	

Note: Isopleths of Sr-90 activity are shown as solid lines where groundwater flow is relatively strong, and as dashed lines where groundwater flow is relatively weak. Isopleths are not shown where groundwater flow is relatively stagnant.

Groundwater Elevation Contours

- Ambient "Water table" Contours for Q4 2008 (11/11/2008)
- Contours Other Than 10' Interval
- Hydraulic Zone of Contaminant Transport

Notes:

1. Groundwater contours drawn from Q4 2008 groundwater data to show groundwater conditions used for recalibration of the Precipitation-Water Balance Model (see 02/2009 LTM Report). These contours developed from limited data recorded on 11/11/2008. Actual elevations may vary from contours shown and the actual distribution of isopleths could be more complex than indicated.

2. [illegible]

General Notes:

1. Base map was developed from an edited electronic file provided by Badey and Watson Surveying and Engineering, P.C. Dated 2/2/06. CAD file name: "SQA.dwg".

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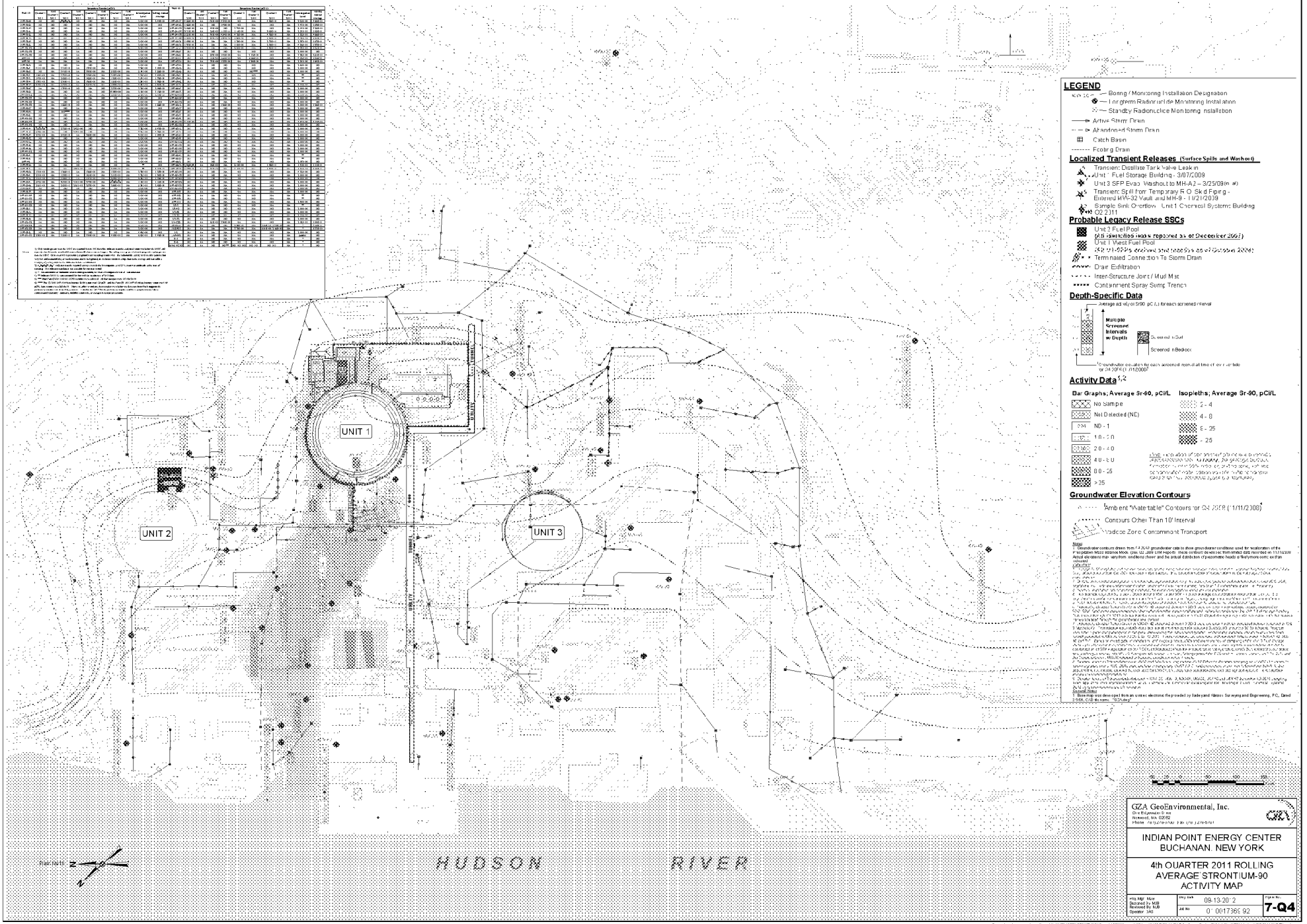
BUCHANAN, NEW YORK

3rd QUARTER 2011 ROLLING AVERAGE STRONTIUM-90 ACTIVITY MAP

Proj Mgr: MJM	Proj Date: 09-13-2012	Figure No.: 7-Q3
Designed by: MJB		
Reviewed by: MJB	Job No: 01.0017369.92	
Operator: MG		

IPEC00267204

4th QUARTER 2011 ROLLING AVERAGE STRONTIUM-90 ACTIVITY MAP



LEGEND

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

Localized Transient Releases (Surface Spills and Washout)

- Transient: Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2009
- Unit 3 SFP Evap. Washout to MH-A2 – 3/25/09(et al)
- Transient: Spill from Temporary R.O. Skid Piping - Entered MH-32 Vault and MH-9 - 11/21/2038
- Sample Sink Overflow - Unit 1 Chemical Systems Building Q2 2011

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (*6.8 gallon/day leaks repaired as of December 2007*)
- Unit 1 West Fuel Pool (*~0.1 gallon/day leaks repaired 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 Sr90 (pCi/L) for each screened interval

Multiple Screened Intervals w Depth

Screened in Overburden

Screened in Bedrock

Groundwater elevation for each screened monitoring well at time of river tide for Q4 2011 (11/1/2008)

Activity Data[1,2]

Bar Graphs; Average Sr-90, pCi/L	Isopleths; Average Sr-90, pCi/L
No Sample	2 - 4
Not Detected (ND)	4 - 8
ND - 1	8 - 25
1.0 - 2.0	> 25
2.0 - 4.0	
4.0 - 8.0	
8.0 - 25	
> 25	

Note: Isopleths are based on the interpolation of the most recent groundwater sample results for each monitoring well. Isopleths are generally not shown in areas where groundwater flow velocities are high and/or where groundwater sample data is not representative of the groundwater quality in the area.

Groundwater Elevation Contours

- Ambient "Water table" Contours for Q4 2011 (11/1/2008)[4]
- Contours Other Than 10' Interval
- Radial Zone Contaminant Transport

Note:

1. Groundwater contours drawn from Q4 2008 groundwater data to show groundwater conditions used for localization of the Precipitation Mass Balance Model. (See UZ-2009 LTM Report). These contours do not reflect limited data received on 11/13/2009 due to dynamic nature of groundwater flow and the annual distribution of piezometric heads at Indian Point Energy Center (IPEC).
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Plan North

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INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

4th QUARTER 2011 ROLLING AVERAGE STRONTIUM-90 ACTIVITY MAP

Proj. Mgr: MJM Designed by: MJB Reviewed by: MJB Operator: MB	Proj. Mgr: MJM Designed by: MJB Reviewed by: MJB Operator: MB	Figure No.: 7-Q4

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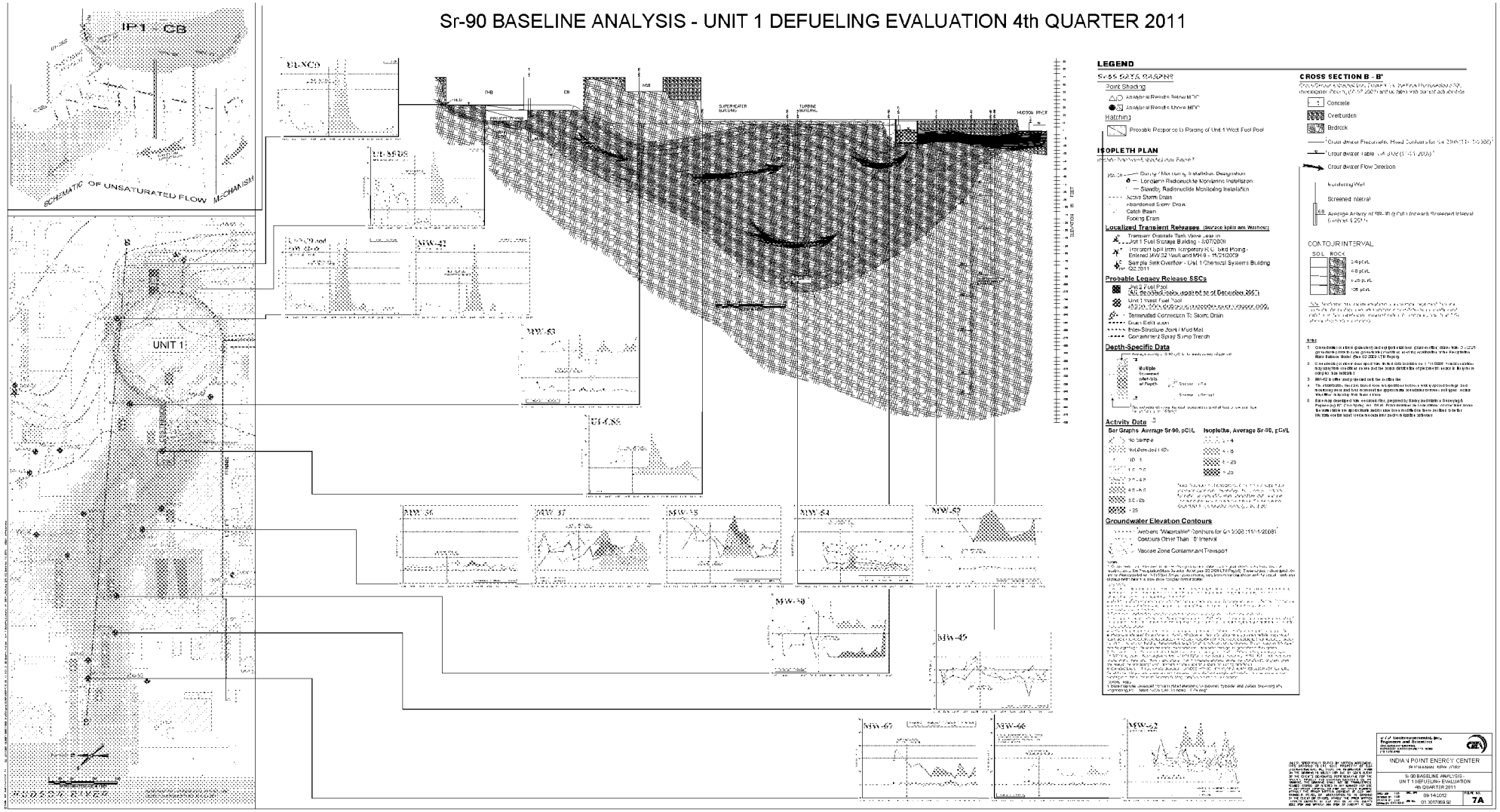
Sr-90 BASELINE ANALYSIS - UNIT 1 DEFUELING EVALUATION 4th QUARTER 2011



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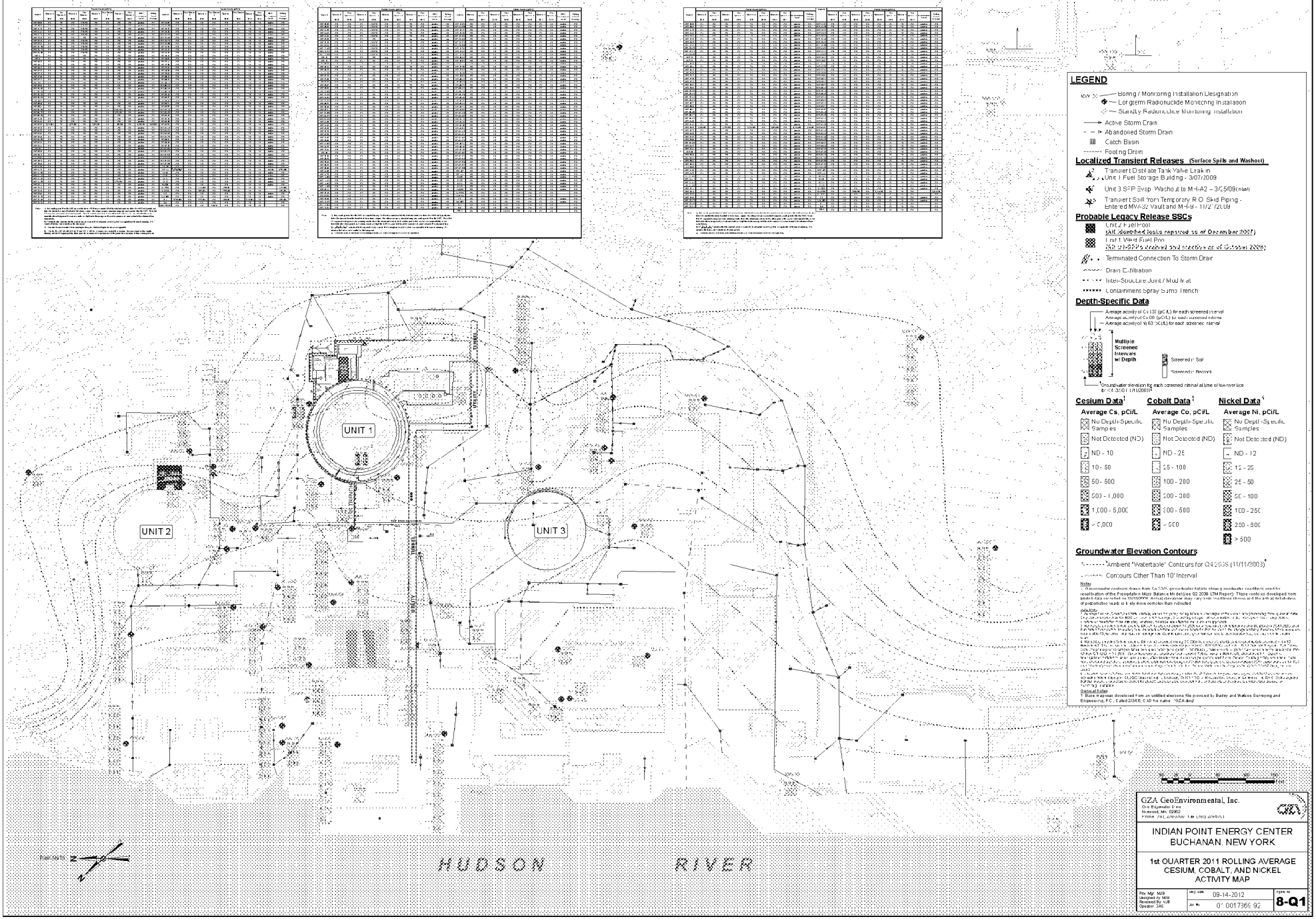
1st QUARTER 2011 ROLLING AVERAGE [1] CESIUM, COBALT, AND NICKEL ACTIVITY MAP



LEGEND

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

Localized Transient Releases (Surface Spills and Washout)

- Transient Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2009
- Unit 3 SFP Evap. Washout to MH-A2 – 3/25/09(max)
- Transient Spill from Temporary R.O. Skid Piping - Entered MW-32 Vaultand MH-A - 11/27/2008

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (All identified leaks repaired as of December 2007)
- Unit 1 Weir Fuel Pool (All U-1 SFP's sealed and inactive as of October 2006)
- 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

[1] Groundwater elevation for each screened interval at time of low river ice (on or after 1/1/2009)

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 Q4 2008 (11/11/2008) [4]
- Contours Other Than 10' Interval

Notes:
1. Groundwater contours drawn from Q4 2008 groundwater data to show groundwater conditions used in recalibration of the Precipitation-Mass Balance Model (see 02 2009 LTM Report). These contours developed from limited data collected on 11/11/2008. Actual groundwater may vary from what is shown and the actual definition of preferential pathways is likely more complex than indicated.

Data Sources:

General Notes:
1. Base mapwas developed from an untitled electronic file provided by Badey and Watson Surveying and Engineering, P.C., Dated 2/2008, CAD file name "IPZA.dwg"

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INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

1st QUARTER 2011 ROLLING AVERAGE CESIUM, COBALT, AND NICKEL ACTIVITY MAP

Proj. Mgr: MJB	Proj. date: 09-14-2012	figure no.
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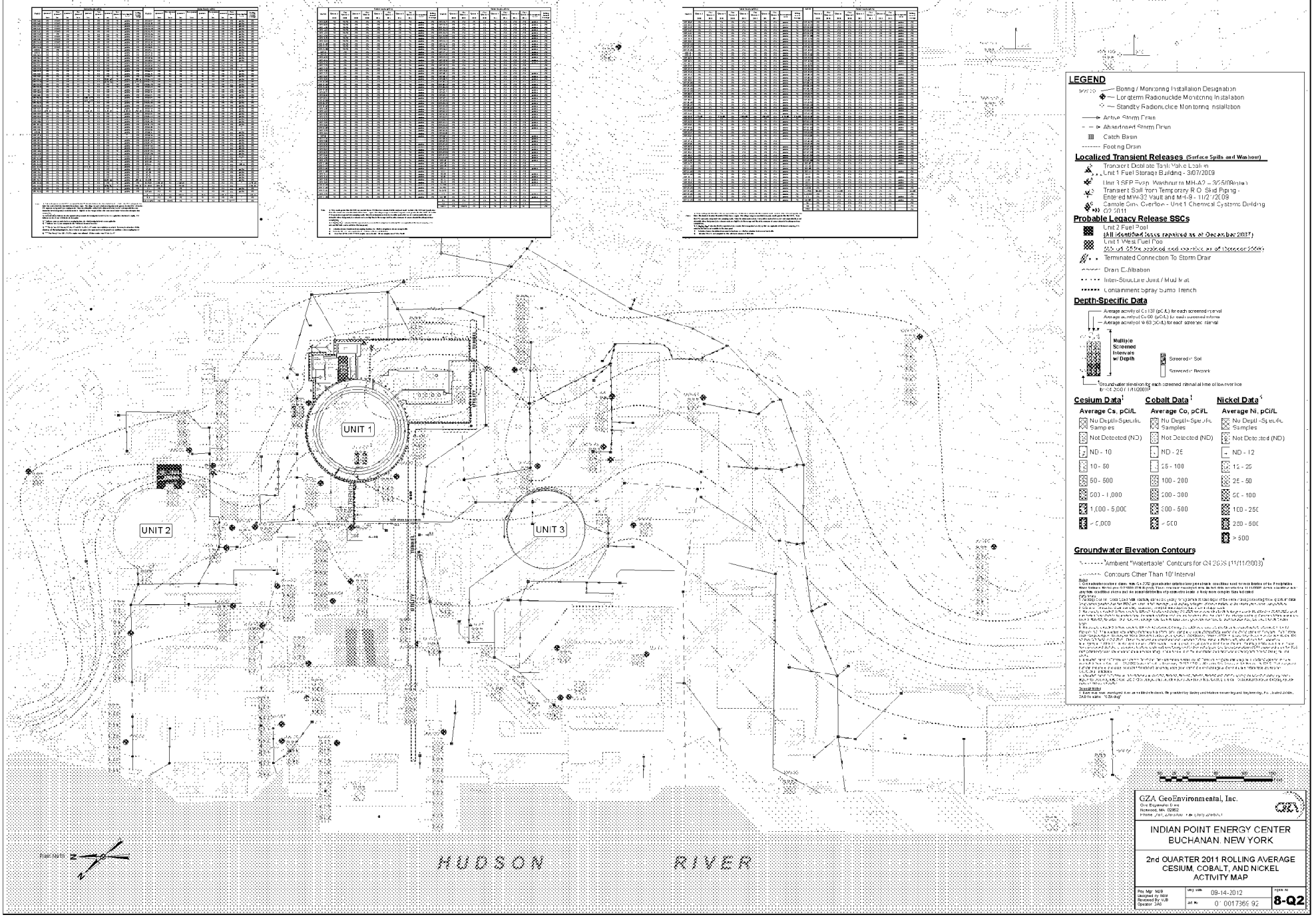
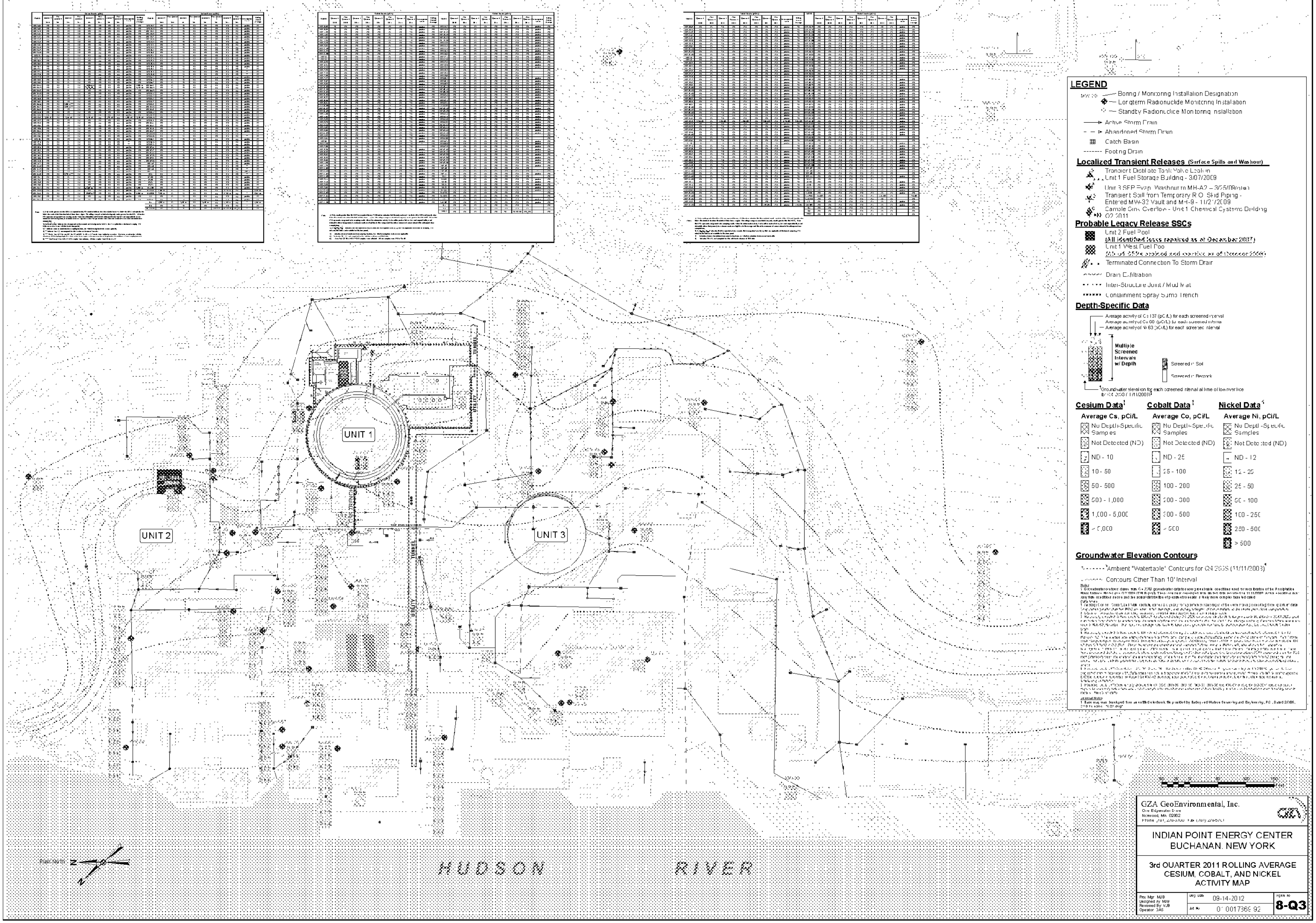
2nd QUARTER 2011 ROLLING AVERAGE[1] CESIUM, COBALT, AND NICKEL ACTIVITY MAP



3rd QUARTER 2011 ROLLING AVERAGE[1] CESIUM, COBALT, AND NICKEL ACTIVITY MAP



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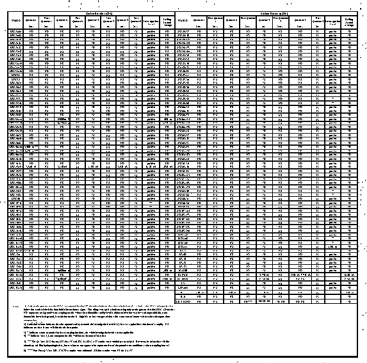
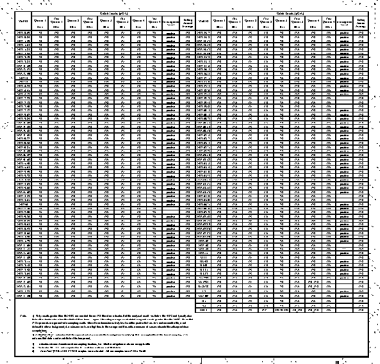
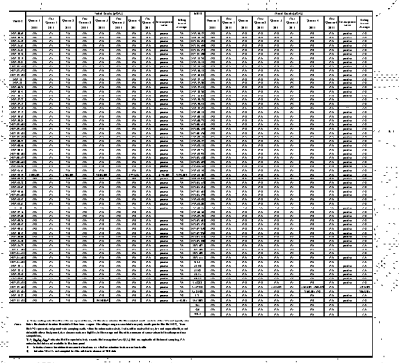
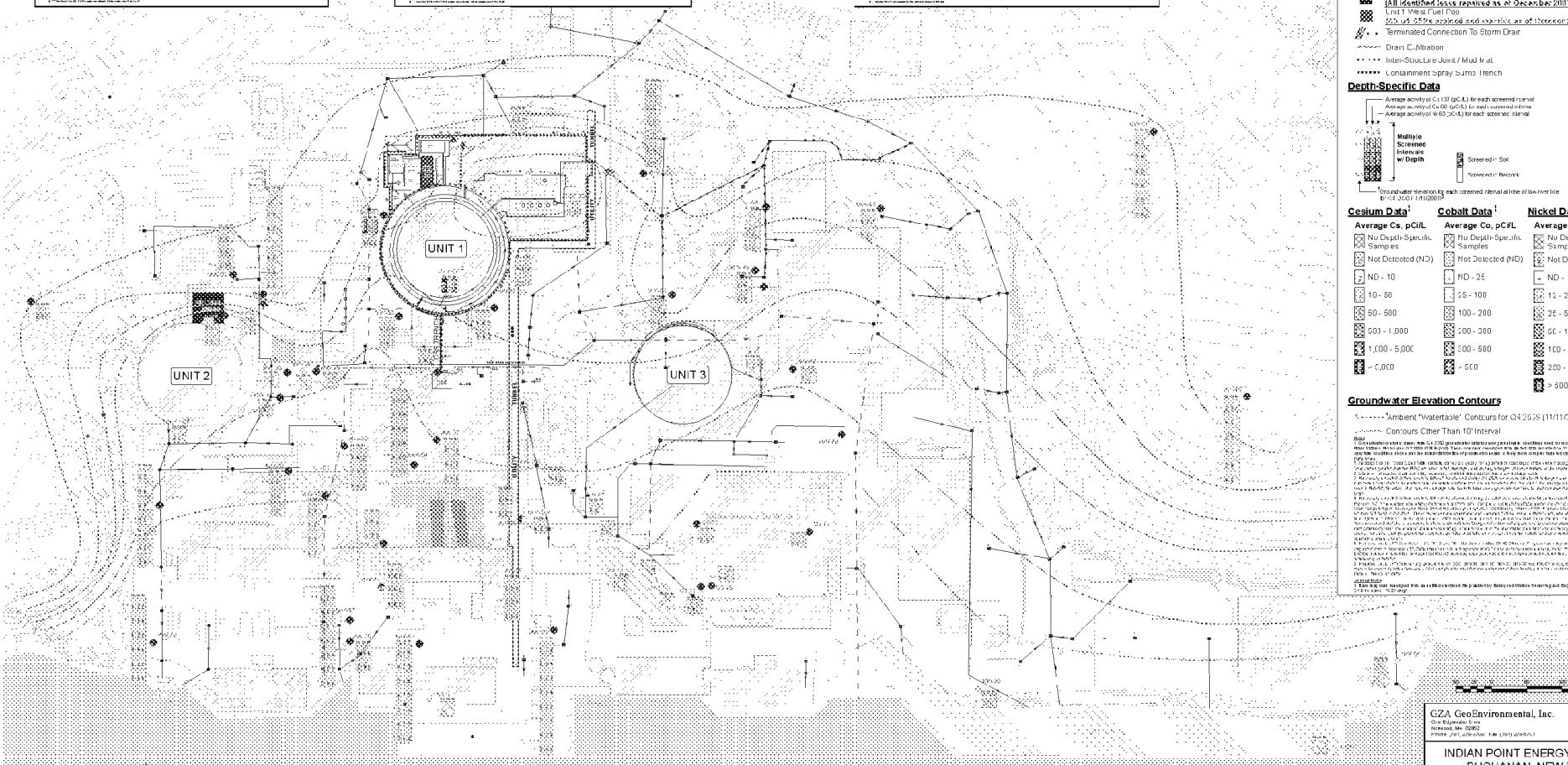
IPEC00267209

4th QUARTER 2011 ROLLING AVERAGE[1] CESIUM, COBALT, AND NICKEL ACTIVITY MAP









LEGEND

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

Localized Transient Releases (Surface Spills and Washout)

- Transient Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2009
- Unit 3 SFP Evap. Washout in MH-A2 – 3/5/09(date)
- Transient Spill from Temporary R.O. Skid Piping - Entered MH-A2 Vault and MH-B – 11/2/2009
- Sample Sink Overflow - Unit 1 Chemical Systems Building Q2 2011

Probable Legacy Release SSCs

- Unit 2 Fuel Pool
  (All identified leaks repaired as of December 2007)
- Unit 1 West Fuel Pool
  (No as of 55% applied and inactive as of December 2008)
- Terminated Connection To Storm Drain
- Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Trench

Depth-Specific Data

- Average activity of Cs137 (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

[1] Groundwater elevation for each screened interval at time of low river ice (on 1/4/2008 / 1/11/2008)[2]

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 Q4 2008 (11/11/2008)[4]
- Contours Other Than 10' Interval

Notes:

[1] Cesium, cobalt, and nickel activities are based on the most recent sample results for each location. Where more than one sample was collected during the quarter, the activity is the average of the most recent sample results. Where no depth-specific samples were collected during the quarter, the most recent sample result is used.

[2] Groundwater elevations were measured on January 4, 2008 and January 11, 2008 at the Indian Point Energy Center. Groundwater elevations were measured in monitoring wells, piezometers, and open boreholes. Where more than one measurement was collected during the quarter, the elevation is the average of the most recent measurements. Where no depth-specific measurements were collected during the quarter, the most recent measurement was used.

[3] Groundwater contours were drawn using Golden Software's Surfer 8 program. The program uses a kriging algorithm to interpolate between data points. Groundwater elevations were contoured using a 10' interval. Groundwater flow direction is perpendicular to the contours and from higher to lower elevations.

[4] Groundwater contours were drawn using groundwater elevations measured on January 4, 2008 and January 11, 2008 at the Indian Point Energy Center. Groundwater elevations were measured in monitoring wells, piezometers, and open boreholes. Where more than one measurement was collected during the quarter, the elevation is the average of the most recent measurements. Where no depth-specific measurements were collected during the quarter, the most recent measurement was used.

General Notes:

1. Base map was developed from an electronic file provided by Entergy and Holtec Consulting and Engineering, P.C., dated 2008, and is scaled 1"=200'.

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INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

4th QUARTER 2011 ROLLING AVERAGE CESIUM, COBALT, AND NICKEL ACTIVITY MAP

Proj. Mgr: MJB	Proj. date: 09-18-2012	figure no.
Designed by: MJB	Job No. 01.0017369.92	8-Q4
Reviewed By: MJB		
Operator: SAS		

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.

IPEC00267211

APPENDIX B: 2011 TRANSDUCER INSTALLATION LOGS

APPENDIX B: Q1-2011 TRANSDUCER INSTALLATION LOGS

TRANSDUCER INSTALLATION LOG

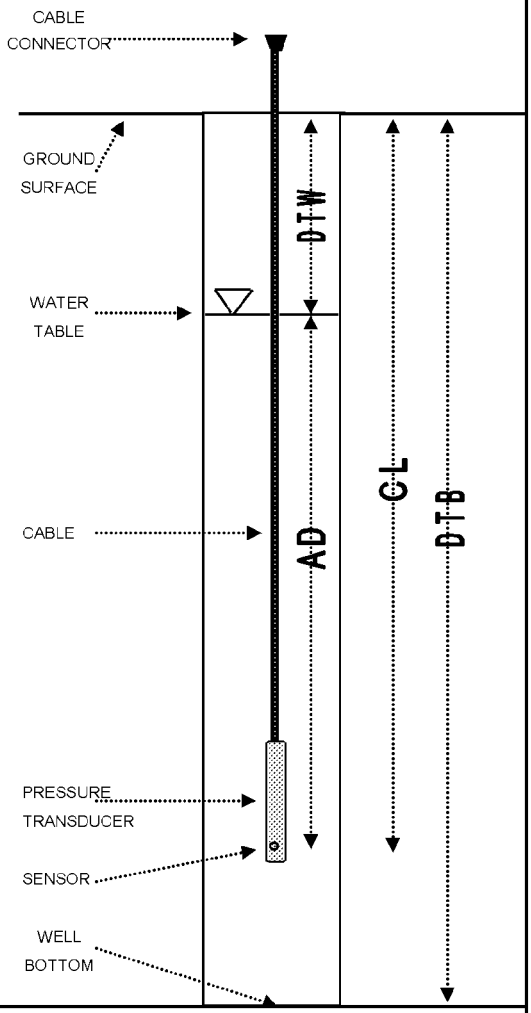
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	I-2n
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	41.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	80.92	DATE	3/9/11
PSI CAPACITY	30	CASING ELEVATION (FT)	82.23		
SERIAL NUMBER	16587	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			54.48
GZA ENGINEER	S. Lee				

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:		41.00	FT
GROUND ELEVATION:		80.92	FT M.S.L.
CASING ELEVATION:		82.23	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		1.31	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		09:49	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		27.75	FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	27.750	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		82.23	FT M.S.L.
DEPTH TO WATER:	−	27.75	FT
REFERENCE ELEVATION:	=	54.48	FT M.S.L.
TEST NAME:		I-2n	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		09:49	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:

TRANSDUCER INSTALLATION LOG

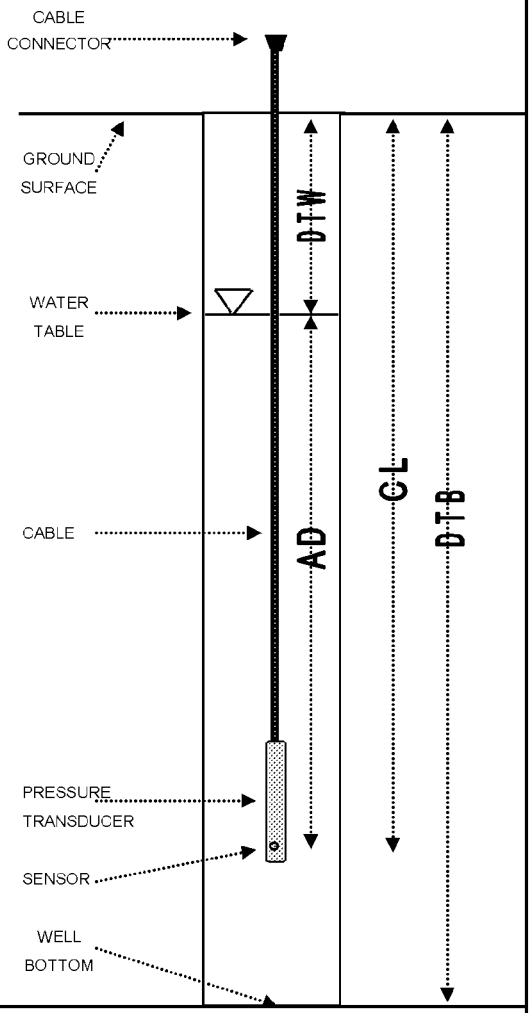
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-36-24
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	54.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	11.799	DATE	3/7/11
PSI CAPACITY	30	CASING ELEVATION (FT)	11.598		
SERIAL NUMBER	5376	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			7.54
GZA ENGINEER	S. Lee				

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:	13:30	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	4.06	FT	
ACTUAL DEPTH:	+	FT	
THEORETICAL CABLE LENGTH:	= 4.060	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:	− 4.06	FT	
REFERENCE ELEVATION:	= 7.538	FT M.S.L.	
TEST NAME:	MW-36-24		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	13:30	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:
Transducer was pulled out last quarter after Unit 2 transformer explosion released electrolytic fluid (oil) and 14' of product was found in MW-36 Wells.
Transducer was reinstalled on 3/7/11.

TRANSDUCER INSTALLATION LOG

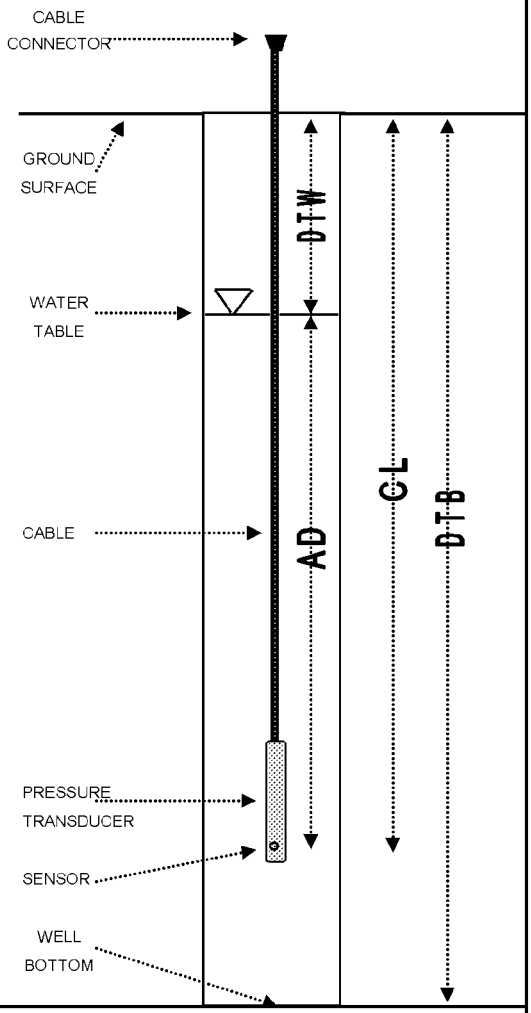
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-41-40
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	64.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	54.87	DATE	2/14/11
PSI CAPACITY	30	CASING ELEVATION (FT)	54.13		
SERIAL NUMBER	6321	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			33.00
GZA ENGINEER	S. Lee				

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:	11:07	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	21.13	FT	
ACTUAL DEPTH:	+	FT	
THEORETICAL CABLE LENGTH:	= 21.130	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:	− 21.13	FT	
REFERENCE ELEVATION:	= 33.00	FT M.S.L.	
TEST NAME:	MW-41-40		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:07	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:

TRANSDUCER INSTALLATION LOG

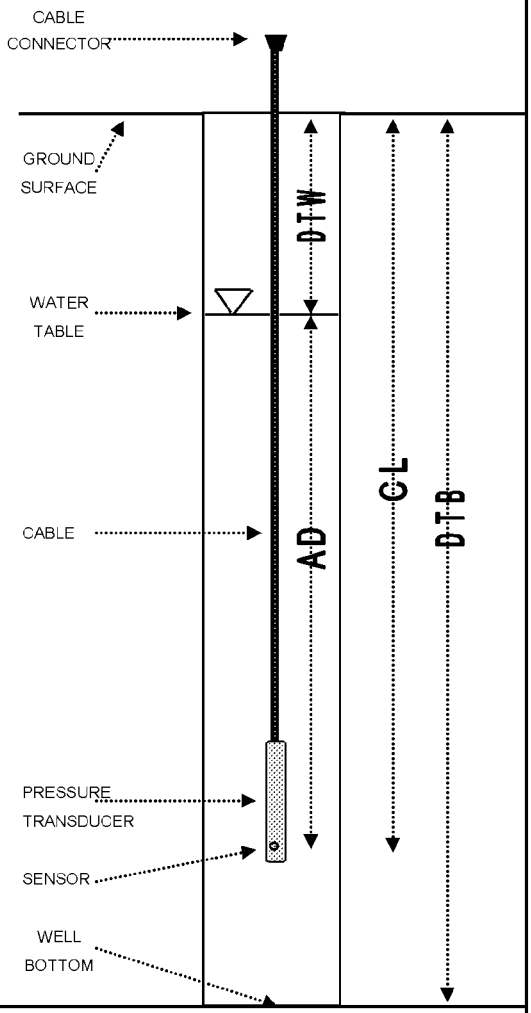
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW42-78
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	80.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	69.714	DATE	3/4/11
PSI CAPACITY	30	CASING ELEVATION (FT)	69.524		
SERIAL NUMBER	16626	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			36.93
GZA ENGINEER	S. Lee				

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:		78.00	FT
GROUND ELEVATION:		69.71	FT M.S.L.
CASING ELEVATION:		69.52	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.19	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		10:02	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		32.59	FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	32.590	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		69.524	FT M.S.L.
DEPTH TO WATER:	−	32.59	FT
REFERENCE ELEVATION:	=	36.934	FT M.S.L.
TEST NAME:		MW42-78	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		10:02	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:

TRANSDUCER INSTALLATION LOG

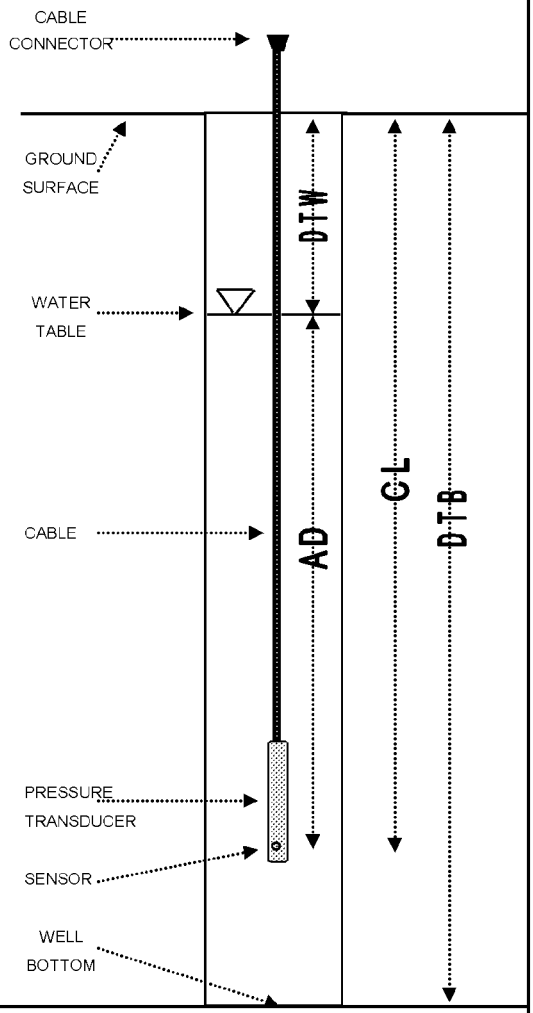
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-43-28
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	63.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	48.760	DATE	2/15/11
PSI CAPACITY	30	CASING ELEVATION (FT)	48.021		
SERIAL NUMBER	11331	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			33.09
GZA ENGINEER	S. Lee				

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:	10:22	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	14.93	FT	
ACTUAL DEPTH:	+	FT	
THEORETICAL CABLE LENGTH:	= 14.930	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:	− 14.93	FT	
REFERENCE ELEVATION:	= 33.091	FT M.S.L.	
TEST NAME:	MW-43-28		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:22	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

TRANSDUCER INSTALLATION LOG

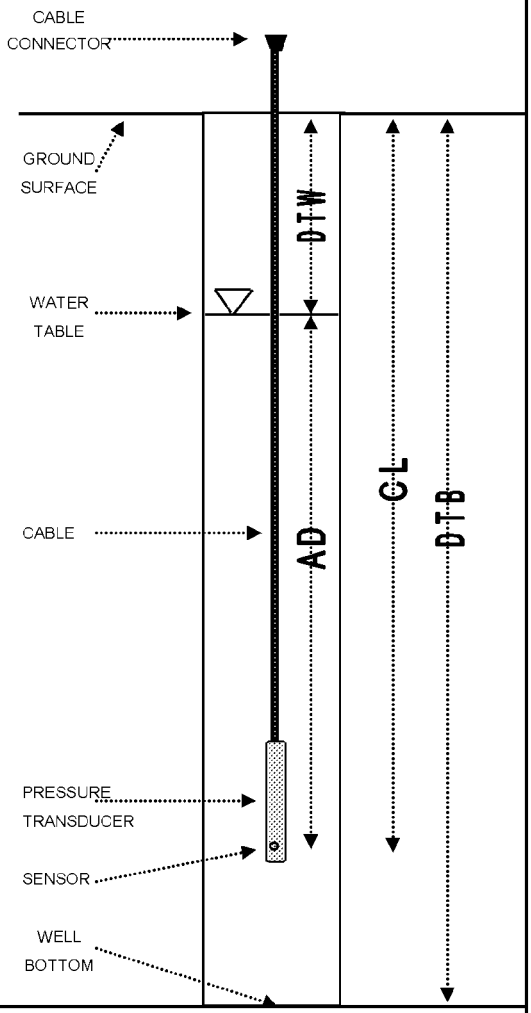
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-43-28
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	63.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	48.760	DATE	3/9/11
PSI CAPACITY	30	CASING ELEVATION (FT)	48.021		
SERIAL NUMBER	11331	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			33.76
GZA ENGINEER	S. Lee				

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:	10:29	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	14.26	FT	
ACTUAL DEPTH:	+	FT	
THEORETICAL CABLE LENGTH:	= 14.260	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:	− 14.26	FT	
REFERENCE ELEVATION:	= 33.761	FT M.S.L.	
TEST NAME:	MW-43-28		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:29	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:
Transducer off by 18.357'.
Reset Transducer.

TRANSDUCER INSTALLATION LOG

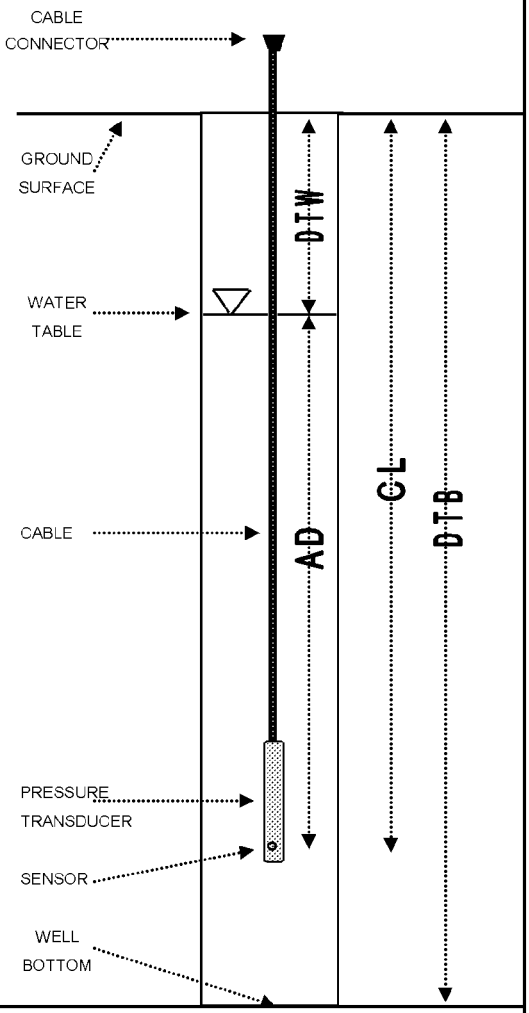
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-50-66
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	67.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.92	DATE	2/25/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.61		
SERIAL NUMBER	14459	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			4.76
GZA ENGINEER	S. Lee				

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:		65.75	FT
GROUND ELEVATION:		14.92	FT M.S.L.
CASING ELEVATION:		14.61	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.31	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		11:02	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		9.85	FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	9.850	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		14.614	FT M.S.L.
DEPTH TO WATER:	−	9.85	FT
REFERENCE ELEVATION:	=	4.764	FT M.S.L.
TEST NAME:		MW-50-66	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		11:02	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:
Could not connect upon arrival. Replaced batteries.
No test running to extract data, extracted "abandoned" test, added new test.

GZA

WELL ID : MW-50-66

TRANSDUCER INSTALLATION LOG

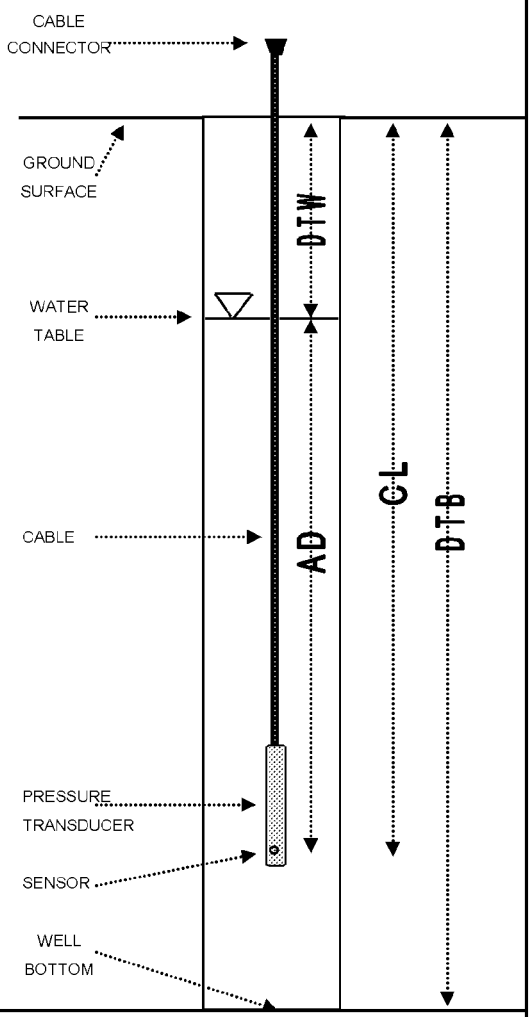
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-53-120
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	124.70	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	70.260	DATE	3/9/11
PSI CAPACITY	30	CASING ELEVATION (FT)	70.190		
SERIAL NUMBER	6097	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			12.04
GZA ENGINEER	S. Lee				

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:		120.00	FT
GROUND ELEVATION:		70.260	FT M.S.L.
CASING ELEVATION:		70.190	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.07	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		11:06	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		58.15	FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	58.150	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		70.190	FT M.S.L.
DEPTH TO WATER:	−	58.15	FT
REFERENCE ELEVATION:	=	12.04	FT M.S.L.
TEST NAME:		MW53-120	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		11:06	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:

TRANSDUCER INSTALLATION LOG

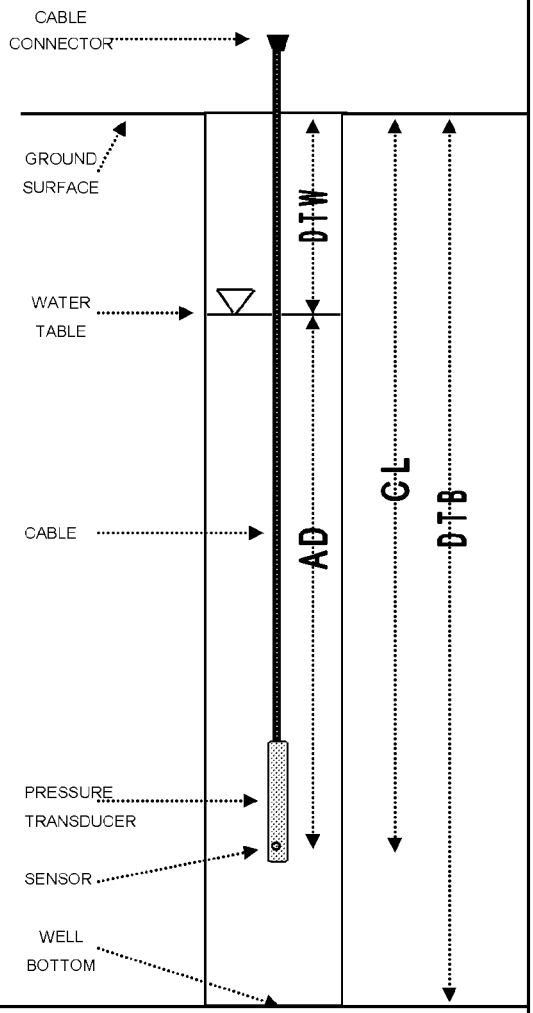
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-55-24
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	77.50	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	18.25	DATE	2/3/11
PSI CAPACITY	30	CASING ELEVATION (FT)	17.77		
SERIAL NUMBER	13988	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			6.96
GZA ENGINEER	S. Lee				

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:	18.25	FT M.S.L.	
CASING ELEVATION:	17.77	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.48	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	11:00	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	10.81	FT	
ACTUAL DEPTH:	+	FT	
THEORETICAL CABLE LENGTH:	= 10.81	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	17.77	FT M.S.L.	
DEPTH TO WATER:	− 10.81	FT	
REFERENCE ELEVATION:	= 6.96	FT M.S.L.	
TEST NAME:	MW-55-24		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:00	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:
Data off by 0.969'.

GZA

WELL ID : MW-55-24

TRANSDUCER INSTALLATION LOG

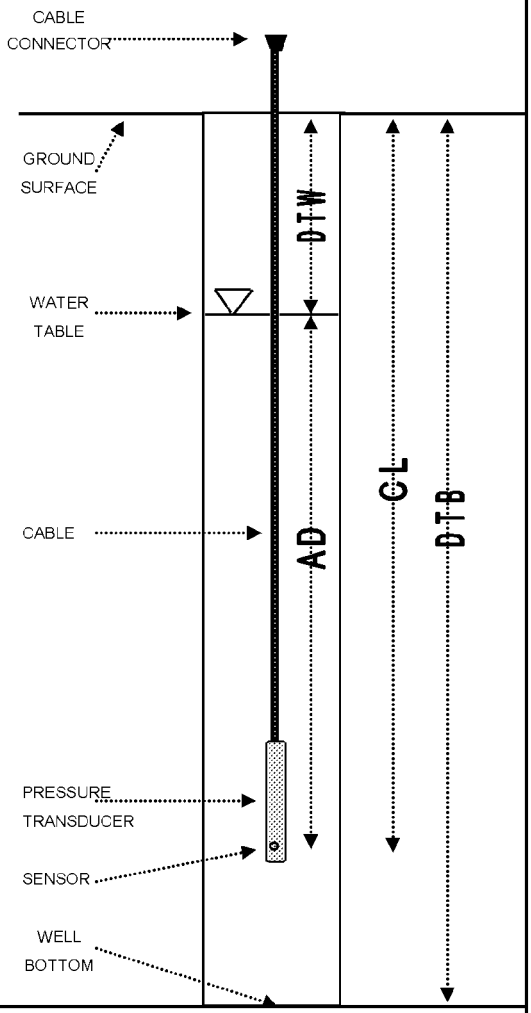
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-55-24
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	77.50	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	18.25	DATE	3/9/11
PSI CAPACITY	30	CASING ELEVATION (FT)	17.77		
SERIAL NUMBER	13988	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			9.01
GZA ENGINEER	S. Lee				

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:	18.25	FT M.S.L.	
CASING ELEVATION:	17.77	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.48	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	11:50	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	8.76	FT	
ACTUAL DEPTH:	+	FT	
THEORETICAL CABLE LENGTH:	= 8.76	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	17.77	FT M.S.L.	
DEPTH TO WATER:	− 8.76	FT	
REFERENCE ELEVATION:	= 9.01	FT M.S.L.	
TEST NAME:	MW-55-24		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:50	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:

TRANSDUCER INSTALLATION LOG

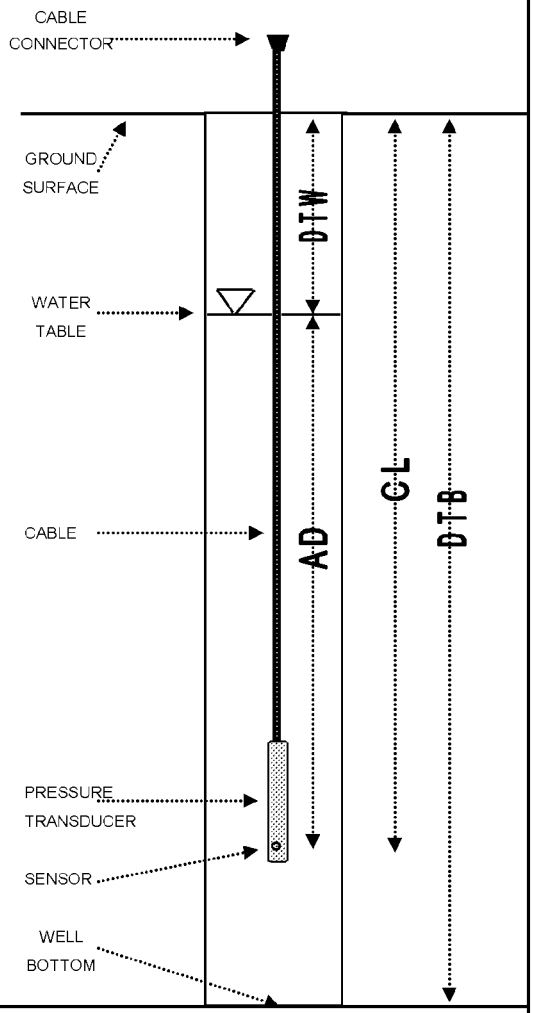
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-55-35
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	77.50	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	18.25	DATE	
PSI CAPACITY	30	CASING ELEVATION (FT)	17.77		
SERIAL NUMBER	[redacted]	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			8.54
GZA ENGINEER	S. Lee				

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:	35.00	FT	
GROUND ELEVATION:	18.25	FT M.S.L.	
CASING ELEVATION:	17.77	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.48	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	12:04	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	9.23	FT	
ACTUAL DEPTH:	+	FT	
THEORETICAL CABLE LENGTH:	= 9.23	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	17.77	FT M.S.L.	
DEPTH TO WATER:	− 9.23	FT	
REFERENCE ELEVATION:	= 8.54	FT M.S.L.	
TEST NAME:	MW-55-35		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	12:04	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:
Unable to connect upon arrival. Replace batteries and tried again but unable to connect.
Checked cable connection: loose connection. Tried ten cable connection and was able to connect.

GZA

WELL ID : MW-55-35

TRANSDUCER INSTALLATION LOG

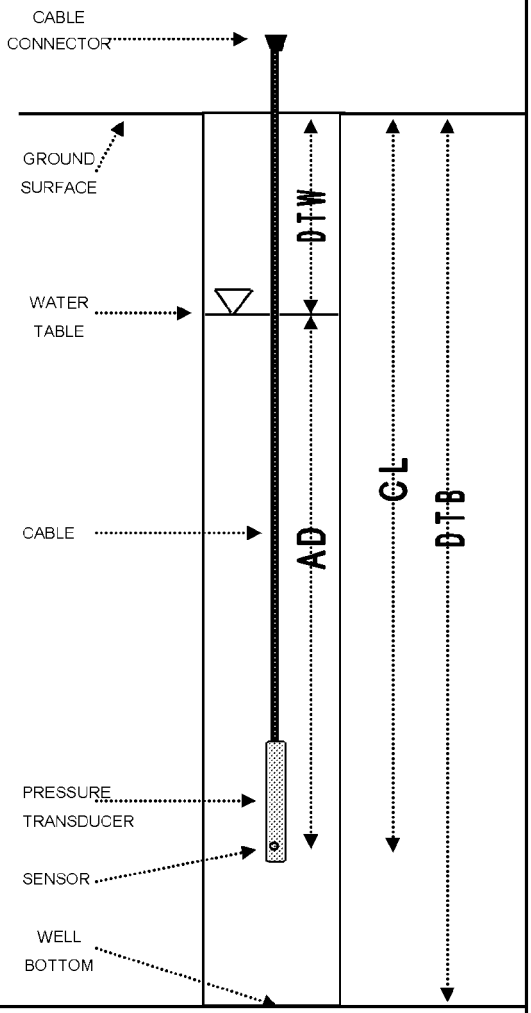
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-62-18
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	38.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.69	DATE	2/24/11
PSI CAPACITY	30	CASING ELEVATION (FT)	12.81		
SERIAL NUMBER	4859	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION			1.21
GZA ENGINEER	S. Lee				

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:	18.00	FT	
GROUND ELEVATION:	14.69	FT M.S.L.	
CASING ELEVATION:	12.81	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-1.88	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	11:35	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	11.60	FT	
ACTUAL DEPTH:	+	FT	
THEORETICAL CABLE LENGTH:	= 11.600	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	* 12.81	FT M.S.L.	
DEPTH TO WATER:	− 11.60	FT	
REFERENCE ELEVATION:	= 1.21	FT M.S.L.	
TEST NAME:	MW-62-18		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:35	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:

TRANSDUCER INSTALLATION LOG

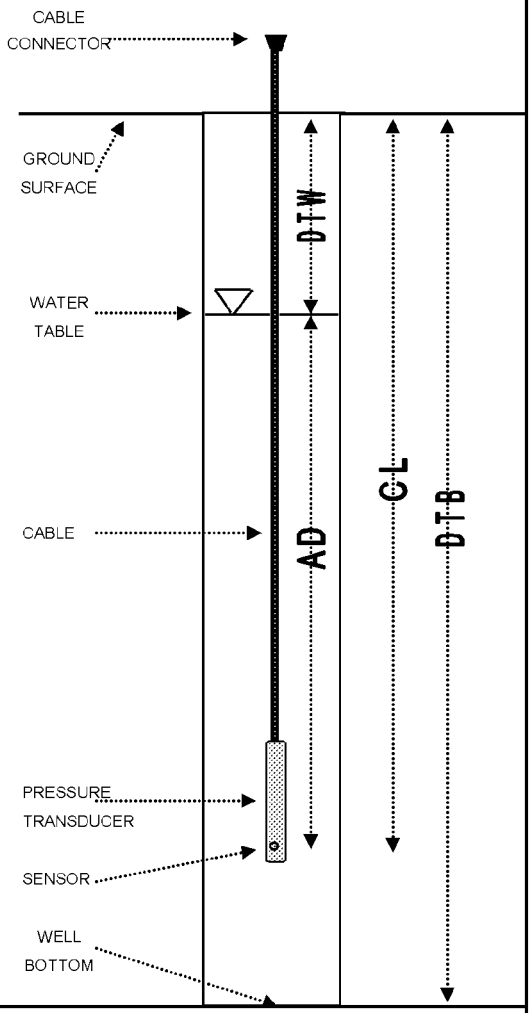
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	OUT-1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	8.20	DATE	3/3/11
PSI CAPACITY	30	CASING ELEVATION (FT)	11.89		
SERIAL NUMBER	16044	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			1.88
GZA ENGINEER	S. Lee				

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:		14:06	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		10.01	FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	10.010	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:	−	10.010	FT
REFERENCE ELEVATION:	=	1.881	FT M.S.L.
TEST NAME:		OUT-1	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		14:06	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:
Organic material growing on transducer and cable.
Cleaned organic material off transducer.

TRANSDUCER INSTALLATION LOG

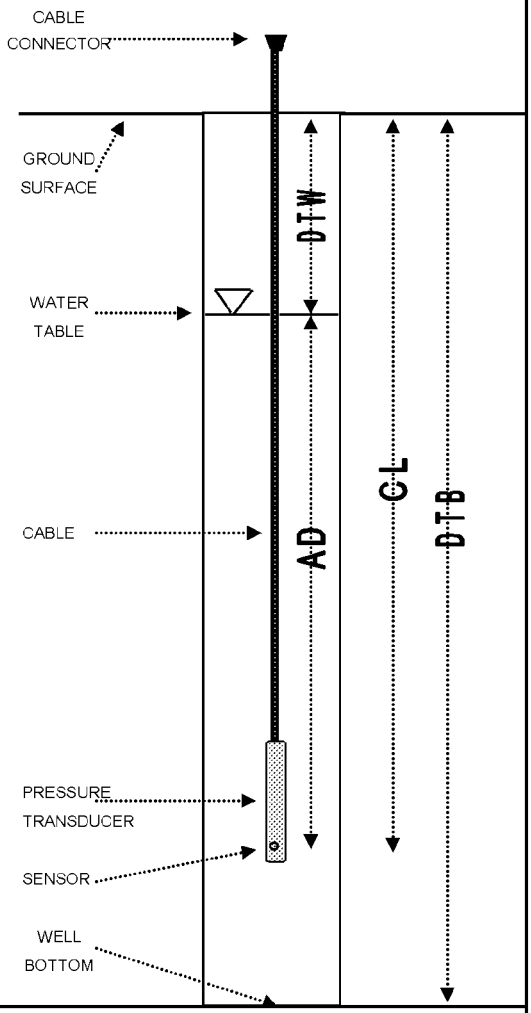
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U3-C1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	NA	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.003	DATE	3/911
PSI CAPACITY	30	CASING ELEVATION (FT)	18.060		
SERIAL NUMBER	5548	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			4.79
GZA ENGINEER	S. Lee				

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:		14:34	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		13.27	FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	13.270	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:	−	13.27	FT
REFERENCE ELEVATION:	=	4.790	FT M.S.L.
TEST NAME:		U3-C1	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		14:34	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:
Unable to connect upon arrival. Replace batteries and tried again.
Able to connect to transducer.

GZA

WELL ID : U3-C1

TRANSDUCER INSTALLATION LOG

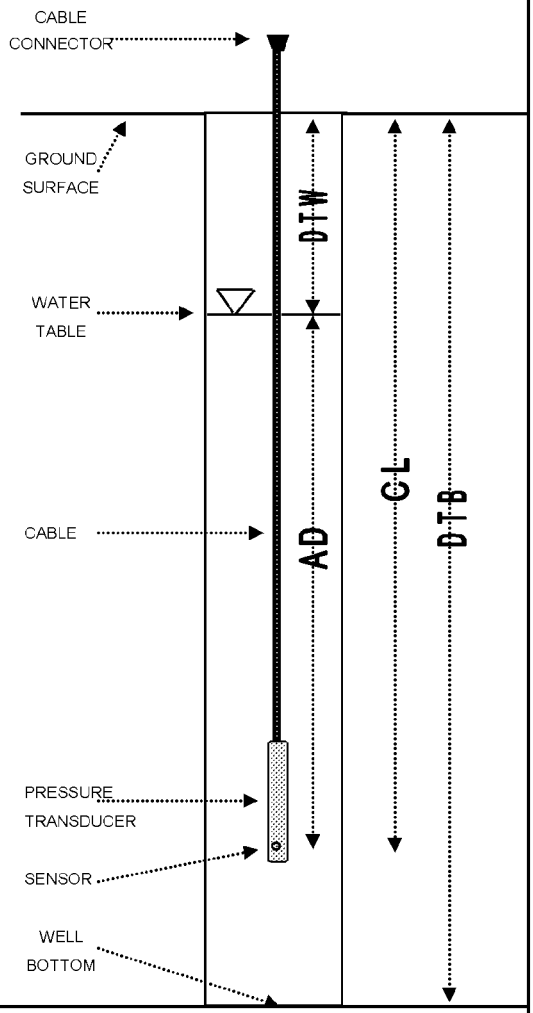
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U3-C1-2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	NA	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.003	DATE	3/9/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.060		
SERIAL NUMBER	11949	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			4.78
GZA ENGINEER	S. Lee				

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:		HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	13.28	FT	
ACTUAL DEPTH:	+	FT	
THEORETICAL CABLE LENGTH:	= 13.280	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:	− 13.28	FT	
REFERENCE ELEVATION:	= 4.780	FT M.S.L.	
TEST NAME:	U3-C1-2		
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:

GZA

WELL ID : U3-C1-2

TRANSDUCER INSTALLATION LOG

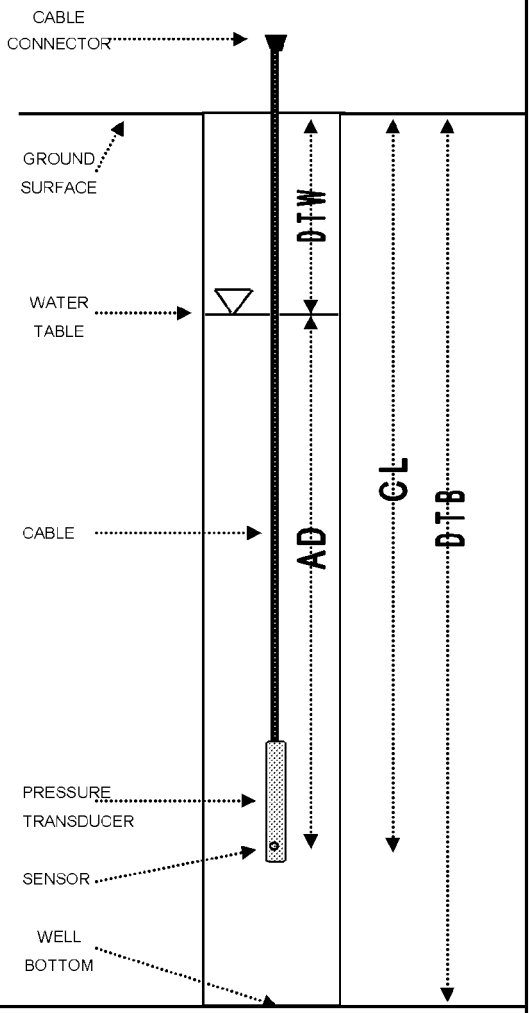
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U3-4D
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	27.25	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.849	DATE	2/17/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.519		
SERIAL NUMBER	14301	CASING DIAMETER (INCH)	4		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			4.21
GZA ENGINEER	S. Lee				

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:		9:48	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		10.31	FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	10.310	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:	−	10.31	FT
REFERENCE ELEVATION:	=	4.209	FT M.S.L.
TEST NAME:		U3-4D	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		12:15	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:

APPENDIX B: Q2-2011 TRANSDUCER INSTALLATION LOGS

TRANSDUCER INSTALLATION LOG

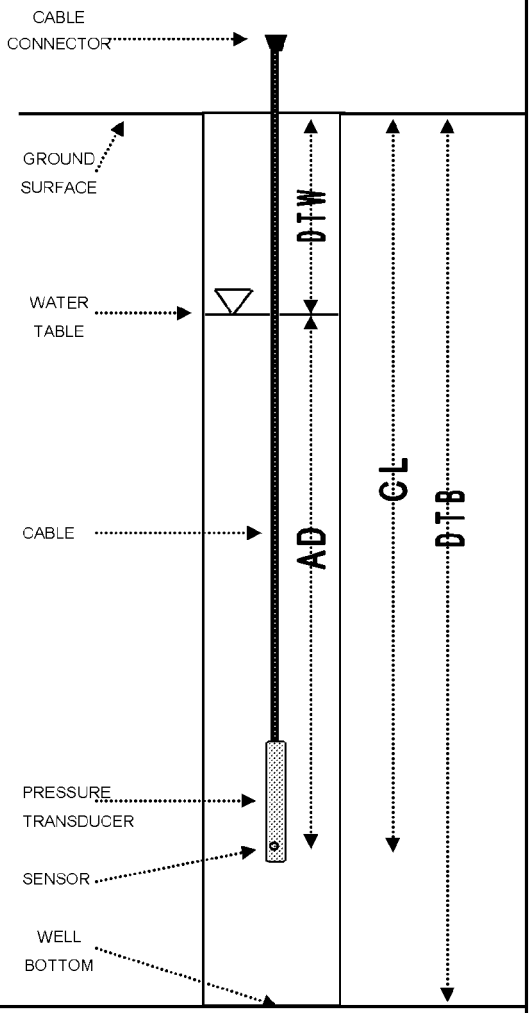
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	HR-1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	5/12/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	16642	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			1.57
GZA ENGINEER	S. Lee				

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:		15:07	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		16.93	FT
ACTUAL DEPTH:	+	41.314	FT
THEORETICAL CABLE LENGTH:	=	58.244	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:	−	16.93	FT
REFERENCE ELEVATION:	=	1.57	FT M.S.L.
TEST NAME:		HR-1	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		15:07	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:
Replaced transducer; moved from MW-57-45.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

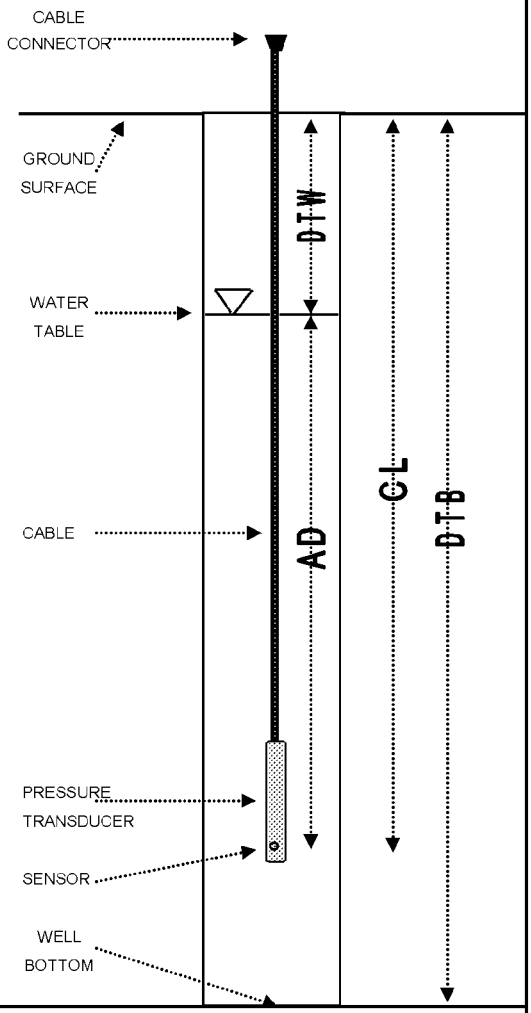
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	I-2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	41.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	80.92	DATE	5/9/11
PSI CAPACITY	30	CASING ELEVATION (FT)	82.23		
SERIAL NUMBER	11998	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			53.02
GZA ENGINEER	S. Lee				

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:	40.40	FT	
GROUND ELEVATION:	80.92	FT M.S.L.	
CASING ELEVATION:	82.23	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	above		
DISTANCE FROM CASING TO GROUND (+ OR -):	1.31	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	11:15	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	29.21	FT	
ACTUAL DEPTH:	+ 9.816	FT	
THEORETICAL CABLE LENGTH:	= 39.026	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	82.23	FT M.S.L.	
DEPTH TO WATER:	− 29.21	FT	
REFERENCE ELEVATION:	= 53.02	FT M.S.L.	
TEST NAME:	I-2		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:15	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:
Replaced batteries.
DTB =40.40' TOC.

TRANSDUCER INSTALLATION LOG

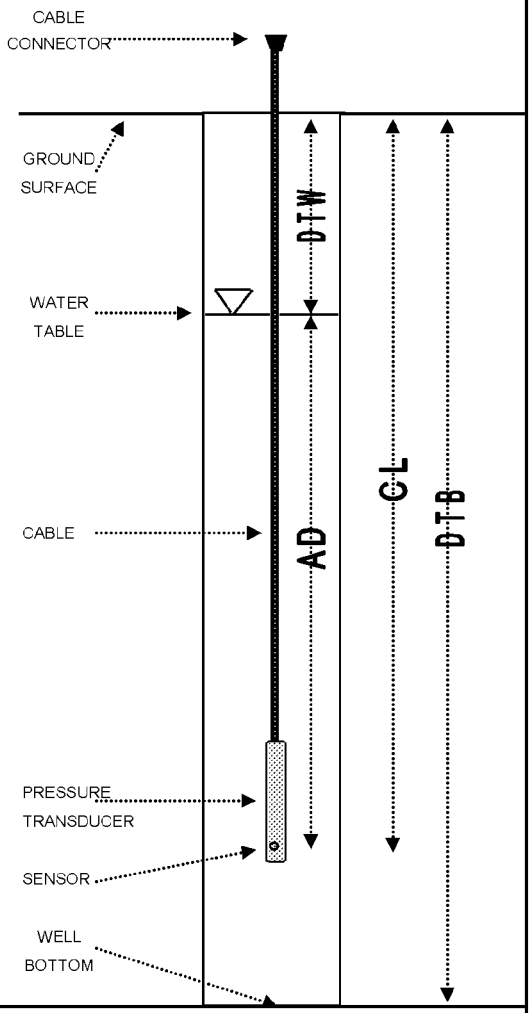
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	I-2n
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	41.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	80.92	DATE	5/9/11
PSI CAPACITY	30	CASING ELEVATION (FT)	82.23		
SERIAL NUMBER	16587	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			53.02
GZA ENGINEER	S. Lee				

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:	40.40	FT	
GROUND ELEVATION:	80.92	FT M.S.L.	
CASING ELEVATION:	82.23	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	above		
DISTANCE FROM CASING TO GROUND (+ OR -):	1.31	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	11:15	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	29.21	FT	
ACTUAL DEPTH:	+ 9.816	FT	
THEORETICAL CABLE LENGTH:	= 39.026	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	82.23	FT M.S.L.	
DEPTH TO WATER:	− 29.21	FT	
REFERENCE ELEVATION:	= 53.02	FT M.S.L.	
TEST NAME:	I-2n		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:25	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:
Replaced batteries.
DTB =40.40' TOC.

GZA

WELL ID : I-2n

TRANSDUCER INSTALLATION LOG

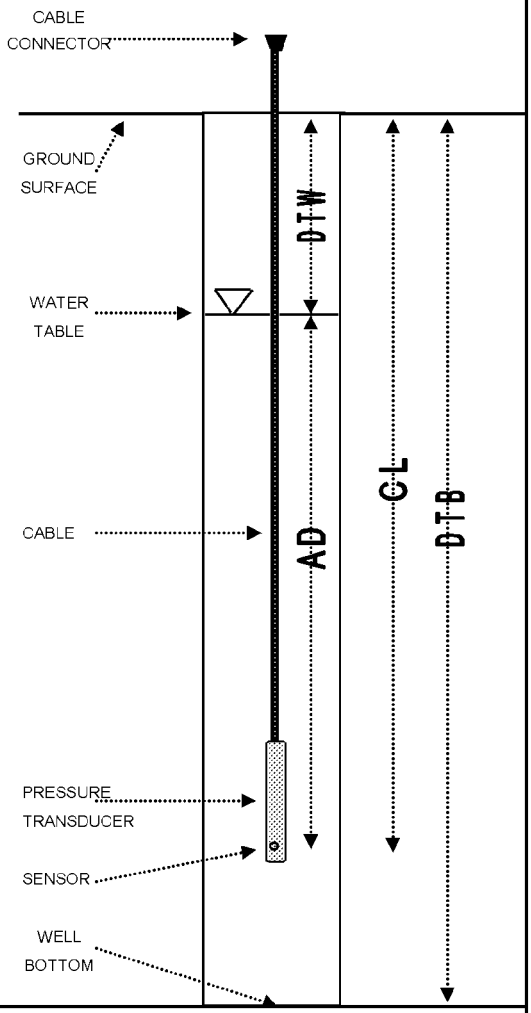
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-36-24
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	54.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	11.799	DATE	4/28/11
PSI CAPACITY	30	CASING ELEVATION (FT)	11.598		
SERIAL NUMBER	5376	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			7.26
GZA ENGINEER	S. Lee				

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:		13:04	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		4.34	FT
ACTUAL DEPTH:	+	13.785	FT
THEORETICAL CABLE LENGTH:	=	18.125	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:	−	4.34	FT
REFERENCE ELEVATION:	=	7.258	FT M.S.L.
TEST NAME:		MW-36-24	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		13:09	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:

TRANSDUCER INSTALLATION LOG

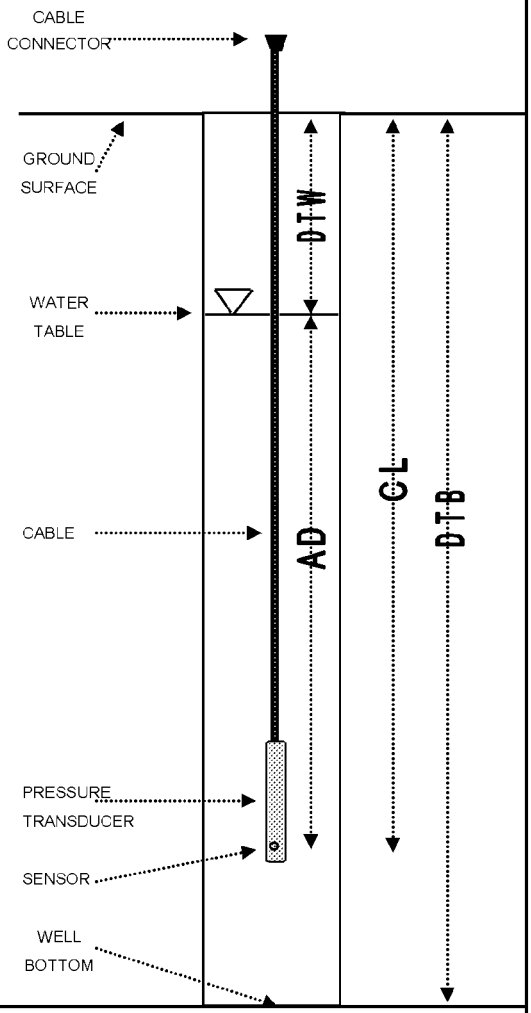
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-36-24
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	54.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	11.799	DATE	5/13/11
PSI CAPACITY	30	CASING ELEVATION (FT)	11.598		
SERIAL NUMBER	5376	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			7.50
GZA ENGINEER	S. Lee				

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:	11:24	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	4.10	FT	
ACTUAL DEPTH:	+ 15.227	FT	
THEORETICAL CABLE LENGTH:	= 19.327	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:	− 4.10	FT	
REFERENCE ELEVATION:	= 7.498	FT M.S.L.	
TEST NAME:	MW-36-24		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:24	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:
DTB = 24.22.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

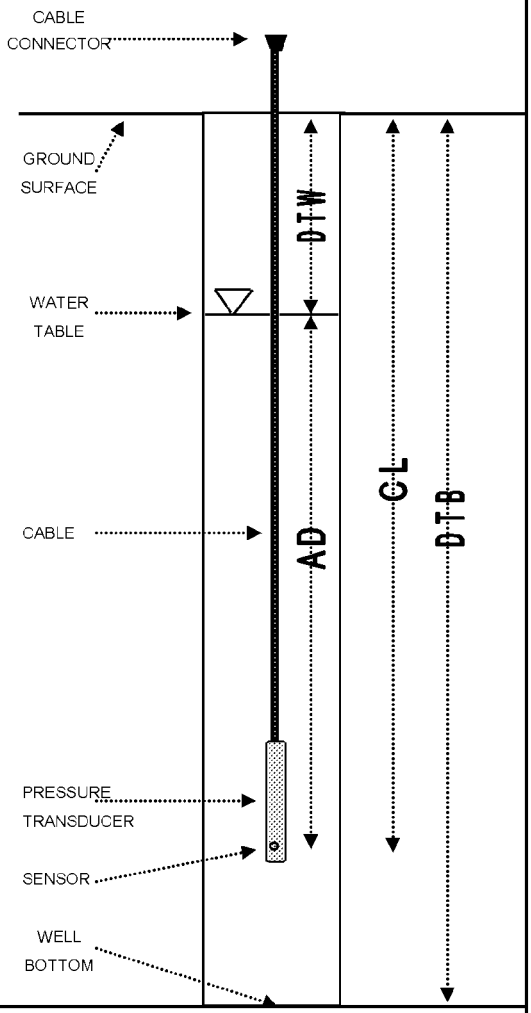
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-37-22
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	57.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.021	DATE	5/13/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.852		
SERIAL NUMBER	6753	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT) *			5.89
GZA ENGINEER	S. Lee				

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:	22.00	FT	
GROUND ELEVATION:	15.021	FT M.S.L.	
CASING ELEVATION:	14.852	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.17	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	10:22	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	8.96	FT	
ACTUAL DEPTH:	+ 12.91	FT	
THEORETICAL CABLE LENGTH:	= 21.87	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.852	*FT M.S.L.	
DEPTH TO WATER:	− 8.96	FT	
REFERENCE ELEVATION:	= 5.892	*FT M.S.L.	
TEST NAME:	MW37-22		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:22	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:
DTB = 22.21' TOC.
Replaced batteries.

GZA

WELL ID : MW-37-22

TRANSDUCER INSTALLATION LOG

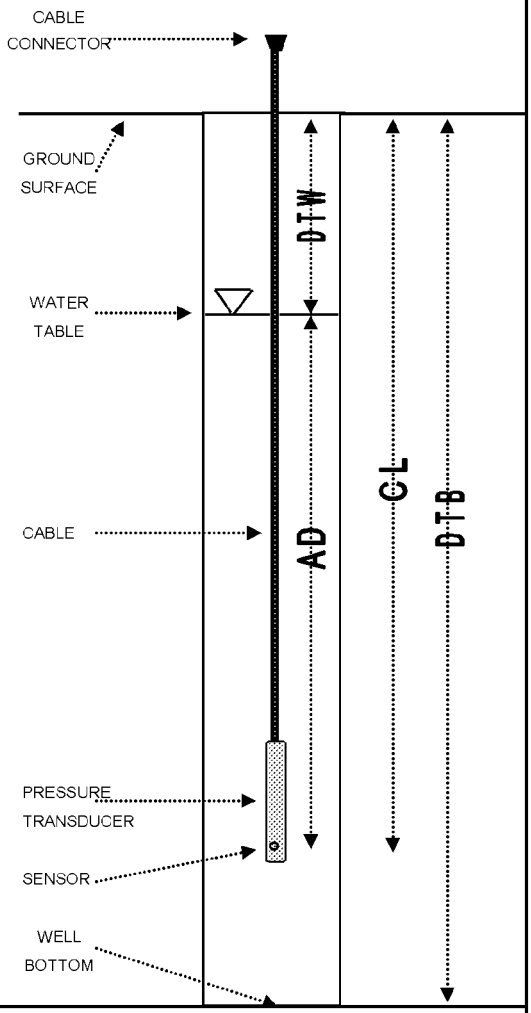
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-37-32
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	57.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.021	DATE	5/13/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.791		
SERIAL NUMBER	6100	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			5.86
GZA ENGINEER	S. Lee				

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:	32.00	FT	
GROUND ELEVATION:	15.021	FT M.S.L.	
CASING ELEVATION:	14.791	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.230	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	10:30	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	8.93	FT	
ACTUAL DEPTH:	+ 15.593	FT	
THEORETICAL CABLE LENGTH:	= 24.523	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.791	FT M.S.L.	
DEPTH TO WATER:	− 8.93	FT	
REFERENCE ELEVATION:	= 5.861	FT M.S.L.	
TEST NAME:	MW-37-32		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:30	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:
DTB = 31.99' TOC.
Replaced Batteries.

GZA

WELL ID : MW-37-32

TRANSDUCER INSTALLATION LOG

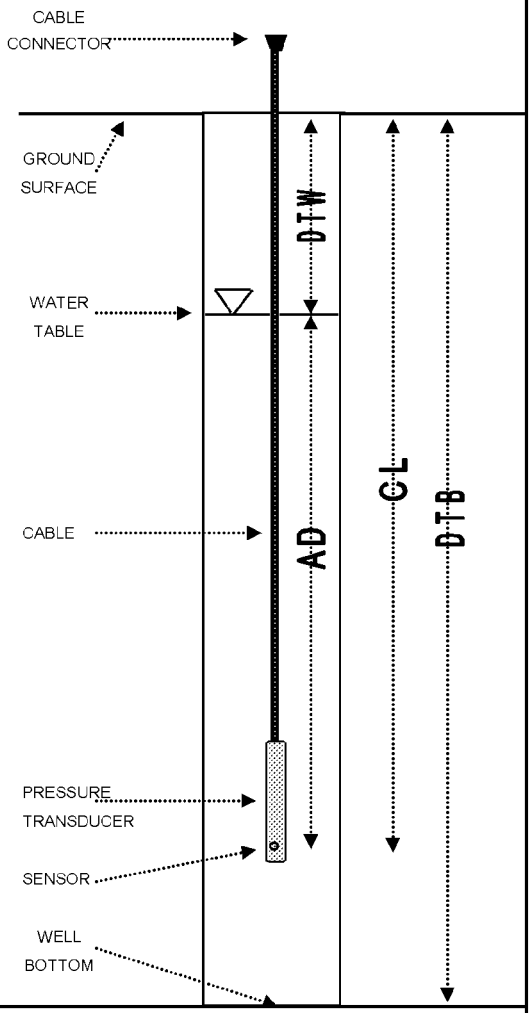
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-37-40
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	57.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.021	DATE	5/13/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.852		
SERIAL NUMBER	2280	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT) *			7.81
GZA ENGINEER	S. Lee				

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:	15.021	FT M.S.L.	
CASING ELEVATION:	14.852	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.169	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	10:53	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	7.04	*FT	
ACTUAL DEPTH:	+ 32.392	FT	
THEORETICAL CABLE LENGTH:	= 39.432	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.852	FT M.S.L.	
DEPTH TO WATER:	− 7.04	*FT	
REFERENCE ELEVATION:	= 7.812	*FT M.S.L.	
TEST NAME:	MW-37-40		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:53	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:
DTB = 41.20' TOC.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

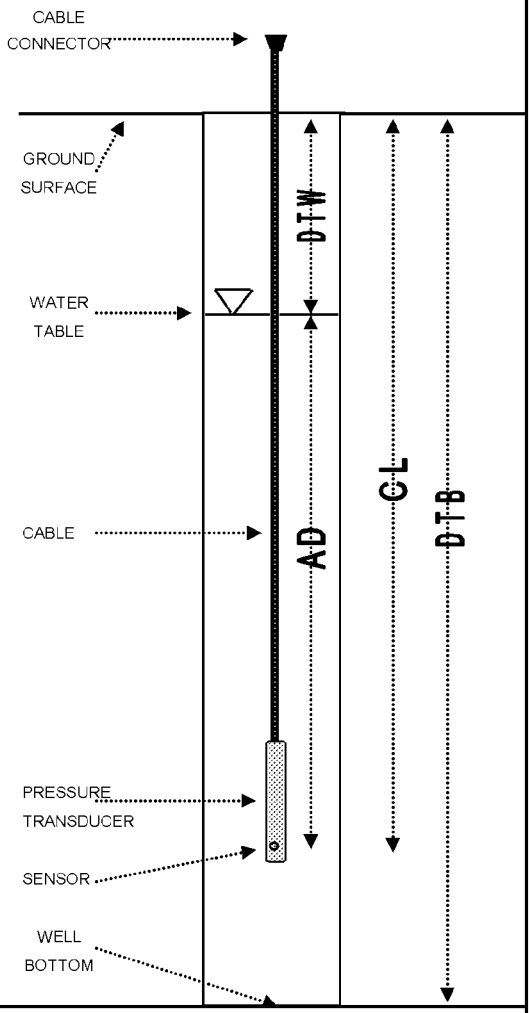
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-37-57
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	57.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.021	DATE	5/13/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.788		
SERIAL NUMBER	11802	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			7.04
GZA ENGINEER	S. Lee				

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:	56.50	FT	
GROUND ELEVATION:	15.021	FT M.S.L.	
CASING ELEVATION:	14.788	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.233	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	11:03	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	7.75	FT	
ACTUAL DEPTH:	+ 42.879	FT	
THEORETICAL CABLE LENGTH:	= 50.629	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.788	FT M.S.L.	
DEPTH TO WATER:	− 7.75	FT	
REFERENCE ELEVATION:	= 7.038	FT M.S.L.	
TEST NAME:	MW-37-57		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:03	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:
DTB = 56.44' TOC.
Replaced batteries.

IPEC00267239

TRANSDUCER INSTALLATION LOG

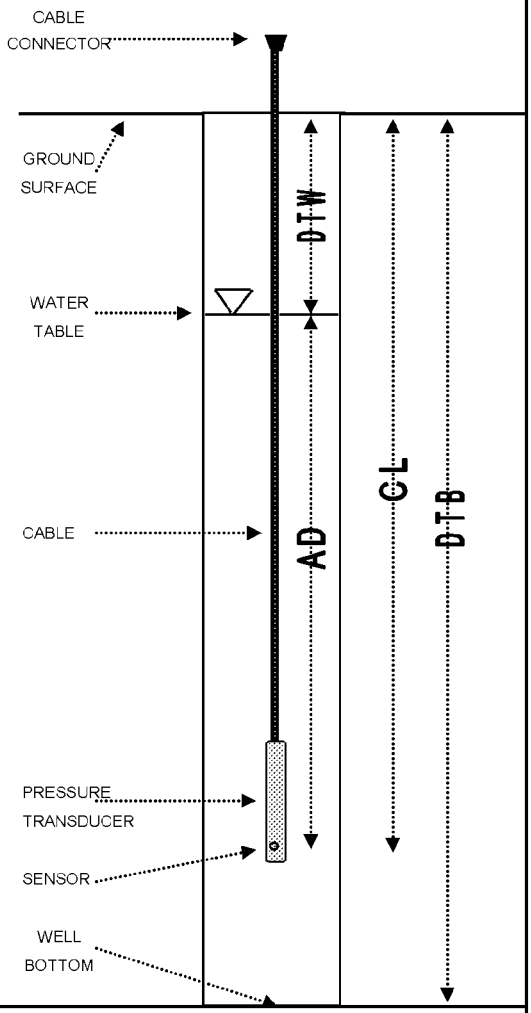
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-38
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	40.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.342	DATE	5/11/11
PSI CAPACITY	30	CASING ELEVATION (FT)	13.999		
SERIAL NUMBER	4386	CASING DIAMETER (INCH)	4		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			4.28
GZA ENGINEER	S. Lee				

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:	39.02	FT	
GROUND ELEVATION:	14.342	FT M.S.L.	
CASING ELEVATION:	13.999	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.34	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	09:38	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	9.71	FT	
ACTUAL DEPTH:	+ 28.229	FT	
THEORETICAL CABLE LENGTH:	= 37.939	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	13.990	FT M.S.L.	
DEPTH TO WATER:	− 9.71	FT	
REFERENCE ELEVATION:	= 4.280	FT M.S.L.	
TEST NAME:	MW-38		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	09:42	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:
Batteries dead upon arrival; some moisture on dead batteries but still working.
Replaced batteries and able to connect; downloaded data.
DTB = 39.45'.

GZA

WELL ID : MW-38

TRANSDUCER INSTALLATION LOG

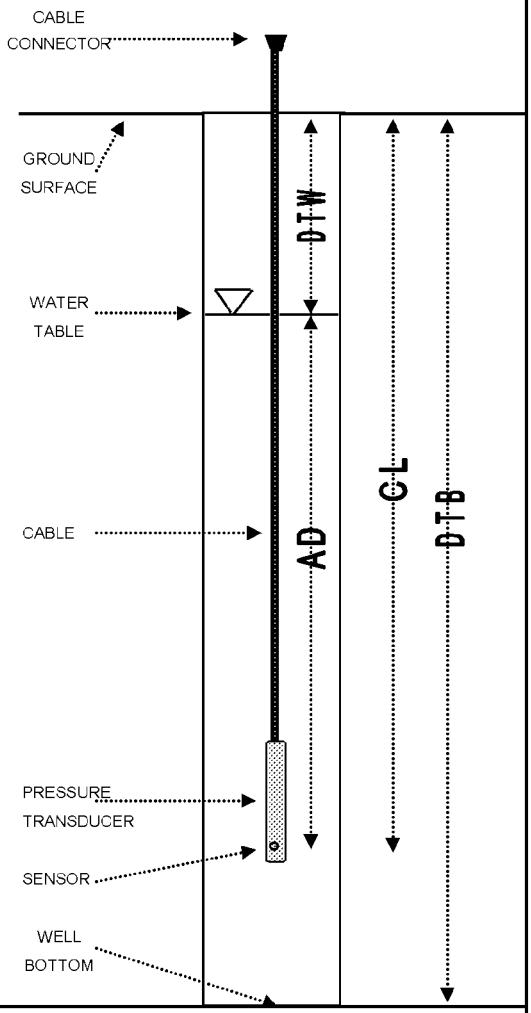
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-41-40
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	64.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	54.87	DATE	4/20/11
PSI CAPACITY	30	CASING ELEVATION (FT)	54.13		
SERIAL NUMBER	6321	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			34.61
GZA ENGINEER	S. Lee				

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:		11:33	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		19.52	FT
ACTUAL DEPTH:	+	65.433	FT
THEORETICAL CABLE LENGTH:	=	84.953	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:	−	19.52	FT
REFERENCE ELEVATION:	=	34.61	FT M.S.L.
TEST NAME:		MW-41-40	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		11:48	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:
Transducer off by 3.752'.

GZA

WELL ID : MW-41-40

TRANSDUCER INSTALLATION LOG

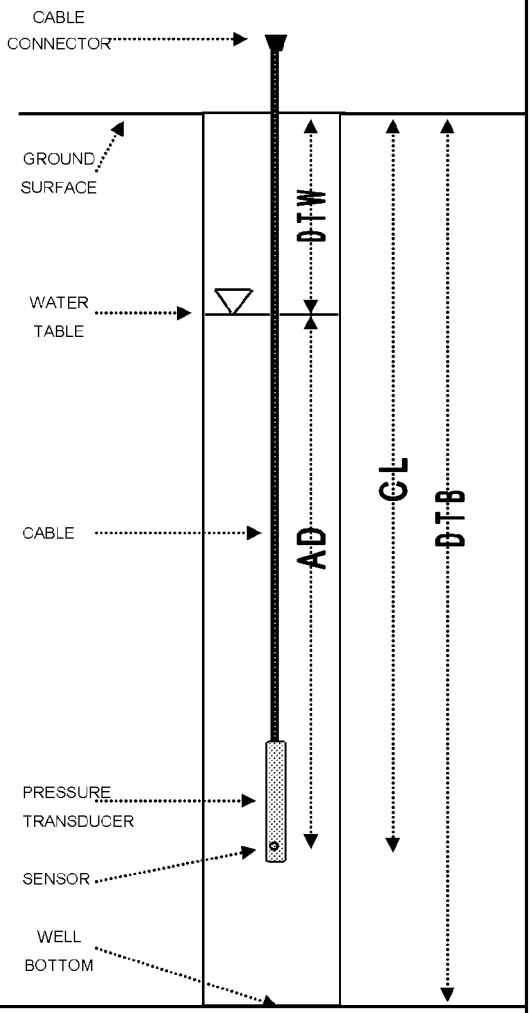
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-41-40
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	64.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	54.87	DATE	5/10/11
PSI CAPACITY	30	CASING ELEVATION (FT)	54.13		
SERIAL NUMBER	6321	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			32.61
GZA ENGINEER	S. Lee				

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:	13:32	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	21.52	FT	
ACTUAL DEPTH:	+ 64.212	FT	
THEORETICAL CABLE LENGTH:	= 85.732	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:	− 21.52	FT	
REFERENCE ELEVATION:	= 32.61	FT M.S.L.	
TEST NAME:	MW-41-40		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	13:36	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:
DTB = 40.89'.
Transducer off by -1.238.

GZA

WELL ID : MW-41-40

TRANSDUCER INSTALLATION LOG

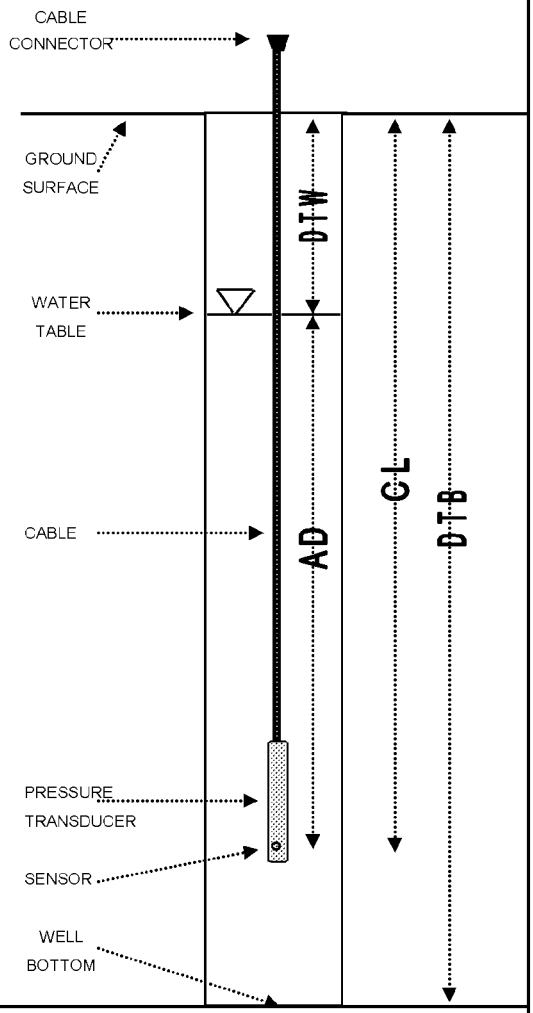
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-41-63
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	64.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	54.87	DATE	5/10/11
PSI CAPACITY	30	CASING ELEVATION (FT)	54.13		
SERIAL NUMBER	5977	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			29.00
GZA ENGINEER	S. Lee				

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:	13:48	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	25.13	FT	
ACTUAL DEPTH:	+ 16.158	FT	
THEORETICAL CABLE LENGTH:	= 41.288	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:	− 25.13	FT	
REFERENCE ELEVATION:	= 29.00	FT M.S.L.	
TEST NAME:	MW-41-63		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	13:51	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:
DTB = 62.29.

GZA

WELL ID : MW-41-63

TRANSDUCER INSTALLATION LOG

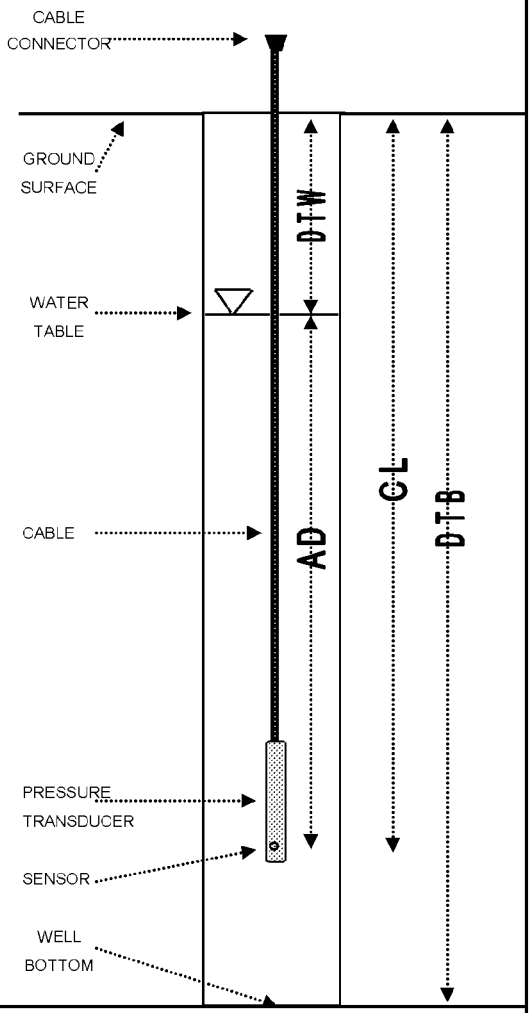
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW42-78
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	80.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	69.714	DATE	4/21/11
PSI CAPACITY	30	CASING ELEVATION (FT)	69.524		
SERIAL NUMBER	16626	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			37.08
GZA ENGINEER	S. Lee				

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:	78.00	FT	
GROUND ELEVATION:	69.71	FT M.S.L.	
CASING ELEVATION:	69.52	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.19	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	12:47	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	32.44	FT	
ACTUAL DEPTH:	+ 45.180	FT	
THEORETICAL CABLE LENGTH:	= 77.620	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	69.524	FT M.S.L.	
DEPTH TO WATER:	− 32.44	FT	
REFERENCE ELEVATION:	= 37.084	FT M.S.L.	
TEST NAME:	MW42-78		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	12:51	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-42-78

TRANSDUCER INSTALLATION LOG

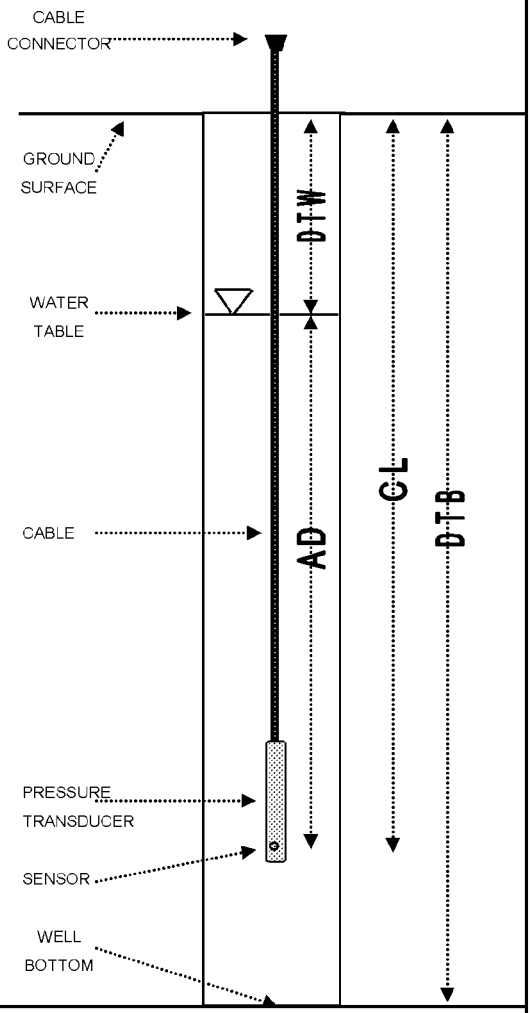
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW42-78
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	80.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	69.714	DATE	5/9/11
PSI CAPACITY	30	CASING ELEVATION (FT)	69.524		
SERIAL NUMBER	16626	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			36.23
GZA ENGINEER	S. Lee				

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:	78.00	FT	
GROUND ELEVATION:	69.71	FT M.S.L.	
CASING ELEVATION:	69.52	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.19	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	14:50	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	33.29	FT	
ACTUAL DEPTH:	+ 44.047	FT	
THEORETICAL CABLE LENGTH:	= 77.337	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	69.524	FT M.S.L.	
DEPTH TO WATER:	− 33.29	FT	
REFERENCE ELEVATION:	= 36.234	FT M.S.L.	
TEST NAME:	MW42-78		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	14:54	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-42-78

TRANSDUCER INSTALLATION LOG

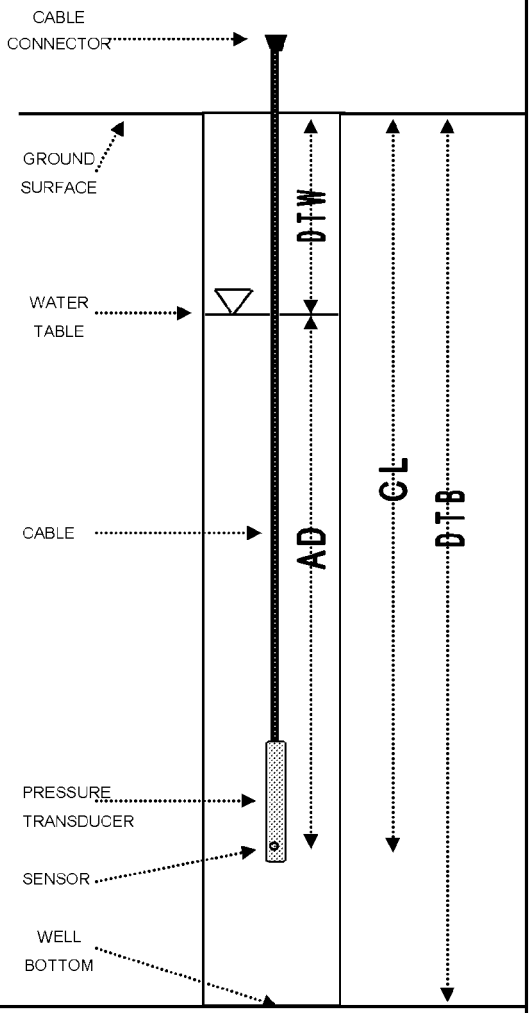
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-43-28
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	63.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	48.760	DATE	4/21/11
PSI CAPACITY	30	CASING ELEVATION (FT)	48.021		
SERIAL NUMBER	11331	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			33.45
GZA ENGINEER	S. Lee				

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:	09:33	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	14.57	FT	
ACTUAL DEPTH:	+ 17.996	FT	
THEORETICAL CABLE LENGTH:	= 32.566	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:	− 14.57	FT	
REFERENCE ELEVATION:	= 33.451	FT M.S.L.	
TEST NAME:	MW-43-28		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	09:33	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:
Transducer was off by 7.639'.

GZA

WELL ID : MW-43-28

TRANSDUCER INSTALLATION LOG

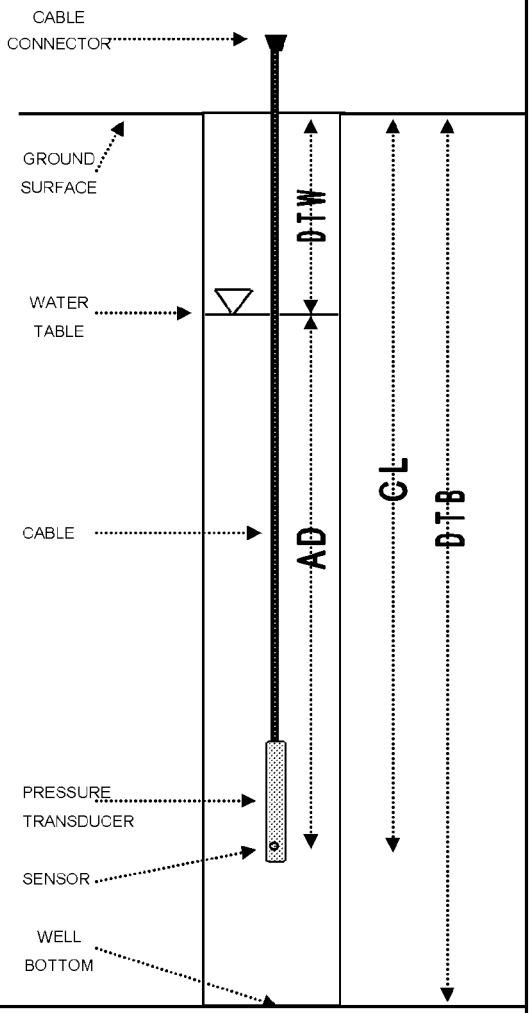
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-43-28
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	63.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	48.760	DATE	5/10/11
PSI CAPACITY	30	CASING ELEVATION (FT)	48.021		
SERIAL NUMBER	11331	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			32.77
GZA ENGINEER	S. Lee				

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:	15:25	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	15.25	FT	
ACTUAL DEPTH:	+ 36.522	FT	
THEORETICAL CABLE LENGTH:	= 51.772	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:	− 15.25	FT	
REFERENCE ELEVATION:	= 32.771	FT M.S.L.	
TEST NAME:	MW-43-28		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	15:25	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:
DTB = 28.38'.
Replaced batteries.

GZA

WELL ID : MW-43-28

TRANSDUCER INSTALLATION LOG

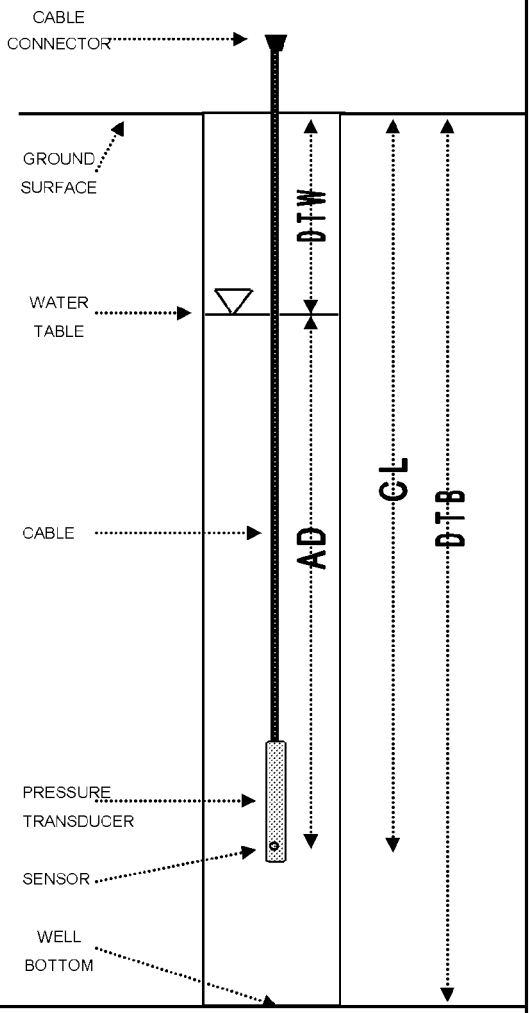
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-43-62
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	63.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	48.761	DATE	4/21/11
PSI CAPACITY	30	CASING ELEVATION (FT)	47.821		
SERIAL NUMBER	16236	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			32.54
GZA ENGINEER	S. Lee				

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:	09:49	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	15.28	FT	
ACTUAL DEPTH:	+ 37.184	FT	
THEORETICAL CABLE LENGTH:	= 52.464	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:	− 15.28	FT	
REFERENCE ELEVATION:	= 32.541	FT M.S.L.	
TEST NAME:	MW-43-62		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	09:50	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:

TRANSDUCER INSTALLATION LOG

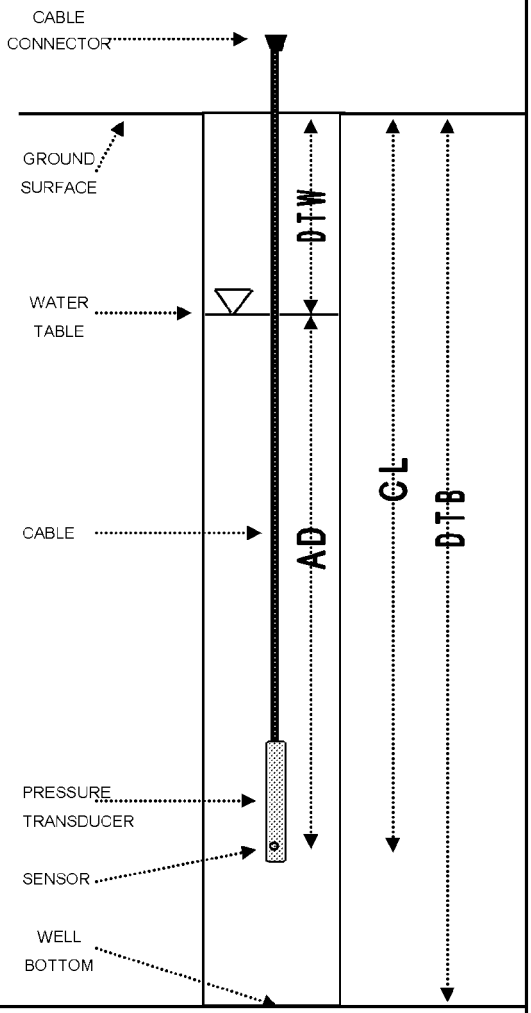
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-43-62
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	63.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	48.761	DATE	5/10/11
PSI CAPACITY	30	CASING ELEVATION (FT)	47.821		
SERIAL NUMBER	16236	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			32.17
GZA ENGINEER	S. Lee				

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:	14:30	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	15.65	FT	
ACTUAL DEPTH:	+ 36.682	FT	
THEORETICAL CABLE LENGTH:	= 52.332	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:	− 15.65	FT	
REFERENCE ELEVATION:	= 32.171	FT M.S.L.	
TEST NAME:	MW-43-62		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	14:30	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:
DTB = 62.98'.
Replaced batteries.

GZA

WELL ID : MW-43-62

TRANSDUCER INSTALLATION LOG

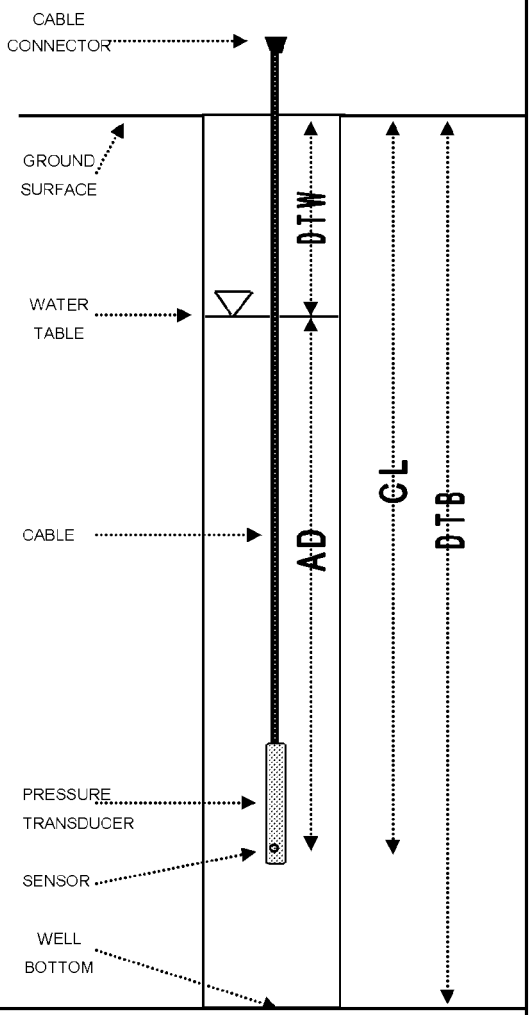
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-44-67
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	105.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	93.52	DATE	5/10/11
PSI CAPACITY	30	CASING ELEVATION (FT)	93.02		
SERIAL NUMBER	16108	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			33.66
GZA ENGINEER	S. Lee				

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:	11:44	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	59.36	FT	
ACTUAL DEPTH:	+ 33.620	FT	
THEORETICAL CABLE LENGTH:	= 92.980	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:	− 59.36	FT	
REFERENCE ELEVATION:	= 33.66	FT M.S.L.	
TEST NAME:	MW-44-67		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:44	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:
DTB = 66.50'.
Replaced batteries.

IPEC00267250

TRANSDUCER INSTALLATION LOG

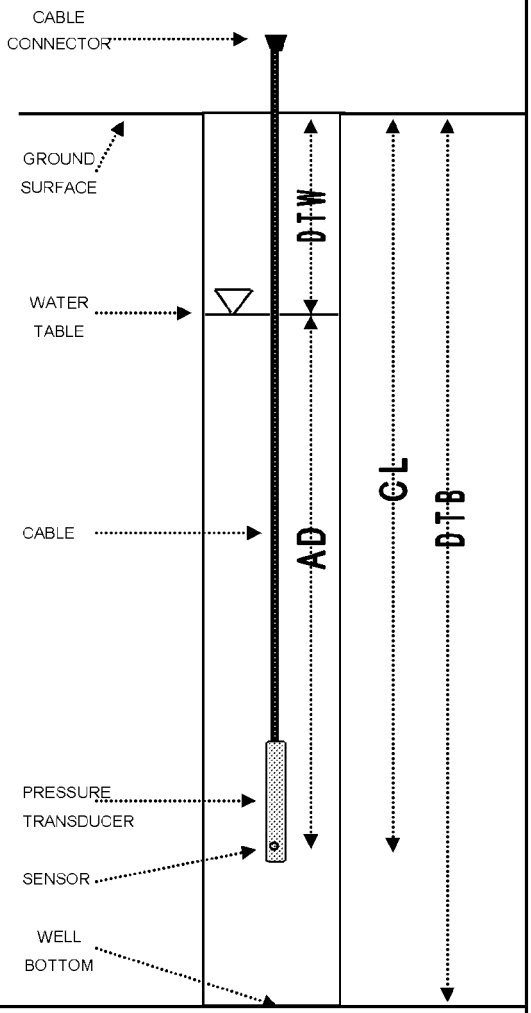
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-44-102
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	102.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	93.52	DATE	5/10/11
PSI CAPACITY	30	CASING ELEVATION (FT)	93.09		
SERIAL NUMBER	15940	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			26.48
GZA ENGINEER	S. Lee				

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:		102.00	FT
GROUND ELEVATION:		93.52	FT M.S.L.
CASING ELEVATION:		93.09	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.43	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		11:23	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		66.61	FT
ACTUAL DEPTH:	+	32.025	FT
THEORETICAL CABLE LENGTH:	=	98.635	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		93.09	FT M.S.L.
DEPTH TO WATER:	−	66.61	FT
REFERENCE ELEVATION:	=	26.48	FT M.S.L.
TEST NAME:		MW-44-102	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		11:23	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:
DTB = 102.16'.
Replaced batteries.

IPEC00267251

TRANSDUCER INSTALLATION LOG

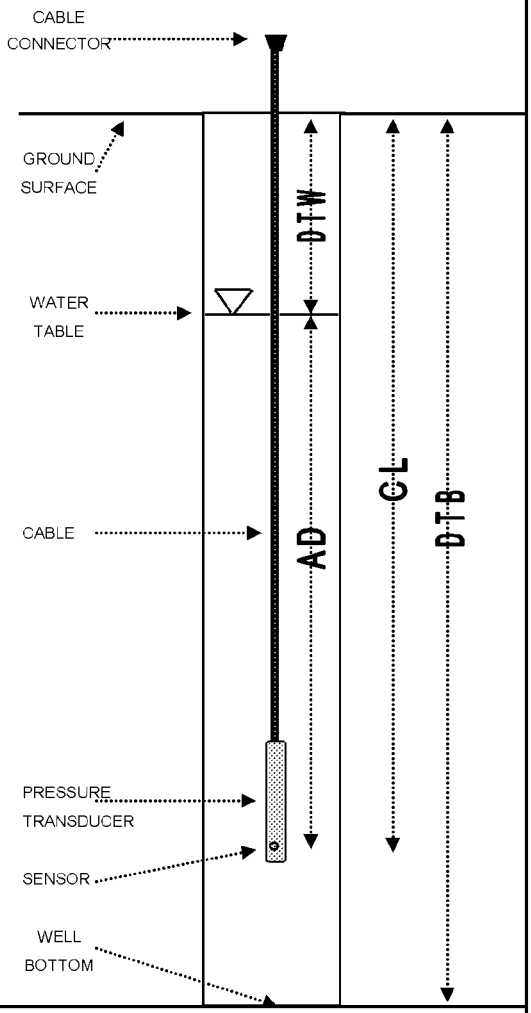
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-45-42
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	65.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	53.66	DATE	5/10/11
PSI CAPACITY	30	CASING ELEVATION (FT)	53.20		
SERIAL NUMBER	6082	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			29.83
GZA ENGINEER	S. Lee				

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:	53.66	FT M.S.L.	
CASING ELEVATION:	53.20	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.46	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	12:43	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	23.37	FT	
ACTUAL DEPTH:	+ 17.557	FT	
THEORETICAL CABLE LENGTH:	= 40.927	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	53.20	FT M.S.L.	
DEPTH TO WATER:	− 23.37	FT	
REFERENCE ELEVATION:	= 29.83	FT M.S.L.	
TEST NAME:	MW-45-42		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	12:45	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:
DTB = 41.83'.

TRANSDUCER INSTALLATION LOG

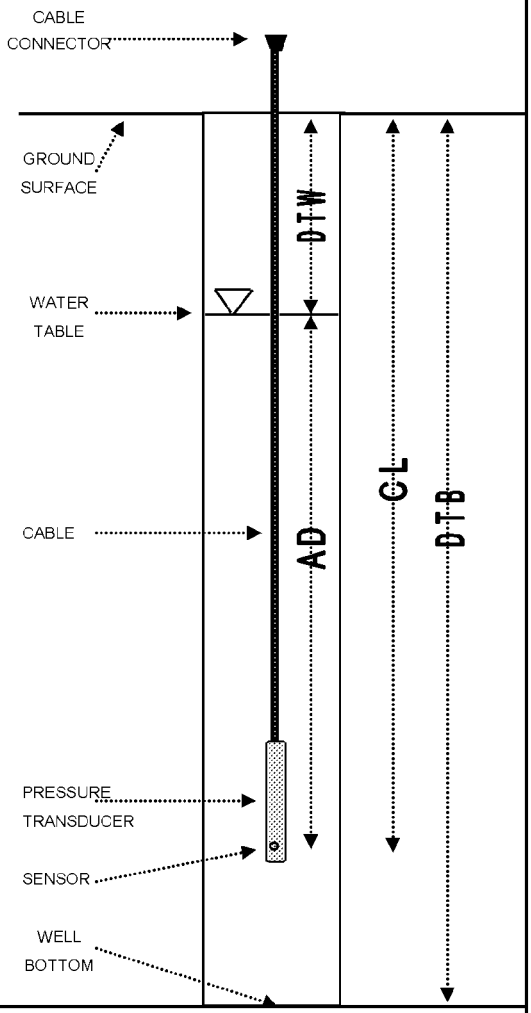
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-45-61
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	67.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	53.662	DATE	5/10/11
PSI CAPACITY	30	CASING ELEVATION (FT)	53.217		
SERIAL NUMBER	16930	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			29.34
GZA ENGINEER	S. Lee				

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:	61.00	FT	
GROUND ELEVATION:	53.662	FT M.S.L.	
CASING ELEVATION:	53.217	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.45	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	12:57	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	23.880	FT	
ACTUAL DEPTH:	+ 41.338	FT	
THEORETICAL CABLE LENGTH:	= 65.218	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	53.217	FT M.S.L.	
DEPTH TO WATER:	− 23.88	FT	
REFERENCE ELEVATION:	= 29.337	FT M.S.L.	
TEST NAME:	MW-45-61		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	13:00	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:
DTB = 61.23'.

TRANSDUCER INSTALLATION LOG

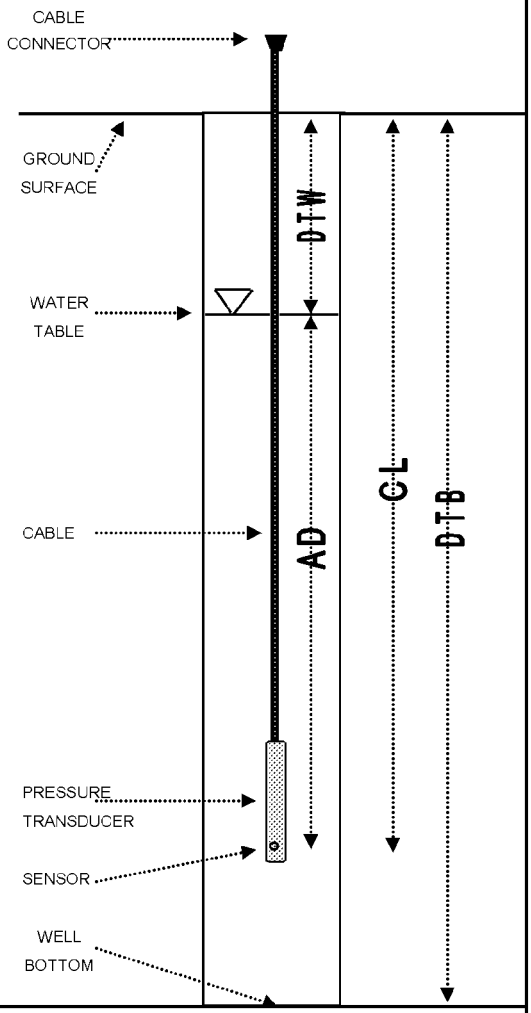
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-46
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	30.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	18.08	DATE	5/12/11
PSI CAPACITY	30	CASING ELEVATION (FT)	16.97		
SERIAL NUMBER	4424	CASING DIAMETER (INCH)	4		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			12.72
GZA ENGINEER	S. Lee				

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:	29.82	FT	
GROUND ELEVATION:	18.08	FT M.S.L.	
CASING ELEVATION:	16.97	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	-		
DISTANCE FROM CASING TO GROUND (+ OR -):	-1.11	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	11:50	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	4.25	FT	
ACTUAL DEPTH:	+ 12.71	FT	
THEORETICAL CABLE LENGTH:	= 16.96	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	16.97	FT M.S.L.	
DEPTH TO WATER:	− 4.25	FT	
REFERENCE ELEVATION:	= 12.72	FT M.S.L.	
TEST NAME:	MW-46		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:50	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:
DTB = 29.54' TOC.
Replaced batteries.

GZA

WELL ID : MW-46

TRANSDUCER INSTALLATION LOG

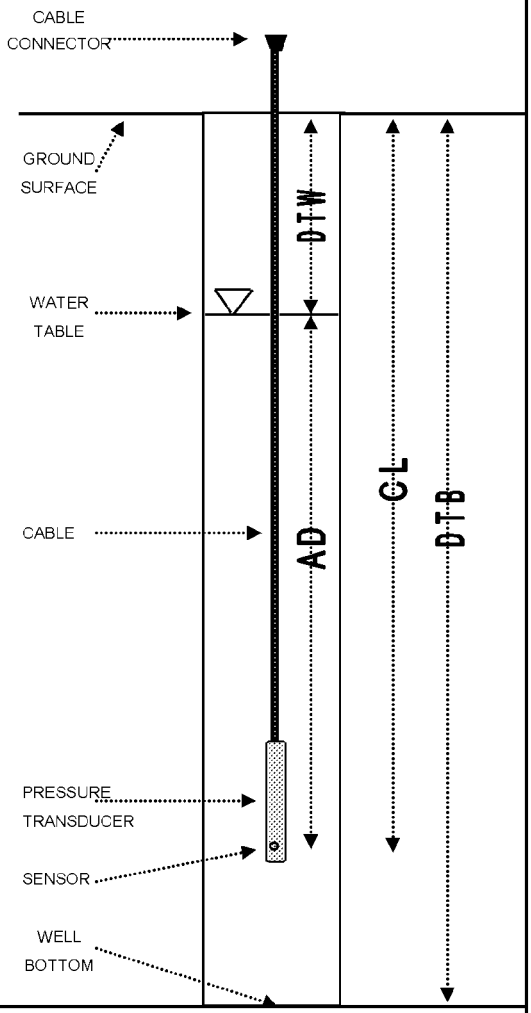
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-47-80
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	80.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	70.32	DATE	5/10/11
PSI CAPACITY	30	CASING ELEVATION (FT)	69.742		
SERIAL NUMBER	9445	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			24.83
GZA ENGINEER	S. Lee				

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:		70.32	FT M.S.L.
CASING ELEVATION:		69.742	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.58	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		08:58	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		44.91	FT
ACTUAL DEPTH:	+	6.141	FT
THEORETICAL CABLE LENGTH:	=	51.051	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		69.742	FT M.S.L.
DEPTH TO WATER:	−	44.91	FT
REFERENCE ELEVATION:	=	24.832	FT M.S.L.
TEST NAME:		MW-47-80	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		08:58	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:
DTB = 80.15'.
Replaced batteries.

GZA

WELL ID : MW-47-80

TRANSDUCER INSTALLATION LOG

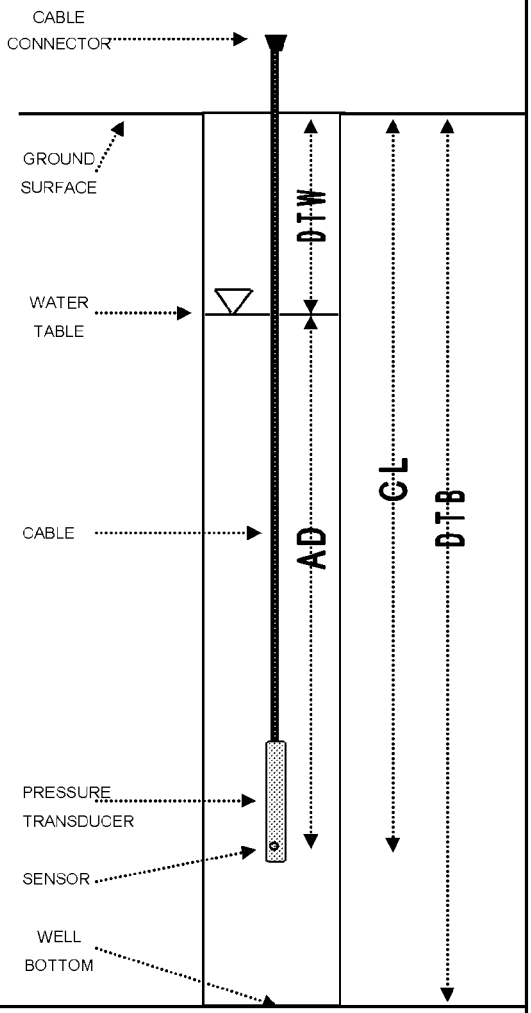
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-49-26
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	26.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.650	DATE	5/11/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.171		
SERIAL NUMBER	11948	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			2.17
GZA ENGINEER	S. Lee				

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:	26.00	FT	
GROUND ELEVATION:	14.650	FT M.S.L.	
CASING ELEVATION:	14.171	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.48	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	10:06	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	12.00	FT	
ACTUAL DEPTH:	+ 12.525	FT	
THEORETICAL CABLE LENGTH:	= 24.525	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.17	FT M.S.L.	
DEPTH TO WATER:	− 12.00	FT	
REFERENCE ELEVATION:	= 2.17	FT M.S.L.	
TEST NAME:	MW-49-26		
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:
DTB = 25.96'.
Replaced Batteries.

GZA

WELL ID : MW-49-26

TRANSDUCER INSTALLATION LOG

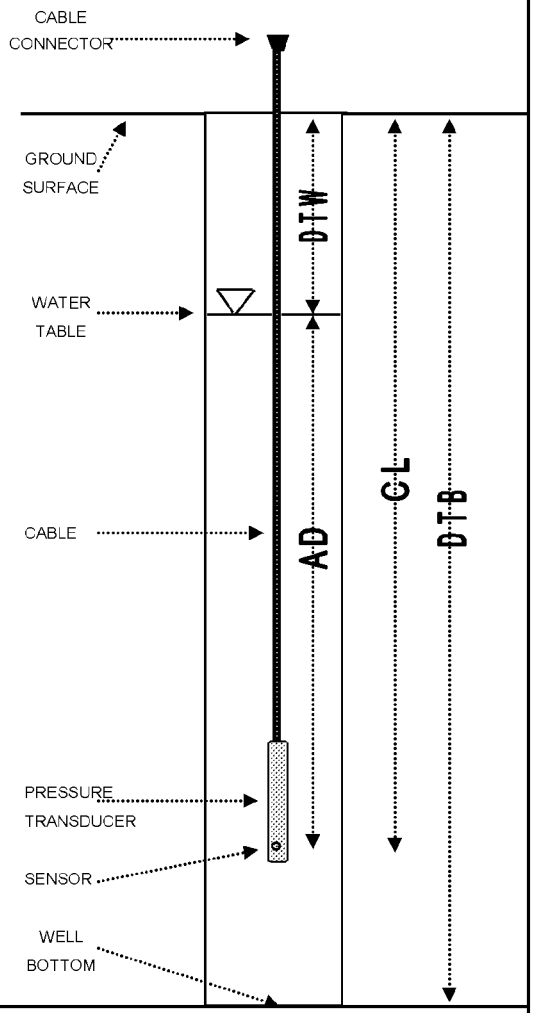
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW49-42
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	66.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.650	DATE	5/11/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.223		
SERIAL NUMBER	5395	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			2.16
GZA ENGINEER	S. Lee				

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:	66.00	FT	
GROUND ELEVATION:	14.650	FT M.S.L.	
CASING ELEVATION:	14.223	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.43	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	10:35	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	12.06	FT	
ACTUAL DEPTH:	+ 15.450	FT	
THEORETICAL CABLE LENGTH:	= 27.510	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.223	FT M.S.L.	
DEPTH TO WATER:	− 12.06	FT	
REFERENCE ELEVATION:	= 2.163	FT M.S.L.	
TEST NAME:	MW49-42		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:35	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:
DTB = 42.03'.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

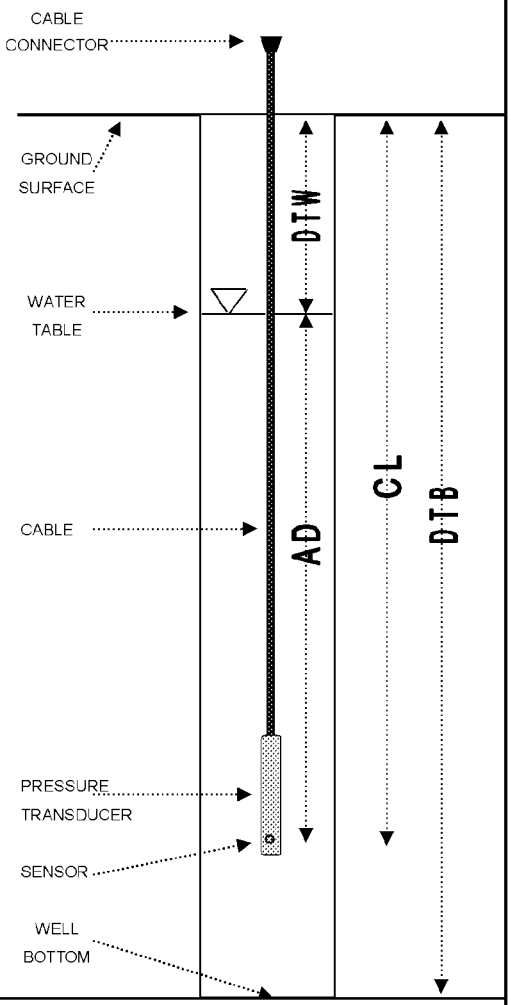
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-49-65
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	66.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.650	DATE	5/11/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.457		
SERIAL NUMBER	15847	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			2.34
GZA ENGINEER	S. Lee				

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:	65.50	FT	
GROUND ELEVATION:	14.650	FT M.S.L.	
CASING ELEVATION:	14.457	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.19	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	10:23	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	12.12	FT	
ACTUAL DEPTH:	+ 13.78	FT	
THEORETICAL CABLE LENGTH:	= 25.90	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.457	FT M.S.L.	
DEPTH TO WATER:	- 12.12	FT	
REFERENCE ELEVATION:	= 2.337	FT M.S.L.	
TEST NAME:	MW-49-65		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:23	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:
DTB = 65.56'.
Replaced batteries.

GZA

WELL ID : MW-49-65

TRANSDUCER INSTALLATION LOG

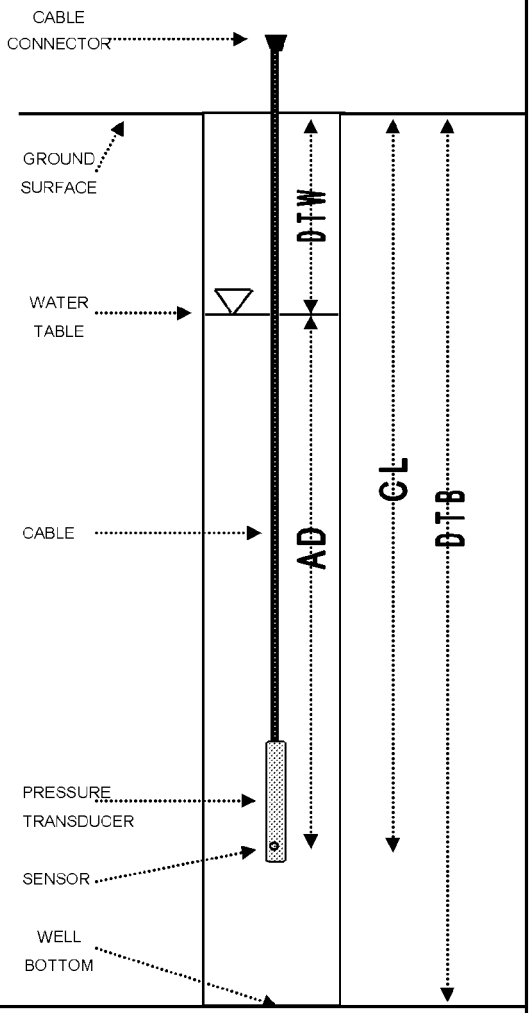
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-50-66
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	67.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.92	DATE	5/3/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.61		
SERIAL NUMBER	14459	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			4.72
GZA ENGINEER	S. Lee				

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:	65.75	FT	
GROUND ELEVATION:	14.92	FT M.S.L.	
CASING ELEVATION:	14.61	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.31	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	10:58	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	9.89	FT	
ACTUAL DEPTH:	+ 89.503	FT	
THEORETICAL CABLE LENGTH:	= 99.393	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.614	FT M.S.L.	
DEPTH TO WATER:	− 9.89	FT	
REFERENCE ELEVATION:	= 4.724	FT M.S.L.	
TEST NAME:	MW-50-66		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:59	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:

TRANSDUCER INSTALLATION LOG

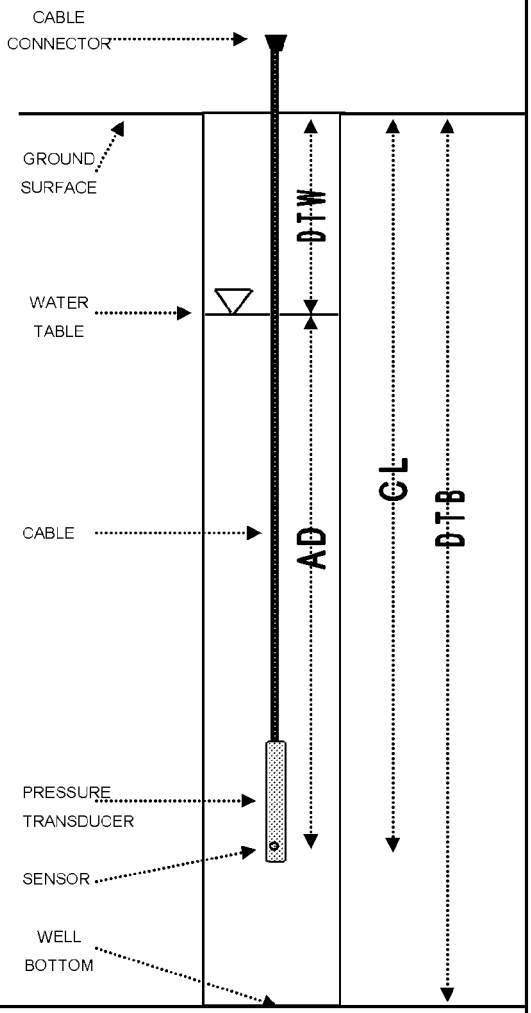
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-50-66
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	67.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.92	DATE	5/16/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.61		
SERIAL NUMBER	14459	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			5.48
GZA ENGINEER	S. Lee				

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:	65.75	FT	
GROUND ELEVATION:	14.92	FT M.S.L.	
CASING ELEVATION:	14.61	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.31	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	11:48	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	9.13	FT	
ACTUAL DEPTH:	+ 89.892	FT	
THEORETICAL CABLE LENGTH:	= 99.022	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.614	FT M.S.L.	
DEPTH TO WATER:	− 9.13	FT	
REFERENCE ELEVATION:	= 5.484	FT M.S.L.	
TEST NAME:	MW-50-66		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:48	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:
DTB = 65.74' TOC.
Replaced batteries.

GZA

WELL ID : MW-50-66

TRANSDUCER INSTALLATION LOG

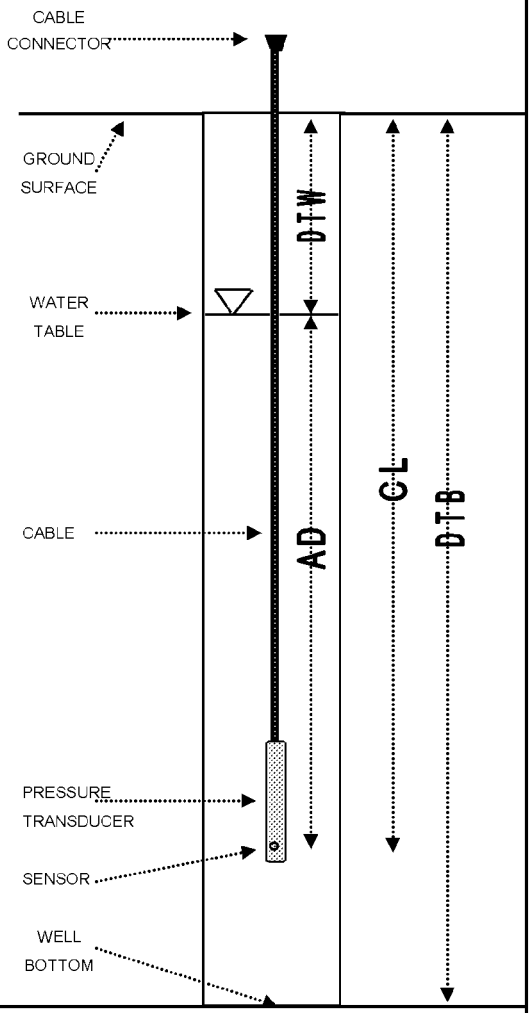
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-52-11
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	12.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	16.77	DATE	5/9/11
PSI CAPACITY	30	CASING ELEVATION (FT)	16.28		
SERIAL NUMBER	14150	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			8.13
GZA ENGINEER	S. Lee				

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:		11.00	FT
GROUND ELEVATION:		16.77	FT M.S.L.
CASING ELEVATION:		16.28	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.49	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		09:23	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		8.15	FT
ACTUAL DEPTH:	+	1.748	FT
THEORETICAL CABLE LENGTH:	=	9.90	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:	*	16.28	FT M.S.L.
DEPTH TO WATER:	−	8.15	FT
REFERENCE ELEVATION:	=	8.13	FT M.S.L.
TEST NAME:		MW-52-12	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		09:23	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:
Replaced batteries.

IPEC00267261

TRANSDUCER INSTALLATION LOG

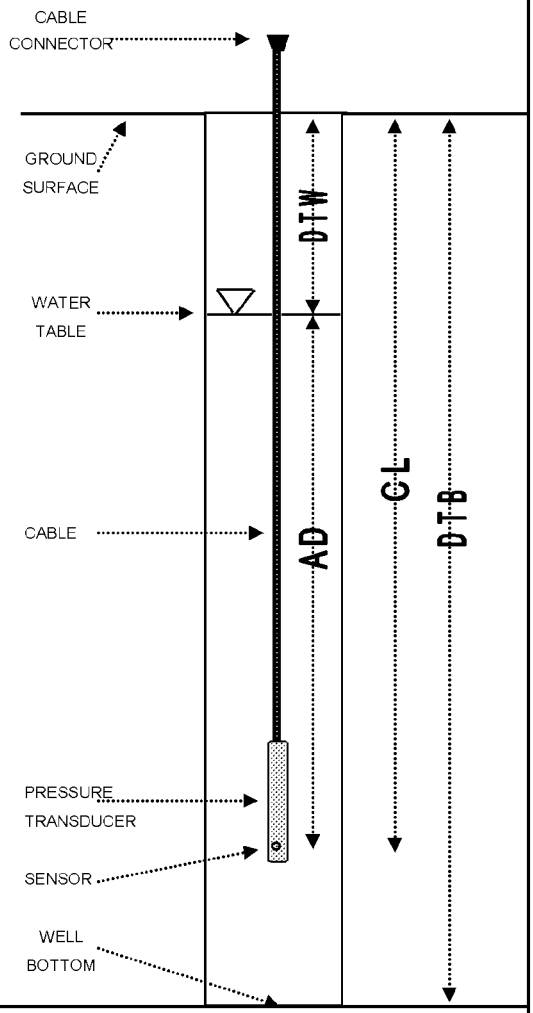
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-53-82
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	124.70	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	70.26	DATE	5/9/11
PSI CAPACITY	30	CASING ELEVATION (FT)	69.93		
SERIAL NUMBER	11897	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			11.01
GZA ENGINEER	S. Lee				

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:	82.00	FT	
GROUND ELEVATION:	70.26	FT M.S.L.	
CASING ELEVATION:	69.93	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.33	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	13:35	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	58.92	FT	
ACTUAL DEPTH: +	22.828	FT	
THEORETICAL CABLE LENGTH: =	81.748	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	69.93	FT M.S.L.	
DEPTH TO WATER: −	58.92	FT	
REFERENCE ELEVATION: =	11.01	FT M.S.L.	
TEST NAME:	MW-53-82		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	13:35	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:
DTB = 82.91'.
Replaced batteries.

GZA

WELL ID : MW-53-82

TRANSDUCER INSTALLATION LOG

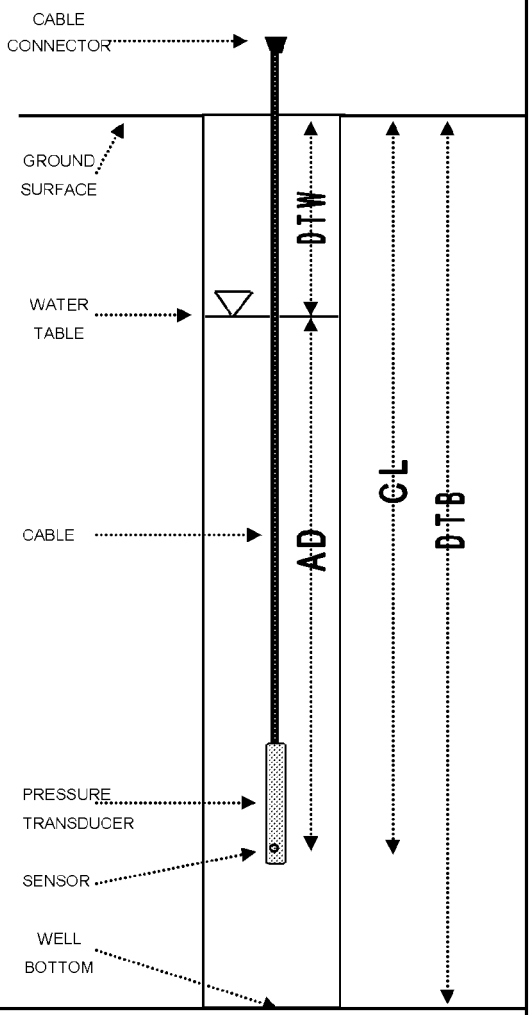
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-53-120
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	124.70	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	70.260	DATE	5/9/11
PSI CAPACITY	30	CASING ELEVATION (FT)	70.190		
SERIAL NUMBER	6097	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			10.61
GZA ENGINEER	S. Lee				

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:		120.00	FT
GROUND ELEVATION:		70.260	FT M.S.L.
CASING ELEVATION:		70.190	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.07	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		13:12	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		59.58	FT
ACTUAL DEPTH:	+	57.803	FT
THEORETICAL CABLE LENGTH:	=	117.383	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		70.190	FT M.S.L.
DEPTH TO WATER:	−	59.58	FT
REFERENCE ELEVATION:	=	10.61	FT M.S.L.
TEST NAME:		MW53-120	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		13:12	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:
DTB = 119.25' TOC/
Replaced batteries.

TRANSDUCER INSTALLATION LOG

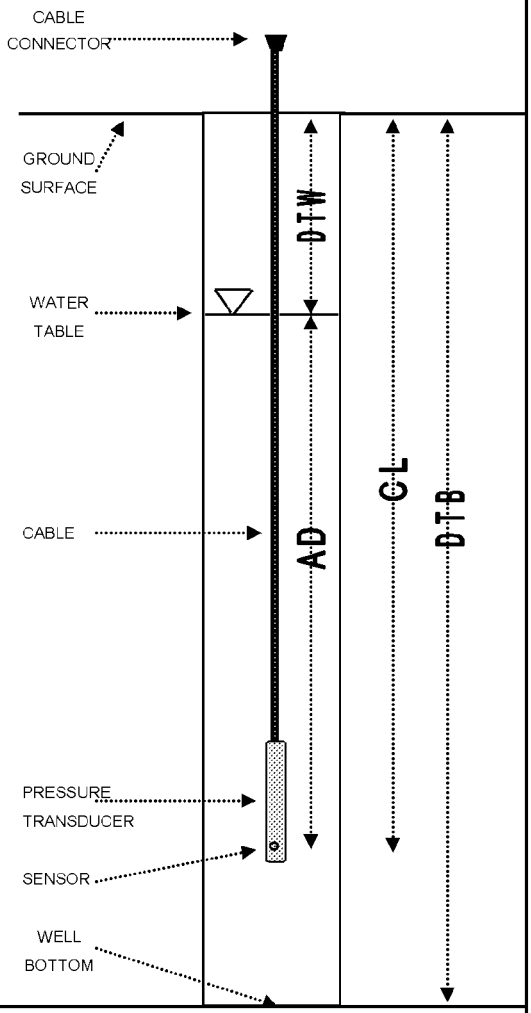
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-56-53
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	88.50	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	70.26	DATE	5/10/11
PSI CAPACITY	30	CASING ELEVATION (FT)	69.32		
SERIAL NUMBER	16499	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			24.16
GZA ENGINEER	S. Lee				

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:	53.00	FT	
GROUND ELEVATION:	70.26	FT M.S.L.	
CASING ELEVATION:	69.32	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.94	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	10:19	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	45.16	FT	
ACTUAL DEPTH:	+ -18.867	FT	
THEORETICAL CABLE LENGTH:	= 26.293	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	69.32	FT M.S.L.	
DEPTH TO WATER:	− 45.16	FT	
REFERENCE ELEVATION:	= 24.16	FT M.S.L.	
TEST NAME:	MW-56-53		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:20	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:
DTB = 53.48; unable to connect prior to replacing batteries.
Replaced batteries.

GZA

WELL ID : MW-56-53

TRANSDUCER INSTALLATION LOG

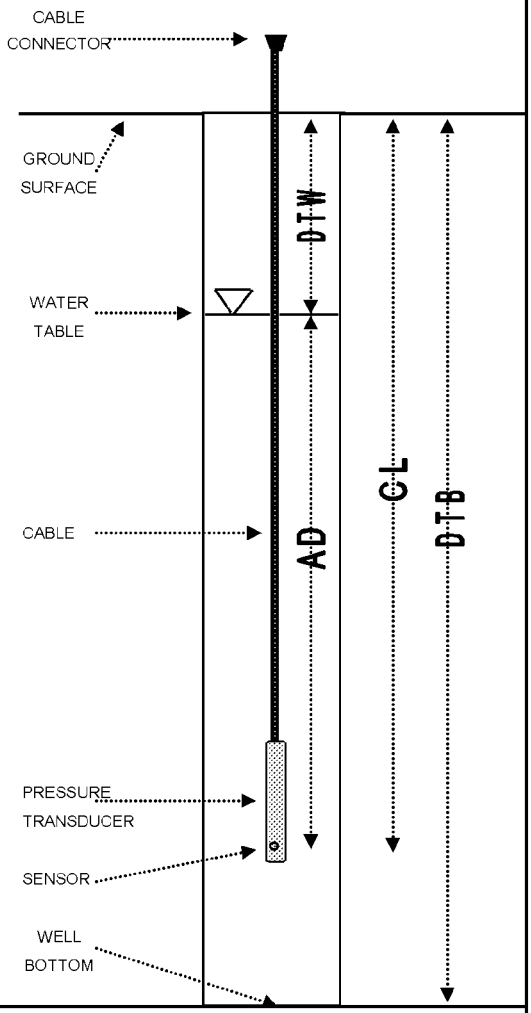
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-56-83
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	88.50	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	70.258	DATE	4/27/11
PSI CAPACITY	30	CASING ELEVATION (FT)	69.207		
SERIAL NUMBER	16394	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			25.78
GZA ENGINEER	S. Lee				

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:	83.00	FT	
GROUND ELEVATION:	70.258	FT M.S.L.	
CASING ELEVATION:	69.207	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-1.05	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	09:40	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	43.43	FT	
ACTUAL DEPTH:	+ 40.079	FT	
THEORETICAL CABLE LENGTH:	= 83.509	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	69.207	FT M.S.L.	
DEPTH TO WATER:	− 43.43	FT	
REFERENCE ELEVATION:	= 25.777	FT M.S.L.	
TEST NAME:	MW-56-83		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	09:43	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:
Transducer was off by -5.158' before resetting.

TRANSDUCER INSTALLATION LOG

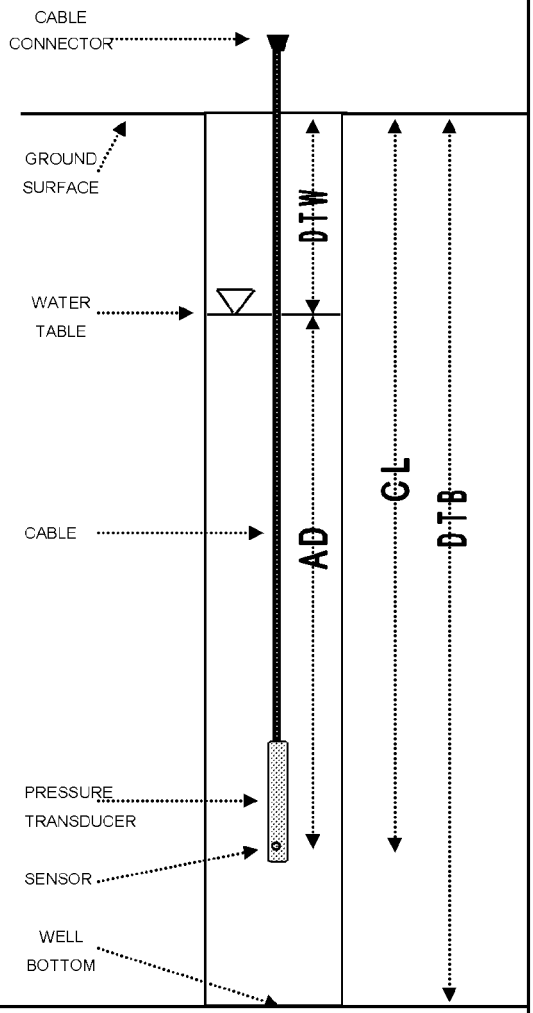
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-56-83
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	88.50	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	70.258	DATE	5/10/11
PSI CAPACITY	30	CASING ELEVATION (FT)	69.207		
SERIAL NUMBER	16394	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			23.35
GZA ENGINEER	S. Lee				

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:	83.00	FT	
GROUND ELEVATION:	70.258	FT M.S.L.	
CASING ELEVATION:	69.207	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-1.05	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	09:44	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	45.86	FT	
ACTUAL DEPTH:	+ 37.667	FT	
THEORETICAL CABLE LENGTH:	= 83.527	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	69.207	FT M.S.L.	
DEPTH TO WATER:	− 45.86	FT	
REFERENCE ELEVATION:	= 23.347	FT M.S.L.	
TEST NAME:	MW-56-83		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:04	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:
DTB = 82.93'.
Replaced batteries.

IPEC00267266

TRANSDUCER INSTALLATION LOG

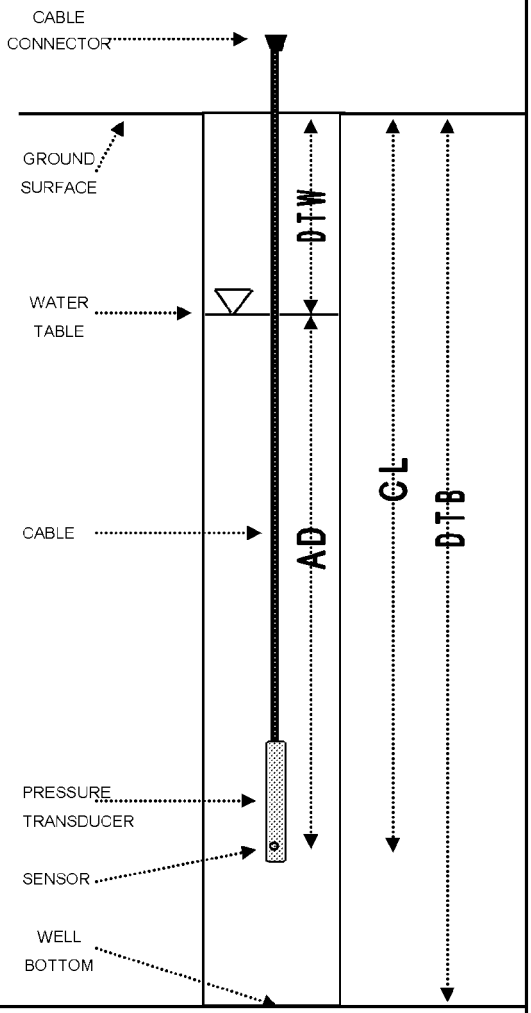
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-57-11
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	46.50	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.98	DATE	5/16/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.73		
SERIAL NUMBER	16389	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			10.33
GZA ENGINEER	S. Lee				

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:	11.00	FT	
GROUND ELEVATION:	14.98	FT M.S.L.	
CASING ELEVATION:	14.73	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.25	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	10:11	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	4.40	FT	
ACTUAL DEPTH:	+ 39.946	FT	
THEORETICAL CABLE LENGTH:	= 44.346	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.73	FT M.S.L.	
DEPTH TO WATER:	− 4.40	FT	
REFERENCE ELEVATION:	= 10.33	FT M.S.L.	
TEST NAME:	MW-57-11		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:11	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:
DTB = 11.06' TOC.
Replaced batteries.

GZA

WELL ID : MW-57-11

TRANSDUCER INSTALLATION LOG

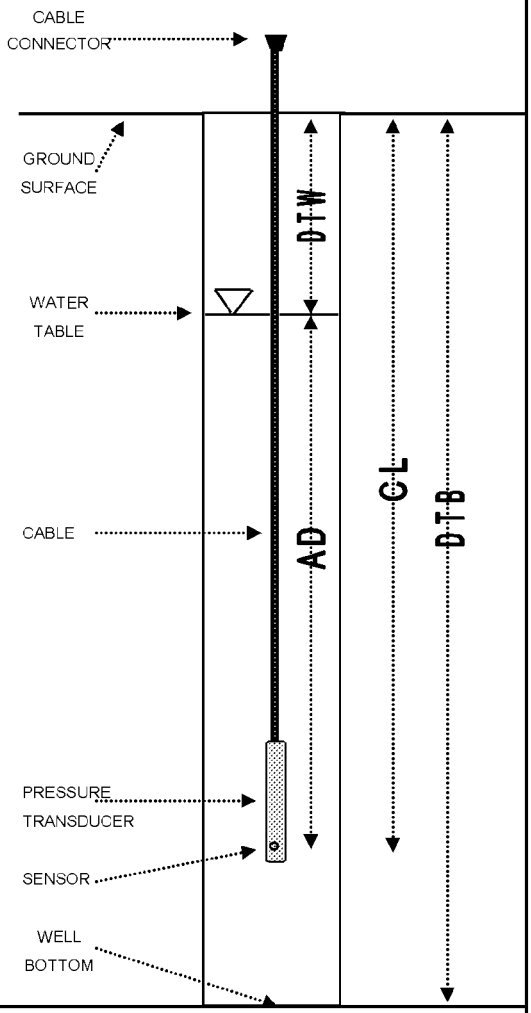
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-58-26
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	72.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.57	DATE	5/12/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.23		
SERIAL NUMBER	3114	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			7.17
GZA ENGINEER	S. Lee				

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:		26.00	FT
GROUND ELEVATION:		14.57	FT M.S.L.
CASING ELEVATION:		14.23	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.34	FT
		--	FT
TIME OF MEASUREMENT:		13:11	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		7.06	FT
ACTUAL DEPTH:	+	17.937	FT
THEORETICAL CABLE LENGTH:	=	24.997	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		14.23	FT M.S.L.
DEPTH TO WATER:	−	7.06	FT
REFERENCE ELEVATION:	=	7.17	FT M.S.L.
TEST NAME:		MW-58-26	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		13:11	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:
DTB = 25.93'.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

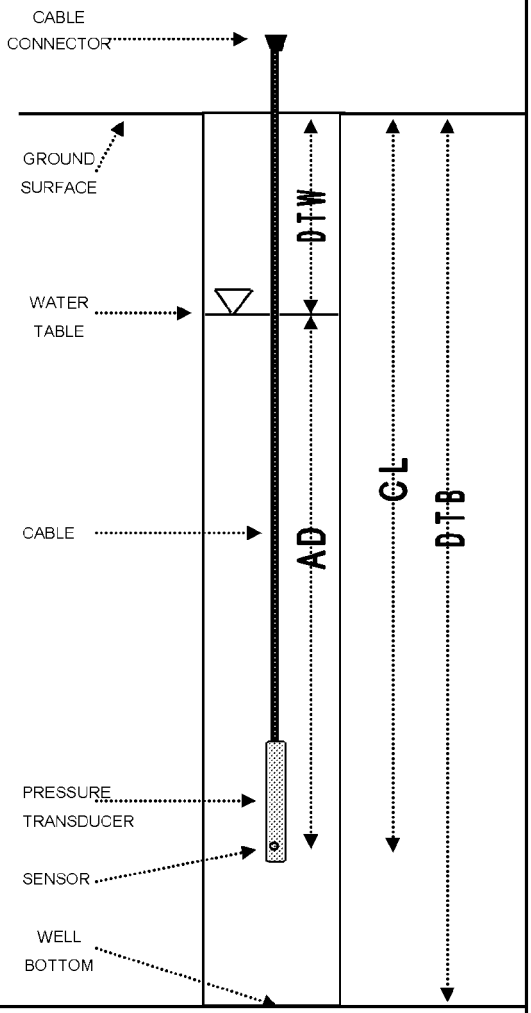
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-58-65
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	72.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.57	DATE	5/12/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.25		
SERIAL NUMBER	5619	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			6.96
GZA ENGINEER	S. Lee				

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:	65.00	FT	
GROUND ELEVATION:	14.57	FT M.S.L.	
CASING ELEVATION:	14.25	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.32	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	13:38	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	7.29	FT	
ACTUAL DEPTH:	+ 6.966	FT	
THEORETICAL CABLE LENGTH:	= 14.256	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.25	FT M.S.L.	
DEPTH TO WATER:	− 7.29	FT	
REFERENCE ELEVATION:	= 6.96	FT M.S.L.	
TEST NAME:	MW-58-65		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	13:38	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:
DTB = 64.67'.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

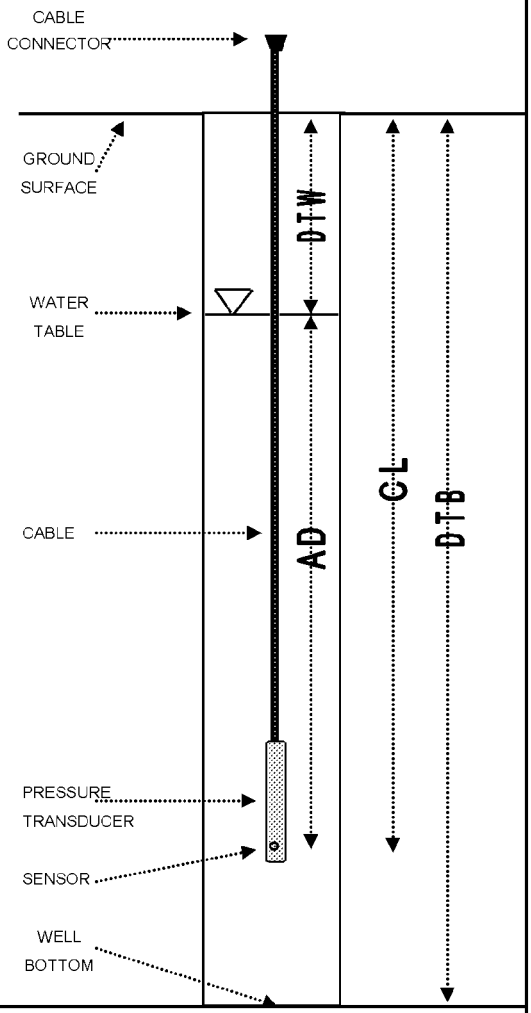
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-62-18
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	38.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.69	DATE	4/13/11
PSI CAPACITY	30	CASING ELEVATION (FT)	12.81		
SERIAL NUMBER	4859	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION			2.90
GZA ENGINEER	S. Lee				

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:		18.00	FT
GROUND ELEVATION:		14.69	FT M.S.L.
CASING ELEVATION:		12.81	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-1.88	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:			HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		9.91	FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	9.910	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:	*	12.81	FT M.S.L.
DEPTH TO WATER:	−	9.91	FT
REFERENCE ELEVATION:	=	2.90	FT M.S.L.
TEST NAME:		MW-62-18	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		09:58	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:

TRANSDUCER INSTALLATION LOG

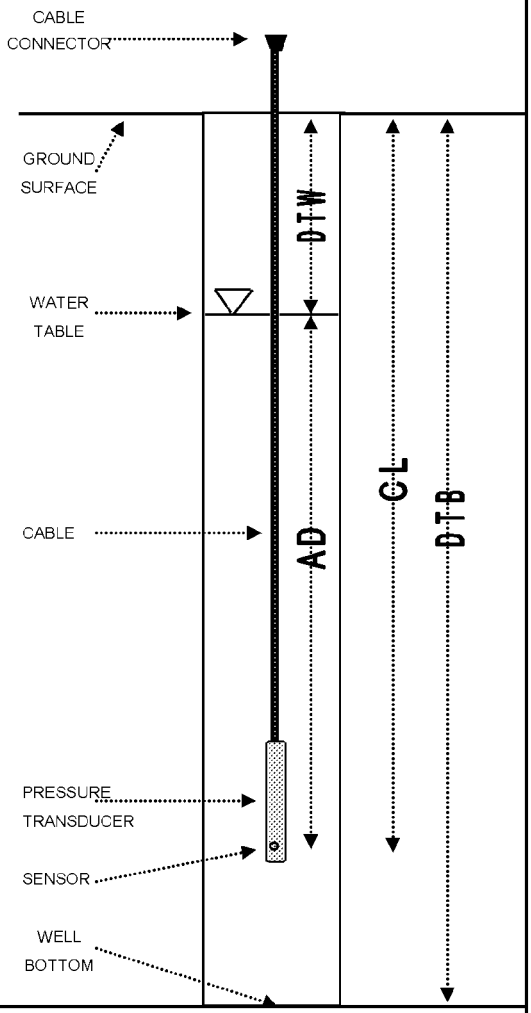
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-62-18
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	38.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.69	DATE	5/11/11
PSI CAPACITY	30	CASING ELEVATION (FT)	12.81		
SERIAL NUMBER	4859	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION			0.88
GZA ENGINEER	S. Lee				

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:	18.00	FT	
GROUND ELEVATION:	14.69	FT M.S.L.	
CASING ELEVATION:	12.81	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-1.88	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	14:18	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	11.93	FT	
ACTUAL DEPTH:	+ 4.511	FT	
THEORETICAL CABLE LENGTH:	= 16.441	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	* 12.81	FT M.S.L.	
DEPTH TO WATER:	− 11.93	FT	
REFERENCE ELEVATION:	= 0.88	FT M.S.L.	
TEST NAME:	MW-62-18		
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:
DTB = 17.3' TOC.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

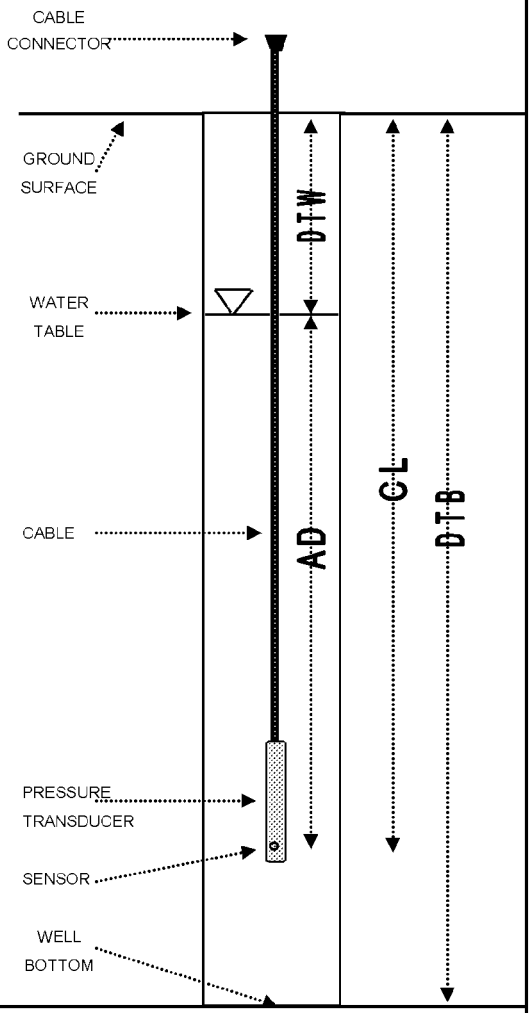
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-62-37
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	38.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.69	DATE	5/11/11
PSI CAPACITY	30	CASING ELEVATION (FT)	12.81		
SERIAL NUMBER	5441	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION *			1.44
GZA ENGINEER	S. Lee				

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:	38.00	FT	
GROUND ELEVATION:	14.69	FT M.S.L.	
CASING ELEVATION:	12.81	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-1.88	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	13:54	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	11.37	FT	
ACTUAL DEPTH:	+ 11.259	FT	
THEORETICAL CABLE LENGTH:	= 22.629	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	12.81	FT M.S.L.	
DEPTH TO WATER:	− 11.37	FT	
REFERENCE ELEVATION:	= 1.44	FT M.S.L.	
TEST NAME:	MW-62-37		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	13:54	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:
DTB = 36.02'.
Replaced batteries.

GZA

WELL ID : MW-62-37

TRANSDUCER INSTALLATION LOG

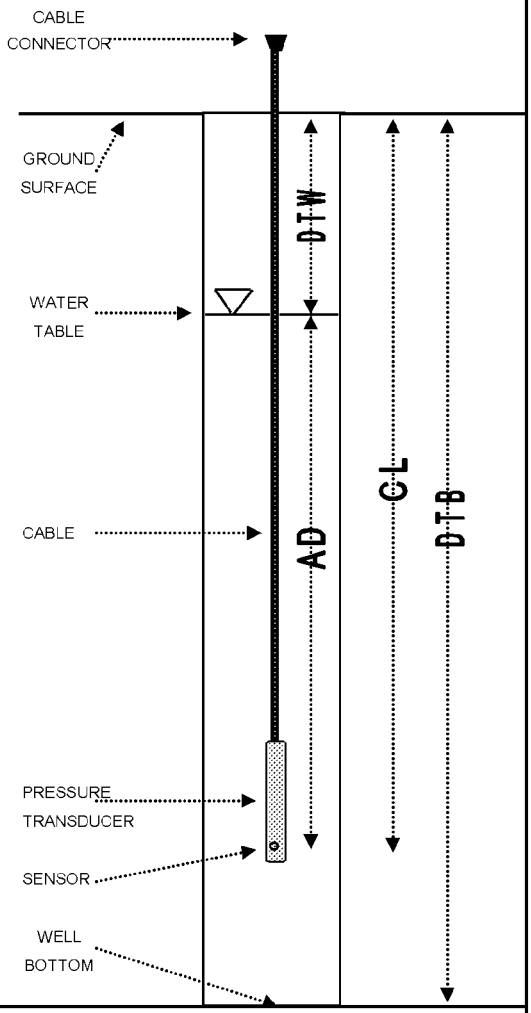
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-63-18
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	35.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.18	DATE	5/12/11
PSI CAPACITY	30	CASING ELEVATION (FT)	13.06		
SERIAL NUMBER	16104	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION			2.68
GZA ENGINEER	S. Lee				

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:		18.00	FT
GROUND ELEVATION:		14.18	FT M.S.L.
CASING ELEVATION:		13.06	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-1.12	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		10:03	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		10.38	FT
ACTUAL DEPTH:	+	6.816	FT
THEORETICAL CABLE LENGTH:	=	17.196	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:	*	13.06	FT M.S.L.
DEPTH TO WATER:	−	10.38	FT
REFERENCE ELEVATION:	=	2.68	FT M.S.L.
TEST NAME:		MW-63-18	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		10:03	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:
DTB = 17.50' TOC.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

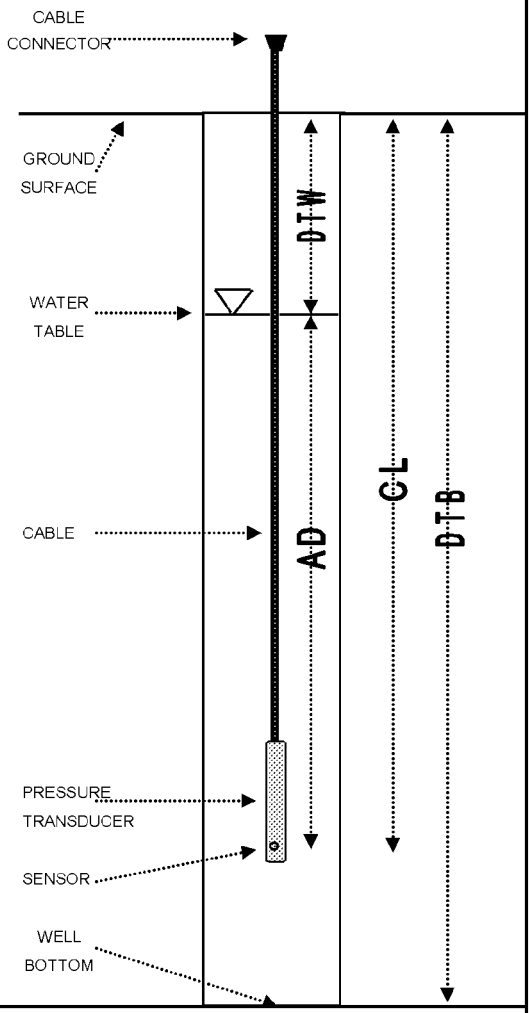
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-63-35
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	35.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.18	DATE	5/12/11
PSI CAPACITY	30	CASING ELEVATION (FT)	13.06		
SERIAL NUMBER	5359	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION			2.62
GZA ENGINEER	S. Lee				

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:	34.00	FT	
GROUND ELEVATION:	14.18	FT M.S.L.	
CASING ELEVATION:	13.06	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-1.12	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	10:19	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	10.44	FT	
ACTUAL DEPTH:	+ 14.226	FT	
THEORETICAL CABLE LENGTH:	= 24.666	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	13.06	FT M.S.L.	
DEPTH TO WATER:	− 10.44	FT	
REFERENCE ELEVATION:	= 2.62	FT M.S.L.	
TEST NAME:	MW-63-34		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:19	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:
DTB = 34.05' TOC.

GZA

WELL ID : MW-63-35

TRANSDUCER INSTALLATION LOG

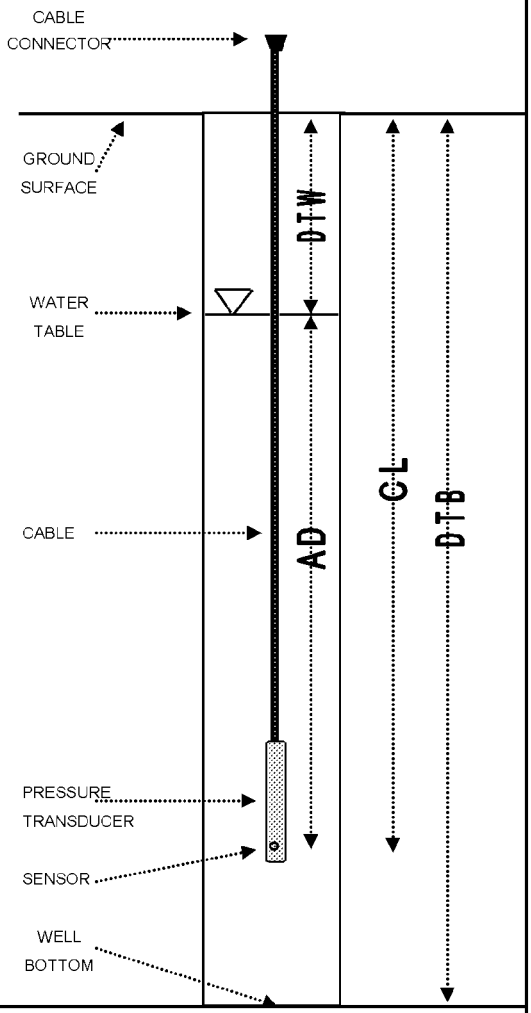
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-66-21
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	37.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.122	DATE	5/11/11
PSI CAPACITY	30	CASING ELEVATION (FT)	13.407		
SERIAL NUMBER	15849	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			1.52
GZA ENGINEER	S. Lee				

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:	12:07	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	11.89	FT	
ACTUAL DEPTH:	+ 8.673	FT	
THEORETICAL CABLE LENGTH:	= 20.56	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:	− 11.89	FT	
REFERENCE ELEVATION:	= 1.517	FT M.S.L.	
TEST NAME:	MW-66-21		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	12:07	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:
DTB = 20.85'.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

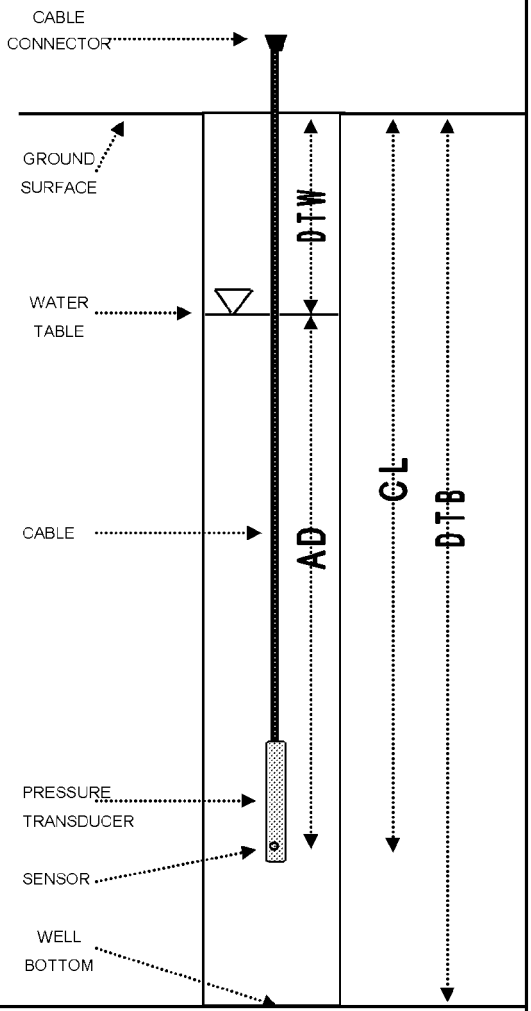
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-66-36
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	37.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.122	DATE	5/11/11
PSI CAPACITY	30	CASING ELEVATION (FT)	13.364		
SERIAL NUMBER	11840	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			1.72
GZA ENGINEER	S. Lee				

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:	36.00	FT	
GROUND ELEVATION:	14.122	FT M.S.L.	
CASING ELEVATION:	13.364	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.76	FT	
MEASURED CABLE LENGTH	--	FT	
TIME OF MEASUREMENT:	11:35	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	11.64	FT	
ACTUAL DEPTH:	+ 12.733	FT	
THEORETICAL CABLE LENGTH:	= 24.37	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	13.364	FT M.S.L.	
DEPTH TO WATER:	− 11.64	FT	
REFERENCE ELEVATION:	= 1.724	FT M.S.L.	
TEST NAME:	MW-66-36		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:35	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:
DTB = 36.24'.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

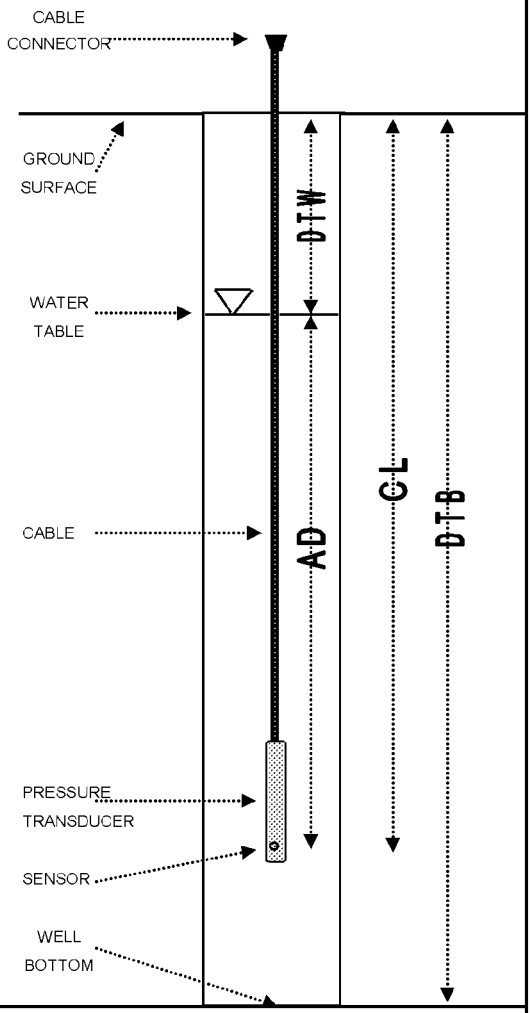
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-107
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	37.90	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	140.061	DATE	5/2/11
PSI CAPACITY	30	CASING ELEVATION (FT)	142.757		
SERIAL NUMBER	5746	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			120.78
GZA ENGINEER	S. Lee				

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:		37.90	FT
GROUND ELEVATION:		140.061	FT M.S.L.
CASING ELEVATION:		142.757	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		2.696	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		08:07	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		21.98	FT
ACTUAL DEPTH:	+	-6.703	FT
THEORETICAL CABLE LENGTH:	=	15.277	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		142.757	FT M.S.L.
DEPTH TO WATER:	−	21.98	FT
REFERENCE ELEVATION:	=	120.777	FT M.S.L.
TEST NAME:		MW-107	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		08:14	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:
Transducer off by +26.549' actual depth was -6.703 after resetting transducer.
Note: rechecked calculations and still same result; bad transducer?

GZA

WELL ID : MW-107

TRANSDUCER INSTALLATION LOG

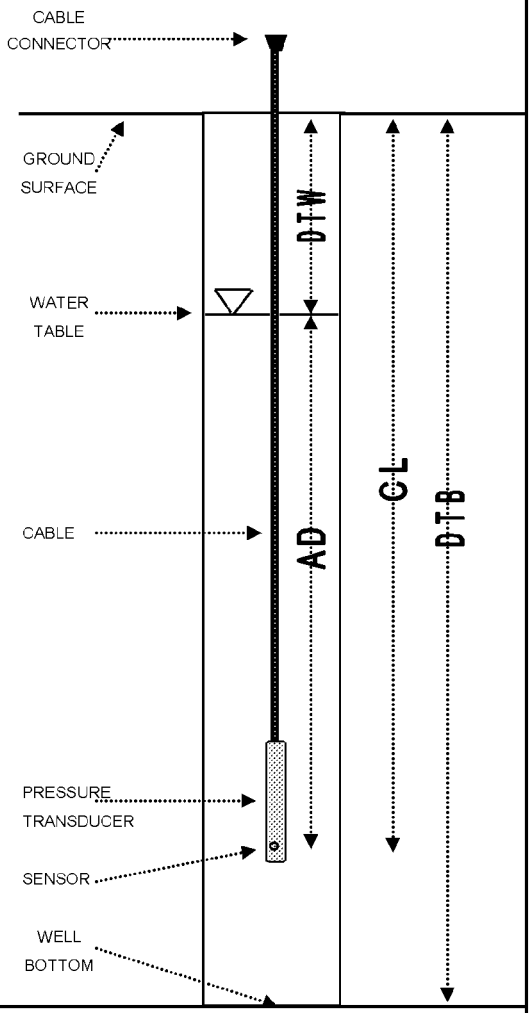
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-107
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	37.90	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	140.061	DATE	5/17/11
PSI CAPACITY	30	CASING ELEVATION (FT)	142.757		
SERIAL NUMBER	5746	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			120.82
GZA ENGINEER	S. Lee				

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:	37.90	FT	
GROUND ELEVATION:	140.061	FT M.S.L.	
CASING ELEVATION:	142.757	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	above		
DISTANCE FROM CASING TO GROUND (+ OR -):	2.696	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	13:43	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	21.94	FT	
ACTUAL DEPTH:	+ -6.700	FT	
THEORETICAL CABLE LENGTH:	= 15.240	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	142.757	FT M.S.L.	
DEPTH TO WATER:	− 21.94	FT	
REFERENCE ELEVATION:	= 120.817	FT M.S.L.	
TEST NAME:	MW-107		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	13:43	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:
DTB = 38.29'; TOC.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

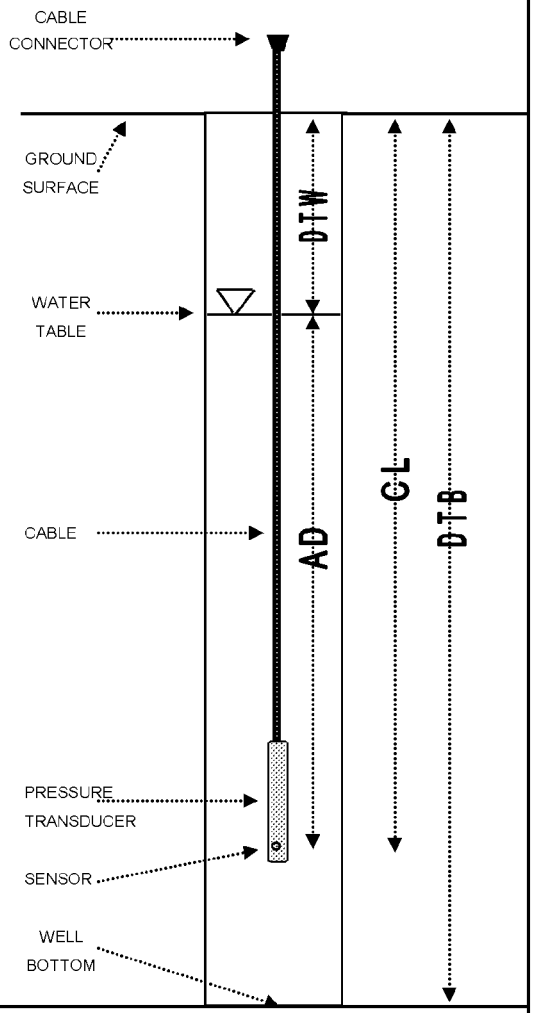
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-108
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	11.90	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.48	DATE	5/12/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.23		
SERIAL NUMBER	20738	CASING DIAMETER (INCH)	4		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			9.44
GZA ENGINEER	S. Lee				

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:		11.60	FT
GROUND ELEVATION:		14.48	FT M.S.L.
CASING ELEVATION:		14.23	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.25	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:			HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		4.79	FT
ACTUAL DEPTH:	+	6.390	FT
THEORETICAL CABLE LENGTH:	=	11.18	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		14.23	FT M.S.L.
DEPTH TO WATER:	−	4.79	FT
REFERENCE ELEVATION:	=	9.44	FT M.S.L.
TEST NAME:		MW-108	
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:
DTB = 11.36'.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

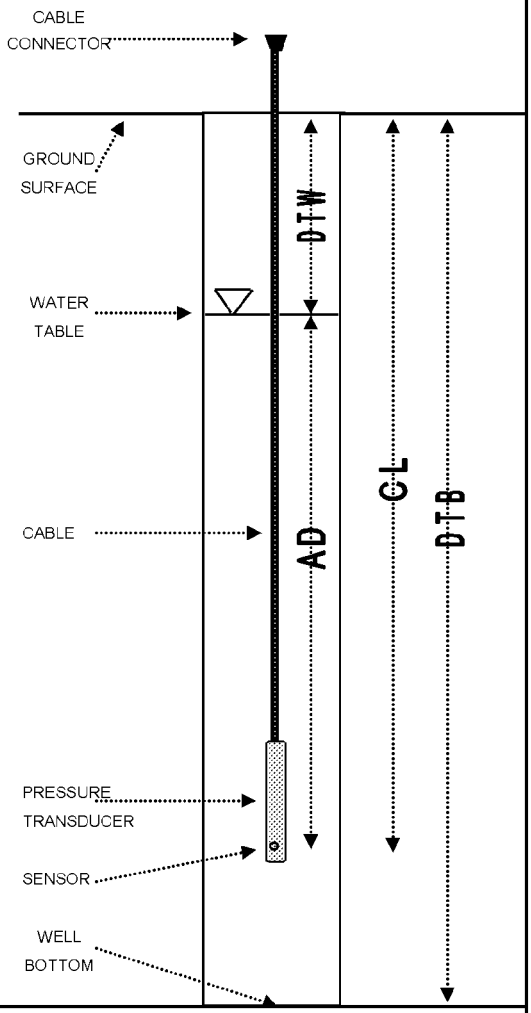
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	OUT-1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	8.20	DATE	5/13/11
PSI CAPACITY	30	CASING ELEVATION (FT)	11.89		
SERIAL NUMBER	16044	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			5.45
GZA ENGINEER	S. Lee				

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:		09:08	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		6.44	FT
ACTUAL DEPTH:	+	49.557	FT
THEORETICAL CABLE LENGTH:	=	55.997	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:	−	6.440	FT
REFERENCE ELEVATION:	=	5.451	FT M.S.L.
TEST NAME:		OUT-1	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		09:08	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:
Replaced batteries.
Little organic build up on transducer.

TRANSDUCER INSTALLATION LOG

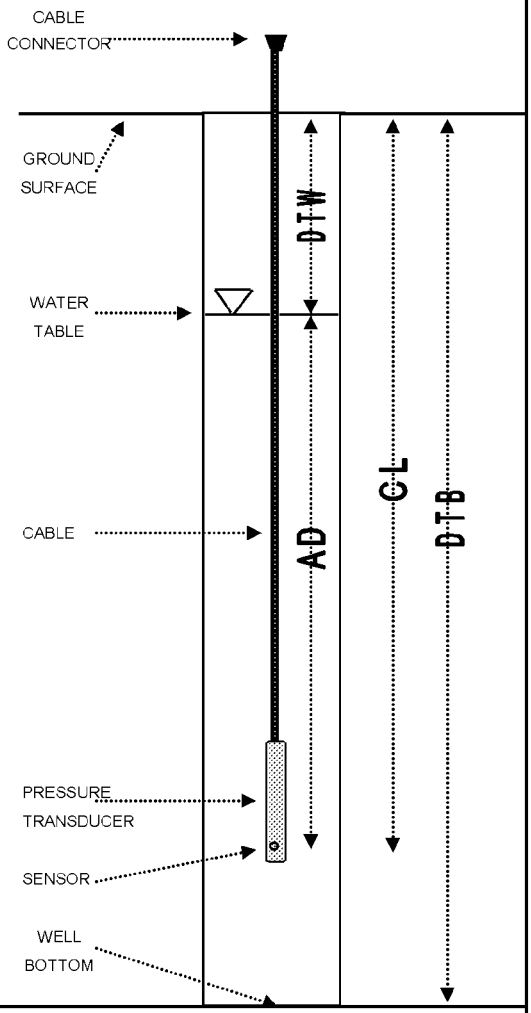
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U1CSS
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	NA	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.088	DATE	5/4/11
PSI CAPACITY	30	CASING ELEVATION (FT)	20.073		
SERIAL NUMBER	13911	CASING DIAMETER (INCH)	4		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			18.63
GZA ENGINEER	S. Lee				

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:		15.088	FT M.S.L.
CASING ELEVATION:		20.073	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		4.985	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		11:48	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		1.44	FT
ACTUAL DEPTH:	+	12.735	FT
THEORETICAL CABLE LENGTH:	=	14.175	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		20.073	FT M.S.L.
DEPTH TO WATER:	−	1.44	FT
REFERENCE ELEVATION:	=	18.633	FT M.S.L.
TEST NAME:		U1CSS	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		11:56	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:

TRANSDUCER INSTALLATION LOG

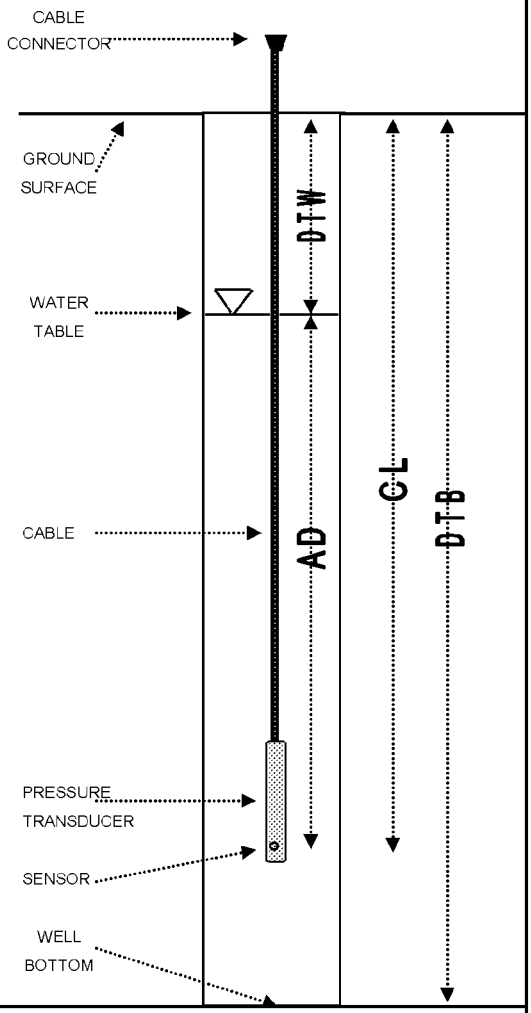
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U1CSS
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	NA	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.088	DATE	5/16/11
PSI CAPACITY	30	CASING ELEVATION (FT)	20.073		
SERIAL NUMBER	13911	CASING DIAMETER (INCH)	4		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			14.37
GZA ENGINEER	S. Lee				

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:	15.088	FT M.S.L.	
CASING ELEVATION:	20.073	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	above		
DISTANCE FROM CASING TO GROUND (+ OR -):	4.985	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	09:35	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	5.70	FT	
ACTUAL DEPTH:	+ 8.481	FT	
THEORETICAL CABLE LENGTH:	= 14.181	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	20.073	FT M.S.L.	
DEPTH TO WATER:	- 5.70	FT	
REFERENCE ELEVATION:	= 14.373	FT M.S.L.	
TEST NAME:	U1CSS		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	09:35	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:
DTB = 15.05'.
Replaced batteries.

GZA

WELL ID : U1CSS

TRANSDUCER INSTALLATION LOG

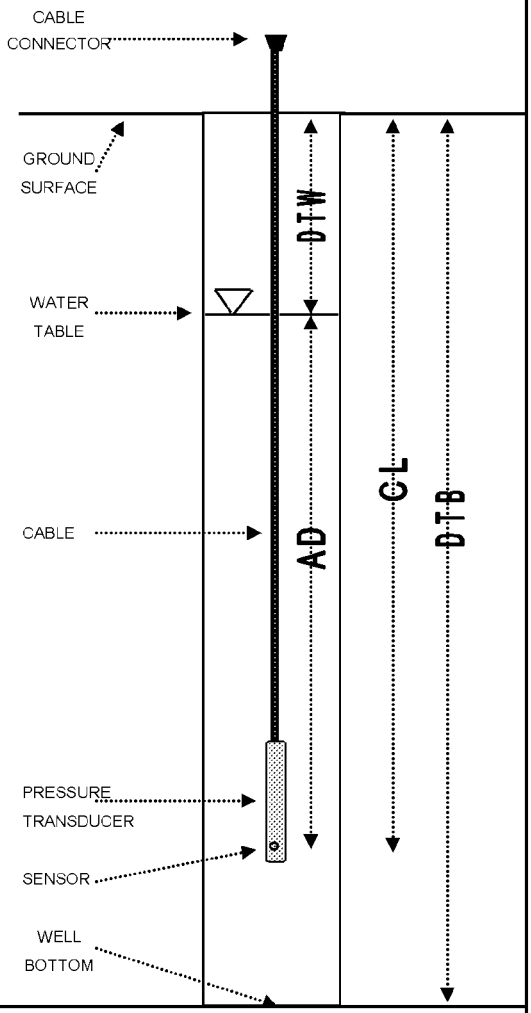
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U3-C1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	NA	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.003	DATE	5/12/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.060		
SERIAL NUMBER	5548	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			3.62
GZA ENGINEER	S. Lee				

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:	10:55	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	14.44	FT	
ACTUAL DEPTH:	+ 14.931	FT	
THEORETICAL CABLE LENGTH:	= 29.371	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:	− 14.44	FT	
REFERENCE ELEVATION:	= 3.620	FT M.S.L.	
TEST NAME:	U3-C1		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:55	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:
DTB =
Replaced batteries.
Some organic build up on transducer.

TRANSDUCER INSTALLATION LOG

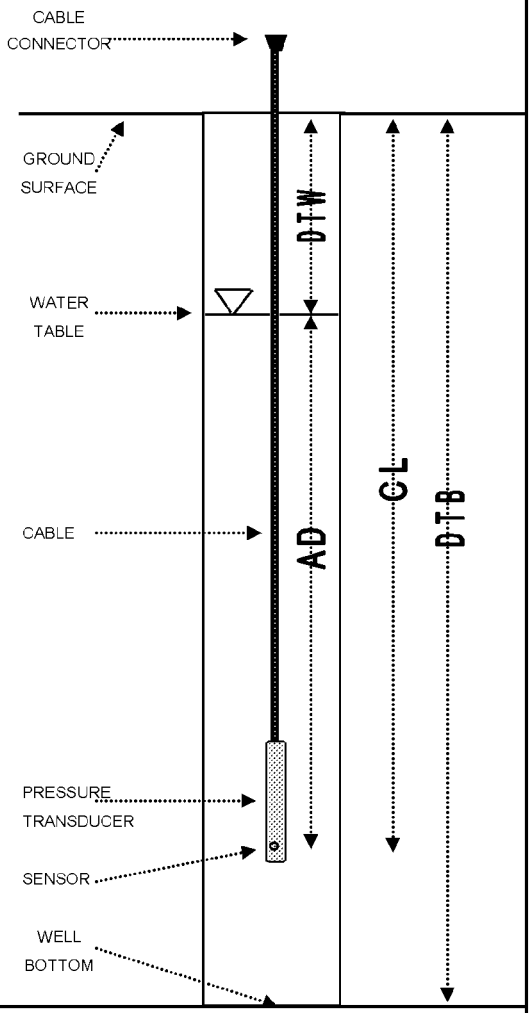
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U3-C1-2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	NA	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.003	DATE	5/12/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.060		
SERIAL NUMBER	11949	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			3.53
GZA ENGINEER	S. Lee				

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:		11:05	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		14.53	FT
ACTUAL DEPTH:	+	-15.643	FT
THEORETICAL CABLE LENGTH:	=	-1.113	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:	−	14.53	FT
REFERENCE ELEVATION:	=	3.530	FT M.S.L.
TEST NAME:		U3-C1	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		11:05	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:
Replaced batteries.
Some organic build up on transducer.

GZA

WELL ID : U3-C1

TRANSDUCER INSTALLATION LOG

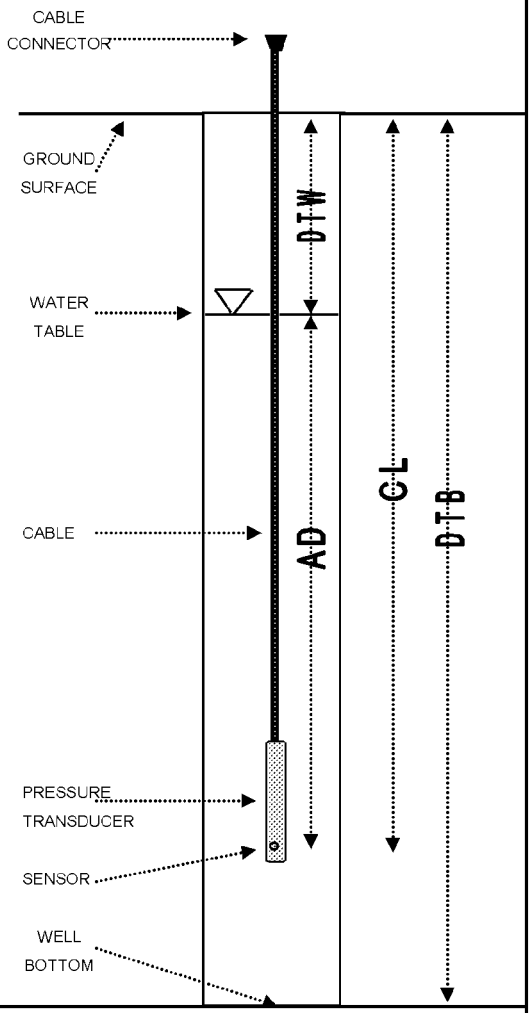
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U3-3
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	14.15	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.849	DATE	5/17/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.599		
SERIAL NUMBER	4318	CASING DIAMETER (INCH)	6		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			7.92
GZA ENGINEER	S. Lee				

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:		14.15	FT
GROUND ELEVATION:		14.849	FT M.S.L.
CASING ELEVATION:		14.599	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.250	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		10:31	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		6.68	FT
ACTUAL DEPTH:	+	10.041	FT
THEORETICAL CABLE LENGTH:	=	16.721	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		14.599	FT M.S.L.
DEPTH TO WATER:	−	6.68	FT
REFERENCE ELEVATION:	=	7.919	FT M.S.L.
TEST NAME:		U3-3	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		10:31	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:
DTB = 14.30'.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

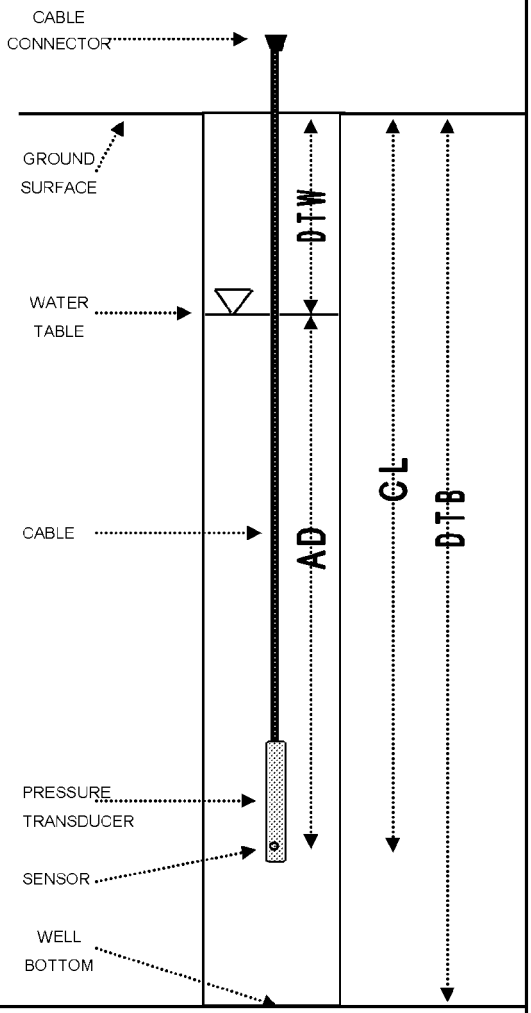
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U3-4D
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	27.25	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.849	DATE	5/12/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.519		
SERIAL NUMBER	14301	CASING DIAMETER (INCH)	4		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			5.00
GZA ENGINEER	S. Lee				

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:	11:25	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	9.52	FT	
ACTUAL DEPTH:	+ 51.911	FT	
THEORETICAL CABLE LENGTH:	= 61.431	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:	− 9.52	FT	
REFERENCE ELEVATION:	= 4.999	FT M.S.L.	
TEST NAME:	U3-4D		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:25	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:
DTB = 26.85'.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

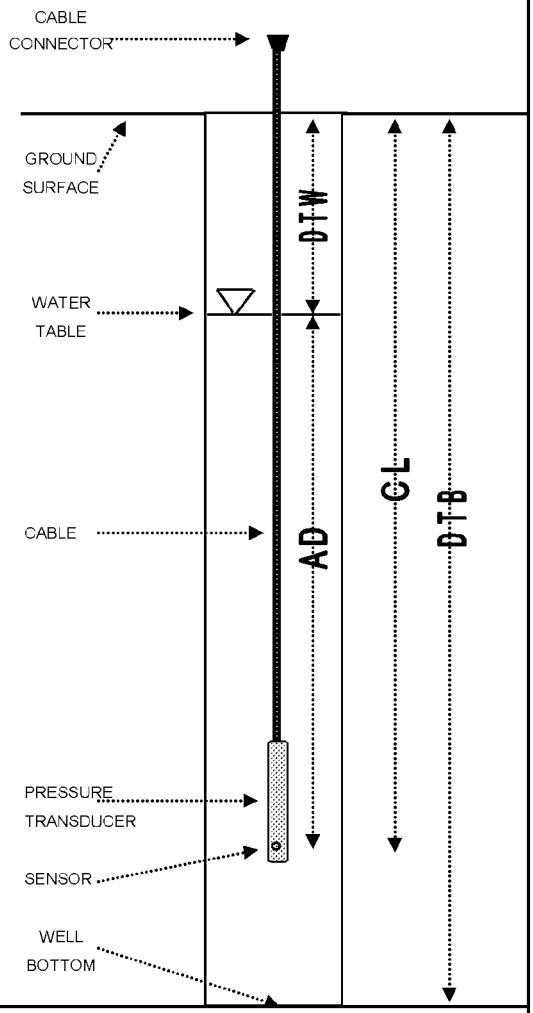
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U3-T1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	2.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	3.267	DATE	5/13/11
PSI CAPACITY	30	CASING ELEVATION (FT)	8.518		
SERIAL NUMBER	3062	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			5.26
GZA ENGINEER	S. Lee				

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:	2.00	FT	
GROUND ELEVATION:	3.267	FT M.S.L.	
CASING ELEVATION:	8.518	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	above		
DISTANCE FROM CASING TO GROUND (+ OR -):	5.251	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	09:55	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	3.26	FT	
ACTUAL DEPTH:	+ 3.758	FT	
THEORETICAL CABLE LENGTH:	= 7.018	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	8.518	FT M.S.L.	
DEPTH TO WATER:	- 3.26	FT	
REFERENCE ELEVATION:	= 5.258	FT M.S.L.	
TEST NAME:	U3-T1		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	09:55	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:
DTB = 6.88' TOC.
Replaced batteries.

TRANSDUCER INSTALLATION LOG

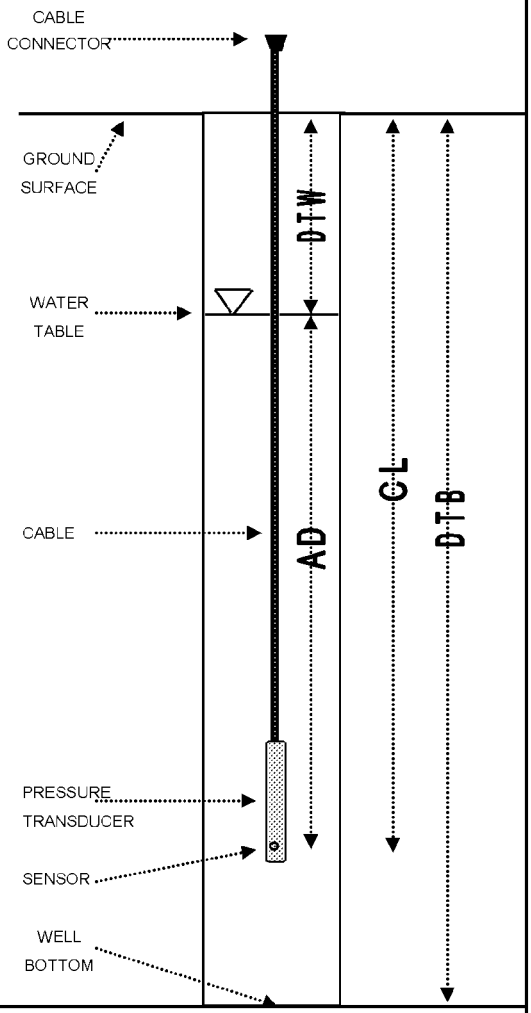
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U3-T2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	2.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	3.259	DATE	5/6/11
PSI CAPACITY	30	CASING ELEVATION (FT)	8.512		
SERIAL NUMBER	16240	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			2.20
GZA ENGINEER	S. Lee				

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:	2.00	FT	
GROUND ELEVATION:	3.259	FT M.S.L.	
CASING ELEVATION:	8.512	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	above		
DISTANCE FROM CASING TO GROUND (+ OR -):	5.253	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	09:05	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	6.31	FT	
ACTUAL DEPTH:	+ 2.866	FT	
THEORETICAL CABLE LENGTH:	= 9.176	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	8.512	FT M.S.L.	
DEPTH TO WATER:	− 6.31	FT	
REFERENCE ELEVATION:	= 2.202	FT M.S.L.	
TEST NAME:	U3-T2		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	09:09	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:
Transducer was off by -2.583'.

TRANSDUCER INSTALLATION LOG

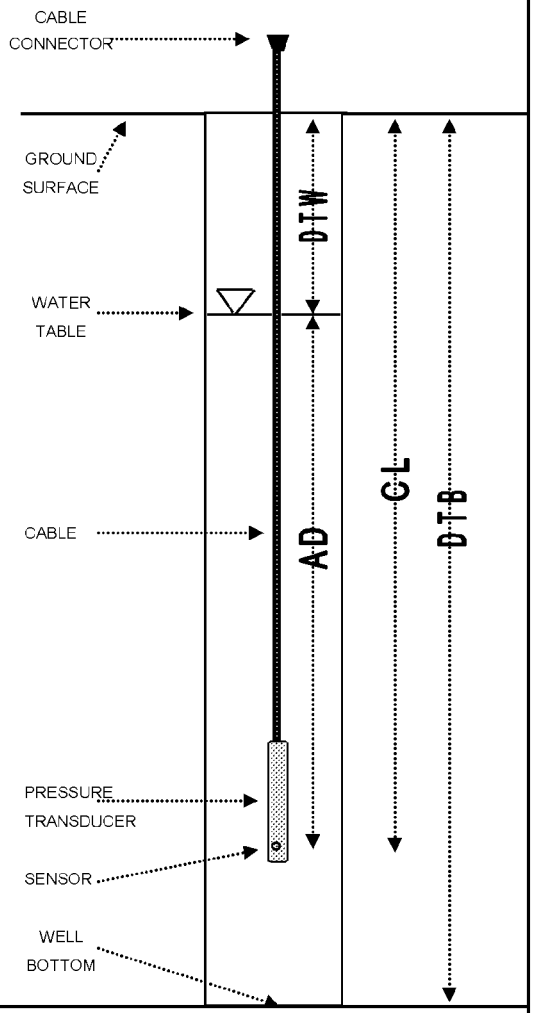
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U3-T2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	2.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	3.259	DATE	5/13/11
PSI CAPACITY	30	CASING ELEVATION (FT)	8.512		
SERIAL NUMBER	16240	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			5.43
GZA ENGINEER	S. Lee				

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:	2.00	FT	
GROUND ELEVATION:	3.259	FT M.S.L.	
CASING ELEVATION:	8.512	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	above		
DISTANCE FROM CASING TO GROUND (+ OR -):	5.253	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	09:42	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	3.08	FT	
ACTUAL DEPTH:	+ 3.602	FT	
THEORETICAL CABLE LENGTH:	= 6.682	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	8.512	FT M.S.L.	
DEPTH TO WATER:	- 3.08	FT	
REFERENCE ELEVATION:	= 5.432	FT M.S.L.	
TEST NAME:	U3-T2		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	09:42	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:
DTB = 6.81' TOC.
Replaced batteries.

APPENDIX B: Q3-2011 TRANSDUCER INSTALLATION LOGS

TRANSDUCER INSTALLATION LOG

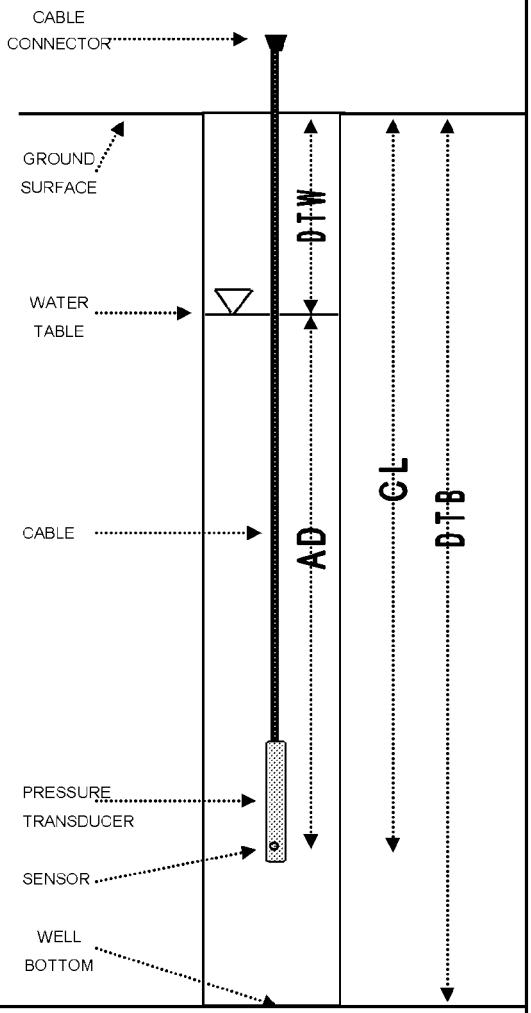
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	HR-1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	8/17/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	16642	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			-0.31
GZA ENGINEER	S. Lee				

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:		08:25	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		18.81	FT
ACTUAL DEPTH:	+	45.400	FT
THEORETICAL CABLE LENGTH:	=	64.210	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:	−	18.81	FT
REFERENCE ELEVATION:	=	-0.31	FT M.S.L.
TEST NAME:		HR-1	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		08:25	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 6.121'; heavy organic build up on transducer.

IPEC00267291

TRANSDUCER INSTALLATION LOG

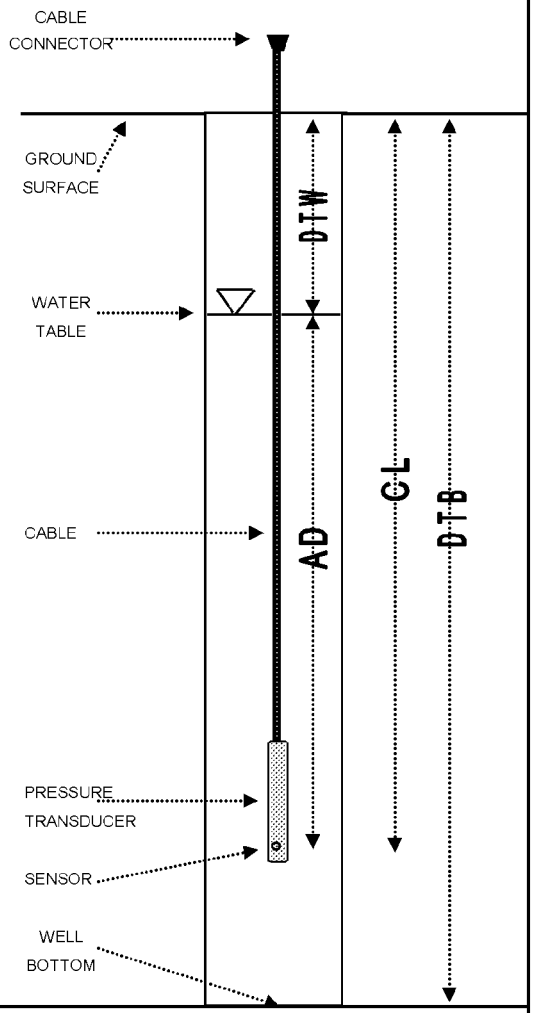
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	HR-1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	8/19/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	16642	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			2.96
GZA ENGINEER	S. Lee				

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:	15:26	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	15.54	FT	
ACTUAL DEPTH:	+ 39.953	*FT	
THEORETICAL CABLE LENGTH:	= 55.493	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:	− 15.54	FT	
REFERENCE ELEVATION:	= 2.96	FT M.S.L.	
TEST NAME:	HR-1		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	15:26	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:
Transducer set at ~21' from TOC.
*Most likely transducer is a non-venting transducer installed on a venting cable. Actual depth is erroneous.

TRANSDUCER INSTALLATION LOG

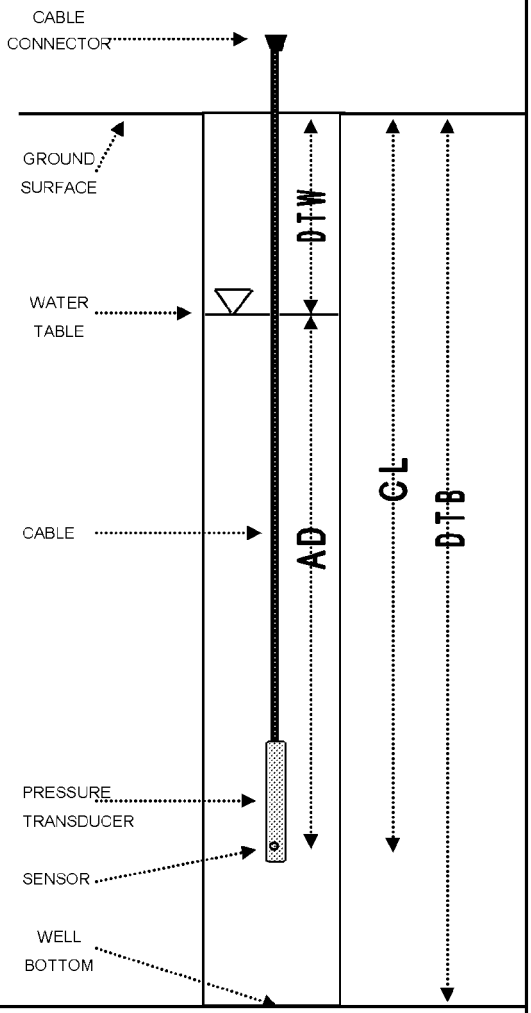
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	HR-1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	8/23/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	16642	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			0.78
GZA ENGINEER	S. Lee				

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:		09:03	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		17.72	FT
ACTUAL DEPTH:	+	37.295	*FT
THEORETICAL CABLE LENGTH:	=	55.015	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	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		09:03	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:

TRANSDUCER INSTALLATION LOG

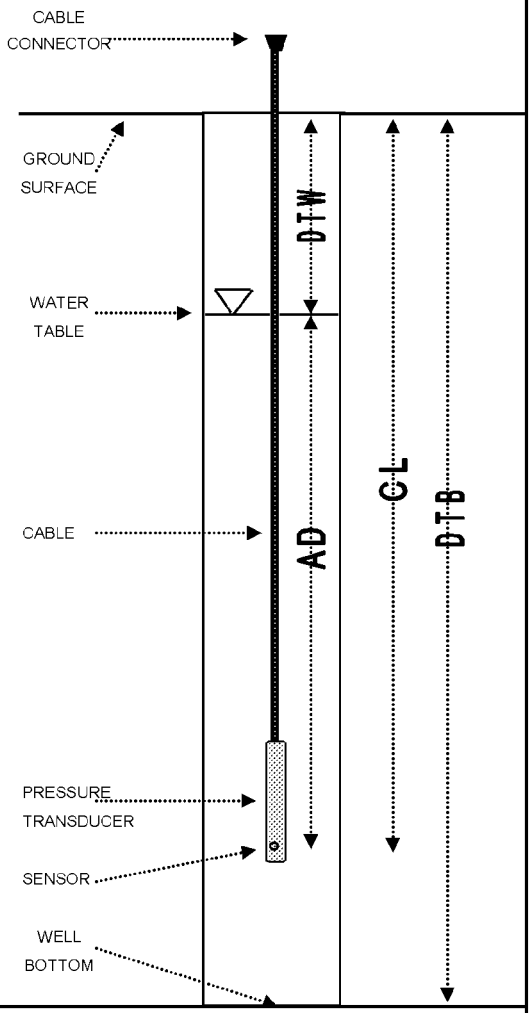
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	HR-1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	9/6/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	16642	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			0.27
GZA ENGINEER	S. Lee				

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:		10:42	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		18.23	FT
ACTUAL DEPTH:	+	38.522	*FT
THEORETICAL CABLE LENGTH:	=	56.752	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:	−	18.23	FT
REFERENCE ELEVATION:	=	0.27	FT M.S.L.
TEST NAME:		HR-1	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		10:42	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:
Extended drop pipe PVC casing by 5'. Total length = 24.25' TOC.
Transducer reading off by 1.79' prior to lengthening drop pipe and reinstallation.

TRANSDUCER INSTALLATION LOG

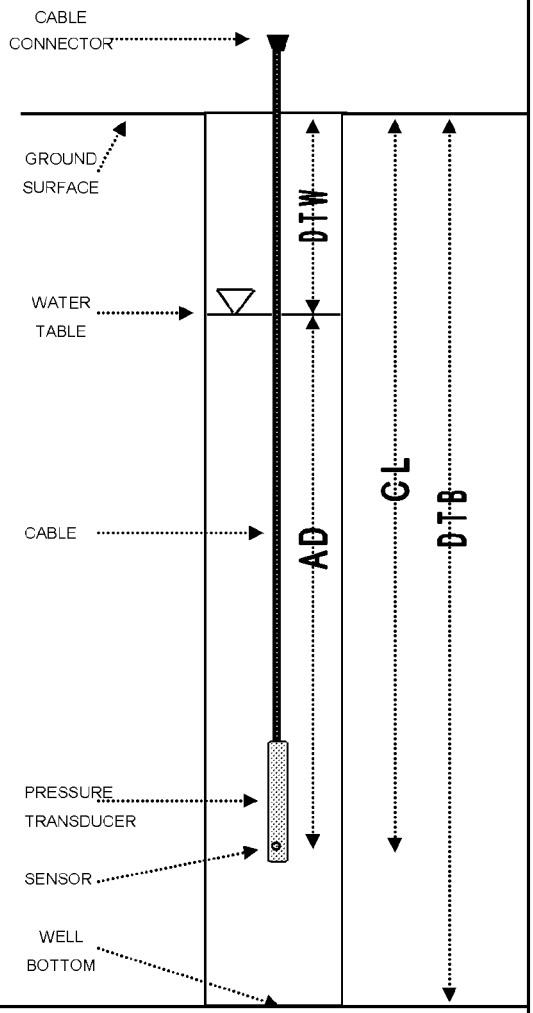
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	HR-1 #2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	8/22/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	2280	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			0.28
GZA ENGINEER	S. Lee				

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:		08:58	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		18.22	FT
ACTUAL DEPTH:	+	3.195	*FT
THEORETICAL CABLE LENGTH:	=	21.415	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:	−	18.22	FT
REFERENCE ELEVATION:	=	0.28	FT M.S.L.
TEST NAME:		HR-1 #2	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		08:58	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:
Installed transducer at 22' from TOC.
Pulled transducer from MW-37-40 for installation at HR-1 #2.

TRANSDUCER INSTALLATION LOG

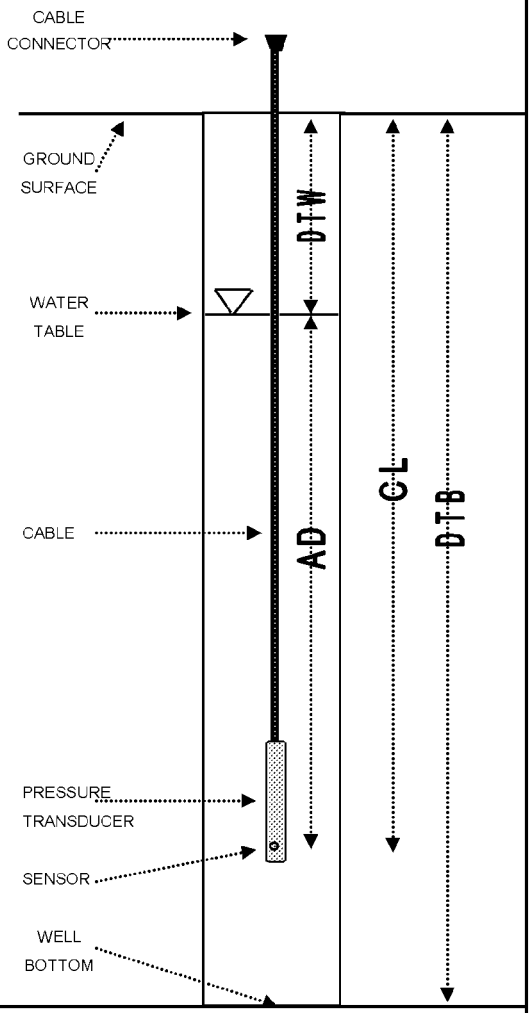
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	HR-1 #2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	8/23/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	2280	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			0.62
GZA ENGINEER	S. Lee				

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:		09:13	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		17.88	FT
ACTUAL DEPTH:	+	1.666	*FT
THEORETICAL CABLE LENGTH:	=	19.546	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:	−	17.88	FT
REFERENCE ELEVATION:	=	0.62	FT M.S.L.
TEST NAME:		HR-1 #2	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		09:13	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 : HR-1 #2

TRANSDUCER INSTALLATION LOG

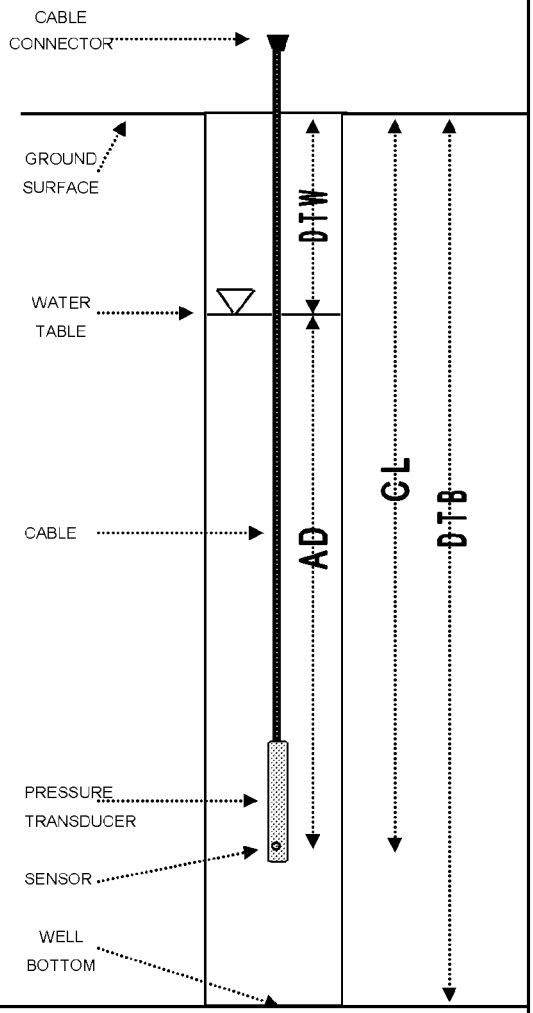
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	HR-1 #2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	9/6/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	2280	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			0.29
GZA ENGINEER	S. Lee				

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:		10:37	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		18.21	FT
ACTUAL DEPTH:	+	3.321	*FT
THEORETICAL CABLE LENGTH:	=	21.531	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:	−	18.21	FT
REFERENCE ELEVATION:	=	0.29	FT M.S.L.
TEST NAME:		HR-1 #2	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		10:37	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:
Extended drop pipe PVC casing by 5'. Total length = 24.25' TOC.
Transducer reading off by 2.423' prior to lengthening drop pipe and reinstallation.

GZA

WELL ID : HR-1 #2

TRANSDUCER INSTALLATION LOG

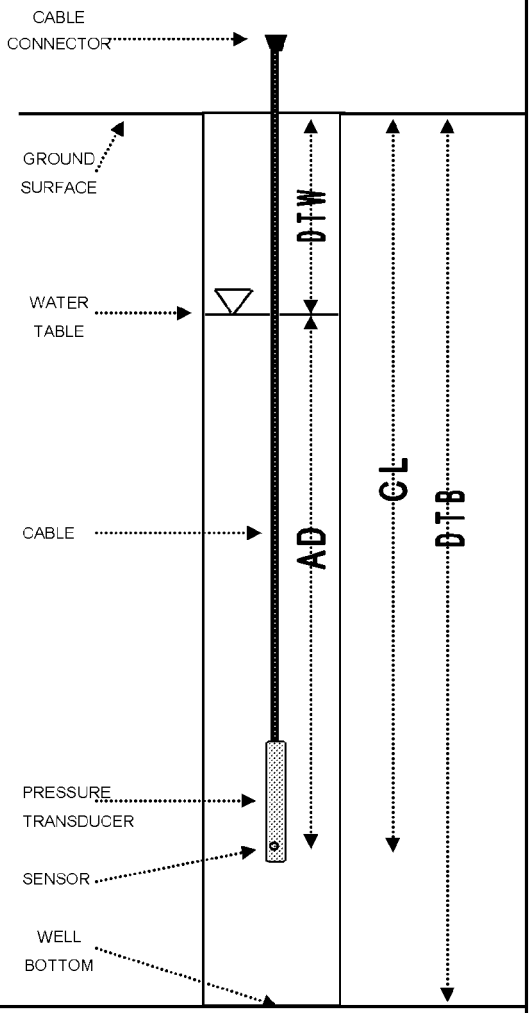
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-36-24
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	54.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	11.799	DATE	8/16/11
PSI CAPACITY	30	CASING ELEVATION (FT)	11.598		
SERIAL NUMBER	5376	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			8.12
GZA ENGINEER	S. Lee				

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:		11:42	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		3.48	FT
ACTUAL DEPTH:	+	21.376	FT
THEORETICAL CABLE LENGTH:	=	24.856	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:	−	3.48	FT
REFERENCE ELEVATION:	=	8.118	FT M.S.L.
TEST NAME:		MW-36-24	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		11:44	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:
Transducer off by -5.50'.

TRANSDUCER INSTALLATION LOG

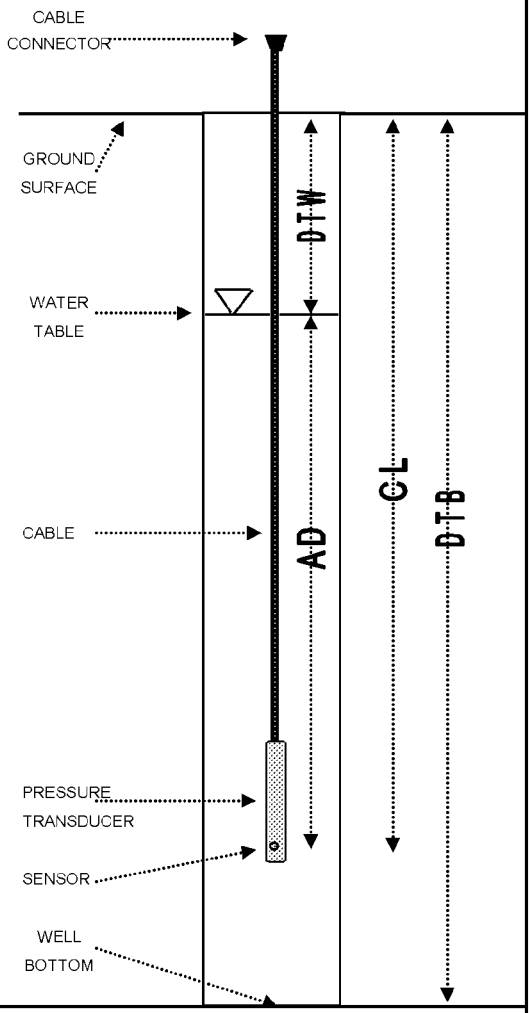
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-37-40
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	57.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.021	DATE	8/16/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.852		
SERIAL NUMBER	2280	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT) *			7.07
GZA ENGINEER	S. Lee				

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:	15.021	FT M.S.L.	
CASING ELEVATION:	14.852	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.169	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	09:11	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	7.78	*FT	
ACTUAL DEPTH:	+ 31.909	FT	
THEORETICAL CABLE LENGTH:	= 39.691	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.852	FT M.S.L.	
DEPTH TO WATER:	− 7.78	*FT	
REFERENCE ELEVATION:	= 7.070	*FT M.S.L.	
TEST NAME:	MW-37-40		
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:

TRANSDUCER INSTALLATION LOG

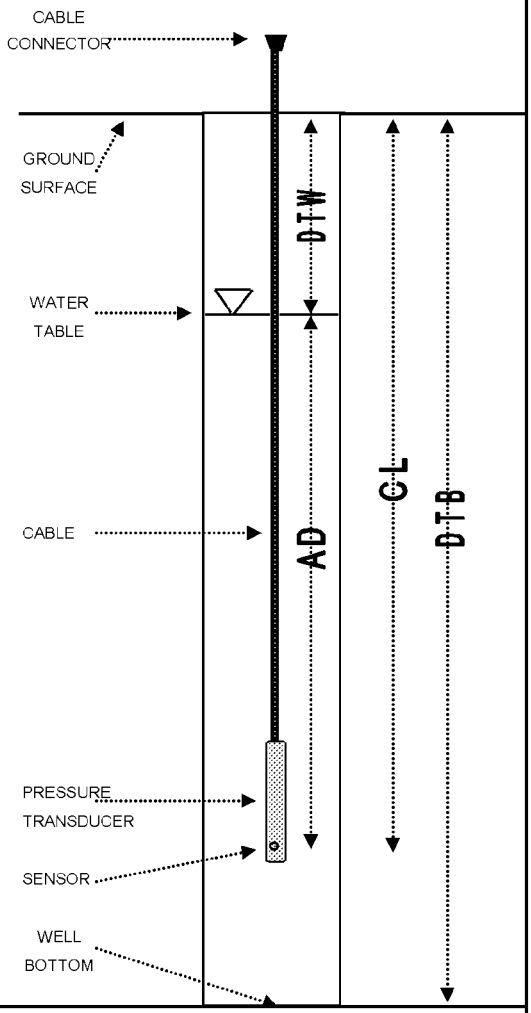
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-41-40
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	64.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	54.87	DATE	7/15/11
PSI CAPACITY	30	CASING ELEVATION (FT)	54.13		
SERIAL NUMBER	6321	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			33.13
GZA ENGINEER	S. Lee				

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:	10:40	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	21.00	FT	
ACTUAL DEPTH:	+ 68.874	FT	
THEORETICAL CABLE LENGTH:	= 89.874	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:	− 21.00	FT	
REFERENCE ELEVATION:	= 33.13	FT M.S.L.	
TEST NAME:	MW-41-40		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:40	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

TRANSDUCER INSTALLATION LOG

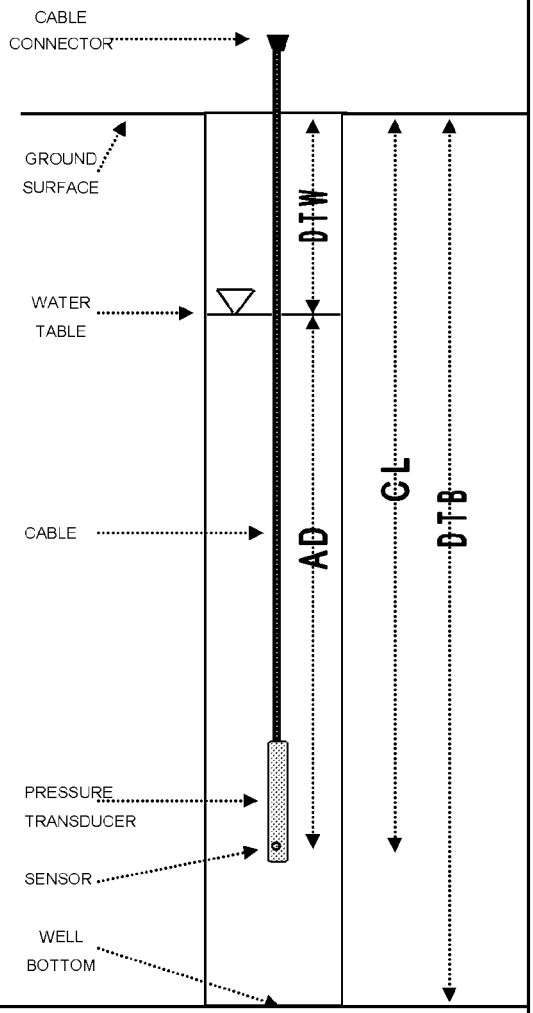
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-41-40
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	64.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	54.87	DATE	8/4/11
PSI CAPACITY	30	CASING ELEVATION (FT)	54.13		
SERIAL NUMBER	6321	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			33.48
GZA ENGINEER	S. Lee				

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:	13:15	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	20.65	FT	
ACTUAL DEPTH:	+ 70.491	FT	
THEORETICAL CABLE LENGTH:	= 91.141	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:	− 20.65	FT	
REFERENCE ELEVATION:	= 33.48	FT M.S.L.	
TEST NAME:	MW-41-40		
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:
Transducer off by -1.273'.

GZA

WELL ID : MW-41-40

TRANSDUCER INSTALLATION LOG

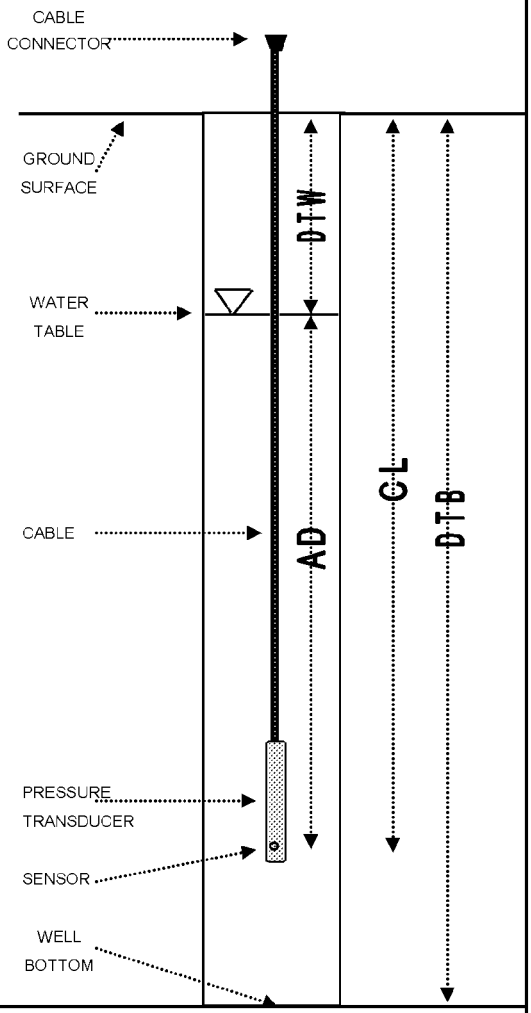
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-43-28
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	63.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	48.760	DATE	8/4/11
PSI CAPACITY	30	CASING ELEVATION (FT)	48.021		
SERIAL NUMBER	11331	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			48.02
GZA ENGINEER	S. Lee				

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:			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:		48.021	FT M.S.L.
DEPTH TO WATER:	−	0.00	FT
REFERENCE ELEVATION:	=	48.021	FT M.S.L.
TEST NAME:		MW-43-28	
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:
Off by 26.92', last reset transducer was off by 7.639'.
Pulled transducer out of service. Data progressively off.

GZA

WELL ID : MW-43-28

TRANSDUCER INSTALLATION LOG

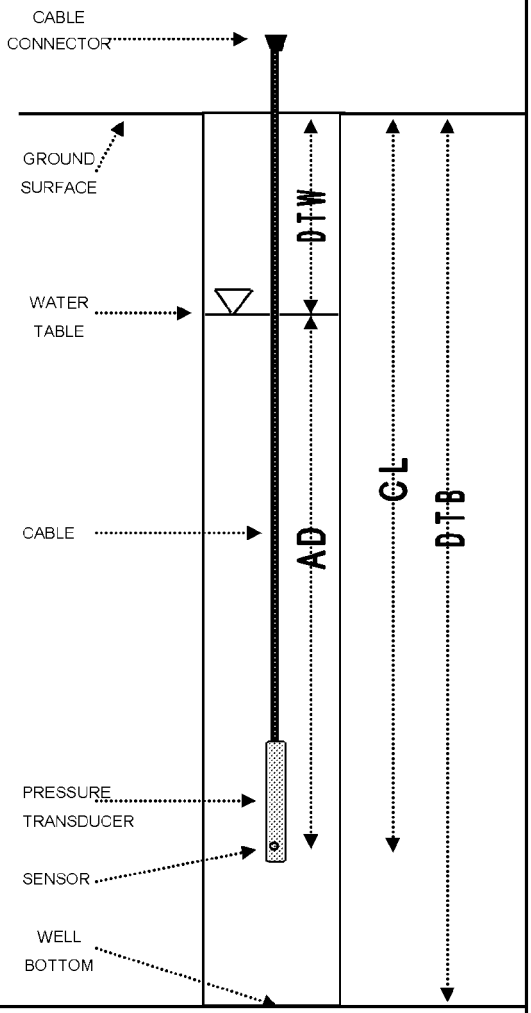
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-43-62
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	63.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	48.761	DATE	8/4/11
PSI CAPACITY	30	CASING ELEVATION (FT)	47.821		
SERIAL NUMBER	16236	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			31.34
GZA ENGINEER	S. Lee				

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:	10:11	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	16.48	FT	
ACTUAL DEPTH:	+ 36.213	FT	
THEORETICAL CABLE LENGTH:	= 52.693	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:	− 16.48	FT	
REFERENCE ELEVATION:	= 31.341	FT M.S.L.	
TEST NAME:	MW-43-62		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:11	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-43-62

TRANSDUCER INSTALLATION LOG

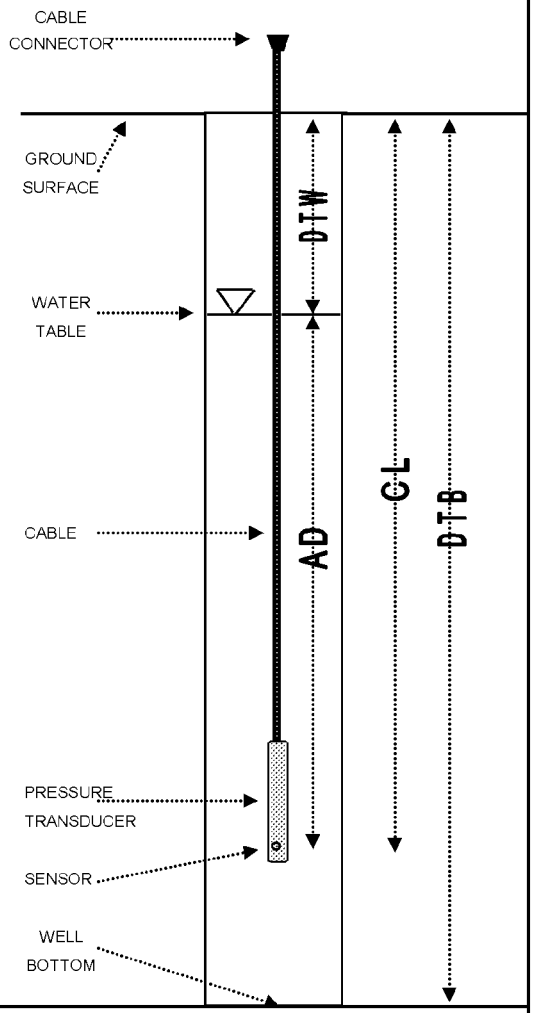
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-44-102
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	102.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	93.52	DATE	8/22/11
PSI CAPACITY	30	CASING ELEVATION (FT)	93.09		
SERIAL NUMBER	15940	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			31.70
GZA ENGINEER	S. Lee				

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:	102.00	FT	
GROUND ELEVATION:	93.52	FT M.S.L.	
CASING ELEVATION:	93.09	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.43	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	09:35	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	61.39	FT	
ACTUAL DEPTH:	+ 37.369	FT	
THEORETICAL CABLE LENGTH:	= 98.759	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	93.09	FT M.S.L.	
DEPTH TO WATER:	− 61.39	FT	
REFERENCE ELEVATION:	= 31.70	FT M.S.L.	
TEST NAME:	MW-44-102		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	09:36	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:
Transducer off by +2.532'.

GZA

WELL ID : MW-44-102

TRANSDUCER INSTALLATION LOG

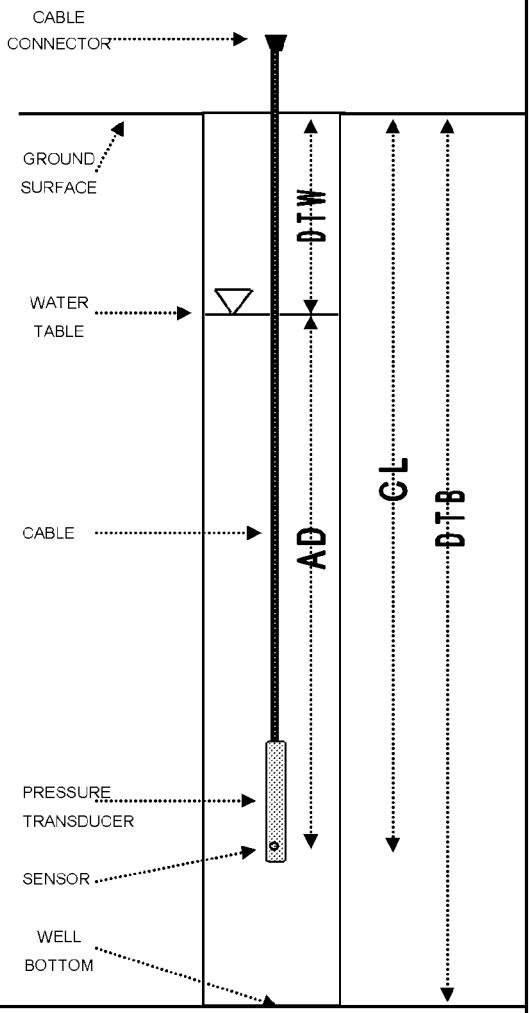
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-46
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	30.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	18.08	DATE	7/13/11
PSI CAPACITY	30	CASING ELEVATION (FT)	16.97		
SERIAL NUMBER	4424	CASING DIAMETER (INCH)	4		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			13.19
GZA ENGINEER	S. Lee				

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:	29.82	FT	
GROUND ELEVATION:	18.08	FT M.S.L.	
CASING ELEVATION:	16.97	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	-		
DISTANCE FROM CASING TO GROUND (+ OR -):	-1.11	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	11:20	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	3.78	FT	
ACTUAL DEPTH:	+ 23.99	FT	
THEORETICAL CABLE LENGTH:	= 27.77	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	16.97	FT M.S.L.	
DEPTH TO WATER:	− 3.78	FT	
REFERENCE ELEVATION:	= 13.19	FT M.S.L.	
TEST NAME:	MW-46		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:20	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:

TRANSDUCER INSTALLATION LOG

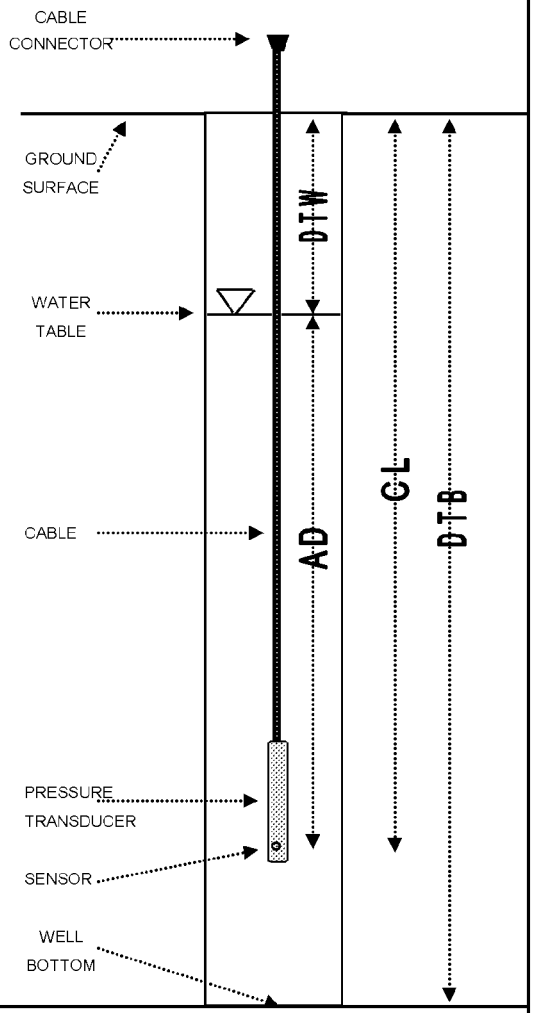
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-50-66
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	67.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.92	DATE	9/6/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.61		
SERIAL NUMBER	14459	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			10.65
GZA ENGINEER	S. Lee				

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:	65.75	FT	
GROUND ELEVATION:	14.92	FT M.S.L.	
CASING ELEVATION:	14.61	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.31	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	09:47	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	3.964	FT	
ACTUAL DEPTH:	+ 88.667	FT	
THEORETICAL CABLE LENGTH:	= 92.631	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.614	FT M.S.L.	
DEPTH TO WATER:	− 3.96	FT	
REFERENCE ELEVATION:	= 10.650	FT M.S.L.	
TEST NAME:	MW-50-66		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	09:47	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:
Transducer reading off by 0.314'.

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-55-54
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

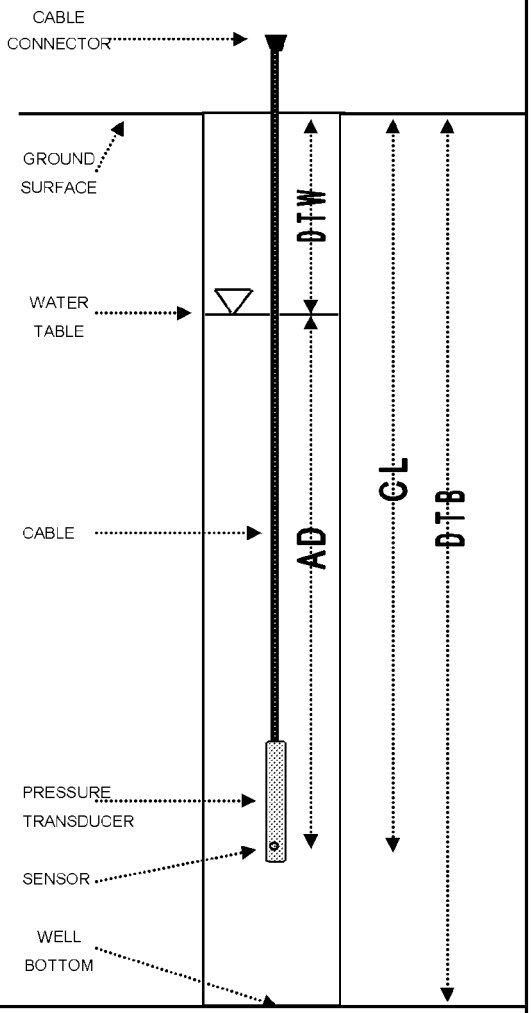
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	77.50	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	18.25	DATE	8/12/11
PSI CAPACITY	30	CASING ELEVATION (FT)	17.77		
SERIAL NUMBER		CASING DIAMETER (INCH)	1		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	9.27
GZA ENGINEER	S. Lee		

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:		54.00	FT
GROUND ELEVATION:		18.25	FT M.S.L.
CASING ELEVATION:		17.77	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.48	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		10:46	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		8.50	FT
ACTUAL DEPTH:	+	41.092	FT
THEORETICAL CABLE LENGTH:	=	49.59	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		17.77	FT M.S.L.
DEPTH TO WATER:	−	8.50	FT
REFERENCE ELEVATION:	=	9.27	FT M.S.L.
TEST NAME:		MW-55-54	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		10:46	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:

TRANSDUCER INSTALLATION LOG

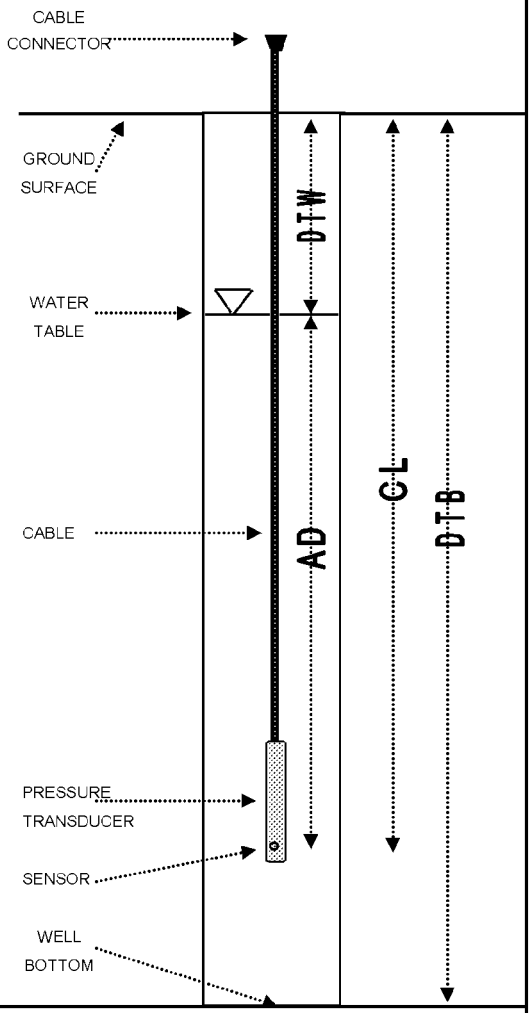
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-56-53
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	88.50	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	70.26	DATE	7/6/11
PSI CAPACITY	30	CASING ELEVATION (FT)	69.32		
SERIAL NUMBER	16437	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			23.61
GZA ENGINEER	S. Lee				

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:		53.00	FT
GROUND ELEVATION:		70.26	FT M.S.L.
CASING ELEVATION:		69.32	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.94	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		10:48	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		45.71	FT
ACTUAL DEPTH:	+	39.640	FT
THEORETICAL CABLE LENGTH:	=	85.350	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		69.32	FT M.S.L.
DEPTH TO WATER:	−	45.71	FT
REFERENCE ELEVATION:	=	23.61	FT M.S.L.
TEST NAME:		MW-56-53	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		11:00	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:
Reinstalled spare transducer to remedie issues (Serial #16437).

TRANSDUCER INSTALLATION LOG

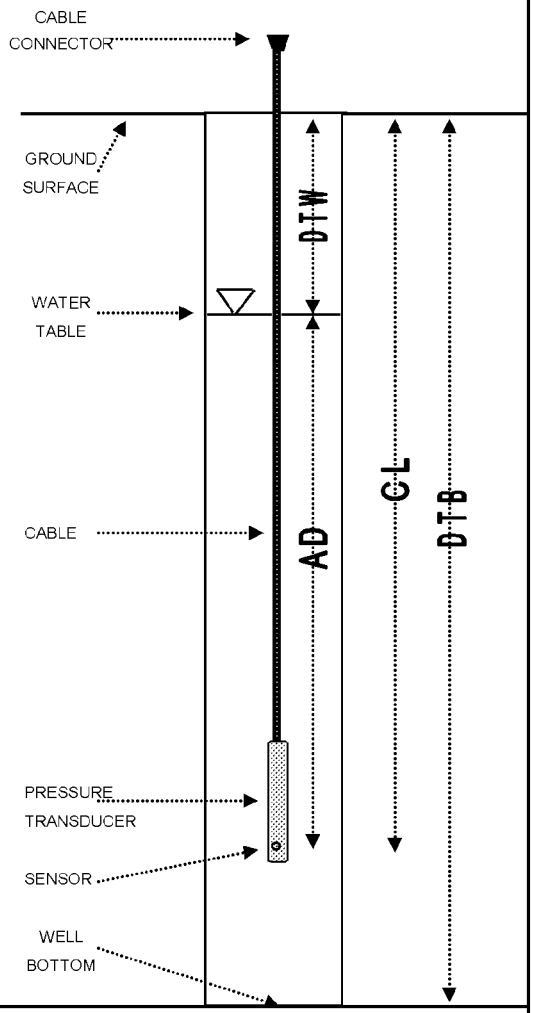
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-57-11
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	46.50	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.98	DATE	8/19/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.73		
SERIAL NUMBER	16389	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			12.06
GZA ENGINEER	S. Lee				

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:	11.00	FT	
GROUND ELEVATION:	14.98	FT M.S.L.	
CASING ELEVATION:	14.73	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.25	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	08:54	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	2.67	FT	
ACTUAL DEPTH:	+ 41.952	FT	
THEORETICAL CABLE LENGTH:	= 44.622	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.73	FT M.S.L.	
DEPTH TO WATER:	− 2.67	FT	
REFERENCE ELEVATION:	= 12.06	FT M.S.L.	
TEST NAME:	MW-57-11		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	08:54	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:
Off by -0.314.

GZA

WELL ID : MW-57-11

TRANSDUCER INSTALLATION LOG

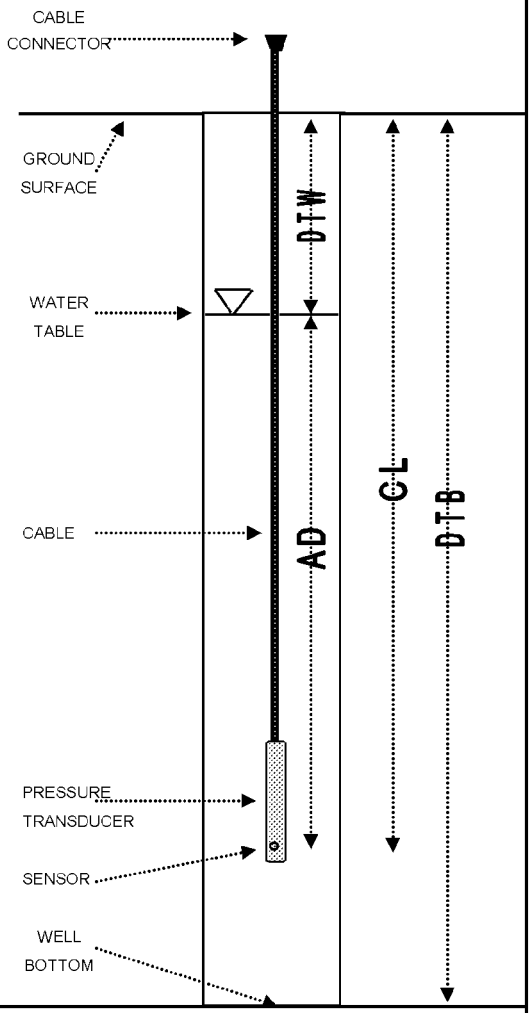
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-62-37
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	38.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.69	DATE	8/4/11
PSI CAPACITY	30	CASING ELEVATION (FT)	12.81		
SERIAL NUMBER	5441	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION *			2.42
GZA ENGINEER	S. Lee				

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:	38.00	FT	
GROUND ELEVATION:	14.69	FT M.S.L.	
CASING ELEVATION:	12.81	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-1.88	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	12:02	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	10.39	FT	
ACTUAL DEPTH:	+ 12.238	FT	
THEORETICAL CABLE LENGTH:	= 22.628	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	12.81	FT M.S.L.	
DEPTH TO WATER:	− 10.39	FT	
REFERENCE ELEVATION:	= 2.42	FT M.S.L.	
TEST NAME:	MW-62-37		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	12:02	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:
Reset clock on transducer.

GZA

WELL ID : MW-62-37

TRANSDUCER INSTALLATION LOG

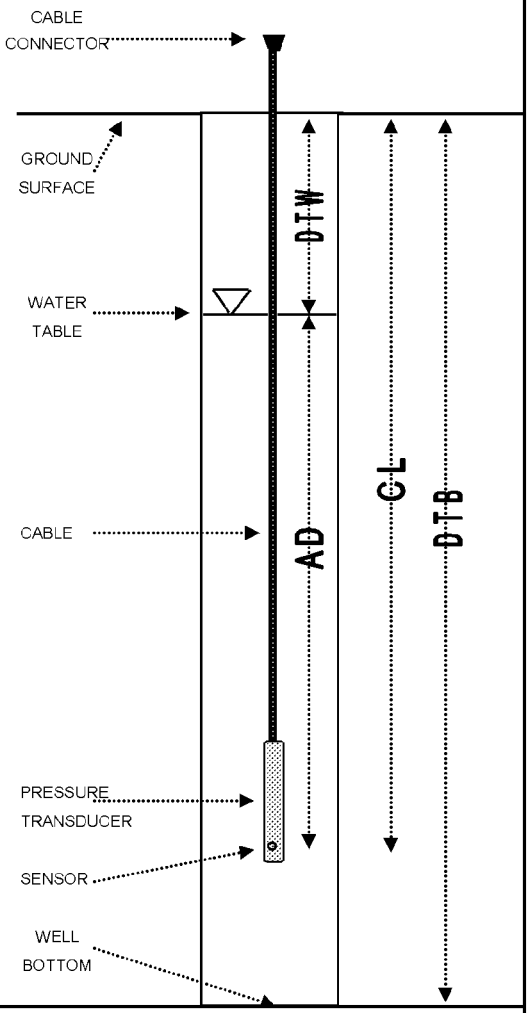
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	OUT-1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	8.20	DATE	8/31/11
PSI CAPACITY	30	CASING ELEVATION (FT)	11.89		
SERIAL NUMBER	16044	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			6.68
GZA ENGINEER	S. Lee				

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:		13:24	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		5.21	FT
ACTUAL DEPTH:	+	49.486	FT
THEORETICAL CABLE LENGTH:	=	54.696	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:	−	5.210	FT
REFERENCE ELEVATION:	=	6.681	FT M.S.L.
TEST NAME:		OUT-1	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		13:24	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:
Transducer off by 0.645'; transducer original set at 18.3' from TOC.
PVC drop pip = 13.8'; transducer reinstalled at 17.25' from TOC.
Some organic build up on transducer.

TRANSDUCER INSTALLATION LOG

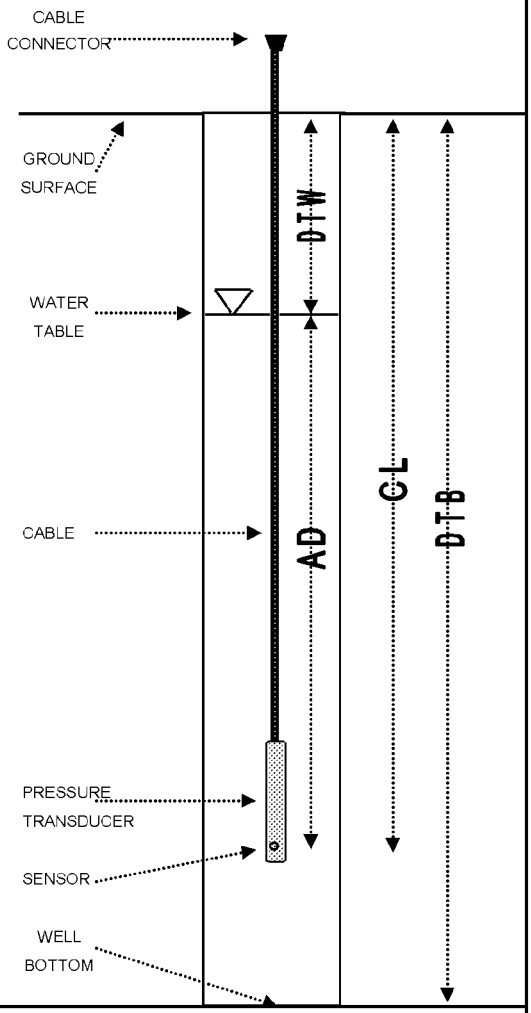
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	TIW-1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	77.50	DATE	7/11/11
PSI CAPACITY	30	CASING ELEVATION (FT)	76.583		
SERIAL NUMBER	11998	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			49.99
GZA ENGINEER	S. Lee				

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:	25.59	FT	
GROUND ELEVATION:	77.50	FT M.S.L.	
CASING ELEVATION:	76.583	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	above		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.917	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	11:19	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	26.59	FT	
ACTUAL DEPTH:	+	FT	
THEORETICAL CABLE LENGTH:	= 26.590	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	76.583	FT M.S.L.	
DEPTH TO WATER:	− 26.59	FT	
REFERENCE ELEVATION:	= 49.993	FT M.S.L.	
TEST NAME:	TIW-1		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:19	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:
Transducer installed. All measurements are from TOC.
TOC is 11" below ground surface. Casing elevation calculated using known ground elevation of 77.50' and measured distance.

GZA

WELL ID : TIW-1

TRANSDUCER INSTALLATION LOG

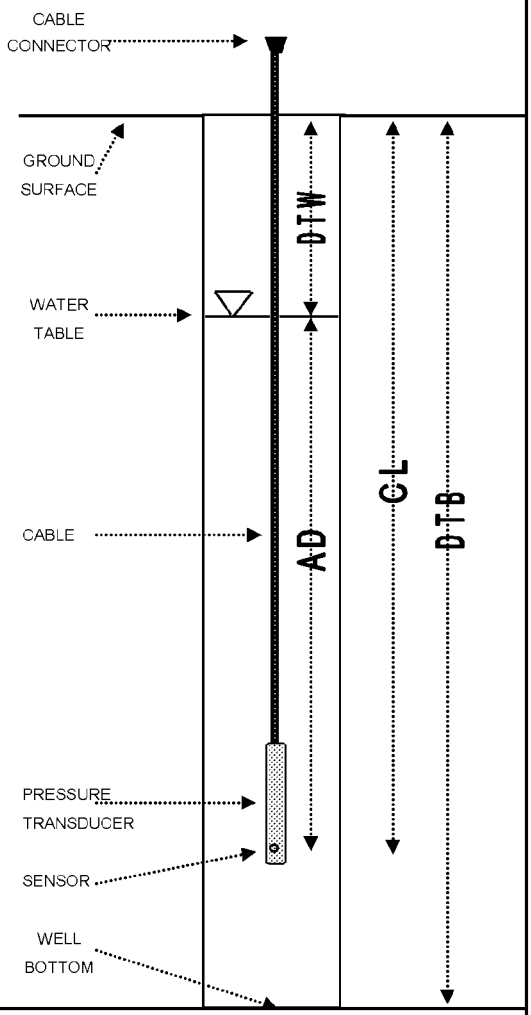
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	TIW-1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	77.50	DATE	9/8/11
PSI CAPACITY	30	CASING ELEVATION (FT)	76.583		
SERIAL NUMBER	11998	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			50.48
GZA ENGINEER	S. Lee				

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:	25.59	FT	
GROUND ELEVATION:	77.50	FT M.S.L.	
CASING ELEVATION:	76.583	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	above		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.917	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	10:05	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	26.10	FT	
ACTUAL DEPTH:	+ 0.080	FT	
THEORETICAL CABLE LENGTH:	= 26.180	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	76.583	FT M.S.L.	
DEPTH TO WATER:	− 26.10	FT	
REFERENCE ELEVATION:	= 50.483	FT M.S.L.	
TEST NAME:	TIW-1		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	10:05	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:
Transducer reading off by 0.48'.
Well dry.
Some condensation accumulating on vault lid and dripping into vault.

GZA

WELL ID : TIW-1

TRANSDUCER INSTALLATION LOG

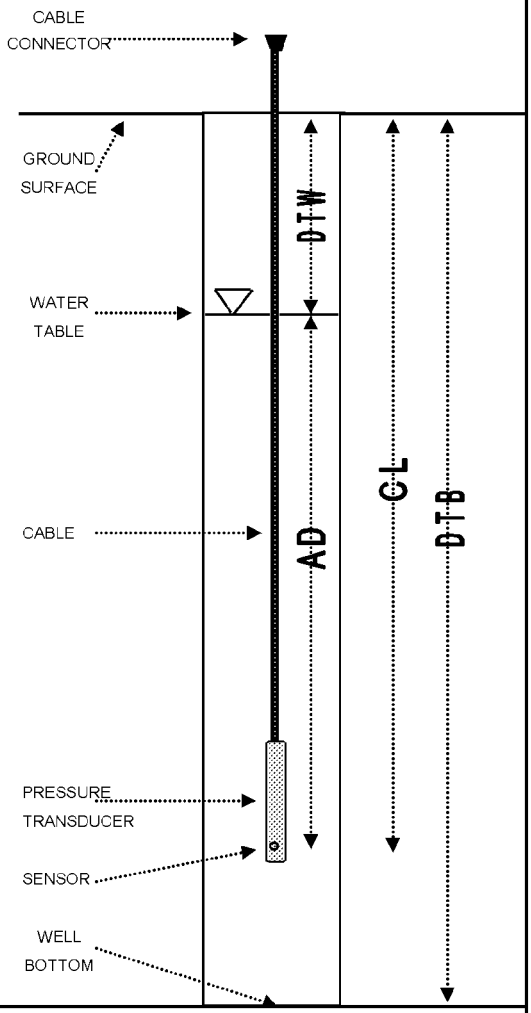
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	I-2n
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	41.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	80.92	DATE	8/12/11
PSI CAPACITY	30	CASING ELEVATION (FT)	82.230		
SERIAL NUMBER	16587	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			54.26
GZA ENGINEER	S. Lee				

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:		41.00	FT
GROUND ELEVATION:		80.92	FT M.S.L.
CASING ELEVATION:		82.230	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		1.310	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		13:05	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		27.97	FT
ACTUAL DEPTH:	+	44.812	FT
THEORETICAL CABLE LENGTH:	=	72.782	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		82.230	FT M.S.L.
DEPTH TO WATER:	−	27.97	FT
REFERENCE ELEVATION:	=	54.260	FT M.S.L.
TEST NAME:		I-2n	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		13:03	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:
Transducer off by +0.860.

GZA

WELL ID : I-2n

APPENDIX B: Q4-2011 TRANSDUCER INSTALLATION LOGS

TRANSDUCER INSTALLATION LOG

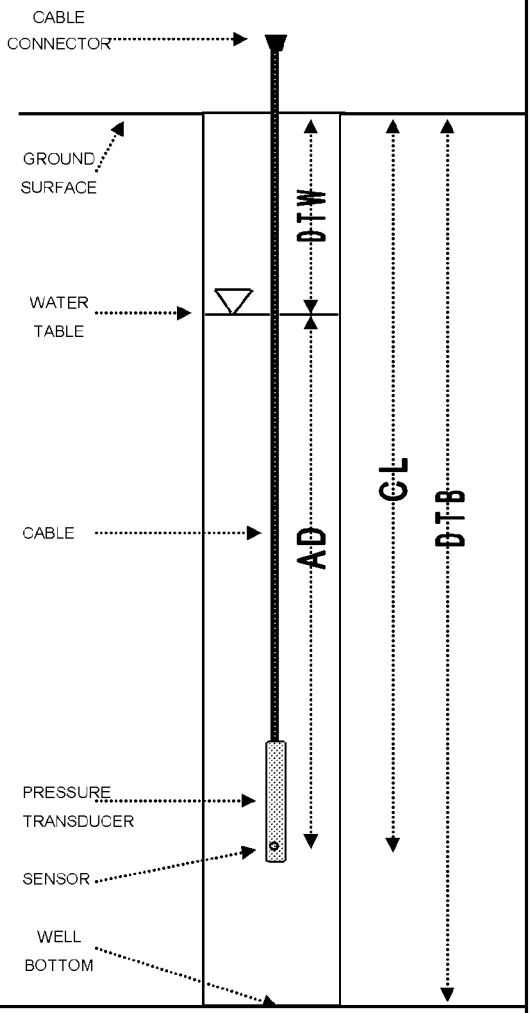
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	HR-1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	12/15/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	16642	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			3.90
GZA ENGINEER	S. Lee				

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:		13:35	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		14.60	FT
ACTUAL DEPTH:	+	-20.912	FT
THEORETICAL CABLE LENGTH:	=	-6.312	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:	−	14.60	FT
REFERENCE ELEVATION:	=	3.90	FT M.S.L.
TEST NAME:		HR-1	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		13:35	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:
Transducer reading serverly off. Off by 63.017'.
Transducer reading surface at -59.121'. Consider replacement of transducer.

TRANSDUCER INSTALLATION LOG

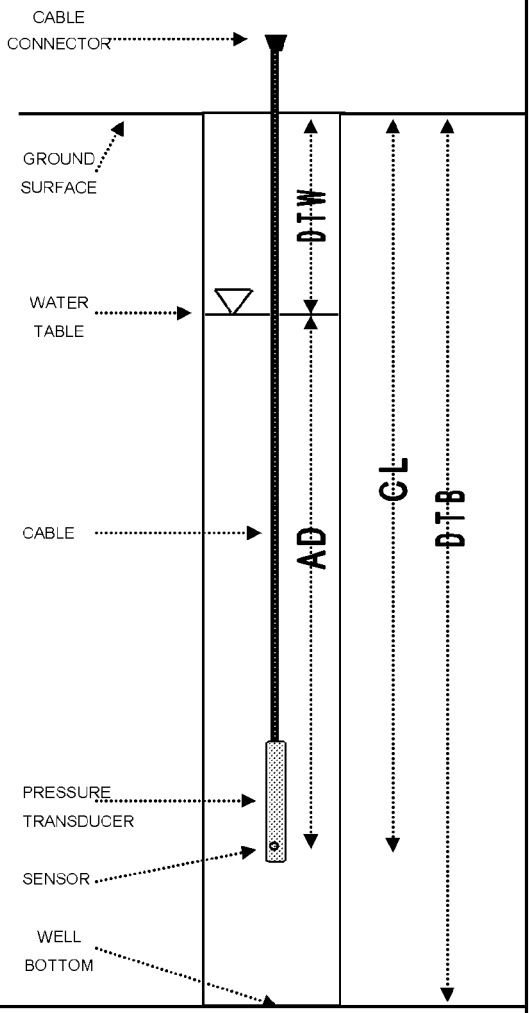
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	HR-1 #2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	12/15/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	2280	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			3.90
GZA ENGINEER	S. Lee				

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:		13:25	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		14.60	FT
ACTUAL DEPTH:	+	7.245	FT
THEORETICAL CABLE LENGTH:	=	21.845	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:	−	14.60	FT
REFERENCE ELEVATION:	=	3.896	FT M.S.L.
TEST NAME:		HR-1 #2	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		13:26	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:
Transducer reading off by 0.359'. No organic build up observed on transducer.

GZA

WELL ID : HR-1 #2

TRANSDUCER INSTALLATION LOG

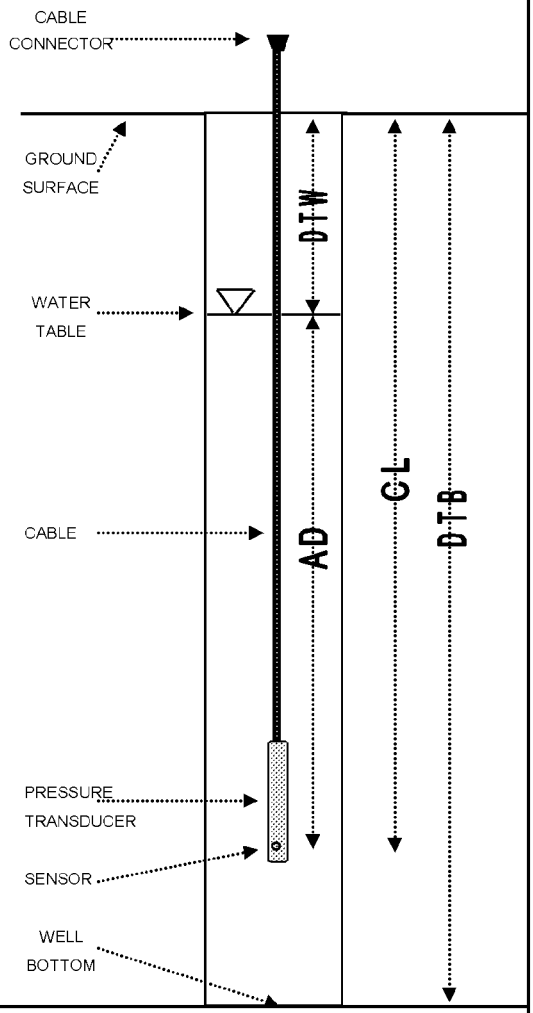
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-41-40
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	64.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	54.87	DATE	11/28/11
PSI CAPACITY	30	CASING ELEVATION (FT)	54.13		
SERIAL NUMBER	6329	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			33.53
GZA ENGINEER	S. Lee				

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:	12:35	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	20.60	FT	
ACTUAL DEPTH:	+ 77.960	FT	
THEORETICAL CABLE LENGTH:	= 98.560	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:	− 20.60	FT	
REFERENCE ELEVATION:	= 33.53	FT M.S.L.	
TEST NAME:	MW-41-40		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	12:35	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:
Transducer reading off by 5.495'.

GZA

WELL ID : MW-41-40

TRANSDUCER INSTALLATION LOG

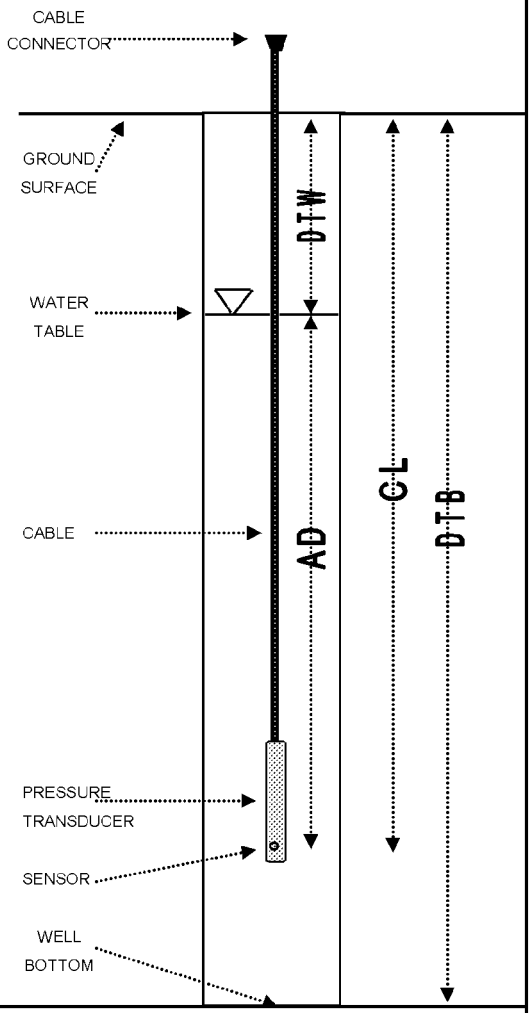
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-44-102
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	102.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	93.52	DATE	12/1/11
PSI CAPACITY	30	CASING ELEVATION (FT)	93.09		
SERIAL NUMBER	15940	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			28.65
GZA ENGINEER	S. Lee				

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:	102.00	FT	
GROUND ELEVATION:	93.52	FT M.S.L.	
CASING ELEVATION:	93.09	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.43	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	11:11	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	64.44	FT	
ACTUAL DEPTH:	+ 34.247	FT	
THEORETICAL CABLE LENGTH:	= 98.687	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	93.09	FT M.S.L.	
DEPTH TO WATER:	− 64.44	FT	
REFERENCE ELEVATION:	= 28.65	FT M.S.L.	
TEST NAME:	MW-44-102		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:12	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:
Transducer reading was off by 16.738'.

GZA

WELL ID : MW-44-102

TRANSDUCER INSTALLATION LOG

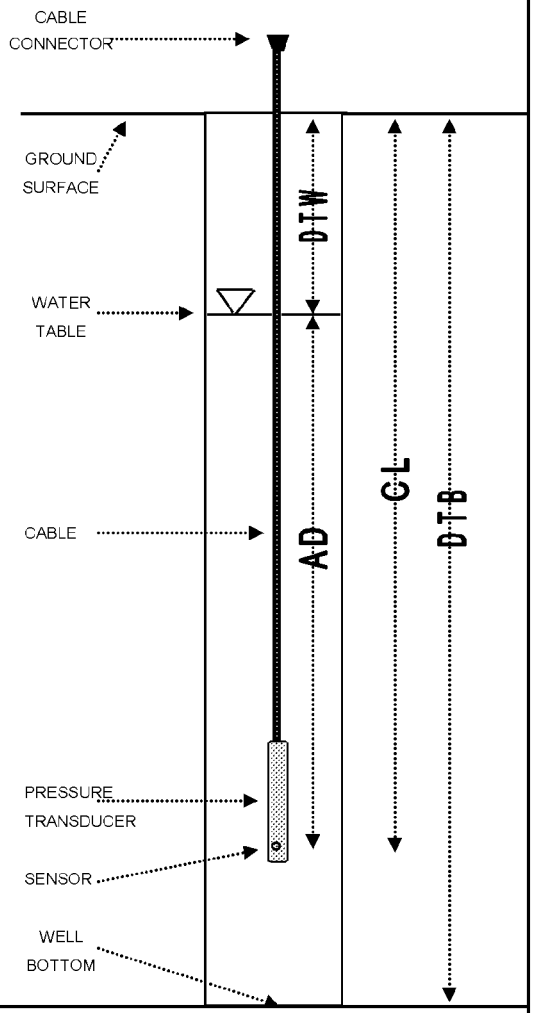
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW49-42
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	66.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.650	DATE	11/4/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.223		
SERIAL NUMBER	5395	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			1.86
GZA ENGINEER	S. Lee				

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:		66.00	FT
GROUND ELEVATION:		14.650	FT M.S.L.
CASING ELEVATION:		14.223	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.43	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		10:09	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		12.36	FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	12.360	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		14.223	FT M.S.L.
DEPTH TO WATER:	−	12.36	FT
REFERENCE ELEVATION:	=	1.863	FT M.S.L.
TEST NAME:		MW49-42	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		10:09	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:
Transducer off by 0.459'.

GZA

WELL ID : MW-49-42

TRANSDUCER INSTALLATION LOG

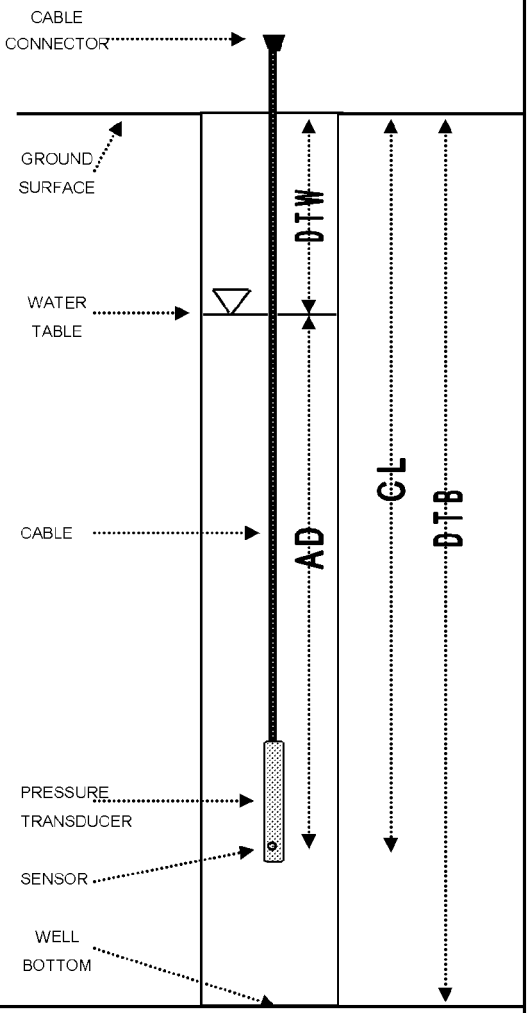
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-50-66
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	67.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.92	DATE	10/27/11
PSI CAPACITY	30	CASING ELEVATION (FT)	14.61		
SERIAL NUMBER	14459	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			4.66
GZA ENGINEER	S. Lee				

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:		65.75	FT
GROUND ELEVATION:		14.92	FT M.S.L.
CASING ELEVATION:		14.61	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.31	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		09:35	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		9.95	FT
ACTUAL DEPTH:	+	89.024	FT
THEORETICAL CABLE LENGTH:	=	98.974	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		14.614	FT M.S.L.
DEPTH TO WATER:	−	9.95	FT
REFERENCE ELEVATION:	=	4.664	FT M.S.L.
TEST NAME:		MW-50-66	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		09:35	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:
Transducer reading off by 0.345'.

TRANSDUCER INSTALLATION LOG

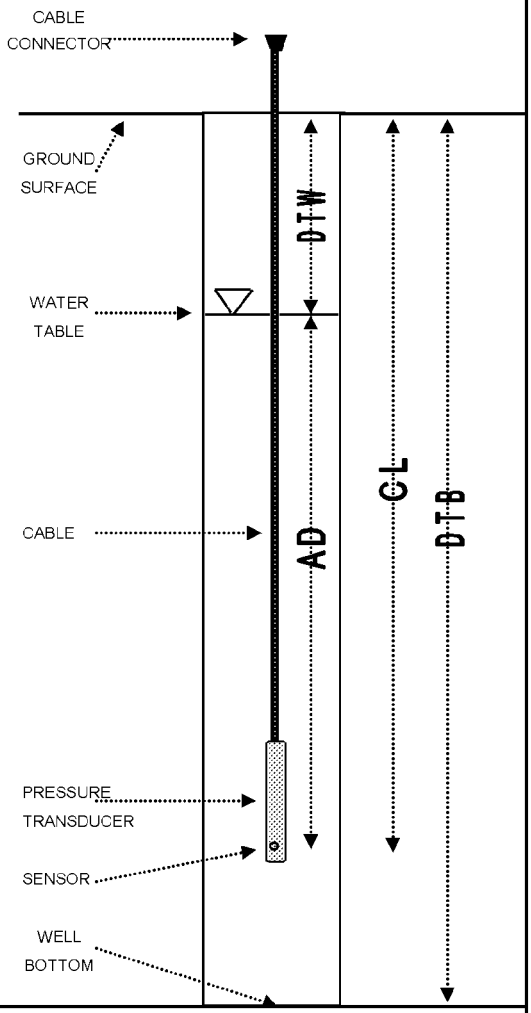
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-56-83
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	88.50	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	70.258	DATE	10/31/11
PSI CAPACITY	30	CASING ELEVATION (FT)	69.207		
SERIAL NUMBER		CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			27.89
GZA ENGINEER	S. Lee				

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:	83.00	FT	
GROUND ELEVATION:	70.258	FT M.S.L.	
CASING ELEVATION:	69.207	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-1.05	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	11:03	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	41.32	FT	
ACTUAL DEPTH:	+ 42.584	FT	
THEORETICAL CABLE LENGTH:	= 83.904	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	69.207	FT M.S.L.	
DEPTH TO WATER:	− 41.32	FT	
REFERENCE ELEVATION:	= 27.887	FT M.S.L.	
TEST NAME:	MW-56-83		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	11:13	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:
Non-vented transducer.

TRANSDUCER INSTALLATION LOG

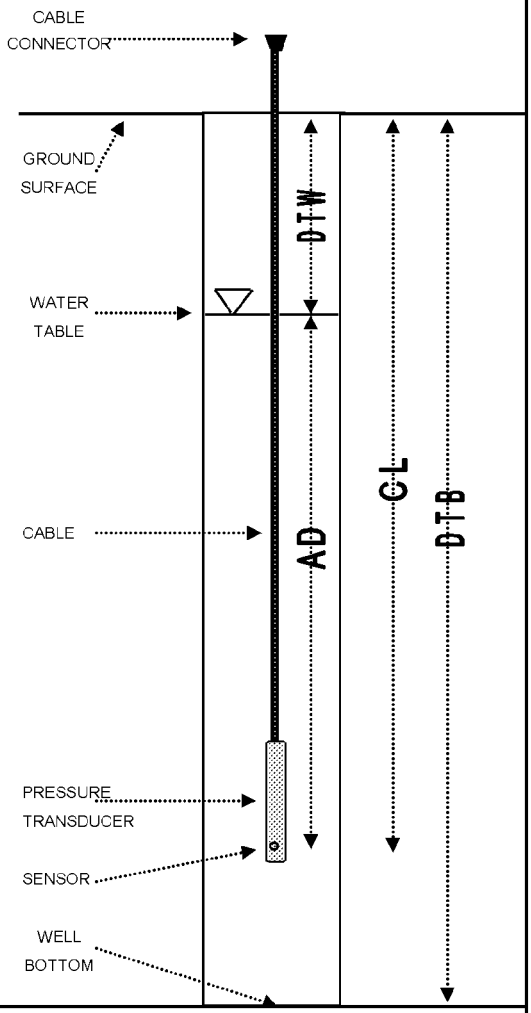
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	I-2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	41.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	80.92	DATE	12/08/11
PSI CAPACITY	30	CASING ELEVATION (FT)	82.23		
SERIAL NUMBER	16587	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			52.81
GZA ENGINEER	S. Lee				

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:	41.00	FT	
GROUND ELEVATION:	80.92	FT M.S.L.	
CASING ELEVATION:	82.23	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	above		
DISTANCE FROM CASING TO GROUND (+ OR -):	1.31	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	13:48	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	29.42	FT	
ACTUAL DEPTH:	+ 43.501	FT	
THEORETICAL CABLE LENGTH:	= 72.921	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	82.23	FT M.S.L.	
DEPTH TO WATER:	− 29.42	FT	
REFERENCE ELEVATION:	= 52.81	FT M.S.L.	
TEST NAME:	I-2		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	13:48	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:
Transducer reading off by 1.142'.

TRANSDUCER INSTALLATION LOG

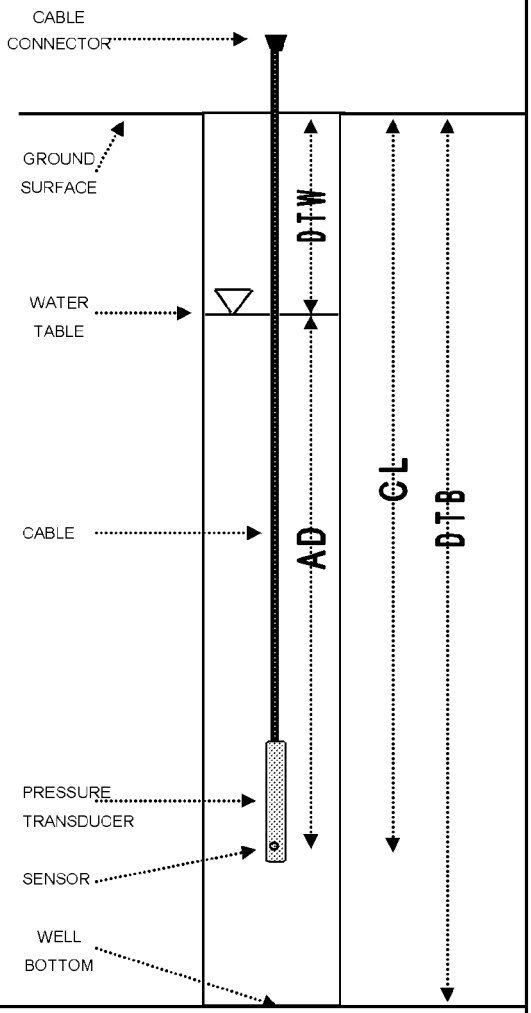
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	I-2n
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	41.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	80.92	DATE	11/18/11
PSI CAPACITY	30	CASING ELEVATION (FT)	82.23		
SERIAL NUMBER	16587	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			49.91
GZA ENGINEER	S. Lee				

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:		41.00	FT
GROUND ELEVATION:		80.92	FT M.S.L.
CASING ELEVATION:		82.23	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		1.31	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		14:50	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		32.32	FT
ACTUAL DEPTH:	+	41.737	FT
THEORETICAL CABLE LENGTH:	=	74.057	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		82.23	FT M.S.L.
DEPTH TO WATER:	−	32.32	FT
REFERENCE ELEVATION:	=	49.91	FT M.S.L.
TEST NAME:		I-2n	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		14:50	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:
Tansducer reading off by 1.23'.

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	U3-C1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

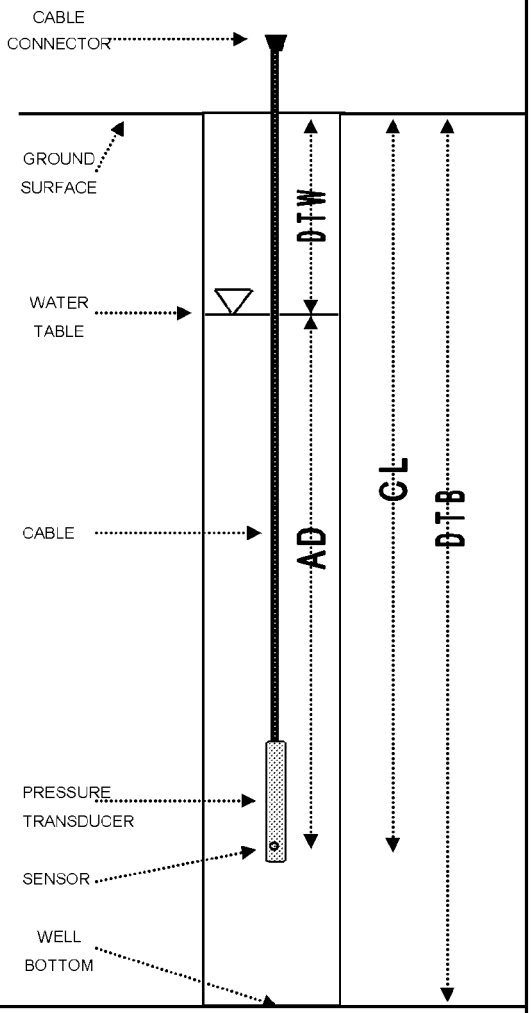
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	NA	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.003	DATE	12/16/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.060		
SERIAL NUMBER	5548	CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	18.06
GZA ENGINEER	S. Lee		

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:			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:		18.060	FT M.S.L.
DEPTH TO WATER:	−	0.00	FT
REFERENCE ELEVATION:	=	18.060	FT M.S.L.
TEST NAME:		U3-C1	
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:
No connection upon arrival. Replaced batteries. Noticed break in cable sheathing. By passed transducer cable and connected directly to transducer to download data. Most recent test was abended. Previous two tests were abended, three consecutive tests have been abended and batteries were replaced all three times. Pulled transducer due to draining of batteries frequently.

TRANSDUCER INSTALLATION LOG

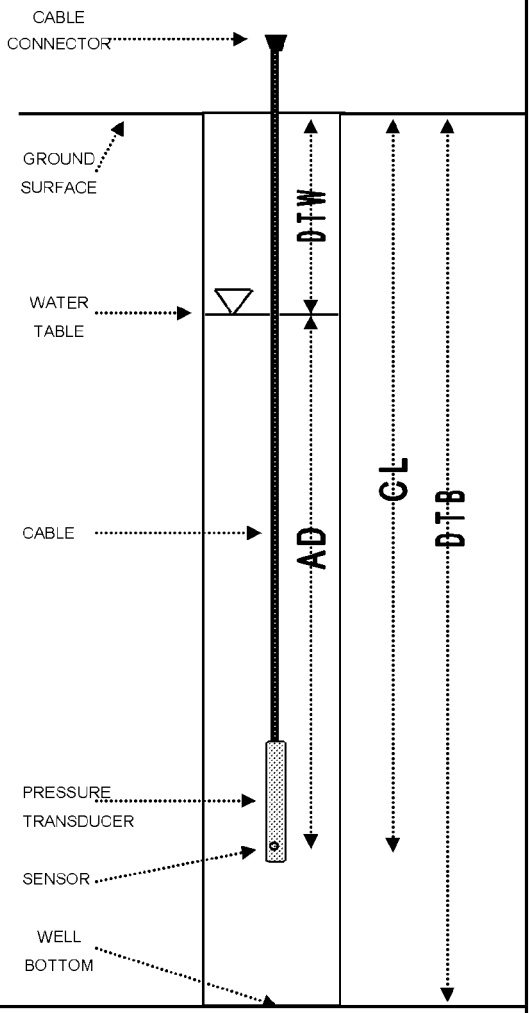
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U3-C1-2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	NA	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.003	DATE	12/16/11
PSI CAPACITY	30	CASING ELEVATION (FT)	18.060		
SERIAL NUMBER		CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			0.97
GZA ENGINEER	S. Lee				

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:	09:20	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	17.09	FT	
ACTUAL DEPTH:	+ 32.973	FT	
THEORETICAL CABLE LENGTH:	= 50.063	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:	− 17.09	FT	
REFERENCE ELEVATION:	= 0.970	FT M.S.L.	
TEST NAME:	U3-C1-2		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	09:20	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:
Transducer severely off. Transducer reading surface at -26.448' CB.
Transducer off by 27.458'.

APPENDIX C: 2011 CHAINS OF CUSTODY

APPENDIX C: Q1-2011 CHAINS OF CUSTODY

IPEC00267329

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 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 (Sr-90)								<-- Preservative Type (6)
B-1-(011)	02/14/11	1544	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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 2/15/11 1510	1 SECURED STORAGE 2/15/11 1510
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

IPEC00267330

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, SC 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
B-6-(011)	2/28/11	1127	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 3 / 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	Scott Lee	2/28/11	1400	Harold Stong	2/28/11	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=Feral, 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

IPEC00267331

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, SL — 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
MH-5-(014)	2/28/11	0947	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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] 2/28/11 1420	[signature] 2/28/11 1430
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=Food, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 9320, 906.0, 903.1) and number of containers provided for each (i.e. 9320 - 3, 906.0/7470A - 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
Coolers Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00267332

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: CS
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 (Sr-90)	<-- Preservative Type (6)	Comments
MH-5-(015)	3/28/11	1306	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	3/30/11	1458	1 SECURED STORAGE	3/30/11	1458
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, A=Air, 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

IPEC00267333

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
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: DNFA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)	<-- Preservative Type (6)	Comments
MH-5-(015)	3/28/11	1306	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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 Cheryl Bergen	3/30/11	1458	1 SECURED STORAGE	3/30/11	1458
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, C=Oil, F=Filter, P=Wipe, U=Urine, F=Feces, N=Other
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, MX = Mixture, 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

IPEC00267334

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
MW-30-69-(037)	02/09/11	1217	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-30-84-(028)	02/09/11	1257	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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	Cheryl Bryan	2/9/11	1355	1 SECURED STORAGE	2/9/11	1355
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, FB = 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=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, T=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

IPEC00267335

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, SL 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)	<-- Preservative Type (6)	Comments
						Should this sample be considered:							
MW-30-69-(038)	3/31/11	1138	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-30-84-(029)	3/31/11	1203	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
													Note: extra sample is required for sample specific QC

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] 3/31/11 1458	1 SECURED STORAGE 3/31/11 1458
2 [signature]	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=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, FI=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

IPEC00267336

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: SDZ/MB/CB — 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)
MW-31-49-(029)	02/09/11	1312	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-31-63-(029)	02/09/11	1314	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-31-85-(029)	02/09/11	1303	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	2/9/11	1530	1 SECURED STORAGE	2/9/11	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

IPEC00267337

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 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: DW/CWA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)								<-- Preservative Type (6)
MW-31-49-(030)	3/30/11	1233	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-31-63-(030)	3/30/11	1313	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-31-85-(030)	3/30/11	1255	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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	3/30/11	1458	1 SECURED STORAGE	3/30/11	1458
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 Y = Yes 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, OI=Oil, FI=Fiber, PW=Wipe, UN=Urine, FE=Feces, AI=Air

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

IPEC00267338

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: SL, CB — 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
MW-32-149-(023)	3/1/11	1337	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-173-(021)	3/1/11	1313	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-190-(025)	3/1/11	1324	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-59-(023)	3/1/11	1138	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-85-(026)	3/1/11	1205	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1					
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=Feed, 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

IPEC00267339

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: SL CB 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
MW-32-59-(024)	3/31/11	1246	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	Note: extra sample is required for sample specific QC
MW-32-85-027)		1318	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	
MW-32-149-(024)		1133	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	
MW-32-173-(022)		1135	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	
MW-32-190-(026)	V	1147	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 Cheryl Bergin 3/31/11 1458	1 SIGNED STORAGE 3/31/11 1458
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: BW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, We=Wet, ML=Mine Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, W=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 82608, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, N = 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

IPEC00267340

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: SL, JB 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)
MW-36-24-(021)	02-28-11	1637	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-36-41-(015)	02-28-11	1353	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-36-52-(020)	02-28-11	1243	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: Specify: (subject to Surcharges)

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]	3/3/11	1420	[signature]	3/3/11	1420
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=Miscellaneous 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

IPEC00267341

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
MW-37-22-(021)	01/27/11	1519	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-37-32-(021)	01/27/11	1509	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-37-40-(021)	01/27/11	1335	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-37-57-(021)	01/27/11	1526	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) Central Mountain Pacific Other ____

Chain of Custody Signatures

Relinquished by (Signed)	Date	Time	Received by (signed)	Date	Time
1 Cheryl Ferguson	1/27/11	1625	1 [illegible]	1/27/11	1625
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 matrixes, 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=Miscible Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, OI=Oil, F=Fiber, P=Wipe, L=Liquor, S=Petrol, N=Nonsol
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

IPEC00267342

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, SL 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)
MW-40-27-(014)	3/08/11	1255	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-40-46-(015)		1258	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-40-81-(015)		1017	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-40-100-(017)		1027	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-40-127-(017)		1041	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-40-162-(015)		1102	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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 Cheryl Bogin	3/08/11	1510	1 SECURED STORAGE	3/8/11	1510
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, OnOil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 82608, 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

IPEC00267343

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)

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)
MW-41-40-(019)	2/14/11	1405	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-41-63-(018)	2/14/11	1337	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	2/14/11	1445	SECURED STORAGE	2/14/11	1445
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

IPEC00267344

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, SL 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
MW-42-49-(024)	03/04/11	1137	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-42-78-(019)	03/04/11	1058	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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	3/4/11	1306	1 SECURED STORAGE	3/4/11	1306
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

IPEC00267345

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: CS 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
MW-43-28-(018)	2/15/11	1308	N	N	GW	Y	N	1	1	1	1							2 Liter Poly	Note: extra sample is required for sample specific QC
MW-43-62-(018)	2/15/11	1345	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]	2/15/11	1510	[signature]	2/15/11	1510
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, FB = 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, OL=Oil, F=Filter, P=Wipe, L=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (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

IPEC00267346

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, SC — 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
MW-44-102-(020)	2/18/11	1044	N	N	GW	Y	N	1	1	1	1							2 Liter Poly	Note: extra sample is required for sample specific QC
MW-44-66-(019)	2/19/11	1441	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]	2/18/11	1521	[signature]	2/19/11	1521
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, FB = 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, Sl=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Feral, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 82608, 6010B/7470A) and number of containers provided for each (i.e. 82608 = 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

IPEC00267347

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 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 (3)	Field Filtered (2)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: DW & Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							<-- Preservative Type (6)
MW-45-42-(023)	2/16/11	1658	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-45-61-(023)	2/16/11	1615	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharges)

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	2/17/11	1545	SECURED STORAGE	2/17/11	1545
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, SE=Sediment, SL=Sludge, SS=Solid Waste, OI=Oil, FI=Filter, PT=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

IPEC00267348

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 500135510

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: SL CB — 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 (Sr-90)							<-- Preservative Type (6)
MW-46-(023)	02-23-11	1246	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	Scott D Tice	2/23/11	1505	Secured Storage	2/23/11	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, SD = 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, OnOil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (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

IPEC00267349

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)	Nickel 63 (Ni63)						<-- Preservative Type (6)	Comments
MW-49-26-(023)	01/28/11	1357	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly	Note: extra sample is required for sample specific QC
MW-49-42-(023)	01/28/11	1300	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly	
MW-49-65-(023)	01/28/11	1315	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]	1/28/11	1500	SAMPLE STORAGE	1/28/11	1500
2	[signature]			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, F=Wipe, T=Trap, 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

IPEC00267350

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: SL, CB 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
MW-50-42-(024)	02-25-11	1236	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-50-66-(029)	02-25-11	1236	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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	Scott D. Lee	2/25/11	1315	Scott D. Lee	2/25/11	1315
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, FB = 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

For Lab Receiving Use Only

Custody Seal Intact? YES NO

Cooler Temp: _____ C

IPEC0026735 1

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: SL, CB 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 (Sr-90)	<-- Preservative Type (6)	Comments
MW-51-40-(018)	03/08/11	1018	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-51-79-(018)	03/08/11	1034	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-51-104-(016)	03/08/11	1210	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-51-135-(016)	03/08/11	1244	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-51-163-(016)	03/08/11	1301	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-51-189-(016)	03/08/11	1230	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharges) 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]	3/08/11	1511	[signature] SEE BACK	3/08/11	1511
2	[signature]			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

IPEC00267352

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: SL, CB 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 (Sr-90)	Nickel 63 (Ni63)							<-- Preservative Type (6)
MW-53-82-(018)	03/03/11	1153	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-53-120-(022)	03/03/11	1200	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	3/3/11	1455	[signature]	3/3/11	1455
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

IPEC00267353

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 500013510

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, MP 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) (Hours)	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
MW-54-37-(016)	2/1/11	1410	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly	Note: extra sample is required for sample specific QC
MW-54-58-(016)	2/1/11	1422	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly	
MW-54-123-(016)	2/1/11	1411	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly	
MW-54-144-(016)	2/1/11	1234	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly	
MW-54-173-(016)	2/1/11	1229	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly	
MW-54-190-(016)	2/1/11	1225	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly	

T&T 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]	2/1/11	1525	1 [signature]	2/1/11	1525
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, WetWater, ML=Miscellaneous Liquid, SO=Soil, SE=Sediment, SL=Sludge, SS=Solid Waste, OnOil, FeFilter, FeWipe, UnUrine, FeFecal, Method

5) Sample Analyses 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

IPEC00267354

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, MG 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
MW-55-24-(017)	02/03/11	1413	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-55-35-(016)	02/03/11	1416	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-55-54-(017)	02/03/11	1417	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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	Chris Bryan	02/03/11	1540	SECURED STORAGE	02/03/11	1540
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, FB = 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=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, FoFilter, PoWipe, I=Urine, FeFecal, NoNasal

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

IPEC00267355

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, MG, SL 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
MW-60-35-(016)	02/11/11	1217	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-35-(016)-B	02/11/11	1217	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-35-(016)-D	02/11/11	1217	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-35-(016)-S	02/11/11	1217	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-53-(016)	02/11/11	1057	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-72-(016)	02/10/11	1254	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-135-(016)	02/10/11	1304	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-154-(016)	02/10/11	1253	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-176-(016)	02/10/11	1031	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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 2/11/11 1305	1 SECURED STORAGE 02/11/11 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, UnU=Urine, F=Food, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 82688, 6010B/7470A) and number of containers provided for each (i.e. 82688 - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, N = Nitric Acid, SB = 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

IPEC00267356

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, SL 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)
MW-62-18-(016)	02/24/11	1249	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-62-37-(016)		1252	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-62-53-(015)		1257	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-62-71-(016)		1240	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-62-92-(016)		1236	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-62-138-(016)		1454	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-62-182-(016)		1507	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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 Cheryl Bergmann	2/24/11	1610	1 SECURED STORAGE	2/24/11	1610
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, OC=Oil, F=Filter, S=Wipe, U=Urine, FeFecal, NeNasal
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

IPEC00267357

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: SL, CB 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
MW-63-18-(016)	3/2/11	1060	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-34-(016)	3/2/11	1050	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-50-(016)	3/2/11	1421	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-93-(017)	3/2/11	1414	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-112-(016)	3/2/11	1415	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-121-(016)	3/2/11	1110	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-163-(016)	3/2/11	1077	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-174-(016)	3/2/11	1036	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	3/2/11	1500	1 SIGNED COURIER	3/2/11	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. 82608, 6010B/7470A) and number of containers provided for each (i.e. 82608 - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SB = 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

IPEC00267358

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: [signature] 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
MW-66-21-(016)	05/23/11	1024	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-66-36-(015)	05/23/11	1551	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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]	05/23/11	1700	1 [signature]	05/24/11	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 a "N" for sample was not field filtered

4) Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, WE = Water, ML = Misc. Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, OI = Oil, FF = Fish Fillet, PW = Paint, OT = Other, FP = Food, AI = Air

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

IPEC00267359

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)	Nickel 63 (Ni63)	<-- Preservative Type (6)	Comments
MW-67-39-(016)	02/07/11	1348	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-105-(015)	02/07/11	1357	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-173-(016)	02/07/11	1413	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-219-(015)	01/31/11	1448	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-276-(015)	01/31/11	1431	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-323-(015)	01/31/11	1504	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-340-(015)	01/31/11	1453	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharges)

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	02/07/11	1630	1 SIGNED STORAGE	02/07/11	1630
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. 82608 - 8010B/8470A) and number of containers provided for each (i.e. 82608 - 3, 8010B/8470A - 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

IPEC00267360

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, SL 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
U3-4D-(027)	2/7/11	1441	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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	Chris Bergin	2/7/11	1545	Received Storage	2/7/11	1545
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=Miso 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

IPEC00267361

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, SL 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 (Sr-90)								<-- Preservative Type (6)	Comments
U3-T1-(031)	02-22-11	1111	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	Note: extra sample is required for sample specific QC
¶																				

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]	2/22/11	1510	[signature]	2/22/11	1510
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

IPEC00267362

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, SL
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 (Sr-90)	<-- Preservative Type (6)	Comments
U3-T2-(036)	02-22-11	1430	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	

Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Surcharges will be applied)
Fax Results: Yes / (No)
Circle Deliverable: C of A / QC Summary / Level 3 / 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 Robert D. Lee	2/22/11	1510	1 Howard Strauge	2/22/11	1510
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=Miscellaneous 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

APPENDIX C: Q2-2011 CHAINS OF CUSTODY

IPEC00267364

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: SL, CB — 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 (Sr-90)								<-- Preservative Type (6)
B-1-(012)	04-25-11	1050	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	4/25/11	1510	1 SECURED STORAGE	4/25/11	1510
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=Miscl Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, T=Tissue, N=Nasal

5.) Sample Analyses 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

IPEC00267365

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: SL, CB 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 (Sr-90)							<-- Preservative Type (6)
B-6-(012)	04-25-11	0948	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	4/25/11	1510	1 SECURED STORAGE	4/25/11	1510
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, L=Leftover, F=Fecal, F=Blood

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

IPEC00267366

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, SC — 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)
B-6-(013)	7/8/11	1105	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	7/8/11	1447	[signature]	7/8/11	1447
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=Mix: Liquid, SO=Soil, SE=Sediment, SL=Sludge, SS=Solid Waste, OC=Oil, FB=Filter, FW=Wipe, O=Other, F=Fecal, B=Blood
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

IPEC00267367

GEL Chain of Custody and Analytical Request

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

Page: 1 of 1	GEL Laboratories, LLC
Project #: Entergy GW Mon Prog	2040 Savage Road
GEL Quote #:	Charleston, SC 29407
COC Number [1]:	Phone: (843) 556-8171
PO Number: 50013510	Fax: (843) 766-1178
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:	SL/CB	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 (Sr-90)	Nickel 63 (Ni63)	<-- Preservative Type (6)	Comments
LAF-002-(015)	05-02-11	1250	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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			1 SECURED STORAGE	5/3/11	1232
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, WaWater, ML=Mix. 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**

IPEC00267368

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, SC 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 (Sr-90)	<-- Preservative Type (6)	Comments
MH-5-(015)	4/22/11	1337	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other ____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 Cheryl Bryant	4/22/11	1540	1 SECURED STORAGE	4/22/11	1540
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, FB = 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=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, OL=Oil, FI=Filter, PW=Wipe, DI=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 82608 - 8260B, 6010B/7470A - 3).

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

IPEC00267369

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
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) (Hours)	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)
MH-5-(017)	6/29/11	1506	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: Rush: ✓ Specify: (Subject to Surcharge)
Fax Results: Yes / (No)
Circle Deliverable: COA / 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]	6/29/11	1525	SEALED STORAGE	6/29/11	1525
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

IPEC00267370

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: GB, SL 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)
MH-5-(018)	7/7/11	1429	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

T&T 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]	7/13/11	1447	[signature]	7/13/11	1447
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

IPEC00267371

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [3]:
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, SL
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)
MH-5-(019)	7/12/11	1246	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	7/13/11	1447	[signature]	7/13/11	1447
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=Feces, 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, MX = 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

IPEC00267372

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, SL 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 (Sr-90)								<-- Preservative Type (6)
MH-5-(020)	7/20/11	1048	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	7/27/11	1142	1 SECURED STORAGE	7/27/11	1142
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=Miscl. 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

IPEC00267373

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, SL 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 (Sr-90)								<-- Preservative Type (6)
MH-5-(021)	7/26/11	1250	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	7/27/11	1142	1 SECURED STORAGE	7/27/11	1142
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

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Lab Returns to Proj. Mgr. GOLDENROD COPY - Proj. Mgr. Keeps

W.O. # ______________ *(for lab use only)*

CHAIN-OF-CUSTODY RECORD

Sample I.D.	Date/Time Sampled (Very Important)	Matrix A=Air S=Soil GW=Ground W. SW=Surface W. WW=Waste W. DW=Drinking W. Other (specify)	WW ONLY: 624	WW ONLY: ☐601 ☐602	WW ONLY: 625	ANALYSIS REQUIRED: ☐524.2 ☐502.1	8260	8260 - [illegible] List	8021	8021 - "8010" List	8021 - "8020" List	8270 ☐ [illegible]	608 PCBs Only	8081 - Pest Only	TPH-GC (Mod. 8100)	ETPH (CT)	Metals ☐PPM-13 ☐ R-8	Metals [illegible]	Total # of Cont.	Note #
							X					X								

PRESERVATIVE (Cl - HCl, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:

NOTES: Preservatives, special reporting limits, known contamination, etc.

PROJECT MANAGER: ______________ EXT: ______

TURNAROUND TIME: Standard Rush___ Days, Approved by: ______

LAB USE
TEMP. OF COOLER ______ °C

GZA GEOENVIRONMENTAL, INC.
ENGINEERS AND SCIENTISTS

27 Naek Road
VERNON, CT 06066
(860) 875-7655
FAX (860) 872-2416

GZA FILE NO: ______________ P.O. NO. ______

PROJECT ______________

LOCATION ______________

COLLECTOR(S) ______________ SHEET ___ OF ___

GZAP631

IPEC00267375

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: E.CB 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: ESCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-30-69-(039)	05-05-11	1205	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-30-84-(030)	05-05-11	1253	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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	Edith Lee	5-5-11	1404	Gerard Stoyl	5-5-11	1404
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

IPEC00267376

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 500135510

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/SL — 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	RCRA Regulated	Should this sample be considered:	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)	<-- Preservative Type (6)	Comments
MW-30-69-(040)	7/11/11	1205	N	N	GW	Y	N		1	1	1	1		2 Liter Poly
MW-30-84-(031)	7/11/11	1245	N	N	GW	Y	N		1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other .....

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	7/11/11	1600	SECURED STORAGE	7/11/11	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=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, D=Drum, F=Foreal, 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

IPEC00267377

Page: 1 of 1
Project #: Enterey GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 80013510

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: C 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 (I3)	Gamma Spec (GS)	Strontium 90 (Sr90)							<= Preservative Type (6)
MW-31-49-(032)	6/28/11	1404	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-31-63-(032)		1450	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-31-85-(032)		1425	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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
Cheryl Bergen 6/28/11 1515	Secured Storage 6/28/11 1515
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, ME = 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=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, S=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

IPEC00267378

New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-0001

CHAIN OF CUSTODY

Client: New York State Department of Environmental Conservation
Project: Entergy- Indian Point Ground Water Monitoring
Sampled by: SL, CB
Client Contact: Tim Rice (NYSDEC) **Phone:** (518) 402-8574

Sample Description:						Analysis / Method																							
Sample Location	Date Completed	Time Completed	Sample Matrix	Composite or Grab	No. of Containers	Gross Alpha	Gross Beta	Ni-59	Ni-63	Fe-55	Gamma	Tritium	I-129	P-32	C-14	Ce-144	Am-241	Np-237	Nb-94	Pu-238, 239/240	Pu-241	Ra-224, 226	Sr-89/90	Tc-99	U-234, 235, 238	Th-230, 232	Cs-137	Other
MW-31-49-(031)	4/18/11	1253	GW	Grab	1						X	X											X					
MW-31-63-(031)	4/18/11	1321	GW	Grab	1						X	X											X					
MW-31-85-(031)	4/18/11	1318	GW	Grab	1						X	X											X					

Relinquished by: Robert D. Lee Date: 4/18/11 Time: 1340 Received by: [signature] Date: 4/18/11 Time: 1340
Relinquished by: Date: Time: Received by: Date: Time:
Relinquished by: Date: Time: Received by: Date: Time:
Shipment Method: Air Bill Number:

Turnaround Time Required:
Routine:
Rush:
Cooler Temp:

Comments:

IPEC00267379

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: SL, CB 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
MW-31-49-(031)	4/18/11	1253	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-31-63-(031)	4/18/11	1321	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-31-85-(031)	4/18/11	1318	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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]	4/18/11	1500	1 SECURED STORAGE	4/18/11	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. 82608, 6010B/7470A) and number of containers provided for each (i.e. 82608 - 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

IPEC00267380

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: SL, CB 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
MW-32-59-025)	04-27-11	1226	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-85-(028)		1304	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-149-(025)		1112	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-173-(023)		1127	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-190-(027)	↓	1117	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 Cheryl Bryan	4/28/11	1556	1 SECURED STORAGE	4/28/11	1556
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, FB = 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=Feces, 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

IPEC00267381

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 5001 3510

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 — 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
MW-32-59-(026)	6/29/11	1238	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-85-(029)		1310	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-149-(026)		1152	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-173-(024)		1133	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-190-(028)		1126	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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 Cheryl Benjamin	6/29/11	1525	1 Secured Storage	6/29/11	1525
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=Miss Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, FB=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8268B, 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

IPEC00267382

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, SL 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
MW-36-24-(022)	4/28/11	1434	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-36-41-(016)	↓	1539	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-36-52-(021)	↓	1438	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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	4/28/11	1556	1 SECURED STORAGE	4/28/11	1556
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 - 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

IPEC00267383

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: SLCB 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
MW-37-22-(022)	4/28/11	1205	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-37-32-(022)		1221	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-37-40-(022)		1131	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-37-57-(022)		1217	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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	4/28/11	1556	1 SECURED STORAGE	4/28/11	1556
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, FF=Filter, PW=Wipe, DW=Drink, FF=Fecal, NN=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

IPEC00267384

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: JL, CB 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: DOE/AL Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-39-67-(011)	04-26-11	1450	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-39-84-(011)		1425	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-39-102-(011)		1433	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-39-124-(011)		1301	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-39-183-(011)		1135	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-39-195-(011)	↓	1238	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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]	4/26/11	1550	1 SECURED STORAGE	4/26/11	1550
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, WaWater, MLMiscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, OtOil, FtFilter, PtWipe, BkBlank, PtPaint, NtNaail

5.) Sample Analyses Requested: Analytical method requested (i.e. 82600, 6010B/7470A) and number of containers provided for each (i.e. 82600 - 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

IPEC00267385

GEL Chain of Custody and Analytical Request

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

Page: 1 of 1	GEL Laboratories, LLC
Project #: Entergy GW Mon Prog	2040 Savage Road
GEL Quote #:	Charleston, SC 29407
COC Number (1):	Phone: (843) 556-8171
PO Number: 50013510	Fax: (843) 766-1178
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:	SJ, CB	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)
MW-39-67-(012)	07-15-11	1342	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-39-84-(012)	07-15-11	1433	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-39-102-(012)	07-15-11	1402	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-39-124-(012)	07-15-11	1144	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-39-183-(012)	07-15-11	1149	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-39-195-(012)	07-15-11	1113	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	7/15/11	1525	1 SEALED STORAGE	7/15/11	1525
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

IPEC00267386

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)

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)
MW-40-27-(015)	04-29-11	1329	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-40-46-(016)		1331	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-40-81-(016)		1108	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-40-100-(018)		1127	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-40-127-(018)		1126	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-40-162-(016)	↓	1226	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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 Cindy Bergin, 5/3/11 1232	1 SECURED STORAGE 5/3/11 1232
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, OnOil, 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 = issue field blank

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

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00267387

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, SC — 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) (hh:mm)	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
MW-41-40-(020)	4/20/11	1351	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	Note: extra sample is required for sample specific QC
MW-41-63-(019)	4/20/11	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)
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 Carl Benjamin	4/20/11	1435	1 SECURED STORAGE	4/20/11	1435
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 Numbers = 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 a "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, I=Ice, T=Tissue, V=Vegetation, M=Metal
5.) Sample Analysis Requested: Analytical method requested (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

IPEC00267388

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, SC
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: RCRA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)							<-- Preservative Type (6)
MW-41-40-(021)	7/15/11	1230	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-41-63-(020)	7/15/11	1251	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	7/15/11	1525	1 SECURED STORAGE	7/15/11	1525
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, SE=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

IPEC00267389

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: SL, CB 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)
MW-42-49-(025)	04-21-11	1404	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-42-78-(020)	04-21-11	1345	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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 Cheryl Bryan 4/22/11 1426	1 SECURED STORAGE 4/22/11 1426
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, We=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, Oi=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, R=Rinsate
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

IPEC00267390

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, SL — 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 (1)	Field Filtered (2)	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)
MW-42-49-(026)	7/1/11	1202	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-42-78-(021)	7/1/11	1200	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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 Cindy Baggini 7/1/11 1500	SEALED STORAGE 7/1/11 1506
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, OnOil, FrFilter, FrWipe, UnUrine, FrFood, Nonfood
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

IPEC00267391

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, SL 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: DoD/DOE/NRC Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<-- Preservative Type (6)	Comments
MW-43-28-(019)	4/21/11	1115	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	Note: extra sample is required for sample specific QC
MW-43-62-(019)	4/21/11	1100	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 Cheryl Burgin 4/21/11 1426	1 SECURED STORAGE 4/21/11 1426
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

IPEC00267392

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, SL 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) (Hours)	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)
MW-44-102-(021)	4/26/11	1218	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-44-66-(020)	4/26/11	1317	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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 Cindy Burgin	4/26/11	1550	1 SIGNED STORAGE	4/26/11	1550
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=Miix Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Fiber, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 82688, 6010B/7470A) and number of containers provided for each (i.e. 82688 - 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

IPEC00267393

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: SL, CB 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
MW-44-102-(022)	07/19/11	1053	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-44-66-(021)	07/19/11	1539	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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] 7/19/11 1550	1 [signature] 7/19/11 1550
2 [signature]	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=Feed, 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, MX = Mixture, 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

IPEC00267394

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: SL, CB — 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
MW-45-42-(024)	04/20/11	1406	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-45-61-(024)	04/20/11	1007	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	4/20/11	1435	1 SEALED SOLAGE	4/20/11	1435
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, OC=Oil, F=Filter, P=Wipe, U=Urine, F=Feces, 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

IPEC00267395

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: [illegible] 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)
MW-45-42-(025)	07-25-11	1323	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-45-61-(025)	07-25-11	1000	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	7/25/11	1350	1 SECURED STORAGE	7/25/11	1350
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, R=Wipe, U=Urine, B=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: Hcl = Hydrochloric Acid, N = 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

IPEC00267396

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: CD, SL
Send Results To: Patrick Donahue

Sample Analysis Requested (3) (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 ($r90)								<-- Preservative Type: (6)	Comments
MW-46-(024)	4/25/11	1119	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	Note: extra sample is required for sample specific QC

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 Cindy Engvi 4/27/11 1442	1 SEALED STORAGE 4/27/11 1442
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

IPEC00267397

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, SC — 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)
MW-46-(025)	7/13/11	1329	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	7/13/11	1447	[signature]	7/13/11	1447
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 - 3, 6010B/7470A - 1).
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, MX = 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

IPEC00267398

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: SL, CB 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)
MW-47-56-(006)	07-06-11	1532	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-47-80-(005)	07-06-11	1437	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	7/7/11	1506	SECURED STORAGE	7/7/11	1506
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. 82608, 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

IPEC00267399

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, SL — 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: DW/CWA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)	Nickel 63 (Ni63)	<-- Preservative Type (6)	Comments
MW-49-26-(024)	4/15/11	1158	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-49-42-(024)	4/15/11	1155	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-49-65-(024)	4/15/11	1152	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other ____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	4/15/11	1446	1 SECURED STORAGE	4/15/11	1446
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=Miscellaneous 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

IPEC00267400

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, SL 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 (Sr-90)	Nickel 63 (Ni63)	<-- Preservative Type (6)	Comments
MW-50-42-(025)	5/3/11	1205	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-50-66-(030)	5/3/11	1207	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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 Cheryl Bryni	5/3/11	1232	1 SECURED STORAGE	5/3/11	1232
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

IPEC00267401

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: SL, CB 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)
MW-50-42-(026)	07-25-11	1248	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-50-66-(031)	07-25-11	1226	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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] 7/25/11 1350	1 SECURED STORAGE 7/25/11 1350
2 [signature]	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, OI=Oil, FI=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

IPEC00267402

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: SL / CB 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
MW-51-40-(019)	04-29-11	1041	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-51-79-(019)		1057	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-51-104-(017)		1235	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-51-135-(017)		1316	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-51-163-(017)		1319	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-51-189-(017)		1252	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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 Cheryl Bergini	5/3/11	1232	1 SECURED STORAGE	5/3/11	1232
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=Miscl Liquid, SD=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

IPEC00267403

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, SL 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
MW-52-11-(006)	4/22/11	1210	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-52-18-(006)		1212	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-52-48-(006)		1218	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-52-64-(006)		1523	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-52-122-(006)		1045	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-52-162-(006)		1018	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-52-181-(006)		1022	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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 Cheryl Burgess	4/27/11	1442	1 SECURED STORAGE	4/27/11	1442
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=Miscl 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 - 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

IPEC00267404

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: SL, CB 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
MW-52-11-(007)	07-26-11	1232	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-52-18-(007)	↓	1439	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-52-48-(007)	↓	1502	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-52-64-(007)	07-27-11	1045	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-52-122-(007)	07-26-11	1334	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-52-162-(007)	↓	1133	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-52-181-(007)	↓	1143	N	N	GW	Y	N	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]	7/26/11	1111	[signature]	7/27/11	1111
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=Feral, 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

IPEC00267405

New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-0001

CHAIN OF CUSTODY

Client: New York State Department of Environmental Conservation
Project: Entergy- Indian Point Ground Water Monitoring
Sampled by: C. BEAMECHUI, S. LEE
Client Contact: Tim Rice (NYSDEC) **Phone:** (518) 402-8574

Sample Description:

Sample Location	Date Completed	Time Completed	Sample Matrix	Composite or Grab	No. of Containers	Analysis / Method: Gross Alpha	Gross Beta	Ni-59	Ni-63	Fe-55	Gamma	Tritium	I-129	P-32	C-14	Ce-144	Am-241	Np-237	Nb-94	Pu-238, 239/240	Pu-241	Ra-224, 226	Sr-89/90	Tc-99	U-234, 235, 238	Th-230, 232	Cs-137	Other
MW-53-82-(019)	4/13/11	1245	GW	Grab	1				X		X	X											X					
MW-53-120-(023)	4/13/11	1152	GW	Grab	1				X		X	X											X					

Relinquished by: Date: 4/15/11 Time: 1340 Received by: Date: 4/18/11 Time: 1341
Relinquished by: Date: Time: Received by: Date: Time:
Relinquished by: Date: Time: Received by: Date: Time:
Shipment Method: AirBill Number:

Turnaround Time Required:
Routine:
Rush:
Cooler Temp:

Comments:

IPEC00267406

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, SL 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
MW-53-82-(019)	4/18/11	1245	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-53-120-(023)	4/18/11	1152	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly	

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharges)

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	4/18/11	1500	SECURED STORAGE	4/18/11	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, FB = 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, FF=Filter, PW=Wipe, U=Urine, F=Feral, 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, MX = 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

IPEC00267407

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, SL 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
MW-53-82-(020)	6/30/11	1213	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly	Note: extra sample is required for sample specific QC
MW-53-120-(024)	6/30/11	1307	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] 7/1/11 1506	1 STORED STORAGE 7/1/11 1506
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, FB = 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, B=Blood, 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

IPEC00267408

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: SZ 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) (Hours)	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
MW-54-37-(017)	04/12/11	1202	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-58-(017)		1204	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-123-(017)		1222	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-144-(017)		0950	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-173-(017)		0956	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-190-(017)		1001	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other ____

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	Scott D. Lee	4/12/11	1444	Secured Storage	4/12/11	1444
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, FB = 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, T=Tissue, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 82688, 6010B/7470A) and number of containers provided for each (i.e. 82688 - 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

IPEC00267409

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: S, CB — 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)
MW-54-37-(018)	07-18-11	1345	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-54-58-(018)		1333	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-54-123-(018)		1406	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-54-144-(018)		1238	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-54-173-(018)		1220	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-54-190-(018)		1314	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	7/18/11	1505	1 SECURED STORAGE	7/18/11	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, We=Wipe, 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

IPEC00267410

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, SL 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)
MW-56-53-(010)	4/27/11	1208	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-56-83-(012)	4/27/11	1346	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	Cheryl Bergen	4/27/11	1442	SECURED STORAGE	4/27/11	1442
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

IPEC00267411

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, SC 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)
MW-56-53-(011)	7/6/11	1258	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-56-83-(013)	7/6/11	1158	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	7/7/11	1506	1 SECURED STORAGE	7/7/11	1506
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

IPEC00267412

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, SL 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: DW/CA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)	<-- Preservative Type (6)	Comments
MW-57-11-(007)	5/4/11	1028	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-57-20-(007)		1037	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-57-45-(008)		1103	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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	5/4/11	1346	1 SECURED STORAGE	5/4/11	1346
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

IPEC00267413

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, SC 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
MW-57-11-(008)	7/18/11	1157	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-57-20-(008)	"	1209	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-57-45-(009)	"	1236	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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	7/18/11	1525	1	7/18/11	1525
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, MX = 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

IPEC00267414

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: SL, CB 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: DoD/A Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-58-26-(012)	05-03-11	0958	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-58-65-(012)	05-03-11	1011	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other ____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	5/3/11	1232	1 SECURED STORAGE	5/3/11	1232
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**

IPEC00267415

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, SL 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
MW-58-26-(013)	7/5/11	1329	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-58-65-(013)	7/5/11	1330	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Note: extra sample is required for sample specific QC

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]	7/7/11	1506	SEALED STORAGE	7/7/11	1506
2	[signature]					
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=Food, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 8011B/7473A) and number of containers provided for each (i.e. 8260B - 3, 60/0B/7-470A - 1)

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, MX = Mixture, 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

IPEC00267416

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, SL 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
MW-59-32-(005)	7/20/11	0959	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-59-45-(005)	↓	0959	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-59-68-(005)	↓	1014	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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	7/20/11	1120	1 SEALED STORAGE	7/20/11	1120
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 Code = 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, WaWater, ML=Misc Liquid, SO=Soil, SE=Sediment, SL=Sludge, SW=Solid Waste, OnOil, F=Filter, PaWipe, LiLiquid, FrFoam, 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, N = 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

IPEC00267417

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)

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
MW-60-35-(017)	4/15/11	1136	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-53-(017)		1137	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-53-(017)-B		1137	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-53-(017)-D		1137	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-53-(017)-S		1137	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-72-(017)		1312	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-135-(017)		1325	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-154-(017)		1319	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-176-(017)		1349	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	4/15/11	1446	1 SECURED STORAGE	4/15/11	1446
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, FB = 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=Miscellaneous Liquid, SO=Soil, SE=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, H=Helium, I=Freon, N=Nitrogen

5.) Sample Analysis Requested: Analytical method requested (i.e. 82688, 8010B/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, 0 no preservative = added = leave field blank

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

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00267418

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)

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
MW-60-35-(017)	4/15/11	1136	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-53-(017)		1137	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-53-(017)-B		1137	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-53-(017)-D		1137	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-53-(017)-S		1137	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-72-(017)		1312	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-135-(017)		1325	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-154-(017)		1319	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-176-(017)	"	1349	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]	4/15/11	1446	1 SECURED STORAGE	4/15/11	1446
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, FB = 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

IPEC00267419

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, SL 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-62-18-(017)	4/13/11	1158	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-37-(017)		1210	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-53-(016)		1132	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-71-(017)		1115	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-92-(017)		1103	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-138-(017)		1439	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-182-(017)		1444	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]	4/19/11	1210	SECURED STORAGE	4/19/11	1210
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

IPEC00267420

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)

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
MW-62-18-(018)	7/22/11	1135	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-62-37-(018)		1228	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-62-53-(017)		1047	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-62-71-(018)		1012	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-62-92-(018)		1058	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-62-138-(018)		1150	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-62-182-(018)		1202	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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	7/22/11	1330	1 SEALED STORAGE	7/22/11	1330
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

IPEC00267421

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)

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
MW-63-18-(017)	4/19/11	1035	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-34-(017)		1035	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-50-(017)		1125	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-93-(017)		1127	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-112-(017)		1125	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-121-(017)		0954	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-163-(017)		0949	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-174-(017)	↓	0952	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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] 4/19/11 1210	1 SECURED STORAGE 4/19/11 1210
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

IPEC00267422

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: SL, CB 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)
MW-63-18-(018)	07-21-11	1036	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-63-34-(018)		1000	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-63-50-(018)		1125	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-63-93-(019)		1132	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-63-112-(018)		1140	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-63-121-(018)		0958	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-63-163-(018)		1009	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-63-174-(018)		0957	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other ___

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	7/21/11	1254	1	7/21/11	1254
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=Feral, 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

IPEC00267423

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: CR, SL — 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
MW-65-48-(002)	7/7/11	1219	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-65-80-(003)	7/13/11	1012	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other ____

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	Scott A. Lo	7/13/11	1447	Erin Trent	7/13/11	1447
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=Feces, 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, MX = 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

IPEC00267424

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, SL 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: DW/CWA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)						<-- Preservative Type (6)	Comments
MW-66-21-(017)	4/14/11	1343	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly	Note: extra sample is required for sample specific QC
MW-66-36-(016)	4/14/11	0953	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) Central Mountain Pacific Other ____

Chain of Custody Signatures

Relinquished by (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	4/14/11	1555	1 SECURED STORAGE	4/14/11	1555
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

IPEC00267425

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, SL 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
MW-67-39-(016)	9/14/11	1325	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-105-(016)		1343	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-173-(017)		1409	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-219-(016)		1049	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-276-(016)		1053	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-323-(016)		1133	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-340-(016)		1117	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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	Cheryl Bergeron	9/14/11	1555	SEALED STORAGE	9/14/11	1555
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=Mix, L=Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Blood

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

IPEC00267426

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: SL, CB 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
MW-107-(010)	05-02-11	0925	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other ____

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	5/3/11	1232	SECURED STORAGE	5/3/11	1232
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

IPEC00267427

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: SL, CB 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)
MW-108-(005)	07/5/11	1508	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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] 7/11 1506	1 ISSUED STORAGE 7/11 1506
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, FB = 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, SE=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

IPEC00267428

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: SL, CB
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)
MW-109-(005)	07-05-11	1245	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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] 7/7/11 1506	1 FEDEX STORAGE 7/7/11 1506
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, OnOil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 8018B/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, MX = 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

IPEC00267429

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: SL, JB — 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
~~RW-1-(Upper)-(001)~~			~~N~~	~~N~~	~~GW~~	~~Y~~	~~N~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~2 Liter Poly~~	
RW-1-(Middle)-(001)	7/12/11	0905	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
~~RW-1-(Lower)-(001)~~			~~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) Central Mountain Pacific Other _____

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	Jeff Dyke	7/12/11	1447	Leonard Hoag	7/12/11	1447
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=Miscellaneous 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. *82608 - 3, 90198/7478A* ; and number of containers provided for each (i.e. *82608 - 3, 90198/7478A - 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

IPEC00267430

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, SL 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: DoD/CA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)							<-- Preservative Type (6)
U1-CSS-(016)	5/4/11	1324	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	5/4/11	1346	SECURED STORAGE	5/4/11	1346
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, FB=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

IPEC00267431

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, SL 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)
U1-CSS-(017)	7/8/11	1333	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	7/12/11	1447	[signature]	7/13/11	1447
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, FB = 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

IPEC00267432

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: SL, CB — 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
U3-3-(014)	07-13-11	1238	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	7/13/11	1447	[signature]	7/13/11	1447
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, MX = 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

IPEC00267433

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, SL — 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: DW/CWA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
U3-4D-(028)	4/25/11	1450	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other ____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	4/25/11	1442	1 SECURED STORAGE	4/25/11	1442
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, 6810/7470A) 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**

IPEC00267434

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: SL, BB 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 [1]	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 (Sr-90)	<-- Preservative Type (6)	Comments
US-4D-(029)	07-14-11	1155	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC

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]	7/14/11	1255	SECURED STORAGE	7/14/11	1255
2	[signature]			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, WeWater, ML=Miscellaneous 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 - 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

IPEC00267435

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, SL 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: DW/CA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)								<-- Preservative Type (6)	Comments
U3-4S-(003)	4/25/11	1413	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	Note: extra sample is required for sample specific QC

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	4/27/11	1442	1 SECURED STORAGE	4/27/11	1442
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 Signatures = Client Relinquished

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 a "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

IPEC00267436

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, SL 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 (Sr-90)							<-- Preservative Type [6]
U3-4S-(004)	7/14/11	1127	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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] 7/14/11 1255	1 SECURED STORAGE 7/14/11 1255
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, FB = 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, SE=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

IPEC00267437

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: SL, CB 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
U3-T1-(032)	05-06-11	1023	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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	Cheryl Bergin	5/6/11	1230	SECURED STORAGE	5/6/11	1230
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

IPEC00267438

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, SL 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 (Sr-90)								<-- Preservative Type (6)
U3-T2-(037)	5/6/11	~~1300~~ 1141	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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] 5/6/11 1230	1 SECURED STORAGE 5/6/11 1230
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, OC=Oil, FI=Filter, PW=Wipe, DI=Ditic, 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, N3 = 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

IPEC00267439

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, SL — 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)
U3-T2-(038)	7/8/11	1055	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	7/8	1447	[signature]	7/8	1447
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, WtrWater, ML=Misc. Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, B=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 82608, 6010B/7470A) and number of containers provided for each (i.e. 82608 - 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

APPENDIX C: Q3-2011 CHAINS OF CUSTODY

IPEC00267441

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) 736-6405

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

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

Collected by: SL, CB 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 (Sr-90)	<-- Preservative Type (6)	Comments
B-1-(013)	08-17-11	1317	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	8/17/11	1410	[signature]	8/17/11	1410
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, SE=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 - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SM = 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

IPEC00267442

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, SL 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)	Hazardous	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							<-- Preservative Type (6)
						Should this sample be considered:												
B-6-(014)	7/29/11	1052	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	8/2/11	1302	[signature]	8/2/11	1302
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, TR = 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. 82688, 901.1/7473A) and number of containers provided for each (i.e. 82688 - 3, 901.1/7473A - 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

IPEC00267443

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: J, CB — 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: DNCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<-- Preservative Type (6) / Comments
I-2-(003)	08-12-11	1513	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments Note: extra sample is required for sample specific QC

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	Scott D Lee	8/15/11	1314	Edward Stange	8/15/11	1314
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=Miscellaneous 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

IPEC00267444

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, SL 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: EnCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<-- Preservative Type (6)
MH-5-(022)	8/3/11	1412	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	8/4/11	1511	1 SEALED STORAGE	8/4/11	1511
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, FB = 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

IPEC00267445

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, SL 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 (Sr-90)	<-- Preservative Type [6]	Comments
MH-5-(023)	8/11/11	1239	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC

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	8/12/11	1501	1 SECURED STORAGE	8/12/11	1501
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=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, V=Urine, FeFecal, NeNasal

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

IPEC00267446

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013610

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, SL 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)
MW-59-32-(006)	8/24/11	1422	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-59-45-(006)		1432	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-59-68-(006)		1409	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-108-(006)	8/29/11	1125	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-109-(006)	8/26/11	1349	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
U3-3-(015)	8/29/11	1309	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MH-5-(024)	8/18/11	0950	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MH-5-(025)	8/24/11	1101	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
													2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed) Date Time	Received by (signed) Date Time
1 [signature] 8/31/11 1524	1 SECURED STORAGE 8/31/11 1524
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=Miscible 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

IPEC00267447

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, SL 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)
MH-5-(026)	8/30/11	1356	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
																		2 Liter Poly
																		2 Liter Poly
																		2 Liter Poly
																		2 Liter Poly
																		2 Liter Poly
																		2 Liter Poly
																		2 Liter Poly
																		2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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 Cheryl Bryan 9/1/11 1335	1 SEALED STORAGE 9/1/11 1335
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=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, F=Wipe, U=Urine, F=Fecal, N=Blood

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, N3 = 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

IPEC00267448

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, SL 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) (Hours)	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 (Sr-90)							<-- Preservative Type (6)
MW-30-69-(041)	8/9/11	1049	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-30-84-(032)	8/9/11	1116	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: ____ Specify: (Subject to Surcharges) 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]	8/9/11	1236	SECURED STORAGE	8/9/11	1236
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 matrixes, 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=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, B=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 9056/7470A) and number of containers provided for each (i.e. 8260B - 3, 9056/7470A - 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

IPEC00267449

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: SL, CB 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)
MW-31-49-(033)	08-05-11	1047	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-31-63-(033)	↓	1129	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-31-85-(033)	↓	1127	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	8/5/11	1405	1 SECURED STORAGE	8/5/11	1405
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, FB = 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, B=Feces, 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

IPEC00267450

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, SL — 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 time/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
MW-32-149-(027)	8/5/14	1110	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-173-(025)		1111	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-190-(029)		1115	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-59-(027)		1230	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-32-85-(030)		1336	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	8/5/14	1405	1 SECURED STORAGE	8/6/14	1405
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, SE=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Feces, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 82608, 6010B/7470A) and number of containers provided for each (i.e. 82608 - 3, 6010B/7470A - 1).
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, AN = Anchor, 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

IPEC00267451

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, SL 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: TRCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-36-24-(023)	8/16/14	1334	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-36-41-(017)	↓	1418	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-36-52-(022)	↓	1450	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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] 8/16/14 1504	1 SECURED STORAGE 8/16/14 1504
2 [signature]	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, FB = Field 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=Feces, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (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

IPEC00267452

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: SL, CB 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
MW-37-22-(023)	08-16-11	1035	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-37-32-(023)		1100	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-37-40-(023)		1124	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-37-57-(023)		1055	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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] 8/16/11 1504	1 SECURED STORAGE 8/16/11 1504
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, T=Feces, 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 -3)
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

IPEC00267453

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, SL 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 (Sr-90)								<-- Preservative Type (6)
MW-39-67-(013)	8/29/11	1347	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-39-84-(013)		1356	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-39-102-(013)		1411	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-39-124-(013)		1054	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-39-183-(013)		1045	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-39-195-(013)		1051	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
																			2 Liter Poly
																			2 Liter Poly
																			2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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
[signature]	8/31	1524	[signature] LOCKED STORAGE	8/31	1524
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=Miscellaneous 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

IPEC00267454

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: SL, CB 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)
MW-40-27-(016)	7/27/11	1512	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-40-46-(017)		1555	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-40-81-(017)		1324	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-40-100-(019)		1329	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-40-127-(019)		1356	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-40-162-(017)		1440	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	7/27/11	13:10	1 FEDEX STORAGE	7/27/11	13:10
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, FB = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrixes, 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

IPEC00267455

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: SL, CB 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)
MW-41-40-(022)	08-04-11	1439	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-41-63-(021)	08-04-11	1420	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	Cheryl Bryan	8/4/11	1511	SECURED STORAGE	8/4/11	1511
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, SD=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

IPEC00267456

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, SL 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: DW/CWA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)	<--- Preservative Type (6)	Comments
MW-42-49-(027)	8/1/11	1411	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-42-78-(022)	8/1/11	1250	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1			1		
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 Analyses 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

IPEC00267457

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: SL, CB 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 (Sr-90)							<-- Preservative Type (6)
MW-43-28-(020)	08-04-11	1115	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-43-62-(021)	08-04-11	1135	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	Cheryl Bryan	8/4/11	1511	SECURED STORAGE	8/4/11	1511
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, FB = 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=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Feces, 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

IPEC00267458

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: SC, CB 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: DoT / Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)	<-- Preservative Type (6)	Comments
MW-44-102-(023)	08-22-11	1043	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-44-66-(022)	08-22-11	~~1043~~ 1205	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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 Cayle Bryan	8/22/11	1504	1 SECURED STORAGE	8/22/11	1504
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=Fiber, P=wipe, U=Urine, F=Feed, N=Metal
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

IPEC00267459

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: SL,CB 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
MW-45-42-(026)	08/23/11	1358	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-45-61-(026)	08/23/11	1048	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	8/23/11	1445	1 SECURED STORAGE	8/23/11	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, FB = 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 Analyses 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

IPEC00267460

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 500013510

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, SL — 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]	Shipping this sample is considered DOT Radioactive	TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-46-(026)	8/17/11	1136	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	Robert D. Lee	8/17/11	1410	Howard Straz	8/17/11	1410
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

IPEC00267461

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, SL 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)
MW-47-56-(007)	8/18/11	1239	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-47-80-(006)	↓	1136	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
																			2 Liter Poly
																			2 Liter Poly
																			2 Liter Poly
																			2 Liter Poly
																			2 Liter Poly
																			2 Liter Poly
																			2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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 CB, SL Bonjini	8/18/11	1524	1 SECURED STORAGE	8/18/11	1524
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=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, PrWipe, DrRinse, FrVessel, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 82608, 6010B/7470A) and number of containers provided for each (i.e. 82608 - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, N = 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

IPEC00267462

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: SL, CB
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)
MW-49-26-(025)	08-10-11	1046	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-49-42-(025)	"	1116	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-49-65-(025)	"	1055	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	1444	SEALED STORAGE	8/10	1444
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. 82688, 6010B/7470A) and number of containers provided for each (i.e. 6010B - 3, 6010B/7470A - 5)
6.) Preservative Type: HA = Hydrochloric Acid, N = 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

IPEC00267463

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: SL, CB 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)
MW-50-42-(027)	08-19-11	1210	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-50-66-(032)	08-19-11	1212	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	8/19/11	1227	1 SECURED STORAGE	8/19/11	1227
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, T=Tissue, 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

IPEC00267464

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: C&J, SL 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: TRRA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-51-40-(020)	7/28/11	1143	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-51-79-(020)		1155	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-51-104-(018)		0951	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-51-135-(018)		1004	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-51-163-(018)		1018	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-51-189-(018)		1042	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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

Circle Deliverable: COA / 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] 8/2/11 1302	1 SPARKED SOLARCE 8/2/11 1302
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, FB = 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 - 3, 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, MX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00267465

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, SL — 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
MW-53-82-(021)	8/1/11	1111	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly	Note: extra sample is required for sample specific QC
MW-53-120-(025)	8/1/11	1000	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]	8/2/11	1302	[signature]	8/2/11	1302
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=Feces, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 82608, 6010B/7470A) and number of containers provided for each (i.e. 82608 - 3, 6010B/7470A - 1).
6.) Preservative Type: HA = Hydrochloric Acid, N = 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

IPEC00267466

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: SL — 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: FSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)	<-- Preservative Type (6)	Comments
MW-54-37-(019)	08-15-11	0925	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-58-(019)		0947	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-123-(019)		0955	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-144-(019)		1144	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-173-(019)		1150	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-190-(019)	↓	1200	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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 Todd D. Lee	8/15/11	1314	1 Leonard Strange	8/15/11	1314
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, OnOil, F=Filter, P=Wipe, O=Urine, F=Feces, 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 BX = 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

IPEC00267467

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, SL — 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: Hazardous	Should this sample be considered: DOE's Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)	<-- Preservative Type (6)	Comments
MW-55-24-(018)	8/2/11	1212	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-55-35-(017)		1215	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-55-34-(018)		1209	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	8/2/11	(SD)	1 SECURED STORAGE	8/2/11	(SD)
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 = Miso Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, A = 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, N = 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

IPEC002674 68

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, SL 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
MW-56-53-(012)	8/26/11	1106	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-56-83-(014)	"	1056	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
												2 Liter Poly	
												2 Liter Poly	
												2 Liter Poly	
												2 Liter Poly	
												2 Liter Poly	
												2 Liter Poly	
												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	8/31/11	1524	1 SECURED STORAGE	8/31/11	1524
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

IPEC00267469

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, SL 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)
MW-57-11-(009)	8/19/11	0949	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-57-20-(009)		0954	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-57-45-(010)		1019	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-58-26-(014)	8/26/11	1447	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
MW-58-65-(014)		1404	N	N	GW	Y	N	1	1	1	1								2 Liter Poly
																			2 Liter Poly
																			2 Liter Poly
																			2 Liter Poly
																			2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	8/31/11	1524	1 SECURED STORAGE	8/31/11	1524
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, D=Drink, 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

IPEC00267470

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, SL 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 (Sr-90)	<-- Preservative Type (6)	Comments
MW-60-35-(018)	8/10/4	1054	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-60-53-(018)		1145	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-60-53-(018)-B		1145	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-60-53-(018)-D		1145	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-60-53-(018)-S		1145	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-60-72-(018)		1325	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-60-135-(018)		1351	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-60-154-(018)		1322	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-60-176-(018)		1412	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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] 8/10/4 1444	1 [signature] 8/10/4 1444
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=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Feces, 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/7470B - 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

IPEC00267471

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: CBSL 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: DSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-62-18-(019)	8/3/11	1018	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-37-(019)		1035	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-53-(018)		1244	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-71-(019)		1158	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-92-(019)		1210	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-138-(019)		1008	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-182-(019)		1020	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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]	8/3/11	1439	[signature] STORAGE	8/3/11	1439
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, FB = 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, B=Blood, N=Nasal

5.) Sample Analysis Requested: Analysis or 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

IPEC00267472

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: CR, SL — 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: DSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-63-18-(019)	8/2/11	1002	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-34-(019)		1014	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-50-(019)		1138	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-93-(020)		1150	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-112-(019)		1201	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-121-(019)		1003	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-163-(019)		1006	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-63-174-(019)		1018	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: Specify: (Subject to Surcharge) — Fax Results: Yes / (No) — Circle Deliverable: C of A / QC Summary / 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] 8/2/11 1202	1 SECURED STORAGE 8/2/11 1302
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 = Miscellaneous Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Food, A = Air
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B - 5035/5030B) 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

IPEC00267473

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: SL, CB — 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: RSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)							<-- Preservative Type (6)	Comments
MW-66-21-(018)	08-08-11	1055	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly	Note: extra sample is required for sample specific QC
MW-66-36-(017)	08-08-11	1049	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	Cheryl Bergin	8/8/11	1402	Sandra Stoerke	8/8/11	1402
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. 82608 - 8, 6010B/7470A - 1) and number of containers provided for each (i.e. 82608 - 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

IPEC00267474

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 SL 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 (Sr-90)	Nickel 63 (Ni63)	<-- Preservative Type (6)	Comments
MW-67-39-(018)	8/8/11	1226	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-105-(017)		1248	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-173-(018)		1253	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-219-(017)		1033	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-276-(017)		1045	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-323-(017)		1053	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-340-(017)		1043	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) Central Mountain Pacific Other

Chain of Custody Signatures

Relinquished By (Signed) Date Time	Received by (signed) Date Time
1 [signature] 8/8/11 1402	1 SECURED STORAGE 8/8/11 1402
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, FR = 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

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

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00267475

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, SL 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 (Sr-90)	<-- Preservative Type (6)	Comments
U3-4D-(030)	7/29/11	1105	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC

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	8/4/11	1302	1	8/4/11	1302
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=Feral, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 82608 - 3, 6010B/7470A) and number of containers provided for each (i.e. 82608 - 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

IPEC00267476

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, SL 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 (Sr-90)							<-- Preservative Type (6)
U3-4S-(005)	7/29/11	1006	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	Edward Lee	8/2/11	1302	Edward Lee	8/2/11	1302
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 = Miso Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, T = Tissue, A = Air
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

IPEC00267477

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, SL — 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: DW/CA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<-- Preservative Type [6]	Comments
U3-T1-(033)	8/22/11	1440	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	Note: extra sample is required for sample specific QC

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	8/22/11	1584	1 SECURED STORAGE	8/22/11	1504
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: SW=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 Analyses 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**

IPEC00267478

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, SL 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
U3-T2-(039)	7/29/11	1232	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC

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]	8/1/11	1307	[signature]	8/2/11	0830
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, SE=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 - 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

APPENDIX C: Q4-2011 CHAINS OF CUSTODY

IPEC00267480

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, SL Send Results To: John Doroski

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 (Sr-90)	<-- Preservative Type (6)
~~B-1-(014)~~			N	N	GW	Y	N	1	1	1	1	~~2 Liter Poly~~ CB 10/21
B-6-(015)	10/20/11	1201	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	10/21/11	1158	1 SECURED STORAGE	10/21/11	1158
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, SE=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

IPEC00267481

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, SL Send Results To: John Doroski

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)
I-2-(004)	12/08/11	1415	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	12/8/11	1501	SECURED STORAGE	12/8/11	1501
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=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Feed, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (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

IPEC00267482

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: RB, SL Send Results To: John Doroski

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)
LAF-002-(016)	12/13/11	1031	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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] 12/14/11 1018	1 SEALED STORAGE 12/14/11 1018
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

IPEC00267483

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, SL Send Results To: John Doroski

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)
MH-5-(027)	10/17/11	1007	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	10/19/11	12:15	1 SECURED STORAGE	10/19/11	12:15
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, B=Blood, S=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

IPEC00267484

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) 736-6405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, SL — Send Results To: John Doroski

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
MH-5-(028)	10/31/11	14:20	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
[signature]	11/4/11	1404	1 SEALED STORAGE	11/4/11	1404
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, SE=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

IPEC00267485

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, SC Send Results To: John Doroski

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)
MW-30-69-(042)	11/30/11	1120	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-30-84-(033)	11/30/11	1137	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	11/30/11	1230	1 SECURED STORAGE	11/30/11	1232
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=Miscellaneous 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, or 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

IPEC00267486

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: OB, CG, SL Send Results To: John Doroski

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 (Sr-90)	<-- Preservative Type (6)	Comments
MW-31-49-(034)	11/21/11	1032	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-31-63-(034)	↓	1114	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-31-85-(034)	↓	1125	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other ____

Chain of Custody Signatures

Relinquished By (Signed) Date Time	Received by (signed) Date Time
1 [signature] 11/21/11 1322	1 SECURED STORAGE 11/21/11 1322
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, FB = 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

IPEC00267487

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, CG Send Results To: John Doroski

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
MW-32-59-(028)	11/17/11	1415	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-32-85-(031)	"	1508	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-32-149-(028)	"	1205	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-32-173-(026)	"	1201	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-32-190-(030)	"	1203	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	11/21/11	1322	SECURED STORAGE	11/21/11	1322
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

IPEC00267488

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, SL Send Results To: John Doroski

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) (Hours)	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
MW-36-24-(024)	12/07/11	1104	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-36-41-(018)	↓	1309	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-36-52-(023)	↓	1136	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	

Note: extra sample is required for sample specific QC

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]	12/07/11	1331	1 SECURED STORAGE	12/07/11	1381
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=Miscellaneous 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

IPEC00267489

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: SL, CB, CG — Send Results To: John Doroski

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)
MW-37-22-(024)	11-23-11	1133	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-37-32-(024)		1119	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-37-40-(024)		1146	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-37-57-(024)	↓	1122	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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

Circle Deliverable: C of A / QC Summary / Level 3 / 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	11/23/11	1405	1 SECURED STORAGE	11/23/11	1405
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, FB = 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

IPEC00267490

Page: 1 of 3
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: SL, CB, CG — Send Results To: John Doroski

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
MW-39-67-(014)	12/1/11	1404	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-39-84-(014)		1447	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-39-102-(014)		1410	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-39-124-(014)		1142	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-39-183-(014)		1126	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-39-195-(014)	√	1128	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments Note: extra sample is required for sample specific QC

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] 12/01/11 1500	1 SECURED STORAGE 12/01/11 1506
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=Miso 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

IPEC00267491

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, SL Send Results To: John Doroski

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-40-27-(017)	12/09/11	1150	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	
MW-40-46-(018)		1203	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	
MW-40-81-(018)		1023	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	
MW-40-100-(020)		1028	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	
MW-40-127-(020)		1040	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	
MW-40-162-(018)		1102	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] 12/14/11 1018	1 SAUER STORAGE 12/14/11 1018
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

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

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

IPEC00267492

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) 73 -6247

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

Collected by: SL, CB, CG Send Results To: John Doroski

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
MW-41-40-(023)	11/28/11	1425	N	N	GW	Y	N	1	1	1	1							2 Liter Poly	Note: extra sample is required for sample specific QC
MW-41-63-(022)	11/28/11	1408	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
[signature]	11/28/11	1522	SECURED STORAGE	11/28/11	1522
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, FB = 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, SOL=Soil, SED=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

IPEC00267493

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 Send Results To: John Doroski

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)
MW-42-49-(028)	11/3/11	1113	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly
MW-42-78-(023)	11/3/11	1131	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	11/3/11	1425	[signature]	11/3/11	1425
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, DoOil, F=Filter, P=Wipe, U=Urine, F=Fecal, B=Blood
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, or 1ib/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

IPEC00267494

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, CG Send Results To: John Doroski

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 (Sr-90)	<-- Preservative Type (6)
MW-43-28-(021)	11/22/11	1123	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-43-62-(022)	11/22/11	1222	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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 Cheryl Bruzzi	11/23/11	1405	1 SECURED STORAGE	11/23/11	1405
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, FB = 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 - 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

IPEC00267495

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, SL Send Results To: John Doroski

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)
MW-44-66-(023)	12/08/11	1200	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-44-102-(024)	12/1/11	1218	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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
[signature]	12/08/11	1520	SEALED STORAGE	12/8/11	1501
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=Feces, 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

IPEC00267496

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: GL, CB, CG Send Results To: John Doroski

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: Biodiscective	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-45-42-(027)	11/28/11	1503	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-45-61-(027)	11/28/11	1144	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

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	11/28/11	1522	1 SECURED STORAGE	11/28/11	1522
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, OnOil, 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 preserv...

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

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00267497

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, SL — Send Results To: John Doroski

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
MW-46-(027)	10/20/11	1335	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 Cheryl Bryan	10/21/11	1158	1 SECURED STORAGE	10/21/11	1158
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

IPEC00267498

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, SL Send Results To: John Doroski

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)
MW-47-56-(008)	10/28/11	1136	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-47-80-(007)	10/28/11	1324	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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 10/28/11 1452	1 SECURED STORAGE 10/28/11 1456
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=Feces, 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

IPEC00267499

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 Send Results To: John Doroski

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 **	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
MW-49-26-(026)	11/4/11	1150	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-49-42-(026)	"	1143	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-49-65-(026)	"	1147	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1 Cyl Benjamin	11/4/11	1400	1 SECURED STORAGE	11/4/11	1404
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=Mix 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

IPEC00267500

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) 736-6405

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

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

Collected by: GB, SC Send Results To: John Doroski

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) (Hours)	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
MW-50-42-(028)	10/27/14	1048	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly	Note: extra sample is required for sample specific QC
MW-50-66-(033)	10/27/14	1053	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			1 SOURED STORAGE	11/4/14	1409
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=Mine 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

IPEC00267501

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [5]:
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: SL, CB — Send Results To: John Doroski

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)
MW-51-40-(021)	12/13/11	1043	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-51-79-(021)		1109	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-51-104-(019)		1212	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-51-135-(019)		1250	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-51-163-(019)		1226	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-51-189-(019)	↓	1223	N	N	GW	Y	N	1	1	1	1	1			↑				2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other ____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	12/14/11	1018	1 SECURED STORAGE	12/14/11	1018
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

IPEC00267502

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 Send Results To: John Doroski

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)
MW-53-82-(022)	11/2/11	1126	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-53-120-(026)	11/2/11	1156	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other ____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	11/2/11	1415	KEYED STORAGE	11/2/11	1415
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, DI=Drum, FC=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 82608 - 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

IPEC00267503

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, SL Send Results To: John Doroski

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 (1)	Field Filtered (2)	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)
MW-54-37-(020)	12/06/11	1037	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-54-58-(020)		1023	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-54-123-(020)		1037	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-54-144-(020)		1325	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-54-173-(020)		1326	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-54-190-(020)		1338	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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] 12/06/11 14:37	1 SEALED STORAGE 12/06/11 14:09
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, 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

IPEC00267504

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: SL, CB Send Results To: John Doroski

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
MW-55-24-(019)	11-14-11	1120	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-55-35-(018)	↓	1123	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-55-54-(019)	↓	1107	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed) Date Time	Received by (signed) Date Time
1 11/14/11 1325	1 SECURED STORAGE 11/14/11 1323
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, OL=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

IPEC00267505

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: CG, SL Send Results To: John Doroski

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
MW-56-53-(013)	10/31/11	1213	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-56-83-(015)	10/31/11	1200	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other ____

Chain of Custody Signatures

Relinquished By (Signed) Date Time	Received by (signed) Date Time
1 [signature] 10/31/11 1455	1 SECURED STORAGE 10/31/11 1455
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=Miscellaneous 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 - 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

IPEC00267506

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 Send Results To: John Doroski

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 (1)	Field Filtered (2)	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)
MW-58-26-(015)	11/15/11	1422	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-58-65-(015)	11/15/11	1405	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	11/15/11	1605	1 SECURED STORAGE	11/16/11	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=Mine Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Feral, 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

IPEC00267507

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, CG, SL Send Results To: John Doroski

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
MW-60-35-(019)	12/02/11	1121	N	N	GW	Y	N	1	1	1	1		2 Liter Poly	Note: extra sample is required for sample specific QC
MW-60-53-(019)		1146	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly	
MW-60-53-(019)-B		1146	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly	
MW-60-53-(019)-D		1146	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly	
MW-60-53-(019)-S		1146	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly	
MW-60-72-(019)		1001	N	N	GW	Y	N	1	1	1	1		2 Liter Poly	
MW-60-135-(019)		1010	N	N	GW	Y	N	1	1	1	1		2 Liter Poly	
MW-60-154-(019)		1018	N	N	GW	Y	N	1	1	1	1		2 Liter Poly	
MW-60-176-(019)		1027	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) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	12/02/11	1253	1 SECURED STORAGE	12/02/11	1253
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, T=Feces, 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

IPEC002675O8

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: SL, CB Send Results To: John Doroski

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
MW-62-18-(020)	10-31-11	1014	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-37-(020)		1002	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-53-(019)		1017	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-71-(020)		0944	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-92-(020)		0942	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-138-(020)		1129	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-182-(020)	"	1137	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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	10/26/11	1158	1 SIGNED STRAAG	10/26/11	1158
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

IPEC00267509

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, SL — Send Results To: John Doroski

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
MW-63-18-(020)	10/18/11	1134	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-63-34-(020)		1139	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-63-50-(020)		1355	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-63-93-(021)		1414	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-63-112-(020)		1420	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-63-121-(020)		1127	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-63-163-(020)		1137	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-63-174-(020)		1142	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]	10/9/11	12:15	SECURED STORAGE	10/9/11	12:15
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, PW=Wipe, U=Urine, FE=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

IPEC00267510

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: SL, CB, CG — Send Results To: John Doroski

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)
MW-66-21-(019)	11-29-11	1108	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly
MW-66-36-(018)	11-29-11	1101	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	11/29/11	15:3	[signature]	11/29/11	1503
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=Miscl Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, B=Blood, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 82608 - 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

IPEC00267511

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, CG, SL Send Results To: John Doroski

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
MW-67-39-(019)	11/29/11	1359	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-105-(018)		1410	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-173-(019)		1423	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-219-(018)		10:41	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-276-(018)		10:57	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-323-(018)		10:57	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-340-(018)		1046	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

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) Central Mountain Pacific Other _____

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	11/29/11	1713	[signature]	11/29/11	1503
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* - 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

IPEC00267512

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 — Send Results To: John Doroski

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)
MW-111-(036)	11/11/11	1130	N	N	GW	Y	N	1	1	1	1								2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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]	11/11	1242	[signature] SGUARD SCORRE	11/11/11	1242
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, FB = 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=Mise 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

IPEC00267513

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, SC Send Results To: John Doroski

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)
U1-CSS-(018)	10/27/14	1302	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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 Cheryl Bergeron	11/4/14	14:4	1 SECURED STORAGE	11/4/14	1404
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, SE=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

IPEC00267514

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: SL, CB, CG Send Results To: John Doroski

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)
U3-4D-(031)	11-16-11	1256	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
U3-4S-(006)	11-16-11	1128	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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	11/21/11	1322	1 SECURED STORAGE	11/21/11	1322
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, FB = 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

IPEC00267515

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

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

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

Collected by: SZ, CB Send Results To: John Doroski

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)
U3-T1-(034)	10-19-11	1139	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
U3-T2-(040)	10-19-11	1020	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

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 Cheryl Burgai	10/19/11	12:15	1 SECURED STORAGE	10/19/11	12:15
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, T=Tissue, B=Blood
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

APPENDIX D: 2011 SAMPLING DATA SHEETS

APPENDIX D: Q1-2011 SAMPLING DATA SHEETS

WELL ID: MW 30 - 69

SAMPLE ID: 037

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: 2/9/11
SAMPLER(S): CC

SAMPLING INTERVAL (depth in ft below top of casing)

67.3 to 71.3

SAMPLING PORT

69

TOTAL VOLUME PURGED: 1.15 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)
1111	0	PUMP ON						6/12	40
1117	0.01	19.67	1.116	13.15	7.27	120.7	—		
1124	0.20	20.47	1.123	6.71	7.04	116.0	—		
1130	0.30	20.68	1.120	3.39	7.02	109.4	—		
1135	0.40	20.74	1.113	4.31	7.04	102.5	—		
1140	0.50	20.78	1.105	4.49	7.07	97.4	—		
1145	0.65	20.75	1.111	4.34	7.10	93.5	—		
1150	0.80	20.70	1.111	4.12	7.13	90.5	—		
1155	0.95	20.75	1.109	4.04	7.15	87.0	—		
1157	START	SAMPLE COLLECTION							
1217	END SAMPLE	COLLECTION: 21 TUBES							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	NA

NOTES AND OBSERVATIONS:

WELL ID: MW 30 - 84

SAMPLE ID: 028

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 20's

PROJECT NO: 01.0017869.92
DATE: 2/9/11
SAMPLER(S): CR

SAMPLING INTERVAL (depth in ft below top of casing)

77.3 to 85.4

SAMPLING PORT

84

TOTAL VOLUME PURGED: 0.5 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)
1111	0	PUMP	ON					6/12	90
1124	0.05	15.25	1.720	2.28	7.26	-58.5	—		
1130	0.05	15.17	1.712	2.12	7.29	-57.4	—		
1135	0.08	14.51	1.700	2.12	7.30	-57.4	—		
1140	0.12	14.23	1.696	2.14	7.32	-47.7	—		
1145	0.18	13.52	1.688	2.32	7.32	-38.9	—		
1150	0.16	13.20	1.690	2.30	7.32	-30.7	—		
1155	0.18	12.74	1.683	2.26	7.32	-19.6	—		
1200	0.20	12.40	1.681	2.27	7.31	-13.2	—		
1205	0.22	11.81	1.682	2.21	7.31	-5.9	—		
1210	0.24	11.99	1.671	2.31	7.30	-1.8	—		
1215	0.26	11.26	1.674	2.27	7.30	3.1	—		
1220	0.28	11.14	1.670	2.24	7.29	6.7	—		
1225	0.30	11.09	1.669	2.22	7.30	11.2	—		
1230	0.32	11.05	1.666	2.20	7.31	15.0	—		
1231	START	SAMPLE COLLECTION							
1257	END SAMPLE COLLECTION: 2L JUG								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	NA

NOTES AND OBSERVATIONS:

WELL ID: MW 31 - 49

SAMPLE ID: 029

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: M. Sunny 20's

PROJECT NO: 01.0017369.92
DATE: 2/9/11
SAMPLER(S): SL / MB

SAMPLING INTERVAL (depth in ft below top of casing)

34.8 to 49.3

SAMPLING PORT

49

TOTAL VOLUME PURGED: 6.95 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 Pressur (psi)
1058	0	PUMP ON						6/7	29
1131	1.5	15.70	2.895	4.97	7.07	-29.5	0.31		
1144	2.5	14.19	1.154	2.34	6.94	-98.4	0.52		
1200	3.0	15.90	2.908	5.36	7.08	-90.0	0.00		
1220	4.25	16.44	2.939	5.21	7.06	-110.7	0.00		
1234	5.0	17.19	2.942	5.26	7.06	74.0	0.00		
1241	5.4	17.17	2.941	5.28	7.08	72.8	0.00		
1250	6.0	16.91	2.932	5.29	7.08	58.1	0.00		
1258	6.6	16.87	2.923	5.30	7.09	56.2	0.00		
1303	6.8	16.90	2.919	5.32	7.09	55.9	0.00	↓	↓
1304		PUMP OFF							
1305		START SAMPLE COLLECTION							
1312		SAMPLE COMPLETED: 2 L				IPEC			
1312		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

WELL ID: MW 31 - 63

SAMPLE ID: 029

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: M. Sunny 20's

PROJECT NO: 01.0017869.92
DATE: 2/9/11
SAMPLER(S): SL / MB

SAMPLING INTERVAL (depth in ft below top of casing)

55.8 to 63.8

SAMPLING PORT

63

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)
1058	0	PUMP ON						6/7	29
1107		TUBING FROZEN							
1131	0.3	12.27	1.079	1.76	6.70	-109.1	1.81		
1144	0.7	14.10	1.146	2.22	6.93	-89.9	1.88		
1200	1.05	12.62	1.200	2.30	7.14	-72.8	2.43		
1220	1.35	13.56	1.288	2.20	7.01	-95.4	1.67		
1234	1.80	14.82	1.270	1.99	6.96	-93.9	1.89		
1241	1.90	14.84	1.279	1.98	6.97	-92.0	1.82		
1246	2.0	14.89	1.282	1.98	6.98	-94.6	1.79	↓	↓
1248		PUMP	OFF						
1250		START	SAMPLE COLLECTION						
1314		SAMPLE	COMPLETED :	2 L IPEC					
1314		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

WELL ID: MW 31 - 85

SAMPLE ID: 029

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: M. Sunny 20's

PROJECT NO: 01.0017869.92
DATE: 2/9/11
SAMPLER(S): SL / MB

SAMPLING INTERVAL (depth in ft below top of casing)

69.8 to 85.4

SAMPLING PORT

85

TOTAL VOLUME PURGED: 2.75 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)
1058	0	PUMP ON						6/7	29
1107		TURBIDITY FROZEN						↓	↓
1131	0.45	13.23	1.961	4.17	6.52	-25.0	0.93		
1144	0.90	14.79	2.013	3.92	6.62	8.3	0.12		
1200	1.35	13.15	2.014	4.00	6.68	44.1	0.00		
1220	1.80	14.49	2.029	3.90	6.74	61.2	0.00		
1234	2.15	15.60	2.033	3.87	6.79	64.4	0.00		
1241	2.40	15.66	2.034	3.90	6.79	63.6	0.00		
1246	2.60	15.69	2.033	3.92	6.80	63.4	0.00	↓	↓
1247		PUMP	OFF						
1248		START	SAMPLE						
1303		SAMPLE	COMPLETED:		2 L	IPEC			
1303		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	9
turbidity meter	20078254

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 59

SAMPLE ID: 023

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY 30's

PROJECT NO: 01.0017869.92
DATE: 3/1/11
SAMPLER(S): SL, EB

SAMPLING INTERVAL (depth in ft below top of casing)

28.3 to 61.3

SAMPLING PORT

59 6

TOTAL VOLUME PURGED: 2.80 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)
1034	0	PUMP ON						8/11	40
1043	0.5	16.67	1.093	8.62	6.64	-34.6			
1048	0.9	16.16	1.215	8.62	6.78	3.4	0.54		
1053	1.2	15.03	1.236	8.54	6.89	38.0	0.38		
1058	1.5	15.30	1.249	8.54	6.90	57.8	0.51		
1103	2.0	15.29	1.250	8.53	7.07	70.1	0.40		
1108	2.25	15.31	1.252	8.03	7.10	76.3	0.38		
1113	2.45	15.26	1.255	8.65	7.17	80.4	0.29		
1118	2.65	15.43	1.259	8.60	7.20	80.9	0.31		
1118		PUMP OFF							
1119		START SAMPLE COLLECTION							
1126		SAMPLE COMPLETED;			2L IPEA				
1126		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070254

NOTES AND OBSERVATIONS:

WELL ID: MW 32 . 85

SAMPLE ID: 026

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY 30's

PROJECT NO: 01.0017869.92
DATE: 3/1/11
SAMPLER(S): SK, CB

SAMPLING INTERVAL (depth in ft below top of casing)

79.3 to 92.8

SAMPLING PORT

85 5

TOTAL VOLUME PURGED: 0.97 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)
1034	0	PUMP	ON					8/11	40
1048	0.05	13.91	1.537	2.33	6.44	-78.7	1.32		
1053	0.13	13.77	1.531	1.64	6.58	-88.3	1.27		
1058	0.25	14.43	1.529	1.28	6.74	-82.2	1.00		
1103	0.4	14.78	1.522	1.12	6.88	-71.7	0.93		
1108	0.49	14.71	1.527	1.06	6.95	-65.2	1.02		
1113	0.60	14.70	1.529	1.04	7.02	-60.0	1.45		
1118	0.71	14.61	1.527	1.03	7.04	-54.0	0.71		
1123	0.75	13.65	1.532	1.13	7.10	-48.8	0.76	↓	↓
1128	0.97	13.80	1.525	1.04	7.08	-45.1	1.42		
1129		START SAMPLE COLLECTION							
1205		SAMPLE COMPLETE: 2L IPEC							
1205		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
Turbidity meter	20070254

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 149

SAMPLE ID: 023

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40's

PROJECT NO: 01.0017869.92
DATE: 3/1/11
SAMPLER(S): SC, CB

SAMPLING INTERVAL (depth in ft below top of casing)

147.3 to 156.8

SAMPLING PORT

149 3

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)
1223	0	PUMP	ON					10/12	58
1233	0.15	15.35	2.147	1.09	6.63	-183.0	4.12		
1238	0.3	15.62	2.146	0.68	6.75	-177.2	1.37		
1243	0.42	15.55	2.154	0.53	6.81	-158.6	0.80		
1248	0.57	15.55	2.162	0.44	6.84	-141.1	1.43		
1253	0.69	15.36	2.181	0.40	6.88	-127.0	0.01		
1258	0.81	15.52	2.185	0.37	6.92	-114.3	1.00		
1304	0.92	15.50	2.197	0.36	7.02	-104.0	0.95		
1309	1.06	15.62	2.195	0.32	6.97	-99.4	1.35		
1314	1.20	15.70	2.208	0.31	6.97	-95.2	1.58		
1315		START SAMPLE COLLECTION							
1337		SAMPLE COMPLETED			2L JAR				
1337		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
Turbidity meter	20070354

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 173

SAMPLE ID: 021

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40's

PROJECT NO: 01.0017869.92
DATE: 3/1/11
SAMPLER(S): SL, CB

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 (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1223	0	PUMP	ON					10/2	55
1233	0.24	16.15	2.125	0.00	6.75	145.3	0.97	↓	↓
1238	0.41	16.39	2.145	0.70	6.93	-140.3	1.51		
1243	0.53	16.28	2.155	0.55	7.00	-133.1	0.72		
1248	0.75	16.31	2.156	0.43	7.05	-126.7	0.60		
1253	0.90	16.17	2.160	0.38	7.07	-123.4	0.73		
1254	START SAMPLE COLLECTION								
1313	SAMPLE COMPLETED; 2L IPEC								
1313	-	PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125Y

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 190

SAMPLE ID: 025

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY

PROJECT NO: 01.0017869.92
DATE: 3/1/11
SAMPLER(S): SL, AB

SAMPLING INTERVAL (depth in ft below top of casing)

180.3 to 193.9

SAMPLING PORT

190

TOTAL VOLUME PURGED: 0.95 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)
1223	0	PUMP	ON					10/12	58
1233	0.2	15.41	1.745	0.66	6.95	-197.6	1.50		
1238	0.3	15.39	1.734	0.47	6.94	-194.1	1.62		
1243	0.4	15.64	1.735	0.35	6.96	-192.1	1.43		
1248	0.55	15.63	1.739	0.30	6.94	-189.2	1.46		
1253	0.76	15.47	1.738	0.32	6.97	-186.4	1.32		
1258	0.90	15.58	1.735	0.35	6.96	-182.4	1.19		
1319		START	SAMPLE	COLLECT	TIME				
1324		SAMPLE	COMPLETED	@	1324				
1324		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070254

NOTES AND OBSERVATIONS:

WELL ID: MW-36-24
SAMPLE ID: 621

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 40's

PROJECT NO: 01.0017869.92
DATE: 2/28/11
SAMPLER(S): CB, SL
PUMP DEPTH: 14' FROM TOC ft

WATER QUALITY: DTW = 4.28 Transducer Actual Depth NA

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)
1100	4.28	PUMP ON							
1105	4.31	22.62	0.581	11.12	6.94	-204			
1110	4.31	21.09	1.895	2.80	7.20	-193.9			
1115	4.31	19.31	1.949	1.35	7.22	-193.7	3.44		0.1
1120	4.31	19.95	1.933	0.00	7.39	-176.5	2.49		0.15
1125	4.31	21.01	1.931	0.66	7.41	-179.9	2.71		0.19
1130	4.31	22.33	1.935	0.70	7.51	-167.6	2.85		0.22
1136	4.31	23.35	1.936	0.71	7.56	-161.9	2.74		0.24
1142	4.31	24.06	1.939	0.67	7.60	-167.1	3.04		0.30
1143	START SAMPLE COLLECTION								
1237	SAMPLE COMPLETED @ IPEC								
1237	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	4
turbidity meter	2007 0134

NOTES AND OBSERVATIONS: Total volume purged 0.45 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-36-41
SAMPLE ID: 015

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 40's

PROJECT NO: 01.0017869.92
DATE: 2/28/11
SAMPLER(S): CB, SL

WATER COLUMN HEIGHT (ft)

41 (DTB) - 4.19 (DTW) = 36.81 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 36.81 x 0.041 (Multiplier) = 1.5 gal (Well Volume)

1.5 x 1.5 = 2.26 gal
Designed Purge Volume

TOTAL VOLUME PURGED: gal

WATER QUALITY: DTW = 4.19 Transducer Actual Depth NA

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1100		—	PUMP ON						
1105	0.50	—	15.98	2.174	0.41	8.51	-165.4		
1115	0.75	—	16.84	2.079	0.40	9.03	-132.5	14.20	
1120	0.90	—	17.75	2.140	2.15	8.97	-149.2	5.46	
1125	1.00	—	19.06	2.191	2.94	8.99	-145.3	4.23	
1130	1.20	—	19.59	2.255	3.57	9.14	-143.7	3.95	
1136	1.25	—	19.99	2.269	3.93	9.21	-140.7	3.63	
1140	1.30	—	20.44	2.264	4.29	9.32	-136.7	2.97	
1152	1.35	—	20.85	2.239	4.47	9.24	-131.8	2.39	
1157	1.40	—	20.95	2.314	4.51	9.24	-127.9	2.42	
1207	1.46	—	20.49	2.159	4.606	9.28	-124.7	2.21	
1219	1.55	—	21.27	2.137	4.853	9.29	-120.3	2.58	
1228	1.75	—	20.70	2.105	5.09	9.28	-119.4	1.94	
1250	2.00	—	20.92	2.077	6.39	9.45	-117.9	3.13	
1315	2.25	—	20.88	2.057	6.72	9.55	-109.1	2.35	
1316		START	SAMPLE COLLECTION						
1353		SAMPLE COMPLETED: 2L IPEC							
1353		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070854

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: 020

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 40's

PROJECT NO: 01.0017869.92
DATE: 2/28/11
SAMPLER(S): CB, SL

WATER COLUMN HEIGHT (ft)

52 (DTB) - 4.50 (DTW) = 47.5 (Water Column Height) ft

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 47.5 x 0.041 (Multiplier) = 1.95 (Well Volume) gal

1.95 x 1.5 = 2.92 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 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
1100		—	PUMP ON						
1105	0.75	—	16.90	2.669	1.14	7.05	-109.9		
1115	1.25	—	17.30	2.638	0.58	7.13	-101.5	2.09	
1120	1.75	—	17.51	2.631	0.48	7.16	-91.3	1.10	
1125	1.86	—	17.66	2.631	0.42	7.20	-88.4	0.75	
1130	1.95	—	17.66	2.634	0.38	7.24	-95.1		
1136	2.05	—	17.54	2.622	0.36	7.26	-124.6		
1142	2.10	—	17.67	2.612	0.33	7.30	-105.9		
1152	2.15	—	17.77	2.596	0.26	7.31	-125.6		
1157	2.20	—	17.74	2.590	0.24	7.32	-132.1		
1207	2.25	—	17.32	2.534	0.24	7.35	-135.8		
1219	2.50	—	17.77	2.476	0.19	7.33	-129.4		
1220	START SAMPLE COLLECTION								
1243	SAMPLE COMPLETED ; 2L IDEP								
1243	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007012S4

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-37-22
SAMPLE ID: 021

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Snow Stopped, 30's

PROJECT NO: 01.0017869.92
DATE: 1/29/10
SAMPLER(S): CA, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.84 Transducer Actual Depth 12.884

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
1234	12.016	PUMP ON							
1310	11.978	23.74	1.455	9.19	5.21	925.2	—		0.003
1320	11.988	23.45	2.777	2.34	7.01	23.2	2.23		0.01
1330	12.116	23.37	2.761	1.90	7.01	-39.0	2.24		0.04
1335	11.988	22.70	2.820	2.11	7.01	23.2	2.18		0.05
1342	11.992	20.90	2.833	2.68	6.93	+1.9	2.97		0.06
1350	11.999	20.85	2.786	1.57	6.95	-6.4	3.04		0.09
1357	12.032	20.99	2.783	1.50	6.96	-7.9	3.34		0.12
1403	12.000	20.00	2.772	1.46	6.96	-11.7	3.11		0.14
1412	12.044	21.27	2.753	1.64	6.96	-10.4	3.96		0.18
1417	12.029	21.43	2.748	1.72	6.96	-6.9	4.40		0.18
1422	12.034	21.89	2.746	1.72	6.96	-2.7	3.24		0.19
1427	12.034	21.94	2.740	1.70	6.95	4.7	3.36		0.20
1432	12.034	22.09	2.748	1.58	6.95	1.8	2.55		0.23
1437	12.002	22.20	2.742	1.27	6.96	-2.1	3.31		0.28
1442	12.014	22.31	2.738	1.26	6.95	-9.0	3.21		0.30
1447	12.046	22.26	2.740	1.22	6.94	-12.3	3.10		0.32
1519	START	SAMPLE COLLECTED							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	3
turbidity meter	20070125H

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

WELL ID: MW-37-32
SAMPLE ID: 021

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 32°F

PROJECT NO: 01.0017869.92
DATE: 11/23/11
SAMPLER(S): CM, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.90 Transducer Actual Depth 14.635

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
1234	14.560	PUMP ON							
1303	14.557	21.92	2.141	5.03	7.18	202.2	—		0.05
1310	14.558	22.01	2.141	2.75	7.19	195.2	0.00		0.10
1320	14.556	22.14	2.148	1.87	7.25	192.9	0.00		0.20
1330	14.560	22.00	2.189	1.44	7.28	191.1	0.00		0.30
1335	14.604	19.71	2.270	1.01	7.31	188.5	0.00		0.35
1342	14.634	19.79	2.181	1.18	7.31	184.4	0.00		0.40
1350	14.657	20.60	2.173	0.99	7.33	182.1	0.00		0.45
1357	14.645	20.58	2.174	0.97	7.35	180.6	0.00		0.55
1403	14.657	20.54	2.175	0.96	7.37	179.7	0.00		0.70
1404		PUMP OFF							
1409		START SAMPLE COLLECTION							
1528		END SAMPLE COLLECTION							
1529		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	2
turbidity meter	2001012591

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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-37-40
SAMPLE ID: 021

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Snow stopped, 30's

PROJECT NO: 01.0017869.92
DATE: 1/27/11
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

40 (DTB) − 8.46 (DTW) = 31.54 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 31.54 x 0.041 (Multiplier) = 1.29 gal (Well Volume)

1.29 x 1.5 = 1.94 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.0 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
1259	0	8.52		PUMP ON					
1303	0.01		21.64	1.832	3.01	7.26	-186.2	—	
1306	0.20		21.71	1.804	1.16	7.32	-194.5	3.83	
1309	0.60		21.75	1.801	0.65	7.35	-199.7	170.6	
1317	1.15		21.78	1.808	0.40	7.37	-170.1	>1100	
1321	1.50		21.81	1.809	0.37	7.38	-162.9	>1100	
1325	1.75		21.81	1.808	0.38	7.38	-152.2	>1100	
1328	1.90		21.80	1.808	0.39	7.39	-144.7	>1100	
1328			PUMP OFF						
1329			START SAMPLE COLLECTION						
1335			SAMPLE COMPLETED :				2 L	IPEC	
1335			PUMP OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429 3

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-37-57
SAMPLE ID: 021

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Snow, 30's

PROJECT NO: 01.0017869.92
DATE: 11/27/11
SAMPLER(S): CR, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.37 Transducer Actual Depth 42.194

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
1234	42.180	PUMP ON							
1303	41.087	23.21	1.760	5.50	6.68	126.0	—		0.01
1310	41.097	23.02	1.762	2.50	6.89	117.0	0.50		0.05
1320	41.157	22.92	1.762	1.69	6.98	110.7	0.28		0.15
1320	41.146	22.70	1.760	1.46	7.03	105.9	0.00		0.20
1325	41.500	20.57	1.786	1.52	7.05	106.3	0.00		0.22
1342	42.091	20.89	1.734	1.30	7.06	106.0	0.00		0.30
1350	42.114	20.44	1.729	1.26	7.08	104.3	0.00		0.33
1357	42.191	20.49	1.730	1.19	7.10	102.2	0.00		0.35
1403	42.225	20.84	1.730	1.61	7.13	101.1	0.00		0.40
1412	42.128	21.22	1.731	2.56	7.15	100.4	0.00		0.43
1417	42.122	21.43	1.732	2.44	7.16	100.6	0.00		0.45
1422	42.158	21.73	1.731	1.92	7.18	100.5	0.00		0.46
1427	42.138	21.89	1.733	1.61	7.18	100.2	0.00		0.48
1432	42.120	22.08	1.734	1.42	7.19	99.8	0.00		0.52
1437	42.140	22.16	1.735	1.39	7.20	99.4	0.00		0.55
1442	42.142	22.12	1.737	1.30	7.20	98.9	0.00		0.60
1446	START	SAMPLE	COLLECTION						
1526	END SAMPLE	COLLECTED	DW						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	4
turbidity meter	2007013534

NOTES AND OBSERVATIONS: Total volume purged 0.35 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl

WELL ID: MW 40.27

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40s

PROJECT NO: 01.0017869.92
DATE: 3/8/11
SAMPLER(S): CG, SL

SAMPLING INTERVAL (depth in ft below top of casing)

18.2 to 35.2

SAMPLING PORT

27 6

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)
1204	0	PUMP ON						5/5	15
1209	0.05	11.25	3.988	6.40	7.05	83.0	22.36		
1215	0.90	11.38	3.994	5.78	7.22	71.6	12.18		
1220	0.60	11.45	4.003	5.03	7.23	16.2	11.53		
1225	0.80	11.62	4.007	5.53	7.23	16.5	9.28		
1230	1.00	11.69	4.006	5.49	7.16	18.0	14.08		
1235	1.15	11.63	4.009	5.52	7.19	32.3	11.32		
1240	1.35	11.69	4.010	5.48	7.20	31.1	10.54		
1245	1.50	11.66	4.010	5.46	7.19	28.3	10.12		
1247	START	SAMPLE COLLECTION							
1255	END SA	MPLE COLLECTION: 12:39							
	PUMP O	FF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070284

NOTES AND OBSERVATIONS:

WELL ID: MW 40.46

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 90's

PROJECT NO: 01.0017869.92
DATE: 3/5/11
SAMPLER(S): CS, SL

SAMPLING INTERVAL (depth in ft below top of casing)

44.2 to 53.7

SAMPLING PORT

46 5

TOTAL VOLUME PURGED: 0.90 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)
1209	0	Pump ON						5/9	18
1210	0.01	10.70	5.383	8.56	6.853	64.8	1.12		
1215	0.15	10.97	5.315	0.34	6.857	-120.0	0.98		
1220	0.28	10.96	5.286	0.62	6.894	-117.6	0.90		
1225	0.49	11.03	5.265	0.54	6.93	-118.4	0.81		
1230	0.55	11.25	5.268	0.50	7.03	-115.4	0.99		
1235	0.70	11.21	5.269	0.49	7.04	-112.5	0.80		
1240	0.76	11.26	5.272	0.50	7.03	-110.5	0.85		
1242	START SAMPLE COLLECTION								
1258	END SAMPLE COLLECTION / 2L TPHC								
	Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	9
Turbidity meter	2007Q254

NOTES AND OBSERVATIONS:

WELL ID: MW 40.81

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40s

PROJECT NO: 01.0017869.92
DATE: 3/8/11
SAMPLER(S): CS, SL

SAMPLING INTERVAL (depth in ft below top of casing)

64.7 to 84.2

SAMPLING PORT

81

4

TOTAL VOLUME PURGED: 2.90 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)
0918	0	Pump ON						6/4	44
0923	0.72	10.93	2.724	2.81	6.11	-30.1	—		
0932	1.88	12.10	4.299	1.90	6.95	-80.3	42.13		
0943	1.90	11.74	2.698	0.68	5.94	-45.5	42.53		
0949	2.25	12.12	4.276	1.84	6.99	-77.2	32.84		
0955	2.45	11.87	4.294	1.90	7.00	-77.8	34.35		
1000	2.50	12.22	4.294	1.88	7.01	-89.7	36.81		
1005	2.75	12.40	4.301	1.87	7.01	-82.6	35.72		
1010	START SAMPLE COLLECTION								
1017	END SAMPLE COLLECTION: 2.90 GAL								
	Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	S
turbidity meter	20070125-4

NOTES AND OBSERVATIONS:

WELL ID: MW 40 . 100

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40's

PROJECT NO: 01.0017869.92
DATE: 3/31/11
SAMPLER(S): C.S.

SAMPLING INTERVAL (depth in ft below top of casing)

93.2 to 106.7

SAMPLING PORT

100 3

TOTAL VOLUME PURGED: 2.80 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)
0915	0	PUMP	ON					6/9	44
0922	0.05	9.78	2.132	0.94	5.99	-51.7	—		
0934	0.40	11.64	2.175	0.90	5.96	-51.6	92.92		
0943	1.35	12.06	2.129	0.45	6.22	-30.7	93.9		
0949	2.00	11.38	2.706	0.09	5.97	-41.7	32.71		
0955	2.10	11.52	2.702	0.04	6.02	-43.2	33.20		
1000	2.25	11.82	2.687	0.58	5.99	-38.7	36.93		
1005	2.40	12.09	2.688	0.05	6.04	-33.5	32.37		
1010	2.50	12.13	2.687	0.04	6.06	-25.7	35.63		
1015	2.65	12.15	2.685	0.05	6.07	-28.1	33.43		
1018	START	SAMPLE	COLLECTION						
1027	END SAMPLE COLLECTION: 2.30 GAL								
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	2009121254

NOTES AND OBSERVATIONS:

WELL ID: MW 40 - 127

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40's

PROJECT NO: 01.0017869.92
DATE: 3/3/11
SAMPLER(S): CA, SL

SAMPLING INTERVAL (depth in ft below top of casing)

125.2 to 136.7

SAMPLING PORT

127 2

TOTAL VOLUME PURGED: 1.55 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)
0918	0	PUMP ON						6/6	44
0923	0.05	9.70	2.132	0.40	5.98	-66.2	—		
0932	0.30	10.11	2.129	0.58	6.07	-89.3	0.53		
0942	0.55	10.15	2.129	0.46	6.24	-107.2	0.47		
0949	0.70	10.15	2.135	0.45	6.28	-106.6	0.41		
0955	0.75	9.67	2.147	0.36	6.32	-125.1	0.37		
1000	0.85	9.99	2.127	0.32	6.33	-120.6	0.34		
1007	1.05	10.01	2.145	0.29	6.40	-113.8	0.31		
1010	1.15	10.30	2.151	0.34	6.42	-116.5	0.28		
1015	1.30	10.25	2.152	0.41	6.44	-112.7	0.25		
1020	1.40	11.01	2.152	0.37	6.48	-114.6	0.20		
1022	START SAMPLE COLLECTION								
1041	END SAMPLE COLLECTION: 2L TOC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2W00 07554

NOTES AND OBSERVATIONS:

WELL ID: MW 40.162

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40s

PROJECT NO: 01.0017869.92
DATE: 3/8/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

158.7 to 190.3

SAMPLING PORT

162

TOTAL VOLUME PURGED: 0.120 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)
0915	0	PUMP	ON					6/9	44
0923	0.01	9.23	1.307	4.22	6.04	-21.0	—		
0932	0.10	8.92	1.327	0.93	7.03	-58.1	0.99		
0943	0.24	8.18	1.302	0.56	7.45	-71.6	0.45		
0949	0.30	8.10	1.303	0.66	7.59	-74.2	0.38		
0959	0.32	7.77	1.312	0.53	7.67	-79.4	0.32		
1000	0.35	7.91	1.300	0.48	7.77	-79.5	0.29		
1005	0.40	8.49	1.303	0.44	7.80	-84.5	0.25		
1010	0.45	8.53	1.304	0.41	7.87	-88.2	0.22		
1013	START SAMPLE COLLECTION								
1102	END SAMPLE COLLECTION: SL JPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	10070121259

NOTES AND OBSERVATIONS:

WELL ID: MW-41-40
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40s

PROJECT NO: 01.0017869.92
DATE: 2/14/14
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 21.13 Transducer Actual Depth 59.960

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
1203	59.938	PUMP ON						NA	NA	
1222	59.771	15.72	5.082	6.93	6.29	152.2	7.01			0.01
1232	59.794	16.91	5.264	6.29	6.45	130.9	4.06			0.07
1242	59.799	16.56	5.294	6.31	6.57	129.8	3.40			0.11
1247	59.811	16.6	5.320	6.76	6.64	125.9	3.34			0.14
1252	59.833	16.83	5.325	6.61	6.65	127.0	3.31			0.17
1255	START SAMPLE COLLECTION									
1305	END SAMPLE COLLECTION									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007 C42973

NOTES AND OBSERVATIONS: Total volume purged 0.30 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-91-63
SAMPLE ID: 018

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40's

PROJECT NO: 01.0017869.92
DATE: 2/14/11
SAMPLER(S): CB, SL

WATER COLUMN HEIGHT (ft)

DTB		DTW	=	Water Column Height
103	-	19.08	=	37.92 ft

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 37.92 x Multiplier 0.041 = Well Volume 1.55 gal

1.55 x 1.5 = 2.33 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.5 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
1306	0	—	PUMP ON						
1314	0.20	—	15.09	4.087	8.36	6.84	190.6	13.20	
1317	0.50	—	15.74	3.700	6.62	6.99	157.2	35.08	
1322	0.75	—	15.87	3.503	7.39	7.11	42.8	48.54	
1324	1.00	—	15.55	3.426	6.36	7.13	8.6	67.00	
1326	1.25	—	15.95	3.388	5.93	7.15	-6.0	66.26	
1326	1.50	—	16.04	3.378	5.76	7.16	-12.3	67.28	
1328	1.75	—	16.12	3.354	5.59	7.16	-17.8	59.01	
1329	2.00	—	16.16	3.334	5.46	7.19	-23.1	50.62	
1330	2.25	—	16.15	3.326	5.45	7.19	-25.0	48.52	
1332	START SAMPLE COLLECTION								
1337	END	SAMPLE COLLECTION: 2L JAR							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070492

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-42-49
SAMPLE ID: 024

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30's

PROJECT NO: 01.0017869.92
DATE: 3/4/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 34.71 Transducer Actual Depth 13.670

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
1004	13.768	PUMP	ON					5/10	22	
1024	13.097	11.70	3.940	7.95	6.10	249.5	4.77			0.20
1034	13.325	9.72	4.470	7.29	6.28	218.6	5.67			0.35
1044	13.341	9.28	4.633	7.45	6.43	207.5	6.23			0.50
1050	13.346	9.15	4.629	7.47	6.46	201.0	4.02			0.65
1055	13.352	8.95	4.626	7.48	6.46	191.1	3.36			0.82
1100	13.359	9.05	4.610	7.62	6.58	184.5	3.59			0.74
1105	13.324	8.95	4.599	7.36	6.58	179.0	3.55			0.96
1110	13.323	8.88	4.583	7.20	6.61	172.8	3.52			0.98
1115	13.311	8.84	4.584	7.25	6.69	169.7	3.48			1.0
1120	START	SAMPLE	COLLECTION							
1137	END SAMPLE	COLLECTION.	2.7 FSC							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125Y

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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-42-78
SAMPLE ID: 019

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 30's

PROJECT NO: 01.0017869.92
DATE: 3/4/11
SAMPLER(S): CB, SL

WATER COLUMN HEIGHT (ft)

78 (DTB) - 32.89 (DTW) = 45.11 (Water Column Height) ft

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 45.11 x 0.041 (Multiplier) = 1.85 (Well Volume) gal

1.85 x 1.5 = 2.77 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 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
1029	0	———	PUMP	ON					
1030	0.5	———	12.49	2.052	3.77	6.71	193.6	158.0	
1035	1.25	———	13.40	2.104	3.23	6.90	161.8	371.8	
1040	1.90	———	13.60	2.118	3.17	6.97	144.3	558.7	
1047	2.40	———	13.25	2.127	3.16	7.03	95.7	645.3	
1051	2.55	———	13.28	2.130	3.16	7.06	51.0	683.5	
1053	START	T SAMP	LE CA	LECTION					
1058	END	SAMPLE	WELL	ECTION:	2L 3PEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	2100P 01284

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 25
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, windy, low 40s

PROJECT NO: 01.0017869.92
DATE: 2/15/11
SAMPLER(S): CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 14.93 Transducer Actual Depth 28.339

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
1155	28.339	Pump	0 ml					5.5/22	16	
1156	24.025	4.53	4.912	6.07	6.78	17.5	—			0.01
1202	27.973	4.23	5.017	2.16	6.53	32.1	0.76			0.05
1212	27.927	4.58	5.043	1.85	6.82	8.9	0.61			0.12
1217	27.895	4.65	5.045	1.67	6.84	1.6	0.69			0.15
1222	27.879	4.67	5.083	1.68	6.82	-4.0	0.42			0.20
1227	27.847	4.79	5.095	1.60	6.82	-8.5	0.53			0.25
1229	START	SAMPLE COLLECTION								
1305	END SAMPLE	COLLECTION								
	Pump OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125Y

NOTES AND OBSERVATIONS: Total volume purged 0.4 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-93 62
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: sunny, windy, low 30's

PROJECT NO: 01.0017869.92
DATE: 2/15/11
SAMPLER(S): GB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 16.35 Transducer Actual Depth 35.585

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
1153	35.611	PUMP ON						1/1	32	
1202	35.418	6.46	2.968	5.33	7.84	129.7	15.50			0.05
1212	34.640	12.37	2.801	1.52	7.55	135.3	21.52		30	0.45
1217	34.853	11.46	2.789	1.27	7.60	140.4	25.30			0.55
1222	34.901	11.27	2.777	1.16	7.66	143.8	25.32			0.75
1227	34.968	10.86	2.769	1.03	7.67	146.2	24.59			0.85
1232	35.020	10.59	2.767	0.95	7.70	147.8	24.42			0.95
1237	35.050	10.68	2.765	0.91	7.70	146.4	24.35			1.10
1242	35.144	10.57	2.762	0.86	7.71	144.9	24.22			1.20
1244	START SAMPLE COLLECTION									
1315	END SAMPLE COLLECTION; 2L FOR FC									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070254

NOTES AND OBSERVATIONS: Total volume purged 1.35 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-94-66
SAMPLE ID: 019

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY CLOUDY, 40's

PROJECT NO: 01.0017869.92
DATE: 2/18/11
SAMPLER(S): CB, SL

WATER COLUMN HEIGHT (ft)

66 (DTB) - 59.08 (DTW) = 6.92 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 6.92 x 0.163 (Multiplier) = 1.128 gal (Well Volume)

1.128 x 1.5 = 1.69 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 1.40 gal

WATER QUALITY: DTW = 59.08 Transducer Actual Depth 5.492

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 PRESSURE
0928	0	5.491	PUMP ON						10/15 38
0933	0.01	4.916	13.97	1.620	4.61	6.82	175.0	49.37	
0941	0.25	3.628	14.64	1.390	4.30	7.19	17.5	25.58	
0947	0.50	2.783	14.72	1.367	5.05	7.34	23.2	16.99	
0955	0.75	1.807	14.71	1.359	5.47	7.44	36.0	21.99	
1000	0.95	1.786	14.93	1.356	5.41	7.47	40.2	23.32	
1006	1.10	1.788	14.83	1.362	5.43	7.50	45.3	26.37	
1019	1.25	1.786	14.00	1.363	5.11	7.48	52.5	—	
1020	1.25	1.786	WELL DRY. LET RECHARGE BEFORE SAMPLING						
1424	START SAMPLE COLLECTION								
1491	END SAMPLE COLLECTION. 2L IPC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070429 3

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: 020

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY CLOUDY, 40's

PROJECT NO: 01.0017869.92
DATE: 2/19/11
SAMPLER(S): SL, CB

WATER COLUMN HEIGHT (ft)

102	·	66.52	=	35.48
DTB		DTW		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 (Well Volume) gal

1.45 x 1.5 = 2.18 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.5 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
1023	0	66.52	PUMP ON						
1031	1	—	16.05	1.228	7.15	7.24	-39.8	>1000	
1036	1.5	—	15.10	1.230	6.56	7.34	-37.6		
1038	1.75	—	15.99	1.235	6.35	7.34	-39.2		
1040	2.00	—	15.91	1.239	6.22	7.37	-40.7		
1042	2.25	—	15.91	1.239	6.12	7.38	-42.4	↓	
1043	START	SAMPLE	COLLECTION						
1044	END	SAMPLE	COLLECTION, 2L IPEC						
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070393

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-45-42
SAMPLE ID: 023

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, LOW 30S

PROJECT NO: 01.0017869.92
DATE: 2/16/11
SAMPLER(S): CB

WATER COLUMN HEIGHT (ft)

47	-	23.41	=	18.59
DTB		DTW		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 18.59 x 0.163 (Multiplier) = 3.03 (Well Volume) gal

3.03 x 1.5 = 4.54 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 3.50 gal

WATER QUALITY: DTW = Transducer Actual Depth 17.495

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1224	0	17.399	PUMP ON						@ PRESSURE 20.1 (6/8)
1230	0.05	18.899	15.41	1.506	2.09	6.77	182.2	9.02	
1237	0.25	18.927	16.44	1.441	0.79	7.43	-10.0	1.64	
1246	0.90	12.394	16.73	1.432	0.59	7.57	-56.1	0.91	
1252	1.15	10.936	16.86	1.429	0.57	7.60	-61.3	0.59	
1259	1.75	9.382	16.93	1.426	0.58	7.62	-63.5	0.23	
1309	2.50	6.757	17.16	1.433	0.47	7.64	-66.1	3.86	
1317	2.75	4.460	17.11	1.434	0.45	7.65	-64.3	16.05	
1330	2.25	3.318	WELL DRY		ALLOW RECHARGE		BEFORE	SAMPLING	
1620	BEGIN	SAMPLE COLLECTION							
1630	END	SAMPLE COLLECTION		2 CIPEC					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070127541

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-45-61
SAMPLE ID: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, low 30's

PROJECT NO: 01.0017869.92
DATE: 2/10/16
SAMPLER(S): GB

WATER COLUMN HEIGHT (ft)

61	-	24.41	=	36.80
DTB		DTW		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 36.80 x 0.041 (Multiplier) = 1.51 (Well Volume) gal

1.51 x 1.5 = 2.26 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.40 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
1547	0	—	PUMP	ON					
1550	0.05	—	13.98	1.039	7.66	6.83	115.2	—	
1553	0.50	—	15.89	1.221	3.18	6.64	111.1	—	
1557	1.00	—	16.42	1.236	2.24	6.59	100.3	—	
1600	1.25	—	16.58	1.247	1.74	6.62	91.2	—	
1603	1.50	—	16.68	1.249	1.58	6.65	86.2	—	
1605	1.75	—	16.72	1.251	1.63	6.69	82.6	—	
1606	2.00	—	16.69	1.247	1.77	6.70	81.7	—	
1608	2.25	—	16.70	1.246	1.99	6.72	80.6	—	
1610	START SAMPLE COLLECTION								
1615	END SAMPLE COLLECTION: 2.40 GAL								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
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: 023

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 20's

PROJECT NO: 01.0017869.92
DATE: 2/23/11
SAMPLER(S): SL, CB

WATER COLUMN HEIGHT (ft)

29.7 (DTB) - 4.04 (DTW) = 25.66 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 25.66 x 0.653 (Multiplier) = 16.76 gal (Well Volume)

16.76 x 1.5 = 25.25 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 2.55 gal

WATER QUALITY: DTW = 4.04 Transducer Actual Depth 12.981

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
0958	0	23.765	PUMP ON						
1010	CHANGE YSI BATTERIES DEAD								
1100	CHANGED BATTERIES IN YSI				PUMP OFF				
1115	9	19.189	PUMP ON						
1128	13	16.665	16.69	0.340	2.30	7.67	-102.0	18.87	
1150	16.25	16.88	16.88	0.741	3.23	7.54	-76.9	12.36	
1206	20.50	9.862	17.10	0.974	4.10	7.55	-68.6	9.56	
1218	22.50	7.127	17.17	1.077	4.93	7.57	-64.4	6.37	
1229	24.50	5.495	17.18	1.130	5.11	7.59	-61.4	4.23	
1235	25.50	5.044	17.20	1.193	5.43	7.60	-61.0	2.81	
1237	START	STAMP	LE COLLECTION						
1246	END SAMPLE COLLECTION; 2 L 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-49-26
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly cloudy 30's

PROJECT NO: 01.0017869.92
DATE: 1/28/11
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.22 Transducer Actual Depth 12.465

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
10.22	12.225	Pump On/ Turbidity Probe In			6.25	N			
1046	Turbidity Probe Removed								
1114	11.906	1.85	2.643	6.67	6.25	129.4	—		0.01
1120	11.873	1.42	2.652	6.65	6.28	127.0	0.10		0.05
1130	11.815	1.77	2.646	6.02	6.31	126.9	0.08		0.10
1135	11.788	1.74	2.627	4.00	6.33	125.4	0.01		0.12
1140	11.765	1.73	2.630	3.67	6.34	124.0	0.00		0.13
1145	11.735	1.80	2.631	3.49	6.35	122.7	0.00		0.14
1150	11.718	1.79	2.634	3.34	6.36	121.9	0.00		0.15
1155	11.671	1.81	2.638	3.31	6.37	120.8	0.00		0.16
1200	11.677	1.77	2.640	3.29	6.38	119.7	0.00		0.17
1204	START	Sample Collection							
1337	End Sample Collection / IPEC Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	5
turbidity meter	20070423

NOTES AND OBSERVATIONS: Total volume purged 0.35 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-49-42
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly cloudy 30's

PROJECT NO: 01.0017869.92
DATE: 1/28/11
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.11 Transducer Actual Depth 15.209

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
1022	15.139	PUMP IN TUBING NO PROBES							
1040	TUBING DEPROBES ADDED								
1052	14.321	5.34	2.345	1.22	7.37	104.1	—		0.05
1100	14.303	4.63	2.330	1.20	7.24	111.0	1.27		0.10
1110	14.129	4.81	2.241	0.84	7.28	100.8	0.30		0.20
1120	14.066	5.08	2.291	0.96	7.45	97.4	0.12		0.30
1130	14.087	5.23	2.270	0.90	7.40	101.7	0.00		0.35
1135	14.574	5.09	2.265	0.82	7.48	97.6	0.00		0.38
1140	14.549	5.83	2.264	0.83	7.50	94.3	0.00		0.40
1145	14.525	5.96	2.263	0.80	7.52	93.9	0.00		0.42
1150	14.515	5.87	2.265	0.79	7.51	92.8	0.00		0.44
1154	START SAMPLE COLLECTION								
1500	END SAMPLE COLLECTION		2.26	SPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	3
turbidity meter	20570293

NOTES AND OBSERVATIONS: Total volume purged 0.45 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl

WELL ID: MW-49-65
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly cloudy 30's

PROJECT NO: 01.0017869.92
DATE: 1/28/11
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.32 Transducer Actual Depth 12.495

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
10:22	13.412 PU	MP DO	TUBING FI	LLED					
10:46	TUBING	DEPLO	YED						
1109	12.123	3.33	2.197	6.34	5.32	218.7	—		0.21
1110	12.057	3.58	2.206	4.54	6.12	31.2	0.89		0.05
1120	12.034	4.93	2.210	2.09	6.59	-37.6	0.92		0.15
1130	12.976	5.74	2.217	2.23	6.76	-51.2	0.30		0.25
1135	12.959	5.85	2.223	1.96	6.81	-52.6	0.41		0.25
1140	12.943	5.86	2.219	1.63	6.85	-61.3	0.31		0.29
1145	12.931	5.73	2.222	1.56	6.86	-65.6	0.31		0.30
1150	12.879	5.24	2.237	1.68	6.87	-68.0	0.29		0.36
1155	12.950	5.06	2.226	1.65	6.86	-68.3	0.21		0.42
1200	12.311	5.43	2.219	1.26	6.87	-71.9	0.00		0.45
1205	12.303	5.47	2.216	1.27	6.91	-74.0	0.00		0.60
1210	12.279	5.62	2.220	1.29	6.92	-76.0	0.00		0.65
1213	START	SAMP	LE COLL	ECTION					
1315	END SA	MPLE	COLLE	CTION:	2 L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	4
turbidity meter	2007042?3

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-6D-42
SAMPLE ID: 024

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rainy 40s

PROJECT NO: 01.0017869.92
DATE: 2/25/14
SAMPLER(S): CASE
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.67 Transducer Actual Depth NA

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
1105	8.67	PUMP ON							
1125	8.74	17.20	2.400	1.67	7.08	153.2	3.46		0.1
1130	8.91	17.19	2.432	1.19	7.20	149.6	2.30		0.2
1135	8.81	17.17	2.445	1.02	7.29	144.2	2.03		0.25
1140	8.91	17.17	2.454	0.97	7.37	140.8	2.25		0.31
1145	8.91	17.23	2.459	0.90	7.46	134.1	2.16		0.40
1150	8.81	17.21	2.461	0.73	7.51	131.0	1.63		0.49
1155	8.81	17.26	2.459	0.64	7.57	129.4	2.83		0.55
1200	8.81	17.23	2.460	0.61	7.62	125.0	1.93		0.65
1205	8.91	17.27	2.461	0.65	7.66	119.0	1.63		0.32
1206	START	SAMPLE COLLECTION							
1236	END SAMPLE	VOLUME: 2L			IPEC				
	STOP PUMP								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	4
turbidity meter	4 2020892

NOTES AND OBSERVATIONS: Total volume purged 0.88 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-5D-60
SAMPLE ID: 029

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 90's

PROJECT NO: 01.0017869.92
DATE: 2/25/11
SAMPLER(S): CK, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.85 Transducer Actual Depth 87.596

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
									3hr
1115	87.429	PUMP	ON						
1125	85.894	17.24	2.046	1.59	7.01	95.4	3.11		0.9
1130	86.116	17.29	2.044	1.21	7.19	45.3	3.16		0.11
1135	86.178	17.30	0.041	1.15	7.24	25.3	2.91		0.19
1140	86.142	17.26	2.036	1.05	7.28	8.1	1.51		0.25
1145	86.013	17.28	2.034	0.91	7.32	-9.0	1.04		0.30
1150	86.020	17.31	2.033	0.79	7.33	-13.8	1.25		0.35
1155	86.06	17.35	2.031	0.71	7.35	-18.6	1.58		0.41
1156	START	SAMPLE	COLLECTION						
1230	END SAMPLE COLLECTION; 2L			IPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	1
turbidity meter	2077042072

NOTES AND OBSERVATIONS: Total volume purged 0.5 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 5L - 40

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30's

PROJECT NO: 01.0017869.92
DATE: 3/8/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

29.7 to 44.2

SAMPLING PORT

40 7

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)
0930	0		PUMP ON					6.5/8.4	24
0935	0.01	9.06	3.547	7.35	6.43	-11.6	3.86		
0942	0.60	11.50	3.410	5.28	6.66	-0.8	1.54		
0952	0.90	11.90	2.307	5.24	6.77	3.2	1.20		
0957	1.10	12.07	2.393	5.19	6.77	1.5	1.18		
1002	1.25	12.14	2.398	5.22	6.79	-2.1	1.23		
1003		START SAMPLE COLLECTION							
1015		SAMPLE COMPLETED : 2L IPEC							
1018		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070493

NOTES AND OBSERVATIONS:

WELL ID: MW 5L-79

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30s

PROJECT NO: 01.0017869.92
DATE: 3/8/11
SAMPLER(S): SL, DB

SAMPLING INTERVAL (depth in ft below top of casing)

63.2 to 81.2

SAMPLING PORT

79 6

TOTAL VOLUME PURGED: 1.54 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)
0930	0		PUMP ON					6.5/8.4	24
0935	0.01	9.28	2.722	7.71	6.40	-130.9	7.80	↑	↓
0942	0.28	10.48	2.732	3.33	6.53	-142.8	14.78		
0952	0.53	11.13	2.737	1.96	6.72	-100.0	23.25		
0957	0.70	11.26	2.740	1.77	6.77	-85.2	19.29		
1002	0.85	11.46	2.737	1.73	6.80	-69.2	21.09		
1008	1.05	11.41	2.734	1.70	6.77	-57.4	18.89		
1013	1.20	11.61	2.732	1.70	6.84	-54.9	21.54		
1018	1.39	11.73	2.732	1.67	6.86	-52.4	24.12	↓	↓
1019		START	SAMPLE	COLLECTION					
1034		SAMPLE	COMPLETED: 2L	TPH					
1034		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070493

NOTES AND OBSERVATIONS:

WELL ID: MW 5I - 104

SAMPLE ID: 0116

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30's

PROJECT NO: 01.0017869.92
DATE: 3/8/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

130.2 to 143.7

SAMPLING PORT

104 4

TOTAL VOLUME PURGED: 2.45 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)
1119	0	PUMP ON						5.6/5.6	42
1125	0.35	12.38	2.615	1.90	6.83	-69.1	1.33		
1131	0.75	12.39	2.625	1.53	6.91	-25.6	1.16		
1137	1.20	12.33	2.630	1.56	6.87	-11.4	0.98		
1143	1.40	12.54	2.627	1.49	6.92	-3.3	0.60		
1149	1.70	12.52	2.632	1.42	6.99	0.2	0.94		
1154	1.95	12.47	2.631	1.39	6.96	7.6	0.61		
1200	2.30	12.55	2.625	1.40	7.03	9.3	0.79		
1202		START SAMPLE COLLECT ION							
1210		SAMPLE COMPLETED: 2L IPEC							
1210		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2007 ou 293

NOTES AND OBSERVATIONS:

WELL ID: MW 51 - 135

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30's

PROJECT NO: 01.0017869.92
DATE: 3/8/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

130.2 to 143.7

SAMPLING PORT

135 3

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)
1119	0	PUMP ON						5.6/5.6	42
1125	0.35	12.09	2.496	0.70	6.45	-79.2	4.19		
1131	0.50	12.21	2.494	0.40	6.49	-61.5	0.96		
1137	0.75	12.27	2.499	0.29	6.49	-40.0	0.67		
1142	0.85	12.30	2.504	0.24	6.50	-26.3	0.59		
1148	1.00	12.21	2.505	0.21	6.49	-15.9	0.93		
1154	1.15	12.17	2.504	0.17	6.49	-5.0	0.49		
1200	1.30	12.27	2.507	0.13	6.49	5.9	0.49		
1207	1.45	12.26	2.507	0.14	6.49	16.3	1.66		
1214	1.70	12.30	2.507	0.13	6.49	25.2	0.44		
1219	1.95	12.28	2.505	0.14	6.50	31.9	0.21	↓	↓
1225	2.05	12.26	2.506	0.12	6.50	34.2	0.2		
1226		START SAMPLE COLLECTION							
1244		SAMPLE COMPLETED: 2L IPEC							
1244		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
Turbidity meter	20070429

NOTES AND OBSERVATIONS:

WELL ID: MW 51-163

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30s

PROJECT NO: 01.0017869.92
DATE: 3/5/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

154.7 to 166.2

SAMPLING PORT

163 2

TOTAL VOLUME PURGED: 1.05 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)
1119	0	PUMP ON						5.6/5.6	42
1125	0.09	11.50	2136	1.55	5.90	-98.5	2.47		
1131	0.11	11.69	2132	0.64	5.65	-104.0	2.07		
1137	0.20	11.65	2.150	0.47	5.68	-92.3	2.67		
1142	0.28	11.71	2.160	0.36	5.73	-83.7	1.52		
1148	0.37	11.58	2.170	0.29	5.78	-89.6	1.58		
1154	0.45	11.61	2.171	0.27	5.83	-93.4	1.26		
1200	0.53	11.79	2.170	0.24	5.88	-91.1	1.39		
1207	0.61	11.69	2.174	0.21	5.97	-89.8	1.02		
1214	0.75	11.63	2.171	0.19	6.02	-95.3	1.36		
1219	0.83	11.47	2.170	0.16	6.05	-101.8	1.24	↓	↓
1225	0.90	11.44	2.170	0.00	6.02	-95.5	1.13		
1226		START SAMPLE COLLECTION							
1301		SAMPLE COMPLETED: 2L IPEC							
1301									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070493

NOTES AND OBSERVATIONS:

WELL ID: MW 51 - 189

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30's

PROJECT NO: 01.0017869.92
DATE: 3/8/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

184.2 to 197.8

SAMPLING PORT

189

TOTAL VOLUME PURGED: 1.23 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)
1119	0	PUMP ON						5.6/5.6	42
1125	0.09	11.96	1.531	1.09	6.44	-75.4	1.95		
1131	0.25	11.82	1.544	0.67	6.64	-122.0	1.42		
1137	0.40	11.74	1.553	0.56	6.73	-135.9	1.45		
1143	0.53	11.66	1.560	0.47	6.77	-165.9	1.36		
1149	0.68	11.62	1.564	0.43	6.79	-180.6	1.31		
1154	0.83	11.93	1.560	0.38	6.81	-191.2	1.33		
1200	0.92	12.07	1.556	0.34	6.82	-195.9	1.06		
1207	1.09	11.99	1.556	0.33	6.83	-197.8	2.68		
1208		START SAMPLE COLLECTION							
1230		SAMPLE COMPLETED: 2L IPEC							
1230		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 3563 Sonde	6
turbidity meter	20070496

NOTES AND OBSERVATIONS:

WELL ID: MW-53-82
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 20s

PROJECT NO: 01.0017869.92
DATE: 3/3/11
SAMPLER(S): LB, SC
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 58.26 Transducer Actual Depth 23.574

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)	H_2O Purge Notes
1019	23.25	PUMP	ON					5/20	38	
1040	23.272	9.45	5.650	5.91	6.48	52.0	25.99			0.10
1050	23.323	9.57	6.764	2.53	6.87	-6.3	21.91			0.28
1102	23.317	10.13	6.774	3.43	7.09	-21.4	16.85			0.69
1110	23.222	9.51	6.732	3.50	7.22	-32.5	14.22			0.80
1117	23.214	9.34	6.377	9.01	7.30	-31.3	11.68			1.00
1124	23.252	10.02	6.575	7.16	7.35	-38.6	8.16			1.10
1129	23.149	10.17	6.875	5.63	7.36	-41.0	7.86			1.20
1132	23.125	10.24	6.901	5.79	7.35	-41.9	7.75			1.90
1135	START	SAMPLE	COLLECTION							
1153	SAMPLE	COMPLETED;	2L	TB						
1153	PUMP	OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	LE
turbidity meter	20070402-73

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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-58-120
SAMPLE ID: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30s

PROJECT NO: 01.0017869.92
DATE: 3/3/11
SAMPLER(S): SL, CG

WATER COLUMN HEIGHT (ft)

120 (DTB) − 59.23 (DTW) = 60.77 (Water Column Height) ft

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 60.77 x 0.041 (Multiplier) = 2.49 (Well Volume) gal

2.49 x 15 = 3.74 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 3.90 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
1120	0	—	9.69	DRY					
1125	0.6	—	10.55	1.629	6.46	6.57	238.9	27.19	
1130	1.25	—	11.38	1.638	4.35	6.82	218.1	68.75	
1135	1.5	—	12.67	1.755	3.89	6.89	196.3	118.5	
1140	2.25	—	12.95	1.812	3.77	6.96	168.7	119.9	
1145	2.5	—	13.20	1.820	4.13	6.96	154.7	104.7	
1150	3.0	—	13.62	1.826	4.03	7.04	123.7	93.12	
1155	3.85	—	13.91	1.830	3.93	7.01	109.8		
1157		START SAMPLE COLLECTION							
1200		END SAMPLE COLLECTION. 2L IPEC							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20120420393

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-35S 24
SAMPLE ID: 013

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: ICE, PARTLY SUNNY, 25°F

PROJECT NO: 01.0017869.92
DATE: 2/13/14
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.81 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
1124	5.692	PUMP ON							
1127	TUBING	FROZEN							
1150	TUBING	DEFROSTED							
1200	5.898	3.68	0.664	3.40	7.32	-48.8	—		0.20
1210	6.013	3.66	0.657	2.46	7.34	-35.8	1.21		0.25
1220	5.723	5.61	0.652	2.45	7.37	-30.4	0.77		0.30
1230	5.814	5.38	0.651	1.86	7.46	-54.8	0.57		0.35
1230	5.762	5.59	0.653	1.90	7.48	-71.3	0.41		0.38
1242	5.675	6.12	0.653	1.83	7.51	-72.2	0.41		0.50
1253	5.738	6.60	0.654	1.64	7.55	-89.0	0.27		0.55
1300	5.762	6.43	0.662	1.30	7.58	-93.3	0.23		0.60
1306	5.775	6.24	0.660	1.24	7.59	-95.1	0.02		0.65
1312	5.808	6.31	0.660	1.27	7.61	-98.9	0.00		0.70
1318	5.702	6.46	0.659	1.29	7.63	-99.8	2.00		0.75
1324	5.702	6.49	0.660	1.30	7.64	-102.1	0.00		0.80
1326	START	SAMP	LE COLLECTION						
1413	END SAMPLE	COLLECTION/	2 LATER						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	4
turbidity meter	20670125A

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: 016

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 10C, PARTLY SUNNY, 26°F

PROJECT NO: 01.0017869.92
DATE: 2/2/11
SAMPLER(S): CHMB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.16 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
1124	21.761	PUMP	ON						
1125	TUBING	FILLING							
1150	TUBING	DEFLATED							
1200	21.710	10.55	0.648	2.29	7.72	-147.5	—		0.05
1210	21.690	7.65	0.645	1.21	7.90	-141.7	1.45		0.20
1220	21.692	5.96	0.646	0.73	7.97	-123.5	1.30		0.25
1230	21.789	5.10	0.654	0.61	8.01	-115.2	0.08		0.30
1240	21.692	4.42	0.661	0.76	8.02	-111.7	0.53		0.35
1242	21.648	4.33	0.659	0.72	8.02	-106.2	0.27		0.40
1253	21.690	4.55	0.669	0.69	8.04	-103.9	0.16		0.45
1300	21.789	4.00	0.657	0.74	8.04	-100.9	0.12		0.50
1306	21.747	3.75	0.688	0.76	8.04	-96.1	0.04		0.55
1312	21.777	3.49	0.690	0.72	8.03	-92.0	0.02		0.60
1318	21.692	3.85	0.681	0.71	8.03	-92.0	0.00		0.60
1324	21.701	3.99	0.679	0.70	8.04	-93.6	0.00		0.62
1331	21.722	3.98	0.701	0.72	8.06	-95.5	0.00		0.63
1336	21.369	3.93	0.703	0.75	8.06	-91.8	0.00		0.65
1341	START SAMPLE COLLECTION								
1416	END SAMPLE COLLECTION: 2L JAR								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	2
turbidity meter	20070259

NOTES AND OBSERVATIONS: Total volume purged 2.75 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 54 - 37

SAMPLE ID: 0116

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Snow/ice 28°F

PROJECT NO: 01.0017869.92
DATE: 2/1/11
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: 4.0 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)
1255	0	PUMP ON						6/4	20
1304	0.25	21.03	1.787	0.80	6.82	-125.4	—		
1310	0.85	21.08	1.785	0.66	6.95	-125.4	0.65		
1315	1.10	21.11	1.784	0.67	6.98	-125.4	0.46		
1320	1.50	21.07	1.783	0.65	6.99	-125.3	0.14		
1326	1.80	21.12	1.783	0.64	7.00	-127.6	0.28		
1332	2.19	21.18	1.784	0.63	7.01	-128.5	0.30		
1337	2.50	21.18	1.785	0.61	7.02	-129.5	0.17		
1342	2.60	21.19	1.786	0.60	7.02	-130.0	0.15		
1347	2.95	21.20	1.786	0.59	7.02	-130.9	0.01		
1352	3.00	21.21	1.787	0.59	7.02	-131.1	0.00		
1358	3.90	21.22	1.788	0.59	7.02	-131.9	0.00		
1401	START	SAMPLE COLLECTION							
1410	END SAMPLE COLLECTION & EQUIP.								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070129Y

NOTES AND OBSERVATIONS:

WELL ID: MW-55-64
SAMPLE ID: DUP

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: ICE, PARTLY SUNNY, 25°F

PROJECT NO: 01.0017869.92
DATE: 2/3/11
SAMPLER(S): CS, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.92 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
1124	9.92	PUMP ON							
1125	TUBING	FLOW	ON						
1126	TURBINE	DOPPLER	ED						
1200	9.90	7.56	1.743	8.00	6.38	257.3	—		0.01
1210	9.90	4.75	1.759	5.28	6.30	255.9	1.87		0.05
1220	9.90	3.62	1.748	4.27	6.24	254.1	0.21		0.10
1230	9.90	3.39	1.731	4.33	6.25	257.8	0.13		0.15
1236	9.90	3.11	1.730	4.20	6.27	258.3	0.91		0.20
1242	9.90	2.81	1.729	4.04	6.28	256.0	0.86		0.25
1253	9.90	2.72	1.728	3.80	6.29	251.4	0.35		0.30
1300	9.90	2.67	1.730	3.80	6.31	247.1	0.86		0.35
1306	9.90	2.63	1.730	3.71	6.32	243.7	0.83		0.40
1313	START	SAMPLE	COLLECTION						
1417	END SAMPLE COLLECTION			2L JUG					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	3
turbidity meter	2007 01254

NOTES AND OBSERVATIONS: Total volume purged 0.50 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 54 - 58

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Snow/ice 28°F

PROJECT NO: 01.0017369.92
DATE: 2/1/11
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

51.6 to 64.0

SAMPLING PORT

58 5

TOTAL VOLUME PURGED: 2.75 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)
1255	0	PUMP ON						6/4	20
1304	0.05	20.83	1.720	0.47	6.42	-67.0	—		
1310	0.40	20.94	1.709	0.19	6.63	-60.0	0.65		
1315	0.80	20.96	1.711	0.15	6.73	-51.2	0.49		
1320	1.0	20.77	1.718	0.16	6.81	-65.2	0.17		
1326	1.25	20.85	1.725	0.17	6.85	-61.1	0.31		
1332	1.65	20.90	1.722	0.17	6.86	-57.9	0.41		
1337	1.85	20.93	1.737	0.17	6.92	-53.7	0.27		
1342	2.00	20.95	1.739	0.16	6.93	-29.8	0.31		
1347	2.15	20.96	1.743	0.27	6.95	-34.7	0.42		
1352	2.40	20.98	1.746	0.19	6.96	-23.5	0.22		
1358	2.50	20.99	1.750	0.08	6.97	-36.8	0.40		
1403	2.100	21.110	1.754	0.08	6.98	-33.7	0.47		
1408	2.70	21.00	1.758	0.21	6.99	-30.3	0.95		
1410	START SAMPLE COLLECTION								
1422	END SAMPLE COLLECTION / 2L JAR								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

WELL ID: MW 54 - 123

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Snow/ice 28°F

PROJECT NO: 01.0017869.92
DATE: 2/1/11
SAMPLER(S): CB, MD

SAMPLING INTERVAL (depth in ft below top of casing)

116.0 to 126.0

SAMPLING PORT

123 4

TOTAL VOLUME PURGED: 0.80 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)
1255	0	PUMP ON						6/4	20
1304	0.01	20.79	1.794	0.85	6.18	-150.8	—		
1310	0.10	20.79	1.782	0.15	6.45	-156.4	0.01		
1315	0.25	20.84	1.781	0.12	6.69	-165.2	0.00		
1320	0.30	20.70	1.785	0.08	6.93	-168.8	0.00		
1326	0.35	20.77	1.784	0.19	6.95	-157.8	0.00		
1332	0.40	20.86	1.785	0.17	7.01	-159.1	0.00		
1337	0.50	20.91	1.786	0.15	7.13	-158.9	0.00		
1342	0.60	20.99	1.781	0.15	7.15	-163.2	0.00		
1346	START	SAMPLE COLLECTION							
1410	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

WELL ID: MW 54-144

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny/Hot, 100°F

PROJECT NO: 01.0017869.92
DATE: 2/11
SAMPLER(S): CL, MB

SAMPLING INTERVAL (depth in ft below top of casing)

135.0 to 155.5

SAMPLING PORT

144 3

TOTAL VOLUME PURGED: 4.75 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)
1104	0	PUMP	ON					7s/6s	36
1112	0.20	21.58	1.897	2.50	5.84	-20.0	4.60		
1120	0.50	21.08	1.838	0.42	6.42	-84.7	2.50		
1140	1.15	20.62	1.831	0.27	6.68	-96.1	1.31		
1150	1.75	20.34	1.847	0.23	6.73	-102.3	2.00		
1155	2.05	20.21	1.849	0.21	6.74	-104.2	0.99		
1200	2.90	20.12	1.850	0.20	6.75	-105.5	1.69		
1205	2.70	20.02	1.851	0.21	6.74	-106.1	1.18		
1210	3.00	19.94	1.852	0.20	6.73	-109.9	0.91		
1215	4.00	19.88	1.851	0.18	6.73	-111.1	1.16		
1220	4.25	19.83	1.853	0.19	6.73	-112.0	1.07		
1225	4.50	19.78	1.855	0.20	6.73	-113.5	1.18		
1227	START SAMPLE COLLECTION								
1234	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	2007 01294

NOTES AND OBSERVATIONS:

WELL ID: MW 54 - 173

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Snowing/ICY 26°F

PROJECT NO: 01.0017869.92
DATE: 2/1/11
SAMPLER(S): CRJ/CS

SAMPLING INTERVAL (depth in ft below top of casing)

170.5 to 182.0

SAMPLING PORT

173 2

TOTAL VOLUME PURGED: 3.05 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)
1119	0	Pump	On					75/67	30
1123	0.20	21.59	1.934	2.90	5.78	7.9	0.34		
1130	0.50	21.09	1.945	0.77	6.18	-21.9	1.05		
1140	1.15	20.68	1.941	0.25	6.59	2.9	0.00		
1150	1.75	20.30	1.938	0.22	6.70	18.3	0.15		
1155	2.05	20.14	1.938	0.20	6.77	22.2	0.12		
1200	2.45	20.05	1.937	0.19	6.81	22.3	0.01		
1205	2.80	19.94	1.937	0.15	6.85	17.0	0.00		
1210	3.00	19.85	1.936	0.14	6.89	9.0	0.00		
1215	3.25	19.80	1.936	0.13	6.92	4.8	0.00		
1220	3.50	19.75	1.936	0.12	6.94	0.9	0.00		
1221	START	SAMPLE COLLECTION							
1224	END SAMPLE COLLECTION								
	Pump @ FP								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007012794

NOTES AND OBSERVATIONS:

WELL ID: MW 54-190

SAMPLE ID: 0116

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny/Wind, 28°F

PROJECT NO: 01.0017869.92
DATE: 2/1/11
SAMPLER(S): CB, MR

SAMPLING INTERVAL (depth in ft below top of casing)

185.0 to 203.6

SAMPLING PORT

190

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)
1119	0	PUMP	ON					3.5/6.7	30
1123	0.20	21.51	2.052	2.01	6.07	-5.1	0.59		
1130	0.50	21.15	1.994	0.13	6.62	-93.1	0.11		
1140	1.15	20.59	1.978	0.07	7.13	-76.2	0.03		
1150	1.60	20.29	1.978	0.07	7.27	-66.7	0.03		
1155	2.00	20.14	1.978	0.06	7.32	-58.0	0.05		
1200	2.15	20.09	1.978	0.07	7.34	-50.3	0.02		
1205	2.50	19.93	1.979	0.07	7.37	-46.5	0.00		
1210	2.60	19.85	1.979	0.08	7.39	-41.8	0.00		
1215	2.75	19.80	1.979	0.08	7.40	-38.2	0.00		
1216	START	SAMPLE COLLECTION							
1215	END &	SAMPLE COLLECTION 2 L EPEC							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	2007012541

NOTES AND OBSERVATIONS:

WELL ID: MW 60 - 35

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly Sunny, 15°F

PROJECT NO: 01.0017869.92
DATE: 2/11/11
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

24.9 to 39.4

SAMPLING PORT

35

7

TOTAL VOLUME PURGED: 1.60 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)
0925	0	PUMP ON						5/5	15
0940	0.45	5.54	1.368	2.00	7.13	-33.3	—		
1001	0.75	6.31	2.331	2.33	7.28	-48.6	0.06		
1010	0.85	6.37	3.294	2.21	7.32	-51.5	0.01		
1015	0.95	6.48	3.441	2.14	7.33	-53.9	0.01		
1020	1.05	6.55	3.917	2.26	7.36	-54.5	0.01		
1025	1.10	6.38	3.655	2.30	7.36	-58.8	0.01		
1030	1.15	6.34	3.826	2.37	7.37	-60.5	0.00		
1035	1.20	6.34	3.978	2.43	7.36	-57.1	0.00		
1040	1.25	5.89	4.116	2.62	7.33	-57.6	0.00		
1045	1.30	6.85	4.205	2.78	7.31	-58.7	0.00		
1050	1.35	5.82	4.213	2.70	7.34	-60.1	0.00		
1055	START SAMPLE COLLECTION								
1217	END SAMPLE COLLECTION			2L TRIP BLANK					
				2L MS	- DUPLICATE				
				2L MSD	- SPIKE				
				2L TRIP	- BLANK				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	0
turbidity meter	20070254

NOTES AND OBSERVATIONS:

WELL ID: MW60 - 53

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY SUNNY, 15°F

PROJECT NO: 01.0017869.92
DATE: 2/11/11
SAMPLER(S): M. BRITZS

SAMPLING INTERVAL (depth in ft below top of casing)

45.4 to 59.4

SAMPLING PORT

53

6

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)
0935	0	PUMP	ON					5/7	15
0940	0.45	8.55	2.341	1.87	6.96	242.9	—		
1004	0.75	8.63	2.435	1.42	6.91	407.0	0.43		
1010	1.00	8.82	2.452	1.44	7.04	94.9	1.50		
1015	1.15	8.96	2.459	1.45	7.00	55.0	0.22		
1020	1.25	9.15	2.473	1.45	7.06	62.9	0.09		
1025	1.35	9.22	2.498	1.49	7.10	65.5	0.05		
1030	1.50	9.24	2.504	1.50	7.13	69.4	0.01		
1035	1.60	9.20	2.509	1.50	7.15	72.6	0.01		
1039	START SAMPLE COLLECTION								
1057	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070254

NOTES AND OBSERVATIONS:

WELL ID: MW 60- 72

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 20'S

PROJECT NO: 01.0017869.92
DATE: 2/10/11
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

66.4 to 78.2

SAMPLING PORT

72 4

TOTAL VOLUME PURGED: 6.15 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)
1011	0	PURGE PUMP TEST						0/5	35
1012	0	RESUME PURGE							
1017	0	TROUBLE SHOOTING: NO PRESSURE							
1028	0	PRESSURE RESUMED							
1105	0	COMPRESSOR PROBLEM FIXED: RESUMED PURGING							
1115		PUMP OFF TO DEFROST							
1128	2.5	11.69	3.520	0.46	6.94	66.7	0.91		
1130	3.0	11.98	3.500	0.38	6.98	70.4	1.16		
1145	3.75	12.56	3.477	0.37	7.03	70.8	1.09		
1155	4.0	12.77	3.462	0.40	7.01	71.8	1.00		
1202	4.5	12.77	3.444	0.35	7.02	72.3	1.11		
1210	5.5	12.72	3.438	0.36	7.04	72.3	2.76		
1216	6.25	12.76	3.420	0.38	7.04	73.4	2.85		
1224	7.00	13.32	3.427	0.57	7.07	72.3	2.83		
1230	7.50	13.31	3.399	0.48	7.08	72.5	2.87		
1236	8.00	13.34	3.409	0.46	7.09	72.1	2.80		
1248	START SAMPLE COLLECTION								
1254	END SAMPLE COLLECTION: 7 L TOC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429

NOTES AND OBSERVATIONS:

WELL ID: MW 60 - 135

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 20's

PROJECT NO: 01.0017869.92
DATE: 2/10/11
SAMPLER(S): M. BG, TDS

SAMPLING INTERVAL (depth in ft below top of casing)

124.9 to 141.4

SAMPLING PORT

135 3

TOTAL VOLUME PURGED: 5.90 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)
1091	0	PURGING, TURNING VALVE						1/15	35
1097	0	PURGE STARTED TURNING							
1021	0	TURNED VALVE, NO PRESSURE							
1028	0	PRESSURE RESUMED							
1105	0	COMPRESSOR PROBLEM FIXED; RESUMED PUMPING							
1115		PUMP OFF TO DEFROST							
1128	2.0	10.60	2.346	0.28	7.04	10240	0.10		
1136	2.5	11.19	2.373	0.22	7.01	-161.8	0.09		
1145	2.75	11.61	2.381	0.19	7.01	-162.2	0.14		
1155	3.25	12.10	2.405	0.17	7.03	-154.4	0.06		
1202	3.75	12.38	2.415	0.17	7.03	-155.5	0.24		
1210	4.00	12.49	2.452	0.16	7.02	-148.0	0.45		
1216	4.50	12.41	2.470	0.18	6.85	-143.8	0.05		
1224	4.75	12.97	2.489	0.16	6.90	-142.4	0.42		
1230	5.00	12.85	2.487	0.16	6.92	-141.7	0.45		
1236	5.25	12.92	2.550	0.30	6.95	-146.2	0.29		
1243	5.15	13.06	2.583	0.22	6.94	-145.2	0.28		
1249	5.35	13.10	2.575	0.19	6.92	-143.1	0.23		
1254	5.75	13.15	2.579	0.18	6.92	-145.2	0.26		
1256	START SAMPLE COLLECTION; 2L IP								
1304	~~PUMP OFF~~ END SAMPLE COLLECTION; 2L IP								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070429

NOTES AND OBSERVATIONS:

WELL ID: MW 60-154

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY 120'S

PROJECT NO: 01.0017869.92
DATE: 2/10/11
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

147.4 to 164.9

SAMPLING PORT

154 2

TOTAL VOLUME PURGED: 9.15 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)
1011	0	PUMP ON. TURBINE FAILURE						1/1	35
1012	0	DRAW DOWN EXCESSIVE TURBINE							
1021	0	TURBINE NOT RUNNING: NO PRESSURE							
1028	0	PRESSURE RESUMED							
1105	0	COMPRESSOR PROBLEM FIXED : RESUMED PUMPING							
1115		PUMP OFF TO DEFROST							
1128	1.25	10.51	2.344	0.28	6.99	-161.6	0.43		
1136	1.75	10.59	2.022	0.41	7.18	-130.1	0.45		
1145	2.00	11.43	2.018	0.41	7.04	-125.8	0.60		
1155	2.50	11.92	2.028	0.41	7.06	-110.7	0.29		
1202	3.00	12.07	2.030	0.37	7.13	-102.2	0.42		
1210	3.75	12.27	2.029	0.30	7.15	-97.4	0.39		
1216	4.00	12.08	2.015	0.29	7.14	-97.6	0.36		
1224	4.50	12.71	2.019	0.30	7.13	-86.9	0.30		
1230	4.75	12.69	2.015	0.29	7.16	-78.6	0.28		
1236	5.00	12.65	2.018	0.29	7.14	-76.3	0.27		
1243	START SAMPLE COLLECTION								
1253	END SAMPLE COLLECTION: 2 L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	
turbidity meter	20070429

NOTES AND OBSERVATIONS:

WELL ID: MW 60 - 176

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 20's

PROJECT NO: 01.0017869.92
DATE: 2/10/11
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

170.9 to 200.4

SAMPLING PORT

176

TOTAL VOLUME PURGED: 2.40 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)
1011	0	PURGE AND SAMPLE EQUIPMENT						6/5	35
1012	0	INITIAL TEMPERATURE TOO LOW							
1021	0	TURBINE DEFROSTED: NOT PRESSURE IN COMPRESSOR							
1026		PRESSURE RESUMED							
~~1105~~									
1115		PUMP OFF TO DEFROST							
1145	0.5	9.45	0.760	2.96	7.09	-131.6	4.63		
1155	0.75	9.26	0.757	1.21	7.11	-138.1	1.23		
1202	1.00	9.40	0.756	0.89	7.19	-138.5	1.34		
1210	1.25	9.46	0.757	0.64	7.21	-144.9	1.35		
1216	1.50	9.40	0.756	0.56	7.20	-143.9	1.37		
1224	1.75	10.18	0.759	0.54	7.19	-141.1	1.44		
1230	2.00	10.23	0.759	0.56	7.22	-144.2	1.39		
1236	2.25	10.26	0.760	0.54	7.23	-144.9	1.35		
1242	START SAMPLE COLLECTION								
1301	END SAMPLE COLLECTION: 2 LITER								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	10
turbidity meter	20070293

NOTES AND OBSERVATIONS:

WELL ID: MW-6278
SAMPLE ID: 016

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 26

PROJECT NO: 01.0017869.92
DATE: 2/23/11
SAMPLER(S): SL, DB
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
1145	4.015	PUMP ON							
1202	4.053	6.04	5.023	11.34	5.58	60.3	1.75		0.05
1207	4.038	6.41	4.909	10.85	6.19	43.1	2.06		0.1
1212	4.050	6.51	4.742	10.85	6.35	14.2	1.53		0.2
1217	4.003	6.77	4.731	10.62	6.45	-26.4	1.31		0.38
1222	4.035	6.93	4.661	10.41	6.53	-75.2	1.14		0.35
1227	4.059	6.98	4.461	10.54	6.59	-73.6	1.42		0.40
1232	4.129	6.85	4.446	10.44	6.57	-72.4	1.16		0.45
1233	START SAMPLE COLLECTION								
1249	END SAMPLE COLLECTION W/ 3PEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	3
turbidity meter	10070493

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.

WELL ID: MW-62-37
SAMPLE ID: 016

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 20's

PROJECT NO: 01.0017869.92
DATE: 2/23/11
SAMPLER(S): SK, CB
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
1149	10.691	PUMP ON							
1202	10.667	6.63	1.654	1.61	9.42	117.2	6.65		0.05
1207	10.674	7.62	1.622	0.91	9.44	3.5	3.96		0.1
1212	10.682	3.40	1.605	0.65	9.50	-33.3	2.68		0.25
1217	10.686	9.12	1.585	0.53	9.55	-49.0	2.13		0.38
1222	10.696	9.34	1.597	0.59	9.60	-58.1	1.62		0.48
1227	10.708	9.34	1.590	0.48	9.63	-64.2	1.58		0.58
1232	10.731	9.46	1.577	0.43	9.70	-74.3	0.98		0.68
1236	START SAMPLE COLLECTION								
1252	END SAMPLE COLLECTION 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	4
turbidity meter	2007W393

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 62 - 53

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY CLOUDY, 20'S

PROJECT NO: 01.0017869.92
DATE: 2/24/11
SAMPLER(S): GB, SL

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)
1135	0	PUMP ON						5/6	25
1150	0.40	9.24	1.377	1.21	6.87	-55.1	2.00	↓	↓
1200	0.30	8.56	1.369	0.77	7.05	-64.1	1.24		
1205	0.40	8.34	1.366	0.72	7.10	-70.4	1.04		
1210	0.50	8.30	1.363	0.71	7.17	-73.9	1.02		
1215	0.60	8.24	1.363	0.68	7.20	-76.7	0.98	↓	↓
1217	START	SAMPLE	COLLECTION						
1257	END SA	MPLE CO	LLECTION	2L IPEC					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	2007012434

NOTES AND OBSERVATIONS:

WELL ID: MW 62 - 71

SAMPLE ID: 0216

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY CLOUDY, 10°C

PROJECT NO: 01.0017869.92
DATE: 2/24/10
SAMPLER(S): CBS

SAMPLING INTERVAL (depth in ft below top of casing)

61.1 to 82.6

SAMPLING PORT

71 5

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)
1135	0	PUMP DWN						5/10	25
1150	0.15	9.68	1.380	0.55	6.75	-59.8	0.00		
1200	0.25	10.52	1.383	0.49	6.92	-66.1	0.00		
1205	0.50	13.91	1.363	0.56	7.08	-71.0	0.00		
1210	0.75	11.17	1.361	0.52	7.13	-70.7	0.00		
1215	1.00	11.89	1.363	0.54	7.18	-70.7	0.00		
1220	1.25	11.67	1.361	0.53	7.21	-65.7	0.00		
1225	1.50	11.70	1.362	0.52	7.23	-68.6	0.00		
1230	START SAMPLE COLLECTION								
1240	END SAMPLE COLLECTION & PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2007.0254

NOTES AND OBSERVATIONS:

WELL ID: MW 62 - 92

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY CLOUDY, 20's

PROJECT NO: 01.0017869.92
DATE: 2/24/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

88.6 to 99.1

SAMPLING PORT

92 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)
1135	0	PUMP ON						6/6	25
1150	0.15	9.59	1.305	0.21	7.15	-85.7	0.40		
1200	0.25	9.65	1.305	0.13	7.49	-84.1	0.17		
1205	0.50	10.01	1.306	0.12	7.56	-74.3	0.09		
1210	0.75	10.30	1.307	0.10	7.60	-79.8	0.00		
1215	1.00	10.61	1.307	0.12	7.64	-76.8	0.00		
1220	1.25	10.89	1.308	0.13	7.66	-80.2	0.00		
1223	START	SAMPLE	COLLECTION						
1239	END SAMPLE COLLECTION. 2L 3D FC								
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070254

NOTES AND OBSERVATIONS:

WELL ID: MW 62 - 138

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY CLOUDY, 20's

PROJECT NO: 01.0017869.92
DATE: 2/24/11
SAMPLER(S): EG, SL

SAMPLING INTERVAL (depth in ft below top of casing)

126.1 to 143.6

SAMPLING PORT

138 3

TOTAL VOLUME PURGED: 1.25 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)
1354	0	PUMP ON						6/4	30
1410	0.25	10.90	1.556	0.63	7.30	-20.0	0.33		
1420	0.50	11.31	1.561	0.50	7.26	-41.2	0.17		
1425	0.75	11.93	1.564	0.46	7.29	-35.7	0.06		
1430	1.00	11.52	1.565	0.45	7.31	-31.2	0.00		
1436	1.15	11.03	1.563	0.44	7.33	-27.9	0.00		
1438	START SAMPLE COLLECTION								
1454	END SAMPLE COLLECTION; 2 1PE2								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2012040854

NOTES AND OBSERVATIONS:

WELL ID: MW 62 - 162

SAMPLE ID: 01U

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY CLOUDY, 22°s

PROJECT NO: 01.0017869.92
DATE: 2/24/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

177.6 to 198.7

SAMPLING PORT

182

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)
1354	0	PUMP ON						6/4	30
1412	0.30	10.19	1.231	0.15	7.26	-112.7	0.30		
1420	0.50	10.50	1.237	0.11	7.165	-108.2	0.12		
1425	0.75	10.64	1.240	0.12	7.13	-89.4	0.09		
1430	0.80	10.76	1.243	0.11	7.09	-72.4	0.12		
1435	1.00	10.90	1.243	0.12	7.12	-60.1	0.20		
1440	1.10	10.96	1.244	0.11	7.13	-54.2	0.08		
1445	1.22	10.99	1.244	0.12	7.13	-50.9	0.07		
1447	START	SAMPLE COLLECTION							
1507	END SAMPLE COLLECTION 2L/3EC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20120254

NOTES AND OBSERVATIONS:

WELL ID: MW-638
SAMPLE ID: DUP

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: sunny, 30's

PROJECT NO: 01.0017869.92
DATE: 3/22/11
SAMPLER(S): CS, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.77 Transducer Actual Depth 6.530

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
0938	6.709	Pump	On						
0945	6.733	8.60	4.467	3.94	6.84	-1.1	26.96		0.01
0955	6.807	9.10	4.265	9.77	6.89	21.2	20.07		0.12
1005	6.864	9.19	3.977	10.36	6.65	35.7	11.25		0.52
1010	6.869	9.48	3.859	10.39	6.69	90.0	9.80		0.44
1015	6.888	9.29	3.701	10.72	6.70	47.0	7.79		0.56
1020	6.874	9.33	3.413	11.20	6.71	53.0	7.62		0.60
1025	6.858	9.19	3.267	11.21	6.71	60.0	6.34		0.68
1030	6.949	9.10	3.159	11.10	6.75	65.5	6.42		0.76
1035	6.918	9.12	3.161	11.01	6.76	66.9	6.31		0.89
1040	6.961	9.24	3.192	11.05	6.76	69.2	6.26		0.95
1045	START	SAMPLE	COLLECTION						
1050	SAMPLE	COMPLETED:	@ 1050						
1055	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	4
turbidity meter	20070425

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: 016

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30's

PROJECT NO: 01.0017869.92
DATE: 3/02/11
SAMPLER(S): CB, SC
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.79 Transducer Actual Depth 13.940

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
0936	14.031	PUMP	ON						
0945	14.069	9.99	1.347	5.38	6.92	-112.9	1.60		0.21
0953	14.109	9.62	1.345	1.31	7.15	-132.5	1.04		0.20
1005	14.159	9.88	1.344	1.04	7.22	-133.2	0.73		0.35
1010	14.164	9.82	1.346	0.88	7.23	-132.9	2.82		0.46
1015	14.186	9.90	1.346	0.76	7.22	-132.1	0.77		0.55
1020	14.199	9.96	1.346	0.72	7.21	-132.8	0.70		0.45
1022	START	SAMPLE COLLECTION							
1050	END SA	MPLE COLLECTION. 2L TPH.							
105	PUMP O	FF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	3
turbidity meter	2W0704213

NOTES AND OBSERVATIONS: Total volume purged 0.75 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 - 50

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY 40's

PROJECT NO: 01.0017869.92
DATE: 3/2/11
SAMPLER(S): JG, CB

SAMPLING INTERVAL (depth in ft below top of casing)

41.5 to 58.0

SAMPLING PORT

5D 7

TOTAL VOLUME PURGED: 2.35 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)
1318		PUMP ON						7/7.4	30
1325	0.30	11.38	1.131	2.02	7.36	-10.9	0.99		
1330	0.85	11.39	1.132	1.61	7.25	-11.3	0.93		
1335	1.00	12.38	1.134	1.27	7.23	-13.2	1.02		
1340	1.25	12.61	1.146	1.05	7.43	-18.4	0.74		
1345	1.45	12.84	1.150	0.98	7.44	-17.3	0.66		
1353	1.75	13.11	1.160	0.91	7.58	-20.3	0.82		
1358	1.95	13.17	1.165	0.91	7.48	-17.3	0.58		
1403	2.30	13.43	1.168	0.90	4.56	-22.3	0.67		
1404		START SAMPLE COLLECTION							
1421		SAMPLE COMPLETED: 2x DUP							
1421		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070254

NOTES AND OBSERVATIONS:

WELL ID: MW 63 - 93

SAMPLE ID: DUP

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40s

PROJECT NO: 01.0017869.92
DATE: 3/2/11
SAMPLER(S):

SAMPLING INTERVAL (depth in ft below top of casing)

81.5 to 100.5

SAMPLING PORT

93 5E 5

TOTAL VOLUME PURGED: 0.8 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)
1314		PUMP	ON					7/7.4	30
1325	0.08	10.59	0.591	0.62	5.76	-115.9	1.31		
1330	0.17	10.39	0.913	0.45	5.64	-135.6	0.00		
1335	0.27	11.10	0.926	0.39	5.59	-101.3	1.93		
1340	0.37	11.56	0.939	0.40	5.71	-100.3	0.43		
1345	0.46	11.77	0.950	0.34	5.68	-100.6	1.04		
1346		START	SAMPLE	COLLECTED	FROM				
1414		SAMPLE	COMPLETED: 2L		IPEC				
1414		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070134

NOTES AND OBSERVATIONS:

WELL ID: MW 63 - 112

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40's

PROJECT NO: 01.0017869.92
DATE: 3/24/11
SAMPLER(S): SK, CD

SAMPLING INTERVAL (depth in ft below top of casing)

106.5 to 112.0

SAMPLING PORT

112 4

TOTAL VOLUME PURGED: 0.63 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)
1314		PUMP	ON					7/7.4	20
1325	0.08	10.64	1.223	0.66	7.08	-121.5	0.83		
1330	0.18	10.93	1.204	0.51	7.11	-115.2	1.05		
1335	0.28	11.31	1.226	0.45	7.13	-109.0	0.48		
1340	0.38	11.32	1.228	0.41	7.16	-109.1	0.64		
1345	0.48	11.97	1.325	0.38	7.16	-104.5	0.52		
1346		START SAMPLE	PURGE VOL						
1415		SAMPLE	COMPLETED: 2L		TED				
1415		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20080154

NOTES AND OBSERVATIONS:

WELL ID: MW 63 - 121

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY 30's

PROJECT NO: 01.0017869.92
DATE: 3/2/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

118 to 127.5

SAMPLING PORT

121 3

TOTAL VOLUME PURGED: 4.00 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)
0940		PUMP	ON					3/3.2	35
0945	0.01	10.66	1.390	2.04	6.53	-66.0	2.17	↓	↓
0955	1.00	11.50	1.376	0.65	6.62	-117.9	0.53		
1000	1.10	11.94	1.317	0.49	5.57	-142.3	0.60		
1005	1.20	12.33	1.310	0.41	5.58	-144.2	0.40		
1010	1.40	12.46	1.307	0.37	5.63	-149.5			
1015	1.90	12.77	1.310	0.41	5.70	-156.3	0.95		
1022	2.05	12.91	1.296	0.47	5.73	-163.3	0.71		
1028	2.40	13.16	1.289	0.46	5.84	-170.5	1.36		
1033	3.60	13.24	1.291	0.36	5.87	-173.7	0.74		
1038	2.95	13.17	1.295	0.42	5.99	-175.9	0.70		
1043	3.05	13.22	1.293	0.32	6.05	-181.9	0.72		
1048	3.35	13.22	1.286	0.30	6.12	-176.8	0.99		
1053	3.60	13.25	1.281	0.31	6.18	-169.6	0.69		
1058	3.85	13.34	1.278	0.33	6.21	-170.0	0.79	↓	↓
1059		START	SAMPLE	COLLECT	FOR:				
1110		SAMPLE	COLLECTED: 2L		3AS				
		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070134

NOTES AND OBSERVATIONS:

WELL ID: MW 63 - 163

SAMPLE ID: Olio

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30's

PROJECT NO: 01.0017869.92
DATE: 3/2/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

150.5 to 165

SAMPLING PORT

163 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)
0940		PUMP	ON					8/8.2	35
0943	0.01	10.33	1.043	2.71	6.68	-65.6	0.92	↓	↓
0954	0.50	11.33	1.004	0.75	6.56	-77.0	1.35		
1000	0.75	11.73	1.005	0.64	6.93	-74.8	0.70		
1005	0.95	12.12	1.008	0.55	6.97	-74.3	1.14		
1010	1.05	12.26	1.011	0.48	7.00	-73.4	0.58		
1011		START SAMPLE COLLECTION							
1027		SAMPLE COMPLETED: SL IPEC							
1027		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125Y

NOTES AND OBSERVATIONS:

WELL ID: MW 63 - 174

SAMPLE ID: 0116

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30's

PROJECT NO: 01.0017869.92
DATE: 3/2/11
SAMPLER(S): SC, CB

SAMPLING INTERVAL (depth in ft below top of casing)

168.0 to 191.1

SAMPLING PORT

174

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)
0940		PUMP	ON					8/8.2	35
0945	0.01	10.71	1.029	1.70	6.76	-40.7	1.70	↓	↓
0955	0.60	11.47	0.980	0.71	6.67	-39.0	0.60		
1000	0.85	11.83	0.977	0.62	6.76	-36.9	0.67		
1005	1.00	12.30	0.957	0.52	6.82	-36.8	0.37		
1010	1.25	12.41	0.954	0.47	6.86	-36.1	0.29	↓	↓
1011		START	SAMPLE COLLECTION						
1026		SAMPLE	COMPLETED:	2L	IRE	0			
1026		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	10070125A

NOTES AND OBSERVATIONS:

WELL ID: MW-166-21
SAMPLE ID: 016

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 28°F

PROJECT NO: 01.0017869.92
DATE: 01/31/11
SAMPLER(S): CG, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.68 Transducer Actual Depth 8.967

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
1243	8.773	PUMP	ON							0
1244	8.769	TUBING	FLOW-CELL							
1248	8.493	TUBING	DEFLECTION							
1341	8.451	4.44	3.235	2.90	6.50	84.7	86.89			0.05
1352	8.380	5.07	3.148	2.83	6.55	86.2	15.48			0.12
1400	8.348	5.69	3.164	1.59	6.57	87.6	9.41			0.22
1410	8.320	5.93	3.160	1.46	6.59	87.2	6.83			0.28
1415	8.298	5.97	3.166	1.29	6.60	87.2	7.77			0.32
1420	8.267	5.73	3.171	1.50	6.59	84.9	7.61			0.35
1425	8.180	5.97	3.167	1.51	6.61	82.7	5.07			0.38
1430	8.148	6.16	3.166	1.27	6.61	72.8	5.44			0.40
1435	8.129	6.17	3.173	1.24	6.62	63.4	6.82			0.44
1440	8.083	6.57	3.157	1.26	6.62	57.2	3.29			0.48
1445	8.039	6.90	3.158	1.20	6.65	44.3	3.16			0.50
1450	8.023	6.89	3.172	1.12	6.64	22.9	3.63			0.54
1455	8.009	6.96	3.165	1.15	6.65	30.3	3.79			0.58
1500	8.000	6.90	3.170	1.17	6.64	27.3	3.68			0.62
1525	START	SAMPLE	COLLECTION							
1626	END SAMPLE	COLLECTION & IPEC								
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007023544

FLOW METER

NOTES AND OBSERVATIONS: Total volume purged 0.75 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-66C-36
SAMPLE ID: 015

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY 28°F

PROJECT NO: 01.0017869.92
DATE: 01/13/11
SAMPLER(S): CG/MR
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.51 Transducer Actual Depth 12.774

Time	DTW or Actual Depth	Temp (^{0}C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1243	12.692	PUMP ON								
1244	12.609	TUBING FROZEN								
1338	12.255	TUBING DEPRESS								
1352	12.165	5.62	2.318	4.51	6.78	-73.6	13.97			0.01
1400	12.119	6.07	2.456	2.11	6.85	-107.0	7.55			0.08
1410	12.075	6.24	2.786	1.39	6.95	-121.7	3.67			0.15
1415	12.046	6.36	2.862	1.33	6.99	-129.4	2.34			0.18
1420	12.029	6.06	2.900	1.25	7.02	-133.9	2.10			0.20
1425	12.027	5.76	2.921	1.19	7.04	-136.1	1.88			0.22
1430	11.980	5.66	2.927	1.17	7.04	-134.7	1.53			0.24
1435	11.947	5.57	2.920	1.14	7.04	-131.7	1.48			0.26
1440	11.916	5.51	2.918	1.12	7.04	-129.6	1.50			0.28
1444	START	SAMPLE COLLECTION								
1551	END SAMPLE COLLECTION				2L IPEC					
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	10071254

FLOW METER 3

NOTES AND OBSERVATIONS: Total volume purged 0.44 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: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY CLOUDY, 35°F

PROJECT NO: 01.0017869.92
DATE: 02/07/11
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)

28.8 to 54.3

SAMPLING PORT

39 7

TOTAL VOLUME PURGED: 3.25 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)
1235	0	PUMP ON						8/8	20
1240	0.10	CHANGED BATTERIES IN YSI							
1300	0.50	15.19	3.280	1.70	7.61	-83.9	0.95		
1306	1.25	15.28	3.270	0.91	7.62	-87.6	0.53		
1315	2.00	15.77	3.264	0.72	7.64	-92.5	0.37		
1320	2.25	15.67	3.263	0.105	7.65	-93.7	0.29		
1325	2.50	15.71	3.263	0.02	7.65	-95.7	0.24		
1330	2.75	15.72	3.262	0.58	7.66	-97.5	0.23		
1335	3.00	15.73	3.258	0.56	7.66	-98.9	0.20		
1339	START SAMPLE COLLECTION								
1348	END SAMPLE COLLECTION & IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070254

NOTES AND OBSERVATIONS:

WELL ID: MW 67 - 105

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Mostly Cloudy, 35°F

PROJECT NO: 01.0017869.92
DATE: 02/07/14
SAMPLER(S): CC

SAMPLING INTERVAL (depth in ft below top of casing)

90.3 to 110.8

SAMPLING PORT

105 6

TOTAL VOLUME PURGED: 2.05 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)
1235	0	Pump On						8/5	20
1300	0.80	13.07	1.537	0.56	6.48	-125.7	1.58		
1305	0.75	13.42	1.544	0.31	6.59	-130.7	0.77		
1315	1.00	14.50	1.547	0.22	6.65	-138.6	0.60		
1320	1.25	14.61	1.547	0.18	6.67	-143.5	0.60		
1325	1.50	14.65	1.545	0.16	6.69	-144.1	0.52		
1330	1.75	14.78	1.542	0.14	6.70	-138.7	0.36		
1335	2.00	14.85	1.544	0.11	6.73	-130.7	0.28		
1340	2.29	14.76	1.547	0.12	6.74	-129.6	0.26		
1345	START SAMPLE COLLECTION								
1357	END SAMPLE COLLECTION. 2x 1PCK								
	Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125A

NOTES AND OBSERVATIONS:

WELL ID: MW 67 - 173

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY CLOUDY, 36°F

PROJECT NO: 01.0017369.92
DATE: 02/07/11
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)

164.8 to 188.3

SAMPLING PORT

173 5

TOTAL VOLUME PURGED: 2.00 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)
1235	0	PUMP @ DEP						8/8	20
1300	0.25	12.29	1.170	1.25	6.33	-103.8	4.99		
1304	0.5	13.60	1.228	1.32	6.40	-169.5	2.71		
1315	0.75	14.23	1.230	0.57	6.44	-191.5	2.60		
1320	1.00	14.34	1.226	0.50	6.46	-196.4	2.50		
1324	1.25	14.55	1.215	0.44	6.48	-203.4	1.95		
1330	1.50	14.79	1.198	0.39	6.50	-208.7	1.64		
1335	1.75	14.82	1.196	0.36	6.53	-212.8	1.42		
1340	1.00	14.57	1.183	0.34	6.54	-214.6	1.60		
1345	1.70	14.97	1.176	0.32	6.55	-218.9	1.55		
1350	1.80	15.04	1.169	0.32	6.57	-212.9	1.50		
1355	1.90	15.05	1.164	0.31	6.59	-210.3	1.47		
1357	START SAMPLE COLLECTION								
1413	END SAMPLE COLLECTION. 2 L TAKE.								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070252

NOTES AND OBSERVATIONS:

WELL ID: MW 67 - 219

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 30°F

PROJECT NO: 01.0017869.92
DATE: 11/31/11
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

209 to 229.8

SAMPLING PORT

219 4

TOTAL VOLUME PURGED: 3.95 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				6/6	50
1312	0.7	12.78	1.148	1.65	5.80	-68.4	—		
1341	2.0	13.00	1.146	0.86	6.25	-54.7	6.27		
1350	2.2	13.29	1.144	0.72	6.31	-57.4	0.19		
1359	2.5	13.42	1.142	0.63	6.39	-59.6	0.13		
1405	2.8	13.68	1.147	0.63	6.49	-60.5	0.09		
1414	3.2	13.72	1.145	0.50	6.59	-65.2	0.08		
1420	3.5	13.77	1.147	0.49	6.61	-65.3	0.09		
1429	3.8	13.79	1.147	0.47	6.62	-65.8	0.07	↓	↓
1431		PUMP	OFF						
1436		START							
1449		SAMPLE COMPLETED			2 L IPEC				
1449		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070423

NOTES AND OBSERVATIONS:

WELL ID: MW 67 - 276

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds

PROJECT NO: 01.0017869.92
DATE: 11 | 3 | 11
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

250.8 to 281.3

SAMPLING PORT

276 3

TOTAL VOLUME PURGED: 2.65 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)
1300	0	PUMP ON						6/6	50
1312	0.35	11.27	0.906	0.25	7.20	-208.2			
1341	1.50	11.49	0.902	0.09	7.45	-146.7	0.79		
1350	1.75	11.75	0.902	0.08	7.45	-148.9	0.56		
1359	2.0	11.83	0.901	0.07	7.46	-149.3	0.43		
1405	2.15	11.85	0.902	0.07	7.46	-152.3	0.42		
1414	2.50	11.92	0.904	0.09	7.47	-149.1	0.40	↓	↓
1416		PUMP OFF							
1417		START SAMPLE COLLECTION							
1431		SAMPLE COMPLETED : 2 L SPEC							
1431		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 67 - 323

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun & Clouds 30°F

PROJECT NO: 01.0017869.92
DATE: 1/31/11
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: 2.55 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)
1300	0		PUMP ON					6/6	50
1312	0.1	9.03	0.825	1.93	6.50	-60.3			
1341	1.0	9.76	0.835	0.62	6.90	-140.4	2.00		
1350	1.1	10.01	0.829	0.51	6.90	-150.1	1.29		
1359	1.3	10.31	0.822	0.44	6.90	-155.5	0.90		
1405	1.5	10.79	0.824	0.42	6.89	-158.3	0.83		
1414	1.7	10.81	0.827	0.40	6.90	-161.3	0.71		
1420	2.0	10.89	10.826	0.35	6.91	-164.4	0.66		
1429	2.2	10.90	0.825	0.34	6.92	167.4	0.65		
1439	2.4	10.92	0.820	0.32	6.92	-164.9	0.63	↓	↓
1441		PUMP OFF							
1443		START SAMPLE COLLECTION							
1504		SAMPLE COMPLETED 2 L IPEC							
1504		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070 4293

NOTES AND OBSERVATIONS:

3

WELL ID: MW 67 - 340

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 30°F

PROJECT NO: 01.0017869.92
DATE: 1/31/11
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

235.3 to 347.9

SAMPLING PORT

340 1

TOTAL VOLUME PURGED: 2.60 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)
1300	0		PUMP	ON				6/6	50
1312	0.15	9.69	0.752	1.82	6.55	-156.4	—	↓	↓
1341	1.00	9.80	0.749	0.66	6.99	-188.2	1.03		
1350	1.30	9.97	0.752	0.60	7.01	-191.1	0.89		
1359	1.70	10.00	0.757	0.53	7.04	-195.4	0.67		
1405	1.85	10.49	0.752	0.49	7.04	-196.9	0.47		
1414	2.00	10.60	0.761	0.40	7.02	-199.8	0.51		
1420	2.25	10.64	0.755	0.38	7.03	-197.9	0.46		
1429	2.45	10.63	0.757	0.38	7.03	196.7	0.49	↓	↓
1431		PUMP OFF							
1436		START SAMPLE COLLECTION							
1453		SAMPLE COMPLETED : 2 L IPEC							
1453		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-4D
SAMPLE ID: 027

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40s

PROJECT NO: 01.0017869.92
DATE: 2/17/11
SAMPLER(S): CA, SL

WATER COLUMN HEIGHT (ft)

27.25 (DTB) - 10.31 (DTW) = 16.94 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 16.94 x 0.653 (Multiplier) = 11.06 gal (Well Volume)

11.06 x 1.5 = 16.59 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 8.15 gal

WATER QUALITY: DTW = 10.31 Transducer Actual Depth 51.060

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1234	0	51.055	PUMP	ON					
1239	0.90	50.421	22.53	2.699	5.75	7.33	163.8	2.22	
1252	2.00	48.463	24.99	2.884	4.16	7.98	111.7	1.02	
1310	4.00	45.262	25.44	2.889	4.70	8.27	86.2	0.42	
1328	5.00	41.646	26.10	2.831	4.33	8.41	80.6	3.01	
1341	7.00	37.415	27.70	2.893	4.30	8.50	77.6	0.43	
1347	7.50	35.449	27.65	2.887	4.15	8.55	74.5	0.85	
1353	8.00	34.629	PUMP	OFF - WELL DRY - Let well recharge					
1430		START	SAMPLE COLLECTION						
1441		SAMPLE	COMPLETED:	2L IRON					
1441		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070493

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-7I
SAMPLE ID: 031

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 18°F

PROJECT NO: 01.0017869.92
DATE: 2/22/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 4.19 Transducer Actual Depth 2.815

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
1000	2.814	PUMP ON							
1010	2.837	18.65	1.299	4.35	4.98	159.2	0.80		0.01
1015	2.833	17.62	1.306	3.34	3.36	120.4	0.37		0.08
1020	2.831	17.34	1.274	2.65	2.68	103.0	0.26		0.19
1025	2.829	17.82	1.271	1.88	1.99	88.7	0.48		0.30
1030	2.826	18.17	1.270	1.59	1.77	82.5	0.30		0.40
1035	2.826	18.40	1.269	1.50	1.80	77.3	0.19		0.51
1037		PUMP OFF - GEOTECH BATTERIES DEAD							
1053		PUMP ON - USING MARINE BATTERY							
1100	2.822	18.83	1.269	1.25	0.69	54.3	0.16		0.75
1105	2.819	18.99	1.268	1.00	0.65	48.5	0.17		0.80
1110	2.820	19.09	1.269	1.04	0.59	45.9	0.14		0.85
1111	START SAMPLE COLLECTION								
1131	END SAMPLE COLLECTION:				2L ID	FL			
※	NOTE: PH PROBE READING WERE STABLE BUT THE PROBE WAS READING LOW <1.								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	4
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

IPEC00267605

WELL ID: MW-72
SAMPLE ID: 035

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 20's

PROJECT NO: 01.0017869.92
DATE: 2/22/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 3.98 Transducer Actual Depth 2.719

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
1305	2.799	PUMP	ON						
1320	2.807	19.83	1.272	4.61	7.33	-45.3	3.62		0.01
1325	2.812	19.84	1.269	2.98	7.39	-46.2	3.61		0.09
1330	2.811	19.99	1.269	2.30	7.45	-47.1	3.14		0.18
1335	2.832	20.23	1.269	1.88	7.53	-65.2	3.36		0.30
1340	2.820	20.36	1.273	1.65	7.57	-122.2	2.49		0.40
1345	2.821	20.65	1.278	1.31	7.61	-109.7	1.96		0.50
1350	2.829	20.85	1.280	1.11	7.65	-121.9	1.55		0.60
1355	2.832	20.04	1.279	0.90	7.70	-158.4	1.25		0.70
1400	2.835	21.05	1.282	0.81	7.72	-156.8	1.07		0.80
1405	2.843	21.13	1.281	0.80	7.75	-164.6	1.11		0.90
1406	START	SAMPLE COLLECTION							
1430	END	SAMPLE COLLECTION:			2L IPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	1
turbidity meter	20670254

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

APPENDIX D: Q2-2011 SAMPLING DATA SHEETS

WELL ID: LAF-002
SAMPLE ID: 015

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 50'S

PROJECT NO: 01.0017869.92
DATE: 5/2/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 73.22 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1001	73.22	PUMP ON						5/30	40	gal 0
1101	73.41	14.31	2.663	4.89	6.35	53.9	2.77	5/14	42	0.01
1108	73.44	13.39	2.685	3.56	6.37	49.6	3.36			0.05
1116	73.48	13.30	2.680	3.07	6.36	48.8	3.42			0.10
1122	73.51	13.43	2.689	2.45	6.36	48.2	2.48			0.15
1128	73.54	13.47	2.696	2.01	6.36	47.2	2.26			0.20
1134	73.56	13.47	2.698	1.72	6.35	47.4	1.50			0.28
1140	73.58	13.56	2.697	1.52	6.35	47.0	1.62			0.32
1146	73.60	13.68	2.698	1.42	6.35	45.8	1.76			0.36
1152	73.62	13.54	2.700	1.36	6.35	46.4	1.83			0.42
1158	73.64	13.59	2.700	1.31	6.35	46.4	1.92			0.48
1158	START	SAMPLE COLLECTION								
1250	END SAMPLE COLLECTION: 2L IPEC									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125 4

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** _____

NOTES AND OBSERVATIONS: Total volume purged 0.62 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of ~~casing~~ stick up casing

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-1
SAMPLE ID: MW-1

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 60's

PROJECT NO: 01.0017869.92
DATE: 5/12/11
SAMPLER(S): SL, CB
PUMP DEPTH: 12 ft

WATER QUALITY: DTW = 10.11 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1102	10.11	PUMP	ON						
1110	10.16	10.51	1.490	3.91	6.51	226.2	2.82		0.15
1113	10.17	10.09	1.478	3.59	6.38	242.1	3.99		0.45
1116	10.17	10.03	1.455	3.76	6.38	243.0	1.11		0.90
1120	10.18	10.00	1.441	3.75	6.40	236.5	1.16		1.35
1124	10.18	9.97	1.439	3.66	6.41	235.5	1.42		1.80
1127	10.18	9.99	1.448	3.60	6.41	230.2	0.80		2.25
1130	10.18	9.95	1.441	3.67	6.41	229.4	0.72		2.70
1131	START	SAMPLE	COLLECTION						
1135	END	"	"		~1L				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	2
turbidity meter	20209293

Measured Well Depth 14.00 (feet from top of casing) **Well Vault Condition** Good (Flooded)

NOTES AND OBSERVATIONS: No product measured in well. Total volume purged 2.25 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

TOTAL DEPTH = 14.00

WELL ID: MW-SD-66
SAMPLE ID: 030

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy, 60's

PROJECT NO: 01.0017869.92
DATE: 5/3/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1113	89.316	PUMP ON							
1120	87.761	19.36	2.177	0.84	7.14	-43.1	0.56		0.01
1127	87.512	19.59	2.214	0.61	7.20	-35.4	0.28		0.15
1132	87.461	19.76	2.307	0.52	7.19	-24.1	0.25		0.30
1137	87.450	19.85	2.326	0.47	7.20	-20.8	0.17		0.40
1142	87.455	19.93	2.333	0.40	7.21	-24.1	0.10		0.50
1145	START SAMPLE COLLECTION								
1207	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	3
turbidity meter	20704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, No Locks

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 30 - 69

SAMPLE ID: 039

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, windy, 60's

PROJECT NO: 01.0087869.92
DATE: 5/15/14
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

67.3 to 71.3

SAMPLING PORT

69

TOTAL VOLUME PURGED: 0.30 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1112	0	Pump	ON					6/12	40
1119	0.1	23.73	1.353	9.11	7.19	-143.0	—		
1124	0.2	24.06	1.348	9.27	7.28	-139.0	—		
1130	0.3	24.16	1.332	9.30	7.37	-134.2	—		
1135	0.4	24.10	1.341	9.26	7.45	-128.1	—		
1140	0.5	24.07	1.350	9.36	7.51	-126.1	—		
1146	0.6	23.59	1.349	9.31	7.56	-121.1	—		
1147	START	SAMPLE	COLLECTION						
1208	END SAMPLE COLLECTION 1.2 TOTAL								
	Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	N/A

NOTES AND OBSERVATIONS:

Total volume purged _____ gal

WELL ID: MW 30 - 84

SAMPLE ID: 030

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, WINDY, 60's

PROJECT NO: 01.0017869.92
DATE: 5/5/11
SAMPLER(S): DR, SL

SAMPLING INTERVAL (depth in ft below top of casing)

77.3 to 85.4

SAMPLING PORT

84

TOTAL VOLUME PURGED: 0.22 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1112	0	PUMP	ON					6/12	40
1135	0.06	21.72	1.760	3.02	6.96	-36.0	—		
1140	0.08	21.60	1.760	3.32	6.99	-38.3	—		
1146	0.10	21.49	1.760	3.03	7.00	-38.7	—		
1150	0.12	21.38	1.760	2.98	7.01	-39.0	—		
1155	0.14	21.19	1.761	2.89	7.02	-38.9	—		
1156	START SAMPLE COLLECTION								
1158	END SAMPLE COLLECTION: 2 L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	NA

NOTES AND OBSERVATIONS:

Total volume purged _____ gal

WELL ID: MW 31 - 49

SAMPLE ID: 031

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 60°

PROJECT NO: 01.0017869.92
DATE: 9/15/11
SAMPLER(S): S. Ch

SAMPLING INTERVAL (depth in ft below top of casing)

34.8 to 49.3

SAMPLING PORT

49

TOTAL VOLUME PURGED: 3.89 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	0	PUMP	ON					6/7	29
1123	0.3	16.68	2.732	3.51	6.76	79.1	0.46		
1128	0.6	16.79	2.765	3.90	6.87	26.2	0.21		
1133	0.95	16.95	2.520	5.90	6.97	27.8	0.79		
1138	1.20	16.99	2.384	5.95	6.99	29.0	0.89		
1143	1.50	17.01	2.340	5.91	7.02	52.0	0.68		
1148	1.82	17.13	2.318	5.96	7.03	63.7	0.78		
1153	2.10	17.26	2.294	7.48	7.19	67.3	0.43		
1158	2.47	17.33	1.485	7.98	7.25	23.2	0.24		
1203	2.73	17.36	1.426	8.13	7.26	25.5	1.82		
1209	3.05	17.37	1.391	8.09	7.28	82.6	0.30		
1214	3.38	17.43	1.370	8.10	7.29	85.6	1.07		
1219	3.74	17.51	1.367	7.98	7.31	86.4	0.74		
1222	Start	Sample	Collection						
1253	END	"	"	: 2L I					
	PUMP	OFF		2L DU					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20704393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Fair

Rain water fills the vault up to the top of the casing. No water needed to be added due to this happening.

WELL ID: MW 31 - 63

SAMPLE ID: 031

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Morning, 60°

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): JL, CR

SAMPLING INTERVAL (depth in ft below top of casing)

55.8 to 63.8

SAMPLING PORT

62

TOTAL VOLUME PURGED: 1.21 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	0	PUMP	ON					6/7	29
1123	0.02	16.45	1.491	4.50	7.10	8.7	3.62		
1126	0.10	16.22	1.876	4.9	7.16	23.9	0.99		
1133	0.19	16.33	1.933	3.10	7.17	31.0	0.49		
1136	0.29	16.55	1.944	2.94	7.18	34.5	0.69		
1143	0.37	16.56	1.951	2.82	7.17	41.3	0.67		
1148	0.46	16.65	1.964	2.65	7.16	47.5	0.74		
1153	0.67	16.91	1.930	2.49	7.16	55.5	0.62		
1158	0.75	17.10	1.980	2.45	7.16	61.6	0.66		
1203	0.80	17.21	1.984	2.40	7.16	65.5	0.61		
1209	0.96	17.26	1.987	2.37	7.15	73.1	0.52		
1214	1.01	17.39	1.990	2.32	7.13	270	0.62		
1219	1.06	17.38	1.994	2.26	7.14	79.7	0.59	↓	↓
1223	START	SAMPLE	COLLECTED						
1221	END	"	"	1.2L	TPE				
	PUMP	OFF		2L	DEI				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20080293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-31-49

WELL ID: MW 31 - 85

SAMPLE ID: 031

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 60°

PROJECT NO: 01.0017869.92
DATE: 4/18/11
SAMPLER(S): SC, CB

SAMPLING INTERVAL (depth in ft below top of casing)

69.8 to 85.4

SAMPLING PORT

85

TOTAL VOLUME PURGED: 1.55 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	0	PUMP	ON					6/7	29
1123	0.03	16.55	2.586	3.49	6.51	74.7	1.08		
1128	0.17	16.68	2.651	3.41	6.44	43.5	0.82		
1133	0.28	16.75	2.676	3.29	6.42	49.7	0.50		
1138	0.42	16.83	2.673	3.27	6.38	40.6	0.41		
1143	0.51	16.95	2.676	3.29	6.31	38.1	0.50		
1148	0.65	17.13	2.676	3.22	6.33	35.1	0.49		
1153	0.76	17.46	2.675	3.22	6.35	30.4	0.54		
1158	0.88	17.58	2.676	3.21	6.37	26.9	0.94		
1203	1.05	17.62	2.679	3.09	6.37	23.1	0.75		
1209	1.15	17.64	2.676	3.16	6.32	21.1	0.57		
1214	1.28	17.81	2.669	3.22	6.38	19.0	0.78		
1219	1.40	17.91	2.663	3.28	6.39	19.9	0.44	↓	↓
1224	START	SAMPLE	COLLECTION						
1315	END	"	"	2L	IPEC				
	PUMP	OFF		2L	DEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070433

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-31-0

WELL ID: MW 32 - 59

SAMPLE ID: 025

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 70s

PROJECT NO: 01.0017869.92
DATE: 4/27/14
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

28.3 to 61.3

SAMPLING PORT

59 6

TOTAL VOLUME PURGED: 1.83 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1149	0	PUMP	ON					8/11	40
1156	0.40	19.55	0.903	7.46	7.20	57.8	0.61	↓	↓
1200	0.65	19.59	0.882	7.55	7.23	58.8	0.27		
1205	0.93	19.72	0.877	7.41	7.31	60.2	1.31		
1210	1.40	19.85	0.878	7.20	7.32	62.8	1.87		
1215	1.68	19.93	0.879	7.19	7.30	65.0	1.07		
1217	START	SAMPLE	COLLECTION						
1226	END	"	"	:26	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20704293

NOTES AND OBSERVATIONS: Lots of air coming from well for first 0.5 gal or so, then became water only.

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 32 - 85

SAMPLE ID: 026

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 70's

PROJECT NO: 01.0017869.92
DATE: 4/27/11
SAMPLER(S): SL, AB

SAMPLING INTERVAL (depth in ft below top of casing)

79.3 to 92.8

SAMPLING PORT

85 5

TOTAL VOLUME PURGED: _____ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1149	0	PUMP	ON					8/11	40
1156	0.03	19.66	1.624	7.64	6.95	-111.8	3.83		
1200	0.07	19.73	1.624	7.05	6.95	-106.1	2.89		
1205	0.13	19.92	1.623	5.84	6.94	-97.0	1.61		
1210	0.24	20.25	1.627	3.94	6.95	-89.5	1.47		
1215	0.30	20.49	1.629	2.86	6.95	-85.1	1.20		
1220	0.36	20.75	1.639	1.97	6.96	-76.7	1.20		
1225	0.43	20.94	1.645	1.52	6.97	-71.3	1.18		
1230	0.53	20.47	1.653	1.35	6.95	-60.5	0.92		
1235	0.65	20.35	1.654	1.19	6.96	-57.3	0.93		
1240	0.87	20.25	1.658	1.15	6.97	-51.0	0.97		
1241	START SAMPLE COLLECTION								
1304	END	"	"	2L IPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW 32 - 149

SAMPLE ID: 025

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 70's

PROJECT NO: 01.0017869.92
DATE: 4/27/11
SAMPLER(S): K, CB

SAMPLING INTERVAL (depth in ft below top of casing)

147.3 to 156.8

SAMPLING PORT

149 3

TOTAL VOLUME PURGED: 0.92 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1027	0	PUMP ON						10/12	55
1035	0.03	18.80	2.372	1.87	6.45	-100.1	4.06	↓	↓
1040	0.27	19.90	2.322	0.99	6.53	-64.2	1.53		
1045	0.45	19.92	2.353	0.59	6.54	-47.4	0.85		
1050	0.63	19.89	2.376	0.49	6.57	-43.0	1.06		
1055	0.77	19.92	2.382	0.42	6.58	-41.9	0.66	↓	↓
1057	START	SAMPLE	COLLECTION						
1112	END	"	"	"	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 32 - 173

SAMPLE ID: 021

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 70s

PROJECT NO: 01.0017869.92
DATE: 4/27/11
SAMPLER(S): SL, DB

SAMPLING INTERVAL (depth in ft below top of casing)

165.8 to 174.3

SAMPLING PORT

173 2

TOTAL VOLUME PURGED: 1.97 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1027	0	PUMP	ON					10/12	53
1035	0.11	18.92	2.233	1.35	6.61	-162.9	13.96		
1040	0.32	18.93	2.232	0.74	6.79	-159.2	9.09		
1045	0.54	18.91	2.227	0.51	6.85	-146.1	8.47		
1050	0.74	18.89	2.222	0.40	6.88	-141.4	0.64		
1055	0.93	18.90	2.219	0.33	6.90	-130.8	0.48		
1100	1.19	18.89	2.218	0.29	6.90	-125.2	0.93		
1105	1.40	18.91	2.218	0.25	6.92	-118.7	0.56		
1110	1.61	18.92	2.217	0.25	6.93	-114.9	0.99		
1115	1.82	18.93	2.214	0.24	6.94	-101.2	0.64		
1116	START	SAMPLE	COLLECTION						
1127	END	"	"	: 2L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 32 - 190

SAMPLE ID: 027

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 70s

PROJECT NO: 01.0017869.92
DATE: 4/27/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)
180.3 to 193.9

SAMPLING PORT
190

TOTAL VOLUME PURGED: 1.04 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1037	0	PUMP	ON					10/12	53
1035	0.07	18.91	1.795	0.77	6.94	-152.7	1.49		
1040	0.23	18.96	1.794	0.49	7.05	-153.4	0.85		
1045	0.40	18.99	1.794	0.40	7.07	-135.0	1.36		
1050	0.58	19.01	1.792	0.34	7.08	-124.4	0.53		
1055	0.74	19.03	1.790	0.30	7.09	-123.8	0.31		
1100	0.89	19.02	1.788	0.26	7.09	-114.7	0.51		
1102	START	SAMPLE	COLLECTION						
1117	END	"	"	32L	COLL				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW-36-24
SAMPLE ID: 022

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain, 40's

PROJECT NO: 01.0017869.92
DATE: 4/28/11
SAMPLER(S): SL, CB
PUMP DEPTH: ~14' from TOC ft

WATER QUALITY: DTW = GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1340									gal
~~1342~~	13.853	PUMP ON							
1344	13.865	19.19	1.887	1.90	7.55	-41.8	1.23		0.03
1350	13.867	19.16	1.890	0.85	7.57	-40.4	0.51		0.27
1355	13.873	19.15	1.895	0.62	7.59	-45.9	0.40		0.48
~~1358~~	13.871	19.14	1.896	0.52	7.60	-63.7	0.49		0.57
1401	13.870	19.14	1.899	0.45	7.59	-72.3	0.33		0.68
1405	13.877	19.13	1.899	0.40	7.62	-91.6	0.45		0.82
1408	13.875	19.12	1.899	0.34	7.61	-102.8	0.13		0.98
1411	13.874	19.12	1.898	0.30	7.62	-112.2	1.82		1.10
1414	13.877	19.14	1.897	0.32	7.63	-121.5	0.01		1.22
1417	13.879	19.14	1.897	0.30	7.64	-123.2	0.33		1.32
1420	13.876	19.14	1.896	0.30	7.65	-129.8	0.73		1.41
1421	START	SAMPLE COLLECTION							
1434	END	"		"	: 2L	IPEC			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	2
turbidity meter	20070354

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Flood

NOTES AND OBSERVATIONS: Total volume purged 1.56 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-36-41
SAMPLE ID: 016

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain, 60s

PROJECT NO: 01.0017869.92
DATE: 4/28/11
SAMPLER(S): SC/DB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition Good
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

41 (DTB) - 4.17 (DTW) = 36.83 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 36.83 x 0.041 (Multiplier) = 1.510 (Well Volume) gal

1.510 x 1.5 = 2.27 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 1.50 gal

WATER QUALITY: DTW = 4.17 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1341	0	4.17	Pump ON						
1343	0.01	"	19.34	1.910	5.29	7.42	-97.5	158.1	
1348	0.25	—	19.13	1.939	1.73	7.36	-71.2	167.9	
1351	0.50	—	19.07	1.939	1.50	7.36	-55.2	56.52	
1408	0.75	—	20.39	1.870	9.06	7.80	-135.9	339.0	
1420	1.00	—	20.79	1.788	9.81	9.81	-86.3	38.17	
1435	1.25	—	19.91	1.853	9.26	7.56	-125.0	43.92	
1451	1.50	—	20.22	1.846	4.26	7.85	-127.6	96.72	
1452	1.00	—	WELL DRY. LET RECHARGE BEFORE SAMPLING						
1520	START	SAMPLE COLLECTION							
1539	END	SAMPLE COLLECTION: 2 L JUG							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429 3

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-32-52
SAMPLE ID: 024

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain, 60's

PROJECT NO: 01.0017869.92
DATE: 4/25/14
SAMPLER(S): SLCB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition _____
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

52 (DTB) - 4.47 (DTW) = 47.53 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 47.53 x 0.041 (Multiplier) = 1.949 (Well Volume) gal

1.949 x 1.5 = 2.92 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 3.15 gal

WATER QUALITY: DTW = 4.47 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1341	0	4.47	PUMP ON						
1343	0.01	—	19.25	1.894	2.18	7.71	-114.5	0.25	
1351	0.90	—	19.03	1.795	0.90	7.62	-92.9	0.26	
1375	1.00	—	18.97	1.793	0.26	7.63	-89.0	0.33	
1403	1.50	—	18.98	1.767	0.20	7.51	-144.5	0.43	
1407	2.00	—	18.98	1.746	0.19	7.45	-148.6	0.34	
1411	2.50	—	19.00	1.736	0.18	7.43	-133.8	0.34	
1416	2.90	—	19.01	1.732	0.16	7.42	-150.7	0.18	
1420	START	SAMPLE COLLECTION							
1438	END SAMPLE	COLLECTION: 2L	IPEC						
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070429 3

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-37-22
SAMPLE ID: 022

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: overcast, Drizzle/100's

PROJECT NO: 01.0017869.92
DATE: 9/28/11
SAMPLER(S): CR, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.10 GW Elevation ~~5762~~ 12.708

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1097	12.708	PUMP	ON						
1106	12.672	20.91	2.426	2.90	6.69	-29.5	0.62		0.05
1110	12.664	20.95	2.441	1.65	6.76	-28.9	0.71		0.20
1115	12.659	20.97	2.453	1.17	6.80	-31.2	0.87		0.30
1120	12.662	20.92	2.460	0.86	6.83	-35.8	0.13		0.40
1125	12.670	20.93	2.499	0.58	6.85	-39.8	0.40		0.50
1130	12.631	20.94	2.460	0.61	6.86	-39.8	0.25		0.60
1135	12.668	20.94	2.460	0.59	6.88	-43.6	0.40		0.75
1135	START	SAMPLE	COLLECTION						
1205	END SAMPLE	COLLECTION	W/ 2L	TEFC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	4
turbidity meter	20704213

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

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-31-32
SAMPLE ID: 022

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, drizzle 60s

PROJECT NO: 01.0017869.92
DATE: 4/26/11
SAMPLER(S): SL, DB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.04 GW Elevation 5.751

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1055	15.05	PUMP ON							
1106	15.374	20.90	2.139	3.08	7.13	200.3	0.97		0.01
1110	15.384	20.78	2.127	1.86	7.16	213.4	1.47		0.08
1115	15.378	20.74	2.113	1.31	7.15	223.3	1.62		0.24
1120	15.355	20.74	2.109	1.08	7.18	216.3	0.39		0.34
1125	15.339	20.76	2.112	0.93	7.20	199.9	0.45		0.45
1130	15.351	20.75	2.117	0.90	7.21	197.0	0.79		0.52
1135	15.343	20.78	2.122	0.82	7.23	186.7	0.00		0.63
1140	15.345	20.78	2.128	0.80	7.24	188.7	0.00		0.73
1145	15.349	20.80	2.133	0.80	7.25	186.0	0.39		0.82
1147	START	SAMPLE COLLECTION							
1217	END	"		"	"	IPEC			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	2
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.97 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-37-40
SAMPLE ID: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, DRIZZLE, 60's

PROJECT NO: 01.0017869.92
DATE: 4/23/11
SAMPLER(S): CR, SL

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition Good
WATER COLUMN HEIGHT (ft)
Well Diameter: 1 in

40	-	7.66	=	32.34 ft
DTB		DTW		Well Column Height

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 32.34 x 0.041 (Multiplier) = 1.326 (Well Volume) gal

1.325 x 1.5 = 1.99 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.25 gal

WATER QUALITY: DTW = 7.66 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1044	0	7.66							
1049	0.15	11.87	20.42	2.057	1.59	6.79	-103.3	2.20	
1056	0.50	11.51	20.45	2.090	0.70	6.83	136.6	171.7	
1100	0.75	11.50	20.45	2.086	0.40	6.84	131.6	167.2	
1103	1.00	11.85	20.44	2.088	0.27	6.85	130.6	100.4	
1108	1.25	11.73	20.44	2.084	0.21	6.87	128.5	110.0	
1113	1.50	11.78	20.45	2.085	0.17	6.88	124.8	109.4	
1117	2.00	11.82	20.44	2.086	0.17	6.89	122.6	95.3	
1120	START SAMPLE COLLECTION								
1131	END	SAMPLE COLLECTION			2L IPEC				
	Pump	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070429

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-37-57
SAMPLE ID: 022

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, Muggy, 60s

PROJECT NO: 01.0017869.92
DATE: 4/23/14
SAMPLER(S): S. Ol
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 7.67 GW Elevation 7.118

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1055	42.159	PUMP ON							
1106	41.979	20.74	1.838	1.33	7.23	212.2	1.16		0.05
1110	41.910	20.68	1.841	1.17	7.31	206.5	0.35		0.12
1115	41.783	20.66	1.877	1.27	7.41	152.3	0.53		0.28
1120	41.942	20.67	1.859	1.19	7.44	120.8	0.90		0.38
1125	42.078	20.69	1.847	1.24	7.46	110.0	0.12		0.50
1130	42.017	20.69	1.863	1.24	7.47	104.4	0.66		0.57
1135	42.602	20.71	1.882	1.30	7.48	99.7	0.67		0.68
1140	42.700	20.73	1.889	1.22	7.49	92.5	0.80		0.79
1145	42.716	20.75	1.900	1.29	7.49	88.3	0.64		0.84
1150	42.705	20.76	1.897	1.31	7.49	87.1	0.54		0.95
1152	START	SAMPLE COLLECTION							
1221	END	"	"		7.2L	IPEC			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	3
turbidity meter	20070126 4

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.10 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 39 - 67

SAMPLE ID: 01

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 70's

PROJECT NO: 01.0017869.92
DATE: 4/26/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

65.0 to 70.5

SAMPLING PORT

67 7

TOTAL VOLUME PURGED: 0.85 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1307	0	PUMP	ON					6/16	34
1318	0.03	17.67	3.090	3.87	6.37	-49.9			
1324	0.14	17.39	2.023	5.17	6.26	-26.9	3.42		
1330	0.28	17.70	1.959	5.72	6.14	-1.2	1.45		
1335	0.38	17.74	1.941	6.17	6.06	40.1	1.33		
1340	0.50	17.74	1.930	6.04	5.90	72.2	1.34		
1345	0.63	18.07	1.930	6.01	5.76	98.0	2.40		
1350	0.77	17.87	1.931	6.25	5.66	120.4	1.05		
1355	0.84	18.03	1.928	6.21	5.47	142.6	1.56		
1400	0.95	17.76	1.930	6.46	5.36	176.0	0.91		
1407	1.05	17.84	1.934	6.50	5.30	196.9	1.43		
1412	1.18	18.01	1.926	6.47	5.12	219.2	1.12		
1417	1.30	18.34	1.935	6.44	4.92	230.7	3.15		
1422	1.45	18.04	1.934	6.49	5.09	276.9	0.87		
1427	1.50	17.87	1.935	6.58	5.23	267.6	0.64		
1432	1.60	17.52	1.933	6.60	5.29	260.0	0.54		
1437	1.70	17.89	1.929	6.66	5.31	258.0	0.43		
1438	START	SAMPLE	COLLECTION						
1452	END SAMPLE COLLECTION - 2L IPE								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070499

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-39-12A

WELL ID: MW 39 - 84

SAMPLE ID: 011

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy, 70's

PROJECT NO: 01.0017869.92
DATE: 4/26/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

76.5 to 85.0

SAMPLING PORT

84 6

TOTAL VOLUME PURGED: 0.81 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1307	0	PUMP	ON					6/16	34
1318	0.01	19.22	2.220	7.43	6.38	-132.9			
1324	0.11	17.78	2.202	6.83	6.51	-110.6	3.22		
1330	0.23	17.83	2.183	6.89	6.62	-96.8	2.13		
1335	0.30	17.56	2.179	6.97	6.66	-79.2	2.74		
1340	0.40	18.01	2.173	6.96	6.72	-61.3	1.22		
1345	0.48	18.24	2.171	6.93	6.76	-54.6	1.67		
1350	0.57	18.32	2.169	7.06	6.77	-52.3	2.60		
1355	0.66	18.32	2.168	7.09	6.79	-49.2	1.44		
1357	START	SAMPLE	COLLECTION						
1425	END	"	"	5 L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-37-124

WELL ID: MW 39-102

SAMPLE ID: 011

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy, 70's

PROJECT NO: 01.0017869.92
DATE: 4/26/11
SAMPLER(S): SL/CB

SAMPLING INTERVAL (depth in ft below top of casing)

93.0 to 103.0

SAMPLING PORT

102 4

TOTAL VOLUME PURGED: 0.92 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1307	0	PUMP	ON					6/16	34
1320	0.03	18.72	2.403	4.16	6.33	-145.3			
1324	0.07	18.34	2.383	4.70	6.17	-129.4	7.93		
1330	0.21	18.44	2.329	4.92	6.14	-111.5	1.42		
1335	0.28	18.31	2.323	5.14	6.25	-100.0	0.98		
1340	0.38	18.67	2.314	5.23	6.37	-98.2	0.67		
1345	0.46	19.05	2.310	5.27	6.47	-85.3	0.76		
1350	0.55	19.67	2.312	5.61	6.59	-77.9	0.73		
1355	0.66	19.85	2.306	5.63	6.61	-82.7	0.71	↓	↓
1400	0.77	19.53	2.310	5.71	6.54	-80.6	0.94		
1402	START	SAMPLE	COLLECTION						
1433	END	"	"	"	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20704393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-39-134

WELL ID: MW 39 - 124

SAMPLE ID: 011

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 70s

PROJECT NO: 01.0017869.92
DATE: 4/26/14
SAMPLER(S): SL, ER

SAMPLING INTERVAL (depth in ft below top of casing)

115.0 to 126.5

SAMPLING PORT

124

5 of 8 3

TOTAL VOLUME PURGED: _____ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1020	0	PUMP	ON					8/10	70
1034	0.5	14.28	2.587	1.11	6.09	-201.4	5.29		
1041	1.0	14.23	0.573	1.09	5.63	-233.9	5.06		
1046	1.5	14.17	2.593	1.46	5.67	-228.7	3.80		
1051	1.8	14.10	2.598	1.79	5.79	-222.8	3.72		
1056	2.1	14.14	2.590	1.84	5.96	-217.9	3.63		
1101	2.4	14.17	2.595	2.16	6.22	-207.4	4.27		
1106	2.75	14.21	2.597	2.57	6.31	-196.6	2.47		
1111	3.00	14.24	2.606	2.90	6.37	-188.7	2.65		
1116	3.25	14.29	2.610	3.12	6.40	-184.8	1.94		
1121	3.60	14.33	2.617	3.23	6.40	-180.0	2.09		
1126	3.90	14.36	2.620	3.30	6.38	-174.2	2.20		
1131	4.10	14.53	2.625	3.41	6.39	-168.6	2.33		
1136	4.40	14.57	2.631	3.59	6.37	-161.0	1.78		
1141	4.70	14.51	2.634	3.67	6.36	-154.1	2.18		
1146	5.00	14.51	2.638	3.65	6.35	-145.5	1.82		
1150	5.30	14.57	2.640	3.75	6.32	-138.1	1.70		
1156	5.50	14.60	2.646	3.82	6.2	-124.3	1.24		
1200	5.75	14.60	2.647	3.86	6.30	-113.8	1.35		
1203	6.00	14.71	2.648	3.85	6.28	-112.5	1.00		
1206	6.25	14.85	2.649	3.77	6.26	-109.1	1.66		
1207	START	SAMPLE	COLLECTION						
1235	END	"	"	" to IPEC					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070493

NOTES AND OBSERVATIONS: SDL Well was flow through purging, measuring during sample collection.

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Fair; hinge is starting to fail

WELL ID: MW 39 - 183

SAMPLE ID: 011

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 70s

PROJECT NO: 01.0017869.92
DATE: 4/26/11
SAMPLER(S): SL, CR

SAMPLING INTERVAL (depth in ft below top of casing)

169.5 to 186.0

SAMPLING PORT

183 2

TOTAL VOLUME PURGED: 1.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1020	0	PUMP	ON					8/10	70
1034	0.75	14.41	1.100	0.56	6.48	-202.8	1.37		
1041	0.47	14.50	1.104	0.40	6.69	-190.7	0.84		
1046	0.60	14.44	1.101	0.37	6.73	-179.6	0.49		
1051	0.75	14.36	1.097	0.32	6.75	-175.5	0.[illegible]		
1056	0.97	14.30	1.093	0.31	6.77	-167.9	0.38		
1101	0.95	14.37	1.089	0.34	6.78	-165.0	0.12		
1106	1.05	14.48	1.087	0.27	6.78	-164.9	0.23		
1111	1.20	14.50	1.084	0.29	6.79	-164.5	0.17		
1113	START	SAMPLE	COLLECTION						
1135	END	"	"		IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-39-134

WELL ID: MW 39 - 19S

SAMPLE ID: 011

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 70s

PROJECT NO: 01.0017869.92
DATE: 4/24/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

193.0 to 198.6

SAMPLING PORT

195

TOTAL VOLUME PURGED: 1.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1020	0	PUMP	ON					8/10	70
1034	0.05	15.69	1.286	2.46	5.69	-290.2	1.00		
1041	0.13	15.77	1.280	1.00	5.87	-320.1	1.07		
1046	0.18	15.65	1.274	0.76	5.94	-341.9	0.71		
1051	0.22	15.52	1.268	0.58	6.04	-360.7	0.49		
1056	0.30	15.35	1.261	0.48	6.17	-383.6	0.88		
1101	0.36	15.32	1.260	0.42	6.23	-346.5	0.28		
1106	0.40	15.33	1.257	0.41	6.30	-339.6	0.50		
1111	0.47	15.36	1.253	0.36	6.33	-277.4	0.11		
1116	0.51	15.41	1.251	0.35	6.41	-326.5	0.40		
1121	0.57	15.51	1.248	0.36	6.45	-234.1	0.10		
1126	0.62	15.57	1.243	0.30	6.51	-249.3	0.30		
1131	0.67	15.75	1.241	0.31	6.54	-302.1	0.48		
1136	0.73	15.95	1.240	0.29	6.66	-317.7	0.57		
1141	0.81	15.96	1.235	0.26	6.73	-346.3	0.44		
1146	0.84	15.78	1.235	0.25	6.70	-337.5	1.13		
1151	0.90	15.86	1.234	0.23	6.73	-340.4	0.52	↓	↓
1152	START	SAMPLE COLLECTION							
1301	END	"	"	:2L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-39-19S

WELL ID: MW 40 - 27

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 60's

PROJECT NO: 01.0017869.92
DATE: 4/29/11
SAMPLER(S): SL, AB

SAMPLING INTERVAL (depth in ft below top of casing)

18.2 to 35.2

SAMPLING PORT

27 6

TOTAL VOLUME PURGED: _____ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1235	0	PUMP	ON					5/9	18
1243	0.17	15.14	5.162	5.46	6.87	98.6	0.59		
1253	0.50	15.20	5.238	5.87	6.93	105.9	0.36		
1258	0.73	15.44	5.242	5.80	6.94	112.0	0.53		
1303	0.88	15.29	5.249	5.83	6.94	118.1	0.56		
1308	1.05	15.28	5.251	5.90	6.93	124.7	0.51		
1313	1.25	15.55	5.250	5.79	6.94	123.9	0.45		
1314	START	SAMPLE COLLECTION							
1321	END	"	"	"	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007 01254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition like MW40-81

WELL ID: MW 40 - 46

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 60's

PROJECT NO: 01.0017869.92
DATE: 4/29/14
SAMPLER(S): SL, CR

SAMPLING INTERVAL (depth in ft below top of casing)

44.2 to 53.7

SAMPLING PORT

46 5

TOTAL VOLUME PURGED: 0.53 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1225	0	PUMP	ON					5/9	15
1243	0.01	16.09	4.913	0.70	6.56	-8.6	2.45		
1250	0.15	16.00	4.902	0.15	6.65	-57.2	1.01		
1256	0.27	16.04	4.942	0.16	6.69	-50.4	0.71		
1303	0.38	16.96	4.931	0.29	6.71	-50.7	1.03		
1304	START	SAMPLE COLLECTION							
1331	END	"	"		:2 IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070201254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-46-91

WELL ID: MW 40 - 81

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 60s

PROJECT NO: 01.0017869.92
DATE: 4/29/14
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

64.7 to 84.2

SAMPLING PORT

81 4

TOTAL VOLUME PURGED: 1.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1030	0	PUMP	ON					6/9	44
1041	0.75	14.14	4.334	2.55	6.24	146.9	1.53	↓	↓
1046	1.10	14.14	4.313	2.32	6.31	142.1	1.81	↓	↓
1052	1.40	14.14	4.301	2.23	6.35	139.5	1.85	↓	↓
1057	1.75	14.13	4.281	2.19	6.39	138.3	0.77	↓	↓
1059	START	SAMPLE	COLLECTION						
1106	END	"		"	"	"			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070 1254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Poor

Weigl is broken off.

WELL ID: MW 40 - 100

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 60's

PROJECT NO: 01.0017869.92
DATE: 4/29/14
SAMPLER(S): SC, DB

SAMPLING INTERVAL (depth in ft below top of casing)

93.2 to 106.7

SAMPLING PORT

100 3

TOTAL VOLUME PURGED: 2.45 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1030	0	PUMP ON						6/9	44
1041	0.50	14.32	2.744	0.51	6.85	120.6	20.90		
1046	0.80	14.32	2.726	0.49	6.86	78.3	22.47		
1052	1.00	14.30	2.720	0.54	6.90	58.5	19.94		
1057	1.30	14.38	2.706	0.54	6.91	45.9	20.38		
1102	1.55	14.40	2.721	0.50	6.92	41.4	19.55		
1106	2.00	14.20	2.725	0.59	6.93	35.4	18.17		
1113	2.30	14.53	2.719	0.61	6.94	32.5	21.10		
1116	START	SAMPLE COLLECTION							
1177	END	"	"		IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-40-91

WELL ID: MW 40-127

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 60's

PROJECT NO: 01.0017869.92
DATE: 4/29/14
SAMPLER(S): SL, CR

SAMPLING INTERVAL (depth in ft below top of casing)

125.2 to 136.7

SAMPLING PORT

127 2

TOTAL VOLUME PURGED: 0.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1030	0	PUMP	ON					6/9	44
1041	0.28	14.96	2.186	0.87	6.81	-67.9	1.16		
1046	0.40	14.99	2.182	0.56	6.86	-78.9	0.85		
1052	0.53	14.94	2.182	0.43	6.93	-91.6	0.80		
1057	0.65	15.06	2.177	0.36	6.96	-95.0	1.63		
1102	0.80	TSW	2.180	0.33	6.97	-96.3	0.49	↓	↓
1104	START	SAMPLE	COLLECTION						
1110	END	"	"		2L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
Turbidity meter	20701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-40S

WELL ID: MW 40-162

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 60's

PROJECT NO: 01.0017869.92
DATE: 4/29/14
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

158.7 to 190.3

SAMPLING PORT

162

TOTAL VOLUME PURGED: 0.93 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1032	0	PUMP	ON					6/9	44
1041	0.1	15.67	1.207	0.41	6.40	-101.2	1.15		
1046	0.19	15.82	1.195	0.26	6.44	-96.3	0.81		
1052	0.25	15.97	1.196	0.27	6.54	-100.5	0.71		
1057	0.31	16.11	1.194	0.14	6.61	-98.3	0.64		
1102	0.37	16.19	1.192	0.12	6.69	-98.7	0.44		
1109	0.45	16.11	1.180	0.09	6.82	-101.9	0.51		
1114	0.50	16.26	1.174	0.06	6.84	-99.6	0.52		
1121	0.57	16.43	1.177	0.04	6.75	-102.0	1.37		
1128	0.67	16.49	1.212	0.05	6.82	-105.2	2.51		
1133	0.73	16.16	1.309	0.04	6.82	-107.0	0.62		
1138	0.78	16.31	1.306	0.04	6.82	-107.7	0.42		
1131	START	SAMPLE	COLLECTION						
1206	END	"	"	"	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-40-81

WELL ID: MW-43-19
SAMPLE ID: 005

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 4/21/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 34.36 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
										gal
1302	34.36	PUMP	ON					5/10	22	0
1309	31.76	12.58	3.235	6.60	7.29	234.7	42.72			0.01
1315	34.82	12.67	2.995	6.15	7.42	235.9	50.62			0.05
1320	34.76	12.80	2.837	6.19	7.51	232.7	47.67			0.15
1325	34.79	12.86	2.750	6.19	7.56	228.8	40.74			0.25
1330	34.80	12.99	2.682	6.22	7.61	225.0	33.82			0.35
1335	34.80	13.07	2.641	6.24	7.60	222.6	31.55			0.45
1340	34.80	13.06	2.623	6.23	7.61	220.7	30.26			0.55
1341	START	SAMPLE COLLECTION								
1404	END SAMPLE COLLECTION: 24 L PEC									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070125H

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR - EXCESS SNOW/ICE

NOTES AND OBSERVATIONS:

Total volume purged 0.75 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-42-78
SAMPLE ID: 020

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Sunny 50's

PROJECT NO: 01.0017869.92
DATE: 4/21/11
SAMPLER(S): SG, CG

Measured Well Depth ..... **(feet from top of casing)**
Well Vault Condition Fair, Bolts Stripped
WATER COLUMN HEIGHT (ft)
Well Diameter: ..... in

78 (DTB) - 32.44 (DTW) = 45.56 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 45.56 x 0.041 (Multiplier) = 1.868 (Well Volume) gal

1.868 x 1.5 = 2.8 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 2.95 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1322	0	—	PUMP	ON					
1325	0.25	—	13.08	2.136	7.31	6.90	241.7	125.6	
1327	0.50	—	14.24	2.225	5.21	7.00	221.9	53.71	
1330	1.00	—	14.71	2.307	4.00	7.16	157.4	934.1	
1334	1.50	—	14.77	2.335	3.93	7.42	140.2	903.8	
1336	1.75	—	14.85	2.340	3.89	7.47	134.1	646.7	
1338	2.00	—	14.86	2.335	3.83	7.49	128.1	581.3	
1339	2.25	—	14.92	2.334	3.78	7.49	125.1	463.1	
1341	2.50	—	14.95	2.333	3.77	7.50	119.5	388.6	
1342	2.75	—	14.94	2.335	3.80	7.52	116.8	356.4	
1343	START	SAMPLE	COLLECTION						
1345	END	"	"	2L IPEC					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070 1254

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: 030

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 50°

PROJECT NO: 01.0017869.92
DATE: 4/20/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 19.52 GW Elevation 34.61

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1243	65.417	PUMP ON						N/A	N/A	0
1252	65.313	12.80	2.981	6.85	7.22	69.7	17.36			0.02
1257	65.211	13.11	2.935	7.15	7.25	68.3	30.41			0.18
1302	65.358	12.10	2.908	6.97	7.24	68.3	14.87			0.21
1307	65.380	12.96	2.875	6.96	7.23	68.8	12.16			0.28
1308	START	SAMPLE COLLECTION								
1356	END	"	"	"	IPEC					
	PUMP	OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070393

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition Dirt, No bolts

NOTES AND OBSERVATIONS:

Total volume purged 0.43 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: 01

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 50°

PROJECT NO: 01.0017869.92
DATE: 4/20/11
SAMPLER(S): CB, SS

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition GOOD, NO STANDING WATER
WATER COLUMN HEIGHT (ft) **Well Diameter:** 1 in

63 (DTB) - 20.40 (DTW) = 42.6 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 42.6 x 0.041 (Multiplier) = 1.75 (Well Volume) gal

1.75 x 1.5 = 2.62 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.90 gal

WATER QUALITY: DTW = 20.40 GW Elevation 33.73

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1252	0	—	PUMP ON						
1256	0.01	—	12.09	0.704	9.76	6.62	138.9	35.61	
1300	0.60	—	15.03	1.709	7.93	6.50	143.8	81.52	
1302	1.00	—	15.39	2.147	5.33	6.51	141.6	70.71	
1305	1.50	—	15.65	2.356	8.04	6.53	140.5	50.67	
1307	2.00	—	15.68	2.459	8.74	6.53	139.3	28.69	
1309	2.50	—	15.69	2.489	8.73	6.55	138.5	18.91	
1311	2.65	—	15.66	2.505	8.80	6.54	138.1	9.76	
1311	START SAMPLE COLLECTION								
1313	END SAMPLE COLLECTION: 2 L OPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070293

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: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Sunny 52°

PROJECT NO: 01.0017869.92
DATE: 4/21/11
SAMPLER(S): SL, CR
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 14.57 GW Elevation 33.45

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
0958	17.977	PUMP	ON					5.5/32	16	
1013	17.748	12.25	5.020	2.60	6.93	249.8	8.05			0.04
1018	17.696	12.26	5.011	1.77	6.92	250.9	2.19			0.08
1023	17.655	12.31	5.007	1.51	6.93	248.2	2.70			0.11
1028	17.602	12.32	4.998	1.30	6.92	245.5	1.57			0.16
1033	17570	12.30	4.988	1.17	6.92	243.8	1.60			0.21
1038	17.508	12.23	4.976	1.10	6.93	242.3	1.80			0.26
1043	17.465	12.45	4.938	1.05	6.93	240.8	1.60			0.31
1044	START	SAMPLE COLLECTION								
1115	END	"	"	1.20	IPEC					
	PUMP	OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition Good, Missing bolts

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-43-62
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 52°

PROJECT NO: 01.0017869.92
DATE: 4/21/11
SAMPLER(S): CB, SC
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 15.28 GW Elevation 32.541 ACTUAL DEPTH = 37.185

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
0953	37.185	PUMP	ON					60/60	30	gal
0958	36.513	13.21	2.056	3.43	6.98	230.8	8.58			0.01
1003	36.141	13.57	2.020	1.11	6.90	176.3	19.04			0.30
1008	35.824	13.84	2.596	0.51	6.92	118.6	34.44			0.45
1013	36.040	13.78	2.599	0.41	6.93	91.5	39.99			0.60
1018	36.108	13.62	2.588	0.40	6.97	71.2	36.12			0.75
1023	36.251	13.61	2.587	0.45	6.97	57.0	36.78			0.90
1028	36.258	13.52	2.586	0.49	6.97	46.0	33.70			1.00
1033	36.177	13.53	2.590	0.53	6.98	40.1	30.06			1.15
1038	36.172	14.04	2.590	0.44	6.95	37.8	31.29			1.30
1039	START	SAMPLE	COLLECTION							
1100	END SA	MPLE	COLLECTION	2 L IPEC						
	PUMP	OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125A

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition GOOD - MISSING BOLTS

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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-44-66
SAMPLE ID: 030

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 60's

PROJECT NO: 01.0017869.92
DATE: 9/26/11
SAMPLER(S): CR, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

66 (DTB) − 56.01 (DTW) = 9.99 ft (Well Column Height)

Well Vault Condition FAIR - MISSING BOLTS
Well Diameter: 2 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 9.99 x 0.163 (Multiplier) = 1.628 (Well Volume) gal

1.628 x 1.5 = 2.44 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 2.25 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
0939	0	8.612	PUMP ON						10/15	38	
0944	0.01	7.824	15.39	1.535	5.01	6.90	73.2	40.81			
0952	0.20	6.661	15.66	1.518	4.80	7.17	70.2	42.25			
1002	0.60	5.451	15.79	1.512	5.36	7.23	35.1	29.07			
1010	0.90	4.658	15.83	1.515	5.78	7.25	44.4	17.98			
1015	1.10	4.115	15.89	1.510	6.94	7.26	50.3	20.19			
1029	1.50	3.039	16.09	1.504	6.07	7.25	61.2	18.81			
1034	1.75	2.493	16.24	1.505	6.04	7.23	72.7	19.44			
1041	1.90	1.790	16.59	1.504	5.96	7.23	82.2	19.41			
1047	2.00	1.781	16.59	1.601	6.01	7.21	91.7	22.35			
1053	2.10	1.781	16.60	1.499	6.05	7.20	95.3	26.25			
1055	2.10	1.781	WELL DRY LET RECHARGE BEFORE SAMPLING								
1253	START SAMP	LE COLLECTION									
1317	END SAMPLE	COLLECTION: 2L IPEC									
	PUMP OFF										

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070154

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-44-02
SAMPLE ID: 021

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: ~~SUNNY~~ OVERCAST, 60's

PROJECT NO: 01.0017869.92
DATE: 4/26/11
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition FAIR - MISSING BOLTS
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

102 (DTB) - 64.28 (DTW) = 37.72 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 37.72 x 0.041 (Multiplier) = 1.55 (Well Volume) gal

1.56 x 1.5 = 2.32 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 3.05 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1113	0	—	Pump	ON					
1119	0.10	—	18.42	1.291	10.21	6.77	19.4	223.3	VERY SILTY
1125	1.00	—	17.62	1.297	7.83	6.90	11.0	398.3	
1127	1.25	—	17.64	1.326	7.93	6.89	-3.6	562.2	
1133	2.00	—	19.53	1.326	7.68	6.97	17.2	788.5	
1142	2.25	—	21.13	1.318	7.85	8.05	23.2	961.3	VERY TURBID
1155	2.50	—	21.09	1.330	8.80	7.19	22.6	888.1	
1200	2.75	—	21.21	1.321	9.53	7.10	25.2	584.3	
1204	2.35	—	21.39	1.324	9.78	7.11	26.3	372.8	
1205	START SAMPLE COLLECTION								
1218	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	2007012594

NOTES AND OBSERVATIONS: PURGE WATER VERY SILTY, BALL VAL CLOGS EASILY

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: 029

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 45°

PROJECT NO: 01.0017869.92
DATE: 4/20/11
SAMPLER(S): CA, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

42	-	18.01	=	23.99
DTB		DTW		Well Column Height

Well Vault Condition Good, bolts stripped
Well Diameter: 2 in
ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 23.99 x 0.163 (Multiplier) = 3.91 (Well Volume) gal

3.91 x 1.5 = 5.86 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 4.60 gal

WATER QUALITY: DTW = 18.01 GW Elevation 35.180 Actual Depth = 22.54'

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
0911	0	22.351	PUR	PON					6/8	26	
0915	0.75	21.582	15.67	1.280	3.36	6.43	186.3	5.12			
0920	0.50	20.346	15.82	1.005	1.36	6.76	120.4	2.98			
0925	0.85	19.739	15.36	0.902	0.76	6.95	103.6	2.49			
0930	0.85	17.990	16.37	0.879	0.64	7.28	93.7	3.36			
0935	1.05	16.678	16.40	0.870	0.54	7.55	88.7	2.11			
0940	1.25	14.103	16.81	0.867	0.46	7.70	85.8	1.80			
0950	2.00	12.656	16.50	0.866	0.43	7.93	80.8	3.40			
0955	2.50	10.757	16.74	0.799	0.78	8.29	75.2	3.44			
1012	3.50	6.961	16.64	0.851	0.84	8.36	72.2	23.11			
1023	4.25	3.058	16.82	0.852	0.73	8.38	71.7				
1027	34.85	3.015	WELL	DRY, ALLOW	TO RE	CHARGE	BEFO	RE SAMPLING			
1400	START	SAMPLE	COLLECTION								
1409	END	SAMPLE	COLLECTION	2	VOC						
	PUMP	OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070404293

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-45 61
SAMPLE ID: 024

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 45°

PROJECT NO: 01.0017869.92
DATE: 4/20/11
SAMPLER(S): SG, CB

Measured Well Depth ..... **(feet from top of casing)**

Well Vault Condition Good, Bolts Stripped

Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

61 (DTB) - 19.29 (DTW) = 41.71 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 41.71 x 0.041 (Multiplier) = 1.71 (Well Volume) gal

1.71 x 1.5 = 2.56 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 3.00 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0938	0	—	15.76	0.470	19.23	6.48	167.0	183.4	
0943	1	—	15.89	0.750	9.41	6.08	162.0	337.6	
0946	1.25	—	16.25	0.928	9.46	6.11	160.3	536.9	
0948	1.50	—	16.27	0.984	9.63	6.19	159.5	621.4	
0950	1.75	—	16.41	0.906	9.41	6.21	158.5	638.1	
0952	2.00	—	16.58	0.947	9.12	6.29	156.3	750.6	
0955	2.25	—	16.59	0.967	9.64	6.37	151.4	858.7	
0958	2.50	—	17.44	1.013	15.98	6.51	147.5	742.0	
1000	2.75	—	17.27	1.098	23.5%	6.54	145.8	708.7	
1005	SART	SAMPLE COLLECTION							
1007	END	"	"	"	IPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070493

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: 029

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, drizzle, 60s

PROJECT NO: 01.0017869.92
DATE: 4/25/14
SAMPLER(S): SL, CB

Measured Well Depth _____ (feet from top of casing)
WATER COLUMN HEIGHT (ft)

29.7 (DTB) - 3.08 (DTW) = 26.62 ft (Well Column Height)

Well Vault Condition FAIR - MISSING BOLTS
Well Diameter: 4 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 26.62 x 0.653 (Multiplier) = 17.383 (Well Volume) gal

17.383 x 1.5 = 26.1 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 26.50 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0917	0	24.694	PUM	PON					
0925	1.50	22.291	16.92	0.972	0.71	7.43	69.7	17.87	
0939	4.50	19.487	16.93	0.964	0.35	7.46	67.8	13.97	
0952	7.50	18.207	16.82	0.965	0.28	7.47	-6.4	11.08	
1018	13.50	15.339	16.90	0.997	0.73	7.48	-31.6	23.58	
1024	15.00	14.060	16.95	1.048	1.23	7.48	-26.4	14.75	
1044	20.00	10.315	16.98	1.300	3.49	7.54	-34.2	19.94	
1050	21.50	9.355	17.00	1.338	4.10	7.55	-39.4	16.47	
1102	24.00	8.280	17.04	1.392	4.73	7.55	-38.7	14.02	
1107	25.50	8.095	17.08	1.413	5.17	7.55	-41.6	17.22	
1111	26.25	8.016	17.13	1.410	5.23	7.56	-48.0	11.58	
1113	START	SAMPLE	COLLE	CTION					
1119	END S	AMPLE	COLLE	CTION: 2L	IPE				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
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-49-24
SAMPLE ID: 024

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY SUNNY, 50'S

PROJECT NO: 01.0017869.92
DATE: 4/15/14
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.94 GW Elevation 2.23

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1040	~~13.59~~ ~12.69	Pump ON							
1048	12.670	13.71	2.489	0.93	6.95	225.5	10.47		0.05
1100	12.622	13.78	2.481	0.47	7.09	173.9	6.87		0.30
1108	12.592	13.87	2.483	0.41	7.13	134.1	8.65		0.40
1115	12.564	13.58	2.484	0.38	7.15	105.4	6.12		0.50
1120	12.526	13.55	2.485	0.38	7.17	80.1	5.02		0.65
1125	12.510	13.62	2.487	0.38	7.18	66.4	4.28		0.80
1130	12.482	13.77	2.488	0.38	7.19	53.8	3.71		0.90
1135	12.456	13.77	4.488	0.38	7.19	47.6	5.52		1.00
1140	12.430	13.80	4.489	0.36	7.20	44.2	3.33		1.10
1141	START	SAMPLE COLLECTION							
1158	END SAMPLE	COLLECTION; 2L IPEC							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	1
turbidity meter	2201042935

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR

NOTES AND OBSERVATIONS: Total volume purged 1.22 gal MISSING BOLTS

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: 029

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY SUNNY, 30S

PROJECT NO: 01.0017869.92
DATE: 4/15/14
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.83 GW Elevation 2.393

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1040	~~14.538~~ ← 19.78	2.	PUMP	ON					
1045	15.159	13.96	2.054	1.92	5.52	108.1	1.16		0.05
1100	15.190	14.52	2.060	0.93	5.16	-10.0	0.60		0.30
1108	15.053	14.56	2.062	0.84	5.82	-42.3	1.02		0.40
1115	15.055	14.41	2.068	0.87	5.91	-57.6	0.39		0.50
1120	15.032	14.41	2.070	0.82	5.98	-66.1	0.24		0.65
1125	15.017	14.55	2.073	0.79	6.03	-70.0	0.18		0.75
1130	14.998	14.68	2.077	0.75	6.08	-73.8	0.12		0.85
1132	START	SAMPLE	COLLECTION						
1135	END SAMPLE COLLECTION: 2 LITRE								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	2
turbidity meter	20070425

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR MUSTARD STAINS

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.

WELL ID: MW-49-65
SAMPLE ID: 024

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY SUNNY, 50'S

PROJECT NO: 01.0017869.92
DATE: 4/15/11
SAMPLER(S): CB, SC
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.82 GW Elevation 7.437

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1040	13.98	PUMP ON							
1045	13.73	13.68	2.182	2.74	6.61	-8.7	0.38		0.01
1100	13.70	14.49	2.188	1.06	6.92	-27.2	0.26		0.30
1105	13.69	14.58	2.192	1.15	7.00	-35.6	0.24		0.40
1115	13.68	14.47	2.186	0.89	7.08	-39.7	0.76		0.50
1120	13.68	14.50	2.186	0.78	7.06	-41.2	0.64		0.65
1125	13.69	14.57	2.187	0.75	7.07	-40.1	0.52		0.75
1127	START	SAMPLE	COLLECTION						
1150	END SAMPLE	COLLECTION	2L IPEC						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	3
turbidity meter	20070442493

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR - RUSTED BOLTS

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-32-92
SAMPLE ID: 0325

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy, 60's

PROJECT NO: 01.0017869.92
DATE: 5/3/14
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 7.83 GW Elevation 6.623

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1113	7.83	PUMP ON							
1120	7.78	19.26	2.398	2.34	7.65	-61.1	1.91		0.01
1127	7.81	19.75	2.392	0.75	7.72	-39.4	0.75		0.20
1132	7.81	19.90	2.389	0.57	7.74	-33.3	0.49		0.30
1137	7.81	19.99	2.389	0.45	7.74	-30.0	0.58		0.42
1142	7.81	20.00	2.390	0.39	7.79	-31.4	0.59		0.55
1145	START	SAMPLE COLLECTION							
1205	END SAMPLE	COLLECTION: 2L IPEC							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	2
turbidity meter	20070493

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Dirty, No Bolts

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 51 - 40

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 60's

PROJECT NO: 01.0017869.92
DATE: 4/29/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

29.7 to 44.2

SAMPLING PORT

40 7

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1001	0	PUMP	ON					6.5/X.4	24
1004	0.01	13.90	2.429	4.52	6.59	-80.8	1.68		
1012	0.35	12.49	2.299	4.46	6.73	-51.9	0.65		
1017	0.55	12.53	2.290	4.87	6.77	-45.8	0.29		
1022	0.75	12.55	2.287	4.80	6.78	-41.6	0.36		
1027	0.95	13.57	2.288	4.80	6.79	-38.2	0.31		
1029	START	SAMPLE COLLECTION							
1041	END SAMPLE COLLECTION: 2L 3PSC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070423

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD

WELL ID: MW 51 - 79

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 60's

PROJECT NO: 01.0017869.92
DATE: 9/29/10
SAMPLER(S): CB, JL

SAMPLING INTERVAL (depth in ft below top of casing)

63.2 to 81.2

SAMPLING PORT

79 6

TOTAL VOLUME PURGED: 1.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1001	0	Pump	ON					6.5/89	24
1007	0.01	14.06	2.815	1.42	6.91	-234.8	12.84		
1012	0.20	13.83	2.790	1.84	5.97	-209.6	15.96		
1017	0.34	13.82	2.794	1.92	5.77	-191.1	14.34		
1022	0.46	13.80	2.797	2.06	5.65	-185.1	11.71		
1027	0.62	13.91	2.795	2.27	5.59	-169.4	11.32		
1032	0.75	13.92	2.794	2.40	5.69	-163.7	11.41		
1037	0.86	13.94	2.793	2.36	5.68	-170.0	11.25		
1039	START	SAMPLE	COLLECTION						
1057	END SAMPLE COLLECTION - 2L TEDLAR								
	Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	2007042493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 51 - 104

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 60s

PROJECT NO: 01.0017869.92
DATE: 4/29/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

130.2 to 143.7

SAMPLING PORT

104 4

TOTAL VOLUME PURGED: 2.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1140	0	Pump	on					5.0/5.6	42
1151	0.01	13.76	2.713	3.104	6.92	-45.6	434.5		
1204	0.75	13.32	2.767	1.58	6.79	-34.4	17.87		
1210	1.00	13.31	2.776	1.50	6.78	-33.6	28.35		
1215	1.25	13.29	2.777	1.45	6.77	-32.4	1.42		
1220	1.50	13.44	2.781	1.40	6.79	-33.8	1.71		
1225	1.85	13.92	2.772	1.37	6.77	-32.6	1.53		
1228	START	SAMPLE	COLLECTION						
1235	END SAMPLE	COLLECTION	IN IPEC						
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429R3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 61 - 135

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 60's

PROJECT NO: 01.0017869.92
DATE: 9/29/11
SAMPLER(S): CD, SC

SAMPLING INTERVAL (depth in ft below top of casing)

130.2 to 143.7

SAMPLING PORT

135 3

TOTAL VOLUME PURGED: 2.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1140	0	Pump	ON					5.6/5.6	42
1153	0.01	14.45	2.492	1.55	6.36	-232.4	3.35		
1204	0.25	13.95	2.574	1.53	5.88	-281.8	1.82		
1210	0.75	13.76	2.577	1.32	5.73	-330.2	2.28		
1215	0.85	13.84	2.578	1.26	5.72	-208.9	0.92		
1220	1.00	14.16	2.579	1.17	5.78	-257.6	0.69		
1225	1.15	14.10	2.578	0.94	5.82	-240.9	0.41		
1230	1.25	14.13	2.587	0.77	5.88	-206.6	0.58		
1235	1.50	13.66	2.581	0.62	5.91	-279.4	0.85		
1240	1.65	13.60	2.577	0.54	5.92	-325.9	1.29		
1246	1.85	13.72	2.571	0.48	6.06	-270.9	1.04		
1250	2.00	13.74	2.575	0.56	6.01	-281.4	0.52		
1255	2.15	13.79	2.571	0.67	6.02	-284.5	0.46		
1200	2.25	13.76	2.578	0.64	6.07	-281.7	0.61		
1301	START	SAMPLE	COLLECTION						
1316	END SA	MPLE	COLLECTION: 2L		IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 51 - 163

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY 60's

PROJECT NO: 01.0013869.92
DATE: 4/29/11
SAMPLER(S): CA, SL

SAMPLING INTERVAL (depth in ft below top of casing)

154.7 to 166.2

SAMPLING PORT

163 2

TOTAL VOLUME PURGED: 0.80 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1140	0	PUMP ON						5/6/5/6	42
1203	0.01	14.27	2.206	2.80	6.81	-134.0	3.91		
1204	0.10	15.22	2.205	3.74	6.93	-145.9	2.49		
1210	0.18	14.79	2.179	0.80	7.08	-154.2	1.98		
1215	0.25	14.94	2.180	0.32	7.06	-141.3	1.23		
1220	0.32	15.41	2.183	0.23	7.06	-126.8	1.18		
1225	0.40	15.53	2.194	0.22	7.05	-121.4	1.11		
1230	0.45	15.92	2.193	0.17	7.05	-113.3	1.19		
1235	0.65	14.80	2.211	0.17	7.04	-110.5	816		
1240	0.65	14.60	2.208	0.16	7.04	-108.1	1.10		
1245	0.72	14.76	2.198	0.14	7.09	-103.9	0.98		
1246	START	SAMPLE	COLLECTION						
1319	END SAMPLE COLLECTION / L TREC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070423

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 51 - 189

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 60's

PROJECT NO: 01.0017869.92
DATE: 4/29/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

184.2 to 197.8

SAMPLING PORT

189

TOTAL VOLUME PURGED: 0.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1140	0	PUMP	ON					5.6/5.6	42
1156	0.01	16.39	2.080	9.56	10.77	-112.4	2.54		
1204	0.10	14.50	1.567	0.73	6.78	-117.3	1.53		
1210	0.25	14.09	1.541	0.38	6.86	-216.5	1.09		
1215	0.40	14.06	1.540	0.34	6.87	-268.4	0.95		
1220	0.55	14.44	1.538	0.33	6.88	-285.5	1.12		
1225	0.65	14.38	1.539	0.33	6.87	-285.6	0.64		
1230	0.75	14.27	1.537	0.30	6.87	-281.5	0.82		
1232	START	SAMPLE COLLECTION							
1252	END SAMPLE COLLECTION: 2L SPEC								
	Pump	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2007 042793

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-52-11
SAMPLE ID: QC

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 40's

PROJECT NO: 01.0017869.92
DATE: 4/27/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition See MW-52-15
Well Diameter: 2 in

WATER COLUMN HEIGHT (ft)

11.0 (DTB) - 8.02 (DTW) = 2.98 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 2.98 x 0.163 (Multiplier) = 0.486 (Well Volume) gal

0.486 x 1.5 = 0.73 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 0.90 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1022	0	1.940	PUMP ON						
1042	0.01	1.794	10.21	1.190	5.74	7.03	13.3	34.24	
1052	0.05	1.718	10.19	1.122	5.93	7.20	1.4	33.46	
1057	0.10	1.509	10.34	1.187	5.40	7.33	-6.2	36.31	
1105	0.25	1.249	10.60	1.111	3.86	7.43	-15.2	43.59	
1110	0.35	1.116	10.18	1.148	3.94	7.48	-17.0	46.15	
1115	0.45	1.004	11.03	1.566	3.43	7.31	-20.3	49.34	
1118	0.55	0.932	11.38	1.961	3.01	7.36	-20.0	46.04	
1122	0.65	0.846	11.68	2.087	3.09	7.23	-19.7	47.93	
1127	0.75	0.776	11.58	2.307	3.20	7.18	-19.8	52.44	
1128	START	SAMPLE COLLECTED							
1210	END	"	"	"					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070354

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.

Drain for well vault was not observed. Bottom of vault is muddy and there are signs that water has drained into the well (MW-52-11).

WELL ID: MW 52 - 18

SAMPLE ID: 006

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40's

PROJECT NO: 01.0017869.92
DATE: 4/22/10
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

10.0 to 30.0

SAMPLING PORT

18 7

TOTAL VOLUME PURGED: 1.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1047	0	PUMP ON						5.7/10	14
1053	0.1	12.57	18.10	0.47	7.03	-36.4	10.47		
1105	0.25	12.44	18.26	0.49	7.16	-40.9	7.70		
1110	0.40	12.51	18.26	0.43	7.22	-42.9	9.35		
1115	0.50	12.34	17.65	0.44	7.25	-45.6	14.83		
1120	0.60	12.55	12.16	0.49	7.23	-44.1	17.10		
1125	0.70	12.55	7.949	0.46	7.17	-42.7	16.16		
1130	0.80	12.55	5.443	0.46	7.11	-40.7	14.69		
1135	0.85	12.54	4.340	0.45	7.13	-42.8	12.97		
1140	0.95	12.60	3.576	0.43	7.13	-42.9	13.76		
1145	1.10	12.66	3.551	0.42	7.12	-42.3	12.72		
1150	1.18	12.59	3.582	0.43	7.10	-40.8	13.02		
1151	START	SAMPLE COLLECTION							
1210	END	SAMPLE COLLECTION.			2L IPE				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	240701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition

WELL ID: MW 52-48

SAMPLE ID: DUP

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: CLEAR, 40s

PROJECT NO: 01.0017869.92
DATE: 4/22/11
SAMPLER(S): CB, SC

SAMPLING INTERVAL (depth in ft below top of casing)

48.0 to 56.0

SAMPLING PORT

48 6

TOTAL VOLUME PURGED: 0.48 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1047	0	PUMP	ON					3.7/10	14
1058	0.01	11.61	0.700	3.63	6.41	-3.6	4.11		
1105	0.08	11.61	0.710	0.91	6.57	-89.8	1.88		
1110	0.12	11.63	0.715	0.65	6.67	-107.1	1.76		
1115	0.18	11.87	0.720	0.55	6.77	-131.0	1.14		
1120	0.24	11.90	0.722	0.47	6.82	-135.7	0.98		
1125	0.30	11.94	0.723	0.45	6.88	-146.7	0.87		
1130	0.35	11.99	0.722	0.39	6.92	-148.2	0.79		
1132	START	SAMPLE	COLLECTION						
1218	END SA	MPLE CO	LLECTION	WELL	DRY				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070123SA

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition

WELL ID: MW 52 - 64

SAMPLE ID: 006

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40S

PROJECT NO: 01.0017869.92
DATE: 4/22/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

59.0 to 71.5

SAMPLING PORT

64 5

TOTAL VOLUME PURGED: 0.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1222	0	PUMP	ON					5/10	28
1226	0.01	12.31	0.405	1.55	5.84	-105.2	7.38		
1232	0.10	13.30	0.413	0.18	6.04	-135.8	2.83		
1240	0.20	12.86	0.414	0.17	6.44	-158.9	2.39		
1245	0.26	12.76	0.414	0.13	6.56	-174.0	1.33		
1250	0.28	12.78	0.414	0.08	6.72	-187.9	1.59		
1255	0.30	12.83	0.413	0.10	6.78	-202.3	2.13		
1300	0.32	12.84	0.413	0.10	6.79	-216.1	2.15		
1305	0.34	12.95	0.413	0.09	6.90	-233.9	2.20		
1310	0.36	12.96	0.413	0.10	7.05	-242.6	2.36		
1315	0.38	12.93	0.414	0.09	6.96	-240.2	2.49		
1316	START	SAMPLE	COLLECTION						
1523	END SA	MPLE COLLECTION: 2 L IPEC							
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	200730, 254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-52-15

WELL ID: MW 52 - 118

SAMPLE ID: 006

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40s

PROJECT NO: 01.0017869.92
DATE: 4/22/11
SAMPLER(S): CB, SK

SAMPLING INTERVAL (depth in ft below top of casing)

110.5 to 123.5

SAMPLING PORT

118 4

TOTAL VOLUME PURGED: 0.80 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0923	0	PUMP	ON					9/12	45
0937	0.05	12.59	0.791	9.74	5.69	-130.7	41.27		
0943	0.20	12.40	0.763	2.17	5.55	-286.0	20.00		
0932	0.35	12.55	0.756	1.15	5.51	-320.7	15.36		
0940	0.45	12.18	0.750	0.76	5.60	-340.2	7.19		
0945	0.55	11.82	0.743	0.59	5.67	-360.0	4.45		
0950	0.00	11.37	0.741	0.50	5.75	-380.2	2.06		
0955	0.62	11.03	0.740	0.45	5.82	-390.2	2.02		
1000	0.64	10.82	0.739	0.43	5.79	-374.1	1.78		
1002	START SAMPLE COLLECTION								
1045	END SAMPLE COLLECTION 2 JARS								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	2007012534

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR - EVIDENCE OF WATER INFILTRATION

WELL ID: MW 52 - 162

SAMPLE ID: 006

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40's

PROJECT NO: 01.0017869.92
DATE: 4/12/11
SAMPLER(S): CB, JL

SAMPLING INTERVAL (depth in ft below top of casing)

154.5 to 164.0

SAMPLING PORT

162 2

TOTAL VOLUME PURGED: 1.55 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0921	0	PUMP	ON					9/12	45
0925	0.25	12.93	2.346	0.88	5.94	-14.4	3.94		
0930	0.75	13.11	2.243	0.16	5.76	-101.7	2.16		
0935	0.45	13.16	2.205	0.05	6.22	-126.5	1.80		
0940	0.65	13.23	2.195	0.03	6.51	-147.2	2.73		
0945	0.85	13.37	2.192	0.02	6.64	-160.2	2.97		
0950	1.05	13.47	2.196	0.03	6.75	-179.4	0.64		
0955	1.20	13.45	2.193	0.04	6.85	-185.1	0.70		
1000	1.35	13.54	2.190	0.03	6.88	-186.3	0.69		
1003	START SAMPLE COLLECTION								
1018	END SAMPLE COLLECTION - 2.3 gpm								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	22L701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR
EVIDENCE OF WATER INFILTRATION

WELL ID: MW 52-181

SAMPLE ID: 006

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40's

PROJECT NO: 01.0017869.92
DATE: 9/22/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

171.0 to 198.1

SAMPLING PORT

181

TOTAL VOLUME PURGED: 1.45 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0924	0	PUMP	ON					9/12	45
0925	0.05	12.50	1.195	1.74	5.71	71.3	7.14		
0930	0.20	12.93	1.123	1.41	6.02	45.4	3.76		
0935	0.35	13.00	1.057	0.95	6.41	3.3	2.03		
0940	0.50	13.12	1.068	0.82	6.71	-18.4	4.84		
0945	0.65	13.27	1.059	0.46	6.90	-26.5	2.91		
0950	0.80	13.33	1.054	0.33	7.06	-24.3	1.77		
9955	1.05	13.36	1.053	0.29	7.16	-32.8	1.64		
1000	1.20	13.49	1.050	0.27	7.18	-31.7	1.53		
1005	1.30	13.48	1.049	0.23	7.22	-35.6	1.47		
1006	START SAMPLE COLLECTION								
1022	END SAMPLE COLLECTION 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	22070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR
EVIDENCE OF WATER INFILTRATION

WELL ID: MW-52-92
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 4/18/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 55.87 GW Elevation 14.06

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Hrs@ Purge Notes gal
0950	25.955	PUMP	ON		6.50			5/10	35	
1004	25.823	12.28	6.782	10.75	~~9.78~~	145.4	12.13			0.01
1014	25.834	12.105	5.962	6.25	6.50	147.6	10.83			0.10
1020	25.834	12.57	5.402	6.00	7.05	145.5	9.98			0.20
1028	25.812	12.51	4.971	6.78	6.69	138.6	8.40			0.25
1035	25.799	12.48	4.593	7.04	6.74	126.8	6.52			0.30
1040	25.804	12.48	4.380	7.23	6.101	127.0	4.81			0.35
1045	25.795	12.47	4.271	7.16	6.78	121.7	5.06			0.40
1050	25.784	12.41	4.204	7.22	6.75	117.6	5.31			0.45
1055	25.788	12.46	4.094	7.36	6.73	115.9	2.04			0.50
1100	25.783	12.33	3.976	7.59	6.82	112.1	4/do			0.55
1105	25.770	12.33	3.910	7.54	6.85	110.5	4.24	↓	↓	0.60
1109	START	SAMP	LE COLLECTION							
1245	END SAMPLE	COLLECTION: 2			LIPE					
				2	L Dup					
	PUMP	OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2070123A

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition Good, minor pooling

NOTES AND OBSERVATIONS:

Total volume purged ~~0.75~~ 0.75 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-53-120
SAMPLE ID: 023

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 4/18/11
SAMPLER(S): MB, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

Well Vault Condition: GOOD - MISSING BOLTS
Well Diameter: 1 in

120 (DTB)	-	57.81 (DTW)	=	62.19 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 62.19 x 0.041 (Multiplier) = 2.55 (Well Volume) gal

2.55 x 1.5 = 3.82 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 4.50 gal

WATER QUALITY: DTW = 57.81 GW Elevation 12.38

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1116	0	—	PUMP ON						N/A	N/A	
1119	0.75	—	14.11	1.711	9.32	6.26	222.3	95.22			
1123	0.50	—	15.41	1.637	10.64	6.27	208.1	143.5			
1126	1.00	—	15.56	1.707	20.12	6.36	194.7	148.4			
1130	2.00	—	16.70	1.775	32.42	6.40	185.1	103.2			
1134	2.50	—	16.77	1.809	35.11	6.45	176.9	98.45			
1136	3.00	—	15.81	1.826	36.65	6.46	172.6	100.12			
1137	3.50	—	15.83	1.826	34.12	6.46	169.8	96.81			
1139	4.00	—	15.87	1.831	13.55	6.56	167.1	90.90			
1140	START SAMPLE COLLECTION										
1152	END SAMPLE COLLECTION				2L IPEC						
					2L DUP						
	PUMP	OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125Y

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 54 - 37

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 58° RAIN

PROJECT NO: 01.0017869.92
DATE: 4/12/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

29.0 to 42.0

SAMPLING PORT

37 6

TOTAL VOLUME PURGED: 2.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	PUMP	ON					6/4	20
1130	0.7	20.97	2.440	1.04	7.16	24.7	0.94		
1135	1.0	20.97	2.459	0.96	7.22	47.9	0.96		
1140	1.35	20.95	2.470	0.94	7.25	57.3	0.71		
1145	1.65	20.92	2.472	0.94	7.27	61.6	0.82		
1150	2.00	20.91	2.474	0.94	7.28	64.3	1.04	↓	↓
1152	START	SAMPLE	COLLECTION						
1208	END	SAMPLE	COLLECTION: 2L		IPEA				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2007 01254

NOTES AND OBSERVATIONS:

Well is in good shape, no problems

Total volume purged 2.15 gal

WELL ID: MW 54 - 58

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 58° RAIN

PROJECT NO: 01.0017869.92
DATE: 4/12/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

51.5 to 64.0

SAMPLING PORT

58 5

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1130	0	PUMP	ON					6/4	20
1130	0.25	20.76	2.037	0.83	6.53	-61.2	0.44	↓	↓
1135	0.50	20.74	2.034	0.50	6.62	-64.2	1.00		
1140	0.75	20.73	2.056	0.39	6.69	-61.3	1.27		
1145	1	20.70	2.083	0.35	6.73	-60.8	0.92		
1150	1.25	20.69	2.102	0.33	6.75	-57.8	0.87	↓	↓
1154	START	SAMPLE	COLLECTION						
1200	END	SAMPLE	COLLECTION:	1PEC					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Well is in good shape, no problems

Total volume purged 1.40 gal

WELL ID: MW SH-123

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 58° RAIN

PROJECT NO: 01.0017869.02
DATE: 4/12/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

116.0 to 126.0

SAMPLING PORT

123 4

TOTAL VOLUME PURGED: 1.10 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	PUMP	ON					6/4	20
1130	0.20	20.71	1.824	0.35	6.75	-66.6	1.22		
1135	0.40	20.76	1.825	0.26	6.52	-61.5	0.70		
1140	0.90	20.76	1.826	0.17	6.75	-58.0	0.48		
1145	0.60	20.75	1.827	0.15	6.96	-53.4	0.81		
1150	0.70	20.74	1.827	0.12	6.97	-50.6	1.03		
1155	0.80	20.72	1.828	0.12	6.96	-48.5	0.26		
1200	0.95	20.72	1.827	0.11	6.98	-47.1	0.36	↓	↓
1202	START	SAMPLE	COLLECTION						
1222	END	SAMPLE	COLLECTION; 2L		IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Well is in good shape, no problems.

Total volume purged 1.10 gal

WELL ID: MW 54 - 144

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 58° Rain

PROJECT NO: 01.0017869.92
DATE: 4/12/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

135.0 to 155.5

SAMPLING PORT

144 3

TOTAL VOLUME PURGED: 2.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0855	0	PUMP	ON					7.5/6.7	36
0900	0.2	20.99	1.869	2.02	6.15	53	1.01	↓	↓
0910	0.5	20.69	1.868	0.49	6.63	66.3	0.77		
0920	1	20.43	1.880	0.37	6.85	80.6	0.98		
0925	1.75	20.25	1.889	0.31	6.97	82.7	1.01		
0930	2	20.16	1.891	0.31	7.01	82.8	0.78		
0935	2.25	20.11	1.892	0.32	7.04	82.9	0.87		
0937	START	SAMPLE	COLLECT	ION					
0950	END OF SAMPLE	COLLECTION: 2L			IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125Y

NOTES AND OBSERVATIONS:

Well is in good shape, no problems.

Total volume purged 2.40 gal

WELL ID: MW 54 - 173

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 58° Rain

PROJECT NO: 01.0017869.92
DATE: 4/13/11
SAMPLER(S): SL

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) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0855	0	PUMP	ON					7.5/6.7	36
0900	0.2	21.07	2.321	0.95	5.48	-31.7	1.47	↓	↓
0910	0.5	20.76	2.318	0.27	6.08	-68.8	0.35		
0920	1	20.50	2.313	0.18	6.37	-78.0	0.59		
0925	1.4	20.31	2.312	0.14	6.52	-77.0	0.71		
0930	1.6	20.23	2.312	0.13	6.58	-79.5	0.32		
0935	1.8	20.16	2.312	0.13	6.62	-76.6	0.66		
0940	2.0	20.12	2.311	0.11	6.66	-77.1	0.44	↓	↓
0942	START	SAMPLE	COLLECTION						
0956	END	SAMPLE	COLLECTION @ 2L		IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20701254

NOTES AND OBSERVATIONS:

Well is in good shape, no problems. Pulled data logger for repair, could not connect even after replacing the batteries.

Total volume purged 2.15 gal

WELL ID: MW 54 - 190

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 59° Rain

PROJECT NO: 01.0017869.92
DATE: 4/13/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

185.0 to 203.6

SAMPLING PORT

190

TOTAL VOLUME PURGED: 2.20 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0855	0	PUMP	ON					7.5/6.7	36
0900	0.2	21.19	2033	0.79	5.81	-44.1	0.82		
0910	0.5	20.91	1.990	0.35	6.75	-34.4	0.95		
0920	1	20.62	1.985	0.16	7.04	-16.2	0.73		
0925	1.4	20.43	1.985	0.13	7.09	-0.1	0.80		
0930	1.5	20.36	1.984	0.13	7.11	6.8	0.88		
0935	1.75	20.29	1.985	0.13	7.12	13.0	0.54		
0940	1.95	20.23	1.985	0.12	7.13	17.8	0.52		
0945	2.05	20.20	1.985	0.11	7.14	21.0	0.38		
0947	START	SAMPLE	COLLECT	ION					
1001	END	SAMPLE	COLLECT	ION: 2L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070 1254

NOTES AND OBSERVATIONS:

Well is in good shape, no problems

Total volume purged 2.20 gal

WELL ID: MW-8-53
SAMPLE ID: 010

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY CLOUDY, 60's

PROJECT NO: 01.0017869.92
DATE: 4/27/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 38.26 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes (gal)
1014	38.25	PUMP	ON					7/15	30	0
1030	38.28	16.16	1.729	1.89	5.58	-89.1	2.41			0.01
1046	38.27	17.40	1.831	7.09	5.70	-94.8	3.94			0.05
1056	38.23	18.09	1.871	7.78	6.03	-101.8	3.72			0.08
1101	38.23	18.30	1.889	7.38	6.12	-103.4	2.98	6/7		0.09
1107	38.24	18.84	1.908	7.82	6.30	-101.9	2.70			0.10
1112	38.25	19.08	1.917	7.74	6.34	-97.6	2.64			0.12
1117	38.26	19.14	1.949	7.46	6.54	-93.5	2.76			0.15
1122	38.27	18.76	1.999	7.94	6.61	-93.1	2.16			0.18
1127	38.27	18.74	2.016	8.36	6.64	-91.1	2.14			0.20
1132	38.28	18.77	2.023	7.99	6.67	-89.5	2.10			0.25
1134	START	SAMPLE COLLECTION								
1208	END SAMPLE COLLECTION: 2 L IPEC									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070125 4

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition BAD - WELL VAULT U

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.

CRACKING AT HINGE. EVIDENCE OF SURFACE WATER INFILTRATION. BOTTOM OF VAULT SATURATED AND SURFACE TRASH AND DEBRIS FROM SURROUNDING AREA (i.e. cigarette butts)

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-56-53
SAMPLE ID: 018

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY CLOUDY, 60's

PROJECT NO: 01.0017869.92
DATE: 4/27/11
SAMPLER(S): CBSL

Measured Well Depth _____ (feet from top of casing)
Well Vault Condition SEE MW-56-53
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

83 (DTB) - 43.42 (DTW) = 39.58 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 39.58 x 0.041 (Multiplier) = 1.1622 (Well Volume) gal

1.1622 x 1.5 = 2.43 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 2.50 gal

WATER QUALITY: DTW = 43.42 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1217	0	—	PUMP	ON					
1222	0.01	—	17.31	0.280	6.04	7.18	-53.0	232.3	DIRTY, DEBRIS FROM SURFACE WATER.
1241	0.20	—	18.71	0.604	4.71	6.47	-40.6	222.8	
1243	0.50	—	16.05	1.192	4.39	6.45	-39.6	120.5	
1328	PUMP OFF.	YSI FLOW THROUGH CELL CLOGGED - SEE NOTES							
1330	PUMP	ON. YSI FLOW THROUGH CELL CLEARED OF DEBRIS							
1333	1.0	—	16.53	1.768	8.89	7.29	-25.2	25.31	
1337	1.5	—	16.54	1.783	4.73	7.09	-14.3	15.94	
1339	2.0	—	16.93	1.757	4.00	7.05	-17.1	12.07	
1341	2.4	—	16.81	1.744	3.76	7.04	-16.8	10.57	
1342	START SAMPLE COLLECTION								
1346	END SAMPLE COLLECTION; 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	2207012154

NOTES AND OBSERVATIONS: FLOW THROUGH CELL CLOGGED DUE TO SURFACE WATER DEBRIS INFILTRATION FROM PREVIOUS PRECIPITATION EVENTS. DEBRIS SURFACE DEBRIS INCLUDES CIGARETTE BUTTS AND ORGANIC MATTER

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

IPEC00267677

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-57-11
SAMPLE ID: DUP

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 60's

PROJECT NO: 01.0017869.92
DATE: 5/4/11
SAMPLER(S): CB, SL

Measured Well Depth ..... **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

11	-	3.67	=	7.33 ft
DTB		DTW		Well Column Height

Well Vault Condition FAIR - BOLTS STRIPPED
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 7.33 x 0.041 (Multiplier) = 0.30 (Well Volume) gal

WELL VAULT FLOODED

0.30 x 1.5 = 0.45 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 0.75 gal

WATER QUALITY: DTW = 3.67 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1002	0	3.67	PUMP ON	2.674	3.81	6.81			
1007	0.2	19.78 ~~2.674~~	~~3.81~~	~~6.81~~	~~187.9~~	187.9	0.161		
1011	0.35	~~19.9~~	19.91	2.605	3.46	7.07	214.3	0.105	
1014	0.50	—	19.96	2.6065	3.43	7.09	210.0	0.69	
1017	START SAMPLE COLLECTION								
1028	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	200704292

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-57-20
SAMPLE ID: 007

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 60's

PROJECT NO: 01.0017869.92
DATE: 5/4/11
SAMPLER(S): CB, SL

Measured Well Depth ..... **(feet from top of casing)**
Well Vault Condition SEE MW-57-11
WATER COLUMN HEIGHT (ft)
Well Diameter: 1 in

20 (DTB) - 3.68 (DTW) = 16.32 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 16.32 x 0.041 (Multiplier) = 0.67 (Well Volume) gal

0.67 x 1.5 = 1.0 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 1.15 gal

WATER QUALITY: DTW = 3.68 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1002	0	3.68	PUMP ON 19.95	2.997	4.94	6.97			
1007	0.2	~~19.95~~	~~2.799~~	~~4.94~~	~~0.59~~	~~1845~~	-184.5	8.97	
1011	0.35	—	20.09	2.731	4.24	6.85	-181.3	7.63	
1014	0.45	—	20.15	2.700	3.96	6.83	-177.5	7.21	
1017	0.60	—	20.13	2.683	3.92	6.82	-169.0	7.22	
1021	0.70	—	20.12	2.650	3.87	6.80	-172.7	6.78	
1024	0.80	—	20.16	2.632	3.91	6.80	-178.2	5.12	
1027	0.90	—	20.17	2.622	3.82	6.81	-184.3	5.14	
1029	1.00	—	20.17	2.615	3.85	6.81	-180	5.16	
1029	START SAMPLE COLLECTION								
1037	END SAMPLE COLLECTION: 2 VOA								
	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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-57-45
SAMPLE ID: 005

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 60's

PROJECT NO: 01.0017869.92
DATE: 5/4/11
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition SEE MW-57-11
WATER COLUMN HEIGHT (ft)
Well Diameter: 1 in

45 (DTB) - 4.5 (DTW) = 40.5 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 40.5 x 0.041 (Multiplier) = 1.66 (Well Volume) gal

1.66 x 1.5 = 2.49 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.65 gal

WATER QUALITY: DTW = 4.50 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1002	0	4.50	PUMP	ON					
1007	0.25	19.82	19.82	2.790	4.86	6.96	-183.2	0.94	
1011	0.45	—	19.94	2.756	2.90	10.98	7.4	0.86	
1014	0.55	—	19.97	2.754	2.70	7.02	2.5	1.90	
1020	0.75	—	20.02	2.755	2.53	7.09	-4.1	2.16	
1029	1.00	—	20.06	2.767	2.56	7.13	-8.9	0.161	
1032	1.25	—	20.13	2.767	2.52	7.14	-7.8	0.75	
1037	1.50	—	20.13	2.769	2.52	7.16	-11.4	0.56	
1042	1.75	—	20.15	2.766	2.53	7.17	-13.0	0.51	
1046	2.00	—	20.15	2.766	2.54	7.17	-13.9	0.50	
1049	2.25	—	20.15	2.766	2.51	7.18	-14.7	0.57	
1054	2.50	—	20.16	2.767	2.53	7.18	-15.9	0.62	
1055	START SAMPLE COLLECTION								
1103	END SAMPLE COLLECTION: 2 L IPEC								
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	10071042 93

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-58-26
SAMPLE ID: 012

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 50's

PROJECT NO: 01.0017869.92
DATE: 5/3/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 6.23 GW Elevation 8.000

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0907	18.925	PUMP ON							
0917	18.484	14.96	3.703	1.41	7.41	-131.2	2.59		0.05
0922	18.455	15.03	3.740	0.69	7.44	-135.0	1.92		0.14
0927	18.433	15.09	3.748	0.47	7.44	-136.8	0.61		0.24
0930	START	SAMPLE COLLECTION							
0958	END	"	"	" IPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	2
turbidity meter	20070393

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** fair, no lock

NOTES AND OBSERVATIONS: Total volume purged 0.39 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

Purge water seems a little soapy (bubbles forming when exiting tubing cap)

WELL ID: MW-58-60S
SAMPLE ID: 012

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy, 50's

PROJECT NO: 01.0017869.92
DATE: 5/3/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 6.68 GW Elevation 7.570

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0907	63.495	PUMP ON							
0917	63.344	15.29	1.111	1.03	7.05	-157.6	1.12		0.06
0922	63.349	15.34	1.119	0.62	7.16	-167.1	0.57		0.15
0927	63.334	15.41	1.121	0.60	7.23	-170	1.13		0.25
0933	63.354	15.58	1.122	0.46	7.30	-172.5	1.09		0.40
0938	63.341	15.66	1.119	0.37	7.30	-193.3	0.60		0.50
0943	63.312	15.77	1.107	0.32	7.35	-189.7	0.35		0.60
0945	START SAMPLE COLLECTION								
1011	END	"	"	"	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	3
turbidity meter	20070393

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, No Locks

NOTES AND OBSERVATIONS: Total volume purged 0.75 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 60-35

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 55°

PROJECT NO: 01.0017869.92
DATE: 4/15/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)
34.9 to 39.4

SAMPLING PORT
35 7

TOTAL VOLUME PURGED: 1.70 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0980	0	PUMP	ON					5/7	19
0953	0.1	12.39	4.004	2.66	6.39	161.2	1.00		
1002	0.28	12.75	4.100	1.77	6.56	139.4	0.99		
1007	0.45	12.66	4.132	1.41	6.70	124.3	0.94		
1018	0.71	12.96	4.066	1.30	6.91	110.6	0.74		
1023	0.80	13.07	3.980	2.23	6.97	103.6	1.04		
1026	0.88	13.11	3.885	2.76	7.02	105.6	0.80		
1034	1.00	13.24	3.756	3.40	7.05	104.5	1.04		
1039	1.10	13.37	3.680	3.78	7.09	103.8	1.15		
1044	1.20	13.63	3.562	4.15	7.07	103.9	1.16		
1049	1.30	13.74	3.499	4.44	7.10	103.3	1.26		
1055	1.40	13.83	3.390	4.80	6.97	103.0	0.04		
1100	1.48	13.96	3.280	4.91	6.95	103.6	0.57		
1105	1.55	14.10	3.213	5.08	6.95	104.0	0.53		
1106	START	SAMPLE	COLLECTION						
1136	END	"	"	1.24	IPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125A

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Very Poor

Lid broken off at hinge and partially sunken in. Needs to be replaced.

WELL ID: MW 60 - 52

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 55°

PROJECT NO: 01.0012869.92
DATE: 4/15/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

45.4 to 59.4

SAMPLING PORT

53

6

TOTAL VOLUME PURGED: 1.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0950	0	PUMP	ON					517	18
0957	0.1	12.73	3.735	1.38	5.95	-33.5	1.68		
1002	0.25	13.82	2.869	1.34	6.01	-22.4	0.77		
1007	0.425	12.81	2.811	1.36	6.16	-6.6	0.54		
1018	0.85	12.86	2.846	1.35	6.46	31.4	0.87		
1023	0.95	12.99	2.843	1.22	6.39	31.1	0.52		
1028	1.10	13.05	2.839	1.27	6.67	38.2	0.67		
1034	1.20	13.21	2.853	1.35	6.72	46.4	0.85		
1039	1.50	13.30	2.871	1.43	6.79	49.9	1.15		
1044	1.65	13.32	2.872	1.44	6.83	54.5	0.96		
1049	1.80	13.62	2.871	1.42	6.87	57.3	0.65		
1050	START	SAMPLE	COLLECTION						
1137	END	"	"	"	2L IPEC - ROUTINE				
	PUMP	OFF			2L IPEC - DUPLICATE				
					2L IPEC - SPIKE				
					2L IPEC - BLANK				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007 01 254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-60-S

WELL ID: MW 60 - 72

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 55°

PROJECT NO: 01.0017869.92
DATE: 4/15/11
SAMPLER(S): SC, DB

SAMPLING INTERVAL (depth in ft below top of casing)

66.4 to 76.2

SAMPLING PORT

72 4

TOTAL VOLUME PURGED: 3.00 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1230	0	[illegible]	PUMP	ON				6/5	35
1235	1.0	13.93	3.654	1.07	7.05	53.7	1.13		
1240	1.75	14.20	3.355	0.61	7.21	62.1	0.92		
1250	2.40	14.23	3.294	0.56	7.22	64.0	1.21		
1255	2.90	14.17	3.277	0.55	7.29	60.3	1.04		
1300	3.35	14.26	3.257	0.51	7.29	65.6	1.16		
1304	START	SAMPLE	COLLECTED				1		
1312	END	"	"		1.2L IPEC				
1349	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070123-54

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition see MW-60-35

WELL ID: MW 60 - 35

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy

PROJECT NO: 01.0017869.92
DATE: 4/15/14
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

124.9 to 141.4

SAMPLING PORT

135 3

TOTAL VOLUME PURGED: 2.30 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1220	0	PUMP	ON					6/5	35
1235	0.5	13.78	2.247	0.29	6.40	-124.6	2.34		
1245	1.0	14.10	2.361	0.18	6.59	-116.0	0.69		
1250	1.25	14.10	2.312	0.15	6.62	-103.7	0.44		
1255	1.75	14.06	2.350	0.13	6.64	-93.3	0.55		
1300	2.10	14.05	2.395	0.13	6.66	-90.5	0.69		
1310	2.15	14.09	2.402	0.10	6.69	-87.4	0.04		
1315	START	SAMPLE	COLLECTION						
1325	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-60-35

WELL ID: MW 60 - 154

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 55°

PROJECT NO: 01.0017899.92
DATE: 4/15/14
SAMPLER(S): SC, DB

SAMPLING INTERVAL (depth in ft below top of casing)

147.4 to 164.9

SAMPLING PORT

154 2

TOTAL VOLUME PURGED: 2.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1230	0	PUMP	ON					6/5	35
1235	0.5	13.98	2.047	0.44	6.96	-95.7	0.60		
1245	1.0	14.20	2.105	0.26	7.10	-43.0	0.54		
1250	1.3	14.26	2.132	0.22	7.13	-54.4	0.13		
1255	1.7	14.27	2.145	0.19	7.14	-59.6	0.13		
1300	1.90	14.28	2.148	0.16	7.15	-63.3	0.35		
1304	START	SAMPLE COLLECTION							
1319	END	"	"		PH IAE				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	90030 1254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition see MW60-33

WELL ID: MW 60 - 176

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy

PROJECT NO: 01.0017869.92
DATE: 4/15/14
SAMPLER(S): SG, CB

SAMPLING INTERVAL (depth in ft below top of casing)

1309 to 2004

SAMPLING PORT

176

TOTAL VOLUME PURGED: 1.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1229	0	PUMP	ON					6/5	35
1235	0.25	14.12	0.741	3.02	5.24	-110.6	1.82		
1245	0.60	14.46	0.744	0.90	5.33	-135.9	2.49		
1250	0.80	14.63	0.746	0.56	5.30	-150.7	0.84		
1255	1.00	14.77	0.748	0.42	5.66	-179.9	1.38		
1300	1.10	14.75	0.749	0.32	5.35	-206.6	0.58		
1310	1.25	14.76	0.750	0.26	6.02	-221.8	0.76		
1315	1.50	14.63	0.751	0.24	6.03	-224.6	1.00		
1320	1.75	14.69	0.750	0.22	6.10	-231.2	0.87		
1322	START SAMPLE COLLECTION								
	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20170125Y

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-60-35

WELL ID: MW-62-18
SAMPLE ID: 040917

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45, DRIZZLE

PROJECT NO: 01.0017869.92
DATE: 4/13/17
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.91 GW Elevation 2.90

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1054	6.119	Pump	ON						
1104	6.045	8.77	2.34	7.51	6.24	229.8	2.11		0.05
1110	6.014	8.80	2.334	[illegible]	6.50	219.4	1.32		0.20
1115	5.983	8.82	2.348	7.52	6.67	210.6	1.15		0.30
1120	5.946	8.85	2.341	7.63	6.79	205.0	1.01		0.45
1125	5.902	8.91	2.355	7.79	6.91	202.0	0.92		0.60
1130	5.389	8.91	3.360	7.83	6.96	200.0	0.63		0.75
1135	5.342	8.91	2.360	7.86	6.99	197.2	0.51		0.90
1136	START	SAMPLE	COLLECTION						
1143	END SAMPLE	COLLECTION			2L 36				
1210	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	3
turbidity meter	20070293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

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.

WELL ID: MW-62-37
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45, DRIZZLE

PROJECT NO: 01.0017869.92
DATE: 4/13/11
SAMPLER(S): GS, SC
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.24 GW Elevation 2.160

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1050	12.151	PUMP ON							
1104	12.009	10.11	1.527	3.33	4.94	327.8	0.47		0.01
1110	11.973	10.53	1.548	4.58	4.98	179.5	0.23		0.20
1115	11.942	10.96	1.539	1.34	5.09	149.1	0.00		0.30
1120	11.912	11.31	1.535	1.05	5.19	124.1	0.00		0.40
1125	11.890	11.47	1.534	1.09	5.29	87.3	0.00		0.50
1130	11.891	11.40	1.538	0.99	5.39	31.3	0.00		0.60
1135	11.886	11.33	1.536	0.87	5.46	-16.5	0.00		0.70
1140	11.880	11.24	1.535	0.76	5.56	-51.3	0.00		0.80
1145	11.879	11.22	1.535	0.76	5.60	-64.5	0.00		0.90
1150	11.872	11.15	1.535	0.77	5.66	-87.1	0.00		1.05
1151	START	SAMP	2S CONNECTION						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	1
turbidity meter	2 2870 4243

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.2 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: 0116

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45° Drizzle

PROJECT NO: 01.0017869.92
DATE: 4/13/11
SAMPLER(S): SC, DR

SAMPLING INTERVAL (depth in ft below top of casing)

49.6 to 54.1

SAMPLING PORT

53 6

TOTAL VOLUME PURGED: 0.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mV/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1009	0	PUMP	ON					5/6	25
1017	0.1	10.39	1.404	2.63	6.47	-41.4	1.03		
1022	0.2	10.33	1.403	1.93	6.54	-42.3	1.35		
1027	0.3	10.69	1.402	1.19	6.66	-41.2	1.73		
1032	0.4	10.43	1.402	0.85	6.73	-40.5	0.73		
1037	0.45	10.23	1.401	0.70	6.79	-39.4			
1042	0.50	10.19	1.400	0.64	6.82	-39.1			
1043	START	SAMPLE	COLLECTED						
1132	END	"	"	" TO IPEC					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2009 01254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 62-71

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45° Drizzle

PROJECT NO: 01.0017869.92
DATE: 4/13/14
SAMPLER(S): SyCD

SAMPLING INTERVAL (depth in ft below top of casing)

61.1 to 82.16

SAMPLING PORT

71 5

TOTAL VOLUME PURGED: _____ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1006	0	PUMP	ON					5/6	25
1017	0.20	10.95	1.373	1.28	5.72	-68.7	0.10		
1022	0.35	11.37	1.363	0.89	5.88	-87.3	0.14		
1027	0.50	11.76	1.360	0.67	6.05	-84.4	0.27		
1032	0.80	11.81	1.360	0.60	6.15	-84.2	0.00		
1037	1.00	12.14	1.356	0.54	6.24	-84.4			
1042	1.15	12.30	1.354	0.62	6.31	-86.7			
1049	1.40	12.32	1.354	0.51	6.36	-79.2			
1054	1.60	12.51	1.352	0.47	6.43	-70.5			
1059	1.75	12.69	1.350	0.48	6.47	-63.3			
1100	START	SAMPLE	COLLECTED						
1115	END	"	"		TPER				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20740/254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 62 - 92

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45° Drizzle

PROJECT NO: 01.0017869.92
DATE: 4/13/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

88.6 to 99.1

SAMPLING PORT

92 4

TOTAL VOLUME PURGED: 1.10 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1005	0	PUMP	ON					5/6	25
1017	0.1	10.40	1.353	2.70	6.47	-32.7	0.25		
1022	0.2	10.74	1.347	1.35	6.83	-25.5	0.00		
1027	0.4	10.15	1.346	0.77	7.10	-14.0	0.00		
1032	0.6	11.34	1.340	0.52	7.16	-2.8	0.00		
1037	0.75	11.53	1.339	0.41	7.22	-0.5			
1042	0.95	11.79	1.351	0.32	7.23	-0.1			
1045	START	SAMPLE	COLLECTION						
1103	END	"	"	"	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070234

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW 62 - 138

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45° Drizzle

PROJECT NO: 01.0017869.92
DATE: 4/13/11
SAMPLER(S): SG, JB

SAMPLING INTERVAL (depth in ft below top of casing)

126.1 to 143.6

SAMPLING PORT

138 3

TOTAL VOLUME PURGED: 1.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1336	0	PUMP	ON					6/4	30
1342	0.01	10.67	1.437	4.65	6.75	-60.7	to 400		
1350	0.20	11.38	1.465	1.03	6.92	-106.4	0.20		
1355	0.36	11.68	1.468	0.67	6.99	-88.2	0.14		
1400	0.55	11.82	1.471	0.48	7.05	-66.4	0.07		
1405	0.70	11.94	1.472	0.40	7.07	-49.3	0.00		
1410	0.82	12.02	1.472	0.37	7.09	-39.9	0.00		
1415	1.05	12.20	1.470	0.34	7.11	-33.1	0.00		
1420	1.20	12.23	1.470	0.32	7.13	-29.7	0.00		
1422	START SAMPLE COLLECTION								
1439	END SAMPLE COLLECTION. 2 L PER.								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125Y

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 62 - 182

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45° Anngle

PROJECT NO: 01.0017869.92
DATE: 4/13/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

177.6 to 198.7

SAMPLING PORT

182

TOTAL VOLUME PURGED: 1.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1336	0	PUMP	ON					6/4	30
1842	0.01	10.46	1.247	5.23	6.18	-85.4	0.21		
1350	0.15	10.86	1.272	2.05	6.29	-131.4	0.00		
1355	0.28	11.17	1.274	1.25	6.39	-142.3	0.00		
1400	0.40	11.36	1.276	0.96	6.46	-135.8	0.00		
1405	0.52	11.51	1.277	0.65	6.50	-126.5	0.00		
1410	0.66	11.65	1.278	0.53	6.53	-118.3	0.00		
1415	0.78	11.76	1.279	0.48	6.56	-111.5	0.00		
1420	0.85	11.82	1.280	0.42	6.57	-108.7	0.00		
1427	START SAMPLE COLLECTION								
1444	END SAMPLE COLLECTION 2L JAR								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2011012554

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW-63-16
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 45°

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.45 GW Elevation 0.607

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes Gal
0905	4.350	PUMP	ON						0
0915	4.895	9.73	2.629	3.91	6.56	-28.4	2.14		0.03
0920	4.919	9.80	2.642	2.14	6.65	-53.5	0.71		0.09
0925	4.950	9.86	2.617	1.21	6.72	-61.9	0.37		0.19
0930	4.996	9.84	2.58	0.99	6.76	-67.4	0.28		0.28
0935	5.061	9.88	2.48	0.95	6.79	-69.5	0.54		0.38
0940	5.107	9.88	2.181	0.92	6.83	-70.8	0.46		0.50
0945	5.86	9.88	2.083	0.85	6.85	-71.4	0.47		0.58
0950	5.241	9.91	1.977	0.75	6.85	-72.3	0.38		0.68
0955	5.286	9.82	1.939	0.74	6.88	-75.3	0.71		0.72
1000	5.339	9.81	1.894	0.68	6.89	-76.3	0.54		0.80
1005	START	SAMPLE COLLECTION							
1025	END	"	"		6.24	180			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	2
turbidity meter	9007043 93

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

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-63-37
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 45°

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.33 GW Elevation 0.829

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0905	12.540	PUMP	ON						0
0915	12.548	10.64	1.356	3.32	6.39	2.4	1.49		0.03
0930	12.590	10.76	1.347	3.08	6.38	-40.0	0.99		0.09
0935	12.597	10.81	1.340	2.94	6.46	-63.9	0.77		0.19
0940	12.630	10.8	1.336	2.00	6.53	-80.0	0.88		0.28
0945	12.669	11.02	1.331	1.61	6.59	-93.6	0.32		0.38
0940	12.734	11.03	1.331	1.12	6.63	-95.1	0.39		0.50
0945	12.765	10.97	1.330	0.86	6.66	-97.4	0.62		0.51
0946	START	SAMPLE COLLECTION							
1025	END	"	"		2L 3PEa				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	2
turbidity meter	20070393

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.72 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 - 50

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 45°, WINDY

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): CR, SL

SAMPLING INTERVAL (depth in ft below top of casing)

41.5 to 58.0

SAMPLING PORT

50 7

TOTAL VOLUME PURGED: 1.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1025	0	PUMP	ON					7/7.4	20
1032	0.05	11.93	1.089	5.04	5.68	78.2	—		
1040	0.16	12.67	1.069	2.26	6.13	-52.9	1.55		
1045	0.25	12.84	1.070	1.55	6.34	-55.1	1.04		
1050	0.40	12.91	1.073	1.56	5.29	-53.0	0.86		
1055	0.75	13.03	1.080	1.40	6.38	-54.3	0.89		
1100	1.00	13.11	1.087	1.30	6.42	-52.7	0.92		
1105	1.25	13.11	1.092	1.29	6.40	-52.4	0.85		
1110	1.50	13.10	1.093	1.29	6.39	-53.7	0.81		
1111	START SAMPLE COLLECTION								
1125	END SAMPLE COLLECTION. 2L 3P 2G								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070154

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 63 - 93

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 45°, WINDY

PROJECT NO: 01.0017869.92
DATE: 9/19/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

81.5 to 100.5

SAMPLING PORT

93 5

TOTAL VOLUME PURGED: 0.80 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1025	0	PUMP	ON					7TH	70
1034	0.01	11.20	0.825	1.58	6.73	-88.5			
1040	0.10	11.60	0.874	0.87	6.90	-88.2	1.49		
1045	0.25	11.77	0.987	0.18	7.02	-93.7	1.53		
1050	0.35	11.85	1.043	0.15	7.10	-87.5	1.09		
1054	0.45	12.00	1.056	0.13	7.16	-84.7	0.90		
1100	0.60	12.10	1.070	0.11	7.21	-81.5	0.85		
1105	0.70	12.08	1.072	0.10	7.23	-79.2	0.79		
1105	START	SAMPLE COLLECTION							
1127	END SAMPLE COLLECTION; LEAVE IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	2007012554

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 63 - 112

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 45°, WINDY

PROJECT NO: 01.0017569.92
DATE: 4/19/11
SAMPLER(S): ZR, SL

SAMPLING INTERVAL (depth in ft below top of casing)

106.5 to 112.0

SAMPLING PORT

112 4

TOTAL VOLUME PURGED: 0.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1025	0	PUMP	ON					7/7.4	20
1032	0.01	11.24	1.240	3.12	7.07	-65.2	—	↓	↓
1040	0.15	11.85	1.192	0.85	7.24	-88.5	2.05		
1045	0.30	11.91	1.197	0.39	7.27	-95.2	1.77		
1058	0.40	12.08	1.206	0.44	7.28	-97.7	1.31		
1055	0.50	12.17	1.214	0.36	7.29	-90.6	1.39		
1100	0.60	12.26	1.218	0.31	7.31	-90.7	1.29	↓	↓
1102	START	STAMP	LE COLLECTION						
1125	END SAMPLE	COLLECTION			IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070125Y

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 63 - 121

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 45°, WINDY

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): KR, SL

SAMPLING INTERVAL (depth in ft below top of casing)

18 to 127.5

SAMPLING PORT

121 3

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	PUMP	ON					8/8.2	35
0910	0.01	11.54	1.200	2.23	6.58	-151.7	0.99	↓	↓
0915	0.10	12.34	1.292	0.96	5.80	-116.2	1.12		
0920	0.30	12.43	1.304	0.85	5.93	-101.1	1.00		
0925	0.75	12.58	1.313	0.89	5.95	-90.9	0.70		
0930	1.00	12.76	1.315	0.78	5.98	-91.4	0.90		
0935	1.25	12.86	1.318	0.77	6.01	-86.6	0.63		
0940	1.50	12.93	1.324	0.76	6.02	-82.5	0.82	↓	↓
0941	START	SAMPLE COLLECTION							
0951	END SAMPLE COLLECTION / 2L TOC								
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 63 - 163

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST ; 45° WIND 4

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

150.5 to 165

SAMPLING PORT

163 2

TOTAL VOLUME PURGED: 1.00 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	PUMP	ON					8 & 2	35
0906	0.05	11.11	1.055	1.41e	6.63	-95.1	2.82		
0915	0.35	11.83	1.008	[illegible]	[illegible]	-103.0	1.52		
0920	0.20	12.01	1.009	0.15	6.94	-105.7	0.[illegible]		
0925	0.60	12.20	1.014	0.12	6.97	-107.8	1.04		
0930	0.79	12.35	1.018	0.10	6.99	-108.4	0.82		
0933	START	SAMPLE	COLLECTION						
0949	END SAMPLE	COLLECTION	2L I	PER					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125Y

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 63-174

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 49° WINDY

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

168.0 to NA

SAMPLING PORT

174

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	PUMP	ON					8/8.2	35
0906	0.21	11.26	1.001	3.32	7.03	65.6	6.33		
0911	0.40	12.11	0.943	0.56	7.21	-55.6	2.03		
0920	0.55	12.27	0.941	0.48	7.23	-52.7	1.75		
0925	0.75	12.47	0.942	0.40	7.24	-49.3	1.28		
0930	0.90	12.63	0.950	0.37	7.21	-48.1	1.02		
0935	1.00	12.78	0.956	0.34	7.22	-49.6	0.98	↓	↓
0937	START	SAMPLE	COLLECTION						
0952	END SAMPLE COLLECTION			AT 1.2 L/Min					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
Turbidity meter	2W701654

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW-6-21
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 60°

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): SC, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.61 GW Elevation 2.797

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1038	9.68	PUMP	ON						GW
1045	9.591	12.61	1.341	2.41	5.74	-44.9			
1050	STOPPED	PUMP	FLOW METER	BLOCKED					
1056	STARTED	PUMP							
1100	9.509	12.37	1.260	2.62	5.89	-39.0	31.32		0.17
1109	9.474	13.44	1.191	1.96	5.91	-43.3			0.30
1110	9.454	13.60	1.180	1.93	5.96	-41.6			0.23
1117	9.395	14.63	1.152	1.87	6.04	-49.1	53.60		0.30
1122	9.371	13.87	1.153	2.18	6.38	-54.4	39.50		0.33
1127	9.321	13.40	1.131	1.88	6.41	-59.9	11.49		0.40
1132	9.305	13.58	1.139	1.82	6.42	-59.4	12.03		0.44
1137	9.266	13.89	1.125	1.71	6.45	-56.3	23.18		0.50
1142	9.232	14.26	1.124	1.65	6.47	-50.9	9.86		0.54
1147	9.200	14.79	1.122	1.55	6.53	-48.2	12.30		0.58
1152	9.163	15.16	1.123	1.38	6.57	-46.7	12.50		0.62
1202	9.091	16.11	1.124	1.55	6.69	-55.2	13.70		0.70
1207	9.057	15.41	1.140	1.59	6.76	-57.9	10.98		0.75
1212	9.026	15.09	1.134	1.43	6.79	-55.6	9.64		0.80
1213	START	SAMPLE COLLECTION							
1345	END	"	"		7.26	IPE			
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	2
turbidity meter	2007 04297

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Dry

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-16-30
SAMPLE ID: 016

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 60°

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.66 GW Elevation 2.704

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1031	13.505	PUMP ON							
1045	13.312	13.62	2.609	3.13	6.62	-24.4			
1050	STOPPED	PUMP	FLOW METER	CLOGGED					
1056	START	PUMP							
1100	13.288	13.70	3.092	0.93	6.93	-51.1	2.80		0.24
1105	13.240	13.89	3.100	0.74	6.97	-54.5			0.30
1110	13.205	13.88	3.112	0.71	7.00	-57.9			
1117	13.195	14.48	3.106	0.65	7.06	-61.1	1.79		0.45
1122	13.163	14.31	3.116	0.69	7.06	-61.1	1.51		0.50
1127	13.130	14.52	3.102	0.68	7.09	-61.9	1.05		0.58
1132	13.119	14.67	3.101	0.69	7.10	-62.6	1.15		0.60
1137	13.072	14.56	3.110	0.65	7.11	-62.2	0.93		0.68
1142	13.045	14.72	3.095	0.57	7.12	-62.5	0.44		0.73
1147	13.018	14.92	3.098	0.53	7.14	-63.0	1.21		0.78
1152	12.989	15.05	3.103	0.52	7.15	-63.6	1.27		0.93
1153	START	SAMPLE COLLECTION							
1253	END	"	"		2L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	4
turbidity meter	20020293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

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 67 - 39

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): CL, SL

SAMPLING INTERVAL (depth in ft below top of casing)

39.5 to 54.3

SAMPLING PORT

39 7

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1232	0	PUMP	ON					5/8	20
1236	0.01	18.49	2.989	3.25	6.40	-30.2			
1250	0.75	18.61	2.800	0.35	7.42	-45.9	1.00		
1255	1.00	18.69	2.788	0.35	7.45	-48.8	1.64		
1300	1.25	18.71	2.777	0.32	7.46	-50.5	1.74		
1305	1.45	18.62	2.779	0.31	7.47	-51.7	0.89		
1310	1.60	18.67	2.775	0.30	7.47	-54.7	0.62		
1313	START	SAMPLE COLLECTION							
1325	END SAMPLE COLLECTION: 2L IPEC								
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	2007012804

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR

MISSING MANIFOLD

WELL ID: MW 67 - 105

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 52's

PROJECT NO: 01.0013869.92
DATE: 4/14/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

90.3 to 110.8

SAMPLING PORT

105 6

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1223	0	PUMP ON						8/8	20
1235	0.01	18.58	1.594	2.17	6.30	-79.2	—		
1250	0.50	18.85	1.527	0.40	6.43	-125.7	3.04		
1255	0.60	18.87	1.562	0.26	6.48	-110.7	2.34		
1300	0.75	18.79	1.563	0.18	6.52	-120.6	1.90		
1305	0.85	18.79	1.570	0.14	6.536	-143.1	1.67		
1310	1.00	18.72	1.575	0.12	6.560	-126.5	1.45		
1315	1.10	18.66	1.574	0.11	6.561	-126.7	1.25		
1320	1.25	18.75	1.573	0.10	6.564	-107.2	1.35	↓	↓
1325	START SAMPLE COLLECTION								
1343	END SAMPLE COLLECTION: 2L DPE								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125?4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR
MISSING MANIFOLD

WELL ID: MW 67 - 17S

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50's

PROJECT NO: 01.0017859.92
DATE: 4/14/11
SAMPLER(S): CR, SL

SAMPLING INTERVAL (depth in ft below top of casing)

164.9 to 169.3

SAMPLING PORT

17 3 5

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1233	0	Pump	ON					8/8	20
1240	0.01	18.07	1.115	4.51	6.51	-52.0	—		
1250	0.50	18.43	1.166	0.53	6.36	-132.7	4.04		
1255	0.60	18.52	1.214	0.38	6.45	-197.6	3.09		
1300	0.68	18.55	1.215	0.34	6.48	-221.7	2.12		
1305	0.75	18.64	1.209	0.31	6.51	-229.0	2.89		
1310	0.85	18.55	1.199	0.27	6.51	-236.2	2.60		
1315	0.95	18.49	1.183	0.26	6.52	-242.1	2.66		
1320	1.00	18.44	1.170	0.23	6.66	-250.1	2.31		
1325	1.05	18.62	1.161	0.20	6.56	-255.3	2.19		
1330	1.15	18.79	1.153	0.19	6.58	-245.1	2.02		
1335	1.20	18.72	1.130	0.19	6.59	-260.2	1.89		
1340	1.25	18.79	1.127	0.21	6.62	-263.7	1.75		
1345	1.30	18.75	1.115	0.18	6.62	-269.7	1.64	↓	↓
1349	START	SAMPLE COLLECTION							
1409	END SAMPLE COLLECTION - 2 x 40's								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2007 08234

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition PAR

MISSING MANIFOLD

WELL ID: MW 67 - 219

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

209 to 229.5

SAMPLING PORT

219 4

TOTAL VOLUME PURGED: 2.20 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1000	0	Pump	DN					valve	50
1005	0.15	14.91	1.157	0.24	6.42	-210.2	0.78		
1015	0.75	15.72	1.134	0.07	6.86	-220.5	0.37		
1022	0.95	15.83	1.155	0.05	6.93	-219.6	0.20		
1025	1.25	15.74	1.157	0.04	6.96	-220.6	0.12		
1030	1.45	15.74	1.157	0.05	6.98	-220.7	0.53		
1035	2.00	15.72	1.155	0.06	7.00	-221.5	0.39		
1038	START SAMPLE COLLECTION								
1049	END SAMPLE COLLECTION: 2 x FAIC								
	PUMP @ 17'								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	2007012534

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR
MISSING PADLOCK

WELL ID: MW 67 - 276

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

29.8 to 39.3

SAMPLING PORT

276 3

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1000	0	PUMP	DRY	1.20				10/10	50
1005	0.10	14.57	0.956	0.28	6.85	-63.2	1.10		
1015	0.35	15.01	0.944	0.39	7.06	-82.5	4.97		
1020	0.50	15.73	0.946	0.29	7.12	-45.8	0.94		
1025	0.75	15.63	0.946	0.23	7.14	-35.5	0.61		
1030	1.00	15.66	0.944	0.20	7.16	-30.4	0.78		
1035	1.25	15.66	0.942	0.18	7.16	-34.3	0.65		
1039	START	SAMPLE	COLLECTION						
1053	END SAMPLE COLLECTION 3L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	2007U2534

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR
MISSING MANHOLE

WELL ID: MW 67-323

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): CA, SL

SAMPLING INTERVAL (depth in ft below top of casing)

317.8 to 328.3

SAMPLING PORT

323 2

TOTAL VOLUME PURGED: 2.20 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1000	0	PUMP	ON					6/6	50
1005	0.01	13.67	0.843	0.54	5.53	13.7	2.25		
1010	0.15	14.93	0.790	1.04	6.00	62.4	1.70		
1015	0.25	15.23	0.788	0.60	6.20	81.7	3.32		
1020	0.50	15.27	0.794	0.43	6.28	-102.7	3.64		
1025	0.75	15.25	0.801	0.31	6.36	-131.0	1.60		
1030	1.05	15.24	0.802	0.22	6.41	-160.9	1.12		
1040	1.25	15.34	0.803	0.12	6.49	-190.0	0.98		
1045	1.50	15.42	0.802	0.11	6.51	-164.5	0.65		
1100	1.75	15.44	0.802	0.11	6.52	-163.7	0.54		
1105	1.95	15.36	0.807	0.04	6.55	-210.1	1.22		
1110	1.98	15.38	0.811	0.08	6.56	-216.9	1.07		
1115	2.05	16.86	0.809	0.06	6.59	-220.1	0.95		
1117	START SAMPLE COLLECTION								
1133	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007012534

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR
MISSING MANIFOLD

WELL ID: MW 62 - 340

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50's

PROJECT NO: 01.0017569.92
DATE: 4/14/11
SAMPLER(S): CH, SL

SAMPLING INTERVAL (depth in ft below top of casing)
335.3 to 347.9

SAMPLING PORT
340 1

TOTAL VOLUME PURGED: 1.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1000	0	PUMP	ON					6/6	50
1005	0.01	13.73	0.580	4.13	6.46	-72.3	1.69		
1015	0.10	15.03	0.756	0.40	6.60	-77.4	1.94		
1020	0.25	15:30	0.750	0.46	6.77	-133.5	0.54		
1025	0.50	15:38	0.748	0.38	6.80	-138.1	0.43		
1030	0.75	15.46	0.748	0.21	6.90	-149.1	0.25		
1035	1.00	15.27	0.749	0.18	6.94	-151.0	0.17		
1040	1.25	15.24	0.754	0.15	6.97	-146.8	0.12		
1045	1.50	16.33	0.754	0.13	6.97	-149.4	0.06		
1100	1.75	15.32	0.754	0.23	6.98	-146.2	0.00		
1102	START	SAMPLE	COLLECTION						
1110	END SAMPLE COLLECTION @ 2 LPM								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2W70125S4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR
MISSING MANIFOLD

WELL ID: MW-107
SAMPLE ID: 010

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 50's

PROJECT NO: 01.0017869.92
DATE: 5/2/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 31.98 GW Elevation 120.777

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
0824	-6.704	PUMP ON						6/8.4	22	0
0830	-6.704	10.86	4.006	0.25	6.11	118.9	2.09			0.25
0835	-6.704	10.78	3.877	0.25	6.13	109.6	0.77			0.60
0840	-6.704	10.72	3.571	0.26	6.23	105.8	1.15			0.90
0845	-6.704	10.70	3.593	0.28	6.18	103.8	0.26			1.20
0850	-6.704	10.71	3.681	0.30	6.18	102.0	0.91			1.50
0855	-6.704	10.73	3.764	0.23	6.16	100.4	0.63			1.75
0900	-6.704	10.75	3.878	0.25	6.20	99.1	0.33			2.00
0905	-6.704	10.76	3.950	0.24	6.14	98.2	0.22			2.25
0910	-6.705	10.77	3.989	0.21	6.15	97.2	0.11			2.50
0915	-6.705	10.78	4.016	0.19	6.19	96.6	0.36			2.80
0916	START	SAMPLE COLLECTION								
0925	END	"	"	"	"	IPEC				
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070B1254

Measured Well Depth _____ (feet from top of casing) **Well Vault Condition** Standing in Well Vault.

NOTES AND OBSERVATIONS: GW elevation negative even after transducer reset. Total volume purged 2.95 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-05S
SAMPLE ID: 016

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain 50's

PROJECT NO: 01.0017869.92
DATE: 5/4/14
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 1.44 GW Elevation 18.633

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1213	12.739	PUMP ON							0
1223	12.577	17.66	2.245	4.86	malfunction	81.1			0.08
1228	12.443	17.70	2.303	4.93		97.2	3.86		0.15
1233	12.348	17.71	2.360	5.02		134.8	2.49		0.21
1238	12.332	17.74	2.379	5.06		163.5	1.96		0.32
1243	12.296	17.76	2.384	5.10		188.9	2.29		0.42
1248	12.268	17.78	2.385	5.09		215.9	0.76		0.52
1253	12.231	17.78	2.385	5.17		243.6	1.00		0.62
1258	12.204	17.78	2.384	5.11		211.7	0.94		0.72
1258	START SAMPLE COLLECTION								
1324	END SAMPLE COLLECTION 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	2
turbidity meter	20704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good (Locked)

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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-4D
SAMPLE ID: DUP

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 60's

PROJECT NO: 01.0017869.92
DATE: 4/25/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition Fair, bolts stripped
WATER COLUMN HEIGHT (ft)
Well Diameter: 4 in

27.25	−	9.89	=	17.36 ft
DTB		DTW		Well Column Height

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 17.36 x 0.653 (Multiplier) = 11.336 (Well Volume) gal

11.336 x 1.5 = 17.0 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 8.25 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1238	0	51.510	PUMP ON						
1245	0.5	50.846	20.99	1.646	4.21	7.65	119.4	1.58	
1305	3.0	46.901	22.05	1.635	3.67	7.87	101.4	1.34	
1318	4.75	42.958	22.20	1.635	3.69	7.88	87.0	1.36	
1322	6.00	40.959	22.27	1.635	3.82	7.86	77.9	1.93	
1340	7.50	35.947	22.52	1.635	3.84	7.85	68.6	1.44	
1344	7.75	35.248	22.68	1.635	3.55	7.86	65.3	1.15	
1348	8.00	34.675	22.82	1.632	3.65	7.85	62.8		
1349	8.10	34.672	PUMP OFF - Well dry; Will let well recharge.						
1424		START SAMPLE COLLECTION							
1450		END	"	"	"	"	"	"	
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125V

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-45
SAMPLE ID: DUP

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 60's

PROJECT NO: 01.0017869.92
DATE: 4/25/11
SAMPLER(S): SL, AB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes (gal)
1238	9.21	PUMP	ON						
1246	9.24	19.29	0.951	1.30	7.40	160.4	1.12		0.03
1305	9.25	19.50	0.906	0.76	7.04	99.2	1.23		0.33
1310	9.25	19.65	0.905	0.47	6.93	71.3	0.87		0.43
1315	9.25	19.52	0.905	0.43	6.85	56.7	0.74		0.45
1320	9.25	20.74	0.903	0.43	6.89	42.6	1.04		0.80
1325	9.25	21.18	0.900	0.44	6.88	34.7	0.69		0.88
1330	9.26	21.39	0.898	0.43	6.85	24.6	0.74		1.00
1335	9.26	21.46	0.895	0.41	6.81	15.4	0.58		1.10
1340	9.26	21.42	0.895	0.42	6.78	9.3	0.75		1.25
1345	9.26	21.40	0.894	0.46	6.75	2.6	0.83		1.38
1350	9.26	21.38	0.893	0.44	6.71	-11.8	0.59		1.55
1355	9.26	21.53	0.892	0.45	6.71	-12.1	0.45		1.68
1400	9.26	21.48	0.892	0.46	6.70	-19.4	0.43		1.75
1400	START	SAMPLE	COLLECTION						
1413	END SAMPLE	COLLECTION	2L	IPER					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	2
turbidity meter	20701354

Measured Well Depth ..... **(feet from top of casing)** **Well Vault Condition** Jan, bolts stripped

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-1
SAMPLE ID: 092

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 50's

PROJECT NO: 01.0017869.92
DATE: 5/6/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 3.91 GW Elevation 4.603

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0920	3.072	PUMP	ON						0
0935	3.059	16.09	1.007	2.58	7.42	186.0	0.45		0.13
0940	3.058	16.55	0.999	2.10	7.48	173.1	0.04		0.28
0945	3.052	16.79	0.995	1.66	7.50	166.9	0.06		0.46
0950	3.052	16.89	0.993	1.43	7.51	163.4	0.35		0.60
0955	3.048	16.97	0.984	1.12	7.52	163.2	0.05		0.73
1000	3.046	17.12	0.982	0.99	7.53	165.3	0.05		0.84
1005	3.045	17.21	0.982	0.97	7.53	165.6	0.06		0.95
1010	START	SAMPLE COLLECTION							
1023	END	"	"		at IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	3
turbidity meter	20704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.10 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-12
SAMPLE ID: 036 037

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 50's

PROJECT NO: 01.0017869.92
DATE: 5/6/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 6.61 ~~GW Elevation~~ ACTUAL DEPTH = 28.66

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1038	2.854	PUMP ON							0
1047	2.811	21.21	1.395	3.06	7.33	-61.0	3.94		0.01
1052	2.810	21.30	1.393	2.49	7.60	-88.4	11.38		0.15
1057	2.815	21.66	1.384	1.94	7.72	-123.8	2.15		0.32
1102	2.819	21.77	1.389	1.77	7.77	-120.7	2.30		0.48
1107	2.818	22.01	1.384	1.68	7.82	-125.6	2.17		0.62
1112	2.817	22.14	1.383	1.06	7.85	-119.5	0.78		0.85
1117	2.813	22.22	1.381	1.04	7.86	-119.6	0.73		0.95
1122	2.810	22.27	1.384	0.98	7.87	-120.8	0.68		1.20
1124	START	SAMPLE COLLECTION							
1141	END SAMPLE COLLECTION 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	2
turbidity meter	20704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.35 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

APPENDIX D: Q3-2011 SAMPLING DATA SHEETS

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: I-2
SAMPLE ID: 003

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80s

PROJECT NO: 01.0017869.92
DATE: 8/12/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition Bad
Well Diameter: 2 in

WATER COLUMN HEIGHT (ft)

40.13 (DTB) - 27.97 (DTW) = 12.16 **Well Column Height** ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 12.16 x 0.163 **Multiplier** = 1.982 **Well Volume** gal

1.982 x 1.5 = 2.97 **Designed Purge Volume** gal

TOTAL VOLUME PURGED: gal

WATER QUALITY: DTW = 27.97 GW Elevation = 54.16 ACTUAL DEPTH = 44.812

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1322	0	44.812	PUMP	ON					
1328	0.02	44.893	19.14	0.823	MALFUNC.	7.12	71.2	1.76	
1338	0.34	43.992	18.10	0.813		7.34	62.2	0.81	
1343	0.50	43.992	18.04	0.812		7.14	53.0	0.47	
1353	0.85	43.992	17.92	0.814		7.05	59.4	0.64	
1403	1.18	43.994	18.07	0.814		6.95	73.9	1.07	
1413	1.50	44.000	17.90	0.815		6.95	80.5	1.68	
1423	1.84	44.000	17.82	0.819		6.94	59.3	1.50	
1433	2.18	44.000	17.92	0.819		7.04	41.4	1.58	
1443	2.39	44.006	17.86	0.819		7.09	32.6	1.04	
1448	2.77	44.000	17.78	0.821		7.15	21.7	0.69	
1453	3.00	44.000	17.65	0.823		7.16	13.3	0.73	
1459	START	SAMPLE	COLLECTION						
1513	END	"	"	"	CAP				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	AG
turbidity meter	20070125U

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.

Used one peristaltic pump through all three heads.

WELL ID: MW 30 - 84

SAMPLE ID: 032

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: 8/9/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

77.3 to 85.4

SAMPLING PORT

84

TOTAL VOLUME PURGED: 0.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1005	0	PUMP @ N						6/12	40
1015	0.01	28.51	1.9216	2.88	6.81	50.7	—	↓	↓
1020	0.05	28.61	1.929	2.49	6.89	57.6	—		
1025	0.10	28.65	1.928	2.20	6.94	51.6	—		
1030	0.15	28.67	1.926	2.08	6.98	50.7	—		
1035	0.20	28.67	1.924	1.99	7.00	50.1	—		
1040	0.25	28.67	1.924	1.90	7.02	49.6	—		
1041	START SAMPLE COLLECTION								
1116	END SAMPLE COLLECTION; IPEC PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	N/A

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR

WELL ID: MW 30 - 69

SAMPLE ID: 041

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's

PROJECT NO: 01.0013869.02
DATE: 8/9/11
SAMPLER(S): CR, SC

SAMPLING INTERVAL (depth in ft below top of casing)
67.3 to 71.3

SAMPLING PORT
69

TOTAL VOLUME PURGED: 0.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1005	0	PUMP ON						6/12	40
1010	0.05	27.72	1.390	8.80	7.52	27.7	—	↓	↓
1015	0.20	27.62	1.377	9.13	7.74	12.8	—		
1020	0.35	27.45	1.356	9.48	7.85	8.6	—		
1025	0.50	27.30	1.359	9.60	7.91	7.1	—		
1030	0.65	27.20	1.360	9.51	7.98	6.1	—		
1031	START SAMPLE COLLECTION								
1049	END SAMPLE COLLECTION: 2 x 1 L								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	NA

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR

WELL ID: MW 31 - 49

SAMPLE ID: 033

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80s

PROJECT NO: 01.0017869.92
DATE: 8/5/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

34.9 to 49.3

SAMPLING PORT

49

TOTAL VOLUME PURGED: 1.69 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1008	0	PUMP	ON					6/7	29
1015	0.26	20.43	2.261	2.63	6.96	13.6	5.87		
1020	0.59	20.10	2.176	2.86	7.05	21.6	1.99		
1025	0.89	19.45	2.009	4.44	7.12	27.4	1.53		
1030	1.20	19.81	1.969	4.63	7.12	31.6	1.05		
1035	1.54	19.72	1.954	4.73	7.13	33.6	1.59		
1040	START	SAMPLE	COLLECTION						
1047	END	"	"	: SL	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good, but heavy water intrusion above waterloo manifold, bailed out to ground. No water needed to be added to packer.

WELL ID: MW-31 - 63

SAMPLE ID: 033

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80s

PROJECT NO: 01.0017869.92
DATE: 8/5/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

55.8 to 63.8

SAMPLING PORT

63

TOTAL VOLUME PURGED: 1.16 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1000	PUMP	ON						6/7	29
1015	0.01	22.95	1.857	0.53	7.12	-74.8	1.22		
1020	0.08	22.23	1.809	0.39	7.22	-56.2	0.86		
1025	0.18	21.86	1.790	1.96	7.28	-23.4	0.38		
1030	0.29	21.68	1.730	2.45	7.32	-1.5	0.16		
1035	0.39	21.43	1.672	2.75	7.37	7.6	0.33		
1040	0.51	21.37	1.657	2.70	7.39	11.6	0.32		
1045	0.64	21.34	1.604	2.69	7.41	13.1	0.73		
1050	0.76	21.35	1.585	2.69	7.44	11.9	0.53		
1055	0.87	21.28	1.588	2.57	7.44	11.7	0.39		
1100	0.94	21.15	1.604	2.60	7.45	45.0	0.47		
1105	1.01	21.13	1.622	2.57	7.46	39.8	0.49		
1107	START	SAMPLE	COLLECTION						
1127	END	"	"	"	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	17594 AG
turbidity meter	20070293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-31-49

WELL ID: MW 31 - 85

SAMPLE ID: 033

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80s

PROJECT NO: 01.0017869.92
DATE: 8/5/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

69.8 to 85.4

SAMPLING PORT

85

TOTAL VOLUME PURGED: 1.46 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1008	0	PUMP	ON					6/7	29
1015	0.03	22.46	1.797	0.59	6.93	-173.8	2.47		
1020	0.18	21.88	1.933	2.67	6.94	-98.2	1.03		
1025	0.31	21.58	1.892	2.12	6.97	-75.2	1.00		
1030	0.42	21.50	1.897	3.19	6.96	-63.7	0.61		
1035	0.57	21.38	1.862	3.23	6.99	-58.2	0.68		
1040	0.71	21.21	1.934	3.33	6.99	-55.2	1.03		
1045	0.93	21.41	1.928	3.57	7.01	-54.7	1.50		
1050	0.93	21.28	1.930	3.36	7.03	-52.4	1.39		
1055	1.03	21.16	1.921	3.41	7.03	-48.7	1.72		
1100	1.18	21.08	1.913	3.42	7.02	-46.2	1.79		
1105	1.31	21.14	1.924	3.48	7.03	-43.2	1.05		
1108	START	SAMPLE	COLLECTION						
1129	END	"	"	"	TAKE				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20704297

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-31-49

WELL ID: MW 32 - 59

SAMPLE ID: 027

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: 3/5/14
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

28.3 to 61.3

SAMPLING PORT

59 6

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1200	0	PUMP	ON					8/11	40
1205	0.25	21.12	1.101	5.32	7.01	36.7	3.12		
1210	0.50	20.82	1.125	5.52	7.08	35.2	2.67		
1215	1.00	20.88	1.127	5.44	7.12	33.2	2.48		
1220	1.25	20.79	1.130	5.54	7.15	32.6	2.51		
1222	START SAMPLE COLLECTION								
1230	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125H

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-19D

WELL ID: MW 32 - 85

SAMPLE ID: 220

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: 8/5/14
SAMPLER(S): SL, CR

SAMPLING INTERVAL (depth in ft below top of casing)
79.3 to 92.8

SAMPLING PORT
85 5

TOTAL VOLUME PURGED: 0.85 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1200	0	Pump	ON					8/11	40
1205	0.01	23.53	1.766	6.71	7.11	-75.6	2.34		
1210	0.05	23.91	1.765	5.85	6.76	-58.1	2.14		
1215	0.10	24.14	1.765	5.50	6.74	-50.2	1.89		
1220	0.20	24.24	1.765	4.60	6.73	-34.1	1.29		
1225	0.25	24.19	1.765	3.68	6.74	-20.1	1.83		
1230	0.30	24.34	1.765	2.77	6.75	-16.8	1.25		
1235	0.35	24.12	1.773	2.45	6.77	-7.2	1.01		
1240	0.45	24.08	1.768	1.80	6.77	-4.3	0.80		
1245	0.50	24.05	1.772	1.40	6.75	-1.0	0.82		
1250	0.60	24.04	1.784	1.18	6.75	-2.3	0.83		
1255	0.68	23.97	1.792	1.08	6.77	-2.7	0.85		
1300	0.75	24.02	1.795	1.02	6.80	-1.7	0.84		
1301	START SAMPLE COLLECTION								
1336	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070125L

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-190

WELL ID: MW 32 - 149

SAMPLE ID: 027

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.02
DATE: 8/15/11
SAMPLER(S): S, CB

SAMPLING INTERVAL (depth in ft below top of casing)

147.3 to 156.8

SAMPLING PORT

149

3

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1017	0	PUMP	ON					10/12	58
1024	0.10	22.34	2.617	1.14	6.43	-100.2	2.81		
1029	0.25	21.72	2.632	0.71	6.54	-95.6	1.83		
1034	0.38	21.34	2.648	0.53	6.57	-84.1	1.74		
1039	0.50	21.21	2.651	0.50	6.69	-80.9	1.78		
1044	0.75	21.32	2.646	0.46	6.73	-76.4	1.62		
1049	0.80	21.16	2.643	0.44	6.75	-75.3	1.65		
1053	START SAMPLE COLLECTION								
1110	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	10070122554

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-PP

WELL ID: MW 32 - 173

SAMPLE ID: 025

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30's

PROJECT NO: 01.0017869.92
DATE: 3/5/11
SAMPLER(S): SC, CB

SAMPLING INTERVAL (depth in ft below top of casing)

165.8 to 174.3

SAMPLING PORT

173

2

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1017	0	PUMP	ON					10/12	68
1024	0.10	21.34	2.403	0.84	6.77	-143.6	1.06		
1029	0.30	20.96	2.418	0.00	6.43	-85.6	0.38		
1034	0.50	20.58	2.416	0.49	6.41	-61.1	0.37		
1039	0.68	20.55	2.414	0.46	6.45	-55.0	0.34		
1044	0.86	20.53	2.408	0.31	6.44	-47.7	0.57		
1049	1.10	20.37	2.405	0.36	6.46	-43.7	0.62		
1054	1.30	20.33	2.397	0.33	6.48	-39.8	0.73		
1057	START SAMPLE COLLECTION								
1111	END SAMPLE COLLECTION 1.2 L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	2007012154

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-190

WELL ID: MW 32 . 190

SAMPLE ID: 029

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: 8/6/14
SAMPLER(S): SL, CB

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:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1017	0	PUMP	ON					10/12	58
1024	0.05	22.19	1.801	1.43	6.36	-218.4	1.60		
1029	0.20	21.54	1.849	0.46	6.64	-240.4	0.68		
1034	0.35	21.12	1.841	0.28	6.79	-240.1	0.59		
1039	0.50	21.07	1.826	0.24	6.81	-237.4	0.62		
1044	0.68	21.05	1.832	0.21	6.82	-235.8	0.61		
1049	0.82	20.91	1.830	0.21	6.82	-234.7	0.52		
1054	1.00	20.77	1.827	0.19	6.83	-234.6	0.43		
1058	START SAMPLE COLLECTION								
1115	END SAMPLE COLLECTION			LL IPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR - WELL VAULT PARTIALLY FLOODED

WELL ID: MW-36-24
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70s

PROJECT NO: 01.0017869.92
DATE: 8/16/11
SAMPLER(S): SL, DB
PUMP DEPTH: 14' ft

WATER QUALITY: DTW = 3.48 GW Elevation = 8.118 ACTUAL DEPTH = 21.563

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1253	21.563	PUMP ON							0
1300	21.629	31.01	3.271	0.66	7.14	-133.0	1.21		0.11
1305	21.643	31.40	3.388	0.36	7.18	-133.8	0.51		0.31
1310	21.659	31.54	3.438	0.35	7.23	-136.6	1.39		0.48
1315	21.661	31.60	3.457	0.23	7.26	-140.2	1.21		0.71
1317	START	SAMPLE COLLECTION							
1334	END	"		"	7.2L	IPEC			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	
turbidity meter	10070493

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.86 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-36-41
SAMPLE ID: 017

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: showers 70's

PROJECT NO: 01.0017869.92
DATE: 8/16/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition Poor

WATER COLUMN HEIGHT (ft)

Well Diameter: 1 in

41 (DTB) - 3.07 (DTW) = 37.93 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 37.93 x 0.041 (Multiplier) = 1.555 (Well Volume) gal

1.555 x 1.5 = 2.33 gal
Designed Purge Volume

TOTAL VOLUME PURGED: _____ gal

WATER QUALITY: DTW = 3.07 GW Elevation= 8.684

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1253	0	3.07	PUMP ON						
1300	0.11	12.74	30.54	1.646	0.94	7.32	-154.1	1.85	
1305	0.25	—	30.74	1.640	0.55	7.28	-137.4	3.31	
1310	0.40	—	30.68	1.661	0.60	7.26	-150.5	4.75	
1315	0.60	—	30.32	1.704	0.33	7.30	-144.0	4.34	
1320	0.69	—	~~WELL DRY, LOW RECHARGE~~						~~BEFORE SAMPLE TIME~~
	~~START SAMPLE COLLECTION~~								
	~~END~~	"	"	"	~~:2L IPEC~~				
1335	0.90	—	29.39	1.747	0.32	7.51	-109.6	3.63	
1338	0.95	—	WELL DRY,						
1340	START SAMPLE COLLECTION								
1410	END	"		"	: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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-36-52
SAMPLE ID: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: showers 70s

PROJECT NO: 01.0017869.92
DATE: 8/16/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

52	-	3.48	=	48.52 ft
DTB		DTW		Well Column Height

Well Vault Condition Good
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 48.52 x 0.041 (Multiplier) = 1.99 (Well Volume) gal

1.99 x 1.5 = 2.98 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 3.18 gal

WATER QUALITY: DTW = 3.48 GW Elevation = 8.19

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1253	0	3.48	PUMP ON						
1306	0.50	11.43	29.45	2.365	0.25	7.37	-195.0	1.05	
1321	1.00	12.81	27.91	2.579	0.18	7.37	-202.8	0.44	
1327	1.50	11.97	27.40	2.446	0.14	7.36	-168.0	0.66	
1354	2.00	11.37	27.50	2.263	0.17	7.33	-176.5	1.20	
1415	2.50	11.28	27.47	2.229	0.16	7.29	-167.9	0.73	
1433	3.00	11.31	27.99	2.186	0.13	7.27	-169.0	0.98	
1434	START SAMPLE COLLECTION								
1452	END SAMPLE COLLECTION: 2 L IDC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070[illegible]84

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-37-22
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: showers 70s

PROJECT NO: 01.0017869.92
DATE: 8/16/14
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.55 GW Elevation = 6.307 ACTUAL DEPTH = 13.326

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0949	13.326	PUMP ON							
1000	13.202	30.71	2.260	0.69	6.85	-87.8	0.89		0.21
1005	13.200	30.45	2.244	0.53	6.83	-80.9	1.16		0.30
1010	13.214	30.56	2.240	0.45	6.82	-86.7	1.24		0.45
1015	13.206	30.67	2.237	0.43	6.96	-93.4	0.13		0.63
1017	START SAMPLE COLLECTION								
1035	END	"	"	"	2 IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

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-37-32
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Showers 70s

PROJECT NO: 01.0017869.92
DATE: 8/16/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.49 GW Elevation = 6.301 ACTUAL DEPTH = 15.967

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0949	15.967	PUMP	ON						
1000	15.939	29.02	2.114	2.60	7.30	130.8	0.40		0.05
1005	15.956	29.26	2.101	1.52	7.37	151.1	0.01		0.20
1010	15.937	29.57	2.097	0.87	7.40	70.0	0.12		0.30
1015	15.969	29.73	2.096	0.61	7.41	17.7	0.00		0.40
1020	15.940	29.85	2.096	0.56	7.42	-12.0	0.71		0.56
1025	15.935	29.85	2.098	0.53	7.42	-21.7	0.46		0.72
1030	15.971	29.84	2.101	0.41	7.43	-31.7	0.08		0.83
1034	15.947	29.98	2.103	0.48	7.43	-41.8	0.15		0.95
1038	15.946	29.90	2.105	0.39	7.43	-47.6	0.46		1.08
1041	15.939	29.95	2.104	0.33	7.44	-50.1	0.01		1.21
1044	15.982	29.95	2.104	0.32	7.44	-52.3	0.01		1.32
1046	START	SAMPLE	COLLECTION						
1100	END	"	"	2L IPEC					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	
turbidity meter	200704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.47 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-37-40
SAMPLE ID: 023

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, DRIZZLE, 70's

PROJECT NO: 01.0017869.92
DATE: 8/16/11
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

40 (DTB) - 6.98 (DTW) = 33.02 ft (Well Column Height)

Well Vault Condition Good
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 33.02 x 0.041 (Multiplier) = 1.35 (Well Volume) gal

1.35 x 1.5 = 2.03 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.25 gal

WATER QUALITY: DTW = 6.98 GW Elevation 7.872

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0959	0	6.93	Pump	On					
1027	0.25	10.88	28.67	2.188	0.62	7.06	-144.3	1.82	
1037	0.50	11.10	28.59	2.185	0.45	7.12	-176.4	59.69	
1050	1.00	10.50	28.24	2.179	0.35	7.17	-169.7	154.5	
1102	1.60	9.24	27.06	2.170	1.40	7.17	-137.2	288.9	
1111	2.00	9.49	26.82	2.162	0.45	7.18	-129.8	187.0	
1114	START	SAMPLE COLLECTION							
1124	END SAMPLE COLLECTION: 2L IPEC								
	Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125Y

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-37-S7
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, DRIZZLE, 70's

PROJECT NO: 01.0017869.92
DATE: 8/16/11
SAMPLER(S): CA, EL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 6.83 GW Elevation 7.958 ACTUAL DEPTH = 43.732

Time	DTW or GW Elevation ACTUAL DEPTH (+/- 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
0959	43.771	PUMP ON							gal 0
1007	43.492	27.95	2.128	1.41	6.94	128.3	1.17		0.05
1012	43.383	27.94	2.145	1.34	7.02	34.6	0.39		0.18
1017	43.265	27.89	2.149	1.23	7.07	16.6	0.01		0.25
1022	43.244	27.88	2.154	1.26	7.09	10.8	0.01		0.35
1027	43.251	27.86	2.152	1.28	7.12	10.9	0.01		0.48
1030	START	SAMPLE COLLECTION							
1055	END SAMPLE	COLLECTION: 2L IPEC							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070175

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

NOTES AND OBSERVATIONS: Total volume purged 0.68 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-41-40
SAMPLE ID: 022

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 70-80

PROJECT NO: 01.0017869.92
DATE: 8/4/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = GW Elevation = ACTUAL DEPTH =

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1334	70.491	PUMP	ON						0
1345	70.319	21.08	1.903	3.94	7.55	46.2	39.66		0.14
1358	70.376	20.9	1.894	4.47	7.59	45.0	19.61		0.29
1400	70.399	20.33	1.886	4.39	7.59	44.6	13.24		0.42
1405	70.300	20.18	1.883	4.51	7.58	46.8	15.31		0.52
1407	START	SAMPLE	COLLECTION						
1439	END	"	"	:	2L IPEC				
					0.25L IPEC (TOTAL METALS)				
					0.25L IPEC (DISSOLVED METALS)				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	17594 AG
flow meter	
turbidity meter	2002@4293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, No Bolts

NOTES AND OBSERVATIONS: Total volume purged 0.67 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: 021

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY CLOUDY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/4/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

63 (DTB) - 24.66 (DTW) = 38.34 ft (Well Column Height)

Well Vault Condition FAIR- MISSING BOLTS
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 38.34 x 0.041 (Multiplier) = 1.57 (Well Volume) gal

1.57 x 1.5 = 2.35 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 2.45 gal

WATER QUALITY: DTW = 24.66 GW Elevation 29.47

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1340	0	———	PUMP	ON					
1343	0.10	———	20.82	2.221	0.48	7.46	-42.5	———	
1400	0.50	———	19.41	2.151	2.29	7.30	-37.6	59.08	
1403	1.25	———	18.61	2.102	1.27	7.24	-32.8	74.15	
1405	1.50	———	18.40	2.068	1.03	7.16	-34.0	55.33	
1407	1.75	———	18.29	2.046	0.96	7.19	-33.7	33.89	
1409	2.00	———	18.21	2.036	0.90	7.18	-42.7	26.76	
1411	2.25	———	18.24	2.032	1.02	7.19	-52.8	73.45	
1413	START SAMPLE COLLECTION								
1420	END SAMPLE COLLECTION: 2L IPEC								
				0.25L IPEC (TOTAL METALS)					
				0.25 L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070429 3

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-42-49
SAMPLE ID: 027

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80s

PROJECT NO: 01.0017869.92
DATE: 8/1/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 34.71 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1246	34.71	Pump	on					5/10	22	0
1252	34.87	28.03	1.520	3.60	7.02	53.5	3.63		24	0.01
1257	34.91	22.99	1.441	5.82	7.19	58.8	4.63			0.05
1302	34.92	22.68	1.343	6.19	7.25	65.1	10.09			0.15
1307	34.94	22.43	1.309	5.81	7.31	70.7	12.30			0.25
1312	34.95	22.36	1.287	5.71	7.39	76.2	7.72			0.35
1317	34.96	22.43	1.274	5.65	7.45	79.1	7.68			0.45
1322	34.97	22.59	1.247	5.54	7.51	80.7	7.62			0.55
1327	34.98	22.68	1.246	5.64	7.57	81.6	7.68			0.60
1329	START SAMPLE COLLECTION									
1411	END SAMPLE COLLECTION: 2L IPEC									
				0.25L	(TOTAL METALS) IPEC					
				0.25L	IPEC (DISSOLVED METALS)					
				0.25L	IPEC (TOTAL METALS) (DUPLICATE SAMPLE)					
				0.25L	IPEC (DISSOLVED METALS) (DUPLICATE SAMPLE)					
	Pump OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429

Measured Well Depth ..... **(feet from top of casing)**

Well Vault Condition FAIR - Bolts Stripped

NOTES AND OBSERVATIONS:

Total volume purged 0.75 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-92-78
SAMPLE ID: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80-90's

PROJECT NO: 01.0017869.92
DATE: 8/1/11
SAMPLER(S): SL, CB

Measured Well Depth ..... **(feet from top of casing)**

Well Vault Condition Lvr, Bolts stripped

Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

78 (DTB) - 33.34 (DTW) = 44.66 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 44.66 x 0.041 (Multiplier) = 1.831 (Well Volume) gal

1.831 x 1.5 = 2.75 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.90 gal

WATER QUALITY: DTW = 33.34 GW Elevation = 36.181

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1229	0	—	START	PUMP					
1233	0.5	—	16.12	2.357	5.54	6.48	12.3	176.7	
1235	1.0	—	17.81	2.393	4.94	6.23	14.5	209.7	
1237	1.5	—	17.49	2.407	4.60	6.12	16.6	221.7	
1239	2.0	—	17.32	2.400	4.39	6.05	17.9	214.1	
1242	2.5	—	17.15	2.390	4.11	6.03	16.6	255.7	
1243	2.75	—	17.12	2.387	4.07	6.03	13.0	273.1	
1245	START	SAMPLE COLLECTION							
1250	END	"		"	2L IPEC				
	PUMP OFF				0.25L	IPEC	(TOTAL METALS)		
					0.25L	IPEC	(DISSOLVED METALS)		

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	2007043993

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: 020

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 70-80

PROJECT NO: 01.0017869.92
DATE: 8/4/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 15.38 GW Elevation = 32.641

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1016	15.38	PUMP ON						5.5/22	16	0
1025	15.64	22.47	4.944	2.17	6.58	-17.8	36.87			0.07
1030	15.72	22.39	4.962	0.93	6.59	-20.9	47.11			0.12
1040	15.84	22.07	4.900	0.66	6.62	-28.8	34.93			0.23
1045	15.91	22.12	4.753	0.54	6.62	-28.5	28.34			0.31
1047	START	SAMPLE COLLECTION								
1115	END	"	"		2L IPEC					
	PUMP	OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070293

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition Fair, Missing Bolts

NOTES AND OBSERVATIONS:

Total volume purged 0.46 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: 02

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 70-80

PROJECT NO: 01.0017869.92
DATE: 8/4/11
SAMPLER(S): SL, CD
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 16.48 GW Elevation = 31.341 ACTUAL DEPTH = 36.24

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1020	36.214	PUMP ON						6/6	30	0
1025	35.473	17.91	2.724	1.27	7.10	114.0	143.9			0.08
1030	35.148	17.52	2.784	0.47	7.04	82.7	357.3			0.25
1035	35.010	17.40	2.780	0.30	7.04	73.4	341.7			0.42
1040	34.950	17.60	2.772	0.61	7.06	65.8	293.3			0.62
1045	34.911	17.67	2.764	0.48	7.07	62.7	268.5			0.80
1050	34.886	17.52	2.752	0.30	7.08	59.8	266.1			0.95
1056	34.866	17.53	2.745	0.27	7.10	60.5	201.3			1.20
1100	34.850	17.49	2.740	0.26	7.09	59.7	176.4			1.38
1105	34.850	17.43	2.741	0.24	7.10	58.0	130.2			1.60
1110	34.850	17.43	2.737	0.23	7.11	58.2	110.3			1.80
1115	34.850	17.44	2.735	0.24	7.12	58.5	111.3			1.90
1120	34.809	17.46	2.734	0.25	7.13	57.2	100.7			2.10
1122	START SAMPLE COLLECTION									
1135	END SAMPLE COLLECTION: 21 IPEC									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K1594 AG
turbidity meter	20070493

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR MISSING BOLTS

NOTES AND OBSERVATIONS:

Total volume purged 2.34 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-44-66
SAMPLE ID: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70'S

PROJECT NO: 01.0017869.92
DATE: 8/22/11
SAMPLER(S): SK, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition _____
Well Diameter: 2 in

WATER COLUMN HEIGHT (ft)

66 (DTB) - 53.48 (DTW) = 12.52 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 12.52 x 0.163 (Multiplier) = 2.04 (Well Volume) gal

2.04 x 1.5 = 3.06 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: _____ gal

WATER QUALITY: DTW = 53.48 GW Elevation = 39.54 ACTUAL DEPTH = 11.108

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
0948	0	11.107	PUMP ON						10/15	38	
0955	0.05	10.624	19.42	1.255	3.08	6.93	-21.2	63.09			
1000	0.20	10.389	19.09	0.1098	5.20	6.93	-37.2	54.89			
1012	0.50	9.480	19.00	0.416	6.19	7.27	-26.6	42.58			
1022	0.75	8.963	18.96	0.378	6.48	7.35	-17.0	21.52			
1030	1.00	8.464	19.01	0.359	6.75	7.41	-14.8	17.48			
1040	1.25	8.042	19.25	0.314	6.45	7.61	-19.1	19.84			
1049	1.50	7.706	18.79	0.323	6.50	7.70	-17.6	16.67			
1058	1.75	7.443	18.65	0.356	6.38	7.71	-20.2	14.02			
1105	2.00	7.272	18.52	0.384	6.29	7.60	-19.6	10.62			
1116	2.30	7.030	19.32	0.438	6.34	7.80	-20.8	12.58			
1132	2.75	10.731	19.67	0.524	6.60	7.85	-24.8	13.56			
1141	3.00	6.576	18.88	0.573	6.78	7.81	-30.6	10.25			
1143	START	SAMPLE COLLECTION									
1208	END	SAMPLE COLLECTION:			2L IPEC (ROUTINE)						
					0.5L IPEC (GROSS BETA)						

Equipment Used	Equipment Identification #
PUMP OFF	
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200704293

NOTES AND OBSERVATIONS: WATER TABLE ~6' HIGHER THAN LAST MONTH (7/2011). LEVEL UNUSUAL FOR WELL. WELL NORMALLY PURGES DRY; HOWEVER THIS SAMPLING EVENT WELL RECHARGED MORE THAN USUAL AND DID NOT PURGE DRY. INFORMED D. RUSCZYK VIA PHONE.

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: 023

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 70s

PROJECT NO: 01.0017869.92
DATE: 8/22/11
SAMPLER(S): SC, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition _____
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

102 (DTB) - 61.38 (DTW) = 40.62 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 40.62 x 0.041 (Multiplier) = 1.665 (Well Volume) gal

1.665 x 1.5 = 2.50 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.65 gal

WATER QUALITY: DTW = 61.38 GW Elevation = 61.38

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1014	0	—	PUMP ON						
1020	0.5	—	20.81	1.321	7.24	6.92	208.1	526.0	
1026	1.0	—	19.04	1.318	6.90	6.77	218.8	440.6	
1030	1.5	—	18.72	1.333	7.10	6.91	221.1	379.3	
1033	2.0	—	19.17	1.335	7.41	7.01	230.4	417.3	
1036	2.5	—	19.06	1.335	7.58	7.04	251.3		
1038	START	SAMPLE COLLECTION							
1043	END	"	"	"	2L IPEC				
					0.5L IPEC	(GROSS BETA - ZW HAUGE)			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	/
turbidity meter	200704293 (malfunction, switched to → 200701954)

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-45-42
SAMPLE ID: 026

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70's - 80's

PROJECT NO: 01.0017869.92
DATE: 8/23/11
SAMPLER(S): SC, CB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

42 (DTB) - 18.28 (DTW) = 23.72 (Well Column Height) ft

Well Vault Condition FAIR. BOLTS STRIPPED
Well Diameter: 2 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 23.72 x 0.163 (Multiplier) = 3.86 (Well Volume) gal

3.86 x 1.5 = 5.80 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 4.45 gal

WATER QUALITY: DTW = 18.28 GW Elevation = 34.916 ACTUAL DEPTH = 34.944

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1010	0	22.676	PUMP	ON					6/8	26	
1024	0.5	17.775	20.09	1.742	6.97	7.37	-65.1	8.69			
1033	1.0	14.334	20.01	1.706	0.59	7.41	-58.2	3.40			
1039	1.5	13.668	20.00	1.639	0.45	7.42	-58.2	3.51			
1044	2.0	12.510	19.90	1.513	0.33	7.41	-58.8	3.03			
1049	2.5	11.513	19.85	1.417	0.31	7.41	-59.0	4.56			
1102	3.0	8.1662	19.93	1.356	2.00	7.47	-53.6	33.18			
1109	3.5	7.165	19.96	1.502	1.86	7.45	-54.1	26.31			
1115	4.0	5.589	19.94	1.580	1.56	7.44	-54.6	19.82			
1124	4.25	3.590	WELL DRY. LET RECHARGE BEFORE SAMPLING								
1305	—	6.149	START SAMPLE COLLECTION								
1358			END SAMPLE COLLECTION: 2 L IPEC (ROUTINE)								
						0.5 L IPEC (IN-HOUSE			GROSS BETA)		

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
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-45-61
SAMPLE ID: 026

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80

PROJECT NO: 01.0017869.92
DATE: 8/22/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition _____
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

61 (DTB) - 19.38 (DTW) = 41.62 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 41.62 x 0.041 (Multiplier) = 1.70 (Well Volume) gal

1.70 x 1.5 = 2.56 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.71 gal

WATER QUALITY: DTW = 19.38 GW Elevation 53.887

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1013	0	—							
1024	1	—	21.08	1.334	4.65	7.00	358.4	580.9	
1030	1.5	—	20.59	1.317	4.70	7.06	439.6	1000	
1035	2.0	—	20.47	1.316	4.70	7.05	462.9	1100+	
1041	2.5	—	20.71	1.309	4.90	7.07	485.4	1100+	
1042	START SAMPLE COLLECTION								
1048	END	"		"	:21.1	PEC			
	PUMP OFF				:0.5L	IPEC (GROSS BETA IN HOUSE)			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	200701754

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: 026

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's

PROJECT NO: 01.0017869.92
DATE: 8/17/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

29.7 (DTB) - 1.02 (DTW) = 28.68 ft **Well Column Height**

Well Vault Condition FAIR - MISSING BOLTS
Well Diameter: 4 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 28.68 x 0.653 (Multiplier) = 18.73 (Well Volume) gal

18.73 x 1.5 = 28.09 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 28.10 gal

WATER QUALITY: DTW = 1.02 GW Elevation = 15.96 ACTUAL DEPTH = 26.741

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0928	0	26.741	PUMP	ON					
0942	2.5	23.295	23.05	0.828	0.49	7.42	-41.8	2.19	
0950	5.0	22.515	21.11	0.725	0.47	7.50	-44.9	1.74	
0954	7.5	22.211	21.16	0.715	0.41	7.52	-47.5	2.48	
0959	10.0	21.928	21.19	0.718	0.24	7.54	-51.2	1.29	
1015	12.5	21.312	21.34	0.755	0.21	7.60	-58.7	2.84	
1029	15.0	21.223	21.35	0.697	0.29	7.62	-61.1	4.51	
1037	17.5	21.215	21.43	0.659	0.42	7.60	-61.4	7.11	
1046	20.0	21.192	21.46	0.751	0.69	7.58	-61.0	6.87	
1059	22.5	21.264	21.51	0.900	1.25	7.59	-59.8	10.11	
1113	25.0	21.320	21.55	0.991	1.91	7.61	-59.3	5.48	
1124	27.5	21.700	21.54	1.019	2.26	7.63	-58.9	3.79	
1130	28.0	22.407	21.52	1.025	2.36	7.63	-59.8	3.29	
1131	START SAMPLE COLLECTION								
1136	END SAMPLE COLLECTION: 2L IDEC PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	10T704242

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-49-26
SAMPLE ID: 0225

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Sunny 70-80

PROJECT NO: 01.0017869.92
DATE: 9/10/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.75 GW Elevation = 2.421 ACTUAL DEPTH = 13.989

Time	DTW or GW Elevation Actual Depth (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes GW
0951	12.989	PUMP	OV						
1005	13.084	23.55	2.225	1.29	6.93	95.0	2%		0.1
1010	13.078	23.66	2.251	0.95	7.00	93.0	0.43		0.2
1015	13.069	23.79	2.257	0.84	7.05	90.9	0.20		0.3
1020	13.059	23.83	2.260	0.75	7.09	88.9	0.44		0.4
1022	START	SAMPLE COLLECTION							
1046	END	"	"	2L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	
turbidity meter	20070397

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** fair, no bolts

NOTES AND OBSERVATIONS: Total volume purged 0.55 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: 025

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Sunny, 70-80

PROJECT NO: 01.0017869.92
DATE: 8/10/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.49 GW Elevation = 2,733 ACTUAL DEPTH = 16.203

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0951	16.203	PUMP ON							
1005	16.188	24.00	2.209	0.89	6.97	112.6	1.03		0.17
1010	16.182	23.98	2.206	0.65	7.00	92.5	1.20		0.27
1015	16.174	23.98	2.202	0.51	7.03	95.7	1.78		0.30
1020	16.158	23.84	2.203	0.54	7.06	45.2	2.07		0.50
1025	16.139	23.78	2.201	0.57	7.08	15.5	0.72		0.65
1030	16.127	23.67	2.203	0.75	7.10	0.6	1.44		0.77
1035	16.115	23.69	2.201	1.01	7.12	-8.9	1.25		0.84
1040	16.097	23.58	2.203	1.22	7.13	-20.7	1.50		1.01
1045	16.078	23.60	2.202	1.21	7.13	-22.6	1.20		1.09
1050	16.068	23.46	2.203	1.12	7.14	-26.9	1.65		1.32
0952	START	SAMPLE	COLLECTION						
1116	END	"	"	1.2L	IPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20704793

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Sun, No Leaks

NOTES AND OBSERVATIONS: Total volume purged 1.37 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-4-65
SAMPLE ID: 025

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Sunny, 70's

PROJECT NO: 01.0017869.92
DATE: 8/10/11
SAMPLER(S): SLCB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.54 GW Elevation = 2.917 ACTUAL DEPTH = 14.439

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0951	14.439	PUMP	ON						
1005	14.388	23.69	1.987	1.64	7.38	-23.7	1.78		0.05
1010	14.374	23.52	2.001	0.57	7.41	-9.7	1.21		0.13
1015	14.361	23.57	2.005	0.54	7.43	-1.9	0.19		0.22
1020	14.338	23.44	2.012	0.45	7.44	0.3	0.37		0.32
1025	14.312	23.35	2.017	0.37	7.45	1.7	0.40		0.43
1027	START	SAMPLE COLLECTION							
1055	END	"	"	"	"				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	17894 AC
flow meter	
turbidity meter	10070293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Dry, No bolts

NOTES AND OBSERVATIONS: Total volume purged 0.58 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-50-42
SAMPLE ID: D27

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70S

PROJECT NO: 01.0017869.92
DATE: 8/19/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 7.89 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1111	7.89	PUMP	ON						0
1119	7.88	28.65	2.6025	1.44	7.97	-140.5	1.25		0.05
1124	7.87	28.78	2.890	10.80	7.94	-155.4	1.32		0.20
1129	7.84	28.82	3.088	0.09	7.91	-130.9	1.37		0.34
1134	7.84	28.77	3.082	0.06	7.91	-133.8	0.90		0.44
1139	7.85	28.73	3.085	0.08	7.92	-133.7	0.95		0.58
1143	START SAMPLE COLLECTION								
1210	END SAMPLE COLLECTION: 2L IPEC (ROUTINE)								
				0.5L IPEC (IN HOUSE GROSS AETA)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070125 4

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Re bolt

NOTES AND OBSERVATIONS: Total volume purged 0.75 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-SD-66
SAMPLE ID: 032

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70's

PROJECT NO: 01.0017869.92
DATE: 8/19/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.87 GW Elevation = 3.744 ACTUAL DEPTH = 88.307

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1111	88.387	PUMP	ON						0
1119	86.559	27.34	2.369	1.28	7.23	51.8	0.11		0.01
1124	86.215	27.39	2.373	0.70	7.22	42.2	0.09		0.14
1129	86.098	27.32	2.381	0.54	7.22	43.0	0.13		0.28
1134	86.196	27.19	2.386	0.55	7.22	43.8	0.15		0.36
1139	86.365	27.24	2.385	0.56	7.23	44.8	0.16		0.48
1143	START SAMPLE COLLECTION								
1212	END SAMPLE COLLECTION! 2L IPEC (ROUTINE)								
				0.5L	IPEC	(IN-HOUSE GROSS BETA)			
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	10
flow meter	
turbidity meter	20070127 54

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** No Lock

NOTES AND OBSERVATIONS: Total volume purged 0.68 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 51 - 40

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/28/11
SAMPLER(S): SL, AB

SAMPLING INTERVAL (depth in ft below top of casing)

29.7 to 44.2

SAMPLING PORT

40 7

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1055	0	PUMP	ON					6.5/8.4	24
1102	0.12	16.02	2.558	6.09	6.90	-46	0.84		
1107	0.34	15.85	2.578	6.11	6.85	29.2	0.61		
1112	0.52	15.87	2.580	6.87	6.83	44.6	0.24		
1117	0.75	15.92	2.583	5.75	6.82	59.3	0.01		
1122	0.90	15.92	2.586	5.01	6.81	60.7	0.00		
1127	1.05	15.77	2.588	5.78	6.81	63.9	0.00		
1129	START	SAMPLE COLLECTION							
1143	END SAMPLE	COLLECTION: 20	IPEC						
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	3007047293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 51 - 79

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/28/11
SAMPLER(S): SC, CB

SAMPLING INTERVAL (depth in ft below top of casing)
63.2 to 81.2

SAMPLING PORT
79 6

TOTAL VOLUME PURGED: 0.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1055	0	PUMP	ON					6.5/8.0	34
1102	0.05	17.19	2.894	1.06	6.47	-71.3	2.31		
1107	0.15	16.95	2.947	1.24	5.95	-54.7	4.03		
1112	0.28	16.98	2.962	1.29	5.87	-39.8	3.46		
1117	0.40	17.01	2.978	1.38	5.89	-26.4	4.04		
1122	0.56	17.06	2.974	1.37	5.92	-15.3	[illegible]		
1127	0.66	16.92	2.973	1.37	5.97	-9.5	4.61		
1132	0.80	16.73	2.966	1.25	6.00	-8.2	4.49		
1135	START SAMPLE COLLECTION								
1155	END SAMPLE COLLECTION. 2 L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070429 2

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 51 - 104

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Sunny, 80's

PROJECT NO: 01.0017869.92
DATE: 7/28/14
SAMPLER(S): SL, DB

SAMPLING INTERVAL (depth in ft below top of casing)

13.2 to 43.7

SAMPLING PORT

104 4

TOTAL VOLUME PURGED: 2.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	Pump	ON					5.6/5.6	42
0911	0.25	14.76	2.910	2.14	6.48	25.6	8.50		
0917	0.75	14.53	2.927	1.92	6.53	50.3	4.72		
0922	1.00	14.43	2.940	1.78	6.57	58.6	2.21		
0927	1.25	14.31	2.938	1.66	6.60	63.0	1.91		
0932	1.60	14.20	2.938	1.59	6.62	68.4	3.35		
0937	2.00	14.18	2.935	1.61	6.64	71.6	1.06		
0942	START SAMPLE COLLECTION								
0961	END SAMPLE COLLECTION: LL IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 51 . 135

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/23/11
SAMPLER(S): SL AB

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) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	PUMP	ON					5.6/5.6	42
0911	0.15	15.85	2.772	0.94	6.00	-81.0	0.85		
0917	0.75	15.45	2.754	0.58	5.65	-52.2	0.18		
0922	0.50	15.48	2.764	0.47	5.57	-27.8	0.42		
0927	0.75	15.24	2.776	0.41	5.56	-16.0	0.32		
0932	1.15	15.11	2.772	0.40	5.55	-3.3	0.17		
0937	1.25	15.10	2.772	0.40	5.59	-2.8	0.00		
0942	1.45	15.20	2.771	0.40	5.59	-3.6	0.00		
0944	START SAMPLE COLLECTION								
1004	END SAMPLE COLLECTION: 2L UF FE								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070492

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 51 - 163

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/23/14
SAMPLER(S): K.AB

SAMPLING INTERVAL (depth in ft below top of casing)

154.7 to 166.2

SAMPLING PORT

163 2

TOTAL VOLUME PURGED: 0.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	PUMP	ON					5.6/5.6	42
0911	0.01	18.38	2.388	1.31	6.29	-192.3	6.02		
0917	0.05	17.59	2.324	0.12	6.53	-190.9	1.79		
0922	0.15	17.47	2.301	0.10	6.69	-172.0	1.10		
0927	0.20	17.47	2.297	0.10	6.73	-187.9	0.04		
0932	0.30	17.44	2.306	0.09	6.76	-177.4	0.01		
0937	0.40	17.01	2.304	0.10	6.78	-174.8	0.03		
0940	START	SAMPLE COLLECTION							
1018	END SA	MPLE COLLECTION W/			TOPEK				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	AG
turbidity meter	10070429 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 51 - 189

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/28/11
SAMPLER(S): SL, AB

SAMPLING INTERVAL (depth in ft below top of casing)

184.2 to 197.8

SAMPLING PORT

189

TOTAL VOLUME PURGED: 0.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	Pump	ON					5.6/5.6	92
0911	0.05	17.05	1.612	3.08	6.60	-95.0	6.05		
0917	0.15	16.27	1.616	1.34	6.94	-116.0	3.65		
0922	0.30	16.18	1.582	0.91	6.98	-142.0	2.48		
0927	0.42	15.95	1.578	0.75	7.00	-150.7	2.27		
0932	0.55	15.80	1.570	0.70	6.99	-180.4	2.89		
0937	0.70	15.60	1.569	0.65	7.21	-221.3	2.08		
0942	0.80	15.70	1.565	0.61	7.02	-240.0	2.36		
0947	0.90	15.71	1.560	0.56	7.04	-249.8	1.49		
0952	1.05	15.69	1.567	0.53	7.05	-252.6	2.41		
0957	1.20	15.66	1.568	0.50	7.06	-260.4	1.40		
1002	1.35	16.44	1.574	0.49	7.08	-272.9	1.27		
1007	1.35	16.30	1.575	0.48	7.10	-296.1	0.68		
1012	1.50	16.03	1.573	0.47	7.11	-271.0	1.72		
1017	1.65	16.06	1.573	0.41	7.12	-269.9	1.68		
1022	1.75	16.10	1.575	0.39	7.12	-273.9	1.53		
1023	START	SAMPLE COLLECTION							
1042	END SAMPLE COLLECTION 1.2 L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007 D4293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW-53-82
SAMPLE ID: 021

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: 8/11/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 58.69 GW Elevation 11.24 Actual Depth = 28.13

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
										gal
0907	23.097	PUMP	ON					5/20	38	0
0917	22.871	22.74	2.307	1.20	6.71	84.5	7.04			0.01
0922	22.673	21.88	2.277	6.21	6.94	66.9	35.12			0.15
0927	22.628	20.73	2.274	6.40	6.34	58.2	32.65			0.30
0932	22.819	21.00	2.271	6.100	6.30	47.7	21.94			0.40
0937	22.1009	21.49	2.283	6.58	6.42	43.8	18.06			0.50
0942	22.695	21.50	2.287	6.96	6.56	40.5	14.12			0.60
0947	22.728	21.46	2.287	6.41	6.66	36.7	11.86			0.70
0952	22.708	21.69	2.304	6.14	6.75	35.0	7.51			0.80
0957	22.775	22.27	2.316	6.12	6.89	31.9	6.93			0.85
1002	22.760	22.87	2321	6.28	6.99	28.6	6.95			0.87
1007	22.799	23.18	2.322	6.26	7.13	26.7	5.36			0.90
1012	22.813	23.55	2.323	6.58	7.19	27.1	5.45			0.95
1017	22.857	23.64	2.325	6.62	7.23	26.1	5.62			1.00
1018	START	CAMPLE	COLLECTION							
1111	END SA	MPLE	COLLECTION: 2L		JAR					
	PUMP	OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20m04293

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR, BOLTS MISSING LOCK

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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-53-12.0
SAMPLE ID: 025

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny

PROJECT NO: 01.0017869.92
DATE: 8/1/11
SAMPLER(S): SG/CB

Measured Well Depth ..... **(feet from top of casing)**

Well Vault Condition Fair, bolts missing/stripped

Well Diameter: 4 in

WATER COLUMN HEIGHT (ft)

120 (DTB) - 59.50 (DTW) = 60.5 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 60.5 x 0.041 (Multiplier) = 2.481 (Well Volume) gal

2.481 x 1.5 = 3.72 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 3.90 gal

WATER QUALITY: DTW = 59.50 GW Elevation = 10.69

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0922	0	—	PUMP	ON					
0932	0.25	—	20.25	1.722	2.13	6.97	78.9	89.62	
0937	1	—	19.26	1.758	1.24	6.94	80.6	154.3	
0940	1.50	—	19.06	1.795	0.80	6.94	82.7	280.4	
0943	2	—	19.02	1.824	0.63	6.88	83.9	275.8	
0947	2.50	—	19.00	1.842	0.54	7.03	84.5	247.9	
0951	3	—	18.83	1.857	0.48	7.01	85.6	189.1	
0955	3.50	—	18.80	1.864	0.45	7.01	86.2	196.5	
0956	3.75	—	18.77	1.866	0.43	6.96	86.6	163.3	
0957	START SAMPLE COLLECTION								
1000	END	"		"	@ IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070493

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 54 - 37

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Showers 70s

PROJECT NO: 01.0017869.92
DATE: 8/15/14
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

39.0 to 42.0

SAMPLING PORT

37 6

TOTAL VOLUME PURGED: 1.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0850	0	PUMP	ON					6/4	20
0855	0.5	22.98	2.359	1.23	6.79	-60.9	1.15	↓	↓
0900	0.75	22.63	2.313	1.29	6.91	-45.5	1.77		
0905	1.10	22.41	2.297	1.31	6.97	-36.7	0.91		
0910	1.50	22.24	2.294	1.27	7.02	-36.6	1.10		
0915	1.80	22.15	2.291	1.29	7.06	-36.2	1.43		
0920	START	SAMPLE COLLECTION							
0925	END	"	"	"	" IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	2007-012354

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW 54 - 58

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Showers 70's

PROJECT NO: 01.0017869.92
DATE: 8/15/14
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

51.5 to 64.0

SAMPLING PORT

58 5

TOTAL VOLUME PURGED: 2.39 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0850	0	PUMP	ON					6/4	30
0855	0.24	23.35	1.903	0.68	6.56	-36.9	2.97		
0900	0.48	22.91	1.788	0.44	6.59	-14.2	3.80		
0905	0.74	22.63	1.796	0.35	6.64	0.8	1.49		
0910	0.93	22.40	1.797	0.32	6.69	8.4	2.19		
0915	1.17	22.28	1.803	0.31	6.72	14.1	1.93		
0920	1.41	22.19	1.838	0.32	6.75	23.9	2.16		
0925	1.70	22.09	1.854	0.29	6.81	29.8	1.78		
0930	1.94	22.01	1.860	0.28	6.84	35.0	2.32		
0935	2.24	21.99	1.872	0.29	6.87	39.1	2.63		
0937	START	SAMPLE	COLLECTION						
0947	END	"	"		IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070101254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 54 - 123

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy/Rain Starting 10s

PROJECT NO: 01.0017869.92
DATE: 8/15/14
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

116.0 to 126.0

SAMPLING PORT

173 4

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0840	0	PUMP	ON					6/4	20
0845	0.01	24.60	1.921	2.10	6.04	38.7	7.17		
0900	0.12	24.30	1.917	10.75	6.03	23.9	1.28		
0905	0.27	23.80	1.908	0.57	6.20	16.5	1.50		
0910	0.38	23.44	1.903	0.45	6.38	8.8	0.87		
0915	0.52	23.23	1.899	0.40	6.50	4.6	1.01		
0920	0.67	23.16	1.896	0.36	6.58	0.7	0.97		
0925	0.80	23.00	1.897	0.35	6.66	-2.5	0.66		
0930	0.91	22.92	1.897	0.36	6.71	-6.0	1.17		
0935	1.10	22.86	1.895	0.31	6.74	-8.1	0.94		
0939	START	SAMPLE	COLLECTION						
0955	END	"	"		@ 1455				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125Y

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 54 - 144

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Showers 70's

PROJECT NO: 01.0017869.92
DATE: 8/15/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

135.0 to 155.5

SAMPLING PORT

144 3

TOTAL VOLUME PURGED: 1.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1100	0	PUMP	ON					7.5/6.7	30
1110	0.4	22.59	2.171	0.57	6.47	-95.9	1.62		
1115	0.60	22.25	2.107	0.26	6.80	-90.2	1.55		
1120	0.80	22.07	2.085	0.20	6.87	-81.4	1.11		
1125	1.00	21.93	2.088	0.20	6.94	-78.9	1.18		
1130	1.20	21.79	2.099	0.21	6.98	-76.6	1.79		
1132	START	SAMPLE	COLLECTION						
1144	END	"	"	12 BOTTLES					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070 1754

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW 54 - 173

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Showers 70's

PROJECT NO: 01.0017869.92
DATE: 8/15/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)
170.5 to 182.0

SAMPLING PORT
173 2

TOTAL VOLUME PURGED: 1.55 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mV/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1100	0	PUMP	ON					7.5/6.7	36
1110	0.40	22.73	2.023	0.90	6.54	-35.4	1.62		
1115	0.55	22.34	2.024	0.40	6.66	-6.9	1.31		
1120	0.75	22.23	2.019	0.32	6.71	14.9	1.33		
1125	1.00	22.05	2.018	0.26	6.77	24.5	1.22		
1130	1.20	21.90	2.015	0.21	6.82	27.8	1.40		
1135	1.40	21.78	2.012	0.21	6.85	33.8	1.43		
1137	START	SAMPLE	COLLECT	FOR	: 2x3	PCs			
1150	END	"	"						
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 54 - 190

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Showers 70s

PROJECT NO: 01.0017869.02
DATE: 8/15/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

185.0 to 203.6

SAMPLING PORT

190

TOTAL VOLUME PURGED: 1.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1100	0	PUMP	ON					7.5/6.7	36
1110	0.40	13.26	2.185	1.12	6.14	59.9	0.56	↓	↓
1115	0.55	22.97	2.150	0.58	6.35	52.3	0.29		
1120	0.75	22.71	2.158	0.47	6.48	50.7	0.65		
1125	1.00	22.53	2.161	0.42	6.59	49.6	0.99		
1130	1.20	22.36	2.163	0.40	6.67	48.9	0.27		
1135	1.40	22.23	2.166	0.37	6.73	48.4	0.35		
1140	1.60	22.14	2.166	0.35	6.78	47.7	0.24		
1145	1.80	22.04	2.168	0.35	6.81	47.0	0.65		
1147	START	SAMPLE	COLLECTION						
1200	END	"	"	:2L	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW-35-24
SAMPLE ID: 018

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: 8/12/11
SAMPLER(S): SC, AB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.34 GW Elevation = 9.43 ACTUAL DEPTH = 9.511

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
11:09	7.436	PUMP	ON						
11:18	6.772	22.39	1.169	1.50	7.74	-113.2	0.92		0.1
11:24	6.648	22.41	1.157	0.58	7.63	-115.0	1.03		0.25
1129	6.648	22.42	1.157	0.39	7.91	-138.2	0.55		0.42
1134	6.648	22.23	1.155	0.28	7.96	-160.0	0.44		0.60
1139	6.648	22.29	1.157	0.28	7.98	-166.3	0.74		0.75
1144	6.648	22.26	1.161	0.28	8.00	-173.1	0.49		0.85
1149	6.648	22.25	1.163	0.22	8.02	-175.7	0.53		1.00
1151	START SAMPLE COLLECTION								
1212	END SAMPLE COLLECTION: 2L IPEC								
				0.25L	IPEC	(TOTAL METALS)			
				0.25L	IPEC	(DISSOLVED METALS)			
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR; BOLTS STRIPPED

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-55-35
SAMPLE ID: 017

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: 8/10/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.83 GW Elevation = 8.94 ACTUAL DEPTH = 23.08

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1109	23.101	PUMP ON							
1118	22.893	22.72	1.136	0.00	7.50	-82.0	0.49		0.85
1124	22.873	22.13	1.151	0.00	7.52	-98.6	0.56		0.20
1129	22.866	21.92	1.196	-0.01	7.48	-100.3	0.62		0.36
1134	22.866	21.51	1.266	-0.01	7.41	-109.1	0.37		0.54
1139	22.831	21.96	1.305	-0.01	7.39	-97.8	0.28		0.66
1144	22.829	21.46	1.353	-0.02	7.36	-93.4	0.51		0.80
1149	22.842	21.50	1.376	-0.01	7.35	-90.6	0.47		1.85
1153	START SAMPLE COLLECTION								
1215	END SAMPLE COLLECTION: 2L				IPEC				
				0.25L	IPEC (TOTAL METALS)				
				0.75L	IPEC (DISSOLVED METALS)				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04E1759 4 A6
flow meter	
turbidity meter	20070125Y

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR: BOLTS STRIPPED

NOTES AND OBSERVATIONS: Total volume purged 1.10 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: DUP

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: 8/12/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.80 GW Elevation = 9.27 ACTUAL DEPTH = 41.092

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1109	41.104	PUMP	ON						
1118	41.050	23.25	2.214	3.11	7.04	11.2	1.75		0.05
1124	41.042	23.11	2.201	2.91	7.10	-30.4	1.62		0.20
1129	41.040	22.72	2.216	2.97	7.25	-23.1	1.59		0.36
1134	41.042	22.44	2.204	2.90	7.31	-17.6	1.34		0.50
1139	41.033	22.58	2.205	2.88	7.33	-15.5	1.26		0.62
1143	START	SAMPLE	COLLECTION						
1209	END SAMPLE	COLLECTION: 2L IPEC							
				0.25L	IPEC	(TOTAL METALS)			
				0.25L	IPEC	(DISSOLVED METALS)			
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070154

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR; BOLTS STRIPPED

NOTES AND OBSERVATIONS: Total volume purged 0.30 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 60 - 35

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's

PROJECT NO: 01.0017369.92
DATE: 8/10/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)
24.9 to 39.4

SAMPLING PORT
35 7

TOTAL VOLUME PURGED: 1.60 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0909	0	PUMP	ON					5/7	18
0915	0.10	20.25	2.034	4.04	10.81	-9.7	4.63		
0920	0.25	20.15	1.775	1.66	7.10	0.6	0.50		
0925	0.45	20.26	1.675	1.30	7.35	8.9	0.49		
0930	0.50	20.50	1.633	1.23	7.45	11.6	0.60		
0936	0.60	20.69	1.611	1.24	7.51	10.7	0.50		
0940	0.75	20.78	1.601	1.38	7.56	9.3	0.77		
0945	0.85	20.69	1.586	1.43	7.60	11.1	0.80		
0950	0.95	20.72	1.568	1.45	7.62	12.1	0.77		
0955	1.00	20.76	1.542	1.58	7.65	12.9	1.84		
1000	1.10	20.85	1.508	1.91	7.66	13.2	0.84		
1005	1.15	20.76	1.494	2.02	7.68	13.7	0.61		
1010	1.25	20.99	1.456	2.04	7.69	13.6	0.61		
1015	1.40	21.17	1.427	2.13	7.71	13.3	0.61		
1020	1.45	21.21	1.414	2.24	7.72	13.4	0.57		
1021	START SAMPLE COLLECTION								
1054	END SAMPLE COLLECTION: 2L 3PE								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070/254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Very Poor

WELL ID: MW 60 - 53

SAMPLE ID: 018

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: 8/10/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

45.4 to 59.4

SAMPLING PORT

53 6

TOTAL VOLUME PURGED: 3.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0909	0	Pump ON						5/7	18
0915	0.10	21.27	2.517	1.50	6.03	-132.7	2.39		
0920	0.25	20.45	2.284	0.76	6.48	-121.5	0.83		
0925	0.45	19.87	2.123	0.46	6.79	-87.6	0.84		
0930	0.50	19.73	2.071	0.40	6.88	-64.5	0.55		
0935	0.65	19.51	2.051	0.38	6.95	-35.5	1.43		
0940	0.80	19.34	2.040	0.38	7.02	-13.6	1.27		
0945	1.00	19.17	2.034	0.37	7.02	1.9	0.44		
0950	1.15	18.96	2.029	0.42	7.00	21.0	1.25		
0955	1.25	18.90	2.021	0.50	7.05	42.8	1.08		
1000	1.45	18.76	2.022	0.51	7.07	51.7	1.44		
1005	1.60	18.70	2.023	0.54	7.10	57.5	0.98		
1010	1.75	18.91	2.023	0.57	7.14	62.8	2.44		
1015	1.90	19.03	2.030	0.58	7.19	68.1	1.11		
1020	2.05	18.90	2.034	0.61	7.26	78.1	1.09		
1025	2.25	18.89	2.037	0.67	7.22	88.8	0.87		
1030	2.45	18.75	2.040	0.67	7.23	107.0	1.35		
1035	2.50	18.81	2.042	0.70	7.22	119.5	0.55		
1040	2.65	18.80	2.049	0.75	7.28	159.3	0.72		
1045	2.85	18.97	2.051	0.79	7.27	146.2	0.74		
1050	2.95	18.99	2.052	0.78	7.27	152.3	0.76		
1056	3.10	19.04	2.055	0.79	7.29	151.1	0.78		
1056	START SAMPLE COLLECTION								
1145	END SAMPLE COLLECTION: 2L IPEC - ROUTINE; 2L IPEC - DUPLICATE; 2L IPEC - SPIKE								
	PUMP OFF	2L IPEC - BLANK							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-60-35

WELL ID: MW 60 - 72

SAMPLE ID: 018

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: 8/10/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

66.4 to 78.2

SAMPLING PORT

72 4

TOTAL VOLUME PURGED: 3.60 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1236	0	Pump	ON					0/5	35
1244	0.85	17.55	3.767	1.78	6.99	87.4	1.18		
1249	1.25	17.23	3.607	0.84	7.03	93.6	2.51		
1254	1.75	17.20	3.492	0.75	7.07	94.4	1.73		
1259	2.00	17.04	3.434	6.70	7.11	94.6	1.59		
1304	2.40	16.87	3.381	0.68	7.14	92.5	2.53		
1309	2.80	16.82	3.348	0.64	7.16	89.9	1.61		
1314	3.10	18.58	3.337	6.63	7.19	87.0	1.12		
1318	START SAMPLE COLLECTION								
1325	END SAMPLE COLLECTION: 2L 3PBC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	10070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition see MW-60-35

WELL ID: MW 60 - 135

SAMPLE ID: 018

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: 9/10/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

124.9 to 141.4

SAMPLING PORT

135 3

TOTAL VOLUME PURGED: 2.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1236	0	Pump on						6/5	35
1244	0.25	18.40	2.413	0.64	6.51	-103.5	1.09		
1249	0.75	17.89	2.369	0.17	6.77	-137.1	1.14		
1254	0.95	17.87	2.402	0.16	6.83	-160.0	0.85		
1259	1.15	17.65	2.478	0.16	6.89	-174.2	0.73		
1304	1.25	17.44	2.494	0.16	6.93	-188.0	0.38		
1309	1.60	17.32	2.512	0.17	6.91	-196.0	2.19		
1314	1.85	17.04	2.527	0.23	6.94	-195.7	0.23		
1319	2.10	16.92	2.541	0.38	6.99	-205.8	0.53		
1324	2.25	17.01	2.570	0.82	6.99	-209.8	0.63		
1329	2.35	17.01	2.569	1.09	7.02	-197.0	0.29		
1334	2.45	17.06	2.579	1.11	7.03	-206.3	0.17		
1339	2.55	17.13	2.612	1.05	7.04	-201.5	0.21		
1340	START SAMPLE COLLECTION								
1351	END SAMPLE COLLECTION: 2L IPEC								
	Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125Y

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-60-35

WELL ID: MW 60 - 134

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80s

PROJECT NO: 01.0017869.92
DATE: 8/10/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

147.4 to 164.9

SAMPLING PORT

151 2

TOTAL VOLUME PURGED: 1.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1236	0	PUMP ON						6/5	35
1244	0.20	18.61	2.108	0.00	6.60	-45.9	7.40		
1249	0.50	18.01	2.073	-0.01	7.04	-33.8	3.12		
1254	0.75	17.99	2.076	0.00	7.10	-31.4	1.11		
1259	0.89	17.80	2.076	0.00	7.15	-36.8	1.40		
1304	1.05	17.54	2.074	-0.00	7.17	-31.0	1.09		
1309	START	SAMPLE	COLLECTION						
1312	END	SAMPLE	COLLECTION: 2L IPEC						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K17594 4&
turbidity meter	200701264

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-60-35

WELL ID: MW 60 - 176

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30's

PROJECT NO: 01.0017869.92
DATE: 8/6/14
SAMPLER(S): S.MB

SAMPLING INTERVAL (depth in ft below top of casing)

170.9 to 200.4

SAMPLING PORT

176

TOTAL VOLUME PURGED: 1.45 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mV/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1236	0	PUMP ON						6/5	35
1244	0.10	23.17	0.773	1.79	6.10	-31.9	1.66		
1249	0.20	22.76	0.764	0.83	5.93	-49.7	1.58		
1254	0.25	23.04	0.762	0.49	6.13	-69.9	1.11		
1259	0.40	22.71	0.771	0.38	6.40	-97.9	1.24		
1304	0.50	22.04	0.774	0.31	6.90	-122.1	1.10		
1309	0.60	21.73	0.773	0.21	7.02	-148.4	0.71		
1314	0.70	21.31	0.774	0.19	7.14	-159.9	1.22		
1319	0.80	21.04	0.772	0.25	7.15	-167.0	0.98		
1324	0.90	21.34	0.767	0.14	7.17	-175.4	0.44		
1329	1.00	21.10	0.770	0.13	7.20	-184.1	0.88		
1334	1.10	21.16	0.768	0.16	7.22	-187.7	0.50		
1339	1.20	21.31	0.767	0.16	7.22	-194.4	0.68		
1340	START SAMPLE COLLECTION								
1412	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007 01254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-60-35

WELL ID: MW-02-18
SAMPLE ID: 09

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80

PROJECT NO: 01.0017869.92
DATE: 8/3/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.16 GW Elevation = 0.64 ACTUAL DEPTH = 4.242

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0905	4.242	PUMP ON							
0915	4.117	23.11	4.600	3.91	7.05	155.4	3.55		0.01
0920	4.088	23.01	4.557	5.34	7.20	66.8	1.40		0.06
0925	4.052	22.93	4.440	4.61	7.31	-16.7	1.24		0.26
0930	4.012	22.92	4.407	4.28	7.34	-22.3	1.20		0.45
0935	3.992	22.81	4.379	4.05	7.35	-31.2	0.92		0.61
0940	3.973	22.64	4.400	3.64	7.35	-36.9	0.64		0.91
0945	3.961	22.54	4.470	3.19	7.34	-37.7	0.36		0.98
0950	3.951	22.55	4.530	3.00	7.34	-39.6	0.68		1.02
0955	3.941	22.62	4.587	2.95	7.34	-38.7	0.65		1.20
0957	START	SAMPLE COLLECTION							
1018	END	"	"	2L	IPEC				
				0.25L	IPEC	(TOTAL METALS)			
				0.25L	IPEC	(DISSOLVED METALS)			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	200701293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.35 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-62-37
SAMPLE ID: OA

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80

PROJECT NO: 01.0017869.92
DATE: 8/3/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = GW Elevation =

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0905	11.72	PUMP ON							
0915	11.85	19.79	1.501	1.31	6.79	133.3	6.84		0.08
0920	11.89	19.51	1.504	0.91	6.85	127.9	5.86		0.18
0925	11.87	19.32	1.515	0.80	6.93	117.8	3.51		0.35
0930	11.87	19.17	1.519	0.70	7.01	106.1	0.64		0.53
0935	11.87	19.06	1.522	0.68	7.04	97.9	1.00		0.63
0940	11.87	18.87	1.524	0.60	7.06	83.4	0.42		0.80
0945	11.84	18.74	1.525	0.56	7.12	68.2	0.28		1.00
0950	11.84	18.76	1.525	0.55	7.15	56.7	0.25		1.18
0955	11.83	18.79	1.526	0.52	7.16	50.5	1.00		1.38
1000	11.82	18.81	1.527	0.49	7.19	37.0	0.38		1.45
1004	11.81	18.78	1.527	0.49	7.21	24.8	0.55		1.57
1009	11.80	18.79	1.527	0.49	7.21	20.4	0.56		1.70
1011	11.80	18.78	1.527	0.49	7.22	14.8	0.35		1.80
1013	START	SAMPLE COLLECTION							
1035	END	"	"		2L IPEC				
					0.5L IPEC	(TOTAL METALS)			
					0.5L IPEC	(DISSOLVED METALS)			
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	
turbidity meter	20070293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.95 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 62 - 53

SAMPLE ID: 08

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: 8/3/11
SAMPLER(S): SL, DB

SAMPLING INTERVAL (depth in ft below top of casing)

49.6 to 54.1

SAMPLING PORT

53 6

TOTAL VOLUME PURGED: 0.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	0	PUMP ON						5/6	25
1120	0.10	20.81	1.407	0.93	6.97	-20.2	1.37		
1125	0.28	21.04	1.404	0.65	7.02	-48.9	0.45		
1130	0.40	21.46	1.405	0.62	7.08	-64.8	0.21		
1135	0.48	21.78	1.404	0.60	7.14	-79.5	0.16		
1140	0.55	22.11	1.404	0.60	7.20	-87.5	0.24		
1145	0.65	21.19	1.408	0.59	7.22	-94.9	0.12		
1150	0.70	22.40	1.406	0.58	7.26	-101.5	0.29		
1155	0.75	22.53	1.409	0.59	7.29	-103.4	0.27		
1196	START SAMPLE COLLECTION								
1244	END SAMPLE COLLECTION: 2L IPEC								
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	2W07012S4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62 - 71

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 72's

PROJECT NO: 01.0017869.92
DATE: 8/3/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

61.1 to 80.6

SAMPLING PORT

71 5

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	0	PUMP ON						5/6	25
1120	0.10	20.94	1.404	0.24	7.27	-174.2	0.81		
1125	0.30	20.44	1.405	0.20	7.24	-160.2	0.95		
1130	0.50	20.06	1.403	0.15	7.28	-154.5	0.63		
1135	0.70	19.69	1.402	0.16	7.30	-156.0	0.91		
1140	0.90	19.52	1.401	0.15	7.31	-157.0	0.85		
1142	START SAMPLE COLLECTION								
1158	END SAMPLE COLLECTION			2L IPEC					
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125I

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62 - 92

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: 8/3/10
SAMPLER(S): SL, JB

SAMPLING INTERVAL (depth in ft below top of casing)
88.6 to 99.1

SAMPLING PORT
92 4

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	0	PUMP ON						5/6	35
1120	0.10	21.70	1.404	2.51	7.07	-67.7	0.72		
1125	0.25	21.13	1.403	1.19	7.23	-59.2	0.42		
1130	0.45	20.66	1.403	0.80	7.29	-59.0	0.85		
1135	0.65	20.34	1.401	0.65	7.30	-56.0	1.29		
1140	0.85	20.09	1.401	0.57	7.31	-56.4	1.30		
1146	1.05	19.94	1.398	0.50	7.30	-54.8	1.58		
1150	1.15	19.81	1.400	0.46	7.31	-58.9	1.96		
1153	START	SAMPLE	COLLECTION						
1210	END SAMPLE COLLECTION			2L IPEC					
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007012554

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62 . 138

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: 8/31/11
SAMPLER(S): SC, CB

SAMPLING INTERVAL (depth in ft below top of casing)

126.1 to 143.6

SAMPLING PORT

138 3

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0900	0	PUMP	ON					6/4	20
0910	0.10	22.42	1.467	0.20	6.64	-193.7	0.00		
0915	0.25	21.90	1.480	0.09	6.78	-189.9	0.00		
0920	0.42	21.45	1.482	0.10	6.87	-162.7	0.00		
0925	0.100	21.07	1.481	0.11	6.93	-146.9	0.00		
0930	0.75	20.88	1.481	0.09	6.97	-131.0	0.00		
0935	0.90	20.64	1.479	0.07	7.00	-122.8	0.00		
0940	1.05	20.42	1.480	0.08	7.03	-117.1	0.00		
0945	1.25	20.21	1.479	0.07	7.04	-118.1	0.00		
0946	START SAMPLE COLLECTION								
1008	END SAMPLE COLLECTION: 2 L IPEC								
			0.25 L IPEC (TOTAL METALS)						
			0.25 L IPEC (DISSOLVED METALS)						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125H

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62 - 182

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: 8/3/11
SAMPLER(S): SC, CB

SAMPLING INTERVAL (depth in ft below top of casing)

17.76 to 198.7

SAMPLING PORT

182 1

TOTAL VOLUME PURGED: 1.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0900	0	PUMP ON						6/4	30
0910	0.01	23.66	1.409	1.66	6.56	-59.2	0.01		
0915	0.10	23.25	1.383	0.28	6.90	-86.9	1.37		
0920	0.26	22.78	1.371	0.17	7.14	-51.2	0.00		
0926	0.40	22.39	1.356	0.14	7.12	-24.7	0.00		
0930	0.50	22.20	1.350	0.10	7.15	-18.2	0.00		
0935	0.65	21.81	1.346	0.12	7.31	-13.5	0.00		
0940	0.80	21.57	1.344	0.10	7.30	-11.4	0.00		
0945	0.85	21.36	1.344	0.10	7.27	-9.5	0.00		
0948	START SAMPLE COLLECTION								
1020	END SAMPLE COLLECTION: 2L IPEC								
				0.25 L IPEC (TOTAL METALS)					
				0.25 L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070101254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW-63B
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80-90

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): SL, CR
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 13.80 GW Elevation = 0.259 ACTUAL DEPTH = 4.369

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0912	4.369	PUMP	ON						0
0920	4.259	20.76	2.611	0.27	6.80	-141.4	3.77		0.15
0925	4.264	20.71	2.589	0.23	6.86	-144.3	0.11		0.22
0930	4.294	20.72	2.433	0.18	6.95	-149.5	0.58		0.34
0935	4.323	20.55	2.401	0.20	7.00	-148.1	0.00		0.49
0937	START	SAMPLE	COLLECTION						
1002	END	"	"	2L	IPEC				
~~1004~~				0.25L	IPEC	(TOTAL	METALS)		
				0.25L	IPEC	(DISSOLVED	METALS)		
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070493

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.64 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: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 90-90

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.83 GW Elevation = 0.29 ACTUAL DEPTH = 11.896

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
0912	11.996	PUMP	ON						0
0920	11.852	19.79	1.364	1.25	6.74	-21.8	4.60		0.13
0925	11.843	19.61	1.358	0.92	6.83	-80.8	1.00		0.20
0930	11.861	19.50	1.352	0.80	6.92	-104.4	0.00		0.32
0935	11.886	19.35	1.348	0.69	6.99	-107.7	0.00		0.46
0940	11.915	19.19	1.348	0.61	7.02	-114.4	0.00		0.61
0942	START	SAMPLE COLLECTION							
1014	END	"	"	2L IPEC					
				0.25L IPEC	(TOTAL METALS)				
				0.25L IPEC	(DISSOLVED METALS)				
				0.25L IPEC	(TOTAL METALS DUPLICATE)				
				0.25L IPEC	(DISSOLVED METALS DUPLICATE)				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	
turbidity meter	20070393

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.76 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 - SD

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): CBSL

SAMPLING INTERVAL (depth in ft below top of casing)

41.5 to 58.0

SAMPLING PORT

50 7

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1050	0	Pump	ON					7/7.4	20
1055	0.10	20.46	1.098	0.67	6.95	-72.0	0.00		
1100	0.30	19.97	1.098	0.23	7.45	-51.8	0.00		
1105	0.50	19.72	1.101	0.24	7.50	-47.0	0.00		
1110	0.75	19.47	1.103	0.25	7.05	-40.9	0.00		
1115	0.90	19.32	1.105	0.27	7.17	-40.9	0.00		
1120	1.10	19.07	1.108	0.25	7.09	-40.3	0.00		
1122	START	SAMPLE	COLLECTION						
1135	END	SAMPLE	COLLECTION: 2 L IPEC						
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	2007 01254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 63 - 93

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): CG, SL

SAMPLING INTERVAL (depth in ft below top of casing)

81.5 to 100.5

SAMPLING PORT

93 5

TOTAL VOLUME PURGED: 0.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1050	0	Pump	ON					7/7.4	20
1055	0.01	21.72	1.150	0.74	7.33	-79.1	3.10		
1100	0.10	21.10	1.157	0.11	7.51	-69.2	1.02		
1105	0.28	20.96	1.159	0.09	7.56	-47.0	0.11		
1110	0.40	20.50	1.158	0.09	7.59	-38.2	0.02		
1115	0.52	20.40	1.155	0.14	7.60	-34.6	0.00		
1120	0.65	20.23	1.155	0.13	7.62	-36.3	0.00		
1125	0.75	20.01	1.152	0.12	7.63	-29.7	0.00		
1126	START SAMPLE COLLECTION								
1150	END SAMPLE COLLECTION			1 2L IPEC					
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K17594 AG
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 63 - 112

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's - 90's

PROJECT NO: 01.0012869.92
DATE: 8/2/11
SAMPLER(S): CSL

SAMPLING INTERVAL (depth in ft below top of casing)

106.5 to 112.0

SAMPLING PORT

112 4

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1050	0	PUMP	ON					7/7.4	20
1055	0.01	22.61	1.267	0.11	7.24	-378.8	0.77		
1100	0.10	21.81	1.237	0.03	7.39	-357.0	0.00		
1105	0.22	21.46	1.215	0.04	7.39	-310.0	0.27		
1110	0.32	21.19	1.267	0.02	7.38	-284.5	0.08		
1115	0.48	20.95	1.301	0.03	7.35	-271.0	0.28		
1120	0.60	20.78	1.307	0.04	7.37	-264.8	0.59		
1125	0.75	20.63	1.306	0.03	7.40	-256.7	0.00		
1130	0.82	20.60	1.303	0.02	7.44	-252.8	0.64		
1135	0.95	20.55	1.302	0.03	7.50	-249.8	0.35		
1136	START	SAMPLE	COLLECTION	N					
1201	END SAMPLE COLLECTION			2L IPEC					
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20207012534

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 63 - 121

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80s-90's

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): CAS, SL

SAMPLING INTERVAL (depth in ft below top of casing)

118 to 127.5

SAMPLING PORT

121 3

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0910	0	Pump	ON					8/8.2	35
0914	0.10	21.38	1.571	0.169	7.17	-112.9	0.01		
0919	0.30	20.68	1.537	0.40	7.18	-93.6	0.00		
0924	0.50	20.21	1.535	0.29	7.20	-86.3	0.00		
0929	0.75	19.70	1.550	0.25	7.31	-78.0	0.00		
0934	0.90	19.38	1.558	0.21	7.14	-70.0	0.00		
0939	1.10	19.20	1.556	0.22	7.17	-63.8	0.00		
0944	1.30	19.15	1.555	0.21	7.15	-60.9	0.00		
0946	START SAMPLE COLLECTION								
1003	END SAMPLE COLLECTION: 2L IPEC								
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 63 - 163

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): CA, SL

SAMPLING INTERVAL (depth in ft below top of casing)

150.5 to 165

SAMPLING PORT

163 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) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0910	0	Pump	ON					8/8.2	35
0914	0.08	21.29	1.067	1.21	7.17	-93.9	21.34		
0919	0.20	20.51	1.035	0.35	7.39	-99.6	2.02		
0924	0.40	20.01	1.021	0.22	7.37	-92.0	1.90		
0929	0.60	19.51	1.017	0.19	7.37	-84.6	2.37		
0934	0.75	19.15	1.018	0.30	7.39	-77.5	1.62		
0939	0.88	18.96	1.019	0.27	7.40	-70.4	1.62		
0944	1.05	18.90	1.019	0.28	7.41	-71.6	1.62		
0947	START SAMPLE COLLECTION								
1006	END SAMPLE COLLECTION	1L IPC							
				0.25L IPC (TOTAL METALS)					
				0.25L IPC (DISSOLVED METALS)					
	Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K17594 AG
turbidity meter	20070259

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 63 - 174

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

168.0 to 191.1

SAMPLING PORT

174

TOTAL VOLUME PURGED: 1.80 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0910	0	PUMP	ON					8/8.2	35
0914	0.08	21.71	1.035	0.06	7.20	-367.6	0.19		
0919	0.20	21.04	1.005	0.06	7.14	-370.5	0.35		
0924	0.38	20.56	0.985	0.05	7.17	-308.9	0.01		
0929	0.56	20.13	0.979	0.05	7.12	-279.5	0.26		
0934	0.75	19.67	0.981	0.06	7.11	-276.0	0.08		
0939	0.90	19.45	0.986	0.05	7.14	-265.2	0.45		
0944	1.05	19.45	0.985	0.05	7.11	-259.0	0.61		
0949	1.30	19.17	0.986	0.03	7.09	-249.8	0.00		
0954	1.48	19.10	0.988	0.03	7.12	-248.3	0.00		
0959	1.65	18.79	0.988	0.04	7.15	-248.0	0.00		
0959	START SAMPLE COLLECTION								
1018	END SAMPLE COLLECTION:			2L TPE					
				0.25L TPE (TOTAL METALS)					
				0.25L TPE (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125H

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW-66-21
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80s

PROJECT NO: 01.0017869.92
DATE: 8/8/11
SAMPLER(S): S.CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.09 GW Elevation = 2.317 ACTUAL DEPTH = 9.446

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0935	9.446	PUMP ON							
0950	9.273	22.34	4.910	0.52	6.49	-240.1	18.95		0.07
0955	9.182	22.46	4.910	0.43	6.64	-241.4	11.11		0.18
1000	9.152	22.65	4.901	0.36	6.62	-202.7	9.85		0.26
1005	9.126	22.80	4.893	0.35	6.61	-211.8	12.34		0.33
1010	9.085	22.91	4.901	0.30	6.61	-227.0	10.83		0.41
1015	9.053	23.09	4.888	0.27	6.63	-220.0	9.39		0.49
1020	9.021	23.41	4.877	0.29	6.61	-218.0	9.51		0.57
1022	START	SAMPLE	COLLECTION						
1055	END	"	"	2L	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	
turbidity meter	10070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.72 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-66
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80s

PROJECT NO: 01.0017869.92
DATE: 8/8/11
SAMPLER(S): SL/CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.04 GW Elevation = 2.324 ACTUAL DEPTH = 13.396

Time	DTW or GW Elevation MEASR. DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0935	13.396	PUMP	ON						
0950	13.156	21.96	2.516	2.43	7.19	-77.3	2.19		0.03
0955	13.140	21.72	2.623	1.31	7.34	-78.9	1.12		0.11
1000	13.099	21.96	2.640	0.84	7.39	-82.6	1.15		0.20
1005	13.057	21.96	2.659	0.68	7.44	-89.7	0.83		0.28
1010	13.059	21.76	2.682	0.67	7.47	-95.3	0.72		0.37
1015	13.011	21.92	2.683	0.51	7.48	-94.9	1.04		0.42
1047	START	SAMPLE	COLLECTION						
1049	END	"	"	: 2L	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	3007010854

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.57 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: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/8/14
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

28.8 to 54.3

SAMPLING PORT

39 7

TOTAL VOLUME PURGED: 1.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1134	0	PUMP	ON					8/8	20
1144	0.28	22.05	2.350	0.64	7.24	-80.3	1.50		
1149	0.50	21.22	2.292	0.54	7.36	-104.5	1.26		
1154	0.68	21.26	2.269	0.51	7.42	-113.9	1.09		
1159	0.85	21.15	2.249	0.51	7.47	-128.3	0.97		
1204	1.15	20.91	2.230	0.50	7.52	-134.2	0.85		
1209	1.40	21.18	2.218	0.47	7.54	-138.5	1.02		
1213	START SAMPLE COLLECTION								
1226	END SAMPLE COLLECTION; 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070489 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR MISSING MANHOLE

WELL ID: MW 67 - 105

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: sunny, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/8/14
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

90.3 to 110.8

SAMPLING PORT

105 6

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1134	0	PUMP ON						8/8	20
1144	0.10	23.37	1.610	0.18	6.83	-187.6	2.58		
1149	0.25	22.41	1.589	0.16	6.94	-210.7	2.18		
1154	0.35	22.43	1.588	0.22	6.96	-218.9	1.98		
1159	0.50	22.19	1.594	0.80	6.98	-229.5	6.09		
1204	0.65	22.12	1.609	0.62	7.02	-234.7	2.16		
1209	0.75	22.34	1.603	0.33	7.01	-224.9	1.75		
1214	0.85	22.47	1.606	0.22	7.01	-240.9	1.71		
1219	1.05	22.32	1.609	0.14	7.03	-246.5	1.84		
1224	1.20	22.37	1.608	0.12	7.03	-248.0	1.51		
1229	1.35	22.66	1.618	0.12	7.04	-250.7	1.65		
1230	START SAMPLE COLLECTION								
1248	END SAMPLE COLLECTION; 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR: MISSING MANIFOLD

WELL ID: MW 67 - 173

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80s-90s

PROJECT NO: 01.0017869.92
DATE: 8/5/14
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

164.8 to 188.3

SAMPLING PORT

173 5

TOTAL VOLUME PURGED: 0.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1134	0	PUMP	ON					8/8	20
1144	0.01	22.63	1.109	0.76	6.57	-78.7	3.23		
1149	0.10	22.31	1.103	0.19	6.72	-109.8	3.91		
1154	0.20	22.46	1.170	0.13	6.78	-148.7	4.36		
1159	0.30	22.26	1.229	0.16	6.84	-187.0	3.62		
1204	0.40	22.17	1.247	0.18	6.88	-209.7	5.85		
1209	0.50	22.04	1.244	0.14	6.89	-238.7	3.26		
1214	0.60	22.02	1.240	0.10	6.88	-246.5	2.68		
1219	0.70	22.01	1.231	0.09	6.90	-248.9	3.15		
1224	0.80	21.91	1.223	0.09	6.93	-248.4	2.77		
1226	START	SAMPLE	COLLECTION						
1253	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K175944 AG
turbidity meter	14007049393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR: MISSING MANIFOLD

WELL ID: MW 67 - 219

SAMPLE ID: D17

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/18/11
SAMPLER(S): C&SL

SAMPLING INTERVAL (depth in ft below top of casing)

209 to 229.8

SAMPLING PORT

219 4

TOTAL VOLUME PURGED: 2.10 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0940	0	PUMP ON						6|6	50
0945	0.25	20.28	1.234	2.77	6.55	-25.5	1.16		
0950	0.50	19.83	1.222	1.07	6.64	-19.9	0.58		
0955	0.75	19.86	1.216	0.70	6.73	-8.5	1.46		
1000	1.00	20.57	1.216	0.56	6.82	-13.0	1.13		
1005	1.25	19.62	1.223	0.51	6.88	-15.2	1.18		
1010	1.50	19.14	1.217	0.48	6.88	-14.4	1.12		
1015	1.75	19.20	1.210	0.39	6.88	-17.6	1.00		
1020	2.00	19.30	1.214	0.36	6.92	-23.4	0.97		
1022	START	SAMPLE	COLLECTION						
1032	END	SAMPLE	COLLECTION: 2L IPEC						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR - MISSING MANIFOLD

WELL ID: MW 67 - 276

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/8/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

250.8 to 281.3

SAMPLING PORT

276 3

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0940	0	Pump	ON				2.20	1616	50
0946	0.1	20.96	1.019	1.70	6.85	-68.3	~~68.2~~		
0950	0.35	20.43	0.991	0.80	6.12	-67.2	1.78		
0955	0.55	20.37	0.985	0.54	6.95	-22.2	1.42		
1000	0.75	21.02	0.982	0.45	5.98	-6.0	1.64		
1005	0.85	20.40	0.983	0.43	6.09	-1.2	0.96		
1010	1.05	19.70	0.976	0.33	6.08	9.9	1.25		
1015	1.25	19.58	0.973	0.30	5.99	10.9	1.00		
1020	1.55	19.76	0.967	0.28	6.10	8.9	1.56		
1025	1.75	19.58	0.967	0.26	6.20	7.7	1.51		
1030	1.85	19.[illegible]	0.966	0.26	6.25	9.5	1.48		
1032	START	SAMPLE	COLLECTION						
1045	END	SAMPLE	COLLECTION: 2L IPEC						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	2W0704293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR - MISSING MANIFOLD

WELL ID: MW 67 - 323

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: sunny, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/8/11
SAMPLER(S): C.B, S.L

SAMPLING INTERVAL (depth in ft below top of casing)

317.8 to 328.3

SAMPLING PORT

323

2

TOTAL VOLUME PURGED: 1.60 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0940	0	Pump	ON					6/6	50
0945	0.01	21.81	0.894	1.23	6.26	-141.2	2.96		
0950	0.15	21.07	0.850	0.10	6.35	-145.0	7.97		
0955	0.26	21.25	0.826	0.09	6.51	-158.4	2.84		
1000	0.45	21.97	0.826	0.06	6.59	-223.7	2.31		
1005	0.50	21.91	0.838	0.09	6.62	-243.6	1.93		
1010	0.75	20.62	0.844	0.11	6.61	-268.7	2.64		
1015	0.86	20.43	0.851	0.07	6.62	-277.4	0.70		
1020	1.00	20.63	0.852	0.08	6.65	-296.9	0.87		
1025	1.15	20.57	0.853	0.10	6.66	-304.4	0.63		
1030	1.25	20.42	0.853	0.12	6.69	-304.0	0.79		
1035	1.38	20.85	0.854	0.14	6.53	-303.6	0.81		
1037	START SAMPLE COLLECTION								
1053	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR: MISSING MANIFOLD

WELL ID: MW 67 - 340

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: sunny, 90-90's

PROJECT NO: 01.0017869.92
DATE: 8/8/11
SAMPLER(S): C.B, S.L

SAMPLING INTERVAL (depth in ft below top of casing)

335.3 to 347.9

SAMPLING PORT

340

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0940	0	Pump	ON					6/6	50
0945	0.05	21.27	0.793	1.37	6.82	-103.2	1.32		
0950	0.75	20.48	0.773	0.13	7.12	-122.2	1.21		
0955	0.38	20.52	0.776	0.17	7.41	-145.8	0.51		
1000	0.50	21.05	0.761	0.33	7.45	-162.7	1.59		
1005	0.75	21.11	0.763	0.28	7.45	-179.8	0.41		
1010	1.00	19.62	0.759	0.13	7.47	-185.4	0.35		
1015	1.25	19.66	0.761	0.09	7.48	-184.9	0.06		
1020	1.38	19.72	0.762	0.07	7.47	-186.2	0.20		
1025	1.50	19.80	0.764	0.05	7.47	-190.9	0.13		
1027	START SAMPLE COLLECTION								
1043	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K17594 AG
turbidity meter	20070293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR: MISSING MANIFOLD

WELL ID: MW-101
SAMPLE ID: N/A
METALS SAMPLE ONLY

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: 8/19/14
SAMPLER(S): SL, CB
PUMP DEPTH: ~9 ft

WATER QUALITY: DTW = 6.50 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1423	6.50	PUMP ON							gal
1430	6.61	22.66	1.858	1.08	7.22	-27.4	16.69		0.30
1435	6.62	22.47	1.874	0.73	7.21	-41.9	3.78		0.60
1438	6.62	22.35	1.879	0.63	7.21	-44.5	1.36		0.85
1441	6.62	22.29	1.884	0.57	7.21	-46.1	1.42		1.10
1442	START	SAMPLE COLLECTION							1.60
1445	END	"	"		: 0.25 L IPEC	(TOTAL METALS)			
					0.25 L IPEC	(DISSOLVED METALS)			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070493

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Well bolted

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-108
SAMPLE ID: N/A
METALS SAMPLE ONLY

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-90's

PROJECT NO: 01.0017869.92
DATE: 8/18/14
SAMPLER(S): SL, CB
PUMP DEPTH: 8 ft

WATER QUALITY: DTW = 4.16 GW Elevation = 10.070 ACTUAL DEPTH = 7.149

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0955	7.149	PUMP ON							
1005	7.048	23.08	0.284	0.86	6.75	140.6	4.85		0.31
1010	7.063	22.61	0.292	0.68	6.76	109.0	5.40		0.57
1015	7.042	22.46	0.310	0.60	6.78	75.0	7.14		0.72
1020	7.035	22.35	0.350	0.53	6.79	24.2	7.48		0.90
1025	7.055	22.26	0.435	0.49	6.85	-10.9	15.00		1.16
1030	7.074	22.29	0.575	0.45	6.93	-37.7	20.53		1.32
1035	7.082	22.43	0.680	0.47	6.86	-62.3	19.64		1.49
1040	7.070	22.49	0.747	0.47	6.89	-75.4	17.71		1.67
1045	7.089	22.54	0.780	0.44	6.93	-81.9	11.94		1.80
1050	7.090	22.68	0.801	0.43	6.98	-85.9	9.11		1.93
1055	7.063	22.76	0.822	0.37	7.03	-88.0	7.80		2.10
1058	7.074	22.80	0.829	0.36	7.04	-87.9	6.44		2.20
1102	7.075	22.81	0.838	0.31	7.06	-90.8	4.80		2.36
1103	START SAMPLE COLLECTION								
1104	END	"	"	: 0.25 L IPEC (TOTAL METALS)					
				0.25 L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** No holes, evidence of surface water infiltration.

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.

Performed field blank MW-108-FB-2 prior to sampling this well.

WELL ID: MW-111
SAMPLE ID: N/A (METALS ONLY)
↳ MW-111-FB-1 (FIELD BLANK-1) COLLECTED AT 1010
0.75L IPEC (DISSOLVED METALS)
0.75L IPEC (TOTAL METALS)

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80

PROJECT NO: 01.0017869.92
DATE: 8/12/11
SAMPLER(S): SL, CB
PUMP DEPTH: 16.5 ft

WATER QUALITY: DTW = 7.18 GW Elevation = 11.2 ACTUAL DEPTH = 8.002

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1027	7.18	PUMP ON							
1035	7.36	20.78	0.539	1.53	6.73	10.2	2.52		0.04
1040	7.43	20.89	0.525	0.73	6.81	14.6	1.85		0.19
1045	7.47	21.05	0.505	0.74	6.85	15.5	3.94		0.28
1050	7.51	21.03	0.509	0.81	6.85	19.8	3.61		0.38
1055	7.55	21.06	0.505	0.67	6.82	24.4	2.34		0.49
1057	START	SAMPLE COLLECTION							
1104	END	"	"	0.75L IPEC (TOTAL METALS)					
				0.75L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Dried, Lids stripped

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.

NOTE: A little evidence (smell) of electrolytic oil in purge water.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: 4340
SAMPLE ID: 030

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Drizzle 80-90's

PROJECT NO: 01.0017869.92
DATE: 7/29/11
SAMPLER(S): SZ, AB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

Well Vault Condition Fair, Lots of Spiders
Well Diameter: 4 in

27.25 (DTB) - 9.86 (DTW) = 17.39 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 17.39 x 0.653 (Multiplier) = 11.356 (Well Volume) gal

11.356 x 1.5 = 17.03 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 8.16 gal

WATER QUALITY: DTW = 9.86 GW Elevation = 4.653 ACTUAL DEPTH = 51.407

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0855	0	51.407	PUMP	ON					
0859	1	50.230	20.45	1.264	0.36	8.24	-63.0	4.43	
0906	2	48.540	20.93	1.259	0.32	8.30	-59.7	1.04	
0911	3	47.440	21.06	1.253	0.51	8.09	-14.0	3.67	
0918	4	45.205	21.18	1.251	0.78	8.02	-11.2	1.95	
0923	5	43.853	21.16	1.251	0.94	8.01	-10.3	2.32	
0931	6	41.233	21.18	1.251	1.18	8.08	-4.8	1.25	
0941	7	38.558	21.06	1.252	1.31	8.14	-2.8	1.29	
0950	8	35.312	21.26	1.253	1.05	8.10	-3.5	1.15	
1002	8.5	39.617	20.55	1.252	1.24	8.09	-2.9		
1001			PUMP OFF, WELL DRY; LET RECHARGE						
1057			START SAMPLE COLLECTION						
1105			END	"	"	"	IPEC		
			PUMP OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070254

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-45
SAMPLE ID: MW-45

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Drizzle 80-90's

PROJECT NO: 01.0017869.92
DATE: 7/29/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.10 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0853	9.10	PUMP	ON						0
0859	9.10	31.19	1.207	1.10	6.88	-141.6	2.36		0.01
0904	9.08	32.98	1.193	0.48	7.11	-125.1	1.96		0.25
0909	9.00	33.30	1.192	0.33	7.16	-138.8	1.96		0.34
0914	9.05	33.50	1.190	0.25	7.21	-137.7	2.05		0.48
0919	9.04	33.63	1.190	0.20	7.24	-154.9	1.93		0.60
0924	9.00	33.68	1.188	0.16	7.26	-174.8	2.10		0.75
0929	9.07	34.36	1.188	0.19	7.29	-197.5	2.00		0.90
0934	9.03	34.81	1.185	0.22	7.31	-204.9	1.73		1.10
0939	8.97	34.87	1.184	0.17	7.31	-210.8	1.71		1.25
0944	9.00	35.09	1.181	0.18	7.32	-215.9	1.67		1.40
0949	9.03	35.53	1.178	0.16	7.33	-220.6	1.79		1.58
0950	START SAMPLE COLLECTION								
1006	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	2007 01254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, Bolts Stripped

NOTES AND OBSERVATIONS: Total volume purged 1.75 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: GZ-T1
SAMPLE ID: 033

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70's

PROJECT NO: 01.0017869.92
DATE: 8/22/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 3.58 GW Elevation = 4.938 ACTUAL DEPTH = 3.465

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1349	3.468	PUMP ON							gal 0
1354	3.475	26.33	1.190	4.01	7.60	46.7	1.18		0.01
1359	3.491	26.29	1.200	1.64	7.66	-24.5	0.72		0.10
1404	3.466	26.26	1.207	1.50	7.71	-38.9	0.47		0.28
1409	3.462	26.26	1.209	1.35	7.74	-46.0	0.71		0.40
1414	3.460	26.22	1.210	1.31	7.76	-50.7	0.79		0.50
1419	3.464	26.22	1.210	1.26	7.78	-53.8	0.84		0.68
1421	START SAMPLE COLLECTION								
1440	END SAMPLE COLLECTION: 21 IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

NOTES AND OBSERVATIONS: Total volume purged 0.82 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-12
SAMPLE ID: 039

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy/drizzle 80-90s

PROJECT NO: 01.0017869.92
DATE: 7/29/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 3.55 GW Elevation = 496.2 ACTUAL DEPTH = 3.664

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes (gal)
1124	3.204	PUMP ON							0
1130	3.165	30.32	1.165	2.31	7.35	-97.0	2.91		0.01
1135	3.166	30.09	1.140	0.83	7.30	-111.2	1.86		0.20
1140	3.165	30.17	1.134	0.46	7.33	-122.7	1.20		0.40
1145	3.177	30.88	1.123	0.29	7.29	-135.8	1.37		0.58
1150	3.170	30.89	1.128	0.29	7.29	-171.7	0.89		0.78
1155	3.176	30.76	1.122	0.19	7.44	-163.6	0.855		0.90
1200	3.179	31.74	1.121	0.15	7.69	-166.2	0.36		1.04
1205	3.179	32.09	1.130	0.14	7.36	-179.4	0.41		1.18
1210	3.181	32.17	1.126	0.15	7.43	-178.3	0.31		1.35
1215	3.175	32.15	1.123	0.11	7.41	-179.8	0.46		1.50
1216	START	SAMPLE COLLECTION							
1232	END	"	"	"	" IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

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.

APPENDIX D: Q4-2011 SAMPLING DATA SHEETS

WELL ID: LAF-002
SAMPLE ID: D16

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30's

PROJECT NO: 01.0017869.92
DATE: 12/13/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 73.2 GW Elevation

Time	(DTW) or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	~~Flow Rate~~ Level in well ml/min/hour	Notes
0915	73.2	PUMP ON						5ft/42	gal 95
0923	73.44	8.24	2.836	4.86	6.49	-20.3	0.76		0.05
0928	73.52	8.70	2.808	3.11	6.46	-11.0	0.04		0.15
0933	73.70	9.08	2.795	1.95	6.48	-6.1	0.96		0.35
0938	73.79	8.77	2.794	1.25	6.50	-3.0	0.23		0.56
0943	73.80	8.72	2.772	1.03	6.50	-1.6	0.57		0.66
0948	73.83	7.25	2.801	1.01	6.61	6.0	0.83		0.74
0953	73.85	6.04	2.755	0.96	6.60	10.1	0.44		0.80
0954	START SAMPLE COLLECTION								
~~0955~~ 0958	END SAMPLE COLLECTION: 2L IPEC								
1031	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	2007012S4

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

NOTES AND OBSERVATIONS: Total volume purged 0.95 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of ~~casing~~ STICK UP CASING

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: I-2
SAMPLE ID: 004

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 30's-40's

PROJECT NO: 01.0017869.92
DATE: 12/08/11
SAMPLER(S): CB, SL

WATER COLUMN HEIGHT (ft)

40.13 (DTB) - 29.42 (DTW) = 10.71 (Water Column Height) ft

Well Diameter: 2 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 10.71 x 0.163 (Multiplier) = 1.75 (Well Volume) gal

1.75 x 1.5 = 2.61 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.80 gal

WATER QUALITY: DTW = 29.42 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
1358	0	43.51	PUMP ON								
1402	0.6	30.00	16.85	0.758	6.74	7.17	69.0	927.1			
1404	1.0	31.83	17.39	0.748	6.79	7.11	30.0	503.8			
1407	1.5	32.34	17.66	0.747	6.79	7.08	9.8	360.8			
1409	2.0	32.98	17.76	0.763	6.72	7.07	6.5	452.8			
1411	2.5	32.51	17.59	0.788	6.59	7.06	-0.3	573.1			
1412	2.6	33.03	17.58	0.795	6.60	7.07	-4.0	—			
1412	START SAMPLE COLLECTION										
1415	END SAMPLE COLLECTION. 2L IPEC										
	PUMP OFF										

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007042973

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 30 - 69

SAMPLE ID: 042

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40s-50s

PROJECT NO: 01.0017869.92
DATE: 11/30/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

67.3 to 71.3

SAMPLING PORT

69

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1016	0	PUMP ON						6/12	40
1022	0.05	22.90	1.102	8.36	7.82	-97.4	NA		
1027	0.15	23.43	1.132	8.62	8.01	17.6	—		
1032	0.30	23.50	1.130	8.83	8.05	49.8	—		
1037	0.40	23.53	1.148	9.20	8.04	73.1	—		
1042	0.50	23.50	1.144	9.36	8.06	65.6	—		
1047	0.60	23.47	1.141	9.57	8.05	94.1	—		
1052	0.80	23.49	1.142	9.69	8.10	96.1	—		
1057	1.00	23.54	1.148	9.83	8.07	84.9	—		
1100	START SAMPLE COLLECTION								
1120	END SAMPLE COLLECTION: 2L IPEC								
			0.0	5L IPEC (TRITIUM IN-HOUSE)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	NA

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR
ACCUMULATION OF WATER
CONDENSATE-CB
CONDENSATE

WELL ID: MW 30 - 84

SAMPLE ID: 033

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40's-50's

PROJECT NO: 01.0017869.02
DATE: 11/3/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

77.3 to 85.4

SAMPLING PORT

84

TOTAL VOLUME PURGED: 0.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1016	0	PUMP	ON					6/12	40
1027	0.05	21.88	1.932	3.42	6.91	-66.0	N/A		
1032	0.10	21.89	1.932	3.45	6.96	-72.0	—		
1037	0.15	21.46	1.933	2.26	7.00	-66.5	—		
1042	0.20	21.24	1.930	2.03	7.02	-62.3	—		
1047	0.25	20.94	1.929	1.95	7.04	-61.9	—		
1049	START SAMPLE COLLECTION								
1137	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	N/A

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR
ACCUMULATION OF WATER CONDENSATE

WELL ID: MW 31 - 49

SAMPLE ID: 034

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40's - 50's

PROJECT NO: 01.0017869.92
DATE: 11/21/11
SAMPLER(S): CB, CG, SL

SAMPLING INTERVAL (depth in ft below top of casing)

34.8 to 49.3

SAMPLING PORT

49

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1002	0	PUMP	ON					6/7	29
1005	0.31	17.09	1.987	4.07	6.68	-60.2	2.42		
1010	0.72	17.46	2.050	2.03	6.81	-39.1	0.93		
1015	0.50	17.57	2.074	1.91	6.89	-20.5	0.79		
1020	0.75	17.68	2.081	1.94	6.93	-15.8	0.74		
1025	1.00	17.69	2.084	1.99	6.91e	-18.5	0.70		
1026	START SAMPLE COLLECTION								
1032	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125H

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD, VAULT WAS SEALED WITH CAULK NO WATER INFILTRATION

WELL ID: MW 31 - 63

SAMPLE ID: 034

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 48° CLEAR, SUNNY

PROJECT NO: 01.0017869.92
DATE: 11/21/11
SAMPLER(S):

SAMPLING INTERVAL (depth in ft below top of casing)

55.8 to 63.8

SAMPLING PORT

63

TOTAL VOLUME PURGED: 0.53 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mV/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1001	0	- PUMP	ON -					6/7	29
1009	0.01	15.58	1.677	3.26	6.98	-143.4	2.08		
1014	0.02	15.58	1.684	0.71	6.98	-131.9	1.65		
1019	0.1	15.27	1.600	0.53	6.98	-121.7	1.74		
1024	0.18	16.82	1.588	0.62	6.98	-110.1	1.88		
1029	0.25	15.98	1.575	0.54	6.98	-79.4	1.63		
1034	0.31	16.05	1.566	0.54	6.98	-83.5	1.68		
1039	0.53	16.18	1.563	0.57	6.98	-75.3	1.38		
1048	START SAMPLE COLLECTION.								
1114	SAMPLE END								
	PUMP OFF		2L: IPEC.						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20704393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD CONDITION
WELL VAULT MOST

WELL ID: MW 31 - 85

SAMPLE ID: 034

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 48° CLEAR, SUNNY

PROJECT NO: 01.0017869.92
DATE: 11/21/11
SAMPLER(S):

SAMPLING INTERVAL (depth in ft below top of casing)

69.8 to 85.4

SAMPLING PORT

85

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1001	0	- PUMP ON -						6/7	29
1009	0.01	16.14	2.117	0.98	7.21	-180.0	3.10		
1014	0.12	16.36	2.082	1.43	7.27	-170.2	2.41		
1019	0.2	16.51	2.055	1.90	7.27	-158.3	1.78		
1024	0.3	16.65	2.044	2.04	7.28	-142.5	1.44		
1029	0.39	16.75	2.032	2.17	7.28	-133.6	1.85		
1034	0.49	16.86	2.024	2.17	7.28	-117.3	1.26		
1039	0.59	16.89	2.019	2.25	7.27	-111.9	1.43		
1044	0.71	16.90	2.018	2.25	7.27	-102.5	2.26		
1049	0.80	16.80	2.017	2.20	7.26	-93.4	1.93		
1054	0.90	16.80	2.014	2.24	7.26	-79.7	2.25		
1059	1.00	16.89	2.015	2.22	7.26	-66.9	2.15		
1104	1.10	16.94	2.015	2.29	7.26	-59.2	2.17		
1106	1.25	START SAMPLE COLLECTION.							
1125	END								
	PUMP OFF		2L: IPEC						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	10F104893

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD CONDITION
WELL VAULT MOIST

WELL ID: MW 32 - 59

SAMPLE ID: 028

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40s

PROJECT NO: 01.0017869.92
DATE: 11/17/11
SAMPLER(S): CR, CBa

SAMPLING INTERVAL (depth in ft below top of casing)

28.3 to 61.3

SAMPLING PORT

59 6

TOTAL VOLUME PURGED: 1.60 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1342	0	PUMP	ON					8/11	40
1348	0.1	18.89	1.617	9.72	7.04	-84.5	7.92		
1350	0.61	19.12	1.608	10.73	7.41	-41.2	5.66		
1355	0.20	19.15	1.008	11.25	7.45	-31.2	6.00		
1400	0.8	19.18	1.012	10.24	7.47	-26.0	2.89		
1405	1.3	19.82	1.015	11.80	7.48	-28.0	1.55		
1408	1.45	START SAMPLE	COLLECTION.						
1415	END SAMPLE		COLLECTION						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125H

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32/59D

WELL ID: MW 32 - 85

SAMPLE ID: 031

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40's

PROJECT NO: 01.0017869.92
DATE: 11/17/11
SAMPLER(S): CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

79.3 to 92.8

SAMPLING PORT

85

5

TOTAL VOLUME PURGED: 1.80 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1342	0	PUMP	ON					8/11	40
1348	0.01	17.48	1.738	9.62	6.69	-244.0	3.31		
1350	0.2	17.57	1.755	10.09	7.09	-203.2	1.11		
1355	0.45	17.34	1.756	9.95	7.39	-188.1	0.86		
1400	0.49	17.27	1.756	8.58	7.02	-189.3	0.81		
1405	0.65	17.27	1.743	6.69	6.82	-188.4	0.00		
1410	0.79	17.30	1.758	5.85	6.78	-186.0	0.00		
1416	0.85	17.34	1.722	5.14	6.77	-187.1	0.11		
1420	0.95	17.43	1.710	4.86	6.91	-187.3	0.01		
1425	1.15	17.49	1.691	3.88	7.03	-185.1	0.03		
1430	1.17	17.51	1.684	3.64	6.90	-180.2			
1435	1.80	WENT DRY							
1443		START SAMPLE COLLECTION							
1508		END SAMPLE COLLECTION							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125H

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-15D

1435 - well went dry, Let recharge before taking sample.

WELL ID: MW 32 - 149

SAMPLE ID: 028

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40s

PROJECT NO: 01.0017869.92
DATE: 11/7/14
SAMPLER(S): CM, CA

SAMPLING INTERVAL (depth in ft below top of casing)

147.3 to 156.8

SAMPLING PORT

149 3

TOTAL VOLUME PURGED: 0.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	PUMP	ON					10/12	58
1126	0.1	16.69	2.623	0.86	6.98	-217.1	1.29		
1131	0.2	16.98	2.561	0.79	6.98	-209.1	0.00		
1136	0.56	17.12	2.541	0.51	6.98	-200.6	0.57		
1141	0.49	17.25	2.529	0.44	6.98	-183.9	0.00		
1146	0.59	17.12	2.529	0.40	6.98	-171.2			
1149	0.94	START	COLLECTION						
1205		END SAMPLE	COLLECTION						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	2007210154

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition SEE MW-32-190

WELL ID: MW 32 - 173

SAMPLE ID: 026

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40's

PROJECT NO: 01.0017869.92
DATE: 11/17/11
SAMPLER(S): CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

165.8 to 174.3

SAMPLING PORT

173 2

TOTAL VOLUME PURGED: 1.10 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	Pump	ON					10/12	58
1125	0.1	17.12	2.378	0.75	6.24	-222.3	17.3		
1131	0.26	17.43	2.447	0.42	6.51	-220.6	1.12		
1136	0.55	17.50	2.468	0.28	6.68	-210.8	0.22		
1141	0.70	17.48	2.456	0.27	6.74	-203.6	0.32		
1146	0.80	17.44	2.449	0.21	6.78	-198.1			
1149	0.95	Start collection							
1201	End sample collection								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070124

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GW MW-32-173

WELL ID: MW 32 - 190

SAMPLE ID: 030

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40's

PROJECT NO: 01.0017869.92
DATE: 11/17/11
SAMPLER(S): CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

180.3 to 193.9

SAMPLING PORT

190

TOTAL VOLUME PURGED: 0.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

1

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	PUMP	ON					10/12	58
1126	0.1	16.65	0.210	2.44	5.46	-268.3	1.57		
1131	0.19	18.43	1.419	0.90	6.51	-292.6	0.00		
1136	0.35	17.27	1.626	0.49	6.93	-286.9	0.00		
1141	0.48	17.20	1.644	0.39	6.92	-278.6	0.00		
1146	0.62	17.20	1.667	0.35	6.96	-275.9			
1148	0.775	START SAMPLE COLLECTION							
1203	END SAMPLE COLLECTION								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070 12.54

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR - WEATHERED PARTIAL FLOODED

WELL ID: MW-36-24
SAMPLE ID: 024

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 40S

PROJECT NO: 01.0017869.92
DATE: 12/07/11
SAMPLER(S): CBSL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 3.48 GW Elevation = 8.118 ACTUAL DEPTH = 21.370

Time	DTW or GW Elevation (ACTUAL DEPTH) (<0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1012	29.60K	PUMP	ON						0
1019	29.677	22.49	0.642	0.28	7.65	-184.6	3.11		0.10
1024	29.681	22.58	0.495	0.22	7.53	-124.4	1.31		0.28
1029	29.682	22.32	0.445	0.18	7.72	-109.8	1.34		0.45
1034	29.682	22.42	0.436	0.17	7.77	-152.7	2.03		0.60
1039	29.688	22.89	0.430	0.14	7.78	-125.5	1.17		0.75
1044	29.689	22.83	0.431	0.15	7.81	-123.4	1.21		0.86
1049	29.690	22.94	0.431	0.16	7.82	-130.1	1.24		1.10
1051	START	SAMP	LE COLLECTION						
1104	END SAMPLE	COLLECTION	1.2	L IPE	C				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	23070429B

Measured Well Depth ..... **(feet from top of casing)** **Well Vault Condition** GOOD

NOTES AND OBSERVATIONS: Total volume purged 1.30 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-36-41
SAMPLE ID: 018

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain, 40's

PROJECT NO: 01.0017869.92
DATE: 12/7/11
SAMPLER(S): SL, CD

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

41 (DTB) - 2.95' (DTW) = 38.05 ft (Well Column Height)

Well Vault Condition Good
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 38.05 x 0.041 (Multiplier) = 1.56 (Well Volume) gal

1.56 x 1.5 = 2.34 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 0.65 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1048	0	PUMP ON							
1052	0.30	~~2.79~~	22.18	1.106	0.61	7.68	-178.0	5.95	
1056	0.50	—	Well Dry ; LET Recharge						
1304 → 1308		START SAMPLE COLLECTION							
1309	END	"		"	: 2L IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	AG
turbidity meter	20070122 20070154

NO PRODUCT OBSERVED DTW = 2.95'

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-30-52
SAMPLE ID: 023

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain / 40s

PROJECT NO: 01.0017869.92
DATE: 12/7/14
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

52	-	6.45	=	45.55 ft
DTB		DTW		Well Column Height

Well Vault Condition Bad
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 45.55 x 0.041 (Multiplier) = 1.87 (Well Volume) gal

1.87 x 1.5 = 2.80 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.95 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1048	0	PUMP	ON						
1052	0.25	15.20	23.51	0.904	1.02	7.56	-115.2	1.96	
1059	0.75	20.04	23.88	0.805	0.67	7.68	-78.6	2.39	
1103	1.00	21.37	22.99	0.762	0.35	7.72	-117.7	2.43	
1109	1.50	22.66	23.34	0.942	0.51	7.72	-134.1	1.49	
1114	2.00	22.89	23.28	1.275	0.70	7.49	-152.9	1.84	
1121	2.25	25.89	22.76	1.279	0.84	7.47	-144.6	1.20	
1124	2.50	26.93	22.76	1.298	1.14	7.40	-150.6	1.28	
1127	2.80	26.90	22.96	1.381	2.07	7.36	-144.7		
1128	START SAMPLE COLLECTION								
1136	END	"		"	2L IDW				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	12070125 4

NOTES AND OBSERVATIONS: DTP = 6.44' DTW = 6.45'
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-37-22
SAMPLE ID: 024

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain showers 50s

PROJECT NO: 01.0017869.92
DATE: 11/23/11
SAMPLER(S): SL, CD, CC
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.64 GW Elevation = 6.242 ACTUAL DEPTH = 13.248

Time	DTW or GW Elevation (ACTUAL DEPTH +/-0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1021	13.248	PUMP	ON						0
1028		PUMP	OFF (NEEDED MARINE BATTERY)						
1033		PUMP	ON						
1040	13.092	25.59	2.023	1.31	7.41	-81.4	2.99		0.01
1045	13.109	25.98	2.004	0.59	7.46	-30.9	2.52		0.11
1050	13.092	26.15	1.984	0.29	7.47	-49.9	2.48		0.20
1055	13.119	26.33	1.956	0.32	7.48	-38.8	3.19		0.30
1100	13.110	26.43	1.941	0.35	7.50	-136.0	3.02		0.40
1105	13.089	26.55	1.929	0.31	7.50	-127.1	2.64		0.50
1110	13.114	26.56	1.927	0.35	7.50	-125.6	3.14		0.60
1112	START	SAMPLE COLLECTION							
1133	END	"	"		2L IPEA				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.75 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-37-32
SAMPLE ID: 024

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain Showers 50's

PROJECT NO: 01.0017869.92
DATE: 11/23/11
SAMPLER(S): SL, CB, CD
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.45 GW Elevation = 6.341 ACTUAL DEPTH = 16.117

Time	DTW or GW Elevation (ACTUAL DEPTH +/- 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1021	16.117	PUMP ON							996 0
1025		PUMP OFF (NEEDED MARINE BATTERY)							
1033		PUMP ON							
1040	16.007	25.33	1.715	1.41	7.33	4.2	2.17		0.03
1045	16.005	25.70	1.684	0.19	7.31	2.5	1.68		0.10
1050	16.021	25.80	1.665	0.40	7.34	-2.4	1.55		0.25
1055	16.046	25.89	1.655	0.34	7.36	-3.6	1.24		0.35
1057	START	SAMPLE COLLECTION							
1119	END	"	"		7.26 IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	~~20670754~~
turbidity meter	20070125V

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.50 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-37-40
SAMPLE ID: 024

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 40's

PROJECT NO: 01.0017869.92
DATE: 11/23/11
SAMPLER(S): CB, CG, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

Well Vault Condition: Good
Well Diameter: 1 in

40	-	6.40	=	33.6 ft
DTB		DTW		Well Column Height

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 33.6 x 0.041 (Multiplier) = 1.37 (Well Volume) gal

1.37 x 1.5 = 2.06 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.30 gal

WATER QUALITY: DTW = 6.40 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1034	0	7.420	PUMP ON						
1040	0.15	9.54	26.07	2,107	1.20	7.31	-229.1	3.46	
1045	0.30	9.62	26.11	2.015	0.54	7.28	-233.7	2.26	
1050	0.50	10.01	26.11	1.996	0.39	7.29	-225.2	2.16	
1055	0.60	10.10	26.04	1.997	0.29	7.29	-220.2	1.80	
1200	0.75	10.28	25.99	1.964	0.31	7.29	-261.4	141.6	
1205	1.00	10.56	25.89	1.940	0.23	7.29	-252.8	140.2	
1210	1.30	10.64	25.88	1.936	0.23	7.29	-256.4	141.9	
1215	1.56	10.35	25.84	1.933	0.20	7.29	-261.1	143.2	
1220	1.60	10.15	25.80	1.926	0.20	7.29	-260.0	135.1	
1225	1.68	9.60	25.50	1.922	0.19	7.29	-256.3	145.0	
1230	1.73	8.39	25.32	1.891	0.14	7.30	-265.2	113.3	
1235	2.21	START SAMPLE COLLECTION.							
1146		END SAMPLE COLLECTION							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429 3

NOTES AND OBSERVATIONS: Lots of very fine silt in purge water.

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-37-57
SAMPLE ID: 024

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 40's

PROJECT NO: 01.0017869.92
DATE: 11/23/11
SAMPLER(S): CB, CG, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 6.25 GW Elevation 8.538 ACTUAL DEPTH = 44.322

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes GAL
1134	44.292		PUMP ON.						0
1140	44.019	25.94	1.872	3.79	6.68	136.6	1.40		0.03
1145	44.019	25.92	1.876	1.61	6.78	67.7	0.95		0.06
1150	44.019	25.86	1.876	1.42	6.74	60.5	1.15		0.19
1155	44.019	25.70	1.870	1.32	6.72	58.6	1.10		0.31
1200	44.019	25.61	1.870	1.30	6.72	58.3	1.11		0.49
1204		START SAMPLE COLLECTION.							0.65
1222		END SAMPLE COLLECTION							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	
turbidity meter	20070429S

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

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 39 - 67

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear 40-50s

PROJECT NO: 01.0017869.92
DATE: 12/1/11
SAMPLER(S): SL, CB, CC

SAMPLING INTERVAL (depth in ft below top of casing)

65.0 to 70.5

SAMPLING PORT

67 7

TOTAL VOLUME PURGED: 1.46 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1255	0	PUMP ON			6.67			6/6	34
1307	0.1	13.74	1.172	7.67	~~4.268~~	-41.9	2.81		
1312	0.25	14.07	1.308	6.60	7.02	-128.3	2.42		
1317	0.40	14.14	1.319	6.10	6.85	-114.2	1.92		
1322	0.50	14.30	1.329	5.73	7.03	-88.7	2.11		
1327	0.65	14.40	1.336	5.73	6.92	-71.7	2.71		
1332	0.80	14.45	1.343	5.64	7.01	-54.5	1.74		
1337	1.00	14.58	1.344	5.73	7.01	-40.5	1.36		
1342	1.17	14.56	1.347	5.76	7.05	-37.3	2.19		
1348	1.31	14.53	1.348	5.69	7.08	-38.7	1.64		
1349	START	SAMPLE	COLLECTION						
1404	END	"	"		~2L IPEC				
	PUMP OFF				20mL (H3	IW-HOUSE)			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Poor, broken hinge

WELL ID: MW 39 - 84

SAMPLE ID: 013

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear, 40-50s

PROJECT NO: 01.0017869.92
DATE: 12/1/11
SAMPLER(S): SL, CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

76.5 to 85.0

SAMPLING PORT

84 6

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1255	0	PUMP	ON					6/6	34
1307	0.01	13.10	1.641	3.25	6.52	-152.1	2.19		
1312	0.10	13.43	1.656	3.54	6.63	-154.0	1.86		
1317	0.20	13.47	1.650	3.60	6.71	-149.7	1.68		
1322	0.30	13.65	1.632	3.78	6.81	-131.5	1.84		
1327	0.40	13.96	1.621	3.89	6.89	-125.6	1.40		
1332	0.50	14.11	1.618	3.93	6.94	-116.4	1.31		
1337	0.60	14.31	1.614	4.02	6.98	-102.0	1.31		
1342	0.73	14.35	1.613	4.04	6.99	-101.0	1.12		
1347	0.81	14.37	1.613	4.05	6.99	-98.4	1.47		
1352	0.99	14.38	1.611	4.11	7.01	-96.3	1.91		
1357	1.10	14.41	1.611	4.56	7.01	-79.5	1.44		
1359	START	SAMPLE	COLLECTION						
1417	END	"	"	"	EPA				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070423

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Poor, broken hinge

WELL ID: MW 39 - 102

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear, 40-50s

PROJECT NO: 01.0017869.92
DATE: 12/1/11
SAMPLER(S): SG, CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

93.0 to 103.0

SAMPLING PORT

102 4

TOTAL VOLUME PURGED: 0.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1255	0	PUMP ON						6/6	34
1312	0.01	13.31	1.585	1.62	6.98	-138.0	2.20		
1317	0.10	13.28	1.609	1.94	6.98	-145.0	2.25		
1322	0.20	13.49	1.654	2.38	6.98	-153.4	1.71		
1327	0.30	13.78	1.684	2.72	6.98	-152.2	1.96		
1332	0.45	13.92	1.697	2.81	6.98	-148.5	1.92		
1337	0.60	14.11	1.707	2.90	6.98	-130.4	2.37		
1342	0.69	14.14	1.708	2.94	6.98	-140.0	1.69		
1347	0.80	14.13	1.712	2.93	6.98	-134.3	2.13		
1349	START	SAMPLE COLLECTION							
1410	END	"	"		2 x 40mL VOC				
	PUMP OFF				2 x 40mL (HCl IN-HOUSE)				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070104293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Poor, broken lunge

WELL ID: MW 39 - 124

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear 40-50s

PROJECT NO: 01.0017869.92
DATE: 12/1/11
SAMPLER(S): SL, AB, AC

SAMPLING INTERVAL (depth in ft below top of casing)

193.0 to 198.6

SAMPLING PORT

195 1

TOTAL VOLUME PURGED: 0.57 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1032	0	PUMP ON						8/10	70
1040	0.01	15.09	1.227	2.65	6.24	-259.4	1.88		
1045	0.12	15.04	1.225	1.02	6.40	-271.2	2.19		
1050	0.19	14.89	1.222	0.72	7.26	-283.4	1.26		
1055	0.26	15.01	1.216	0.60	7.50	-276.3	1.97		
1100	0.34	15.04	1.213	0.51	7.63	-280.6	0.93		
1105	0.42	15.01	1.209	0.44	7.64	-284.9	1.33		
1109	START	SAMPLE	COLLECTION						
1142	END	"	"	" 2L	IPEA				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20170429 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Poor, broken hinge

WELL ID: MW 39 - 183

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear 40-50s

PROJECT NO: 01.0017869.92
DATE: 12/11/14
SAMPLER(S): SJ, CB, AC

SAMPLING INTERVAL (depth in ft below top of casing)

169.5 to 186.0

SAMPLING PORT

193 2

TOTAL VOLUME PURGED: 1.55 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1032	0	PUMP	ON					9/10	70
1040	0.40	14.85	1.137	0.98	6.79	-149.0	0.82	↓	↓
1045	0.70	14.75	1.142	0.63	6.91	-138.4	0.85		
1050	0.80	14.86	1.141	0.45	6.97	-123.4	1.97		
1055	1.00	14.74	1.139	0.38	6.99	-134.9	1.00		
1100	1.30	14.72	1.137	0.32	7.01	-134.9	1.26		
1105	1.40	14.64	1.132	0.26	7.02	-131.6	1.21		
1109	START	SAMPLE COLLECTION							
1126	END	11		4	3L IDEA				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Poor, broken hinge

WELL ID: MW 39 - 195

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear 40-50's

PROJECT NO: 01.0017869.92
DATE: 12/1/14
SAMPLER(S): SL, DB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

115.0 to 126.5

SAMPLING PORT

124

3

TOTAL VOLUME PURGED: 3.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1032	0	PUMP	ON					8/10	70
1040	0.90	15.33	2.340	0.40	6.98	-205.6	8.45		
1045	1.30	15.24	2.190	0.68	6.98	-180.3	6.35		
1050	1.90	15.24	2.101	0.90	6.99	-159.6	3.60		
1055	2.30	15.21	2.069	1.12	6.98	-150.3	6.90		
1100	2.50	15.08	2.030	1.40	6.99	-141.5	9.60		
1105	3.00	15.04	2.005	1.70	6.99	-124.7	7.15		
1110	3.20	15.00	2.004	1.75	6.99	-123.4	4.49		
1117	3.50	15.29	1.994	1.98	6.98	-120.3	3.56	↓	↓
1119	START SAMPLE COLLECTION								
1120	END	"		"		2L EPA 20mL (H3 IN-HOUSE)			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Poor, broken hinge

WELL ID: MW 40 - 27

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40's

PROJECT NO: 01.0017869.92
DATE: 12/09/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

18.2 to 35.2

SAMPLING PORT

27 6

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1100	0	PUMP	ON					5/9	18
1111	0.15	14.88	2.901	2.50	6.94	-25.0	4.65		
1116	0.25	14.86	2.906	2.39	6.89	-16.5	2.83		
1121	0.40	14.70	2.864	2.30	7.32	-12.9	2.03		
1126	0.65	14.83	2.841	2.24	7.07	-12.2	1.99		
1131	0.80	14.75	2.835	2.21	7.07	-11.4	1.98		
1136	1.05	14.95	2.825	2.19	7.06	-9.0	1.97		
1138	START SAMPLE COLLECTION								
1150	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125Y

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition POOR

WELL ID: MW 40 - 46

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40'S

PROJECT NO: 01.0017869.92
DATE: 12/09/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

44.2 to 53.7

SAMPLING PORT

46 5

TOTAL VOLUME PURGED: 0.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1101	0	PUMP	ON					5/9	18
1110	0.05	13.72	4.637	1.15	6.77	13.4	0.49		
1116	0.10	13.85	4.597	0.61	6.83	10.4	0.64		
1121	0.15	13.86	4.518	0.51	6.94	11.0	0.85		
1126	0.20	13.92	4.482	0.33	7.00	16.6	0.79		
1131	0.35	14.12	4.436	0.28	7.03	23.7	0.71		
1136	0.45	14.11	4.414	0.25	7.05	31.1	0.72		
1141	0.60	14.29	4.401	0.24	7.07	36.7	0.70		
1146	0.75	14.91	4.386	0.22	7.08	40.3	0.68		
1147	START SAMPLE COLLECTION								
1203	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	2007012554

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition _____

WELL ID: MW 40 - 81

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40's

PROJECT NO: 01.0017869.92
DATE: 12/09/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

64.7 to 84.2

SAMPLING PORT

81 4

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0948	0	PUMP	ON					6/9	44
0953	0.25	13.37	3.582	1.25	6.88	-43.1	21.00		
0958	0.50	13.36	3.420	1.32	7.08	-11.2	10.21		
1003	0.75	13.38	3.414	1.38	7.11	-0.9	7.34		
1008	1.25	13.21	3.393	1.43	7.13	3.2	6.79		
1013	1.50	13.27	3.394	1.46	7.13	4.7	7.01		
1017	START SAMPLE COLLECTION								
1023	STOP END SAMPLE COLLECTION; 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	AG
turbidity meter	20070403

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Poor

WELL ID: MW 40 - 100

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40's

PROJECT NO: 01.0017869.92
DATE: 12/09/11
SAMPLER(S): CG, SL

SAMPLING INTERVAL (depth in ft below top of casing)

93.2 to 106.7

SAMPLING PORT

100 3

TOTAL VOLUME PURGED: 2.00 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0948	0	Pump on						6/9	44
0953	0.15	14.01	2.737	1.15	6.21	-73.4	24.60		
0958	0.40	13.97	2.704	0.47	6.51	-60.7	51.68		
1003	0.75	12.93	2.702	0.36	6.64	-45.9	46.46		
1008	1.00	13.84	2.700	0.35	6.71	-38.6	39.76		
1013	1.25	13.89	2.700	0.41	6.76	-37.0	38.65		
1018	1.50	13.86	2.697	0.39	6.79	-34.4	37.92		
1021	START SAMPLE COLLECTION								
1028	END SAMPLE COLLECTION: 2L IPEC								
	Pump off								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	10070293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Poor

WELL ID: MW 40 - 127

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40's

PROJECT NO: 01.0017869.92
DATE: 12/09/14
SAMPLER(S): CB, SL

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 (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0948	0	PUMP IN						6/9	44
0952	0.1	14.04	2.358	0.97	6.09	-69.1	0.80		
0958	0.25	13.92	2.358	0.60	6.10	-68.9	0.50		
1003	0.40	13.77	2.349	0.48	6.51	-67.5	0.37		
1008	0.55	13.70	2.347	0.38	6.69	-67.4	0.52		
1013	0.75	13.84	2.357	0.33	6.88	-70.6	0.13		
1018	0.85	13.86	2.359	0.33	6.90	-70.5	0.07		
1023	1.00	13.92	2.360	0.30	6.98	-67.4	0.10		
1026	START SAMPLE COLLECTION								
1040	END SAMPLE COLLECTION; 2L IPEC PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070 4293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition POOR

WELL ID: MW 40 - 162

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: sunny, 40s

PROJECT NO: 01.0017869.92
DATE: 12/09/11
SAMPLER(S): CB, JL

SAMPLING INTERVAL (depth in ft below top of casing)
158.7 to 190.3

SAMPLING PORT
162 1

TOTAL VOLUME PURGED: 0.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0948	0	PUMP	ON					6/9	44
0953	0.05	13.14	1.346	2.97	6.16	-45.1	0.51		
0958	0.10	13.26	1.335	0.48	6.15	-51.3	0.37		
1003	0.20	12.88	1.335	0.32	6.30	-63.7	0.67		
1008	0.30	12.85	1.337	0.20	6.40	-73.6	0.14		
1013	0.35	12.88	1.337	0.14	6.53	-84.0	0.00		
1018	0.45	12.88	1.340	0.13	6.66	-91.5	0.00		
1023	0.50	12.83	1.342	0.12	6.79	-96.3	0.00		
1028	0.55	12.81	1.341	0.12	6.83	-98.2	0.00		
1033	0.65	12.81	1.341	0.11	6.89	-100.0	0.00		
1034	START SAMPLE COLLECTION								
1102	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070429

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition POOR

WELL ID: MW-41-40
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 60s

PROJECT NO: 01.0017869.92
DATE: 11/28/11
SAMPLER(S): SL, CB, CG
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 20.60 GW Elevation = 33.53 ACTUAL DEPTH = 77.956

Time	DTW or GW Elevation ACTUAL DEPTH (<0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1336	78.043	PUMP ON							0
1344	77.924	17.25	1.439	5.57	7.55	-6.6	63.71		0.07
1349	77.920	17.45	1.423	4.10	7.02	-4.1	26.69		0.10
1355	77.929	17.53	1.414	3.98	7.04	-3.9	19.61		0.28
1400	77.971	17.57	1.411	4.07	7.05	-0.4	17.37		0.40
1405	77.983	17.64	1.406	4.06	7.02	-1.1	13.87		0.53
1407	START	SAMPLE COLLECTION							
1425	END	"	"		; 2L IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	
turbidity meter	2017 04393

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, No Lock

NOTES AND OBSERVATIONS: Total volume purged 0.68 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: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 60s

PROJECT NO: 01.0017869.92
DATE: 11/08/14
SAMPLER(S): SL, CS, CB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

63 (DTB) - 22.91 (DTW) = 40.09 ft (Well Column Height)

Well Vault Condition Fair, no bolts
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 40.09 x 0.041 (Multiplier) = 1.64 (Well Volume) gal

1.64 x 1.5 = 2.46 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 2.65 gal

WATER QUALITY: DTW = 22.91 GW Elevation = 31.33

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1336	0	—	PUMP ON						
1342	0.5	—	17.08	0.653	2.70	7.08	177.9	55.08	
1347	1.0	—	17.06	1.009	2.22	7.16	174.6	195.4	
1352	1.5	—	16.85	1.347	3.56	7.53	176.0	124.7	
1358	2.0	—	16.82	1.489	4.41	7.32	176.1	58.76	
1402	2.5	—	16.84	1.539	4.75	7.29	174.7	46.17	
1405	START SAMPLE COLLECTION								
1408	END	"		"	2L IPE				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070493

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measuremcnts are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-42-49
SAMPLE ID: 028

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 40s-50s

PROJECT NO: 01.0017869.92
DATE: 11/3/11
SAMPLER(S): CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 34.42 GW Elevation

Time	(DTW) or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
										gal
1025	34.42	PUMP	ON					5/10	24	0
1032	34.76	15.43	1.476	4.32	6.98	75.6	7.69			0.01
1037	34.79	15.55	1.440	4.53	6.98	84.5	7.35			0.10
1042	34.84	15.71	1.414	4.61	6.98	94.3	3.83			0.25
1047	34.86	15.81	1.393	4.64	6.98	97.4	3.20			0.36
1052	34.91	15.94	1.373	4.72	6.98	98.8	3.06			0.50
1057	34.94	15.97	1.3600	4.73	6.98	105.3	2.98			0.65
1059	START	SAMPLE	COLLECTION							
1113	END SAMPLE	COLLECTION: 2L		IPEC						
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070125Y

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR - BOLTS STRIPPED

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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-42-78
SAMPLE ID: 023

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY 40's-50's

PROJECT NO: 01.0017869.92
DATE: 11/3/14
SAMPLER(S): CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition FAIR - BOLTS STRIPPED
WATER COLUMN HEIGHT (ft)
Well Diameter: 1 in

78 (DTB)	-	32.56 (DTW)	=	45.44 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 45.44 x 0.041 (Multiplier) = 1.86 (Well Volume) gal

1.86 x 1.5 = 2.80 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 3.00 gal

WATER QUALITY: DTW = 37.56 GW Elevation =

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1105	0	——	PUMP ON						
1110	0.50	——	15.97	2.099	5.66	7.04	247.3	77.34	
1112	1.00	——	16.03	2.116	4.59	7.17	190.1	278.3	
1116	1.50	——	15.76	2.080	5.01	7.23	196.8	295.3	
1121	2.00	——	15.89	2.059	4.30	7.25	180.3	272.8	
1124	2.50	——	15.83	2.038	3.69	7.26	170.4	292.2	
1126	2.80	——	15.84	2.031	3.61	7.27	168.6		
1128	START SAMPLE COLLECTION								
1131	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070254

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: 021

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 44°F

PROJECT NO: 01.0017869.92
DATE: 11/22/14
SAMPLER(S): CB, CG
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = GW Elevation =

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
10:15	[redacted]		PUMP ON					5.5/22	16	gal 0
1024	15.52	11.62	4.677	4.17	6.72	182.1	33.72			0.05
1029	15.69	11.74	4.744	2.65	6.85	166.0	35.78			0.10
1034	15.71	12.10	4.735	1.77	6.60	154.5	36.59			0.15
1039	15.82	12.42	4.758	1.36	6.50	162.2	34.65			0.25
1044	15.90	12.63	4.734	1.01	6.68	159.3	34.62			0.30
1049	15.99	12.94	4.687	0.87	6.57	150.9	34.10			0.35
1054	16.10	13.11	4.654	0.81	6.62	148.7	33.52			0.45
1059	16.14	13.15	4.632	0.79	6.62	143.4	33.23			0.50
1100	START SAMPLE COLLECTION									
1123	END SAMPLE COLLECTION									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070293

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition AIR BLTS MISSING

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.

WELL ID: MW-43-62
SAMPLE ID: 022

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 44°F

PROJECT NO: 01.0017869.92
DATE: 6/22/16
SAMPLER(S): CA, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 16.38 GW Elevation = 30.991 ACTUAL DEPTH = 31.206

Time	DTW or GW (ACTUAL DEPTH) Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1123	36.081	PUMP	ON					6/6	30	gal
1132	35.650	12.80	2.514	3.86	6.93	45.2	86.86			0.30
1137	35.393	13.62	2.643	3.03	6.93	20.6	32.28			0.45
1142	35.246	14.16	2.710	2.87	6.92	16.0	32.87			0.48
1147	35.162	14.40	2.729	2.79	6.91	14.0	28.57			0.58
1152	35.111	14.48	2.772	2.64	6.90	12.3	25.89			0.73
1157	35.090	14.52	2.788	2.58	6.91	10.7	19.47			0.87
12.02	35.042	14.62	2.796	2.48	6.89	10.5	16.76			0.95
12.07	35.042	14.64	2.802	2.43	6.90	9.7	18.20			1.00
1209	START	SAMPLE	COLLECTION							
1222	END SAMPLE	COLLECTION	2L	IPEC						
	PUMP	OFF.								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20670293

Measured Well Depth ..... **(feet from top of casing)**

Well Vault Condition FAIR, LOCK MISSING

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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-44-66
SAMPLE ID: 023

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 30's - 40's

PROJECT NO: 01.0017869.92
DATE: 12/08/11
SAMPLER(S): CB, SL

WATER COLUMN HEIGHT (ft)

66 (DTB) - 53.91 (DTW) = 12.09 (Water Column Height) ft

Well Diameter: 2 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 12.09 x 0.163 (Multiplier) = 1.97 (Well Volume) gal

1.97 x 1.5 = 2.95 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 0.75 gal

WATER QUALITY: DTW = 53.91 Transducer Actual Depth 10.670

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
0949	0	10.727	PUMP	On					10/15	38	
1021	0.01	10.563	11.69	0.919	4.06	6.74	7.5	47.61			
1102 *	0.40	10.314	SWITCH TO LOW-FLOW SAMPLING METHOD								
1102	0.45	10.318	14.01	0.445	15.50	7.37	-13.8	39.87			
1108	0.50	10.316	14.09	0.443	11.06	7.38	-23.8	33.86			
1113	0.55	10.338	14.27	0.445	10.60	7.41	-24.8	36.22			
1118	0.60	10.323	14.38	0.448	10.45	7.41	-25.6	38.73			
1120	START SAMPLE COLLECTION										
1200	END SAMPLE COLLECTION: 2 IPEC										
	PUMP OFF										

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070493

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.

SWITCHED SAMPLING METHOD FROM MODIFIED TRADITION PURGE TO LOW-FLOW.

ACTUAL DEPTH STABILIZED WITHIN 0.3' CRITERIA.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-44-102
SAMPLE ID: 024

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 48° sunny, windy

PROJECT NO: 01.0017869.92
DATE: 12/11/14
SAMPLER(S): CB, CG

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

102	-	64.44	=	37.56 ft
DTB		DTW		Well Column Height

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 37.56 x 0.041 (Multiplier) = 1.53 (Well Volume) gal

1.53 x 1.5 = 2.30 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.45 gal

WATER QUALITY: DTW = GW Elevation =

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1144	0	———	PUMP	ON					
1147	0.1		15.00	0.637	10.68	7.37	4.2	123.5	
1152	0.5		14.91	1.076	9.81	6.95	14.0	892.7	
1156	1.0		15.43	1.007	9.26	6.99	8.5	>1100	
1204	1.5		15.48	1.096	9.58	6.85	16.9	>1100	
1210	2.0		15.41	1.126	9.95	6.60	358	>1100	
1215	2.45	START	SAMPLE COLLECTION						
1218	END	SAMPLE	COLLECTION						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
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-45-42
SAMPLE ID: 027

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 60s

PROJECT NO: 01.0017869.92
DATE: 11/28/11
SAMPLER(S): SL, CB, CG

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

43 (DTB) - 20.92 (DTW) = 22.08 (Well Column Height) ft

Well Vault Condition Fair, bolts stripped
Well Diameter: 2 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 22.08 x 0.163 (Multiplier) = 3.59 (Well Volume) gal

3.59 x 1.5 = 5.39 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 4.40 gal

WATER QUALITY: DTW = 20.92 GW Elevation = 32.776 ACTUAL DEPTH = 70.84'

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (mV/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1048	0	19.096	PUMP ON						6/8	26	
1057	0.5	17.155	18.80	0.628	0.56	8.06	-13.3	3.07			
1101	1.0	15.016	18.92	0.542	0.35	8.82	-24.3	3.42			
1108	1.5	13.062	18.95	0.514	0.28	8.87	-25.8	2.89			
1117	2.0	12.801	18.98	0.480	0.23	8.70	-24.0	12.95			
1126	2.5	11.174	18.97	0.472	0.51	8.52	-23.8	18.12			
1135	3.0	9.140	18.94	0.492	0.72	8.59	-24.5	08.92			
1144	3.5	7.767	18.90	0.519	0.60	8.48	-24.9	46.59			
1157	4.0	5.483	18.76	0.542	0.45	8.19	-26.5	19.78			
1207	4.25	3.530	18.64	0.518	0.85	8.53	-29.3	- WELL DRY -			
1429		5.835	START SAMPLE COLLECTION								
1503			END SAMPLE COLLECTION:				2L IPEC				
							0.05L IPEC (TRITIUM @ IW-HOUSE)				
		PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	10704793

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-45-61
SAMPLE ID: 027

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 40s

PROJECT NO: 01.0017869.92
DATE: 11/28/11
SAMPLER(S): SL, CB, CG

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition Dirty, bolts stripped

WATER COLUMN HEIGHT (ft)

Well Diameter: 1 in

61	-	21.99	=	39.01 ft
DTB		DTW		Well Column Height

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 39.01 x 0.041 (Multiplier) = 1.60 (Well Volume) gal

1.60 x 1.5 = 2.4 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.55 gal

WATER QUALITY: DTW = 21.99 GW Elevation = 31.227

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1110	0	—	PUMP ON						
1122	1	—	18.19	0.024	5.64	7.43	107.3	438.6	
1127	1.5	—	18.13	0.520	5.40	7.40	113.6	672.8	
1132	2.0	—	18.13	0.593	5.29	7.35	133.1	447.1	
1137	2.5	—	18.08	0.633	6.36	7.35	131.7	350.5	
1139	START	SAMPLE	COLLECTION						
1144	END	"	"		IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	10070293

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: 027

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 60's

PROJECT NO: 01.0017869.92
DATE: 10/20/11
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

29.7 (DTB) - 3.85 (DTW) = 25.85 ft (Well Column Height)

Well Vault Condition FAIR - MISSING BOLTS
Well Diameter: 4 in SIGNS OF SURFACE WATER INFILTRATE

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 25.85 x 0.653 (Multiplier) = 16.88 (Well Volume) gal

16.88 x 1.5 = 25.32 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 25.50 gal

WATER QUALITY: DTW = 3.85 ~~GW Elevation~~ ACTUAL 23.927

Time	Volume Purged (gal)	DTW or ~~GW Elevation~~ ACTUAL DEPTH (<0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1149	0	23.927	PUMP	ON					
1159	2.5	20.445	20.73	0.815	0.17	7.59	13.4	1.29	
1204	5.0	19.000	20.78	0.812	0.13	7.64	19.2	11.38	
1214	7.5	16.675	20.83	0.425	0.68	7.81	10.8	13.23	
1223	10.0	14.574	20.84	0.178	4.63	7.90	15.5	19.34	
1230	12.5	12.989	20.87	0.184	4.92	7.85	26.5	12.20	
1247	15.0	9.548	20.77	0.530	4.96	7.76	47.7	15.46	
1254	17.5	8.358	20.76	0.680	5.10	7.78	46.8	9.99	
1302	20.0	7.035	20.75	0.816	5.22	7.78	53.5	12.51	
1315	22.5	5.327	20.167	0.946	5.33	7.74	60.4	17.10	
1328	25.0	5.148	20.167	1.039	5.87	7.74	42.1	18.164	
1331	START SAMPLE COLLECTION								
1335	END SAMPLE COLLECTION: 2L IPEC								
				0.02L IPEC	(TRITIUM IN-HOUSE)				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sondc	4
turbidity meter	20070429 3

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-47-56
SAMPLE ID: 008

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: sunny 40-50s

PROJECT NO: 01.0017869.92
DATE: 10/28/11
SAMPLER(S): CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 43.80 GW Elevation =

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1035	43.80	Pump	ON					7/8	30	0
1040	44.30	17.87	5.636	3.97	7.03	13.6	7.14			0.05
1045	44.57	17.01	3.546	2.11	7.20	-79.6	7.23			0.30
1050	44.63	17.02	3.246	1.78	7.163	-86.2	4.37			0.50
1055	44.81	16.77	3.082	1.45	7.167	-94.4	3.03			0.75
1100	44.87	16.85	3.003	1.39	7.169	-97.2	2.03			0.90
1105	44.79	16.78	2.902	1.44	7.168	-101.0	2.02			1.10
1110	44.65	16.97	2.897	1.70	7.165	-95.9	1.43			1.25
1115	44.45	17.11	2.841	1.76	7.162	-93.9	1.63			1.30
1120	44.32	17.33	2.830	1.83	7.154	-88.9	1.52			1.35
1123	START	SAMPLE	COLLECTION							
1136	END SAMPLE	COLLECTION	12	IPEC						
				0.02L IPEC (CRITIVM IN-HOUSE)						
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070293

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR. BOLTS STRIPPED

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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-47-80
SAMPLE ID: 007

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40's-50's

PROJECT NO: 01.0017869.92
DATE: 10/28/14
SAMPLER(S): CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition MNG. BOLTS STRIPPED
WATER COLUMN HEIGHT (ft)
Well Diameter: 1 in

80 (DTB) - 43.49 (DTW) = 36.51 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 36.51 x 0.041 (Multiplier) = 1.50 (Well Volume) gal

1.5 x 1.5 = 2.25 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.40 gal

WATER QUALITY: DTW = 43.49 GW Elevation = 26.252

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1305	0		PUMP	ON					
1310	0.25		17.12	0.695	10.56	7.09	101.4	151.9	
1311	0.50		16.73	0.929	10.59	6.98	73.6	210.4	
1312	0.75		16.63	0.995	10.94	6.98	78.0	260.2	
1313	1.00		16.49	1.062	18.89	6.97	60.1	302.5	
1314	1.25		16.50	1.067	18.34	6.98	56.7	330.3	
1315	1.50		16.50	1.081	17.80	7.01	43.9	334.3	
1316	1.75		16.50	1.093	17.83	7.06	35.4	383.4	
1318	2.00		16.49	1.108	18.43	7.10	32.4	374.8	
1319	2.25		16.49	1.119	17.92	7.14	30.8	316.2	
1320	START SAMPLE COLLECTION:								
1324	END SAMPLE COLLECTION: 2L IPEC								
				0.02L IPEC (TRITIUM IN-HOUSE)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429

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-49-26
SAMPLE ID: 026

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, WINDY, 40'S

PROJECT NO: 01.0017869.92
DATE: 11/4/11
SAMPLER(S): CR
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.41 GW Elevation 1.76 Actual Depth = 12.318

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1046	11.582	PUMP	ON						0
1053	11.943	16.29	2.206	2.64	6.69	-44.6	13.59		0.05
1058	11.915	16.84	2.241	1.61	6.87	-29.2	11.03		0.25
1103	11.897	15.74	2.253	1.16	6.94	-34.1	12.93		0.30
1108	11.867	14.99	2.249	1.02	7.01	-35.5	8.48		0.42
1113	11.848	14.85	2.247	1.07	7.04	-36.2	4.40		0.54
1118	11.822	14.70	2.244	1.09	7.07	-36.9	9.25		0.68
1123	11.797	14.60	2.246	1.12	7.10	-37.2	7.31		0.75
1128	11.776	14.52	2.249	1.06	7.11	-37.5	7.37		0.90
1130	START SAMPLE COLLECTION								
1150	END SAMPLE COLLECTION: 2 LIPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR - MISSING BOLTS

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-49-42
SAMPLE ID: 026

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, WINDY, 40's

PROJECT NO: 01.0017869.92
DATE: 11/4/14
SAMPLER(S): CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.26 GW Elevation 1.863 ACTUAL DEPTH = 14.089

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1046	14.456	PUMP	ON						0
1052	14.317	15.22	2.114	1.11	6.98	163.7	5.12		0.15
1058	14.331	17.96	2.144	0.63	6.98	121.3	2.04		0.36
1103	14.325	17.25	2.133	0.57	6.98	123.2	1.42		0.45
1108	14.291	16.65	2.129	0.51	6.98	120.7	1.03		0.58
1113	14.263	16.52	2.135	0.48	6.98	118.1	0.96		0.68
1118	14.244	16.46	2.131	0.50	6.98	114.7	0.98		0.78
1120	START	SAMPLE COLLECTION							
1143	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR - MISSING BOLTS

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-49-65
SAMPLE ID: 026

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, WINDY, 40's

PROJECT NO: 01.0017869.92
DATE: 11/4/14
SAMPLER(S): CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 17.43 GW Elevation 2.027 ACTUAL DEPTH = 13.446

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1046	13.289	PUMP	ON						0
1053	12.924	16.14	1.983	0.53	7.23	100.2	4.97		0.05
1058	13.015	16.04	2.011	0.43	7.38	81.3	1.83		0.20
1103	13.004	15.43	2.011	0.39	7.40	88.3	0.43		0.28
1108	12.978	14.75	2.019	0.32	7.41	100.6	0.46		0.40
1113	12.955	14.70	2.024	0.28	7.41	98.7	0.42		0.48
1118	12.932	14.52	2.035	0.26	7.41	99.1	0.39		0.58
1122	START SAMPLE COLLECTION								
1147	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	2007 01254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR - MISSING BOLTS

NOTES AND OBSERVATIONS: Total volume purged 0.75 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-50-42
SAMPLE ID: 028

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 50s

PROJECT NO: 01.0017869.92
DATE: 10/27/11
SAMPLER(S): CR, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 7.22 GW Elevation

Time	(DTW) or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0952	7.22	PUMP	ON						0
0959	7.22	22.71	1.864	2.46	7.84	132.7	1.06		0.05
1004	7.22	22.93	1.262	0.94	7.69	100.8	0.83		0.20
1009	7.22	23.24	1.215	0.74	7.74	81.8	0.84		0.35
1014	7.22	23.45	1.198	0.59	7.64	71.1	0.73		0.50
1019	7.22	23.56	1.194	0.45	7.71	68.4	0.54		0.70
1024	7.22	23.48	1.191	0.53	7.65	68.3	0.63		0.80
1029	START	SAMP	LE COLLECTION						
1048	END SAMPLE	COLLECTION: 2L	IPEC						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	/
flow meter	
turbidity meter	10704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR, RUSTING BOLTS

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.

WELL ID: MW-50-66
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, SD's

PROJECT NO: 01.0017869.92
DATE: 10/27/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.07 GW Elevation 4.544 ACTUAL DEPTH = 88.896

Time	DTW or GW Elevation (ACTUAL DEPTH) (<0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
0952	87.204	PUMP	ON						gal 0
0959	86.666	22.17	2.274	2.14	7.09	149.1	1.08		0.05
1004	86.858	22.33	2.255	1.34	7.24	87.8	0.79		0.20
1009	86.638	22.46	2.257	0.90	7.34	24.4	0.94		0.35
1014	86.748	22.60	2.257	0.74	7.38	0.5	0.88		0.50
1019	87.030	22.55	2.257	0.59	7.42	-11.8	0.82		0.60
1024	87.020	22.53	2.257	0.53	7.44	-14.9	0.79		0.75
1029	86.928	22.55	2.259	0.62	7.45	-20.1	0.73		0.80
1030	START	SAMPLE COLLECTION							
1053	END SAMPLE COLLECTION: 2L IPEC								
				0.02L IPEC (TRITIUM IN-HOUSE)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070429

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR MISSING BOLTS

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 51 - 40

SAMPLE ID: 021

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear 30s

PROJECT NO: 01.0017869.92
DATE: 1/12/11
SAMPLER(S): SL, DB

SAMPLING INTERVAL (depth in ft below top of casing)

29.7 to 44.2

SAMPLING PORT

40 7

TOTAL VOLUME PURGED: 1.84 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mV/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0947	0	PUMP ON						6.5/8.4	24
0955	0.2	10.72	2.99	4.79	7.02	-113.0	10.82		
1000	0.4	11.34	3.02	5.10	7.03	-99.7	4.64		
1005	0.58	11.66	3.047	5.44	7.05	-78.0	5.12		
1010	0.80	11.83	3.048	5.45	7.06	-37.1	5.46		
1015	0.93	12.17	3.073	5.62	7.05	-24.7	3.97		
1020	1.19	12.33	3.079	5.61	7.05	-3.6	5.40		
1025	1.41	12.35	3.075	6.07	7.05	6.0	3.87		
1030	1.69	12.34	3.075	7.44	7.06	10.5	4.40		
1032	START	SAMPLE	COLLECTION						
1043	END	"	"	3L	EPEO				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	AG
turbidity meter	2007-04293

NOTES AND OBSERVATIONS: Note: Bubbles coming up w/ water affecting the ORP and DO, everything else is stable, took sample. Well went dry but is recovering slowly, Dry

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition

WELL ID: MW 57 - 79

SAMPLE ID: 021

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear, 70s

PROJECT NO: 01.0017869.92
DATE: 10/2/14
SAMPLER(S): SL/DB

SAMPLING INTERVAL (depth in ft below top of casing)

63.2 to 81.2

SAMPLING PORT

79 6

TOTAL VOLUME PURGED: 2.16 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0947	0	PUMP ON						6.5/6.4	34
0954	0.09	10.44	3.0[illegible]	1.80	6.45	-62.0	5.19		
1000	0.20	11.29	3.0[illegible]	1.85	6.39	-60.2	5.01		
1005	0.32	11.57	3.0[illegible]	1.85	6.40	-50.1	6.45		
1010	0.47	11.74	3.094	1.91	6.90	-36.5	9.34		
1015	0.60	12.18	3.099	1.90	6.85	-26.2	8.71		
1020	0.73	12.39	3.104	1.84	6.89	-12.1	9.71		
1025	0.90	12.57	3.109	1.77	6.91	-2.4	13.48		
1030	1.09	12.64	3.109	1.73	6.91	-4.9	13.62		
1035	1.30	12.71	3.108	1.67	6.92	9.5	10.30		
1040	1.48	12.81	3.109	1.68	6.93	17.4	16.32		
1045	1.72	13.92	3.109	1.66	6.94	27.2	15.32		
1050	1.90	13.81	3.117	1.74	6.95	27.9	20.26		
1055	2.01	13.93	3.115	1.74	6.95	30.8	19.07		
1057	START	SAMPLE	COLLECTION						
1109	END	"	"	2L FILLED					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW 51 - 104

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear 30s

PROJECT NO: 01.0017869.92
DATE: 12/12/11
SAMPLER(S): S.CB

SAMPLING INTERVAL (depth in ft below top of casing)

130.2 to 143.7

SAMPLING PORT

104 4

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1126	0	PUMP	ON					5.6/5.6	42
1130	0.10	12.45	2.982	1.06	10.72	-72.3	1.36		
1135	0.25	12.53	3.063	1.44	6.83	-62.1	0.26		
1140	0.50	12.39	3.109	1.20	6.89	-45.1	0.30		
1145	0.75	12.77	3.122	1.17	6.90	-38.3	0.12		
1150	1.00	12.87	3.132	1.15	6.92	-30.6	0.33		
1155	1.25	12.79	3.124	1.13	6.92	-26.1	0.96		
1200	1.50	12.84	3.130	1.14	6.93	-22.3	0.40	↓	↓
1202	START SAMPLE COLLECTION								
1242	END SAMPLE COLLECTION: 2 VOC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125-4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Dust

WELL ID: MW 51 - 135

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear 30's

PROJECT NO: 01.0017869.92
DATE: 12/13/11
SAMPLER(S): SL, AB

SAMPLING INTERVAL (depth in ft below top of casing)

130.2 to 143.7

SAMPLING PORT

135

3

TOTAL VOLUME PURGED: 2.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	PUMP	DN					5.6/5.6	42
1130	0.05	11.84	2.708	0.35	6.65	-141.5	104		
1135	0.25	11.59	2.762	0.40	6.90	-138.4	0.90		
1140	0.45	11.55	2.775	0.53	6.98	-125.2	0.48		
1145	0.72	11.96	2.789	0.44	7.04	-104.0	0.18		
1150	0.75	12.01	2.808	0.36	7.08	-93.8	0.63		
1155	0.85	12.14	2.799	0.29	7.09	-76.3	10.165		
1200	0.95	12.25	2.804	0.28	7.09	-71.5	0.60		
1205	1.05	12.41	2.795	0.27	7.09	-60.1	0.05		
1210	1.25	12.07	2.804	0.19	7.09	-46.0	0.09		
1215	1.35	11.96	2.804	0.19	7.09	-29.8	0.01		
1220	1.45	12.17	2.799	0.19	7.09	-31.8	0.27		
1225	1.55	12.02	2.802	0.22	7.09	-25.4	0.39		
1230	1.75	12.44	2.783	0.24	7.07	-13.8	2.01		
1235	1.90	12.18	2.788	0.20	7.08	-14.2	3.15		
1240	2.05	12.26	2.783	0.19	7.08	-14.2	3.21		
1240	START SAMPLE COLLECTION								
1250	END SAMPLE COLLECTION. 2 VOA								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	AG
turbidity meter	20070012547

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 51 - 163

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear 30s

PROJECT NO: 01.0017869.92
DATE: 12/12/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

154.7 to 166.2

SAMPLING PORT

163

2

TOTAL VOLUME PURGED: 0.36 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	PUMP	ON					5.6/5.6	42
1130	0.11	11.67	2.407	3.13	6.34	-69.7			
1135	0.20	11.89	2.351	0.63	6.99	-60.4	7.49		
1140	0.28	11.76	2.317	0.47	6.98	-64.9	4.01		
1145	0.12	11.40	2.311	0.47	6.98	-67.2	4.36		
1150	0.21	11.65	2.320	0.46	6.99	-64.9	2.59		
1152	START	SAMPLE	COLLECTION						
	END	4	"	@2L	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	2007HH393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 51 - 189

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear 30s

PROJECT NO: 01.0017869.92
DATE: 12/12/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

184.2 to 197.8

SAMPLING PORT

189 1

TOTAL VOLUME PURGED: _____ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1126	0	PUMP	ON					5.6/5.6	42
1130	0.01	11.94	1.693	0.57	6.48	-103.6	2.85		
1135	0.20	11.73	1.624	0.26	6.78	-165.9			
1140	0.25	11.97	1.592	0.40	6.90	-175.3	1.07		
1145	0.40	12.19	1.584	0.16	7.03	-153.5	0.97		
1150	0.50	12.32	1.586	0.10	7.12	-167.2	0.45		
1155	0.80	12.46	1.593	0.08	7.17	-168.5	1.20		
1200	1.00	12.48	1.586	0.08	7.19	-167.9	0.42		
1202	START SAMPLE COLLECTION								
1223	END	"	"	" IPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW-53-82
SAMPLE ID: 022

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40'S

PROJECT NO: 01.0017869.92
DATE: 11/2/11
SAMPLER(S): CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 5.168 GW Elevation = 13.25 ACTUAL DEPTH = 25.161

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1009	25.144	PUMP	ON					5/20	38	0
1021	24.888	13.35	1.585	4.87	6.98	45.9	18.35			0.01
1026	24.783	14.69	1.227	6.30	6.98	24.6	17.29			0.14
1031	24.817	14.92	1.085	7.01	6.98	19.7	15.16			0.22
1036	24.832	14.45	1.010	7.47	6.98	14.6	10.59			0.32
1041	24.796	14.46	0.982	7.48	6.98	13.1	9.43			0.38
1046	24.827	14.16	0.953	7.70	6.98	12.1	6.78			0.45
1051	24.808	14.19	0.932	7.85	6.98	11.0	5.59			0.50
1056	24.870	14.05	0.926	7.94	6.98	9.7	5.03			0.58
1059	START SAMPLE COLLECTION									
1126	END SAMPLE COLLECTION; 2L IPEC									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070154

Measured Well Depth ..... **(feet from top of casing)**

Well Vault Condition FAIR MISSING BOLTS

NOTES AND OBSERVATIONS:

Total volume purged 0.75 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-53-120
SAMPLE ID: 026

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40's

PROJECT NO: 01.0017869.92
DATE: 11/2/11
SAMPLER(S): CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition Fair missing bolts
WATER COLUMN HEIGHT (ft) **Well Diameter:** 1 in

120	-	57.96	=	62.04	ft
DTB		DTW		Well Column Height	

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 62.04 x 0.041 (Multiplier) = 2.54 (Well Volume) gal

2.54 x 1.5 = 3.82 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 4.00 gal

WATER QUALITY: DTW = 57.96 GW Elevation = 12.23

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1115	0		Pum	P ON					
1121	0.05		14.37	1.601	7.37	7.12	205.9	37.62	
1124	0.50		16.17	1.585	4.27	7.32	192.7	39.14	
1129	1.00		16.64	1.703	1.41	7.31	165.4	105.4	
1133	1.50		16.61	1.819	0.70	7.27	152.2	118.2	
1137	2.00		16.64	1.873	0.42	7.26	152.2	104.6	
1142	2.50		16.73	1.914	0.40	7.26	148.3	80.80	
1146	3.00		16.71	1.933	0.36	7.21	144.5	66.74	
1150	3.50		16.71	1.940	0.30	7.17	143.7	64.25	
1152	3.80		16.75	1.945	0.23	7.20	143.0	57.60	
1153	START SAMPLE COLLECTION								
1156	END SAMPLE COLLECTION: 2L IPEC								
	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.

WELL ID: MW 54 - 37

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 50-60's

PROJECT NO: 01.0017869.92
DATE: 12/06/14
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

29.0 to 42.0

SAMPLING PORT

37

6

TOTAL VOLUME PURGED: 3.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0935	0	PUMP ON						6/4	20
0943	0.20	22.22	1.430	4.76	6.96	-55.6	0.92		
0948	0.75	22.06	1.328	2.38	7.19	-31.6	0.83		
0953	1.15	21.97	1.317	2.11	7.30	-12.8	0.67		
0958	1.50	21.88	1.314	2.06	7.38	5.8	0.72		
1003	1.80	21.81	1.316	2.01	7.44	16.3	0.86		
1008	2.05	21.75	1.319	2.03	7.49	38.8	1.06		
1013	2.25	21.71	1.321	1.99	7.53	54.3	1.27		
1018	2.50	21.68	1.325	2.17	7.57	66.1	1.20		
1023	2.65	21.67	1.330	2.11	7.57	76.9	0.92		
1028	3.00	21.66	1.335	2.05	7.65	73.7	1.07		
1030	START	SAMPLE	COLLECTION						
1037	END SAMPLE COLLECTION: 2 L IPE								
				0.05 L IPEC (TRITIUM IN-HOUSE)					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 64 - 58

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 50's-60's

PROJECT NO: 01.0017869.92
DATE: 12/06/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

51.5 to 64.0

SAMPLING PORT

58 5

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0935	0	PUMP	ON					6/4	20
0943	0.15	22.26	1.875	0.66	6.22	-106.4	0.62		
0948	0.45	22.05	1.831	0.38	6.64	-98.2	0.76		
0953	0.55	21.93	1.818	0.28	6.81	-39.6	0.41		
0958	0.75	21.82	1.814	0.24	6.91	-34.2	0.61		
1003	1.00	21.74	1.815	0.23	6.96	-32.5	0.51		
1008	1.25	21.66	1.817	0.22	7.00	-27.0	0.66		
1011	START SAMPLE COLLECTION								
1023	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:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 54 - 123

SAMPLE ID: 022

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 50's-60's

PROJECT NO: 01.0017869.92
DATE: 12/06/14
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

116.0 to 126.0

SAMPLING PORT

123 4

TOTAL VOLUME PURGED: 0.85 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0936	0	PUMP	ON					6/4	20
0943	0.10	22.67	1.905	0.59	6.17	-79.3	2.00		
0948	0.15	22.56	1.901	0.27	6.19	-47.6	1.19		
0953	0.25	22.46	1.905	0.15	6.37	-41.4	0.55		
0958	0.35	22.32	1.911	0.09	6.62	-40.6	0.48		
1003	0.45	22.22	1.916	0.06	6.88	-37.7	0.82		
1008	0.60	22.13	1.919	0.06	6.94	-36.6	0.68		
1013	0.70	22.07	1.922	0.06	6.98	-37.8	0.76		
1015	START SAMPLE COLLECTION								
1037	END SAMPLE COLLECTION: 2" IPEC PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070429

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 54 - 144

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 50's-60's

PROJECT NO: 01.0017869.92
DATE: 12/06/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

135.0 to 155.5

SAMPLING PORT

144 3

TOTAL VOLUME PURGED: 1.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1239	0	PUMP	ON					7.5/6.7	36
1243	0.10	22.07	2.063	0.44	5.98	-40.0	1.40		
1248	0.40	21.74	2.009	0.14	6.62	-41.6	1.03		
1253	0.65	21.51	1.966	0.11	6.97	-31.3	1.15		
1258	0.85	21.35	1.957	0.12	7.11	-21.6	1.52		
1303	1.15	21.16	1.961	0.13	7.18	-15.2	1.23		
1308	1.40	21.04	1.966	0.13	7.22	-10.9	1.84		
1313	1.75	20.93	1.970	0.13	7.24	-7.9	1.27		
1315	START SAMPLE COLLECTION								
1325	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	2007042983

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 54 - 173

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain, 50's-60's

PROJECT NO: 01.0017869.92
DATE: 12/06/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

170.5 to 182.0

SAMPLING PORT

173 2

TOTAL VOLUME PURGED: 1.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1239	0	PUMP ON						7.5/6.7	26
1243	0.05	22.11	2.010	1.31	5.69	-42.8	1.62		
1248	0.35	21.73	2.042	0.72	5.66	-33.1	2.89		
1253	0.55	21.54	2.050	0.28	6.57	-27.0	1.26		
1258	0.80	21.36	2.051	0.20	6.82	-18.0	1.00		
1303	1.05	21.18	2.052	0.16	6.63	-12.3	0.96		
1308	1.20	21.05	2.053	0.15	6.74	-10.4	1.12		
1313	1.45	20.94	2.053	0.14	6.77	-9.9	1.01		
1315	START SAMPLE COLLECTION								
1326	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070429

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 54 - 190

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain, 50's-60's

PROJECT NO: 01.0017869.92
DATE: 12/06/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

185.0 to 203.6

SAMPLING PORT

190 1

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1239	0	PUMP	ON					7.5/6.7	36
1243	0.10	22.30	2.122	5.33	6.40	-47.9	1.59		
1248	0.25	21.98	2.167	0.77	6.07	-36.8	0.92		
1253	0.45	21.77	2.197	0.32	6.45	-23.6	0.76		
1258	0.60	21.57	2.207	0.27	6.71	-12.2	0.60		
1303	0.80	21.42	2.211	0.21	6.85	-4.1	0.75		
1308	1.0	21.27	2.214	0.20	6.93	4.7	0.55		
1313	1.25	21.14	2.215	0.17	6.99	12.0	0.67		
1318	1.50	21.04	2.216	0.16	7.03	17.4	0.73		
1323	1.60	20.95	2.217	0.15	7.06	22.6	0.65		
1325	START SAMPLE COLLECTION								
1338	END SAMPLE COLLECTION W/ IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007043.93

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD

WELL ID: MW-55-24
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 50-60s

PROJECT NO: 01.0017869.92
DATE: 11/14/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.47 GW Elevation = 9.30 ACTUAL DEPTH = 7.34'

Time	DTW or GW Elevation Actual Depth (+/- 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1010	7.359	PUMP ON							0.0
1013	6.774	18.27	1.317	3.51	7.34	-83.16	3602		0.01
1018	6.948	18.19	1.329	1.40	7.40	-80.4	2.60		0.05
1023	6.517	18.416	1.327	0.74	7.44	-11.7	1.105		0.20
1028	6.609	18.167	1.319	0.48	7.48	-67.5	1.76		0.35
1043	6.470	18.165	1.321	0.46	8.00	-90.4	1.52		0.50
1048	6.441	18.166	1.323	0.48	7.96	-59.1	1.71		0.60
1053	6.450	18.70	1.325	0.39	7.97	-70.5	1.35		0.80
1058	6.526	18.79	1.327	0.40	8.06	-102.9	1.37		0.95
1103	6.421	18.85	1.330	0.40	8.11	-130.8	1.39		1.10
1108	6.508	18.82	1.333	0.36	8.05	-137.5	1.34		1.25
1113	6.515	18.83	1.334	0.32	8.06	-135.4	1.32		1.45
1114	START SAMPLE COLLECTION								
1126	END SAMPLE COLLECTION 12L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	
turbidity meter	20704393

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, bolts stripped

NOTES AND OBSERVATIONS: Total volume purged 1.60 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-55-35
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 50-60s

PROJECT NO: 01.0017869.92
DATE: 11/14/11
SAMPLER(S): SJ, DB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.21 GW Elevation = 8.56 ACTUAL DEPTH = 22.72

Time	DTW or GW Elevation ~~Actual Depth~~ (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes (gal)
1016	22.72	PUMP	ON						
1030	22.607	18.44	1.361	2.76	7.11	-157.6	1.42		0.02
1035	22.539	18.70	1.346	1.15	7.20	-96.8	0.94		0.1
1040	22.50	18.74	1.332	1.08	7.28	-151.6	0.88		0.22
1045	22.511	18.70	1.335	1.01	7.35	-172.9	0.67		0.37
1050	22.550	18.70	1.342	0.78	7.39	-165.5	1.00		0.50
1055	22.509	18.75	1.347	0.97	7.42	-158.0	1.01		0.64
1100	22.532	18.87	1.365	0.96	7.46	-156.7	1.07		0.78
1105	22.534	18.93	1.377	0.88	7.51	-153.8	1.26		0.92
1107	START	SAMPLE	COLLECTION						
1123	END	"	"	1.2L	TPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070 4293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, bolts slipped

NOTES AND OBSERVATIONS: Total volume purged 1.07 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: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 50-60s

PROJECT NO: 01.0017869.92
DATE: 10/4/11
SAMPLER(S): SL, DB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.93 GW Elevation = 8.840 ACTUAL DEPTH = 40.669

Time	DTW or GW Elevation ~~ACTUAL DEPTH~~ (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes (gal)
1016	40.669	PUMP	ON						
1030	40.651	18.82	1.767	2.83	6.88	82.7	1.11		0.05
1035	40.639	18.92	1.743	2.72	6.88	80.2	1.20		0.15
1040	40.646	18.77	1.732	2.75	6.98	81.7	1.19		0.24
1045	40.655	18.65	1.721	2.76	6.98	81.9	0.82		0.40
1047	START SAMPLE	COLLECTION							
1107	END	"	"	: 2L	IDEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	
turbidity meter	20070493

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Dirty, Structurally Sound

NOTES AND OBSERVATIONS: Total volume purged 0.55 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-56-53
SAMPLE ID: 013

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40s

PROJECT NO: 01.0017869.92
DATE: 10/31/11
SAMPLER(S): CBSL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 37.45 GW Elevation 31.872 ACTUAL DEPTH = 48.646

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1102	48.1646	PUMP	ON					7/7.5	28	0
1109	48.425	16.18	0.772	5.15	6.39	93.0	19 25			0.01
1114	48.344	16.19	1.449	6.76	7.09	37.6	11.20			0.20
1119	48.230	16.23	1.541	8.46	7.44	30.9	6.87			0.45
1124	48.420	15.37	1.605	8.90	7.60	35.0	6.67			0.60
1129	48.458	15.32	1.600	9.05	7.60	31.0	4.29			0.70
1134	48.382	15.80	1.592	9.20	7.61	-6.2	7.73			0.80
1139	48.302	16.16	1.589	9.31	7.68	46.1	7.95			1.00
1144	48.327	16.14	1.588	9.16	7.78	-0.8	7.36			1.15
1149	48.211	16.31	1.584	9.34	7.76	-22.2	8.49			1.30
1154	48.296	16.21	1.585	9.34	7.70	-30.8	8.27			1.45
1159	48.283	16.41	1.584	9.27	7.73	-36.5	8.37			1.60
1204	48.279	16.58	1.589	9.22	7.70	-38.7	8.47			1.80
1205	START	SAMPLE	COLLECTION							
1213	END SAMPLE	COLLECTION:	2L IPEC							
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	200704293

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition POOR - BREAKING AT HINGE

NOTES AND OBSERVATIONS:

Total volume purged 2.0 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

EVIDENCE OF WATER INFILTRATION

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-56-83
SAMPLE ID: 015

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40s

PROJECT NO: 01.0017869.92
DATE: 10/31/11
SAMPLER(S): S, CD

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition poor, breaking at hinge w/ water infiltration

Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

83 (DTB) - 41.32 (DTW) = 41.68 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 41.68 x 0.041 (Multiplier) = 1.709 (Well Volume) gal

1.709 x 1.5 = 2.56 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.75 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1127	0	——	PUMP	ON					
1143	1	——	15.60	1.185	39.89	7.12	40.5	64.79	
1145	1.5	——	15.53	1.189	37.07	7.05	20.4	35.51	
1148	2.0	——	15.23	1.213	39.45	7.09	13.2	33.24	
1153	2.5	——	15.23	1.216	36.15	7.19	8.5	24.31	
1158	2.6	START	SAMPLE	COLLECTED	ON				
1200		END	"	"	.2L	IPEC			
		PUMP	OFF		0.02L	(TRITIUM IN-HOUSE)			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	3007047 93

Note: Bypassed flowthrough cell for 1st gallon to avoid clogging from surface material washed into well. ORP jumping around wildly.

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-58-26
SAMPLE ID: 015

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: overcast, 50-60's

PROJECT NO: 01.0017869.92
DATE: 11/15/11
SAMPLER(S): CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 7.22 GW Elevation 7.01 Actual Depth = 17.944

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1320	17.966	Pump	ON						gal 0
1325	17.414	18.09	1.447	3.52	7.74	-92.5	2.91		0.05
1330	17.240	18.21	1.517	0.70	7.85	-98.5	2.09		0.25
1335	17.251	18.27	1.498	0.42	7.71	-200.2	1.62		0.40
1340	17.081	18.31	1.498	0.39	7.70	-191.5	1.45		0.60
1345	17.055	18.35	1.501	0.62	7.74	-177.8	1.25		0.75
1350	17.107	18.40	1.504	0.81	8.07	-181.6	0.88		0.95
1355	17.090	18.42	1.507	0.65	7.69	-182.2	1.18		1.15
1400	16.914	18.46	1.508	1.09	8.42	-175.9	1.63		1.35
1405	16.917	18.46	1.509	0.40	7.86	-191.3	1.85		1.65
1410	16.785	18.49	1.507	0.38	7.79	-193.6	1.61		1.85
1415	16.670	18.52	1.505	0.37	7.74	-192.9	1.71		2.10
1416	START SAMPLE COLLECTION								
1422	END SAMPLE COLLECTION: 2L IPEC								
	Pump off								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	
turbidity meter	20070429 3

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR - MISSING BOLTS

NOTES AND OBSERVATIONS: Total volume purged 2.30 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-58-65
SAMPLE ID: 015

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 50's

PROJECT NO: 01.0017869.92
DATE: 11/18/14
SAMPLER(S): CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 6.99 GW Elevation 7.26 ACTUAL DEPTH = 63.201

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1320	63.235	PUMP	ON						0
1325	63.016	18.23	0.948	2.47	7.15	-110.7	2.11		0.01
1330	63.047	18.26	0.933	1.12	7.15	-119.1	1.36		0.20
1335	63.040	18.28	0.925	0.82	7.18	-123.6	1.52		0.35
1340	63.047	18.26	0.922	0.73	7.20	-127.6	1.24		0.50
1345	63.076	18.26	0.920	0.74	7.22	-130.7	1.32		0.70
1350	63.081	18.27	0.919	0.69	7.24	-133.6	1.40		0.85
1353	START SAMPLE COLLECTION								
1405	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR - MISSING BOLTS

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.

WELL ID: MW 60 - 35

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 30's F, CLEAR

PROJECT NO: 01.0017869.92
DATE: 12/2/11
SAMPLER(S): CC, CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

24.9 to 39.4

SAMPLING PORT

35

7

TOTAL VOLUME PURGED: 0.68 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1040	0	PUMP	ON					5/7	18
1043	0.01	13.20	0.959	2.42	6.98	-26.2	0.77		
1048	0.21	13.68	0.860	1.53	6.98	-34.8	1.93		
1053	0.39	13.80	0.843	1.54	6.98	-32.2	0.94		
1058	0.53	13.87	0.840	1.55	6.98	-19.2	0.15		
1100	0.68	START	SAMPLE COLLECTION						
1121		END	"	"					
1124		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20530213254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-60 72

WELL ID: MW 60 - 53

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 39°F CLEAR

PROJECT NO: 01.0017869.92
DATE: 12/2/11
SAMPLER(S): C.B.C.C.

SAMPLING INTERVAL (depth in ft below top of casing)

45.4 to 59.4

SAMPLING PORT

53 6

TOTAL VOLUME PURGED: 0.76 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1040	0	PUMP	ON					5/7	18
1043	0.01	13.07	1.687	2.73	6.57	-56.4	2.54		
1048	0.15	13.30	1.651	0.53	6.87	-51.8	1.31		
1053	0.29	13.69	1.596	0.57	7.11	-54.3	1.36		
1058	0.42	13.83	1.492	0.55	7.21	-58.2	2.09		
1103	0.61	13.89	1.461	0.57	7.32	-57.2	0.83		
1105	0.76	START	SAMPLE	COLLECTION					
1116		SET	"	"					
		[redacted] PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	9
turbidity meter	10070 13254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition SEE MW-60-72

WELL ID: MW 60 - 72

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 38° F, CLEAR,

PROJECT NO: 01.0017869.92
DATE: 12/2/11
SAMPLER(S): CB, CA, SC

SAMPLING INTERVAL (depth in ft below top of casing)

66.4 to 78.2

SAMPLING PORT

72 4

TOTAL VOLUME PURGED: 2.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
918	0	PUMP ON						6/5	35
920	0.1	14.09	3.242	1.90	6.21	-51.2	—		
930	.25	14.32	3.212	1.13	6.75	-60.4	0.40		
0935	0.75	14.34	3.130	0.78	6.98	-64.7	0.99		
0940	1.25	14.30	2.896	0.66	7.10	-63.5	0.38		
0945	1.50	14.21	2.832	0.59	7.18	-61.4	0.39		
0950	2.00	14.27	2.787	0.62	7.22	-60.1	0.27		
0954	START SAMPLE COLLECTION								
1001	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition POOR. COVER BROKEN AT HINGE

WELL ID: MW 60 - 135

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 38°F, CLEAR

PROJECT NO: 01.0017869.92
DATE: 12/6/11
SAMPLER(S): CC, SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

124.9 to 141.4

SAMPLING PORT

135 3

TOTAL VOLUME PURGED: 1.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
918	0	PUMP	ON					6/5	35
925	0.1	13.96	2.720	2.08	6.98	-32.9			
930	0.25	14.16	2.300	0.107	6.98	-92.5	1.37		
0935	0.50	14.24	2.317	0.35	6.98	-97.9	0.580		
0940	0.75	14.24	2.341	0.27	6.98	-101.8	0.460		
0945	1.00	14.14	2.439	0.22	6.98	-111.5	0.360		
0950	1.25	14.23	2.479	0.19	6.98	-121.2	0.33		
0955	1.50	14.22	2.528	0.19	6.98	-124.1	0.30		
1000	1.75	14.12	2.539	0.20	6.98	-122.9	0.29		
1002	START SAMPLE COLLECTION								
1010	END SAMPLE COLLECTION; 2L SPEC PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070429.3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-60-72

WELL ID: MW 60 - 154

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 38°F, CLEAR

PROJECT NO: 01.0017869.92
DATE: 12/2/11
SAMPLER(S): CB, SS, CG

SAMPLING INTERVAL (depth in ft below top of casing)

147.4 to 164.9

SAMPLING PORT

154 2

TOTAL VOLUME PURGED: _____ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
918	0	PUMP	ON					6/5	35
925	0.1	13.77	2.187	0.65	6.14	-105.7			
930	0.8	13.94	2.171	0.34	6.50	-102.7	248.7		
935	0.6	14.09	2.176	0.29	6.93	-79.5	100.8		
940	0.9	14.08	2.190	0.10	7.10	-70.5	30.88		
946	1.2	13.89	2.213	0.11	7.17	-71.6	17.40		
960	1.4	14.06	2.236	0.11	7.21	-82.1	8.50		
955	1.6	14.10	2.247	0.12	7.23	-85.6	5.97		
1000	1.8	13.83	2.251	0.11	7.24	-90.1	2.89		
1005	2.1	13.99	2.248	0.01	7.25	-92.9	2.17		
1008	2.25	START	SAMPLE COLLECTION						
1018	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	2007012354

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-60-72

WELL ID: MW 60 - 176

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 38° F, CLEAR

PROJECT NO: 01.0017869.92
DATE: 12/2/14
SAMPLER(S): SL, CB, LG

SAMPLING INTERVAL (depth in ft below top of casing)

170.9 to 200.4

SAMPLING PORT

176

TOTAL VOLUME PURGED: _____ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
9:18	0	PUMP ON						6/5	35
930	0.01	11.84	0.778	2.10	6.11	-1.7	1.89		
935	0.11	12.02	0.773	1.39	6.19	-3.1	1.32		
940	0.2	12.10	0.771	1.42	6.31	-34.6	1.24		
945	0.29	12.33	0.771	1.24	6.51	-66.2	0.82		
950	0.39	12.48	0.775	0.97	6.68	-87.2	0.37		
955	0.49	12.55	0.777	0.84	6.86	-101.7	0.31		
1000	0.58	12.66	0.778	0.75	6.95	-108.1	0.41		
1003	0.83	START SAMPLE COLLECTION							
1027	END	SAMPLE COLLECTION.							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070128 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-60-72

WELL ID: MW-62-18
SAMPLE ID: 020

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 60's

PROJECT NO: 01.0017869.92
DATE: 10/21/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.41 GW Elevation = 1.39 ACTUAL DEPTH = 5.115

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0915	5.115	PUMP ON							0
0925	4.934	18.23	0.982	5.90	7.14	3.3	2.04		0.12
0930	4.914	18.29	1.08	5.40	7.24	3.7	1.46		0.24
0933	4.892	18.38	1.105	5.16	7.30	-11.2	1.46		0.32
0936	4.870	18.31	1.144	5.09	7.31	-18.1	2.08		0.40
0941	4.846	18.54	1.195	5.03	7.40	-24.6	1.96		0.55
0944	4.838	18.62	1.230	4.92	7.42	-28.0	1.79		0.63
0947	4.808	18.72	1.264	5.06	7.44	-39.7	1.95		0.72
0950	4.798	18.63	1.289	5.07	7.47	-43.2	1.82		0.79
0953	4.776	18.48	1.299	4.75	7.47	-46.2	1.62		0.83
0955	START	SAMPLE COLLECTION							
1014	END	"	"	"	2 JARS				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070393

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

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-62-37
SAMPLE ID: 020

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 60s

PROJECT NO: 01.0017869.92
DATE: 10/21/11
SAMPLER(S): SL, AB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.14 GW Elevation = 1.67 ACTUAL DEPTH = 11.479

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
0915	11479	PUMP ON							0
0925	11.242	16.62	1.507	1.15	7.11	-78.3	2.35		0.15
0930	11.219	16.59	1.504	0.68	7.11	-85.0	1.05		0.27
0933	11.208	16.61	1.502	0.61	7.11	-84.3	1.27		0.33
0936	11.190	16.62	1.502	0.54	7.11	-84.9	1.86		0.40
0939	START	SAMPLE COLLECTION							
1002	END	"	"	"	"	"			
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	[redacted] 1
flow meter	
turbidity meter	20704393

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

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 62 - 53

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 10/21/14
SAMPLER(S): CG, SL

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) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0852	0	PUMP	ON					5|6	25
0858	0.10	17.94	1.391	1.01	6.90	-121.2	1.13		
0903	0.25	17.88	1.385	0.57	7.06	-126.3	1.10		
0908	0.30	17.71	1.381	0.47	7.15	-139.7	1.25		
0913	0.35	17.46	1.374	0.44	7.26	-144.2	1.45		
0918	0.42	17.24	1.366	0.39	7.35	-145.6	1.32		
0923	0.50	17.12	1.359	0.38	7.39	-144.3	1.30		
0928	0.55	16.88	1.353	0.35	7.44	-142.2	1.29		
0933	0.60	16.62	1.348	0.36	7.46	-139.5	1.20		
0934	START	SAMPLE	COLLECTION						
1017	END SAMPLE COLLECTION: IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62 - 71

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 10/21/13
SAMPLER(S): CBL, SL

SAMPLING INTERVAL (depth in ft below top of casing)

61.1 to 82.6

SAMPLING PORT

71 5

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0852	0	PUMP	ON					5/6	25
0858	0.10	17.69	1.373	0.98	6.45	-95.8	1.20		
0903	0.30	17.69	1.371	0.56	6.62	-81.4	0.98		
0908	0.45	17.57	1.371	0.47	6.65	-66.8	1.55		
0913	0.70	17.44	1.371	0.38	6.69	-52.3	1.09		
0918	0.85	17.32	1.370	0.34	6.72	-34.4	0.79		
0923	1.05	17.21	1.371	0.33	6.73	-55.3	1.05		
0928	1.25	17.14	1.369	0.32	6.76	-57.3	0.97		
0930	START	SAMPLE	COLLECTION						
0944	END SAMPLE COLLECTION: 2L JAR								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	2007012554

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62 - 92

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 10/21/11
SAMPLER(S): C.B.

SAMPLING INTERVAL (depth in ft below top of casing)

88.6 to 99.1

SAMPLING PORT

92 4

TOTAL VOLUME PURGED: 1.00 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0852	0	PUMP ON						5/6	25
0858	0.01	18.21	1.369	0.49	6.65	-150.7	1.39		
0903	0.20	18.01	1.362	0.12	6.98	-147.2	0.94		
0908	0.32	17.80	1.358	0.10	7.12	-138.8	0.89		
0913	0.52	17.60	1.354	0.08	7.20	-128.2	0.94		
0918	0.70	17.49	1.351	0.07	7.22	-124.3	0.96		
0923	0.85	17.40	1.350	0.06	7.23	-120.1	0.98		
0925	START SAMPLE COLLECTION								
0942	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125Y

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62 - 138

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 50S

PROJECT NO: 01.0017869.92
DATE: 10/21/14
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

126.1 to 143.6

SAMPLING PORT

138 3

TOTAL VOLUME PURGED: 1.60 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1020	0	Pump	ON					6/4	30
1026	0.05	17.06	1.428	1.24	6.42	-59.0	1.44		
1031	0.20	17.23	1.484	0.63	6.73	-97.4	1.41		
1036	0.34	17.35	1.512	0.55	6.81	-86.5	1.05		
1041	0.52	17.34	1.550	0.51	6.84	-67.0	1.16		
1046	0.68	17.41	1.567	0.49	6.86	-50.3	0.84		
1051	0.82	17.39	1.580	0.31	6.86	-33.3	1.05		
1056	0.96	17.30	1.584	0.22	6.87	-27.3	0.89		
1101	1.10	17.42	1.584	0.21	6.86	-20.2	0.74		
1106	1.25	17.43	1.585	0.22	6.87	-16.5	0.92		
1111	1.42	17.39	1.584	0.19	6.87	-13.7	0.85		
1117	START SAMPLE COLLECTION								
1120	END SAMPLE COLLECTION; 2L SPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62 - 182

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 10/21/11
SAMPLER(S): GBSL

SAMPLING INTERVAL (depth in ft below top of casing)

177.6 to 198.7

SAMPLING PORT

182 1

TOTAL VOLUME PURGED: 1.28 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1020	0	PUMP	ON					6/4	30
1026	0.01	17.11	1.297	1.87	6.54	-94.9	1.33		
1031	0.12	17.25	1.311	0.71	6.82	-148.3	1.01		
1036	0.24	17.39	1.314	0.44	7.01	-147.7	0.80		
1041	0.36	17.46	1.316	0.34	7.16	-135.4	0.71		
1046	0.48	17.50	1.317	0.34	7.24	-127.1	0.44		
1051	0.60	17.52	1.318	0.28	7.27	-110.2	0.66		
1056	0.72	17.46	1.320	0.24	7.29	-113.8	0.69		
1101	0.80	17.53	1.321	0.24	7.29	-97.0	0.85		
1106	0.92	17.56	1.322	0.23	7.30	-87.7	0.78		
1111	1.06	17.44	1.323	0.20	7.29	-93.1	0.77		
1116	START SAMPLE COLLECTION								
1137	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	2007 01264

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD

WELL ID: MW-63-18
SAMPLE ID: 020

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 60s

PROJECT NO: 01.0017869.92
DATE: 10/18/11
SAMPLER(S): SL / CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.59 GW Elevation = 0.469 ACTUAL DEPTH = 4.690

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1050	4.690	PUMP	ON						0
1100	4.732	20.03	2.230	0.67	6.11	-114.6	2.35		0.12
1105	4.752	20.07	2.188	0.58	6.09	-109.2	1.14		0.21
1109	4.777	20.22	2.169	0.48	6.05	-104.8	1.14		0.31
1111	START	SAMPLE COLLECTION							
1134	END	"	"	"	2L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	20
turbidity meter	20704393

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, hinge bent

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-6334
SAMPLE ID: 020

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 60s

PROJECT NO: 01.0017869.92
DATE: 10/19/11
SAMPLER(S): SL, AR
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.48 GW Elevation = 0.573 ACTUAL DEPTH = 12.253

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1050	12.253	PUMP ON							0
1100	12.278	18.55	1.305	0.63	7.41	-123.0	6.62		0.15
1105	12.301	18.60	1.291	0.50	7.46	-131.5	4.19		0.23
1109	12.316	18.69	1.283	0.45	7.48	-135.1	4.60		0.32
1115	12.346	18.44	1.269	0.38	7.48	-141.5	1.98		0.46
1117	START	SAMPLE COLLECTION							
1139	END	"	"		2L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	
turbidity meter	20070493

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, Heavy Rust

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 63 - 50

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 60S

PROJECT NO: 01.0017869.92
DATE: 10/18/14
SAMPLER(S): CBSC

SAMPLING INTERVAL (depth in ft below top of casing)

41.5 to 58.0

SAMPLING PORT

50 7

TOTAL VOLUME PURGED: 1.45 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1257	0	PUMP	ON					7/7.4	20
1304	0.15	19.02	1.117	0.32	6.98	0.6	1.70		
1309	0.25	18.91	1.117	0.32	6.98	0.7	0.83		
1314	0.50	18.84	1.119	0.34	6.98	-8.7	1.07		
1319	0.70	18.80	1.122	0.36	6.98	-22.7	1.11		
1324	0.85	18.78	1.125	0.38	6.98	-29.7	1.12		
1329	1.00	18.95	1.125	0.38	6.98	-45.1	0.86		
1334	1.10	18.83	1.125	0.39	6.98	-47.3	0.78		
1339	1.25	16.70	1.127	0.38	6.98	-52.2	0.67		
1342	START SAMPLE COLLECTION								
1355	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070754

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition SEE MW-63-174

WELL ID: MW 63 - ~~42~~ 93 CB

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 60's

PROJECT NO: 01.0017869.92
DATE: 10/18/4
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)
81.5 to 100.5

SAMPLING PORT
93 5

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1257	0	PUMP ON						7/7.4	20
1304	0.05	20.95	1.138	1.03	7.14	-121.3	1.64		
1309	0.10	20.60	1.113	0.70	7.29	-97.4	1.26		
1314	0.20	20.50	1.108	0.61	7.37	-82.9	1.05		
1319	0.35	20.30	1.104	0.51	7.44	-73.1	1.14		
1324	0.45	20.24	1.104	0.45	7.48	-72.0	0.90		
1329	0.55	20.18	1.103	0.40	7.50	-77.3	1.06		
1334	0.60	20.45	1.100	0.38	7.52	-89.3	1.00		
1339	0.70	20.22	1.099	0.36	7.54	-99.3	0.94		
1344	0.80	19.70	1.075	0.30	7.55	-101.1	0.91		
1349	0.90	19.70	1.060	0.28	7.56	-102.2	0.96		
1352	START SAMPLE COLLECTION								
1414	END SAMPLE COLLECTION. 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition SEE MW63-174

WELL ID: MW 63 - 112

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 60'S

PROJECT NO: 01.0017869.92
DATE: 10/18/13
SAMPLER(S): CR, SL

SAMPLING INTERVAL (depth in ft below top of casing)

106.5 to 112.0

SAMPLING PORT

112 4

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mV/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1257	0	PUMP	ON					7/7.4	70
1304	0.01	21.10	1.308	1.910	7.02	-341.2	1.22		
1309	0.10	20.76	1.300	0.72	7.11	-379.7	1.59		
1314	0.20	20.73	1.288	0.41	7.11	-321.0	0.92		
1319	0.35	20.42	1.350	0.32	7.11	-295.7	0.78		
1324	0.45	20.39	1.363	0.31	7.09	-281.9	0.99		
1329	0.55	20.49	1.364	0.30	7.05	-273.1	0.97		
1334	0.100	20.91	1.365	0.29	7.03	-258.6	0.81		
1339	0.65	20.80	1.372	0.28	7.01	-267.1	0.89		
1344	0.75	19.77	1.365	0.27	7.00	-263.1	1.02		
1349	0.80	19.64	1.367	0.26	6.99	-262.3	0.95		
1354	1.00	19.56	1.361	0.27	6.99	-260.7	1.16		
1358	START SAMPLE COLLECTION								
1420	END SAMPLE COLLECTION; 2L TPHC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2007012514

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW 63-174

WELL ID: MW 63 - 121

SAMPLE ID: DUP

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY CLOUDY, 60'S

PROJECT NO: 01.0017869.82
DATE: 10/18/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

118 to 127.5

SAMPLING PORT

121 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) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1034	0	PUMP	ON					8/8.2	35
1040	0.05	19.73	1.595	2.07	6.96	11.6	1.15		
1046	0.35	19.03	1.622	0.27	6.96	37.2	1.00		
1051	0.60	18.83	1.627	0.22	6.96	42.7	0.94		
1056	0.85	18.21	1.624	0.20	6.96	45.7	0.97		
1101	1.00	17.99	1.614	0.25	6.96	40.2	0.90		
1106	1.20	18.06	1.610	0.28	6.96	35.8	0.91		
1111	1.40	17.93	1.606	0.28	6.96	32.2	0.93		
1114	START SAMPLE COLLECTION								
1127	END SAMPLE COLLECTION; 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition SEE MW-63-174

WELL ID: MW 63 - 163

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY CLOUDY, LOW'S

PROJECT NO: 01.0017869.92
DATE: 10/18/11
SAMPLER(S): C.G.S.L.

SAMPLING INTERVAL (depth in ft below top of casing)

150.5 to 165

SAMPLING PORT

163 2

TOTAL VOLUME PURGED: 1.70 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1034	0	PUMP	DTW					8/8.2	35
1040	0.05	19.72	1.068	1.40	6.87	-108.0	1.69		
1046	0.25	19.44	1.017	0.83	7.20	-101.2	1.36		
1051	0.40	19.06	1.005	0.74	7.25	-91.8	1.29		
1056	0.60	18.43	1.011	0.65	7.29	-89.9	1.13		
1101	0.80	18.10	1.013	0.61	7.28	-83.2	1.08		
1106	0.95	18.13	1.013	0.50	7.29	-77.9	1.07		
1110	1.10	17.98	1.014	0.50	7.28	-72.1	1.83		
1116	1.30	17.67	1.015	0.48	7.27	-71.8	1.13		
1121	1.50	17.53	1.013	0.48	7.26	-72.4	1.13		
1123	START SAMPLE COLLECTION								
1137	END SAMPLE COLLECTION: 2L AG, 5L VOC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	10701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-63-174

WELL ID: MW 63 - 174

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY Cloudy, 60's

PROJECT NO: 01.0017869.92
DATE: 10/18/11
SAMPLER(S): CB, GL

SAMPLING INTERVAL (depth in ft below top of casing)

168.0 to 191.1

SAMPLING PORT

174

TOTAL VOLUME PURGED: 1.85 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1034	0	Pump	ON					8/8.2	35
1046	0.01	19.34	1.244	4.35	6.98	-392.0	2.07		
1051	0.20	18.58	1.106	0.54	6.98	-453.6	1.47		
1056	0.40	18.14	1.057	0.28	6.98	-332.1	1.29		
1101	0.60	17.96	1.040	0.24	6.98	-249.0	1.53		
1106	0.75	19.95	1.027	0.23	6.98	-196.4	0.88		
1111	0.95	17.69	1.023	0.19	6.98	-216.4	1.42		
1116	1.10	17.54	1.019	0.19	6.98	-200.4	0.79		
1121	1.35	17.41	1.017	0.17	6.98	-203.8	0.98		
1126	1.60	17.35	1.016	0.17	6.98	-197.6	1.13		
1128	START SAMPLE COLLECTION								
1142	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070D1254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR, COVER BROKEN AT HINGE

WELL ID: MW-606-21
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Drizzle, 60's

PROJECT NO: 01.0017869.92
DATE: 11/29/11
SAMPLER(S): SL, CB, CG
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.76 GW Elevation = 0.647 ACTUAL DEPTH = 7.931

Time	DTW or GW Elevation (ACTUAL DEPTH) (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1008	7.931	PUMP	ON						0
1013	7.832	16.16	1.290	0.48	6.96	-131.4	8.17		0.03
1018	7.840	16.42	1.169	0.49	7.06	-126.6	7.06		0.12
1023	7.852	16.53	1.071	0.38	7.07	-141.8	5.81		0.21
1028	7.868	16.74	0.992	0.37	7.14	-153.5	5.12		0.31
1033	7.885	16.84	0.967	0.33	7.15	-143.7	5.96		0.40
1039	7.896	16.89	0.917	0.31	7.19	-147.3	4.44		0.53
1041	START	SAMPLE	COLLECTION						
	END	"	"		@ IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070393

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

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-66-36
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Drizzle, 40s

PROJECT NO: 01.0017869.92
DATE: 11/29/11
SAMPLER(S): SL, CB, CA
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.23 GW Elevation = 1.134 ACTUAL DEPTH = 12.213

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1002	12.213	PUMP ON							0
1013	12.344	16.20	2.420	0.72	6.98	-56.8	2.57		0.07
1018	12.345	16.37	2.478	0.57	6.98	-51.0	1.78		0.19
1023	12.369	16.45	2.525	0.44	7.07	-54.2	1.13		0.30
1028	12.411	16.53	2.540	0.40	7.14	-54.7	1.82		0.38
1033	12.449	16.53	2.543	0.54	7.16	-58.2	2.19		0.50
1035	START	SAMPLE COLLECTION							
1101	END	"	"	:2L	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	
turbidity meter	20704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

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 67 - 39

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, 50's

PROJECT NO: 01.0017869.92
DATE: 11/29/11
SAMPLER(S): SL, CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

28.8 to 54.3

SAMPLING PORT

39 7

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1316	0	PUMP	ON					8/8	20
1325	0.80	16.41	1.077	1.89	6.32	-39.9	1.02	↓	↓
1330	0.50	17.13	2.357	0.40	7.00	-132.7	0.62		
1335	0.80	17.18	2.388	0.36	7.19	-134.6	0.52		
1340	1.00	17.23	2.382	0.32	7.20	-135.2	0.90		
1345	1.25	17.23	2.377	0.31	7.14	-135.8	0.26		
1348	START	SAMPLE	COLLECTION						
1359	END	"	"	3 VOL PER					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	200701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Sun; Missing manifold

WELL ID: MW 67 - 105

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, 50s

PROJECT NO: 01.0017869.92
DATE: 11/29/14
SAMPLER(S): SL, CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

90.3 to 110.8

SAMPLING PORT

105 6

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1326	0	PUMP	ON					8/8	20
1325	0.03	16.49	1.572	0.73	6.79	-36.8	1.97		
1330	0.30	16.69	1.586	0.47	6.91	-113.0	1.42		
1335	0.50	16.77	1.593	0.33	7.01	-124.9	1.15		
1340	0.70	16.85	1.602	0.28	7.04	-120.6	1.19		
1345	0.85	16.84	1.592	0.24	7.10	-136.5	1.90		
1350	1.00	16.87	1.596	0.20	7.11	-136.5	0.83		
1353	START	SAMPLE	COLLECTION						
1410	END	"	"	"	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Fair / Missing Manifold

WELL ID: MW 67 - 173

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, 50s

PROJECT NO: 01.0017869.92
DATE: 11/29/11
SAMPLER(S): SL, CB, CB

SAMPLING INTERVAL (depth in ft below top of casing)

164.8 to 188.3

SAMPLING PORT

173 5

TOTAL VOLUME PURGED: 0.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1316	0	PUMP	ON					8/8	20
1329	0.03	16.37	1.064	2.43	6.39	-54.3	4.34		
1330	0.10	16.63	1.047	1.07	6.72	-81.0	4.78		
1335	0.22	16.75	1.173	0.63	6.49	-172.5	3.62		
1340	0.32	16.95	1.187	0.49	6.43	-188.6	4.68		
1345	0.42	16.88	1.189	0.40	6.55	-202.3	3.59		
1350	0.54	16.90	1.196	0.32	6.59	-215.7	2.97		
1356	0.67	16.91	1.202	0.26	6.54	-223.8	2.56		
1400	0.75	16.91	1.199	0.23	6.56	-224.2	2.14		
1402	START	SAMPLE	COLLECTION						
	END	"	"	~2L	FREE				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	
Turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Lid Missing Manifold

WELL ID: MW 67 - 219

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, 44mph, 61° F

PROJECT NO: 01.0017869.92
DATE: 11/29/11
SAMPLER(S): CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

209 to 229.8

SAMPLING PORT

219 4

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
957	0	PUMP ON						6/6	50
956	0.01	16.12	0.992	2.21	5.83	-102.1	1.28		
1000	0.6	16.49	0.975	0.97	6.09	-117.2	1.16		
1005	0.7	16.76	1.207	0.69	6.65	-171.7	0.05		
10 10	0.8	16.74	1.206	0.56	6.72	-173.1	0.09		
10 15	1.6	16.65	1.206	0.54	6.76	-169.7	0.00		
10 20	1.45	16.63	1.207	0.49	6.79	-152.1	0.00		
10.25	1.60	16.59	1.206	0.45	6.91	-156.6	0.00		
10.29	1.85	START	SAMPLE COLLECTION						
10.41	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition

WELL ID: MW 67 - 276

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy. RAIN. 61°F

PROJECT NO: 01.0017869.92
DATE: 4/29/11
SAMPLER(S): CG CB. [redacted]

SAMPLING INTERVAL (depth in ft below top of casing)

250.8 to 281.3

SAMPLING PORT

276 3

TOTAL VOLUME PURGED: 1.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0957	0	PUMP ON						6/6	50
9955	0.01	16.38	1.242	2.14	5.82	-100.6	0.44		
1000	0.5	16.73	1.215	0.96	6.29	-168.9	0.12		
1005	0.7	16.55	0.973	0.81	6.16	-107.2	0.52		
1010	0.8	16.54	0.970	0.70	6.18	-88.7	0.70		
1015	1.0	16.46	0.967	0.62	6.23	-80.9	0.45		
1026	1.20	16.43	0.964	0.58	6.28	-50.1	0.73		
1025	1.40	16.39	0.961	0.56	6.36	-48.4	0.40		
1030	1.60	16.35	0.959	0.53	6.62	-46.0	0.45		
1035	1.70	16.30	0.958	0.52	6.48	-42.0	0.65		
1040	1.80	16.31	0.957	0.50	6.50	-41.4	0.40		
1042	1.95	START	SAMPLE	COLLECTION					
1057	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070 12 54

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition

WELL ID: MW 67 - 323

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN 50's

PROJECT NO: 01.0017869.92
DATE: 11/29/11
SAMPLER(S): CB, CG, SL

SAMPLING INTERVAL (depth in ft below top of casing)

317.8 to 328.3

SAMPLING PORT

323 2

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
957	0	PUMP	ON					1/1	50
1002	0.01	15.80	0.869	2.84	6.00	-47.6	2.73		
1007	0.4	16.12	0.844	0.96	6.20	-80.6	2.10		
1012	0.5	16.24	0.830	0.58	6.35	-113.1	2.09		
1017	0.6	16.32	0.842	0.34	6.49	-148.4	1.56		
1022	0.7	16.29	0.855	0.24	6.55	-1120.5	1.06		
1027	0.8	16.31	0.866	0.20	6.59	-163.8	0.63		
1032	0.9	16.29	0.871	0.17	6.62	-175.5	0.48		
1037	1.0	16.28	0.895	0.16	6.64	-181.7	0.42		
1042	1.10	16.23	0.866	0.15	6.65	-187.1	0.48		
1043	START SAMPLE COLLECTION								
1057	END SAMPLE COLLECTION 2L TAKEN								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	10070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR: MISSING MANIFOLD

WELL ID: MW 67 - 340

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: ORAN, SU

PROJECT NO: 01.0017869.92
DATE: 11/29/11
SAMPLER(S): CG, CG, SL

SAMPLING INTERVAL (depth in ft below top of casing)

335.3 to 347.9

SAMPLING PORT

340

TOTAL VOLUME PURGED: 1.20 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0957	0	PUMP	ON					6/6	50
1001	0.01	16.87	0.819	5.58	6.32	-207.2	4.94		
1006	0.5	16.17	0.785	1.25	6.53	-211.5	2.02		
1011	0.85	16.27	0.773	0.91	6.70	-237.8	1.72		
1016	0.75	16.32	0.766	0.56	6.90	-237.8	0.71		
1021	0.85	16.31	0.764	0.37	6.95	-239.7	0.98		
1026	0.95	16.30	0.761	0.29	6.97	-238.5	0.71		
1031	1.05	16.29	0.760	0.36	6.97	-237.4	0.71		
1033	START	SAMPLE	COLLECTION						
1046	END SA	MPLE COLLECTION: 2L SPEC							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2009Q125S4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR: MISSING MANIFOLD

WELL ID: MW-111
SAMPLE ID: 0336

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, WINDY, 40'S

PROJECT NO: 01.0017869.92
DATE: 11/11/11
SAMPLER(S): CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 7.77 GW Elevation 10.141 ACTUAL DEPTH = 7.906

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1024	7.912	PUMP	ON						0
1039	7.525	14.10	0.592	5.22	6.69	-154.9	3.64		0.01
1044	7.332	14.27	0.685	1.45	6.78	-149.0	2.66		0.10
1049	7.277	14.26	0.754	1.12	6.89	-123.8	2.00		0.25
1054	7.281	14.61	0.762	0.78	6.95	-112.5	2.34		0.35
1059	7.205	14.74	0.790	0.81	6.99	-72.0	2.06		0.50
1104	7.251	14.62	0.802	0.93	7.02	-72.7	2.19		0.60
1109	7.287	14.46	0.805	0.78	7.06	-71.7	2.23		0.70
1110	START SAMPLE COLLECTION								
1130	END SAMPLE COLLECTION W. 2L IPEC								
				0.02 L IPEC (TRITIUM IN-HOUSE)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070429 3

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR - BOLTS STRIPPED

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-CSS
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain, 50's

PROJECT NO: 01.0017869.92
DATE: 10/27/11
SAMPLER(S): CB/SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 1.43 GW Elevation = 18.64 ACTUAL DEPTH = 12.669.

Time	DTW or ~~GW Elevation~~ ACTUAL DEPTH (+0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal 0
12:20	12.6669	PUMP	ON						
12:24	12.6666	18.52	1.204	7.92	7.67	70.5	4.27		0.01
12:29	12.6669	18.88	1.058	6.93	7.77	33.5	1.45		0.20
12:34	12.6666	19.05	1.012	6.77	7.81	25.2	1.21		0.40
12:39	12.6660	19.14	0.996	6.70	7.84	22.0	1.19		0.65
12:44	12.6664	19.18	0989	6.66	7.86	21.0	0.90		0.85
12:49	12.657	19.20	0.987	6.57	7.87	18.8	0.78		1.10
12:51	START SAMPLE COLLECTION								
13:02	END SAMPLE COLLECTION: 2L IPEC								
				0.02L IPEC (TRITIUM IN-HOUSE)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070429

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

NOTES AND OBSERVATIONS: Total volume purged 1.30 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: 031

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 50-60s

PROJECT NO: 01.0017869.92
DATE: 11/16/11
SAMPLER(S): SL, CB

Measured Well Depth ..... **(feet from top of casing)**
Well Vault Condition Dirt, Missing/Frayed Labels
Well Diameter: 4 in

WATER COLUMN HEIGHT (ft)

27.25 (DTB) - 10.55 (DTW) = 16.7 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 16.7 x 0.653 (Multiplier) = 10.905 (Well Volume) gal

10.905 x 1.5 = 16.4 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: gal

WATER QUALITY: DTW = 10.55 GW Elevation = 3.969 ACTUAL DEPTH = 50.756

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (+/- 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1041	0	50.756	PUMP ON						
1047	1	48.966	31.73	0.379	0.32	8.22	-306.1	4.46	
1052	2	47.779	32.41	0.306	1.41	8.69	-277.4	3.27	
1058	3	45.737	32.51	0.276	3.07	9.06	-164.2	3.76	
1103	4	44.038	32.69	0.272	3.35	9.16	-107.1	2.67	
1109	5	44.897	32.83	0.277	3.50	9.22	-114.8	2.34	
1115	6	40.032	32.63	0.281	3.52	9.24	-122.0	1.71	
1121	7	39.024	32.31	0.287	3.45	9.19	-133.7	1.99	
1126	8	36.213	32.32	0.294	3.36	9.07	-139.5	2.46	
1136	8.5	34.985	31.85	0.316	3.36	8.98	-84.5	3.19	
1137	PUMP	OFF, WELL DRY;	LET RECHARGE						
1249	START	SAMPLE	COLLECTION						
1256	END	"	"	: 2L IPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070125H

Note: Water is warm at this location (see Temps above)

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-45
SAMPLE ID: 006

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 50-60's

PROJECT NO: 01.0017869.92
DATE: 11/16/11
SAMPLER(S): CB, SL, CG
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.63 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
~~1032~~ ~~1133~~	9.81	PUMP	ON	5.22	7.29	166.4			gal 0
~~1037~~ ~~1137~~	9.87	29.09	1.060	0.72	7.61	102.5	11.52		
~~1042~~ ~~1142~~	9.88	30.52	1.046	0.47	7.70	58.8	44.82		
~~1047~~ ~~1147~~	9.88	31.76	1.042	0.35	7.71	-31.9	18.13		0.4
~~1052~~ ~~1152~~	9.88	32.12	1.039	0.27	7.71	-50.0	8.61		0.55
~~1057~~ ~~1157~~	9.88	31.80	1036	0.20	7.69	-58.1	7.37		0.73
~~1102~~ ~~1202~~	9.87	31.88	1.033	0.20	7.68	-69.3	6.34		0.84
~~1107~~ ~~1207~~	9.89	32.32	1.030	0.19	7.67	-74.5	6.10		0.9
1111 ~~1212~~	9.89	32.33	1.027	0.17	7.67	-83.2	5.58		1.1
1113 ~~1213~~	START SAMPLE COLLECTION								
1123 ~~1223~~	END	"	"	:	2L IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070125Y

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, No Water

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.

WELL ID: MW-71
SAMPLE ID: 034

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 50's

PROJECT NO: 01.0017869.92
DATE: 10/19/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 3.96 GW Elevation 4.558 ACTUAL DEPTH = 3.037

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1047	3.037	PUMP	ON						gal 0
1055	3.059	20.14	1.053	3.51	6.43	84.2	0.71		0.05
1100	3.059	20.10	1.054	1.48	6.31	87.5	0.55		0.20
1105	3.055	20.09	1.054	1.06	6.31	99.5	0.53		0.35
1110	3.053	20.05	1.054	0.94	6.34	111.8	0.56		0.50
1115	3.053	20.03	1.054	0.89	6.40	109.1	0.57		0.65
1120	3.050	20.00	1.054	0.87	6.45	108.1	0.53		0.80
1122	START SAMPLE COLLECTION								
1139	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	
turbidity meter	20070125 4

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

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.

WELL ID: 43-T2
SAMPLE ID: 040

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 50S

PROJECT NO: 01.0017869.92
DATE: 10/19/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 3.85 GW Elevation 4.602 TRANSDUCER ACTUAL DEPTH = 2.834

Time	DTW or GW Elevation (ACTUAL DEPTH) (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
0921	2.834	PUMP	ON						0
0927	2.805	24.20	0.953	1.74	7.85	-107.6	3.72		0.01
0932	2.797	24.17	0.950	1.02	7.92	-108.1	3.35		0.10
0937	2.790	24.13	0.943	0.83	7.93	-100.1	2.90		0.20
0942	2.786	24.16	0.922	0.74	7.94	-89.7	2.64		0.30
0947	2.785	24.21	0.907	0.68	7.94	-98.8	2.44		0.45
0952	2.782	24.25	0.894	0.49	7.95	-97.3	2.25		0.60
0957	2.781	24.27	0.883	0.69	7.95	-104.9	1.89		0.70
0959	START	SAMPLE	COLLECTION						
1020	END SAMPLE COLLECTION	1 L IPEC; 0.02 L (TRITIUM IN-HOUSE)							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

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.

APPENDIX E: 2011 MID-QUARTER SAMPLING DATA SHEETS

APPENDIX E: Q1-2011 MID-QUARTER SAMPLING DATA SHEETS

WELL ID: MW 30 - 84

SAMPLE ID: 029

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, RAIN, 40's

PROJECT NO: 01.0017869.92
DATE: 3/21/11
SAMPLER(S): CB SL

SAMPLING INTERVAL (depth in ft below top of casing)

77.3 to 85.4

SAMPLING PORT

84

TOTAL VOLUME PURGED: 0.35 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)
1014	0	Pump	ON					6/7	40
1040	PUMP O	FF: AIR	IN COMP	RESSOR	200 LBS			↓	15
1049	COMPRES	SOR RE	CHARGED						
1055	PUMP ON							6/7	40
1100	0.01	19.24	1.302	3.63	6.92	-45.0	—	6	
1105	0.10	19.39	1.309	3.42	6.94	-49.9	—		
1110	0.15	19.97	1.311	3.41	6.96	-48.1	—		
1115	0.20	20.14	1.312	3.28	6.96	-46.5	—		
1120	0.25	20.18	1.312	3.11	6.97	-43.8	—		
1125	0.30	20.03	1.313	3.10	6.96	-44.5	—		
1130	0.35	19.89	1.313	3.08	6.96	-43.1	—		
1133	START	SAMPLE	COLLECTION						
1208	END SA	MPLE COLLECTION TIME							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	N/A

NOTES AND OBSERVATIONS:

WELL ID: MW 30 - 69

SAMPLE ID: D38

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, RAIN, 40's

PROJECT NO: 01.0017369.92
DATE: 3/31/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

67.3 to 71.3

SAMPLING PORT

69

TOTAL VOLUME PURGED: 0.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (±3%)	Specific Conductivity (S/cm) (±3%)	Dissolved Oxygen (g/l) (±10%)	pH (SU) (±0.1)	ORP (±100)	Turbidity (NTU) (±10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1014	0	PUMP ON						6/12	40
1018	0.01	21.09	1.004	8.74	7.37	96.9	—	↓	↓
1025	0.10	21.77	1.026	8.90	7.79	84.5	—		35
1030	0.20	22.03	1.033	8.91	7.94	83.5	—		25
1035	0.30	21.92	1.034	8.93	7.99	82.3	—	↓	20
1040	PUMP OFF AIR IN LINE/PUMP			SKIP TOO	LOW		—	6/12	15
1054	COMPRESSOR REGULATED								
1055	PUMP ON							6/12	40
1100	0.5	21.77	1.016	9.02	8.11	85.6	—	↓	↓
1105	0.6	22.22	1.012	9.36	8.19	83.7	—		
1110	0.7	22.37	1.006	9.44	8.22	82.7	—		
1115	0.8	22.44	1.002	9.50	8.24	82.6	—	↓	↓
1117	START SAMPLE COLLECTION								
1138	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	N/A

NOTES AND OBSERVATIONS:

WELL ID: MW 31 - 49

SAMPLE ID: 030

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 3/30/11
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)

34.8 to 49.3

SAMPLING PORT

49

TOTAL VOLUME PURGED: 2.0 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 Pressur (psi)
1135	0	PUMP ON						6/7	29
1145	0.1	16.30	2.697	8.46	6.16	33.3	12.33		
1155	0.5	16.74	2.589	6.26	5.99	-0.4	7.42		
1205	1.0	16.84	2.582	6.11	6.08	-1.2	2.76		
1210	1.25	16.99	2.577	6.01	6.13	-0.8	2.89		
1215	1.50	17.09	2.574	6.15	6.19	-4.5	2.69		
1220	START SAMPLE COLLECTION								
1232	END SAMPLE COLLECTION 12 IPEL								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070492

NOTES AND OBSERVATIONS:

WELL ID: MW 31 - 63

SAMPLE ID: 030

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 3/30/11
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)

55.8 to 63.8

SAMPLING PORT

63

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 Pressur (psi)
1135	0							6/7	29
1140	0.1	15.90	2.027	0.49	7.32	64.3	1.60		
1145	0.25	16.32	2.281	0.35	7.30	86.2	1.66		
1205	0.50	16.46	2.312	0.34	7.28	89.3	1.72		
1210	0.65	16.69	2.288	0.71	7.26	90.6	0.65		
1215	0.80	16.93	2.222	1.80	7.29	90.0	1.04		
1220	0.90	17.13	2.1666	2.38	7.30	91.2	1.37		
1225	1.05	17.30	2.117	2.53	7.34	92.1	1.67		
1230	1.15	17.38	2.069	2.63	7.32	92.5	1.57		
1235	1.25	17.47	2.043	2.63	7.32	94.0	1.73		
1230	START SAMPLE COLLECTION								
1313	END SAMPLE COLLECTION: 2 L TOC								
	Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070429.2

NOTES AND OBSERVATIONS:

WELL ID: MW 31 - 85

SAMPLE ID: 030

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 50's

PROJECT NO: 01.0017869.92
DATE: 3/30/11
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)

69.8 to 85.4

SAMPLING PORT

85

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 Pressur (psi)
1135	0							6/7	29
1145	0.75	16.05	2.372	4.58	6.23	-60.5	1.28		
1155	0.75	16.34	2.387	5.32	6.34	-1.2	0.92		
1205	0.750	16.69	2.447	6.16	6.45	29.8	0.49		
1210	0.90	16.75	2.440	5.31	6.51	35.9	0.30		
1215	1.05	17.08	2.443	4.81	6.57	43.6	0.33		
1220	1.15	17.33	2.445	4.89	6.59	46.6	0.31		
1225	1.25	17.49	2.447	4.96	6.61	49.8	0.29		
1227	START SAMPLE COLLECTION								
1255	END SAMPLE COLLECTION: 2L IPEC								
	Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007 042 93

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 59

SAMPLE ID: _____

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 45°

PROJECT NO: 01.0017869.92
DATE: 3/21/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

28.3 to 61.3

SAMPLING PORT

59 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)
1208	0	PUMP	ON					3/11	40
1222	1.0	18.35	1.632	7.45	6.75	63.8	0.65	↓	↓
1227	1.35	18.53	1.633	7.24	6.80	67.6	1.19	↓	↓
1232	1.75	18.79	1.634	7.38	6.85	69.3	1.17	↓	↓
1237	2.10	18.39	1.635	7.33	6.87	71.3	1.02	↓	↓
1238		STARTED	SAMPLE	COLLECTION					
1246		SAMPLE	COMPLETED : 2L		IPEC				
1246		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070393

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 85

SAMPLE ID: _____

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 45°

PROJECT NO: 01.0017869.92
DATE: 3/2/11
SAMPLER(S): JL, DB

SAMPLING INTERVAL (depth in ft below top of casing)

79.3 to 92.8

SAMPLING PORT

85 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)
1208	0	PUMP ON						8/11	40
1222	0.6	14.04	1.593	8.57	7.07	-119.1	2.28		
1227	0.85	15.87	1.597	7.76	7.04	-126.1	1.94		
1232	0.70	15.74	1.593	5.69	6.97	-122.8	1.68		
1237	0.95	15.40	1.592	4.83	6.97	-121.7	1.49		
1242	0.95	15.34	1.591	4.16	6.96	-122.5	1.52		
1247	1.05	15.49	1.585	3.58	6.95	-119.8	1.01		
1252	1.15	15.71	1.600	3.53	6.93	-115.8	0.95		
1257	1.25	15.71	1.603	3.43	6.93	-113.1	0.68		
1258		START SAMPLE COLLECTION							
1315		SAMPLE COMPLETED: 2L			IPEC				
1318		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070439

NOTES AND OBSERVATIONS: Lots of air coming from well for first 0.5 gal or so, then reduced down to only water.

WELL ID: MW 32 - 149

SAMPLE ID: D

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 45°

PROJECT NO: 01.0017869.92
DATE: 3/31/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

147.3 to 156.8

SAMPLING PORT

149 3

TOTAL VOLUME PURGED: 1.55 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)
1020	0	PUMP ON						10/12	55
1030	0.15	15.37	2.177	1.45	7.44	-177.2	1.95		
1035	0.40	15.91	2.213	0.76	6.42	-168.8	1.14		
1040	0.60	16.20	2.236	0.43	6.46	-140.2	2.82		
1045	0.75	15.87	2.244	0.30	6.50	-178.7	1.44		
1050	0.55	15.56	2.252	0.25	6.53	-173.3	1.11		
1100	0.90	14.31	2.276	0.27	6.55	-119.0	1.02		
1105	1.05	15.71	2.240	0.21	6.61	-118.0	0.94		
1110	1.20	16.09	2.254	0.21	6.64	-116.5	1.06		
1115	1.40	16.27	2.252	0.22	6.63	-113.6	0.77		
1116		START SAMPLE COLLECTION							
1133		SAMPLE COMPLETED: 2L		IPEC					
1133		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	2007 01393

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 173

SAMPLE ID: _____

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Drizzle 45°

PROJECT NO: 01.0017869.92
DATE: 3/31/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

165.8 to 174.3

SAMPLING PORT

173 2

TOTAL VOLUME PURGED: 1.70 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)
1030	0	PUMP	ON					10/2	38
1030	0.4	14.89	2.186	0.45	7.45	-443.1	1.58		
1035	0.85	16.50	2.190	0.29	6.91	-308.0	0.42		
1040	0.33	16.46	2.191	0.24	6.66	-258.3	0.62		
1045	0.80	16.29	2.193	0.30	6.60	-246.8	0.97		
1050	1.05	16.10	2.192	0.30	6.51	-235.0	0.40		
1100	1.15	14.13	2.211	0.26	10.52	-227.2	1.24		
1105	1.25	16.29	2.188	0.17	6.50	-223.1	0.67		
1110	1.40	16.32	2.191	0.15	6.47	-229.6	1.96		
1115	1.55	16.64	2.194	0.15	6.48	-235.5	1.08	V	V
1116		START	SAMPLE	COLLECTION					
1135		SAMPLE	COMPLETED	2L	IPEC				
1135		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070493

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 190

SAMPLE ID: _____

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Drizzle, 45°

PROJECT NO: 01.0017869.92
DATE: 3/31/11
SAMPLER(S): SC, DB

SAMPLING INTERVAL (depth in ft below top of casing)

180.3 to 193.9

SAMPLING PORT

190

TOTAL VOLUME PURGED: 1.95 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					10/2	58
1030	0.15	15.27	1.736	1.41	5.49	-208.5	1.16	↓	↓
1035	0.35	15.75	1.745	1.28	5.61	-197.4	0.59		
1040	0.55	16.31	1.744	1.23	5.67	-186.8	1.04		
1045	0.90	15.56	1.745	1.14	5.73	-177.3	0.36		
1050	0.80	15.31	1.745	0.97	5.81	-171.8	0.88		
1100	0.95	13.72	1.745	0.85	5.88	-163.5	0.78		
1105	0.93	15.93	1.736	0.69	5.80	-165.0	0.80		
1110	1.05	16.07	1.733	0.60	5.99	-164.0	0.36		
1115	1.35	16.09	1.741	0.51	6.06	-147.6	0.51		
1120	1.45	15.94	1.744	0.46	6.08	-149.4	1.01		
1125	1.55	15.93	1.744	0.40	6.10	-158.7	1.13		
1130	1.65	15.96	1.751	0.36	6.13	-161.9	1.04		
1135	1.80	16.02	1.752	0.33	6.17	-160.3	1.07	↓	↓
1136		START	SAMPLE	COLLECTION					
1147		SAMPLE	COMPLETED						
1147		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070423

NOTES AND OBSERVATIONS:

APPENDIX E: Q2-2011 MID-QUARTER SAMPLING DATA SHEETS

WELL ID: MW 32 - 59

SAMPLE ID: 026

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 50's

PROJECT NO: 01.0017869.02
DATE: 6/29/11
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)
28.3 to 61.3

SAMPLING PORT
59 6

TOTAL VOLUME PURGED: 2.0 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump
MID-QUARTER SAMPLES

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1209	0	Pump	ON					8/11	40
1210	0.25	20.42	0.752	7.91	10.71	-5.1	1.53	↓	↓
1216	0.75	20.34	0.721	7.78	7.01	-0.3	0.03		
1220	1.00	20.35	0.721	7.80	7.08	0.9	0.08		
1225	1.25	20.29	0.723	7.74	7.12	3.3	0.00		
1230	1.75	20.24	0.723	7.71	2.18	4.1	0.00	↓	↓
1231	START SAMPLE COLLECTION								
1238	END SAMPLE COLLECTION 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070947 93

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-33-147

WELL ID: MW 32 - 85

SAMPLE ID: 029

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: 10/29/11
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)
79.3 to 92.8

SAMPLING PORT
85 5

TOTAL VOLUME PURGED: 1.0 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

MID-QUARTER SAMPLES

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1204	0	Pump	ON					8/11	40
1210	0.02	21.81	1.690	6.59	6.42	-44.0	2.70		
1216	0.15	21.74	1.686	3.93	6.14	-25.8	1.17		
1220	0.20	21.83	1.685	2.88	6.12	-21.7	1.14		
1225	0.35	21.80	1.692	1.85	6.17	-25.2	0.76		
1230	0.42	21.109	1.697	1.67	6.21	-25.5	1.42		
1235	0.60	21.54	1.703	1.31	6.24	-20.1	1.20		
1240	0.70	21.42	1.711	1.28	6.27	-11.4	0.43		
1245	0.80	21.40	1.713	1.20	6.31	-14.9	0.22		
1246	START SAMPLE COLLECTION								
1310	END SAMPLE COLLECTION & IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	10070492 93

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-149

WELL ID: MW 32 - 149

SAMPLE ID: 0726

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80s

PROJECT NO: 01.0017869.92
DATE: 6/29/11
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)

147.3 to 156.8

SAMPLING PORT

149 3

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

1MID - QUARTER SAMPLES

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1030	0	PUMP	ON					10/12	58
1035	0.02	21.39	2.087	0.34	10.42	-378.9	2.03		
1040	0.18	20.77	2.149	0.01	10.56	-361.4	0.58		
1045	0.34	20.78	2.157	0.08	10.70	-307.6	0.42		
1050	0.50	20.73	2.190	0.16	6.78	-291.6	0.23		
1055	0.68	20.83	2.243	0.29	6.81	-282.3	0.12		
1100	0.80	20.93	2.280	0.12	6.83	-285.7	0.18		
1105	0.85	21.97	2.279	0.09	6.86	-279.3	0.11		
1110	0.88	22.52	2.290	0.13	6.86	-290.3	0.26		
1115	1.00	20.93	2.292	0.12	6.88	-342.4	0.38		
1120	1.15	20.50	2.280	0.11	6.88	-314.8	0.46		
1125	1.25	20.37	2.281	0.11	6.87	-301.2	0.57		
1130	1.38	20.14	2.269	0.12	6.87	-304.2	0.42		
1135	1.60	20.09	2.274	0.12	6.87	-309.6	0.36	↓	↓
1137	START	SAMPLE COLLECTION							
1152	END	SAMPLE COLLECTION			2L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070427 93

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition WELL VAULT PARTIALLY FLOODED ~1" DEEP EVIDENCE OF SURFACE DEBRIS INFILTRATION

WELL ID: MW 32 - 173

SAMPLE ID: 1024

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: 6/29/11
SAMPLER(S): CB

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

MID-GUARTER SAMPLES

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1030	0	Pump	ON					10/12	58
1035	0.15	20.86	2.233	2.011	6.57	-245.6	1.41		
1040	0.25	20.51	2.291	1.18	5.97	-204.0	2.42		
1045	0.45	20.39	2.314	0.78	5.97	-171.8	3.76		
1050	0.75	20.34	2.322	0.60	6.00	-181.4	0.66		
1055	1.00	20.42	2.315	0.51	6.06	-169.3	0.53		
1100	1.15	20.54	2.311	0.46	6.11	-152.3	0.47		
1105	1.25	21.50	2.309	0.39	6.29	-137.6	0.38		
1110	1.35	21.98	2.314	0.37	6.32	-139.1	0.26		
1115	1.50	21.42	2.314	0.38	6.36	-130.6	0.19		
1118	START SAMPLE COLLECTION								
1133	END SAMPLE COLLECTION: TCL + PEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Readey and 5563 Sonde	5
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-14A

WELL ID: MW 32 - 190

SAMPLE ID: 028

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80s

PROJECT NO: 01.0012389.92
DATE: 6/29/11
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)

180.3 to 193.9

SAMPLING PORT

190 1

TOTAL VOLUME PURGED: 0.85 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

MID-QUARTER SAMPLES

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1030	0	PUMP	ON					10/12	55
1035	0.01	21.40	1.822	1.56	10.31	-164.8	2.37		
1040	0.18	20.94	1.804	0.71	10.53	-166.7	0.53		
1045	0.32	20.86	1.791	0.54	6.163	-169.2	0.64		
1050	0.48	20.77	1.787	0.48	6.70	-170.7	0.96		
1055	0.62	20.82	1.784	0.46	6.74	-164.1	0.87		
1100	0.74	20.94	1.778	0.45	6.77	-163.9	0.69	↓	↓
1103	START SAMPLE COLLECTION								
1126	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070423

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-149

APPENDIX E: Q3-2011 MID-QUARTER SAMPLING DATA SHEETS

WELL ID: MW 30 - 69

SAMPLE ID: 040

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 90's

PROJECT NO: 01.0017869.92
DATE: 7/11/11
SAMPLER(S): CG

SAMPLING INTERVAL (depth in ft below top of casing)

67.3 to 71.3

SAMPLING PORT

69

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1108	0	PUMP	DN				—	6/12	40
1114	0.05	27.04	1.372	6.84	7.69	148.9	—		
1120	0.15	26.59	1.357	6.82	8.02	111.5	—		
1125	0.30	26.31	1.353	7.14	8.16	87.6	—		
1130	0.40	26.23	1.345	7.41	8.20	67.6	—		
1135	0.90	26.74	1.350	7.77	8.24	60.3	—		
1140	0.75	26.08	1.345	7.88	8.26	55.8	—		
1145	0.85	26.60	1.384	8.03	8.27	53.3	—		
1147	START	SAMPLE	COLLECTION						
1205	END SAMPLE COLLECTION; 2 L EPA VOC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	N/A

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR

WELL ID: MW 30 - 84

SAMPLE ID: 031

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90's

PROJECT NO: 01.0017869.92
DATE: 7/11/11
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)

77.3 to 85.4

SAMPLING PORT

84

TOTAL VOLUME PURGED: 0.30 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1108	0	PUMP	ON				—	6/12	40
1120	0.01	27.75	1.839	3.11	7.22	-71.7	—		
1125	0.05	27.83	1.837	2.20	7.25	-69.8	—		
1130	0.08	27.82	1.840	2.00	7.26	-53.9	—		
1135	0.08	27.83	1.840	1.74	7.26	-43.4	—		
1140	0.10	27.84	1.839	1.56	7.27	-36.7	—		
1145	0.12	27.84	1.839	1.51	7.27	-32.8	—		
1150	0.14	27.84	1.839	1.38	7.28	-29.0	—		
1155	0.16	27.83	1.839	1.34	7.29	-23.4	—		
1200	0.18	27.84	1.840	1.33	7.30	-20.0	—		
1201	START SAMPLE COLLECTION								
1246	END SAMPLE COLLECTION - 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	NA

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR

WELL ID: MW 31 - 49

SAMPLE ID: 032

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 50's

PROJECT NO: 01.0017869.92
DATE: 6/18/14
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)

34.8 to 49.3

SAMPLING PORT

49

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

MID-QUARTER SAMPLES

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1320	0	PUMP	On					6/7	29
1329	0.50	19.46	2.096	4.07	6.61	80.6	1.70		
1335	0.75	19.32	1.851	6.00	6.70	91.8	2.09		
1340	1.00	19.25	1.816	5.66	6.83	78.7	2.84		
1345	1.25	19.23	1.809	5.72	6.86	81.0	2.76		
1350	1.50	19.21	1.808	5.70	6.89	79.9	2.62		
1354	START SAMPLE COLLECTION								
1404	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	
turbidity meter	20070125A

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition WELL VAULT FLOODED, W/ HALF HEIGHT OF WELL VAULT

WELL ID: MW 31 - 63

SAMPLE ID: 032

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: 6/28/11
SAMPLER(S): CS

SAMPLING INTERVAL (depth in ft below top of casing)

55.8 to 63.8

SAMPLING PORT

63

TOTAL VOLUME PURGED: 0.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

MID-QUARTER SAMPLES

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1320	0	PUMP	ON					6/7	29
1329	0.05	23.26	2.069	2.08	6.97	-220.9	1.38		
1335	0.10	22.59	2.008	1.28	7.01	-188.7	1.64		
1340	0.15	22.21	1.949	1.60	7.07	-158.1	0.80		
1345	0.20	22.13	1.893	2.02	7.10	-136.3	1.15		
1350	0.25	22.04	1.843	2.62	7.12	-112.1	1.78		
1355	0.30	21.81	1.806	2.73	7.12	-103.7	1.21		
1400	0.35	21.68	1.757	2.71	7.12	-86.6	1.83		
1405	0.45	21.50	1.752	2.67	7.12	-72.9	1.51		
1410	0.55	21.40	1.740	2.62	7.11	-58.6	0.47		
1415	0.65	21.36	1.752	2.55	7.12	-52.7	0.38		
1420	0.75	21.66	1.761	2.57	7.13	-49.7	0.25	↓	↓
1421	START	SAMPLE COLLECTION							
1450	END SAMPLE COLLECTION: 2L IPEC								
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007102574

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-49

WELL ID: MW 31 - 85

SAMPLE ID: 032

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: 6/28/11
SAMPLER(S): CS

SAMPLING INTERVAL (depth in ft below top of casing)

69.8 to 85.4

SAMPLING PORT

85

TOTAL VOLUME PURGED: 1.0 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

MID-DUPLICATE SAMPLES

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1320	0	Pump	ON					6/7	29
1329	0.25	21.74	2.378	0.78	8.76	-111.3	1.76		
1335	0.25	21.25	2.455	1.70	8.34	-53.7	0.98		
1340	0.35	21.02	2.461	1.97	8.05	-18.7	0.80		
1345	0.45	21.02	2.496	2.13	7.93	-4.5	0.52		
1350	0.55	20.97	2.427	2.41	7.85	3.1	0.24		
1355	0.65	20.79	2.421	2.55	7.81	6.2	0.26		
1400	0.75	20.68	2.399	2.60	7.78	9.2	0.28		
1405	START	SAMPLE COLLECTION							
1425	END SAMPLE COLLECTION		2L IPEC						
	Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070212-54

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-49

WELL ID: MW 32 - 59

SAMPLE ID: 026

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: 6/29/11
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)

28.3 to 61.3

SAMPLING PORT

59 6

TOTAL VOLUME PURGED: 2.0 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

MID-QUARTER SAMPLES

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1204	0	Pump	on					8/11	40
1210	0.25	20.42	0.752	7.91	6.71	-5.1	1.53	↓	↓
1216	0.75	20.34	0.721	7.78	7.01	-0.3	0.03		
1220	1.00	20.35	0.721	7.80	7.08	0.9	0.00		
1225	1.25	20.29	0.723	7.74	7.12	3.2	0.00		
1230	1.75	20.24	0.723	7.71	2.18	4.1	0.00	↓	↓
1231	START SAMPLE COLLECTION								
1238	END SAMPLE COLLECTION: 2L SPEC.								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD MW-32-(4)

WELL ID: MW 32 - 85

SAMPLE ID: 029

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.82
DATE: 10/29/11
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)
79.3 to 92.8

SAMPLING PORT
85

TOTAL VOLUME PURGED: 1.0 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

5

MID-QUARTER SAMPLES

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1204	0	PUMP	ON					8/11	40
1210	0.02	21.81	1.690	6.59	6.42	-44.0	2.70		
1216	0.15	21.74	1.686	3.93	6.14	-29.8	1.17		
1220	0.20	21.83	1.685	2.85	6.12	-21.7	1.14		
1225	0.35	21.80	1.692	1.85	6.17	-29.2	0.710		
1230	0.42	21.89	1.697	1.67	6.21	-29.5	1.42		
1235	0.60	21.64	1.703	1.31	6.24	-20.1	1.20		
1240	0.70	21.42	1.711	1.28	6.27	-16.4	0.93		
1246	0.80	21.40	1.713	1.20	6.31	-14.9	0.22	↓	↓
1246	START SAMPLE COLLECTION								
1310	END SAMPLE COLLECTION - 2 IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	10070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-32-189

WELL ID: MW 32 - 149

SAMPLE ID: 0216

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: 6/29/11
SAMPLER(S): CB

SAMPLING INTERVAL (depth in ft below top of casing)

147.3 to 156.8

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

SAMPLING PORT

149 3

PURGE METHOD: Double Valve Pump

MID-QUARTER SAMPLES

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1030	0	PUMP	ON					10/12	58
1035	0.02	21.39	2.087	0.34	6.42	-378.9	2.03		
1040	0.18	20.77	2.149	0.01	6.56	-361.4	0.58		
1045	0.34	20.78	2.157	0.08	6.70	-307.6	0.42		
1050	0.50	20.73	2.190	0.16	6.78	-291.6	0.23		
1055	0.68	20.83	2.243	0.29	6.81	-282.7	0.12		
1100	0.80	20.93	2.280	0.12	6.83	-285.7	0.18		
1105	0.85	21.77	2.279	0.09	6.86	-279.3	0.11		
1110	0.88	22.52	2.290	0.13	6.86	-290.3	0.40		
1115	1.00	20.93	2.292	0.12	6.88	-342.9	0.38		
1120	1.15	20.80	2.280	0.11	6.85	-314.8	0.46		
1125	1.25	20.37	2.281	0.11	6.87	-301.2	0.57		
1130	1.38	20.14	2.269	0.12	6.87	-304.2	0.42		
1135	1.60	20.09	2.274	0.12	6.87	-309.6	0.36		
1137	START	SAMPLE COLLECTION							
1152	END	SAMPLE COLLECTION @ IPEC							
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070042973

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition WELL VAULT PARTIALLY FLOODED ~1" DEEP EVIDENCE OF SURFACE DEBRIS INFILTRATION

IPEC00267941

WELL ID: MW 32 - 173

SAMPLE ID: 029

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: 6/29/14
SAMPLER(S): EE

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

MID-QUARTER SAMPLES

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1030	0	PUMP	ON					10|2	58
1035	0.15	20.86	2.233	2.611	6.57	-245.6	1.41		
1040	0.25	20.51	2.291	1.18	5.97	-204.0	2.92		
1045	0.45	20.39	2.314	0.78	5.97	-171.8	3.76		
1050	0.75	20.34	2.322	0.60	6.00	-181.4	0.66		
1055	1.00	20.42	2.315	0.57	6.06	-169.3	0.53		
1100	1.15	20.54	2.311	0.46	6.11	-152.3	0.47		
1105	1.75	21.50	2.309	0.39	6.23	-137.6	0.28		
1110	1.35	21.98	2.314	0.37	6.32	-139.1	0.26		
1115	1.50	21.42	2.314	0.38	6.36	-180.6	0.19	↓	↓
1118	START	SAMPLE	COLLECTION						
1133	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070429 2

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-147

WELL ID: MW 32 - 190

SAMPLE ID: 028

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80s

PROJECT NO: 01.0017869.92
DATE: 6/20/11
SAMPLER(S): CB

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. QUALITY SAMPLES

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1030	0	PUMP	ON					10/12	58
1035	0.01	21.40	1.822	1.56	10.31	-169.8	2.87		
1040	0.18	20.94	1.804	0.71	6.63	-166.7	0.33		
1045	0.32	20.86	1.791	0.54	6.63	-169.2	0.64		
1050	0.48	20.77	1.787	0.48	6.70	-170.7	0.96		
1055	0.62	20.82	1.784	0.46	6.74	-164.1	0.87		
1100	0.74	20.94	1.778	0.45	6.77	-163.9	0.69	↓	↓
1103	START SAMPLE COLLECTION								
1126	END SAMPLE COLLECTION & IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070412 93

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW 32-190

WELL ID: MW 39 - 67

SAMPLE ID: 012

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80s

PROJECT NO: 01.0017869.92
DATE: 7/15/11
SAMPLER(S): SL, SB

SAMPLING INTERVAL (depth in ft below top of casing)

65.0 to 70.5

SAMPLING PORT

67 7

TOTAL VOLUME PURGED: 0.70 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1220	0	PUMP	ON					6/6	34
1240	0.25	21.48	1.846	4.78	6.90	2.5	2.26		
1245	0.30	21.55	1.839	4.84	6.92	8.6	2.48		
1250	0.45	21.72	1.840	4.85	6.94	12.4	3.46		
1255	0.55	21.79	1.840	4.93	6.96	14.4	1.61	↓	↓
1257	START	SAMPLE	COLLECTION						
1342	END	"	"	4.21	IPEC				
	PUMP OFF			OSL	IPEC (BROWN - OUSITE)				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20704293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD MW-39-VLT

WELL ID: MW 39 - 84

SAMPLE ID: 011

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80's

PROJECT NO: 01.0017869.92
DATE: 7/15/14
SAMPLER(S): SL, DB

SAMPLING INTERVAL (depth in ft below top of casing)
76.5 to 85.0

SAMPLING PORT
84 6

TOTAL VOLUME PURGED: 0.83 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mV/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1220	0	PUMP	ON					6/16	34
1240	0.09	22.97	2.125	3.42	6.35	-148.2	5.28		
1245	0.12	22.91	2.126	3.51	6.28	-145.0	1.13		
1250	0.17	23.30	2.110	2.87	6.33	-137.2	1.30		
1255	0.22	23.32	2.111	2.95	6.42	-126.2	0.92		
1300	0.28	23.09	2.115	3.24	6.49	-118.4	1.49		
1305	0.33	23.26	2.111	3.42	6.54	-79.5	0.93		
1310	0.38	23.20	2.105	3.42	6.59	-64.3	0.59		
1315	0.41	23.29	2.114	3.42	6.67	-51.3	0.45		
1320	0.46	23.17	2.110	3.42	6.74	-38.7	0.85		
1325	0.50	22.98	2.111	3.70	6.74	-30.0	0.59		
1330	0.54	23.35	2.101	3.70	6.76	-22.0	0.50		
1335	0.58	23.54	2.104	3.66	6.79	-15.3	1.22		
1340	0.62	23.47	2.109	3.60	6.84	-10.0	0.60		
1345	0.67	23.12	2.113	3.77	6.89	-10.3	0.32		
1347	START SAMPLE COLLECTION								
1433	END	"	"	1.2L IDW					
	PUMP OFF			0.5L IDW (RETURN IN-HOUSE)					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	2007043 93

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-39-195

WELL ID: MW 39 - 102

SAMPLE ID: 012

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY 80s

PROJECT NO: 01.0017869.92
DATE: 7/15/14
SAMPLER(S): J.MB

SAMPLING INTERVAL (depth in ft below top of casing)
93.0 to 103.0

SAMPLING PORT
102 4

TOTAL VOLUME PURGED: 0.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1230	0	PUMP	ON					6/16	34
1240	0.15	22.56	2.208	3.80	6.80	-218.9	2.38		
1245	0.20	22.50	2.197	4.35	6.93	-206.8	1.74		
1250	0.27	22.60	2.180	4.30	6.95	-206.3	0.84		
1255	0.33	22.52	2.175	4.51	7.02	-199.0	0.49		
1300	0.40	22.40	2.170	4.77	7.05	-178.0	1.91		
1305	0.45	22.50	2.164	4.81	7.06	-175.0	0.82		
1310	0.50	22.61	2.164	4.75	7.06	-173.5	0.87		
1312	START	SAMPLE	COLLECTION						
1402	END	"	"	~2L	TDEC				
	PUMP	OFF		0.5L	TDEC (BORON IN-HOUSE)				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	J
turbidity meter	2057 04393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-39-195

WELL ID: MW 31 - 124

SAMPLE ID: 012

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MJD - QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80's

PROJECT NO: 01.0017869.92
DATE: 7/15/14
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

193.0 to 198.6

SAMPLING PORT

196

TOTAL VOLUME PURGED: 0.63 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1005	0	PUMP	ON					8/10	70
1030	0.04	22.46	1.257	0.83	6.68	-240.8	1.12	↓	↓
1025	0.11	22.38	1.249	0.52	6.79	-235.9	0.70		
1020	0.19	21.86	1.244	0.44	7.00	-237.8	0.66		
1035	0.27	21.61	1.238	0.32	7.06	-246.2	0.64		
1045	0.38	21.34	1.233	0.22	7.10	-246.9	0.43		
1050	0.49	20.92	1.251	0.19	7.09	-243.1	0.45	↓	↓
1052	START	SAMPLE	COLLECT	IAW					
1113	END	"	"		7.24	IPEC			
[redacted]	PUMP	OFF			0.5L	IPEC (BORROW - IW HOUSE)			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	■ 1
turbidity meter	20070403

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition See MW-31-195

WELL ID: MW 39 - 183

SAMPLE ID: 012

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80's

PROJECT NO: 01.0017869.92
DATE: 7/15/14
SAMPLER(S): SJB

SAMPLING INTERVAL (depth in ft below top of casing)
169.5 to 186.0

SAMPLING PORT
183 2

TOTAL VOLUME PURGED: 3.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mV/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1005	0	PUMP	ON					8/10	70
1010	0.22	19.39	1.116	6.94	DRY	-88.2	5.30		
1020	0.40	18.93	1.115	0.68	5.76	-183.8	3.32		
1025	0.61	18.77	1.108	0.53	5.65	-157.4	0.74		
1030	0.80	18.43	1.105	0.48	5.71	-179.9	1.00		
1035	1.00	18.26	1.098	0.46	5.74	-173.9	0.64		
1040	1.20	17.97	1.094	0.39	5.82	-172.4	0.80		
1050	1.55	17.86	1.084	0.35	5.86	-169.9	0.31		
1055	1.80	17.95	1.091	0.32	5.93	-166.0	0.66		
1100	1.99	18.43	1.085	0.31	6.02	-159.6	0.35		
1105	1.95	18.24	1.077	0.30	6.15	-153.4	0.45		
1110	2.00	19.04	1.090	0.29	6.61	-166.3	0.66		
1115	2.15	18.11	1.083	0.29	6.71	-165.2	1.01		
1120	2.30	17.96	1.082	0.35	6.79	-162.4	0.34		
1125	2.53	17.67	1.079	0.40	6.50	-145.1	0.91		
1130	2.73	17.73	1.077	0.36	6.51	-141.2	0.43		
1135	3.00	17.52	1.074	0.33	6.57	-135.5	0.90	↓	↓
1137	START	SAMPLE	COLLECTION						
1141	END	"	"	12L IDW					
	PUMP	OFF		0.5L IDW (RINSATE - IN HOUSE)					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20704293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-39-195

WELL ID: MW 39 - 195

SAMPLE ID: 012

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 90's

PROJECT NO: 01.0017869.92
DATE: 7/15/14
SAMPLER(S): SL/CB

SAMPLING INTERVAL (depth in ft below top of casing)
115.0 to 126.5

SAMPLING PORT
124 3

TOTAL VOLUME PURGED: 4.30 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1005	0	PUMP	ON					8/10	70
1015	0.85	17.56	2.657	0.65	6.79	-200.9	15.65		
1020	1.25	17.20	2.62	0.78	6.84	-201.0	14.03		
1025	1.80	17.11	2.620	0.71	6.87	-200.3	10.42		
1030	2.10	16.89	2.588	1.03	6.90	-195.4	6.53		
1035	2.50	16.72	2.544	1.68	6.91	-197.1	7.62		
1040	2.90	16.61	2.539	2.02	6.92	-192.7	5.73		
1050	3.50	16.44	2.518	2.18	6.93	-176.1	5.71		
1055	3.95	16.48	2.515	2.24	6.94	-170.4	4.43		
1100	4.15	16.67	2.510	2.24	6.95	-168.5	5.05	↓	↓
1102	START	SAMPLE	COLLECT	IDW					
1144	END	"	"	2.2	IPEC				
	PUMP	OFF		0.5	IPEC (BK	NOW - IDW	HOUSE)		

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Fair; rusty fasteners

WELL ID: MW 40 - 27

SAMPLE ID: 016

GZA GeoEnvironmental of New York

Waterloo Sampling Data Sheet

MID-QUARTER / 3rd QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: _____

PROJECT NO: 01.0017869.92
DATE: [redacted] 7/27/16
SAMPLER(S): J.C.B

SAMPLING INTERVAL (depth in ft below top of casing)

18.2 to 35.2

SAMPLING PORT

27 6

TOTAL VOLUME PURGED: 0.79 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1443	0	PUMP	ON					5/9	18
1450	0.32	17.73	4.243	7.65	7.30	21.6			
1454	0.40	17.29	4.260	7.68	7.31	27.0	5.37		
1459	0.64	17.08	4.237	7.74	7.36	29.8	2.10		
1501	START	SAMPLE	COLLECTION						
1512	END	"	"		: 2L	IPEC			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	17594 A6
turbidity meter	20070124

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Poor

WELL ID: MW 40 - 46

SAMPLE ID: 017

GZA GeoEnvironmental of New York

Waterloo Sampling Data Sheet

MID-QUARTER / 3rd QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: _____

PROJECT NO: 01.0017869.92
DATE: 7/27/11
SAMPLER(S): SL, AB

SAMPLING INTERVAL (depth in ft below top of casing)

44.2 to 53.7

SAMPLING PORT

46 5

TOTAL VOLUME PURGED: 0.44 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1443	0	PUMP	ON					5/9	18
1450	0.01	24.75	5.391	0.62	6.51	-110.6	1.27		
1459	0.06	24.71	5.342	0.25	6.59	-110.4	1.45		
1504	0.11	24.71	5.350	0.22	6.68	-108.4	0.99		
1509	0.16	24.87	5.337	0.23	6.67	-100.4	0.71		
1514	0.21	25.00	5.339	0.21	6.71	-96.9	0.63		
1519	0.29	23.52	5.365	0.21	6.73	-94.5	1.01		
1521	START	SAMPLE	COLLECTION						
1555	END	"	"	: 2L	IPEA				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20270154

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Poor

WELL ID: MW 30 - 81

SAMPLE ID: 017

GZA GeoEnvironmental of New York

Waterloo Sampling Data Sheet

MID-QUARTER / 3rd QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/27/11
SAMPLER(S): SC, AB

SAMPLING INTERVAL (depth in ft below top of casing)

64.7 to 84.2

SAMPLING PORT

81 4

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1238	0	PUMP	ON					6/9	44
1240	0.05	19.10	4.589	4.47	6.67	38.4	2.08		
1251	0.20	18.26	4.587	2.39	6.43	-0.1	1.64		
1256	0.90	17.60	4.587	1.97	6.39	-11.9	0.50		
1301	0.75	17.32	4.572	1.81	6.37	-14.7	0.24		
1306	1.15	17.04	4.567	1.79	6.37	-15.1	0.27		
1311	1.50	16.87	4.569	1.76	6.39	-15.2	0.25		
1315	START	SAMPLE	COLLECTION						
1324	END SAMPLE	COLLECTION : 2L	IPEC						
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	2007012.94

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition POOR

WELL ID: MW 40 - 100

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID QUARTER / 3rd QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/27/11
SAMPLER(S): SL, DH

SAMPLING INTERVAL (depth in ft below top of casing)

93.2 to 106.7

SAMPLING PORT

100 3

TOTAL VOLUME PURGED: 1.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1238	0	PUMP ON						6/9	49
1246	0.01	20.64	2.302	2.75	5.68	-20.2	13.16		
1251	0.20	19.29	2.764	0.81	5.94	6.5	15.94		
1256	0.50	18.48	2.741	0.62	6.16	22.8	17.28		
1301	0.75	18.08	2.733	0.55	6.30	31.3	18.33		
1306	1.25	17.81	2.726	0.58	6.38	36.6	18.54		
1311	1.50	17.69	2.724	0.58	6.44	41.5	18.48		
1316	1.75	17.27	2.721	0.60	6.49	44.7	18.37		
1318	START	SAMPLE COLLECTION							
1329	END SAMPLE	COLLECTION. LL IPEC							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070125H

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition _____

WELL ID: MW 40 - 127

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID QUARTER / 3rd QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80's

PROJECT NO: 01.0017869.92
DATE: 7/27/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

125.2 to 136.7

SAMPLING PORT

127 2

TOTAL VOLUME PURGED: 0.96 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1244	0	PUMP ON						6/4	44
1258	0.21	21.30	2.290	0.13	6.36	-183.6	1.21		
1303	0.32	20.88	2.296	0.09	6.51	-179.6	0.57		
1308	0.40	20.58	2.296	0.08	6.59	-194.2	1.87		
1313	0.50	20.38	2.301	0.07	6.65	-186.9	0.79		
1319	0.61	19.73	2.301	0.07	6.71	-204.0	1.71		
1323	0.72	19.46	2.296	0.07	6.73	-206.6	0.69		
1328	0.81	19.01	2.299	0.07	6.74	-210.2	0.23		
1330	START	SAMPLE	COLLECTION						
1356	END	"	"	2L	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	17994 AC
turbidity meter	2807104093

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Poor

WELL ID: MW 40 - 162

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID QUARTER / 3rd QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80s

PROJECT NO: 01.0017869.92
DATE: 7/27/4
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

158.7 to 190.3

SAMPLING PORT

162

TOTAL VOLUME PURGED: 0.52 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1244	0	PUMP	ON					6/9	44
1250	0.03	22.93	1.306	0.69	6.25	-69.6	1.12		
1303	0.08	23.12	1.311	0.22	6.79	-88.5	0.39		
1308	0.11	23.23	1.313	0.22	6.36	-98.6	0.30		
1313	0.15	23.18	1.317	0.24	6.52	-104.5	0.01		
1318	0.19	22.91	1.322	0.22	6.58	-106.1	0.01		
1323	0.23	22.58	1.325	0.24	6.74	-106.3	0.05		
1328	0.28	22.09	1.326	0.16	6.85	-105.8	0.00		
1333	0.33	21.88	1.324	0.17	6.91	-100.3	0.00		
1338	0.37	22.22	1.318	0.14	6.92	-101.2	0.00	↓	↓
1340	START	SAMPLE	COLLECT	FOR					
1440	END	"	"	"	"	"			
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Poor

WELL ID: MW-41-40
SAMPLE ID: 0 21

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's
MID-QUARTER SAMPLES

PROJECT NO: 01.0017869.92
DATE: 7/15/11
SAMPLER(S): GR, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 21.00 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1109	68.871	PUMP ON							0
1120	68.689	20.01	1.917	4.52	6.80	53.8	5.36		0.05
1126	68.626	19.96	1.836	4.49	6.95	-22.2	2.73		0.25
1136	68.617	19.44	1.829	4.52	7.12	-32.8	1.96		0.45
1141	68.596	19.51	1.828	4.49	7.16	-22.2	1.25		0.65
1146	68.566	19.52	1.834	4.53	7.21	-13.0	1.62		0.75
1151	68.565	19.51	1.840	4.49	7.25	-5.8	1.59		0.85
1156	68.565	19.49	1.845	4.53	7.28	0.2	1.35		0.95
1201	68.565	19.46	1.845	4.55	7.30	3.8	1.25		1.10
1203	START SAMPLE COLLECTION								
1230	END SAMPLE COLLECTION - 2L IPEC								
				0.5 L	IPEC	(FOR BOD ON - IN HOUSE)			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070125N

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-41-63
SAMPLE ID: 020

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's
MID-QUARTER SAMPLES

PROJECT NO: 01.0017869.92
DATE: 7/16/11
SAMPLER(S): CR, SL

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition GOOD

WATER COLUMN HEIGHT (ft)

Well Diameter: 1 in

63	-	24.54	=	38.46 ft
DTB		DTW		Well Column Height

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 38.46 x 0.041 (Multiplier) = 1.57 (Well Volume) gal

1.57 x 1.5 = 2.36 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.50 gal

WATER QUALITY: DTW = 24.54 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1213	0	—	PUMP	ON					
1237	0.25	—	23.24	1.841	4.40	7.35	144.9	84.58	
1240	0.75	—	18.116	1.943	5.05	7.14	158.7	169.5	
1242	1.25	—	17.82	1.982	4.26	7.08	164.9	98.65	
1245	2.00	—	17.69	2.005	4.10	7.06	187.8	66.89	
1247	2.25	—	17.72	2.003	4.09	7.05	185.6	1328	
1248	START SAMPLE COLLECTION								
1251	END SAMPLE COLLECTION: 2L IPEC								
				0.5	L (BORON - IN HOUSE)				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070254

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-42-49
SAMPLE ID: 026

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70's

PROJECT NO: 01.0017869.92
DATE: 7/1/14
SAMPLER(S): CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 34.63 GW Elevation MID-QUARTER SAMPLES

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1002	34.63	PUMP ON						5/10	22	
1022	34.71	24.09	2.136	4.01	6.40	76.1	15.47			0.01
1027	34.74	24.03	2.038	3.78	6.40	65.6	6.18			0.03
1032	34.76	24.22	1.975	4.05	6.46	49.5	8.33			0.05
1037	PUMP OFF: INVOKED EQUIPMENT DUE TO SITE ACTIVITIES									
1049	PUMP ON: EQUIPMENT SETUP RESTORED									
1055	34.78	24.87	1.838	4.04	6.74	32.6	7.05			0.1
1100	34.80	23.58	1.729	4.75	6.83	29.9	3.73			0.15
1105	34.80	23.24	1.587	4.78	6.84	36.6	2.14			0.20
1110	34.80	23.46	1.575	4.81	6.81	37.3	1.96			0.25
1115	34.80	23.26	1.561	4.81	6.90	34.9	1.67			0.30
1118	START SAMPLE COLLECTION									
1202	END SAMPLE COLLECTION: 2 IPEC									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	S
turbidity meter	20070429 3

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR. BOLTS STRIPPED

NOTES AND OBSERVATIONS:

Total volume purged 0.45 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-92-78
SAMPLE ID: 02.1

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70'S

PROJECT NO: 01.0017869.92
DATE: 7/14
SAMPLER(S): CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition FAIR - BOLTS STRIPPED
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

79 (DTB) - 33.0 (DTW) = 45 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 45 x 0.041 (Multiplier) = 1.845 gal (Well Volume)

1.845 x 1.5 = 2.77 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 3.0 gal

WATER QUALITY: DTW = 33.0 GW Elevation 36521 MID-QUARTER SAMPLES

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1134	0	——	PUMP ON						
1137	0.01	——	19.51	1.982	23.00	6.70	60.2	179.4	
1141	0.5	——	17.19	2.341	6.45	6.49	24.8	342.7	
1143	1.0	——	17.15	2.387	5.98	6.56	25.7	370.3	
1147	1.5	——	17.18	2.401	5.68	6.64	31.2	354.0	
1149	2.0	——	17.17	2.392	5.30	6.70	29.5	319.6	
1152	2.5	——	17.12	2.385	5.07	6.73	28.5	310.9	
1155	2.75	——	17.12	2.380	4.84	6.77	27.3	242.5	
1156	START SAMPLE COLLECTION								
1200	END SAMPLE COLLECTION: 3L IPE4								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070427 3

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-44-66
SAMPLE ID: 021

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80s

PROJECT NO: 01.0017869.92
DATE: 7/19/11
SAMPLER(S): SL, AH

Measured Well Depth ..... **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

66 (DTB) - 59.36 (DTW) = 6.64 ft (Well Column Height)

Well Vault Condition Poor, Rusted, Iron Tabs
Well Diameter: 2 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 6.64 x 0.163 (Multiplier) = 1.08 (Well Volume) gal

1.08 x 1.5 = 1.62 gal (Designed Purge Volume)

MID-QUARTER SAMPLES

TOTAL VOLUME PURGED: gal

WATER QUALITY: DTW = 59.36 GW Elevation 33.66 ACTUAL DEPTH = 5.213

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
0900	0	5.213	PUMP ON						10/15	38	
0925	0.2	3.920	20.12	1.343	4.28	5.77	25.3	35.72			
0935	0.4	3.140	20.31	1.337	5.11	5.90	36.8	21.45			
0946	0.6	2.446	20.58	1.325	5.38	6.15	30.2	14.55			
1005	0.85	1.779	72.20	1.314	5.58	6.66	30.0	13.81			
1010	0.99	1.782	22.68	1.320	5.35	6.78	24.9				
1012	0.90	1.782	WELL DRY, LET RECHARGE BEFORE SAMPLING								
1453	START	SAMPLE COLLECTION									
1539	END	"	"		2L IPEC						
	PUMP	OFF			0.5L IPEC (PRIOR TO FILTER)						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070293

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: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80s

PROJECT NO: 01.0017869.92
DATE: 7/19/14
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**

WATER COLUMN HEIGHT (ft)

102 (DTB) − 66.26 (DTW) = 35.74 (Well Column Height) ft

Well Vault Condition POOR - MISSING BOLTS BROKEN TABS

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 35.74 x 0.041 (Multiplier) = 1.47 (Well Volume) gal

1.47 x 1.5 = 1.67 gal
Designed Purge Volume

MID-QUARTER SAMPLES

TOTAL VOLUME PURGED: _____ gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1039	0	—	PUMP ON						
1041	1.01	—	25.25	1.248	9.86	10.91	68.5	117.9	
1043	0.50	—	18.83	1.346	7.75	6.87	67.4	761.6	
1045	0.96	—	18.82	1.311	7.74	6.60	75.3	824.5	
1046	1.15	—	18.59	1.323	7.65	6.57	82.7	694.2	
1048	1.60	—	18.49	1.346	7.09	6.56	91.1		
1050	START SAMPLE COLLECTION								
1053	END SAMPLE COLLECTION: 2L IPEC								
				0.5L IPEC (FOR BORON - IN HOUSE)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	2007 04393

NOTES AND OBSERVATIONS: TUBING GETS HUNG UP WHEN PLACING IT DOWN PVC CASING.

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: 025

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 70'S

PROJECT NO: 01.0017869.92
DATE: 7/19/11
SAMPLER(S): SL, CB

Measured Well Depth _____ (feet from top of casing)
WATER COLUMN HEIGHT (ft)

42 (DTB) - 19.32 (DTW) = 22.68 (Well Column Height) ft

Well Vault Condition GOOD, BOLTS STRIPPED
Well Diameter: 2 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 22.108 x 0.163 (Multiplier) = 3.69 (Well Volume) gal

3.69 x 1.5 = 5.54 (Designed Purge Volume) gal

MID-QUARTER SAMPLES

TOTAL VOLUME PURGED: 4.45 gal

WATER QUALITY: DTW = 19.32 GW Elevation = 33.876 ACTUAL DEPTH = 21.595

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
0912	0	21.598	PUMP	ON					6/8	26	
0915	0.50	20.229	19.07	1.337	1.84	7.12	47.3	7.41			
0920	1.0	17.918	18.46	1.437	0.41	7.45	33.3	1.07			
0931	1.5	14.075	18.40	1.390	0.18	7.59	25.0	1.97			
0936	1.75	13.575	18.36	1.298	0.19	7.64	24.3	0.60			
0943	2.00	12.218	18.38	1.261	0.20	7.64	24.1	0.88			
0950	2.50	10.399	18.35	1.153	1.41	7.71	23.9	46.07			
0955	3.00	9.211	18.26	1.158	1.51	7.68	27.0	49.98			
1002	3.50	7.766	18.28	1.256	1.09	7.61	27.9	37.83			
1006	3.75	6.921	18.36	1.304	0.83	7.57	28.5	25.41			
1018	4.25	4.316	18.93	1.388	3.31	7.58	30.1	—			
1019	4.25	4.250	WELL DRY LET RECHARGE BEFORE SAMPLING								
1310	4.25	7.284	START SAMPLE COLLECTION								
1323			END SAMPLE COLLECTION: 2L FREE								
							ORP	IRON	TA HOUSE		

PUMP OFF

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K17594 AG
turbidity meter	20070 1254

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-45-61
SAMPLE ID: 025

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 70's

PROJECT NO: 01.0017869.92
DATE: 7/19/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition _____
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

61 (DTB) - 22.25 (DTW) = 38.75 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 38.75 x 0.041 (Multiplier) = 1.589 (Well Volume) gal

1.589 x 1.5 = 2.38 gal (Designed Purge Volume)

MID-QUARTER SAMPLES

TOTAL VOLUME PURGED: 2.50 gal

WATER QUALITY: DTW = 22.25 GW Elevation = 30.967 ACTUAL DEPTH = 5.213

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0936	0	—							
0940	0.25	—	19.37	0.887	0.46	6.62	24.0	186.4	
0942	0.50	—	19.65	0.902	0.52	6.69	-28.0	304.0	
0944	0.75	—	19.13	0.873	0.37	6.77	-40.1	452.2	
0945	1.00	—	19.93	0.855	0.38	6.80	-39.5	545.5	
0947	1.25	—	19.85	0.879	0.00	6.86	-36.5	570.7	
0948	1.50	—	19.03	0.883	0.00	6.88	-35.0	574.2	
0950	2.00	—	24.78	0.736	0.00	6.92	-31.5	965.5	
0953	2.25	—	19.55	0.720	0.00	6.99	-33.0	1029	
0955	START	SAMPLE	COLLECTION						
1000	END	"	"	2L	IPEC				
	PUMP	OFF		0.5L	IPEC (BOTTLE	IN-HOUSE)			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20010254

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: 025

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY CLOUDY, 80's MID-QUARTER SAMPLING

PROJECT NO: 01.0017869.92
DATE: 7/13/11
SAMPLER(S): SK, CB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

29.7 (DTB) - 3.78 (DTW) = 25.92 ft (Well Column Height)

Well Vault Condition FAIR - MISSING BOLTS
Well Diameter: 4 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 25.92 x 0.652 (Multiplier) = 16.93 gal (Well Volume)

16.93 x 1.5 = 25.38 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 26.35 gal

WATER QUALITY: DTW = 3.78 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (Actual) (<0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1132	0	23.993	PUMP	ON					
1145	2.5	21.682	19.90	1.370	0.48	7.53	47.4	33.82	
1159	5.0	17.764	19.81	1.213	0.38	7.61	45.5	27.36	
1208	9.5	16.006	19.82	1.026	0.28	7.63	44.6	65.96	
1226	12.50	12.705	19.81	0.841	0.49	7.64	46.2	10.14	
1239	15.00	10.727	19.76	0.761	1.15	7.69	16.4	16.40	
1254	18.50	8.857	19.73	0.932	3.02	7.72	-0.4	14.54	
1305	20.50	7.785	19.73	1.001	4.08	7.75	-9.8	11.02	
1314	22.50	6.974	19.71	1.037	4.55	7.76	-19.8	5.72	
1322	24.00	6.363	19.76	1.056	4.67	7.77	-28.9	4.25	
1322	START	SAMPLE	COLLECTION						
1329	END SAMPLE	COLLECTED: 2L		IPEC					
				0.5 L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070429

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-47-56
SAMPLE ID: 006

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's
MID-QUARTER SAMPLES

PROJECT NO: 01.0017869.92
DATE: 7/16/14
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 45.57 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr) previous	Notes Press	Notes gal
1415	45.57	PUMP ON						6/8	28	0
1432	45.86	26.45	5.774	2.52	6.77	52.2	8.23	↓	↓	0.01
1437	45.89	27.16	5.766	2.21	6.82	53.9	6.20	7/8	30	0.05
1442	45.91	23.23	6.118	2.09	6.92	51.8	7.02	↓	↓	0.1
1447	45.94	22.10	6.865	1.97	6.92	55.6	5.45	↓	↓	0.2
1452	45.97	21.77	6.910	1.58	6.95	58.5	4.83	↓	↓	0.3
1457	46.00	21.89	6.935	1.37	6.97	56.8	3.02	↓	↓	0.4
1502	46.03	21.99	6.955	1.32	7.02	56.8	2.87	↓	↓	0.5
1507	46.06	22.04	6.975	1.27	7.05	57.7	2.75	↓	↓	0.6
1508	START SAMPLE COLLECTION									
1532	END SAMPLE COLLECTION W/ IPEC									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	N/A
turbidity meter	20070429

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good MW-47-30

NOTES AND OBSERVATIONS: Total volume purged 0.75 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-47-56
SAMPLE ID: 007

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

MID QUARTER SAMPLING

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70'S

PROJECT NO: 01.0017869.92
DATE: 8/18/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 39.90 GW Elevation =

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1112	39.90	PUMP	ON					~~7/9~~	30	gal
1119	40.05	21.78	6.229	2.15	6.55	78.0	5.35			0.01
1124	40.12	21.42	6.626	3.60	6.69	91.0	6.50			0.10
1129	40.33	21.16	6.790	3.83	6.74	113.6	6.28			0.20
1134	40.32	21.09	6.859	3.59	6.80	124.2	6.24			0.30
1139	40.33	20.97	6.906	3.42	6.84	134.0	5.71			0.38
1144	40.35	20.97	6.932	3.30	6.88	136.9	4.84			0.46
1149	40.38	20.79	6.952	3.27	6.92	141.4	6.57			0.50
1154	START SAMPLE COLLECTION									
1239	END SAMPLE COLLECTION: 2L IPEC									
				0.5 L IPEC (IN-HOUSE GROSS BETA)						
				0.25 L IPEC (TOTAL METALS)						
				0.25 L IPEC (DISSOLVED METALS)						
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070429 3

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR. BOLTS STRIPPED

NOTES AND OBSERVATIONS:

Total volume purged 0.75 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-47-80
SAMPLE ID: 005

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY 60's
MID-QUARTER SAMPLES

PROJECT NO: 01.0017869.92
DATE: 7/6/11
SAMPLER(S): SL/DB

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition Stain, Bolts Stripped

Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

80 (DTB) - 45.16 (DTW) = 34.84 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 34.84 x 0.041 (Multiplier) = 1.43 gal (Well Volume)

1.43 x 1.5 = 2.15 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.30 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1419	0	PUMP ON							
1422	0.5	—	18.49	1.070	10.38	7.16	85.9	492.5	
1424	0.75	—	17.87	1.269	9.64	7.16	81.8	367.6	
1425	1.00	—	17.80	1.387	9.63	7.19	75.9	395.2	
1428	1.50	—	17.52	1.432	9.23	7.23	65.9	628.6	
1429	1.75	—	17.45	1.437	9.42	7.23	63.0	708.6	
1430	2.00	—	17.53	1.450	9.46	7.24	60.1	714.3	
1432	START	SAMPLE	COLLECTION:						
1437	"	"	"	: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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-47-80
SAMPLE ID: 006

MID QUARTER SAMPLING

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 70s

PROJECT NO: 01.0017869.92
DATE: 8/18/14
SAMPLER(S): SL/CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition _____
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

80 (DTB) − 40.15 (DTW) = 39.85 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 39.85 x 0.041 (Multiplier) = 1.634 (Well Volume) gal

1.634 x 1.5 = 2.45 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.60 gal

WATER QUALITY: DTW = 40.15 GW Elevation = 29.592

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1115	0	PUMP	ON						
1120	0.5	—	17.71	1.333	7.66	7.04	33.5	435.5	
1122	1.0	—	17.31	1.332	7.31	6.97	20.3	390.8	
1124	1.5	—	17.11	1.330	7.21	6.98	16.9	378.6	
1126	2.0	—	16.94	1.326	7.13	7.02	15.6	276.4	
1129	2.5	—	16.99	1.325	7.32	7.05	16.0	237.2	
1131	START	SAMPLE COLLECTION						176.3	Turbidity at time of sample
1136	END	"	"	: 2L IPEC					
				0.5L IPEC	(IN-HOUSE, GROSS BETA)				
				0.25L IPEC	(TOTAL METALS)				
				0.25L IPEC	(DISSOLVED METALS)				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070493

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: D26

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Energy - IPEC
SITE: Buchanan, NY
WEATHER: Showers 70's

PROJECT NO: 01.0017869.92
DATE: 7/25/14
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

MID-QUARTER SAMPLING

WATER QUALITY: DTW = GW Elevation

Time	(DTW) or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes (gal)
1130	8.03	PUMP	ON						0
1139	8.07	26.53	1.027	0.37	8.10	-96.0	2.49		0.15
1145	8.07	26.62	0.992	0.37	8.11	-79.7	0.49		0.26
1150	8.07	26.67	0.987	0.23	8.11	-76.4	0.82		0.39
1155	8.07	26.67	0.987	0.19	8.13	-77.9	0.37		0.50
1157	START SAMPLE COLLECTION								
1218	END	"	"	:24	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	~~20070125C~~ 17594AG
flow meter	
turbidity meter	~~17594AG~~ 20070125A

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** No bolts

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-30-66
SAMPLE ID: 0731

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: showers 70s

PROJECT NO: 01.0017869.92
DATE: 7/25/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

MID-QUARTER SAMPLING

WATER QUALITY: DTW = 10.75 GW Elevation 3.864 ACTUAL DEPTH = 88.414

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes (gal)
1130	88.414	PUMP ON							0
1139	86.659	26.39	2.104	0.49	7.15	-86.4	25.09		0.08
1145	86.420	26.25	2.121	0.28	7.19	-76.9	22.39		0.14
1150	86.331	26.17	2.188	0.34	7.21	-67.5	2.57		0.24
1155	86.276	26.07	2.162	0.20	7.23	-64.8	1.36		0.35
1200	86.186	25.97	2.190	0.22	7.24	-64.1	1.43		0.45
1202	START SAMPLE COLLECTION:								
1226	END	"	"	1L	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070127541

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** No Lots

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.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-52-11
SAMPLE ID: 007

MID QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's

PROJECT NO: 01.0017869.92
DATE: 7/26/11
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

Well Vault Condition FAIR, 3 INCHES OF WATER INFILTRATION
Well Diameter: 2 in

11.0 (DTB) - 8.10 (DTW) = 2.9 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 2.9 x 0.163 (Multiplier) = 0.473 (Well Volume) gal

0.473 x 1.5 = 0.71 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 0.86 gal

WATER QUALITY: DTW = 8.10 GW Elevation = 8.63 ACTUAL DEPTH = 1.737

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1040	0	START	PUMP						
1050	0.05	1.439	24.39	1.338	1.02	7.53	-30.0	5.88	
1055	0.18	1.369	24.31	1.382	1.02	7.52	-34.4	4.39	
1100	0.26	1.320	24.39	1.246	1.18	7.53	-26.5	2.76	
1105	0.34	1.282	24.39	1.243	1.21	7.49	-26.7	2.38	
1110	0.45	1.250	24.11	1.386	1.21	7.43	-20.1	1.60	
1115	0.57	1.246	24.32	1.471	1.13	7.41	-6.2	1.29	
1120	0.62	1.248	24.50	1.499	1.10	7.39	-0.0	1.24	
1125	0.69	1.270	24.44	1.552	1.08	7.38	7.3	1.15	
1127	START	SAMPLE	COLLECTION						
1232	END	"	"	2L IPEC					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	17594 AC
turbidity meter	20090293

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 52 - 18

SAMPLE ID: 007

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's

PROJECT NO: 01.0017869.92
DATE: 7/20/11
SAMPLER(S): SK/CB

SAMPLING INTERVAL (depth in ft below top of casing)

10.0 to 20.0

SAMPLING PORT

18 7

TOTAL VOLUME PURGED: 0.94 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1338	0	PUMP	ON					5.7/10	14
1349	0.12	22.74	2.563	1.46	7.08	7.9	9.02		
1354	0.27	22.9	2.634	0.90	7.02	13.4	5.47		
1359	0.31	22.14	2.452	0.71	7.04	19.4	3.50		
1405	0.56	22.18	2.362	0.63	7.03	24.0	3.18		
1410	0.68	22.05	2.273	0.58	7.03	25.6	3.61		
1415	0.79	21.87	2.204	0.55	7.02	27.3	4.05		
1429	START SAMPLE COLLECTION								
1439	END	"	"	3 mL IPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070126Y

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition MW-52-11

WELL ID: MW 52 - 48

SAMPLE ID: 007

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 90's

PROJECT NO: 01.0017869.92
DATE: 7/20/11
SAMPLER(S): [illegible]

SAMPLING INTERVAL (depth in ft below top of casing)

48.0 to 56.0

SAMPLING PORT

48 6

TOTAL VOLUME PURGED: 0.66 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1338	0	PUMP	ON					5.7/10	14
1349	0.01	25.17	0.746	2.32	6.22	-52.2	2.57		
1354	0.03	25.06	0.760	1.12	5.81	-98.7	0.66		
1359	0.04	24.71	0.767	0.61	5.81	-105.7	0.32		
1403	0.16	24.73	0.769	0.33	5.78	-121.2	0.91		
1410	0.22	24.72	0.771	0.27	5.94	-133.3	0.42		
1415	0.39	24.50	0.775	0.32	6.12	-146.7	0.49		
1422	0.33	24.44	0.775	0.18	6.27	-157.5	0.45		
1427	0.44	24.47	0.775	0.16	6.32	-153.1	0.32		
1432	0.51	24.51	0.777	0.15	6.44	-163.0			
1434	START	SAMPLE	COLLECTION						
1506	END	"	"	"	"	"			
	MAIN	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	2007012754

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition [illegible]

WELL ID: MW 52 - 64

SAMPLE ID: 0727

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.02
DATE: 7/27/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

59.0 to 71.5

SAMPLING PORT

64 5

TOTAL VOLUME PURGED: 0.54 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0915	0	PUMP	ON					5/10	28
0919	0.05	21.05	0.426	0.75	6.12	-52.7	0.95		
0924	0.15	21.58	0.412	0.13	6.36	-87.9	0.11		
0929	0.22	22.30	0.410	0.13	6.55	-113.9	0.00		
0934	0.28	22.79	0.412	0.14	6.65	-137.7	0.00		
0939	0.31	23.32	0.412	0.18	6.72	-150.8	0.00		
0944	0.34	23.68	0.412	0.22	6.80	-160.1	0.00		
0949	0.36	23.88	0.413	0.19	6.85	-174.8	0.00		
0954	0.38	24.06	0.414	0.17	6.89	-184.3	0.00		
0959	0.40	24.25	0.413	0.17	6.93	-198.9	0.00		
1004	0.41	24.37	0.414	0.14	7.01	-212.7	0.00		
1009	0.42	24.43	0.414	0.12	7.01	-216.2	0.00		
1010	START	SAMPLE	COLLECTION						
1045	END SAMPLE COLLECTION			2 LITER					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K175794 A6
turbidity meter	2007 04293

NOTES AND OBSERVATIONS: ADJUST SETTINGS TO 5:5:10 DRIVE/VENT AT 30 PSI FOR NEXT ROUNDS

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-52-11

WELL ID: MW 52 - 118

SAMPLE ID: 007

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/26/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

110.5 to 123.5

SAMPLING PORT

118 4

TOTAL VOLUME PURGED: 0.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1042	0	PUMP	ON					9/12	45
1048	0.14	21.43	0.744	3.01	10.27	-81.6	10.99		
1053	0.20	21.93	0.698	0.79	6.24	-131.6	2.87		
1058	0.35	22.79	0.698	0.50	6.79	-168.0	1.04		
1103	0.45	23.04	0.697	0.37	6.60	-219.2	1.50		
1108	0.50	23.91	0.695	0.32	10.69	-254.2	0.95		
1113	0.55	24.16	0.6916	0.30	6.76	-276.9	0.67		
1118	0.60	24.81	0.6910	0.29	6.81	-286.3	2.37		
1123	0.62	25.35	0.697	0.28	6.85	-291.7	0.75		
1128	0.64	25.72	0.700	0.27	6.88	-287.8	1.45		
1130	START SAMPLE COLLECTION								
1330	END SAMPLE COLLECTION: 2L TOC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125H

NOTES AND OBSERVATIONS: SAMPLING OUT OF PORT 4 WHICH IS THE 118' ELEVATION. SAMPLE ID IS DESIGNATED AS MW-52-122.

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-52-11

WELL ID: MW 52 - 162

SAMPLE ID: 007

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/26/11
SAMPLER(S): CbSL

SAMPLING INTERVAL (depth in ft below top of casing)

154.5 to 164.0

SAMPLING PORT

162 2

TOTAL VOLUME PURGED: 1.30 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1042	10	PUMP	ON					9/12	45
1048	0.1	21.24	2.277	3.05	5.88	-22.4	5.50		
1053	0.3	20.99	2.187	1.25	5.62	-101.6	2.02		
1058	0.45	20.81	2.190	0.72	5.70	-113.2	1.60		
1103	0.65	20.46	2.182	0.41	5.81	-132.7	0.49		
1108	0.80	20.21	2.184	0.35	5.84	-133.0	2.97		
1113	1.00	20.10	2.186	0.32	5.89	-136.7	1.85		
1118	START SAMPLE COLLECTION								
1133	END SAMPLE COLLECTION: 2L JAR								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070125A

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-52-11

WELL ID: MW 52 - 181

SAMPLE ID: 007

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MIDQUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80'S

PROJECT NO. 01.0017869.92
DATE: 7/26/11
SAMPLER(S): CBSL

SAMPLING INTERVAL (depth in ft below top of casing)
171.0 to 198.1

SAMPLING PORT
181

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1042	0	PUMP	ON					9/12	45
1048	0.05	21.95	0.998	0.36	5.70	-87.8	4.80		
1053	0.20	21.75	0.972	0.20	5.80	-113.4	2.90		
1058	0.35	21.48	0.959	0.12	6.15	-141.7	1.95		
1103	0.55	20.98	0.943	0.07	6.51	-154.7	1.09		
1108	0.70	20.64	0.941	0.06	6.68	-156.3	1.19		
1113	0.85	20.47	0.939	0.05	6.82	-176.4	1.02		
1118	1.00	20.35	0.939	0.05	6.92	-181.9	1.67		
1123	1.15	20.26	0.935	0.03	6.98	-179.7	1.18		
1127	START SAMPLE COLLECTION								
1143	END SAMPLE COLLECTION: 2L JPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	2007012554

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good 7-26-11

WELL ID: MW-53-82
SAMPLE ID: 020

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: 6/30/11
SAMPLER(S): CB
PUMP DEPTH: _____ ft

MID-QUARTER SAMPLES

WATER QUALITY: DTW = 5.805 GW Elevation = 11.38 ACTUAL DEPTH TRANSDUCER = 23.751

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1038	23.748	@	PUMP	ON				5/20	38	0
1047	23.586	20.49	3.476	4.38	6.62	93.8	24.31			0.01
1052	23.657	21.68	2.892	5.26	6.77	95.2	25.40			0.08
1057	23.678	21.62	2.572	5.92	6.97	88.9	20.84			0.15
1102	23.575	21.64	2.420	5.97	7.02	88.7	16.56			0.22
1107	23.595	21.79	2.314	5.96	7.17	84.5	15.91			0.30
1112	23.576	21.99	2.258	6.21	7.24	83.3	15.02			0.35
1117	23.593	21.97	2.239	6.29	7.26	80.6	14.92			0.40
1122	23.584	22.00	2.208	6.27	7.34	79.5	14.78			0.45
1127	START	SAMPLE COLLECTION								
1213	END SAMPLE	COLLECTION	2L	JP-8						
	PUMP	OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR, MISSING CAP

NOTES AND OBSERVATIONS:

Total volume purged 0.5 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-53-120
SAMPLE ID: 024

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 6/30/11
SAMPLER(S): CB

Measured Well Depth ..... **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

Well Vault Condition FAIR-MISSING BOLTS
Well Diameter: 1 in

120	-	58.91	=	61.09 ft
DTB		DTW		Well Column Height

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 61.09 x 0.041 (Multiplier) = 2.50 (Well Volume) gal

2.50 x 1.5 = 3.75 (Designed Purge Volume) gal

MID-QUARTER SAMPLES

TOTAL VOLUME PURGED: 3.85 gal

WATER QUALITY: DTW = 58.91 GW Elevation 11.28

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1207	0	—	PUMP ON						
1217	0.05	—	21.19	1.606	3704	7.26	131.6	446.7	
1222	0.50	—	18.81	1.674	20.23	7.16	118.6	117.3	
1225	1.00	—	18.60	1.702	26.40	7.15	106.7	140.1	
1232	1.50	—	18.73	1.7496	23.32	7.10	97.4	120.8	
1236	2.00	—	18.69	1.754	22.68	7.16	89.4	115.3	
1245	2.50	—	18.63	1.776	19.80	7.20	78.6	109.8	
1253	3.00	—	19.02	1.805	8.38	7.24	69.4	96.5	
1259	3.50	—	18.81	1.810	9.51	7.26	66.3	88.2	
1302	3.75	—	18.64	1.816	9.23	7.28	65.4	83.1	
1303	START	SAMPLE COLLECTION							
1307	END SAMPLE	COLLECTION:	2L TEE						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070129I

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 54 - 37

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 70's

PROJECT NO: 01.0017869.92
DATE: 7/12/11
SAMPLER(S): S, AB

SAMPLING INTERVAL (depth in ft below top of casing)

29.0 to 42.0

SAMPLING PORT

37 6

TOTAL VOLUME PURGED: 2.30 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1300	0	PUMP	ON					6/4	20
1305	0.15	22.01	2.349	7.19	6.86	-55.2	2.54		
1310	0.25	21.83	2.314	7.11	6.95	-11.0	2.69		
1315	0.80	21.73	2.308	6.48	6.96	19.7	2.96		
1320	1.35	21.73	2.306	6.41	6.96	38.0	2.71		
1325	1.70	21.70	2.300	5.87	6.97	50.5	3.26		
1330	1.90	21.68	2.305	5.61	6.97	57.3	2.20		
1333	2.15	21.64	2.306	5.40	6.97	61.5	2.28		
1335	START	SAMPLE	COLLECTED						
1345	END	"	"		& IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition dry 1/4"

WELL ID: MW 54 - 58

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy, 80's

PROJECT NO: 01.0017869.92
DATE: 7/8/14
SAMPLER(S): SC, CB

SAMPLING INTERVAL (depth in ft below top of casing)

51.5 to 64.0

SAMPLING PORT

58 5

TOTAL VOLUME PURGED: 1.00 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1300	0	PUMP	ON					6/4	20
1305	0.15	22.00	1.753	1.29	6.54	-0.3	0.99		
1310	0.35	21.81	1.723	0.71	6.44	-6.7	0.77		
1315	0.60	21.70	1.725	0.53	6.44	-60.5	1.13		
1320	0.85	21.71	1.749	0.43	6.41	-58.7	0.75		
1322	START	SAMPLE	COLLECTION						
1333	END	"	"	:2L	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Dry Well

WELL ID: MW 54 - 123

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy, 80s

PROJECT NO: 01.0017869.92
DATE: 7/18/14
SAMPLER(S): SL, JB

SAMPLING INTERVAL (depth in ft below top of casing)

116.0 to 126.0

SAMPLING PORT

123 4

TOTAL VOLUME PURGED: 1.13 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1300	0	PUMP ON						6|4	20
1305	0.04	23.05	1.856	1.60	6.08	-33.3	1.63		
1310	0.18	22.83	1.821	1.13	6.04	-39.9	1.19		
1315	0.30	22.65	1.853	0.66	6.17	-41.8	1.07		
1320	0.42	22.56	1.853	0.44	6.33	-47.1	1.33		
1325	0.55	22.51	1.855	0.35	6.47	-50.2	1.96		
1329	0.66	22.46	1.855	0.30	6.57	-51.7	2.12		
1330	0.80	22.41	1.857	0.27	6.62	-57.9	1.49		
1331	0.90	22.42	1.856	0.25	6.70	-59.6	1.59		
1343	0.93	22.49	1.856	0.26	6.73	-60.7	1.20		
1345	START	SAMPLE COLLECTION							
1406	END	"	"		: 2L IA'S				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	10070125H

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Acc 1414

WELL ID: MW 54 - 144

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy, 80s

PROJECT NO: 01.0017869.92
DATE: 7/18/11
SAMPLER(S): SL, JD

SAMPLING INTERVAL (depth in ft below top of casing)

135.0 to 155.5

SAMPLING PORT

144 3

TOTAL VOLUME PURGED: 3.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	0	PUMP ON						5/6.7	36
1125	0.75	22.15	2.045	0.43	6.61	-100.7	2.23		
1130	0.95	21.95	2.039	0.38	6.66	-96.0	3.22		
1135	1.25	21.72	2.041	0.42	6.71	-70.5	2.14		
1140	1.50	21.55	2.049	0.41	6.74	-59.1	3.50		
1146	1.75	21.44	2.055	0.42	6.75	-50.1	2.50		
1151	2.00	21.33	2.062	0.41	6.77	-42.3	2.15		
1156	2.25	21.23	2.064	0.44	6.79	-34.3	1.79		
1201	2.50	21.19	2.066	0.41	6.80	-26.4	1.57		
1206	2.75	21.09	2.069	0.39	6.80	-17.1	1.13		
1211	3.00	21.04	2.069	0.42	6.81	-12.3	1.34		
1216	3.25	20.97	2.071	0.41	6.81	-4.0	3.23		
1221	3.50	21.04	2.071	0.39	6.83	1.0	2.83		
1226	3.75	20.94	2.072	0.40	6.82	5.4	2.13		
1233	START	SAMPLE COLLECTION							
1238	END								
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007 01254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 54 - 173

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 80's

PROJECT NO: 01.0017869.92
DATE: 7/19/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)
170.5 to 192.0

SAMPLING PORT
173 2

TOTAL VOLUME PURGED: 2.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	0	PUMP	ON					7.5/6.7	34
1125	0.75	22.16	1.995	1.11	5.82	-14.5	0.95		
1130	0.95	21.88	1.981	0.78	5.88	-10.4	1.01		
1135	1.25	21.76	1.978	0.58	5.95	-10.7	1.39		
1140	1.50	21.60	1.974	0.49	6.02	-6.9	1.04		
1146	1.75	21.43	1.972	0.42	6.10	-10.6	1.05		
1151	2.00	21.37	1.968	0.39	6.15	-9.1	1.69		
1156	2.25	21.25	1.968	0.34	6.21	-11.1	1.51		
1201	2.35	21.15	1.966	0.31	6.27	-13.9	1.76		
1206	2.50	21.07	1.964	0.28	6.34	-19.4	1.94	↓	↓
1211	2.75	21.01	1.963	0.27	6.37	-20.1	0.99		
1213	START	SAMPLE	COLLECTION						
1230	END	"	"	~2L	IEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See 144

WELL ID: MW 54 - 190

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 80s

PROJECT NO: 01.0017869.92
DATE: 7/18/11
SAMPLER(S): SL, DB

SAMPLING INTERVAL (depth in ft below top of casing)

195.0 to 203.6

SAMPLING PORT

#10

TOTAL VOLUME PURGED: 1.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	PUMP	ON						7.5/6.7	30
1125	0.50	22.67	2.064	0.50	6.29	47.1	0.65		
1130	0.70	22.41	2.066	0.40	6.41	43.1	1.10		
1135	0.85	22.19	2.069	0.33	6.56	43.7	0.84		
1142	1.00	21.90	2.070	0.31	6.65	44.9	0.55		
1146	1.20	21.83	2.070	0.33	6.71	45.5	0.82		
1151	1.40	21.74	2.073	0.32	6.76	45.6	1.14		
1156	1.60	21.64	2.073	0.33	6.79	41.0	1.16		
1201	1.80	21.54	2.072	0.31	6.82	43.9	1.25		
1203	START	SAMPLE	COLLECTION						
1214	END	"	"	: 2L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	2007012541

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See 144

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-ST-11
SAMPLE ID: 005

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 90's
MID-QUARTER SAMPLES

PROJECT NO: 01.0017869.92
DATE: 7/18/11
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

Well Vault Condition 3.66 MW-ST-9S
Well Diameter: 1 in

11	-	4.59	=	6.41 ft
DTB		DTW		Well Column Height

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 6.41 x 0.041 (Multiplier) = 0.26 (Well Volume) gal

0.26 x 1.5 = 0.40 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 0.75 gal

WATER QUALITY: DTW = 4.59 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL D (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1127	0	39.928	PUMP	ON					
1132	0.01	39.760	21.43	2.299	4.10	7.47	28.3	3.11	
1137	0.30	39.899	21.02	2.202	1.87	7.51	217.3	1.21	
1140	0.45	39.836	21.01	2.172	1.79	7.51	207.3	0.98	
1144	START	SAMPLE COLLECTION							
1157	END SAMPLE	COLLECTION : 26 IPEC							
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K175944 AG
turbidity meter	10D101293

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-57-20
SAMPLE ID: 008

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90's
MID-QUARTER SAMPLES

PROJECT NO: 01.0017869.92
DATE: 7/18/16
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

20 (DTB) - 4.67 (DTW) = 15.33 ft (Well Column Height)

Well Vault Condition GOOD MW-57-45
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 15.33 x 0.041 (Multiplier) = 0.62 (Well Volume) gal

0.62 x 1.5 = 0.94 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 10 gal

WATER QUALITY: DTW = 4.67 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1127	0	4.67	PUMP	ON					
1132	0.01	4.81	21.03	2.669	19.46	7.16	109.0	3.11	
1137	0.30	4.81	21.26	2.602	10.63	7.18	-77.2	1.27	
1140	0.40	4.81	21.26	2.480	10.20	7.28	-51.8	0.72	
1146	0.60	4.81	21.22	2.412	10.24	7.32	-49.6	0.35	
1151	0.75	4.81	21.19	2.367	10.26	7.34	-16.6	0.35	
1157	0.95	4.81	21.16	2.344	9.52	7.35	-0.6	0.35	
1158	START	SAMPLE	COLLECTION						
1209	END SAMPLE	COLLECTION - 2L	IPEC						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	

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-57-45
SAMPLE ID: 009

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90s
MID-QUARTER SAMPLES

PROJECT NO: 01.0017869.92
DATE: 7/18/11
SAMPLER(S): CB/SL

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition PAVE-BOLTS STRIPPED

Well Diameter: 1 in (VAULT RECORD)

WATER COLUMN HEIGHT (ft)

45 (DTB) - 5.43 (DTW) = 39.57 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 39.57 x 0.041 (Multiplier) = 1.62 (Well Volume) gal

1.62 x 1.5 = 2.43 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.60 gal

WATER QUALITY: DTW = 5.43 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1127	0	5.43	PUMP	ON					
1132	0.01	6.95	20.78	2.342	2.52	6.80	114.5	2.05	
1137	0.25	5.81	20.77	2.321	2.04	6.85	-64.2	0.84	
1140	0.50	5.81	20.87	2.331	2.04	6.94	-59.1	0.46	
1146	0.75	5.81	20.82	2.342	2.04	7.02	-65.4	1.07	
1151	1.00	5.81	20.77	2.338	1.93	7.07	-64.4	0.49	
1157	1.15	5.81	20.74	2.337	1.94	7.11	-60.3	0.24	
1203	1.25	5.81	20.53	2.352	2.15	7.14	-63.1	0.36	
1213	1.50	5.81	20.43	2.361	2.00	7.18	-61.1	0.30	
1219	2.00	5.81	20.41	2.362	2.01	7.19	-58.2	0.80	
1223	2.25	5.81	20.39	2.354	1.94	7.20	-58.2	0.75	
1226	2.45	5.81	20.39	2.360	1.93	7.21	-57.9	0.68	
1226	START	SAMPLE	COLLECTION						
1230	END SAMPLE COLLECTION: ALL IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	

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-58-26
SAMPLE ID: 013

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: 7/5/11
SAMPLER(S): CGSL
PUMP DEPTH: _____ ft

MD-QUARTER SAMPLES

WATER QUALITY: DTW = 6.54 GW Elevation 7.69 Actual Depth = 18.914

Time	DTW or GW Elevation Actual Depth (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1246	18.589								gal
1253	17.950	21.28	2.658	2.75	7.51	-71.2	3.18		0.05
1258	17.746	20.85	2.520	0.55	6.82	-101.0	2.92		0.20
1303	17.675	20.71	2.504	0.20	6.62	-104.7	1.61		0.40
1308	17.662	20.48	2.526	0.34	6.59	-104.2	1.32		0.60
1313	17.661	20.36	2.547	0.29	6.58	-103.3	1.08		0.80
1315	START SAMPLE COLLECTION								
1329	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	
turbidity meter	20070125Y

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR - MISSING BOLTS

NOTES AND OBSERVATIONS: Total volume purged 1.10 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-56-53
SAMPLE ID: 011

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: 7/6/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

MID-QUARTER SAMPLES

WATER QUALITY: DTW = 45.97 GW Elevation 23.581 ACTUAL DEPTH = 39.64

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes (gal)
1105	39.64	PUMP	ON					7/7.5	28	0
1150	38.107	21.16	1.173	5.32	6.02	76.5	6.84			0.05
1155	38.717	18.78	1.671	3.85	6.24	80.6	17.66			0.25
1200	38.641	18.99	1.683	3.85	6.37	85.4	16.85			0.34
1205	38.603	20.09	1.704	3.67	6.54	79.6	15.55			0.42
1210	38.565	20.21	1.783	3.53	6.68	73.8	11.69			0.52
1215	38.565	20.34	1.910	3.25	6.75	68.6	8.51			0.68
1220	38.848	20.35	1.983	2.90	6.80	68.2	5.55			0.78
1225	38.484	20.36	2.034	2.70	6.85	69.2	4.09			0.85
1230	38.480	20.41	2.041	2.67	6.89	73.2	3.78			0.92
1235	38.476	20.48	2.048	2.69	6.93	75.4	3.28			1.02
1236	START	SAMPLE	COLLECTION							
1258	END SA	MPLE	COLLECTION:	2L	IPEC					
	PUMP O	FF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070493

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR, CRACK REPAIRED AT HINGE

NOTES AND OBSERVATIONS:

Total volume purged 1.10 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
MID QUARTER SAMPLING Sampling Data Sheet

WELL ID: MW-57-11
SAMPLE ID: 009

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70's

PROJECT NO: 01.0017869.92
DATE: 8/19/11
SAMPLER(S): JL, CB

Measured Well Depth ..... **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

11 (DTB) - 2.67 (DTW) = 8.33 ft (Well Column Height)

Well Vault Condition Bolt, Hinges bolts in vault flooded
Well Diameter: 4 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 8.33 x 0.041 (Multiplier) = 0.34 (Well Volume) gal

0.34 x 1.5 = 0.51 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 0.75 gal

WATER QUALITY: DTW = 2.67 GW Elevation = 12.06 ACTUAL DEPTH 41.952

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0924	0	41.923	Pump	on					
0928	0.1	41.838	22.47	2.368	4.82	6.85	124.5	3.16	
0933	0.38	41.802	22.33	2.352	4.06	6.85	110.7	0.52	
0935	0.52	41.785	22.29	2.348	3.88	6.89	108.7	0.62	
0936	START	SAMPLE COLLECTION							
0949	END	SAMPLE COLLECTION: 2L			IPEC (SUPPLEMENTAL SAMPLING)				
				0.5L	IPEC (IN HOUSE GROSS BETA)				
				0.25L	IPEC (TOTAL METALS)				
				0.25L	IPEC (DISSOLVED METALS)				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070126 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
MID QUARTER SAMPLING Sampling Data Sheet

WELL ID: MW-57-20
SAMPLE ID: 009

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70's

PROJECT NO: 01.0017869.92
DATE: 8/19/11
SAMPLER(S): SL, CB

Measured Well Depth _____ (feet from top of casing)
Well Vault Condition see MW-57-11
WATER COLUMN HEIGHT (ft)
Well Diameter: 1 in

20 (DTB) - 2.70 (DTW) = 17.3 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 17.3 x 0.041 (Multiplier) = 0.71 (Well Volume) gal

0.71 x 1.5 = 1.06 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 1.20 gal

WATER QUALITY: DTW = 2.70 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0924	0	2.70	Pump	ON					
0928	0.20	2.95	21.46	2.240	5.23	7.25	-73.5	3.92	
0933	0.50	2.98	21.34	2.203	5.10	7.35	-22.7	3.01	
0937	0.75	3.00	21.31	2.185	5.24	7.40	-23.7	2.83	
0940	1.00	3.01	21.29	2.175	5.61	7.41	-21.8	1.79	
0942	START SAMPLE COLLECTION								
0959	END SAMPLE COLLECTION: 2L IPEC (SUPPLEMENTAL SAMPLING)								
				0.5L IPEC (IN-HOUSE GROSS BETA)					
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	10D701254

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-57-45
SAMPLE ID: 010

MID QUARTER SAMPLING

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70s

PROJECT NO: 01.0017869.92
DATE: 8/19/11
SAMPLER(S):

Measured Well Depth ..... **(feet from top of casing)**
Well Vault Condition Ok MW-57-11
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

45 (DTB) - 3.66 (DTW) = 41.34 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 41.34 x 0.041 (Multiplier) = 1.69 (Well Volume) gal

1.69 x 1.5 = 2.54 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 2.15 gal

WATER QUALITY: DTW = 3.66 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0924	0	3.66	PUMP	ON					
0928	0.25	4.32	20.95	2.461	3.42	6.91	197.9	10.51	
0937	0.75	4.36	20.80	2.392	3.04	6.92	211.3	8.46	
0940	1.00	4.38	20.78	2.382	3.03	6.92	205.5	5.21	
0947	1.25	4.40	20.71	2.380	2.93	6.93	176.6	4.15	
0950	1.50	4.42	20.76	2.377	2.88	6.93	167.8	4.14	
0954	1.75	4.50	20.64	2.381	2.79	6.93	140.1	3.61	
1000	2.00	4.52	20.63	2.375	2.73	6.93	116.8	3.83	
1003	2.25	4.55	20.61	2.373	2.70	6.92	106.9	2.01	
1006	2.50	4.58	20.58	2.373	2.74	6.92	96.1	2.48	
1008	START SAMPLE COLLECTION								
1019	END SAMPLE COLLECTION: 2L IPEC (SUPPLEMENTAL SAMPLE)								
				0.5L IPEC (IN-HOUSE GROSS BETA)					
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125H

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-5S-165
SAMPLE ID: 013

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80
MID-QUARTER SAMPLES

PROJECT NO: 01.0017869.92
DATE: 7/5/14
SAMPLER(S): CA, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 6.91 GW Elevation 7.34

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1246	6.75								
1253	6.96	22.10	1.150	2.10	6.98	-62.2	5.01		0.01
1258	6.96	22.08	1.152	0.71	7.00	-80.4	1.56		0.20
1303	6.97	22.00	1.157	0.54	7.07	-94.2	1.03		0.35
1308	6.98	21.76	1.158	0.47	7.12	-101.9	0.82		0.55
1313	6.99	21.61	1.144	0.44	7.14	-107.2	0.90		0.75
1316	START SAMPLE COLLECTION								
1330	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	
turbidity meter	2007012554

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR - MISSING BOLTS

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: MW SG-83
SAMPLE ID: 013

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80'S
MID-QUARTER SAMPLES

PROJECT NO: 01.0017869.92
DATE: 7/14/11
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

Well Vault Condition: 356 MW-56-53
Well Diameter: 1 in

83 (DTB) - 45.95 (DTW) = 37.05 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 37.05 x 0.041 (Multiplier) = 1.51 (Well Volume) gal

1.51 x 1.5 = 2.28 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.45 gal

WATER QUALITY: DTW = 45.95 GW Elevation 28.257

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1120	0	——	PUMP ON						
1131	0.25	——	19.54	0.935	6.04	6.96	-3.3	251.8	DIRTY WATER FROM SURFACE WATER
1136	0.45	——	19.04	1.085	4.54	6.90	-12.0	161.3	
1139	1.00	——	18.88	1.265	4.49	6.95	-7.3	97.56	
1144	1.50	——	18.33	1.397	4.62	6.99	-3.2	42.81	
1146	1.75	——	18.21	1.472	4.45	7.01	-2.4	36.68	
1149	2.00	——	18.29	1.495	4.17	7.02	-2.5	27.30	
1150	2.25	——	18.13	1.507	3.87	7.03	-3.5	26.07	
1152	START	SAMPLE COLLECTION							
1158	END	"		"	:24 IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429

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-59-32
SAMPLE ID: 005

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: 7/20/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

MID-QUARTER SAMPLES

WATER QUALITY: DTW = 13.30 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
0856	13.30	PUMP ON							gal 0
0903	13.27	24.50	1.040	2.00	7.06	35.2	5094		0.05
0909	13.27	24.20	1.060	0.31	7.22	-75.5	17.14		0.18
0914	13.30	24.20	1.078	0.29	7.23	-90.7	11.97		0.30
0919	13.32	24.22	1.068	0.25	7.39	-110.4	10.66		0.42
0924	13.32	24.22	1.073	0.24	7.46	-123.2	2.84		0.58
0929	13.35	24.20	1.074	0.22	7.50	-120.0	1.33		0.70
0934	13.30	24.19	1.065	0.22	7.51	-132.9	1.29		0.80
0937	START SAMPLE COLLECTION								
0959	END SAMPLE COLLECTION: 24 JARS								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070479??

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR - WELL VAULT FLOODED TO 1" BELOW MW-59-45 PVC CASING. WELL COVER BEARING AT HINGE

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-59-45
SAMPLE ID: 005

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: 7/20/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

MID-QUARTER SAMPLES

WATER QUALITY: DTW = 11.47* GW Elevation

Time	(DTW) or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
0856	11.47	PUMP ON							gal D
0903	12.01	24.25	0.902	2.18	6.73	-22.7	11.71		0.05
0909	12.05	24.17	1.362	0.64	6.59	-96.0	11.52		0.18
0914	12.05	24.32	1.415	0.47	6.62	-102.6	7.68		0.30
0919	12.10	24.26	1.415	0.41	6.63	-101.7	12.11		0.42
0924	12.05	24.23	1.391	0.37	6.71	-94.6	3.82		0.62
0929	12.10	24.31	1.388	0.33	6.76	-92.4	4.10		0.75
0934	12.10	24.22	1.387	0.33	6.82	-96.0	3.42		0.85
0938	START SAMPLE COLLECTION								
0959	END SAMPLE COLLECTION: 2 L TPHC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	
turbidity meter	20070293

Measured Well Depth _____ (feet from top of casing) **Well Vault Condition** SEE MW-59-32

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.

* PLACED NEW TUBING IN. INITIAL GAUGE NOT EXHIBITING STATIC LEVELS

WELL ID: MW-59-68
SAMPLE ID: 005

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: 7/20/11
SAMPLER(S): CR, SL
PUMP DEPTH: _____ ft

MID-QUARTER SAMPLES

WATER QUALITY: DTW = 11.06* GW Elevation

Time	(DTW) or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0856	11.06	PUMP ON							0
0903	15.22	24.21	0.166	2.67	6.79	35.0	25.78		0.05
0909	15.86	24.05	0.135	0.90	6.69	19.8	23.68		0.18
0914	16.14	24.09	0.127	0.70	6.72	7.8	19.31		0.28
0919	16.41	24.12	0.129	0.62	6.74	-4.6	12.75		0.38
0924	16.41	24.08	0.147	0.55	6.76	-16.0	14.76		0.52
0929	16.41	24.15	0.152	0.51	6.81	-29.2	9.94		0.62
0934	16.52	24.03	0.165	0.46	6.82	-37.1	8.70		0.70
0939	16.74	24.01	0.170	0.41	6.78	-42.1	6.67		0.80
0944	16.87	23.92	0.184	0.39	6.85	-50.3	6.52		0.90
0949	17.02	23.82	0.197	0.36	6.87	-56.6	6.50		1.10
0954	17.04	23.83	0.208	0.34	6.89	-60.1	6.46		1.20
0956	START SAMPLE COLLECTION 2L IPEC								
1014	END SAMPLE COLLECTION 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	
turbidity meter	20070421193

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** SEE MW-59-32

NOTES AND OBSERVATIONS: Total volume purged 1.32 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

*PLACED NEW TUBING IN. INITIAL GAUGE NOT EXHIBITING STATIC LEVELS.

WELL ID: MW-62-18
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 90-100's
MID-QUARTER SAMPLING

PROJECT NO: 01.0017869.92
DATE: 7/22/11
SAMPLER(S): SL, DB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.98 GW Elevation 0.920 ACTUAL DEPTH = 3.996

Time	DTW or GW Elevation (± 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1049	3.966	PUMP	ON						gal 0
1056	3.846	25.09	1.481	4.71	7.48	-101.5	2.47		0.09
1100	3.822	25.03	1.494	4.23	7.43	-86.3	1.01		0.24
1105	3.807	24.66	1.464	4.24	7.48	-93.1	0.56		0.37
1110	3.791	24.87	1.450	3.83	7.47	-85.2	0.93		0.50
1117	START	SAMPLE	COLLECTION						
1135	END	"	"	:	2L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	7007047 93

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

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-6-97
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 90-100s
MID-QUARTER SAMPLING

PROJECT NO: 01.0017869.92
DATE: 7/22/14
SAMPLER(S): SJC
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1049	11.96	PUMP ON							0
1056	12.12	22.63	1.535	0.35	7.47	94.1	2.29		0.07
1100	12.17	22.64	1.527	0.20	7.40	59.4	1.56		0.23
1105	12.17	22.18	1.531	0.20	7.53	39.3	1.13		0.36
1110	12.17	22.37	1.528	0.16	7.54	27.3	0.67		0.49
1115	12.17	22.26	1.526	0.14	7.60	8.6	0.63		0.65
1120	12.17	22.31	1.528	0.17	7.62	-5.9	1.01		0.77
1125	12.17	22.44	1.523	0.13	7.63	-23.9	0.49		0.86
1130	12.17	22.67	1.527	0.14	7.61	-36.9	0.42		0.93
1135	12.17	22.80	1.526	0.19	7.60	-31.7	0.77		1.08
1140	12.17	22.91	1.527	0.19	7.61	-57.7	0.59		1.20
1145	12.17	23.02	1.528	0.17	7.60	-74.7	0.53		1.30
1150	12.17	23.18	1.527	0.18	7.59	-92.7	1.07		1.42
1155	12.17	23.42	1.529	0.17	7.59	-94.2	0.65		1.55
1200	12.17	23.52	1.529	0.15	7.60	-87.5	0.96		1.66
1202	START	SAMPLE COLLECTION							
1228	END	"	"		2L IPA				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	17594 AG
flow meter	
turbidity meter	20070493

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.81 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: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90's

PROJECT NO: 01.0017869.92
DATE: 7/22/11
SAMPLER(S): SL/CB

SAMPLING INTERVAL (depth in ft below top of casing)

49.6 to 54.1

SAMPLING PORT

5 3 6

TOTAL VOLUME PURGED: 0.55 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0921	0	PUMP	ON					5/6	25
0928	1.05	23.05	1.472	0.21	6.52	-194.0	1.95		
0935	0.32	24.12	1.422	0.11	6.82	-184.5	0.87		
0940	0.28	25.02	1.433	0.13	6.98	-190.5	0.82		
0945	0.34	25.62	1.422	0.14	7.01	-189.5	0.72		
0950	0.40	26.21	1.422	0.15	7.08	-189.7	0.98		
0954	START	SAMPLE	COLLECTION						
1047	END SAMPLE COLLECTION / 2 L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	2007012544

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62 - 71

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID - QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90's

PROJECT NO: 01.0017869.92
DATE: 7/22/14
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

61.1 to 92.6

SAMPLING PORT

71 5

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0921	0	PUMP	ON					5/6	25
0935	0.40	22.84	1.429	0.95	6.71	-71.4	4.62		
0935	0.85	22.21	1.413	0.35	6.06	-50.8	0.71		
0940	0.45	21.92	1.409	0.29	6.00	-45.9	2.04		
0945	0.65	21.62	1.399	0.25	6.03	-46.7	0.94		
0950	0.85	21.49	1.399	0.24	6.07	-36.4	1.12		
0955	1.00	21.46	1.396	0.24	6.13	-33.9	1.07		
0958	START	SAMPLE COLLECTION							
1012	END SAMPLE COLLECTION / ALL TOES								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070125-1

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62 . 92

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID - QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90's

PROJECT NO: 01.0017869.92
DATE: 7/22/11
SAMPLER(S): JC, CB

SAMPLING INTERVAL (depth in ft below top of casing)

88.6 to 99.1

SAMPLING PORT

92 4

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0941	0	PUMP	ON					5/6	35
0956	0.01	24.24	1.419	1.69	6.63	-55.8	0.39		
0935	0.39	23.09	1.384	0.59	6.83	-46.8	0.46		
0940	0.42	22.70	1.378	0.45	6.90	-49.6	0.42		
0945	0.60	22.48	1.373	0.37	6.95	-52.2	1.35		
0950	0.75	22.15	1.377	0.34	7.01	-52.4	1.41		
0955	0.85	22.07	1.376	0.37	7.01	-57.4	1.86		
1000	1.05	21.73	1.374	0.30	7.02	-59.5	1.64		
1001	START SAMPLE COLLECTION								
1018	END SAMPLE COLLECTION 12L TOTAL								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125Y

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 62 - 138

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90'S

PROJECT NO: 01.0017869.97
DATE: 7/27/14
SAMPLER(S): S.CB

SAMPLING INTERVAL (depth in ft below top of casing)

136.1 to 146

SAMPLING PORT

138 3

TOTAL VOLUME PURGED: 1.20 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1053	0	PUMP	ON					94	30
1057	0.05	22.28	1.464	1.37	6.87	-93.5	1.63		
1102	0.14	22.44	1.456	0.69	6.87	-99.6	2.09		
1107	0.28	22.32	1.451	0.46	6.95	-89.4	0.57		
1112	0.42	22.54	1.450	0.36	7.03	-70.3	0.55		
1117	0.56	22.57	1.448	0.30	7.07	-62.0	0.65		
1122	0.70	22.23	1.447	0.28	7.10	-55.9	0.65		
1127	0.84	22.21	1.446	0.26	7.11	-51.8	0.60		
1132	0.98	22.08	1.444	0.25	7.11	-47.6	0.57		
1133	START	SAMPLE	COLLECTION						
1150	END SAMPLE COLLECTION; I.C. IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	16
turbidity meter	2007012594

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62-182

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90's

PROJECT NO: 01.0017869.92
DATE: 7/22/11
SAMPLER(S): SC, CB

SAMPLING INTERVAL (depth in ft below top of casing)
177.6 to 198.7

SAMPLING PORT
182 1

TOTAL VOLUME PURGED: 1.10 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1052	0	PUMP	ON					6/4	30
1057	0.01	24.44	1.341	5.58	7.51	-156.2	1.35		
1102	0.10	24.10	1.341	0.01	6.60	-143.3	0.92		
1107	0.20	23.87	1.342	0.27	6.33	-143.6	0.81		
1112	0.30	23.60	1.349	0.22	6.33	-139.8	0.33		
1117	0.40	23.75	1.346	0.22	6.32	-142.6	0.37		
1122	0.50	23.33	1.352	0.20	6.45	-153.4	0.17		
1127	0.100	23.20	1.351	0.19	6.45	-126.5	0.27		
1132	0.70	23.12	1.349	0.18	6.50	-122.3	0.32		
1137	0.80	23.25	1.354	0.19	6.56	-116.8	0.34		
1139	START SAMPLE COLLECTION								
1202	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	2007012534

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW-63-18
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 80-90s
PROJECT NO: 01.0017869.92
DATE: 7/21/11
SAMPLER(S): J, CB
PUMP DEPTH: _____ ft

MID-QUARTER SAMPLING

WATER QUALITY: DTW = 12.14 GW Elevation = 0.99 ACTUAL DEPTH = 5.09'

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0913		PUMP	ON						0
0925	4.808	22.07	1.914	2.32	7.01	-120.1	6.93		0.12
0930	4.772	21.93	1.844	2.03	7.12	-110.5	2.14		0.29
0935	4.755	22.44	1.739	1.69	7.18	-121.1	2.29		0.40
0940	4.734	22.63	1.730	1.56	7.30	-136.7	1.39		0.48
0945	4.694	22.33	1.669	1.43	7.26	-145.7	1.16		0.58
0950	4.669	22.18	1.602	1.25	7.31	-138.0	1.42		0.73
0955	4.637	22.05	1.565	1.09	7.35	-127.5	1.16		0.80
1000	4.631	22.00	1.539	0.96	7.39	-136.9	0.61		1.00
1005	4.596	22.21	1.520	0.84	7.43	-127.2			1.10
1007	START	SAMPLE	COLLECTION						
1026	END	"	"	"	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	[illegible]
turbidity meter	20070125Y

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged [illegible] gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing. 1.25

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-63-34
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 80-90s
MID-QUARTER SAMPLING

PROJECT NO: 01.0017869.92
DATE: 7/21/11
SAMPLER(S): JCB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.08 GW Elevation = 0.979 ACTUAL DEPTH = 12.587

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0913	12.587	PUMP	ON						0
0925	12.351	21.03	1.333	0.32	7.48	-10.2	2.93		0.15
0930	12.321	21.14	1.324	0.21	7.54	-12.1	2.89		0.31
0935	12.314	21.20	1.323	0.22	7.55	-13.1	1.32		0.41
0940	12.277	21.66	1.326	0.20	7.56	-143.0	1.73		0.52
0945	12.254	21.51	1.326	0.18	7.52	-139.0	0.98		0.61
0947	START	SAMPLE	COLLECTION						
1008	END	"	"	1.2L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	17594 AG
flow meter	
turbidity meter	2007012354

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Dry

NOTES AND OBSERVATIONS: Total volume purged 0.76 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 - 50

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90's

PROJECT NO: 01.0017869.92
DATE: 7/21/11
SAMPLER(S): SC, DB

SAMPLING INTERVAL (depth in ft below top of casing)

41.5 to 58.0

SAMPLING PORT

50 7

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1048	0	Pump	ON					2/2.4	30
1048	0.10	21.70	1.091	0.69	7.18	-55.7	7.86		
1053	0.30	21.37	1.084	0.47	7.20	-49.1	5.33		
1058	0.50	21.14	1.088	0.46	7.22	-46.4	4.35		
1103	0.75	21.30	1.088	0.47	7.25	-46.3	3.36		
1108	0.90	21.12	1.091	0.46	7.27	-47.7	3.01		
1112	START SAMPLE COLLECTION								
1125	END SAMPLE COLLECTION: 2L 2VOC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	10
turbidity meter	20070424

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 63-93

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90's

PROJECT NO: 01.0013869.92
DATE: 7/21/11
SAMPLER(S): SL, DB

SAMPLING INTERVAL (depth in ft below top of casing)

81.5 to 100.5

SAMPLING PORT

93 5

TOTAL VOLUME PURGED: 0.70 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1042	0	PUMP	ON					7/24	30
1048	0.01	22.53	1.168	1.36	6.96	-101.8	2.51		
1053	0.10	22.55	1.177	0.92	6.47	-92.2	1.07		
1058	0.25	23.37	1.181	0.29	6.40	-86.2	1.47		
1103	0.35	23.51	1.181	0.23	6.46	-81.4	1.45		
1108	0.45	23.27	1.184	0.20	6.52	-83.10	1.82		
1113	START	SAMPLE	COLLECTION						
1132	END	SAMPLE	COLLECTION:	2L 3 PEC					
	PUMP								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	2007040293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 63-112

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 90's

PROJECT NO: 01.0017869.92
DATE: 7/21/14
SAMPLER(S): KJC

SAMPLING INTERVAL (depth in ft below top of casing)

10.5 to 112.0

SAMPLING PORT

112 4

TOTAL VOLUME PURGED: 1.0 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1042	0	PUMP	ON					7/7.4	20
1048	0.01	23.84	1.112	0.78	7.17	-284.7	1.42		
1053	0.10	23.56	1.091	0.06	7.25	-229.1	0.68		
1058	0.20	23.23	1.085	0.05	7.25	-222.3	0.68		
1103	0.30	23.21	1.113	0.05	7.25	-214.8	0.57		
1108	0.40	23.19	1.142	0.04	7.26	-209.1	0.59		
1113	0.50	23.19	1.157	0.05	7.26	-199.5	0.54		
1118	0.60	23.02	1.157	0.07	7.27	-191.2	0.56		
1123	0.70	22.98	1.161	0.07	7.26	-184.9	0.58		
1126	START SAMPLE COLLECTION								
1140	END SAMPLE COLLECTION; 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070497 93

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 63 - 121

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID - QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90's

PROJECT NO: 01.0017869.92
DATE: 7/21/11
SAMPLER(S): K/CB

SAMPLING INTERVAL (depth in ft below top of casing)

118 to 127.5

SAMPLING PORT

121

3

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0913	0	PUMP	ON					3/8.2	35
0918	0.10	22.08	1.370	3.70	6.73	-70.5	24.49		
0923	0.25	21.47	1.403	1.14	6.60	-60.0	17.92		
0928	0.50	21.09	1.450	0.68	6.56	-57.1	13.23		
0933	0.75	20.80	1.488	0.52	6.97	-55.6	8.06		
0938	1.00	20.60	1.511	0.44	6.96	-53.3	8.66		
0943	1.25	20.45	1.512	0.43	6.99	-55.5	8.69		
0945	START	SAMPLE COLLECTION							
0958	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition (GOOD)

WELL ID: MW 63-163

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID-QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 90's

PROJECT NO: 01.0017869.92
DATE: 7/21/11
SAMPLER(S): SL/CA

SAMPLING INTERVAL (depth in ft below top of casing)

150.5 to 165

SAMPLING PORT

163 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) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (mVolts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0913	0	Pump ON						8/8.2	35
0918	0.05	22.68	1.060	2.11	7.02	-112.2	4.07		
0923	0.24	21.81	1.041	0.58	6.25	-126.0	1.21		
0928	0.40	21.39	1.032	0.48	6.00	-110.4	3.84		
0933	0.60	21.11	1.034	0.44	5.91	-100.1	1.53		
0938	0.75	20.80	1.036	0.40	5.93	-98.5	1.20		
0943	0.85	20.72	1.039	0.37	5.90	-81.2	1.67		
0948	1.10	20.67	1.041	0.34	5.96	-88.9	1.66		
0953	1.25	20.55	1.042	0.31	6.04	-84.3	1.43		
0959	START SAMPLE COLLECTION								
1009	END SAMPLE COLLECTION: 2L IPEC Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070929.3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 63-174

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

MID - QUARTER SAMPLES

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 90S

PROJECT NO: 01.0017869.92
DATE: 7/21/11
SAMPLER(S): SC, DB

SAMPLING INTERVAL (depth in ft below top of casing)

168.0 to 191.1

SAMPLING PORT

174

TOTAL VOLUME PURGED: 1.0 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0913	0	PUMP	0.0					8/8.2	35
0918	0.05	22.73	1.042	1.28	6.67	-209.3	2.60		
0923	0.18	21.95	1.008	0.16	6.92	-185.0	2.21		
0928	0.40	21.55	0.987	0.14	6.97	-170.2	2.30		
0933	0.60	21.27	0.977	0.13	7.00	-165.3	2.17		
0938	0.80	20.93	0.979	0.09	7.02	-164.5	2.23		
0941	START SAMPLE COLLECTION								
0957	END SAMPLE COLLECTION: 7 L TOTAL								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	2007042913

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW-65-48
SAMPLE ID: DUP

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: 7/7/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

MID-QUARTER SAMPLES

WATER QUALITY: DTW = 14.85 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes (gal)
1128	14.85	PUMP ON							
1135	15.21	17.16	0.474	2.17	9.66	102.4	381.8		0.1
1143	15.96	19.41	0.474	0.86	10.20	97.9	349.8		0.2
1150	16.09	21.13	0.476	0.67	10.36	83.9	338.4		0.24
1155	16.17	22.43	0.477	0.79	10.47	81.0	333.1		0.26
1200	16.27	22.92	0.479	0.74	10.51	80.2	338.6		0.28
1205	16.37	23.75	0.482	0.76	10.48	81.2	343.7		0.35
1207	START SAMPLE COLLECTION								
1219	END SAMPLE COLLECTION 2 L ZPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	
turbidity meter	20070429 3

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** POOR-COVER BROKEN SEE BELOW.

NOTES AND OBSERVATIONS: Total volume purged 0.5 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 VAULT CONDITION: POOR. COVER BROKEN, COVER LOCK MECHANISM MISSING PREVENTING LARGE OPENING FOR SURFACE WATER AND DEBRIS INFILTRATION. EVIDENCE OF SURFACE WATER INFILTRATION. BOTTOM OF WELL VAULT MUCKY.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-16S-20
SAMPLE ID: 003

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER:
MID-QUARTER SAMPLES

PROJECT NO: 01.0017869.92
DATE: 7/13/11
SAMPLER(S): CB, SL

Measured Well Depth ____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

83	-	34.87	=	48.13
DTB		DTW		Well Column Height

Well Vault Condition Poor
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 48.13 x 0.041 (Multiplier) = 1.97 (Well Volume) gal

1.97 x 1.5 = 2.96 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 3.15 gal

WATER QUALITY: DTW = 34.87 GW Elevation = 23.971

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0919	PUMP ON								
0926	0.4	—	18.36	2.523	2.71	7.12	139.2	302.5	
0930	0.75	—	18.07	2.775	1.61	7.01	111.4	359.4	
0935	1.00	—	18.45	2.854	1.54	7.00	101.7	415.7	
0942	1.35	—	17.69	2.929	1.48	6.93	95.7	148.5	
0950	1.75	—	17.34	2967	1.31	6.90	107.1	124.1	
0953	2.00	—	17.06	2.992	1.22	6.88	111.2	190.8	
0959	2.50	—	17.05	3.001	1.14	6.89	117.5	220.0	
1005	2.80	—	17.70	3.006	1.13	6.96	116.8	255.8	
1008	3.00	—	17.19	3.006	1.15	6.95	118.7	331.9	
1008	START SAMPLE COLLECTION								
1012	END SAMPLE COLLECTION: 2L TPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	9007043293

Signs of water infiltration into PVC casing from surface.

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-108
SAMPLE ID: 005

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80's
MID-QUARTER SAMPLING

PROJECT NO: 01.0017869.92
DATE: 7/5/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 4.59 GW Elevation = 9.64 ACTUAL DEPTH = 6.509

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes (gal)
1355	6.569	PUMP ON							
1400	6.510	20.79	0.713	2.06	6.56	-92.9	40.05		0.10
1403	6.515	20.88	0.787	1.39	6.30	-97.3	22.10		0.18
1406	6.524	20.91	0.901	1.00	6.09	-107.4	18.66		0.28
1414	6.520	20.92	0.995	0.46	5.72	-117.0	15.39		0.62
1420	6.520	21.20	1.024	0.32	5.81	-119.1	5.95		0.80
1425	6.520	20.84	1.073	0.26	5.80	-126.4	6.82		1.03
1429	6.507	20.76	1.083	0.22	5.75	-166.7	4.39		1.14
1435	6.518	20.68	1.098	0.21	5.97	-177.9	3.58		1.47
1439	6.511	20.64	1.117	0.20	6.16	-188.9	3.30		1.55
1442	6.513	20.54	1.125	0.21	6.23	-192.9	3.32		1.70
1445	6.509	20.64	1.125	0.21	6.36	-199.7	3.10		1.83
1448	6.511	20.59	1.133	0.20	6.44	-197.2	2.19		1.93
1451	6.511	20.60	1.137	0.19	6.49	-196.4	2.16		2.00
1454	6.511	20.49	1.147	0.21	6.53	-204.4	2.23		2.10
1455	START	SAMPLE COLLECTION							
1508	END	"	"		: 2L	IPEa			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	1
turbidity meter	20070U293

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition No water; evidence of surface water infiltration

NOTES AND OBSERVATIONS:

Total volume purged 2.25 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-109
SAMPLE ID: 005

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: 7/15/11
SAMPLER(S): JL, CB
PUMP DEPTH: _____ ft

MID-QUARTER SAMPLING

WATER QUALITY: DTW = 6.36 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes (Gal)
11.59	6.36	PUMP ON							
1205	6.39	21.43	1.932	2.04	6.70	40.4	4.17		0.07
1210	6.38	21.27	1.798	1.40	6.73	42.4	3.25		0.19
1215	6.38	21.17	1.783	1.07	6.76	38.2	2.47		0.36
1220	6.38	21.03	1.763	0.79	6.77	39.1	1.50		0.55
1225	6.38	21.04	1.757	0.61	6.78	37.4	1.24		0.75
1230	6.38	20.97	1.750	0.49	6.77	40.3	0.98		0.93
1232	START	SAMPLE	COLLECTION						
1245	END	"	"	~2L	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	1
turbidity meter	20070493

Measured Well Depth 11.78 **(feet from top of casing)** **Well Vault Condition** Not Locked

NOTES AND OBSERVATIONS: Total volume purged 1.08 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-05S
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80s

PROJECT NO: 01.0017869.92
DATE: 7/8/14
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 5.77 GW Elevation 14.303 ACTUAL DEPTH = 8.500

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1228	8.500	PUMP	P ON						
1233	7.697	23.19	2.382	9.32	7.63	33.4	5.49		0.05
1238	7.501	22.84	2.393	6.59	7.63	40.1	5.23		0.15
1243	7.431	22.66	2.397	6.54	7.65	31.9	4.79		0.25
1248	7.398	22.52	2.401	7.49	7.71	34.7	4.46		0.35
1253	7.353	22.41	2.431	7.40	7.75	39.1	3.60		0.45
1258	7.346	22.36	2.467	7.45	7.79	42.0	3.22		0.55
1303	7.360	22.28	2.499	7.47	7.82	48.1	3.59		0.65
1304	START	SAMPLE	COLLECTION						
1333	END SAMPLE	COLLECTION: 2L IPEC							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	10070293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

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.

WELL ID: MW-3
SAMPLE ID: 014

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy, 80's
MID-QUARTER SAMPLES

PROJECT NO: 01.0017869.92
DATE: 7/13/11
SAMPLER(S): SL, AB
PUMP DEPTH: 11 ft

WATER QUALITY: DTW = GW Elevation

Time	DTW or GW Elevation (Below Datum) (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes (Gal)
1150	10.469	PUMP ON							
1155	10.440	24.07	1.483	1.94	7.53	120.6	3.33		0.15
1200	10.443	24.12	1.480	1.29	7.52	103.1	3.03		0.31
1205	10.440	24.11	1.478	1.07	7.53	95.3	2.06		0.53
1209	10.441	24.10	1.476	1.05	7.52	96.3	2.09		0.67
1211	10.441	24.10	1.474	1.00	7.51	94.4	2.44		0.80
1212	START	SAMPLE COLLECTION							
1218	END	"	"	:	2L IPEC				
					500mL	IN HOUSE (BORON)			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	—
turbidity meter	20070125 4

Measured Well Depth ..... **(feet from top of casing)** **Well Vault Condition** Sun, Lids stripped

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: MW-4D
SAMPLE ID: 029

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70's
MID-QUARTER SAMPLE

PROJECT NO: 01.0017869.92
DATE: 7/14/11
SAMPLER(S): SLP/B

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

Well Vault Condition Lid, bolts, Zipper
Well Diameter: 4 in

27.25	-	9.72	=	17.53	ft
DTB		DTW		Well Column Height	

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 17.53 x 0.653 (Multiplier) = 11.447 (Well Volume) gal

11.447 x 1.5 = 17.2 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: _____ gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (Refer. Depth) (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1005	0	51.667	PUMP ON						
1015	1	49.776	29.54	0.917	1.92	8.44	193.2	1.64	
1019	2	48.431	29.51	0.890	1.84	8.47	189.2	1.38	
1023	3	46.916	30.06	0.793	2.13	8.41	185.9	1.04	
1027	4	45.220	30.42	0.753	2.23	8.41	174.6	2.08	
1032	5	43.877	30.40	0.754	2.35	8.40	173.0	0.89	
1037	6	42.335	30.37	0.777	2.25	8.40	170.3	0.49	
1042	7	38.203	30.16	0.768	2.32	8.40	169.0	0.96	
1047	8	35.914	30.09	0.754	2.44	8.40	167.3	0.89	
1051	8.5	PUMP OFF, WELL WENT DRY.			WILL GET RECHARGE				
1125		START	SAMPLE COLLECTION						
1155		END	"	"	2L	IPEC			
		PUMP OFF			0.5L	IPEC	(BORON	ANALYSIS	- IN HOUSE)

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070125U

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: U3-45
SAMPLE ID: 004

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70's
PROJECT NO: 01.0017869.92
DATE: 7/14/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

MID-QUARTER SAMPLES

WATER QUALITY: DTW = 8.88 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
10:10	8.88	PUMP ON							gal D
10:20	8.89	18.58	1.117	0.82	7.16	-193.9	7.85		0.05
10:26	8.87	29.03	1.092	0.57	7.25	-182.1	5.89		0.20
10:32	8.88	29.48	1.188	0.43	7.28	-195.7	5.37		0.34
1037	8.86	29.47	1.185	0.33	7.30	-226.0	5.35		0.45
1042	8.85	29.62	1.186	0.23	7.31	-194.6	5.24		0.165
1047	8.84	29.65	1.184	0.26	7.31	-195.3	4.86		0.75
1052	8.83	29.58	1.184	0.26	7.32	-200.1	4.71		0.85
1057	8.82	29.18	1.181	0.27	7.32	-202.4	4.65		0.95
1102	START	SAMPLE COLLECTION							
1127	END SAMPLE	COLLECTION		IPEC	, 0.5L	IPEC		(BOTTLES IN-HOUSE)	
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070429 2

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR - BOLTS STRIPPED

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: U3-T2
SAMPLE ID: 038

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: CLOUDY, 70's, SOME PRECIPITATION MIGHT BE/WE
MID-QUARTER SAMPLES

PROJECT NO: 01.0017869.92
DATE: 7/8/11
SAMPLER(S): JCB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 3.73 GW Elevation 4.782 TRANSDUCER RADIAL DEPTH = 3.035

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes (gal)
0943	3.030	PUMP	ON						
0952	2.983	29.45	1.371	4.97	7.79	-91.0	12.02		0.01
0957	2.978	29.57	1.345	3.01	7.84	-115.9	4.11		0.10
1002	2.971	29.76	1.333	2.55	7.85	-137.5	2.89		0.20
1007	2.962	29.93	1.332	1.91	7.85	-107.6	2.11		0.30
1012	2.960	29.89	1.318	1.36	7.86	-140.2	2.17		0.45
1017	2.951	29.92	1.300	1.01	7.87	-159.0	1.47		0.60
1022	2.947	30.01	1.292	0.69	7.87	-168.0	1.40		0.72
1027	2.940	30.13	1.285	0.72	7.87	-170.2	1.40		0.85
1032	2.938	29.90	1.279	0.68	7.88	-174.9	1.39		1.00
1039	START	SAMPLE	COLLECTION						
1055	END SAMPLE	COLLECTION		2L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	2007H293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

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.

APPENDIX E: Q4-2011 MID-QUARTER SAMPLING DATA SHEETS

NO POST QUARTER 4-2011 SAMPLES COLLECTED

APPENDIX F: Q4 2011 DOSE CALCULATIONS

Facility Groundwater Flux Calculation

Site Indian Point
Job No. 17869.92

Prepared By: JAS
Reviewed By: mib

Parameter Values:

year
2011

Totals					
Total Catchment Zone (ft^2)	Total Improved Zone (ft^2)	Recharge (ft/yr)	Precipitation (ft/yr)		
3,969,765	1,432,972	1.31	5.06		
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	0	9,781	1,914	1,711	0
Lower Zone Before Canal: 150	516	3,303	2,681	740	0
Northern Clean Zone	Unit 2 North	Unit 1/2	Unit 3 North	Unit 3 South Zone	Southern Clean Zone
Upper Zone After Canal: 150	499	3,684	436	1,711	0
Lower Zone After Canal: 150	673	903	880	740	0
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
	3,256		0	2,093	1,053
NA	*Avg MH-4*	*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
	0	0	780		0
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	749,221	2,193,386	1,598,443	1,624,119	1,078,507	ft^3/yr
0	2,053	6,009	4,379	4,450	2,955	ft^3/day
0.00	10.66	31.22	22.75	23.12	15.35	GPM
0	21,215,582	62,109,760	45,262,866	45,989,919	30,539,914	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
139,880	268,534	575,954	424,671	353,366	769,654	ft^3/yr
383	736	1,578	1,163	968	2,109	ft^3/day
1.99	3.82	8.20	6.04	5.03	10.95	GPM
3,960,956	7,604,042	16,309,205	12,025,336	10,006,208	21,794,184	L/Yr

IPEC00268025

Facility Groundwater Flux Calculation

Site Indian Point
Job No. 17869.92

Prepared By: JAS
Reviewed By: mib

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	139,880	291,832	707,001	856,768	515,778	1,201,057	ft^3/yr
	383	800	1,937	2,347	1,413	3,291	ft^3/day
	1.99	4.15	10.06	12.19	7.34	17.09	GPM
	3,960,956	8,263,771	20,020,040	24,260,962	14,605,200	34,010,150	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	44,359	171,094	196,200	352,792	0	ft^3/yr
	0	122	469	538	967	0	ft^3/day
	0.00	0.63	2.44	2.79	5.02	0.00	GPM
	0	1,258,093	4,844,850	5,555,760	9,989,957	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	82,949	37,369	62,701	316,412	51,015	662,984	ft^3/yr
	227	102	172	867	140	1,816	ft^3/day
	1.18	0.53	0.89	4.50	0.73	9.44	GPM
	2,348,847	1,058,159	1,775,497	8,959,792	1,444,571	18,773,603	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	56,931	210,105	473,206	344,156	111,971	538,074	ft^3/yr
	156	576	1,296	943	307	1,474	ft^3/day
	0.81	2.99	6.73	4.90	1.59	7.66	GPM
	1,612,109	5,949,519	13,399,693	9,745,410	3,170,672	15,236,547	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	1,346,165	0	47,953	730,083	2,381,145	ft^3/yr
0	3,688	0	131	2,000	6,524	ft^3/day
0	19.16	0.00	0.68	10.39	33.89	GPM
0	38,120,999	0	1,357,886	20,673,652	67,426,519	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	37,461	219,339	111,891	81,206	53,925	ft^3/yr
0	103	601	307	222	148	ft^3/day
0	0.53	3.12	1.59	1.16	0.77	GPM
0	1,060,779	6,210,976	3,168,401	2,299,496	1,526,996	L/Yr

IPEC00268026

Site Indian Point
Job No. 17869.92

Prepared By: JAS
Reviewed By: mib

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	3.52E+08	5.28E+08	6.54E+09	3.90E+09	2.47E+09	0.00E+00	**1.38E+10**
GW to River-Lower Zone	2.42E+08	4.00E+09	1.21E+10	8.58E+09	2.35E+09	0.00E+00	**2.73E+10**
GW to Canal	0.00E+00	0.00E+00	4.74E+10	1.06E+10	1.71E+10	0.00E+00	**7.51E+10**
SW to Canal	NA	1.24E+11	0.00E+00	0.00E+00	4.33E+10	7.10E+10	**2.38E+11**
SW to River	NA	0.00E+00	0.00E+00	2.47E+09	0.00E+00	0.00E+00	**2.47E+09**
						Curies/Yr ==>	**0.36**

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

IPEC00268027

APPENDIX G: Q4 2011 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	46	0	7.36E+04	6.01E+05	-221	-2.08	0.981	decreasing
MW-30-84	33	0	3.78E+03	1.25E+04	149	2.29	0.989	increasing
MW-31-49	44	0	2.98E+02	1.04E+05	58	0.58	0.718	no trend
MW-31-63	32	0	5.00E+03	7.35E+04	67	1.07	0.858	no trend
MW-31-85	32	0	3.17E+02	2.25E+04	111	1.78	0.963	increasing
MW-32-59	31	0	4.13E+02	1.55E+05	55	0.92	0.821	no trend
MW-32-85	30	0	5.42E+03	1.49E+04	166	2.94	0.998	increasing
MW-32-149	27	0	1.99E+02	1.05E+04	3	0.04	0.517	no trend
MW-32-173	25	0	4.31E+02	5.89E+03	-74	-1.70	0.956	decreasing
MW-32-190	29	0	1.21E+03	1.13E+04	-310	-5.80	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	22	4	1.54E+02	3.42E+04	33	0.90	0.817	no trend
MW-36-41	17	0	2.63E+03	5.52E+04	-89	-3.62	1.000	decreasing
MW-36-52	22	0	3.14E+03	2.68E+04	-173	-4.85	1.000	decreasing
MW-37-22	24	0	2.26E+03	3.49E+04	-54	-1.31	0.906	no trend
MW-37-32	24	0	2.49E+03	3.01E+04	-88	-2.16	0.985	decreasing
MW-37-40	23	0	3.92E+03	1.70E+04	-125	-3.27	0.999	decreasing
MW-37-57	24	0	4.05E+03	4.48E+04	-116	-2.85	0.998	decreasing
MW-42-49	25	0	1.12E+03	7.22E+04	-113	-2.62	0.996	decreasing
MW-42-78	20	2	3.46E+02	1.28E+03	-32	-1.01	0.843	no trend
MW-49-26	26	0	2.59E+03	1.54E+04	-210	-4.61	1.000	decreasing
MW-49-42	26	0	1.90E+03	1.13E+04	-203	-4.45	1.000	decreasing
MW-49-65	26	0	1.26E+03	5.76E+03	-140	-3.06	0.999	decreasing
MW-50-42	28	4	1.01E+02	9.75E+03	-4	-0.06	0.524	no trend
MW-50-66	32	0	2.08E+03	1.08E+04	-126	-2.03	0.979	decreasing
MW-53-82	21	1	2.27E+02	1.32E+04	-58	-1.72	0.957	decreasing
MW-53-120	24	0	3.81E+03	9.61E+03	-150	-3.70	1.000	decreasing
MW-55-24	19	0	7.82E+02	3.08E+03	-12	-0.38	0.650	no trend
MW-55-35	18	0	8.53E+02	9.04E+03	-43	-1.59	0.944	no trend
MW-55-54	19	0	5.47E+03	1.31E+04	-31	-1.05	0.853	no trend
MW-111	37	0	6.81E+03	5.78E+05	-319	-4.16	1.000	decreasing
DOWNGRADIENT WELLS								
MW-66-21	19	4	8.28E+01	3.57E+03	-55	-1.89	0.971	decreasing
MW-66-36	18	0	3.01E+03	9.10E+03	-99	-3.71	1.000	decreasing
MW-67-39	17	0	2.55E+03	5.07E+03	-36	-1.44	0.925	no trend
MW-67-105	18	0	9.94E+02	2.93E+03	-93	-3.48	1.000	decreasing
MW-67-173	18	1	4.47E+02	1.05E+03	-106	-3.98	1.000	decreasing
MW-67-219	17	0	6.41E+02	1.44E+03	-20	-0.78	0.783	no trend
MW-67-276	17	0	6.79E+02	1.18E+03	-32	-1.28	0.899	no trend
MW-67-323	17	4	3.09E+02	1.29E+03	-13	-0.49	0.689	no trend
MW-67-340	17	1	2.75E+02	6.69E+02	28	1.11	0.867	no trend

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

IPEC00268029

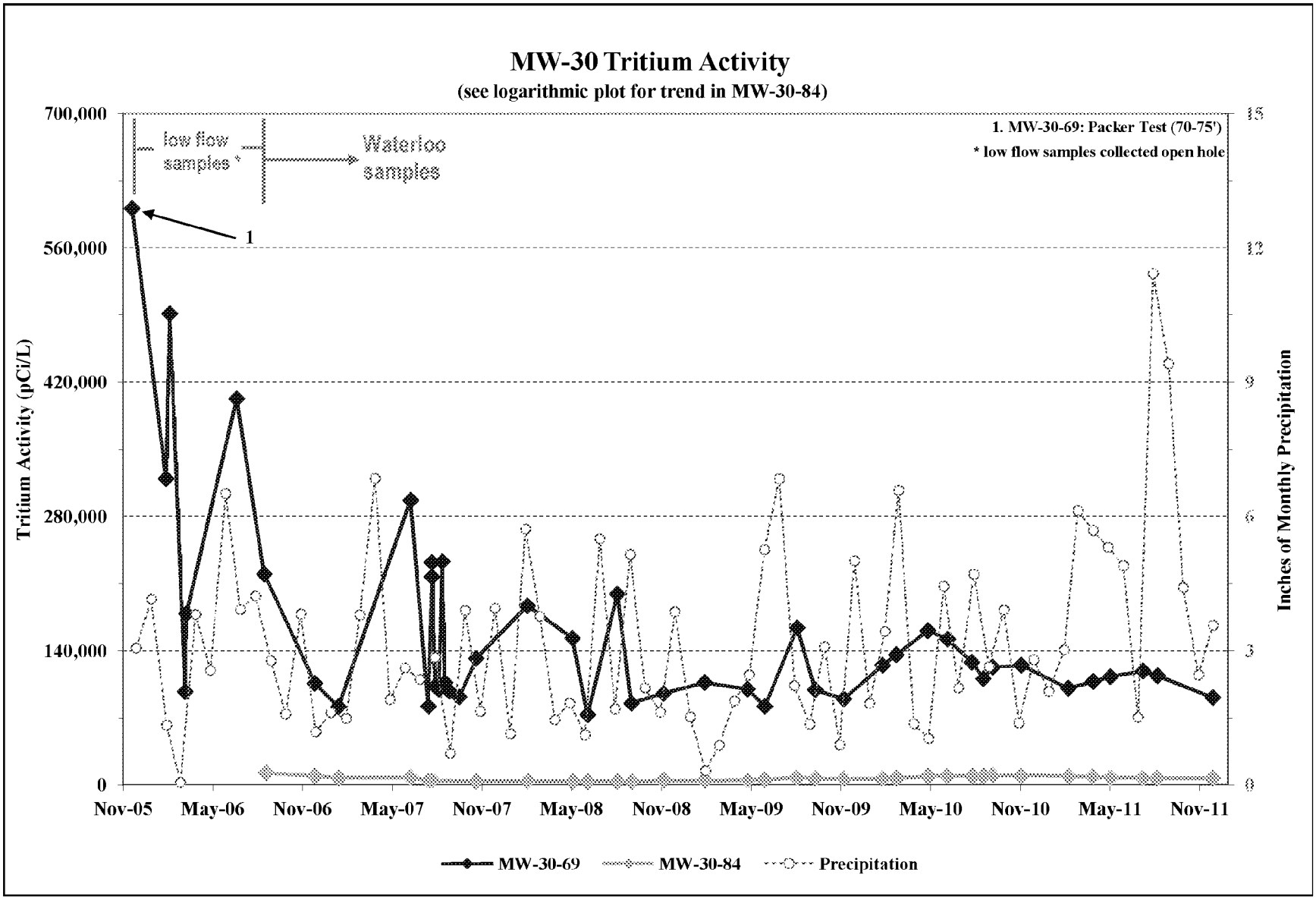

MW-30 Tritium Activity
(see logarithmic plot for trend in MW-30-84)
1. MW-30-69: Packer Test (70-75')
* low flow samples collected open hole
low flow samples *
Waterloo samples
1
Tritium Activity (pCi/L)
Inches of Monthly Precipitation
700,000
560,000
420,000
280,000
140,000
0
15
12
9
6
3
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
Nov-11
MW-30-69
MW-30-84
Precipitation

FIGURE G1

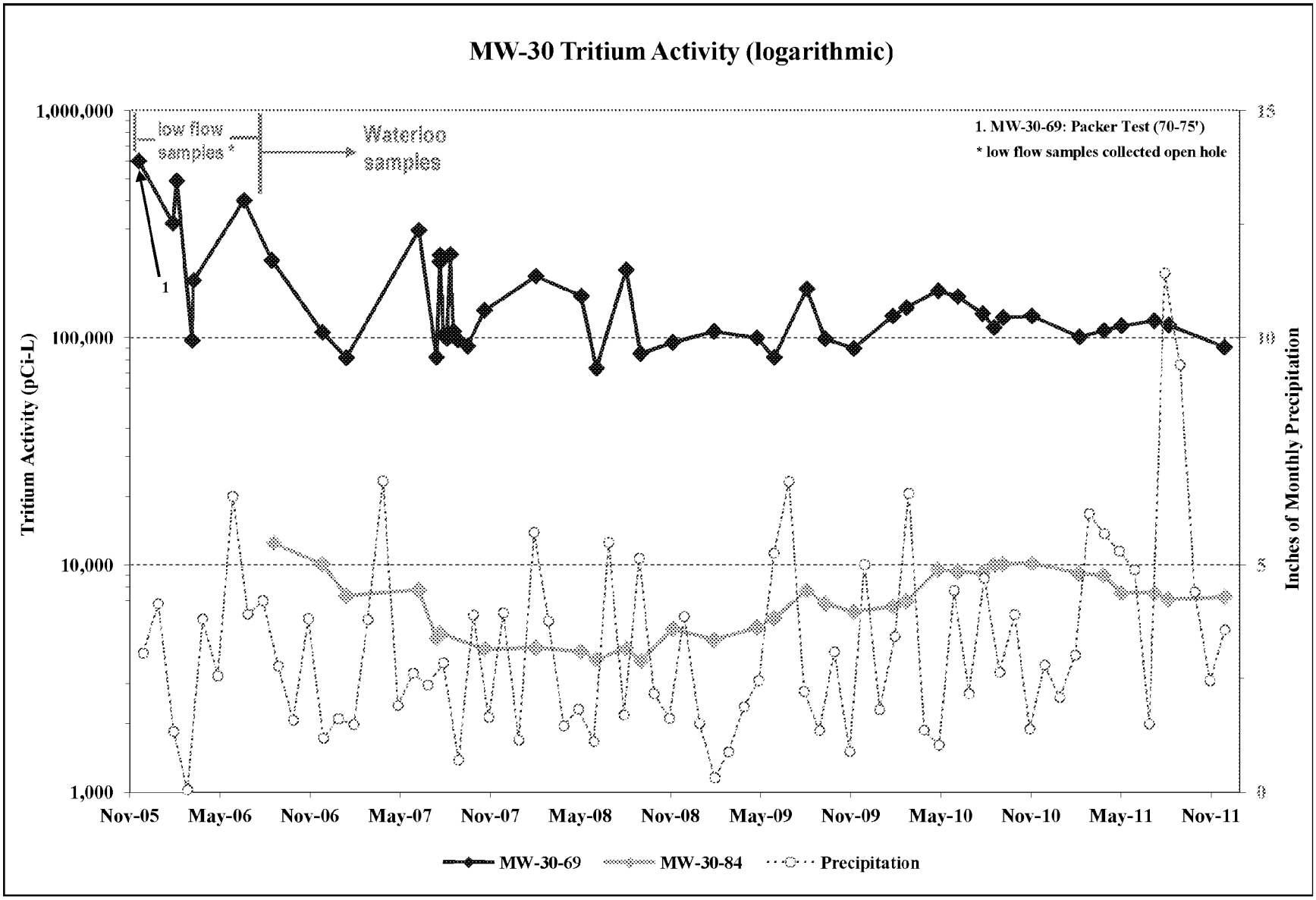

MW-30 Tritium Activity (logarithmic)
1,000,000
100,000
10,000
1,000
Tritium Activity (pCi-L)
15
10
5
0
Inches of Monthly Precipitation
low flow samples *
Waterloo samples
1
1. MW-30-69: Packer Test (70-75')
* low flow samples collected open hole
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
Nov-11
MW-30-69
MW-30-84
Precipitation

FIGURE G1a

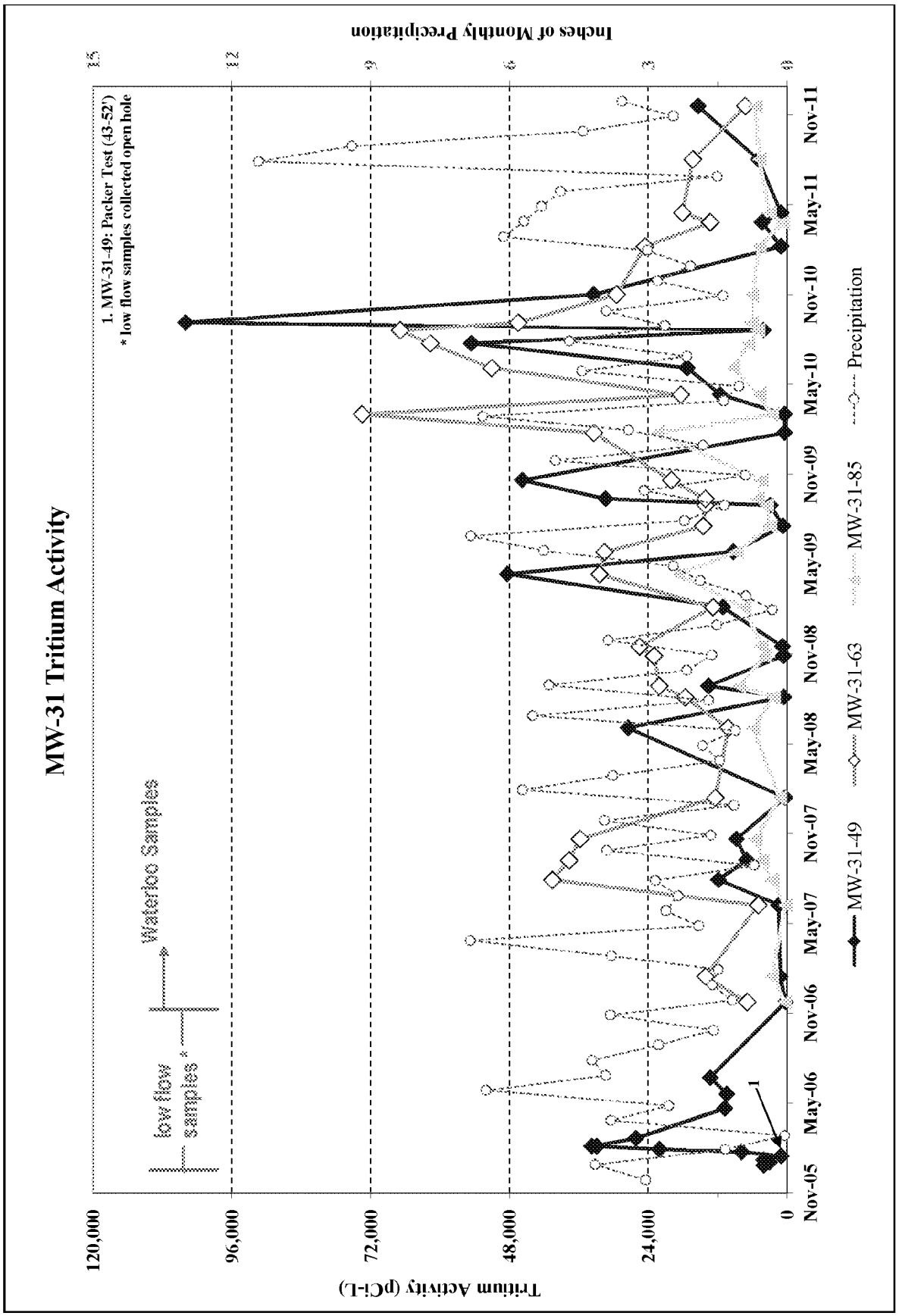


FIGURE G2

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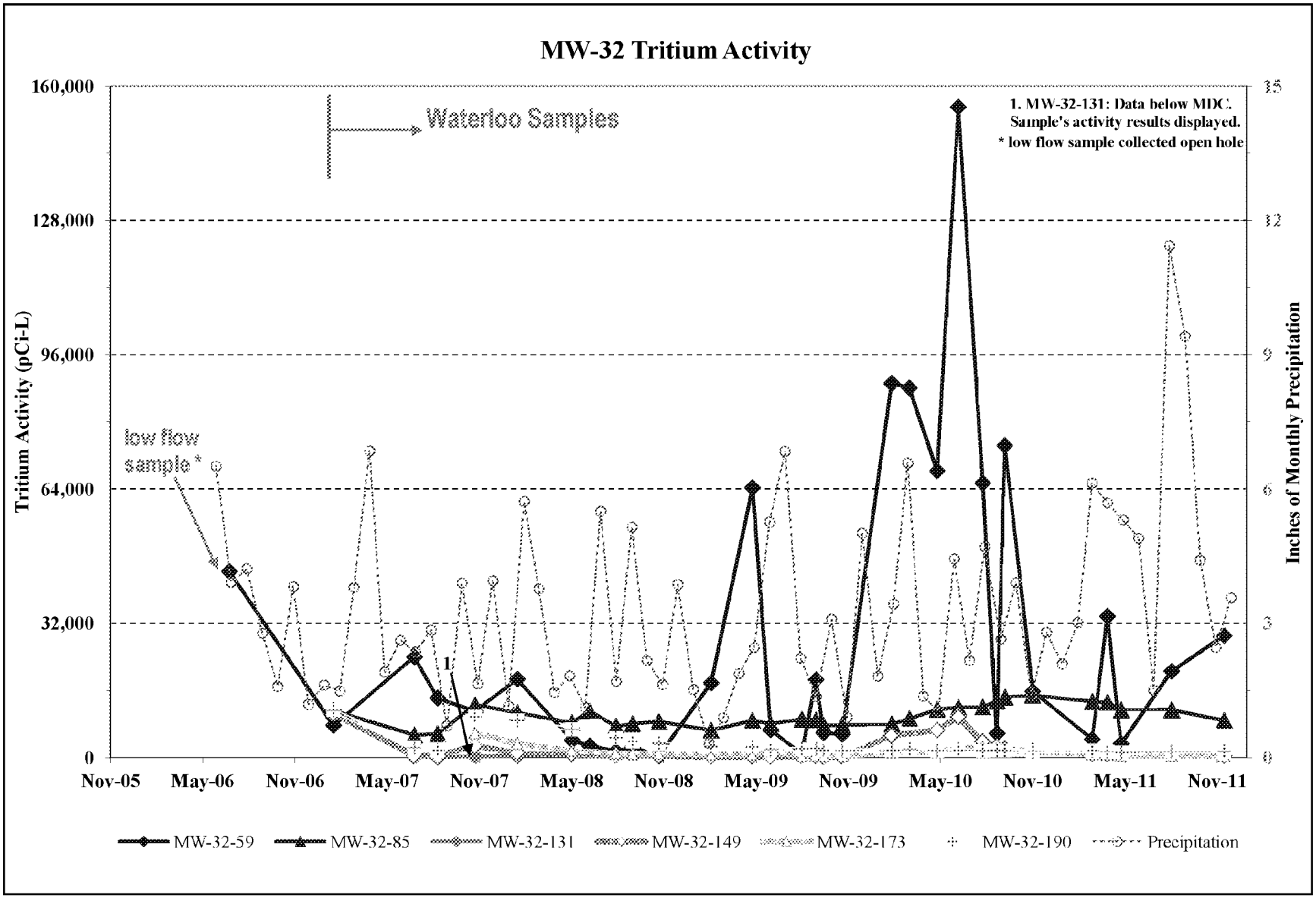

MW-32 Tritium Activity
Waterloo Samples
1. MW-32-131: Data below MDC. Sample's activity results displayed.
* low flow sample collected open hole
low flow sample *
1
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
160,000
128,000
96,000
64,000
32,000
0
15
12
9
6
3
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
Nov-11
MW-32-59
MW-32-85
MW-32-131
MW-32-149
MW-32-173
MW-32-190
Precipitation

FIGURE G3

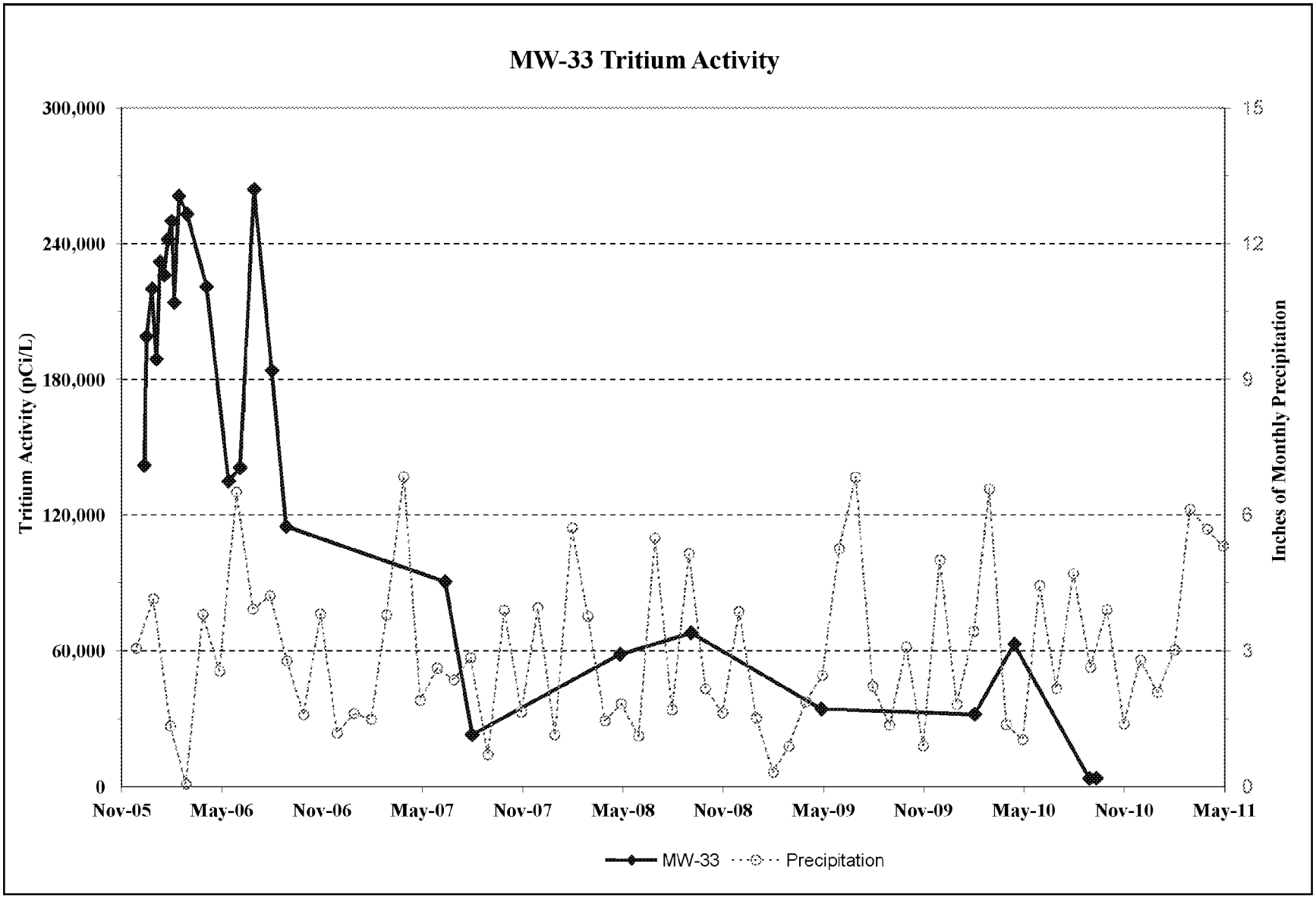

MW-33 Tritium Activity
Tritium Activity (pCi/L)
Inches of Monthly Precipitation
300,000
240,000
180,000
120,000
60,000
0
15
12
9
6
3
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
MW-33
Precipitation

FIGURE G4

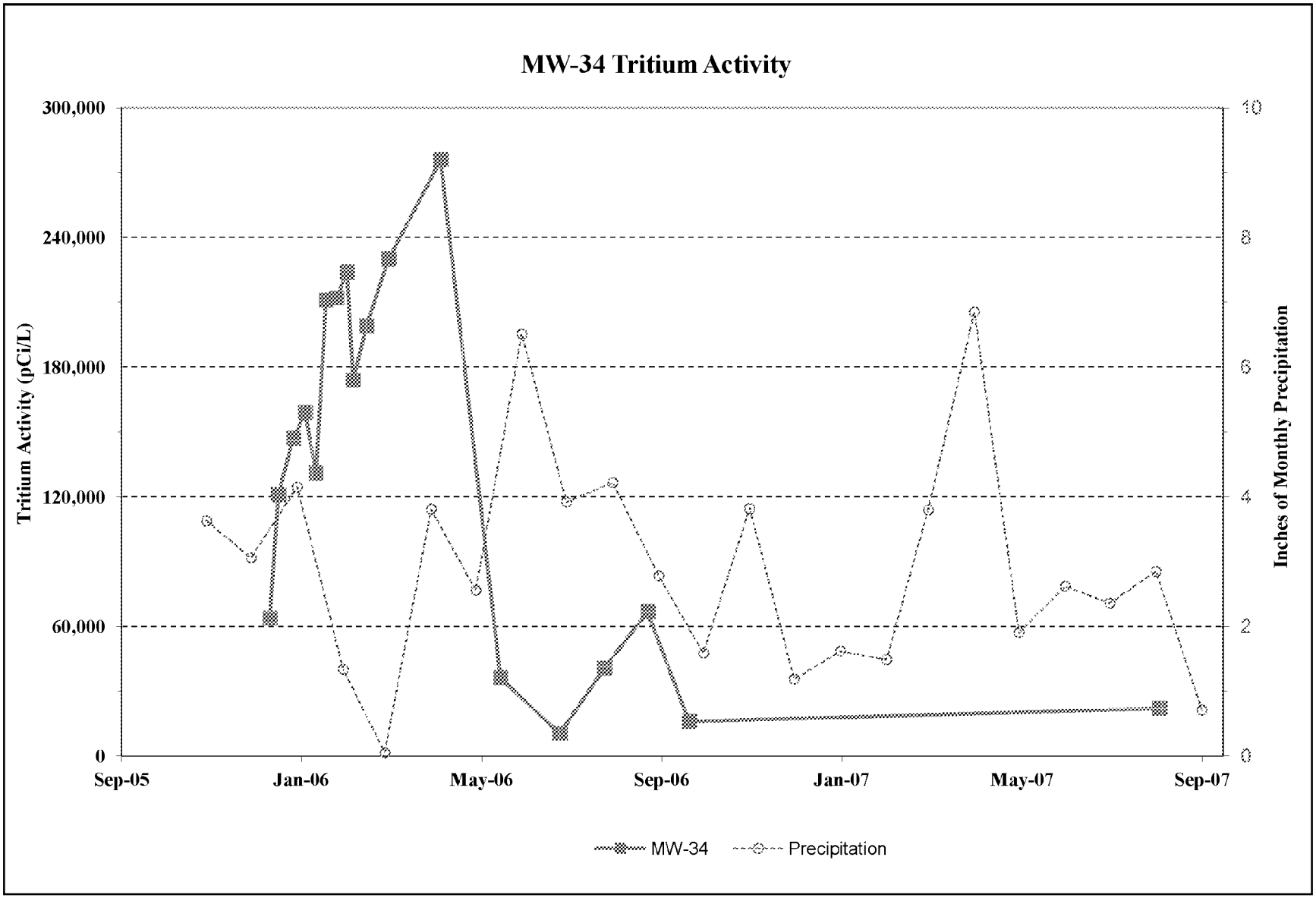

MW-34 Tritium Activity
Tritium Activity (pCi/L)
Inches of Monthly Precipitation
300,000
240,000
180,000
120,000
60,000
0
10
8
6
4
2
0
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
MW-34
Precipitation

FIGURE G5

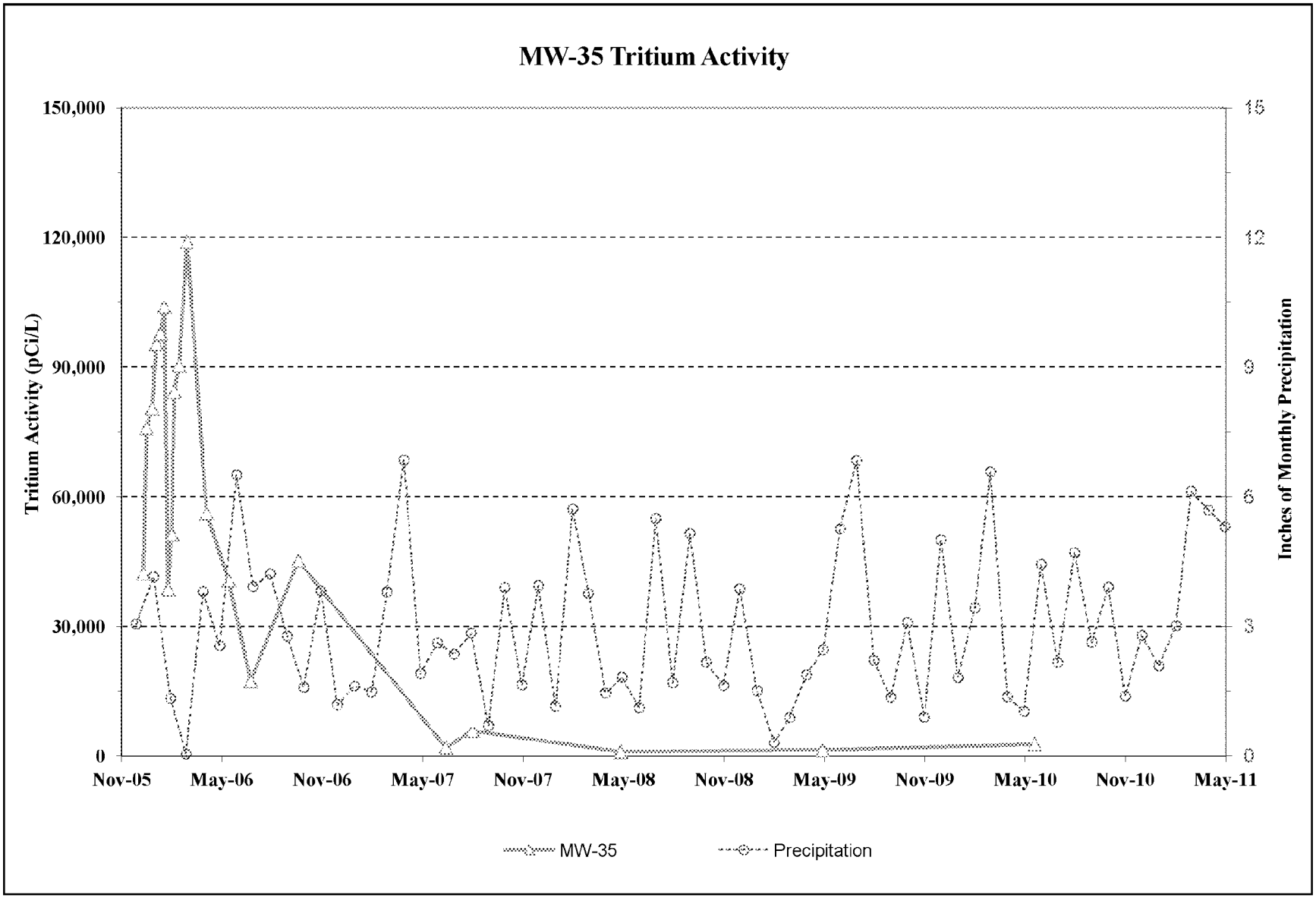

MW-35 Tritium Activity
150,000
120,000
90,000
60,000
30,000
0
Tritium Activity (pCi/L)
15
12
9
6
3
0
Inches of Monthly Precipitation
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
MW-35
Precipitation

FIGURE G6

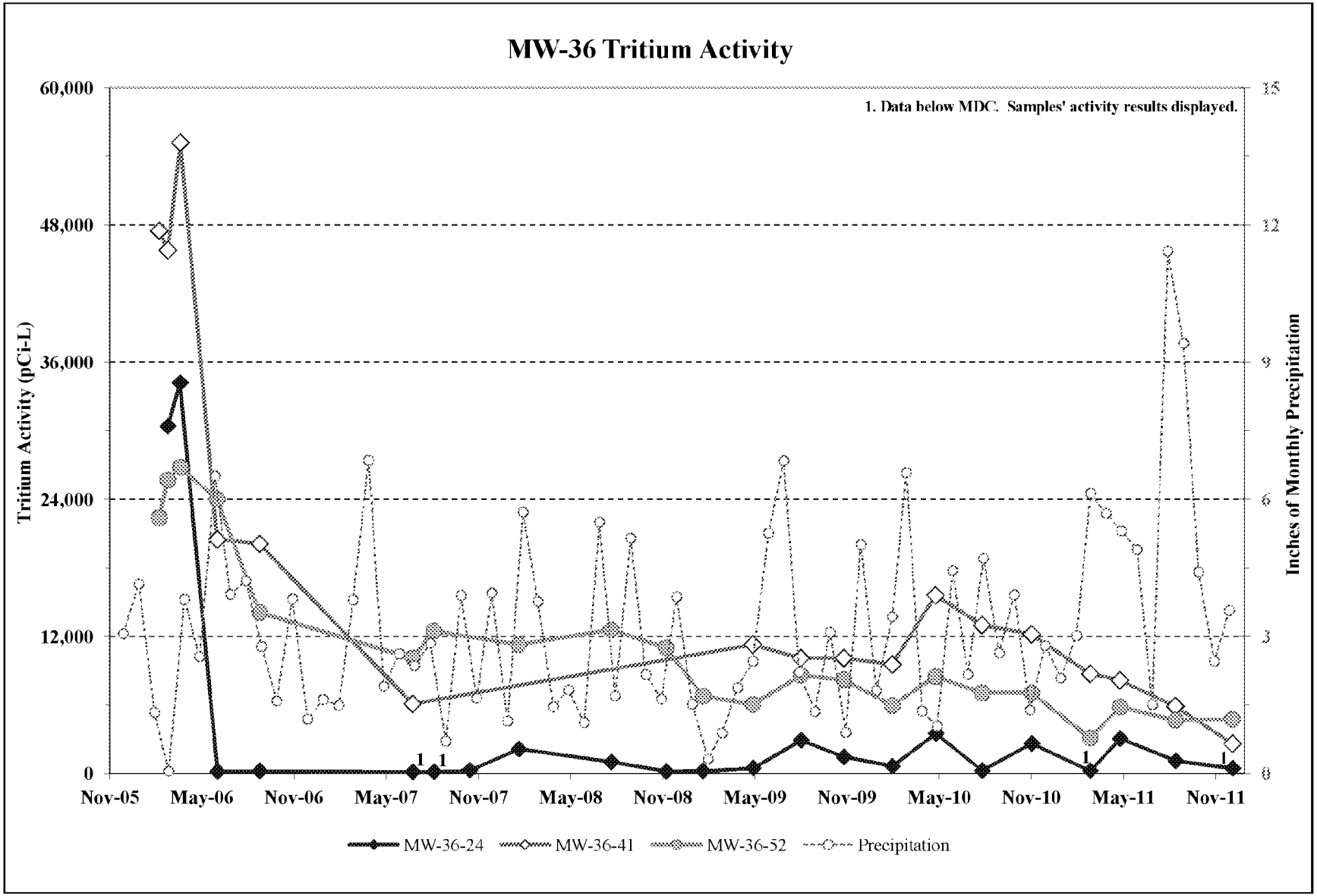

MW-36 Tritium Activity
1. Data below MDC. Samples' activity results displayed.
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
60,000
48,000
36,000
24,000
12,000
0
18
12
9
6
3
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
Nov-11
1
1
1
1
MW-36-24
MW-36-41
MW-36-52
Precipitation

FIGURE G7

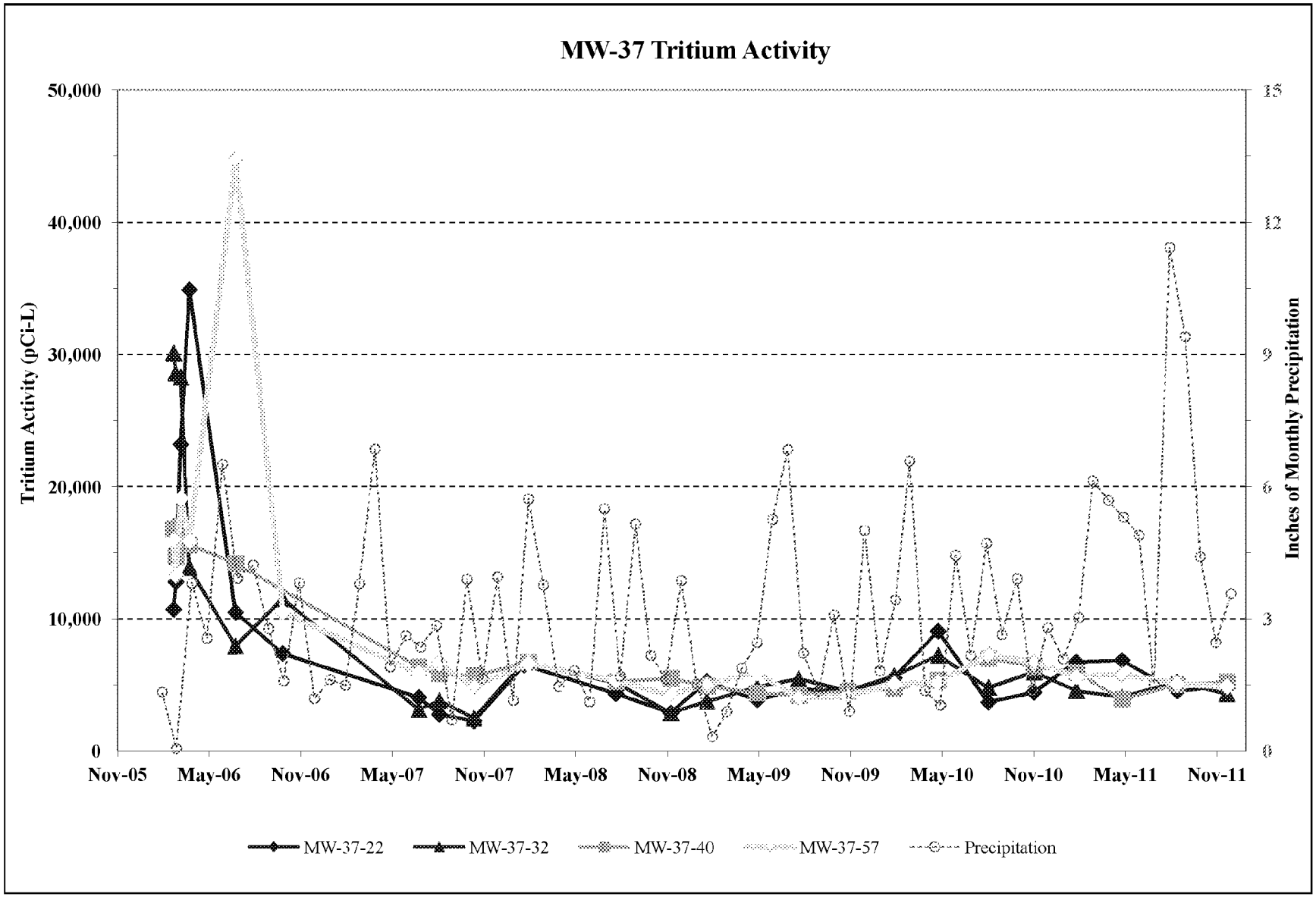

MW-37 Tritium Activity
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
50,000
40,000
30,000
20,000
10,000
0
15
12
9
6
3
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
Nov-11
MW-37-22
MW-37-32
MW-37-40
MW-37-57
Precipitation

FIGURE G8

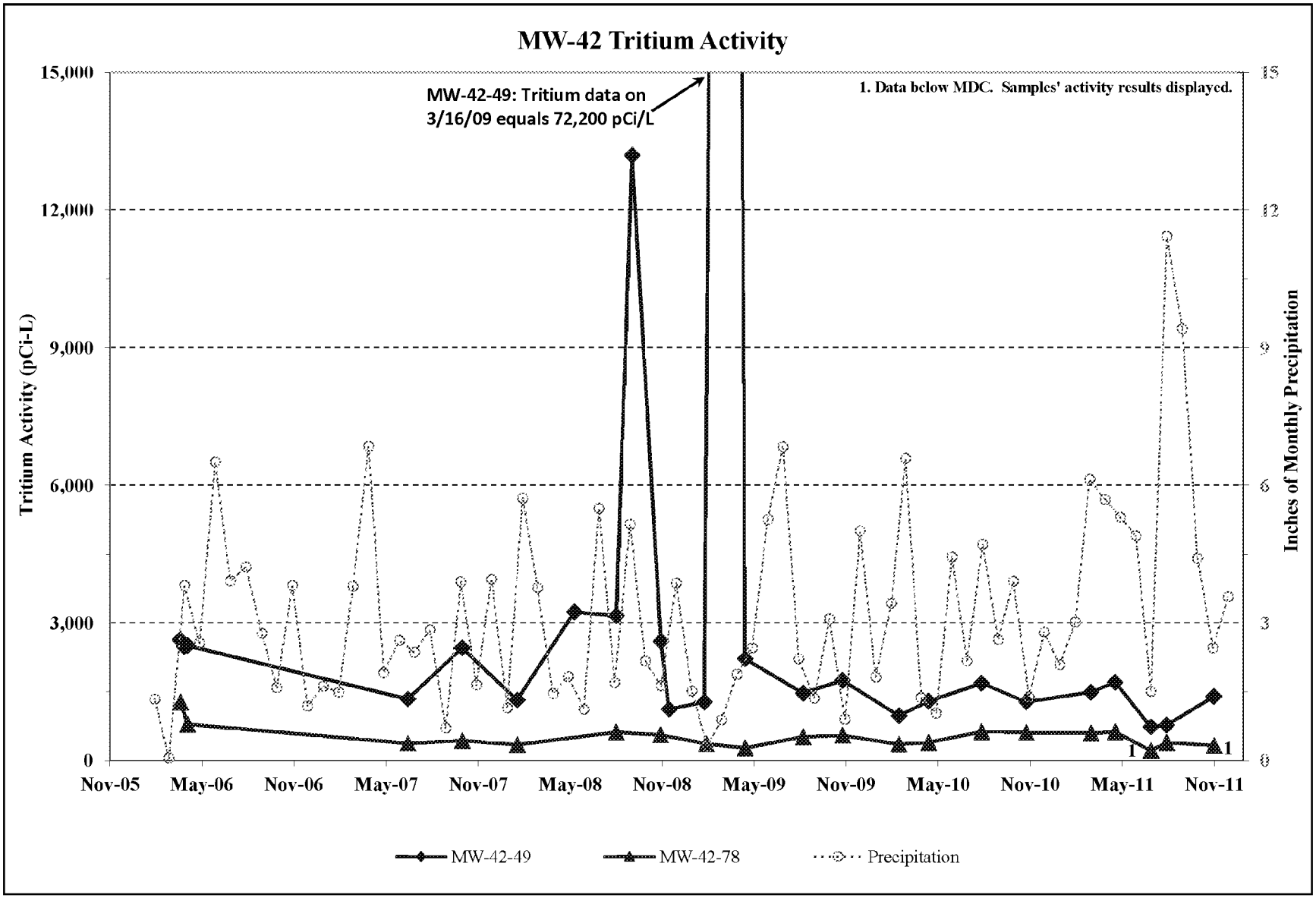

MW-42 Tritium Activity
MW-42-49: Tritium data on 3/16/09 equals 72,200 pCi/L
1. Data below MDC. Samples' activity results displayed.
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
15,000
12,000
9,000
6,000
3,000
0
15
12
9
6
3
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
Nov-11
1
1
MW-42-49
MW-42-78
Precipitation

FIGURE G9

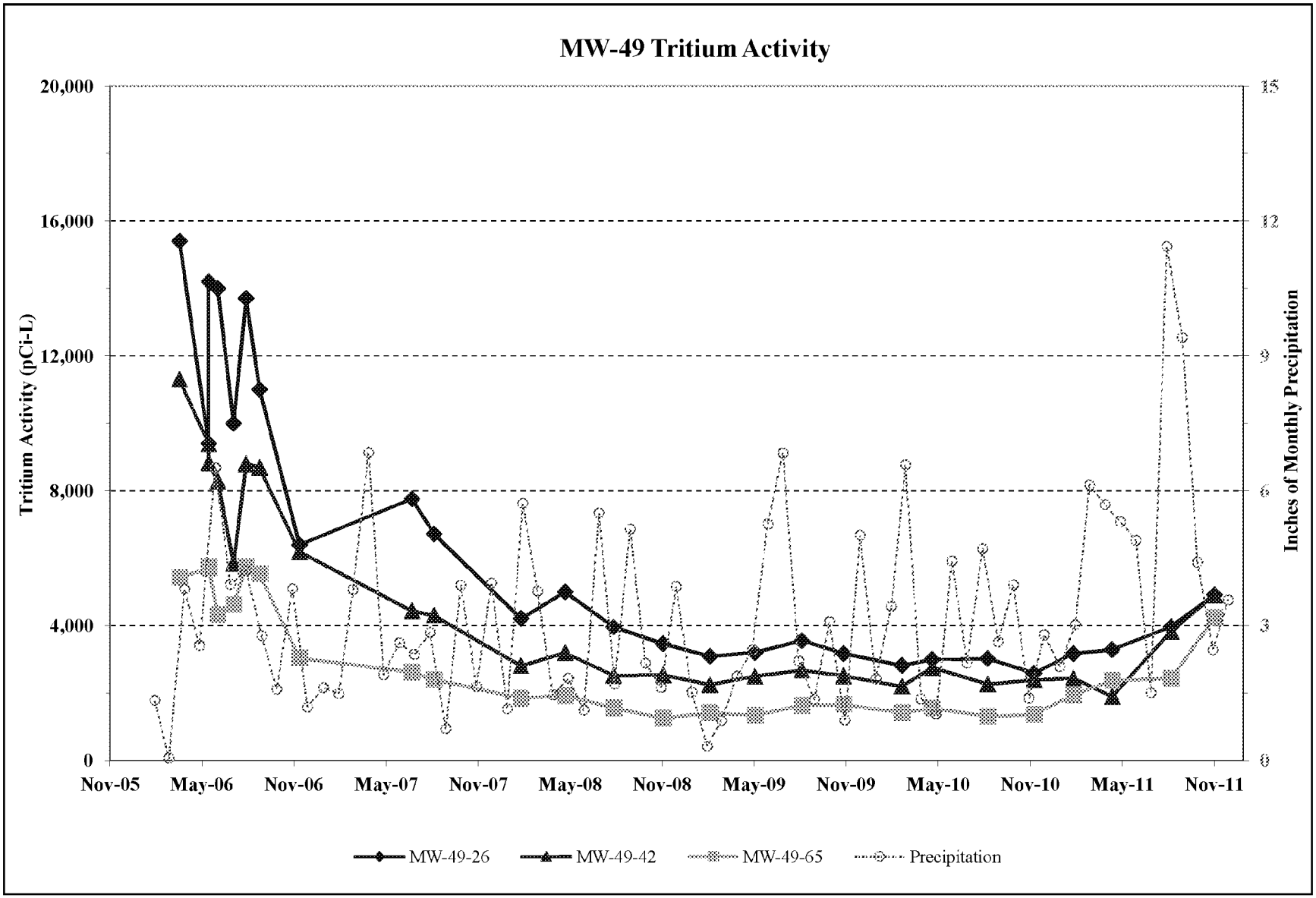

MW-49 Tritium Activity
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
20,000
16,000
12,000
8,000
4,000
0
15
12
9
6
3
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
Nov-11
MW-49-26
MW-49-42
MW-49-65
Precipitation

FIGURE G10

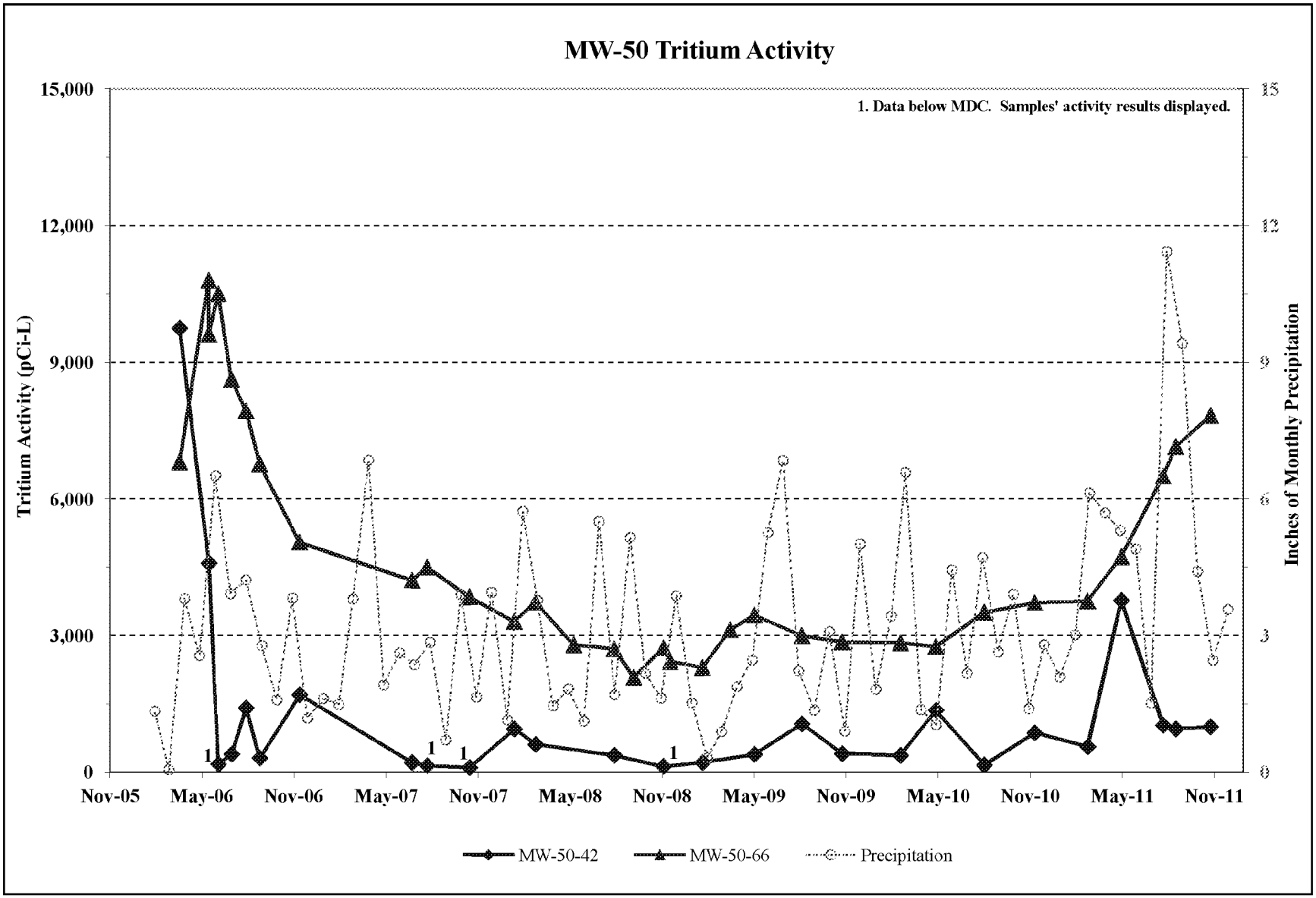

MW-50 Tritium Activity
1. Data below MDC. Samples' activity results displayed.
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
15,000
12,000
9,000
6,000
3,000
0
15
12
9
6
3
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
Nov-11
1
1
1
1
MW-50-42
MW-50-66
Precipitation

FIGURE G11

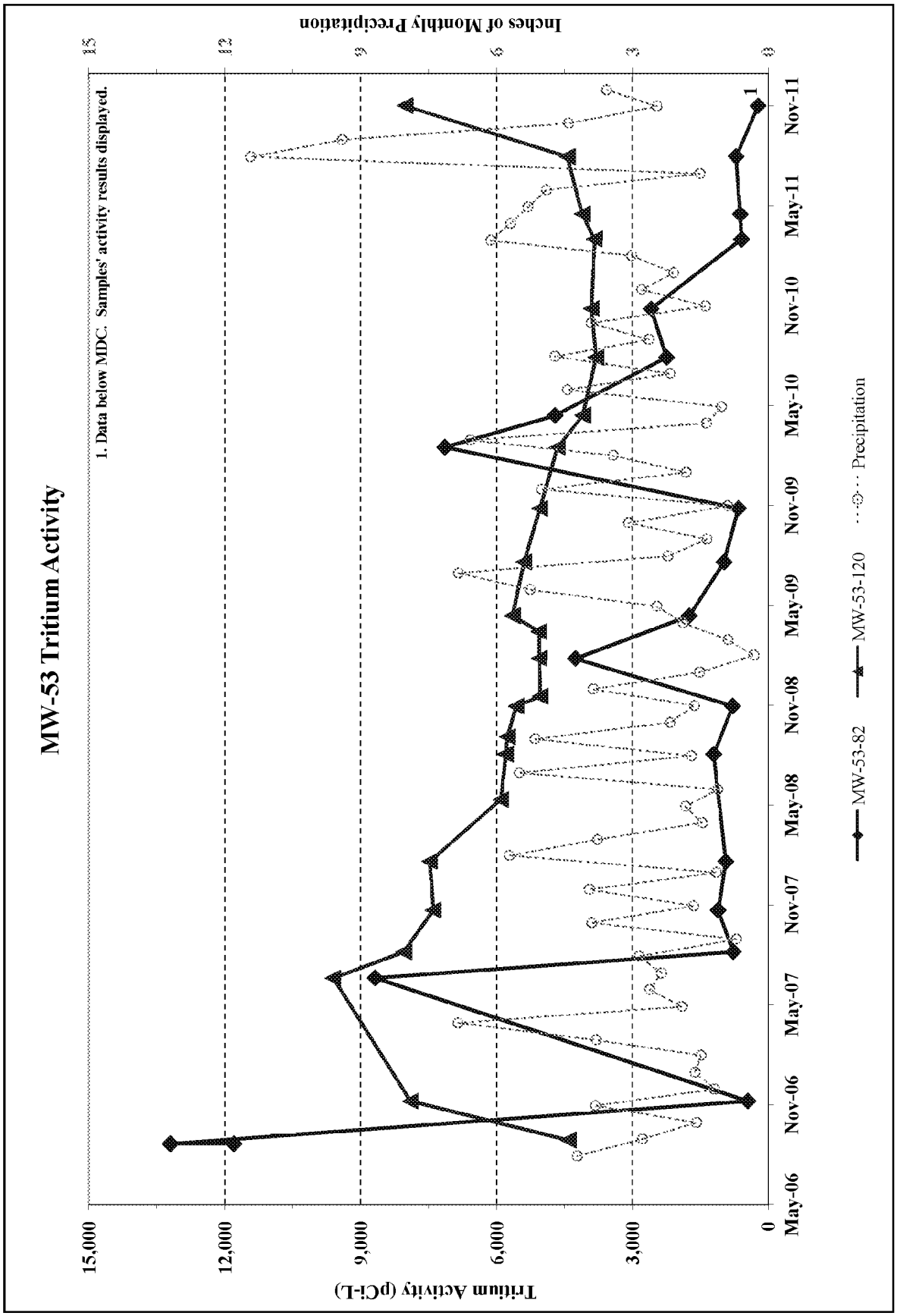

MW-53 Tritium Activity
1. Data below MDC. Samples' activity results displayed.
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
15,000
12,000
9,000
6,000
3,000
0
15
12
9
6
3
0
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
Nov-11
MW-53-82
MW-53-120
Precipitation

FIGURE G12

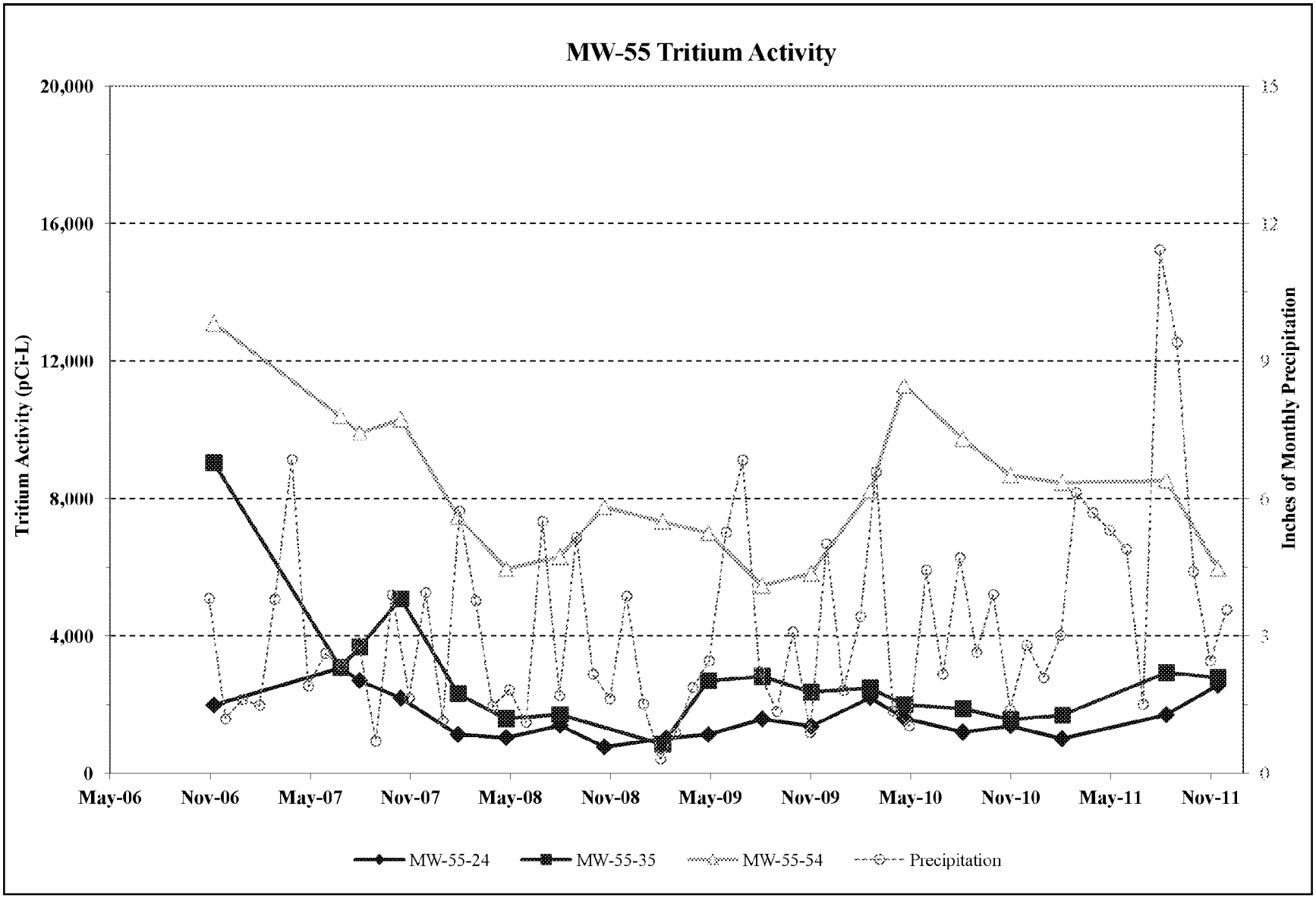

MW-55 Tritium Activity
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
20,000
16,000
12,000
8,000
4,000
0
15
12
9
6
3
0
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
Nov-11
MW-55-24
MW-55-35
MW-55-54
Precipitation

FIGURE G13

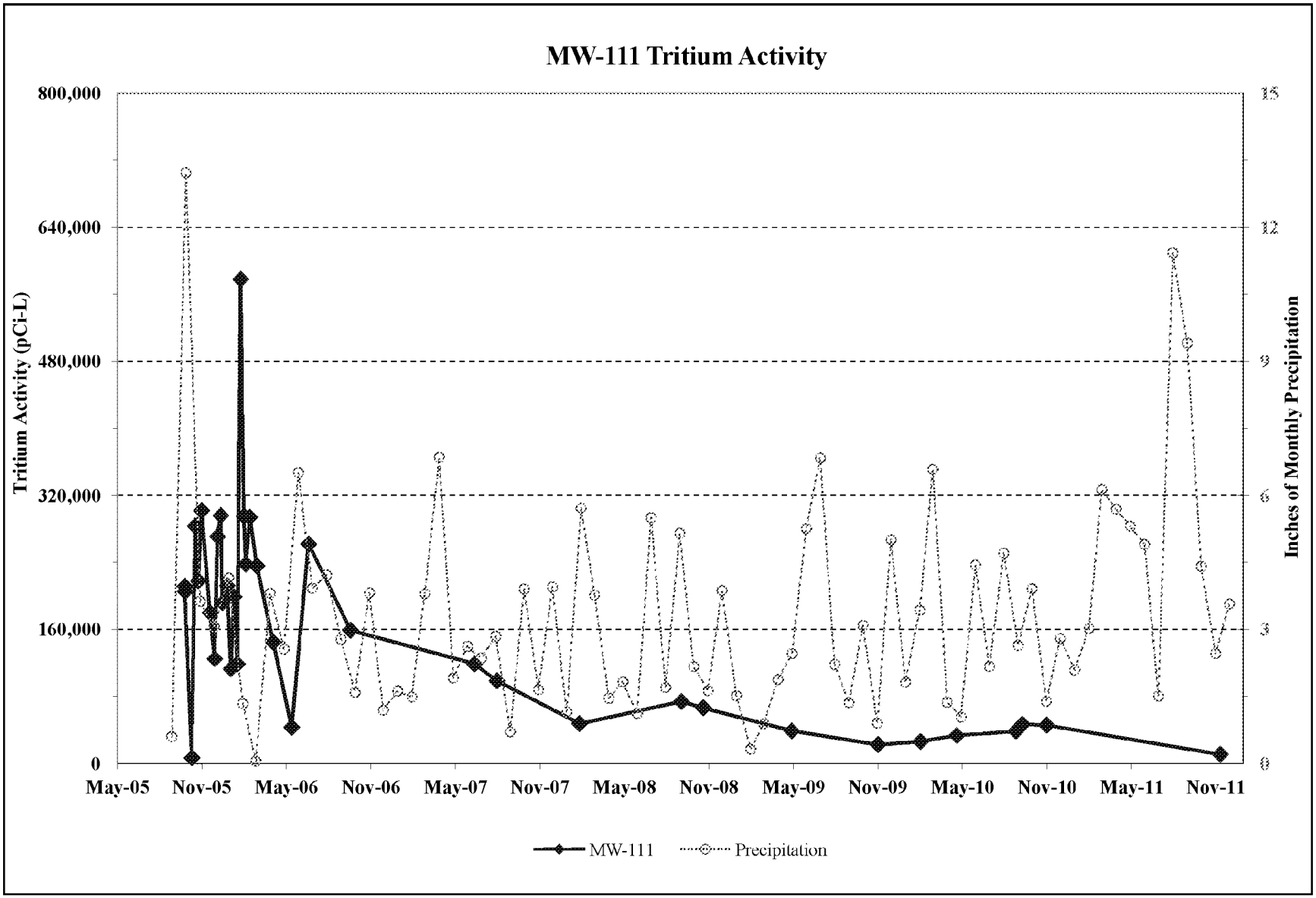

MW-111 Tritium Activity
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
800,000
640,000
480,000
320,000
160,000
0
15
12
9
6
3
0
May-05
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
Nov-11
MW-111
Precipitation

FIGURE G14

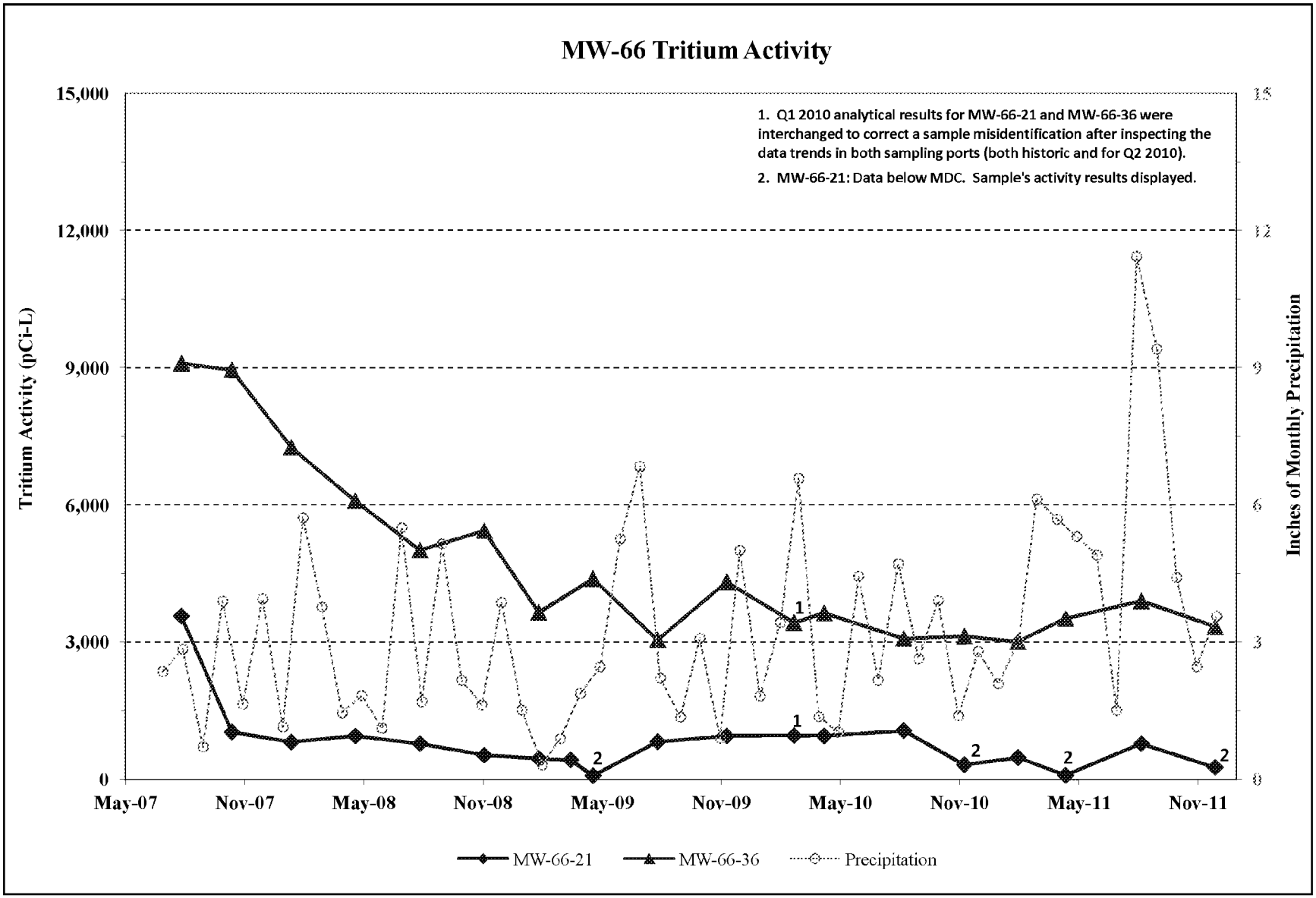

MW-66 Tritium Activity
1. Q1 2010 analytical results for MW-66-21 and MW-66-36 were interchanged to correct a sample misidentification after inspecting the data trends in both sampling ports (both historic and for Q2 2010).
2. MW-66-21: Data below MDC. Sample's activity results displayed.
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
15,000
12,000
9,000
6,000
3,000
0
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
Nov-11
MW-66-21
MW-66-36
Precipitation

FIGURE G15

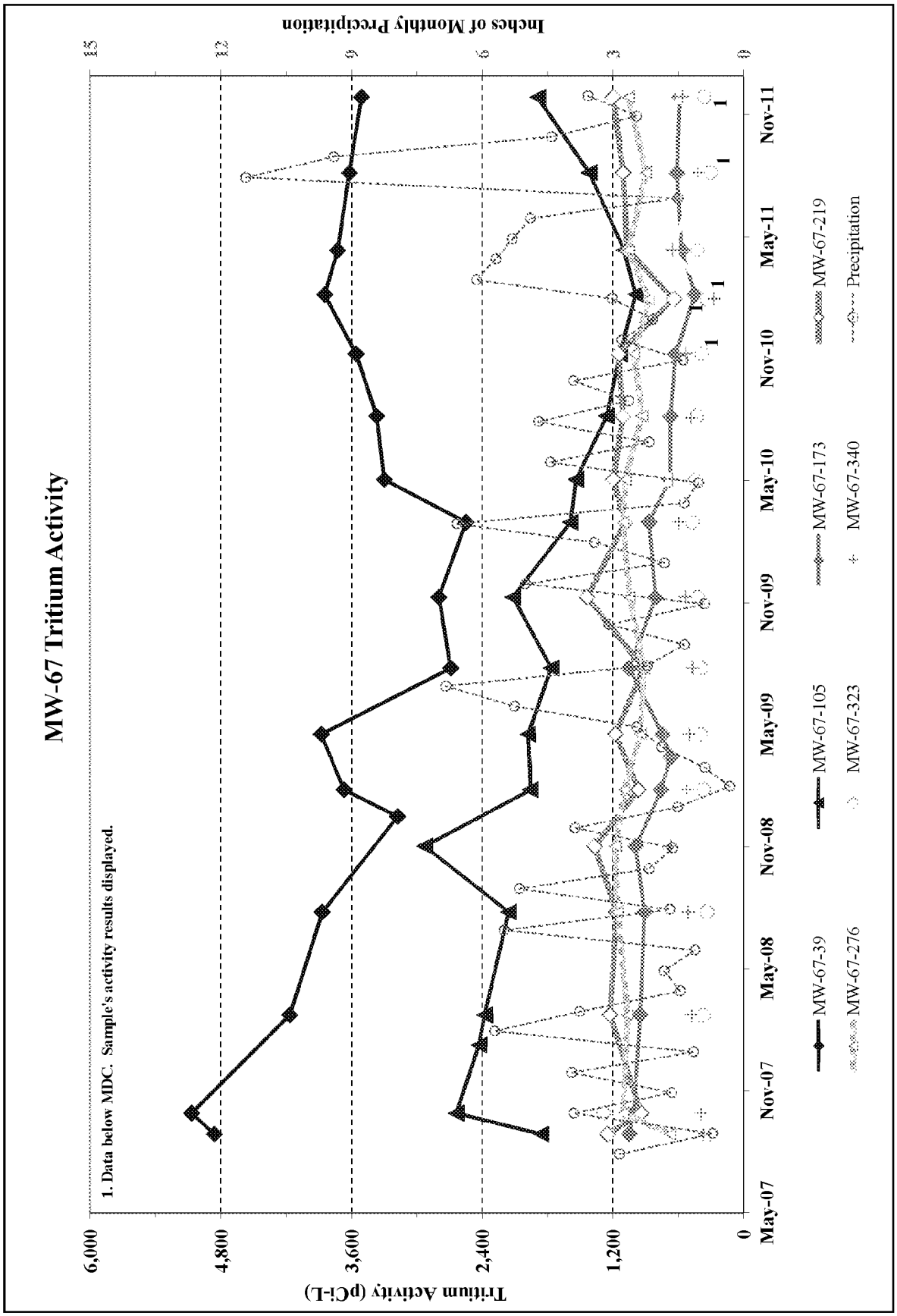
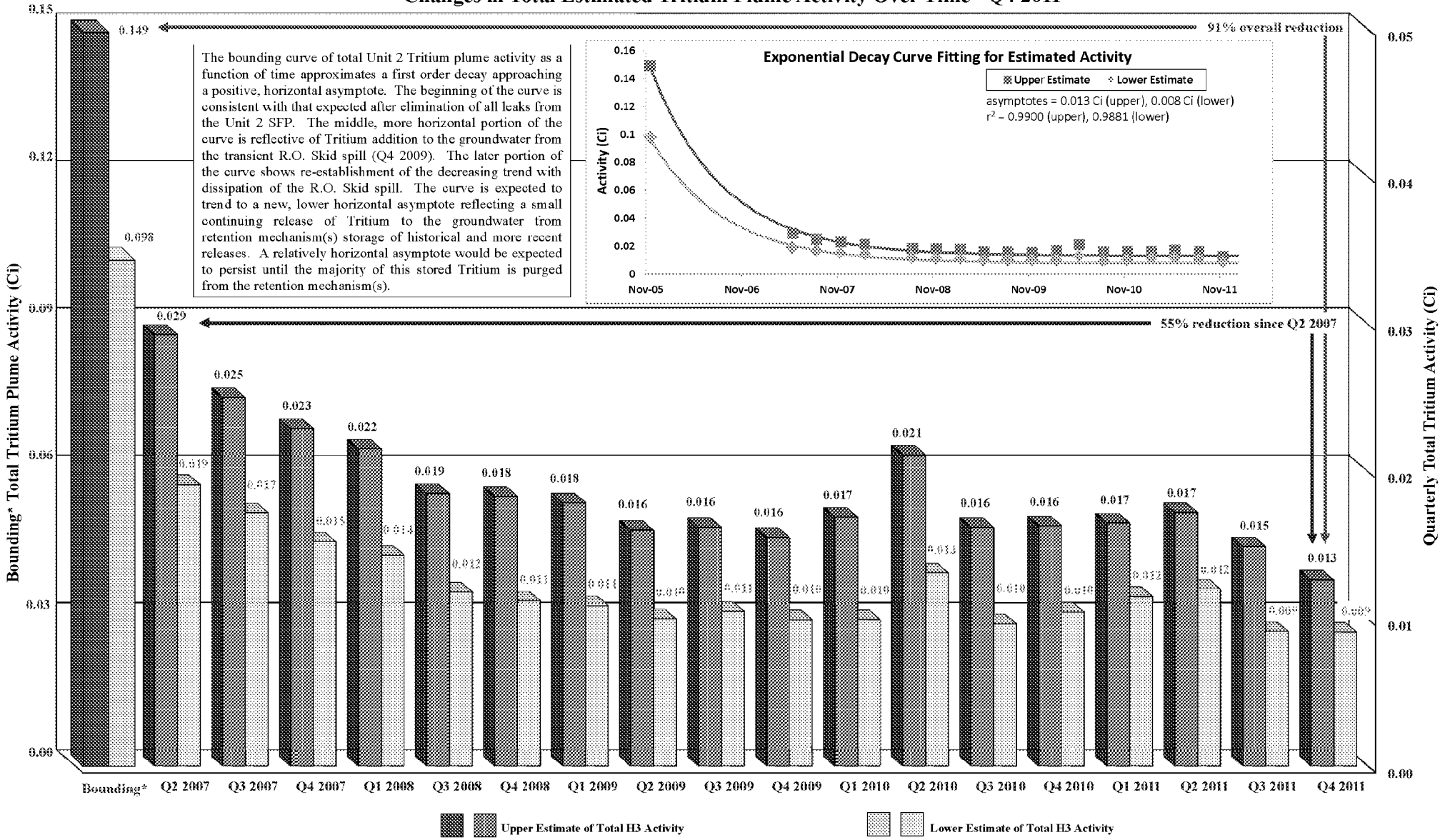

MW-67 Tritium Activity
1. Data below MDC. Sample's activity results displayed.
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
6,000
4,800
3,600
2,400
1,200
0
15
12
9
6
3
0
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
Nov-11
MW-67-39
MW-67-105
MW-67-173
MW-67-219
MW-67-276
MW-67-323
MW-67-340
Precipitation

FIGURE G16

IPEC00268047

Changes in Total Estimated Tritium Plume Activity Over Time - Q4 2011



The bounding curve of total Unit 2 Tritium plume activity as a function of time approximates a first order decay approaching a positive, horizontal asymptote. The beginning of the curve is consistent with that expected after elimination of all leaks from the Unit 2 SFP. The middle, more horizontal portion of the curve is reflective of Tritium addition to the groundwater from the transient R.O. Skid spill (Q4 2009). The later portion of the curve shows re-establishment of the decreasing trend with dissipation of the R.O. Skid spill. The curve is expected to trend to a new, lower horizontal asymptote reflecting a small continuing release of Tritium to the groundwater from retention mechanism(s) storage of historical and more recent releases. A relatively horizontal asymptote would be expected to persist until the majority of this stored Tritium is purged from the retention mechanism(s).

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 Q4 2011 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 2005 through Nov 2006 (a smaller percentage of the Tritium levels required inclusion of measurements through Sept 2007). 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
(Q4 2011)

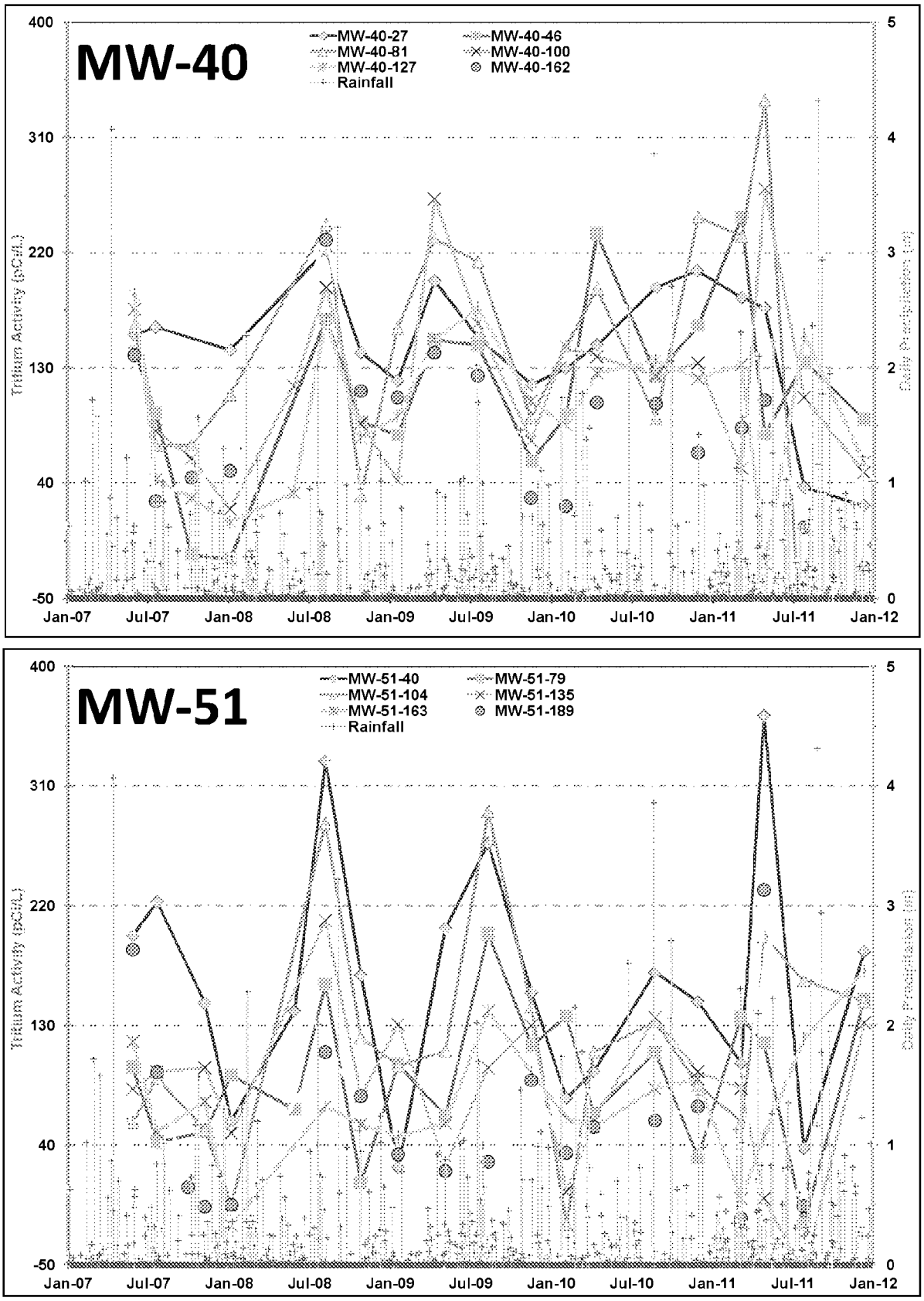


FIGURE H1

APPENDIX I: MW-68 BOREHOLE, WELL COMPLETION AND GEOPHYSICAL LOGS

PRELIMINARY BORING LOG

SH. 1 OF 5

Indian Point Energy Center
Buchanan, NY

BORING NO. MW-68 REV. 1 MAP

REVIEWED BY:			
PROJECT NO:	01.0017869.92	COORDINATES:	
G. SURF. EL.	18.49'	NORTH:	
DATUM		EAST:	
FINAL BORING DEPTH (FT)	150'		

SAMPLER: 6" hand auger; 2" O.D. split spoon, PQ core barrel	BORING CO.: Aquifer Drilling and Testing	GROUND WATER READINGS	
SAMPLER HAMMER: 140 lbs Automatic/300 lbs Donut	FOREMAN: David Carter	DATE / DEPTH	STABILIZATION TIME
CASING SIZE: 8"	ENGINEER: Josh Simpson	11/2/11 / 10.2'	open borehole - 1 day
CASING HAMMER: spun (4' core) and reamed to 8"	DATE START: 10/13/2011		
ROCK CORE: PQ core barrel	DATE END: 12/22/2011		

DEPTH (FT)	CORING (MIN/FT)	SAMPLE / CORE NO.	SAMPLE DEPTH (FT)	BLOWS / 6 INCH	N VALUE	SOIL PEN. / REC (IN / IN) ROCK PEN. / REC. (FT/FT)	TOTAL CORE REC (%)	ROD (%)	DRILLING FLUIDS LOST (GALLONS)	SAMPLE DESCRIPTION	STRATIGRAPHY / FRACTURE ZONE	NOTES	INSITU PROPERTIES: HARDNESS (see below for values) 1 2 3 4 5	INSITU PROPERTIES: WEATHERING (see below for values) 1 2 3 4 5	NO. OF FRACTURES PER FOOT (see below for values) 1 2 3 4 5
1											SAND	1, 2			
2												3			
3		S1	2.0 - 2.5							S1: Brown, fine to medium SAND and GRAVEL, trace silt.					
4															
5		S2	4.0 - 4.5							S2: Gray and black. GRAVEL and COBBLES, little(-) fine sand, trace silt.					
6															
7		S3	5.5 - 6.0							S3: NO RECOVERY.		4, 5			
8															
9		S4	8.0 - 8.2	>100		3/tip				S4: Very dense, gray, fine to medium SAND. little gravel, trace(+) silt.		6			
10									200			7			
11		S5	10.0 - 10.2	>100		3/1.5			50	S5: Potential slough from above. Gray, GRAVEL, little fine to medium sand, trace silt.	BEDROCK				
12															
13												8			
14	4	R1	14.3 - 17.8			3.5/3.0	85.7	23.8	50	R1: Moderately hard to hard, moderate to slight weathering. fine to medium grained, gray and brown, MARBLE.			4 X	4 X	4 X
15	5								60	15.8-16.5 ft: Moderately weathered, rough, sub-vertical fractures. Rock sub-angular with fine sand on fracture faces.			3 X	3 X	3 X
16	7								30		FZ		3 X	3 X	3 X
17	4	(1/2 foot)							30				4 X	4 X	4 X
18	4	R2	17.8 - 22.8			5.0/4.5	89.4	83	100	R2: Hard, moderate to slight weathering, fine grained, gray, MARBLE.			4 X	2 X	4 X
19	5								50	Fracture Zone: 21.4-22.2 ft. Smooth to rough, very close, sub-horizontal, mineralization in fracture.			4 X	2 X	4 X
20	5								25				4 X	4 X	4 X
21	5												4 X	2 X	4 X
22	5								25		FZ		3 X	2 X	3 X
23	6	R3	22.8 - 27.8			5.0/4.0	80	64.5	10	R3: Hard to moderately hard, slight to moderate weathering, fine grained, gray. MARBLE.			4 X	4 X	2 X
24	3								40	Fracture Zone: 25.0-26.0 ft. Rough, sub-vertical to sub-horizontal, sub-angular to sub-rounded pebbles with fine sand on surfaces.	FZ		4 X	4 X	4 X
25	1										FZ		4 X	2 X	4 X
26	3								20				4 X	4 X	3 X
27	4								40				3 X	4 X	3 X
28	6	R4	27.8 - 32.8			5.0/5.0	100	41.6	55	R4: Moderately hard to hard, moderate to slight weathering, fine grained, gray. MARBLE.			3 X	2 X	4 X
29	3												4 X	4 X	3 X
30	4								25				4 X	4 X	3 X

GRANULAR SOILS		COHESIVE SOILS	
BPF	DENSITY	BPF	CONSISTENCY
0-4	VERY LOOSE	<2	VERY SOFT
4-10	LOOSE	2-4	SOFT
10-30	MEDIUM DENSE	4-8	MEDIUM
30-50	DENSE	8-15	STIFF
>50	VERY DENSE	15-30	VERY STIFF
		>30	HARD

ROCK CORE CHARACTERISTICS			
	HARDNESS		WEATHERING
1	VERY SOFT	1	COMPLETE
2	MEDIUM	2	SEVERE
3	MODERATELY HARD	3	MODERATE
4	HARD	4	SLIGHT
5	VERY HARD	5	MECHANICAL BREAK

JOINT/FRACTURE CHARACTERISTICS			
NO. PER FT		SPACING/THICKNESS	ATTITUDE
(1)	0	<2"	VERY CLOSE/VERY THIN	HORIZONTAL
2)	1-2	2"-1'	CLOSE/THIN	SUB-HORIZONTAL
3)	3-10	1'-3'	MOD. CLOSE/MOD. THICK	MOD DIPPING
4)	11-20	3'-10'	WIDE/THICK	SUB-VERTICAL
		>10'	VERY WIDE/VERY THICK	VERTICAL

NOTES:
1) Water level readings have been made at times and under conditions stated. Fluctuations of groundwater levels may occur due to other factors than those present at the time measurements were made.
2) Stratification lines represent approximate boundaries between soil and rock types. transitions may be gradual.
3) Vacuum excavated completed to 6 feet below ground surface. Samples S1 through S3 were collected with a hand auger.
4) Saturated soil observed at approximately 6 ft below ground surface. Possibly perched water above mud mat.
5) Unable to collect a sample with hand auger for S3 due to numerous cobbles/gravel and limited sand/fines at 5.5 to 6 feet below ground surface.
6) Grout/mud mat possibly observed in sample S4. After grinding with the roller bit for approximately 10 minutes, the rods dropped approximately one foot without resistance. Additionally, no return water recirculated back into the wash tub. 8.2 to 9.2 ft bgs.
7) Top of bedrock at approximately 10 feet below ground surface.
8) 10 inch ID augers advanced into bedrock to 14.2 feet below ground surface. Eight inch casing place inside the augers, grouted into rock and and the augers were removed from the hole. Spun the augers out in reverse through 7 feet below ground surface.

PRELIMINARY BORING LOG

BORING NO. MW-68

REVIEWED BY:

PROJECT NO: 01.0017869.92

G. SURF. EL. 18.49'

DATUM

FINAL BORING DEPTH (FT) 150'

SAMPLER 6" hand auger, 2" O.D. split spoon, PQ core barrel

SAMPLER HAMMER 140 lbs Automatic/300 lbs Donut

CASING SIZE 8"

CASING HAMMER spur (4" core) and reamec to 8"

ROCK CORE PQ core barrel

BORING CO. Aquifer Drilling and Testing

FOREMAN Davis Carter

ENGINEER Josh Simpson

DATE START 10/13/2011

DATE END 12/22/2011

GROUND WATER READINGS

DATE	DEPTH	CASING	STABILIZATION TIME
11/2/11	10.2'		open borehole - 1 day

DEPTH (FT)	CORING (MIN/FT)	SAMPLE / CORE NO.	SAMPLE DEPTH (FT)	BLOWS / 6 INCH	N VALUE	SOIL PEN. / REC. (IN / IN) ROCK PEN. / REC. (FT/FT)	TOTAL CORE REC (%)	ROD (%)	DRILLING FLUIDS LOST (GALLONS)	SAMPLE DESCRIPTION	STRATIGRAPHY / FRACTURE ZONE	NOTES	INSITU PROPERTIES: HARDNESS (see below for values) 1 2 3 4 5	INSITU PROPERTIES: WEATHERING (see below for values) 1 2 3 4 5	NO. OF FRACTURES PER FOOT (see below for values) 1 2 3 4 5
31	3	R4	continued						30					X	X	X
32	6													X	X	X
33	5	R5	32.8 - 37.8			5.0/5.0	100	80	100	R5: Moderately hard to hard, moderate to slight weathering, fine grained, gray, MARBLE.				X	X	X
34	7								40				X	X	X	X
35	4								15					X	X	X
36	5								15					X	X	X
37	3								20				X	X	X	X
38	5	R6	37.8 - 42.8			5.0/5.0	100	70	80	R6: Hard to moderaterly hard, moderate to slight weathering, fine grained, gray, MARBLE.				X	X	X
39	5								15					X	X	X
40	3								20					X	X	X
41	3								20					X	X	X
42	5												X	X	X	X
43	4	R7	42.8 - 47.8			5.0/4.9	98	43.3	75	R7: Moderately hard to hard, moderate weathering, fine grained gray, MARBLE.	FZ		X	X	X	X
44	3									Fracture Zone. 43.5 - 45.0 ft. Sub-vertical to sub-horizontal, rough to smooth, iron oxide stainin (oxidation) on surfaces.	FZ		X	X	X	X
45	4								50				X	X	X	X
46	4													X	X	X
47	4													X	X	X
48	4	R8	47.8 - 52.8			5.0/5.0	100	20	70	R8: Moderately hard to hard, moderate weathering, fine grained dark gray, MARBLE.				X	X	X
49	4								25					X	X	X
50	4								10	Fracture Zone. 49.5 - 51.3 ft. Sub-horizontal to sub-vertical, rough to smooth, calcite healing/mineralization within fractures. Fines coating fracture surface at 51 ft below ground surface.	FZ		X	X	X	X
51	3								30		FZ			X	X	X
52	3										FZ		X	X	X	X
53	4	R9	52.8 - 57.8			5.0/5.0	100	48.8	75	R9: Moderately hard to hard, moderate to slight weathering, fine grained, gray, MARBLE.			X	X	X	X
54	4													X	X	X
55	3								30					X	X	X
56	4											9	X	X	X	X
57	4													X	X	X
58	5	R10	57.8 - 62.8			5.0/5.0	100	73.3	100	R10: Hard, slight weathering, fine to medium grained, dark gray, MARBLE.				X	X	X
59	4								50	Fracture Zone. 62.0 - 62.8 ft. Calcite healing/mineralization within fractures.				X	X	X
60	4								30					X	X	X

GRANULAR SOILS

BPF	DENSITY
0-4	VERY LOOSE
4-10	LOOSE
10-30	MEDIUM DENSE
30-50	DENSE
>50	VERY DENSE

COHESIVE SOILS

BPF	CONSISTENCY
<2	VERY SOFT
2-4	SOFT
4-8	MEDIUM STIFF
8-15	STIFF
15-30	VERY STIFF
>30	HARD

ROCK CORE CHARACTERISTICS

HARDNESS		WEATHERING	
1	VERY SOFT	1	COMPLETE
2	MEDIUM	2	SEVERE
3	MODERATELY HARD	3	MODERATE
4	HARD	4	SLIGHT
5	VERY HARD	5	MECHANICAL BREAK

JOINT/FRACTURE CHARACTERISTICS

NO. PER FT		SPACING/THICKNESS		ANGLE
(1)	0	<2"	VERY CLOSE/VERY THIN	0°-5°
(2)	1-2	2"-1'	CLOSE/THIN	5°-35°
(3)	3-10	1-3'	MOD CLOSE/MOD THICK	35°-55°
(4)	11-20	3-10'	WIDE/THICK	55°-85°
		>10'	VERY WIDE/VERY THICK	85°-90°

NOTES:

9) 56.2 - 56.7 ft below ground surface: Dark gray marble with calcite crystals on fracture surface.

IPEC00268052

PRELIMINARY BORING LOG

BORING NO. MW-68

REVIEWED BY:

PROJECT NO: 01.0017869.92

G. SURF. EL. 18.49'

DATUM

FINAL BORING DEPTH (FT) 150'

SAMPLER: 6" hand auger, 2" O.D. split spoon, PQ core barrel

SAMPLER HAMMER: 140 lbs Automatic/300 lbs Donut

CASING SIZE: 8"

CASING HAMMER: spun (4" core) and reamed to 8"

ROCK CORE: PQ core barrel

BORING CO: Aquifer Drilling and Testing

FOREMAN: Davis Carter

ENGINEER: Josh Simpson

DATE START: 10/13/2011

DATE END: 12/22/2011

GROUND WATER READINGS

DATE	DEPTH	CASING	STABILIZATION TIME
11/2/11	10.2'		open borehole - 1 day

DEPTH (FT)	CORING (MIN/FT)	SAMPLE / CORE NO.	SAMPLE DEPTH (FT)	BLOWS / 6 INCH	N VALUE	SOIL PEN. / REC. (IN / IN) ROCK PEN. / REC. (FT/FT)	TOTAL CORE REC (%)	ROD (%)	DRILLING FLUIDS LOST (GALLONS)	SAMPLE DESCRIPTION	STRATIGRAPHY / FRACTURE ZONE	NOTES	INSITU PROPERTIES: HARDNESS (see below for values) 1 2 3 4 5	INSITU PROPERTIES: WEATHERING (see below for values) 1 2 3 4 5	NO. OF FRACTURES PER FOOT (see below for values) 1 2 3 4 5
61	6	R10	continued						20					X	X
62	3								30		FZ	10	X	X	X
63	3	R11	62.8 - 67.8			5.0/5.0	100	76.7	70	R11: Hard, slight weathering, fine grained, gray, MARBLE.			X	X	X
64	4								60				X	X	X
65	5								50				X	X	X
66	4								60				X	X	X
67	4								40				X	X	X
68	4	R12	67.8 - 72.8			5.0/5.0	100	61.7	50	R12: Hard to moderately hard, slight to moderate weathering, fine grained, gray to dark gray, MARBLE.			X	X	X
69	5								50				X	X	X
70	4								20				X	X	X
71	5								15				X	X	X
72	4								10			11	X	X	X
73	3	R13	72.8 - 77.8			5.0/4.8	96	68.3	70	R13: Hard to moderately hard, slight weathering, fine grained, dark gray, MARBLE.			X	X	X
74	5								60				X	X	X
75	4								50				X	X	X
76	6								30				X	X	X
77	4								40			12	X	X	X
78	3	R14	77.8 - 82.8			5.0/5.0	100	11.7	100	R14: Hard to moderately hard, slight to moderate weathering, fine grained, gray, MARBLE.	FZ		X	X	X
79	4								40	Fracture Zone: 79.0 - 80.9 ft. Sub-vertical to sub-horizontal, rough to smooth, iron oxide staining and fines on fracture surfaces.	FZ		X	X	X
80	3								60		FZ		X	X	X
81	3								40				X	X	X
82	3								30				X	X	X
83	3	R15	82.8 - 87.8			5.0/5.0	100	31.7	30	R15: Hard, slight to moderate weathering, fine grained, gray, MARBLE.			X	X	X
84	4								30				X	X	X
85	6								20				X	X	X
86	4								15				X	X	X
87	4								30				X	X	X
88	4	R16	87.8 - 92.8			5.0/5.0	100	21.7	30	R16: Hard to moderately hard, slight to moderate weathering, fine grained, gray, MARBLE.			X	X	X
89	4								20				X	X	X
90	3								20				X	X	X

GRANULAR SOILS

BPF	DENSITY
0-4	VERY LOOSE
4-10	LOOSE
10-30	MEDIUM DENSE
30-50	DENSE
>50	VERY DENSE

COHESIVE SOILS

BPF	CONSISTENCY
<2	VERY SOFT
2-4	SOFT
4-8	MEDIUM STIFF
8-15	STIFF
15-30	VERY STIFF
>30	HARD

ROCK CORE CHARACTERISTICS

	HARDNESS		WEATHERING
1	VERY SOFT	1	COMPLETE
2	MEDIUM	2	SEVERE
3	MODERATELY HARD	3	MODERATE
4	HARD	4	SLIGHT
5	VERY HARD	5	MECHANICAL BREAK

JOINT/FRACTURE CHARACTERISTICS

NO. PER FT	SPACING/THICKNESS	ANGLE
(1) 0	<2" VERY CLOSE/VERY THIN	0°-5°
(2) 1-2	2"-1' CLOSE/THIN	5°-35°
(3) 3-10	1-3' MOD CLOSE/MOD THICK	35°-55°
(4) 11-20	3-10' WIDE/THICK	55°-85°
	>10' VERY WIDE/VERY THICK	85°-90°

NOTES:

10) Calcite mineralization (milky white and clear) in fractures at 62.0 - 63.5 ft below ground surface.

11) Dark gray MARBLE with calcite healed fractures at 71 - 72 ft below ground surface.

12) Calcite mineralization/healing in fractures at 77 - 78 ft below ground surface.

IPEC00268053

PRELIMINARY BORING LOG

BORING NO. MW-68

REVIEWED BY:

PROJECT NO: 01.0017869.92

G. SURF. EL. 18.49'

DATUM

FINAL BORING DEPTH (FT) 150'

SAMPLER 6" hand auger, 2" O.D. split spoon, PQ core barrel

SAMPLER HAMMER 140 lbs Automatic/300 lbs Donut

CASING SIZE 8"

CASING HAMMER spun (4" core) and reamed to 8"

ROCK CORE PQ core barrel

BORING CO. Aquifer Drilling and Testing

FOREMAN Davis Carter

ENGINEER Josh Simpson

DATE START 10/13/2011

DATE END 12/22/2011

GROUND WATER READINGS

DATE	DEPTH	CASING	STABILIZATION TIME
11/2/11	10.2'		open borehole - 1 day

DEPTH (FT)	CORING (MIN/FT)	SAMPLE / CORE NO.	SAMPLE DEPTH (FT)	BLOWS / 6 INCH	N VALUE	SOIL PEN. / REC. (IN / IN) ROCK PEN. / REC. (FT/FT)	TOTAL CORE REC (%)	ROD (%)	DRILLING FLUIDS LOST (GALLONS)	SAMPLE DESCRIPTION	STRATIGRAPHY / FRACTURE ZONE	NOTES	INSITU PROPERTIES: HARDNESS (see below for values) 1 2 3 4 5	INSITU PROPERTIES: WEATHERING (see below for values) 1 2 3 4 5	NO. OF FRACTURES PER FOOT (see below for values) 1 2 3 4 5
91	4	R16	continued						20		FZ	13	X	X	X
92	3								15				X	X	X
93	3	R17	92.9 - 97.9			5.0/5.0	100	33.3	70	R17: Hard to moderately hard, slight weathering, fine to medium grained, gray, MARBLE. Sub-vertical to vertical, smooth fracture through majority of core run.			X	X	X
94	3								35				X	X	X
95	5								15				X	X	X
96	4								15				X	X	X
97	2								30				X	X	X
98	3	R18	97.9 - 102.9			5.0/5.0	100	30	40	R18: Hard to moderately hard, slight to moderate weathering, fine grained, gray, MARBLE.			X	X	X
99	3								25				X	X	X
100	4								15	Fracture Zone: 99.7 - 100.5 ft. Sub-vertical, smooth, iron oxide staining and pyrite on fracture surfaces.	FZ		X	X	X
101	5								10		FZ		X	X	X
102	5								10				X	X	X
103	5	R19	102.9 - 107.9			5.0/5.0	100	35.8	35	R19: Hard, slight weathering, fine grained, gray, MARBLE.			X	X	X
104	7								40				X	X	X
105	6								30				X	X	X
106	6								60				X	X	X
107	6								55			14	X	X	X
108	6	R20	107.9 - 111.8			3.9/3.9	100	10.7	150	R20: Hard, slight weathering, fine grained, gray, MARBLE.		15	X	X	X
109	6								90				X	X	X
110	6								70				X	X	X
111	12								100				X	X	X
112	8	R21	111.8 - 112.8			1.0/1.0	100	70.8	120	R21: Hard, slight weathering, fine grained, gray, MARBLE.			X	X	X
113	5	R22	112.8 - 117.8			5.0/5.0	100	30.5	40	R22: Hard, slight to moderate weathering, fine grained, gray, MARBLE.		16	X	X	X
114	4								70	Vertical fracture with calcite deposited at 113 - 116 ft below ground surface. Rosy quartz and pyrite deposits at 114.8 - 115.8 ft below ground surface.		17	X	X	X
115	8								90				X	X	X
116	7								70				X	X	X
117	7								60				X	X	X
118	4	R23	117.8 - 122.8			5.0/5.0	100	31	65	R23: Hard, slight weathering, fine grained, gray, MARBLE.			X	X	X
119	6								50				X	X	X
120	6								35				X	X	X

GRANULAR SOILS

BPF	DENSITY
0-4	VERY LOOSE
4-10	LOOSE
10-30	MEDIUM DENSE
30-50	DENSE
>50	VERY DENSE

COHESIVE SOILS

BPF	CONSISTENCY
<2	VERY SOFT
2-4	SOFT
4-8	M. STIFF
8-15	STIFF
15-30	V.STIFF
>30	HARD

ROCK CORE CHARACTERISTICS

	HARDNESS		WEATHERING
1	VERY SOFT	1	COMPLETE
2	MEDIUM	2	SEVERE
3	MODERATELY HARD	3	MODERATE
4	HARD	4	SLIGHT
5	VERY HARD	5	MECHANICAL BREAK

JOINT/FRACTURE CHARACTERISTICS

NO. PER FT		SPACING/THICKNESS		ANGLE
(1)	0	<2"	VERY CLOSE/VERY THIN	0°-5°
(2)	1-2	2"-1'	CLOSE/THIN	5°-35°
(3)	3-10	1-3'	MOD CLOSE/MOD THICK	35°-55°
(4)	11-20	3'-10'	WIDE/THICK	55°-85°
		>10'	VERY WIDE/VERY THICK	85°-90°

NOTES:

13) Staining and fines on fracture surfaces at 90.3 - 91.0 ft below ground surface.

14) Approximately 0.8 ft of slough fell into the hole between R-19 and R-20.

15) Mechanical break (#5 classification for weathering) indicates zones that were possibly broken/fractured during the coring process.

16) Reduced the coring speed in last foot of R20 to potentially reduce the number of mechanical breaks in the core.

17) Pyrite observed on fracture faces of core in run R21.

IPEC00268054

PRELIMINARY BORING LOG

BORING NO. MW-68

REVIEWED BY:

PROJECT NO: 01.0017869.92

G. SURF. EL. 18.49'

DATUM

FINAL BORING DEPTH (FT) 150'

SAMPLER: 6" hand auger, 2" O.D. split spoon, PQ core barrel

SAMPLER HAMMER: 140 lbs Automatic/300 lbs Donut

CASING SIZE: 8"

CASING HAMMER: spun (4" core) and reamed to 8"

ROCK CORE: PQ core barrel

BORING CO.: Aquifer Drilling and Testing

FOREMAN: Davis Carter

ENGINEER: Josh Simpson

DATE START: 10/13/2011

DATE END: 12/22/2011

GROUND WATER READINGS

DATE	DEPTH	CASING	STABILIZATION TIME
11/2/11	10.2'		open borehole - 1 day

DEPTH (FT)	CORING (MIN/FT)	SAMPLE / CORE NO.	SAMPLE DEPTH (FT)	BLOWS / 6 INCH	N VALUE	SOIL PEN. / REC. (IN / IN) ROCK PEN. / REC. (FT/FT)	TOTAL CORE REC (%)	ROD (%)	DRILLING FLUIDS LOST (GALLONS)	SAMPLE DESCRIPTION	STRATIGRAPHY / FRACTURE ZONE	NOTES	INSITU PROPERTIES: HARDNESS (see below for values) 1 2 3 4 5	INSITU PROPERTIES: WEATHERING (see below for values) 1 2 3 4 5	NO. OF FRACTURES PER FOOT (see below for values) 1 2 3 4 5
121	4	R23	continued						20					X			X			X	
122	6								40					X			X			X	
123	4	R24	122.8 - 127.8			5.0/5.0	100	38.3	60	R24: Hard to moderately hard, slight to moderate weathering, fine to medium grained, gray and white, MARBLE.				X			X			X	
124	7								30	Fracture Zone: 126.0 - 127.8 ft. Sub-vertical to sub-horizontal, friable rock.				X			X			X	
125	6								20					X			X			X	
126	4								10					X			X			X	
127	3								10		FZ			X			X			X	
128	2	R25	127.8 - 132.8			5.0/4.3	86	7.5	50	R25: Hard to moderately hard, slight to moderate weathering, fine grained, gray to dark gray, MARBLE.	FZ			X			X			X	
129	8								35	Fracture Zone: 127.8 - 128.8 ft. Sub-vertical to sub-horizontal, moderately hard, moderate weathering.				X			X			X	
130	8								25					X			X			X	
131	7								15					X			X			X	
132	7								30					X			X			X	
133	4	R26	132.8 - 137.3			4.5/4.5	100	0	25	R26: Hard, slight weathering, fine grained, gray, MARBLE.				X				X		X	
134	7								30			18		X				X		X	
135	8								10					X			X			X	
136	9								5					X			X			X	
137	11	(1/2 foot)							10					X			X			X	
138	5	R27	137.3 - 142.3			5.0/5.0	100	23.3	30	R27: Hard, slight weathering, fine grained, gray, MARBLE.				X				X		X	
139	6								15					X				X		X	
140	5								15					X				X		X	
141	5								10					X				X		X	
142	6								15					X				X		X	
143	5	R28	142.3 - 147.3			5.0/5.0	100	35.8	40	R28: Hard to moderately hard, slight weathering, fine grained, gray, MARBLE.				X				X		X	
144	6								10	Fracture Zone: 145.3 - 145.6 ft. Fractures with fines on fracture surfaces. Trace pyrite and calcite mineralization.				X				X		X	
145	7								5		FZ	19		X			X			X	
146	7								5					X			X			X	
147	7								5					X			X			X	
148	5	R29	147.3 - 150.3			3.0/2.8	93.3	13.9	20	R29: Hard, slight weathering, fine grained, gray, MARBLE.				X				X		X	
149	5								10					X			X			X	
150	5								10					X				X		X	

GRANULAR SOILS

BPF	DENSITY
0-4	VERY LOOSE
4-10	LOOSE
10-30	MEDIUM DENSE
30-50	DENSE
>50	VERY DENSE

COHESIVE SOILS

BPF	CONSISTENCY
<2	VERY SOFT
2-4	SOFT
4-8	MEDIUM STIFF
8-15	STIFF
15-30	VERY STIFF
>30	HARD

ROCK CORE CHARACTERISTICS

	HARDNESS		WEATHERING
1	VERY SOFT	1	COMPLETE
2	MEDIUM	2	SEVERE
3	MODERATELY HARD	3	MODERATE
4	HARD	4	SLIGHT
5	VERY HARD	5	MECHANICAL BREAK

JOINT/FRACTURE CHARACTERISTICS

NO. PER FT		SPACING/THICKNESS	ANGLE
(1)	0	<2" VERY CLOSE/VERY THIN	0°-5°
(2)	1-2	2"-1' CLOSE/THIN	5°-35°
(3)	3-10	1-3' MOD CLOSE/MOD THICK	35°-55°
(4)	11-20	3-10' WIDE/THICK	55°-85°
		>10' VERY WIDE/VERY THICK	85°-90°

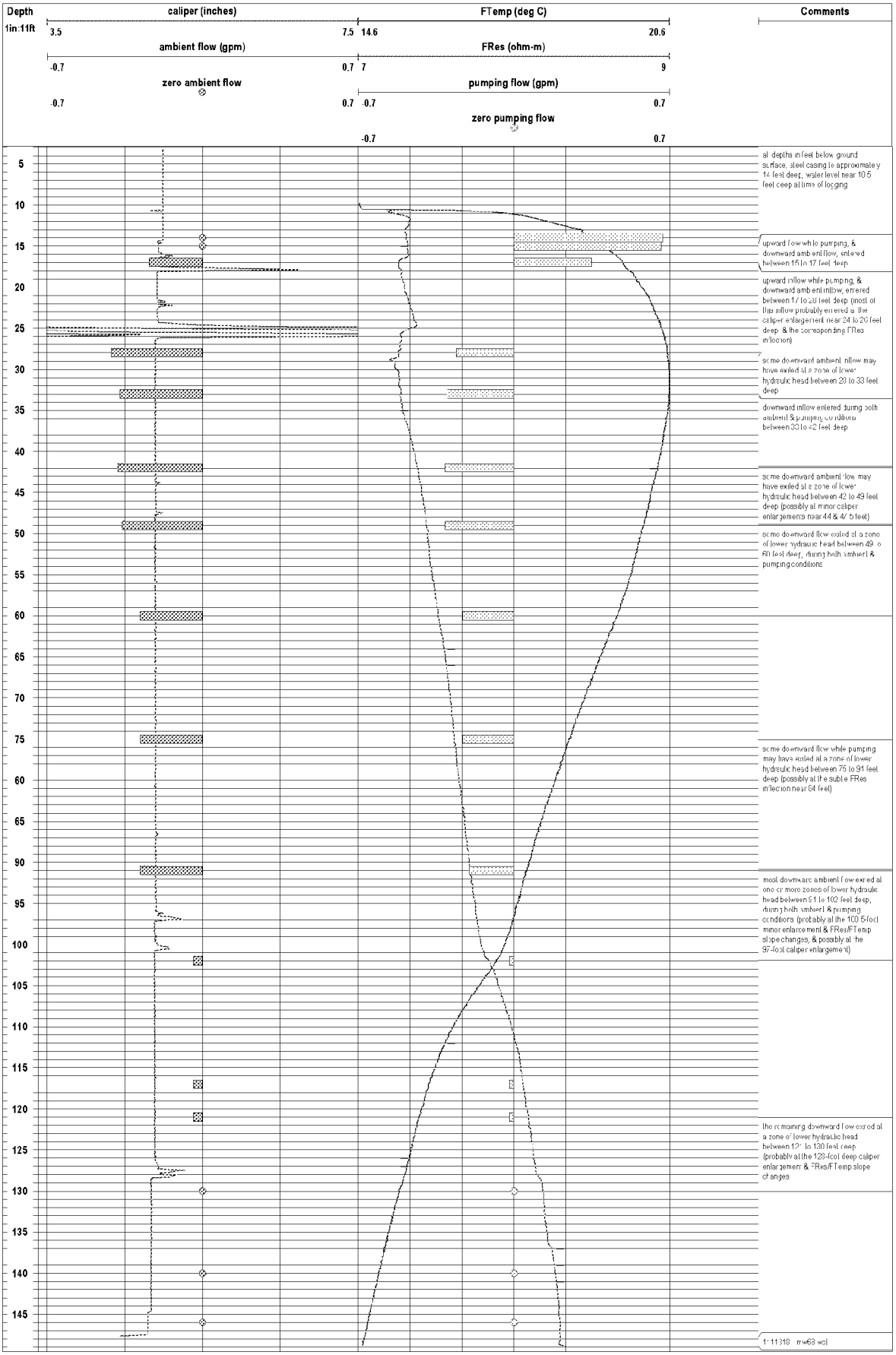
NOTES:

18) Only cored 4.5 feet on R-26 because approximately 6 inches of R-25 was still in the bottom of the borehole. Added the recovered legth from R-26 to the previous core from R-25.

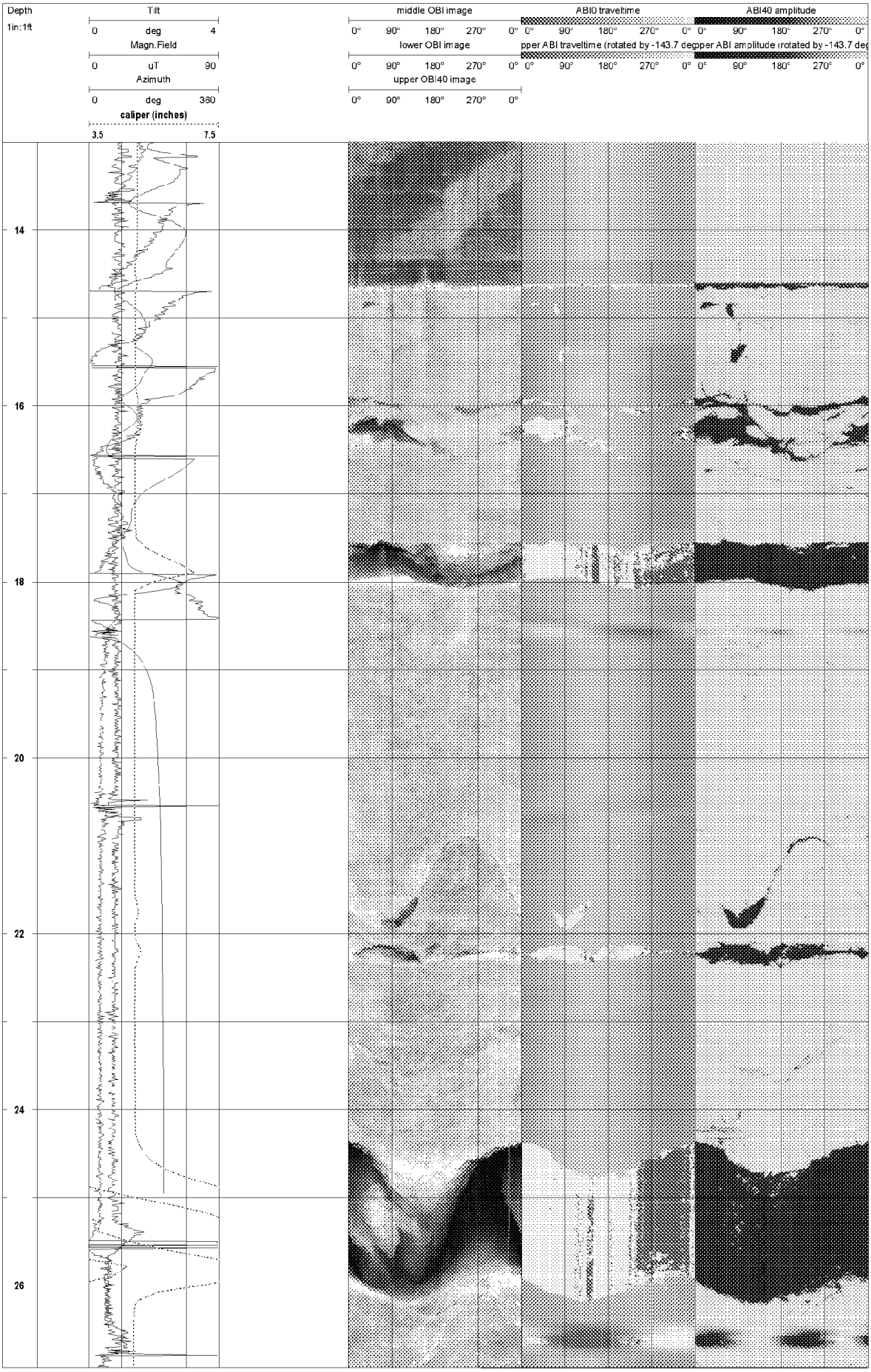
19) Fracture at 145.5 ft below ground surface has moderate weathering and moderately hard rock.

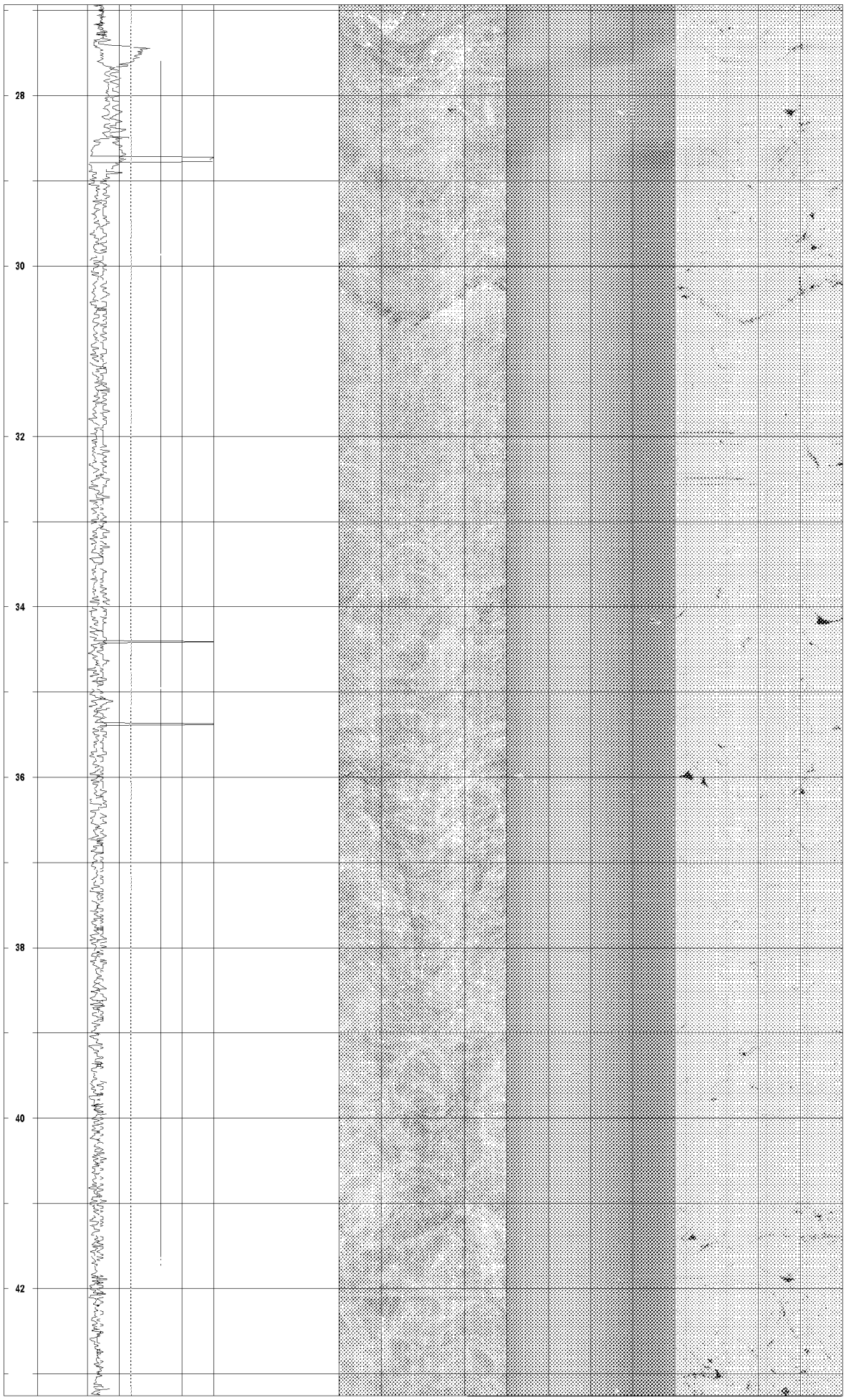
IPEC00268055

GZA / Buchanan, NY - MW-68 conventional log plot



GZA / Buchanan, NY - MW-68 optical & acoustic televiewer log plot

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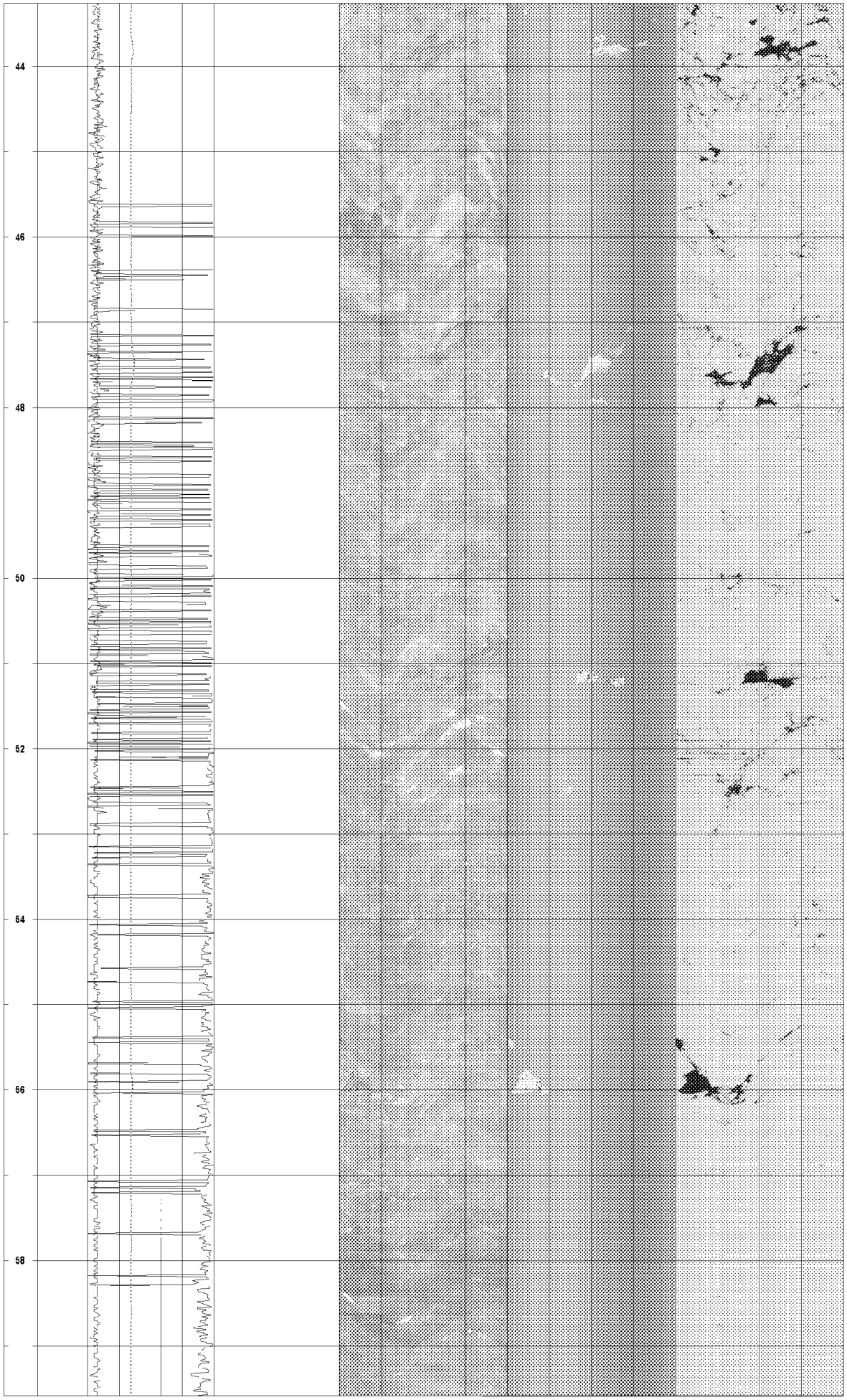
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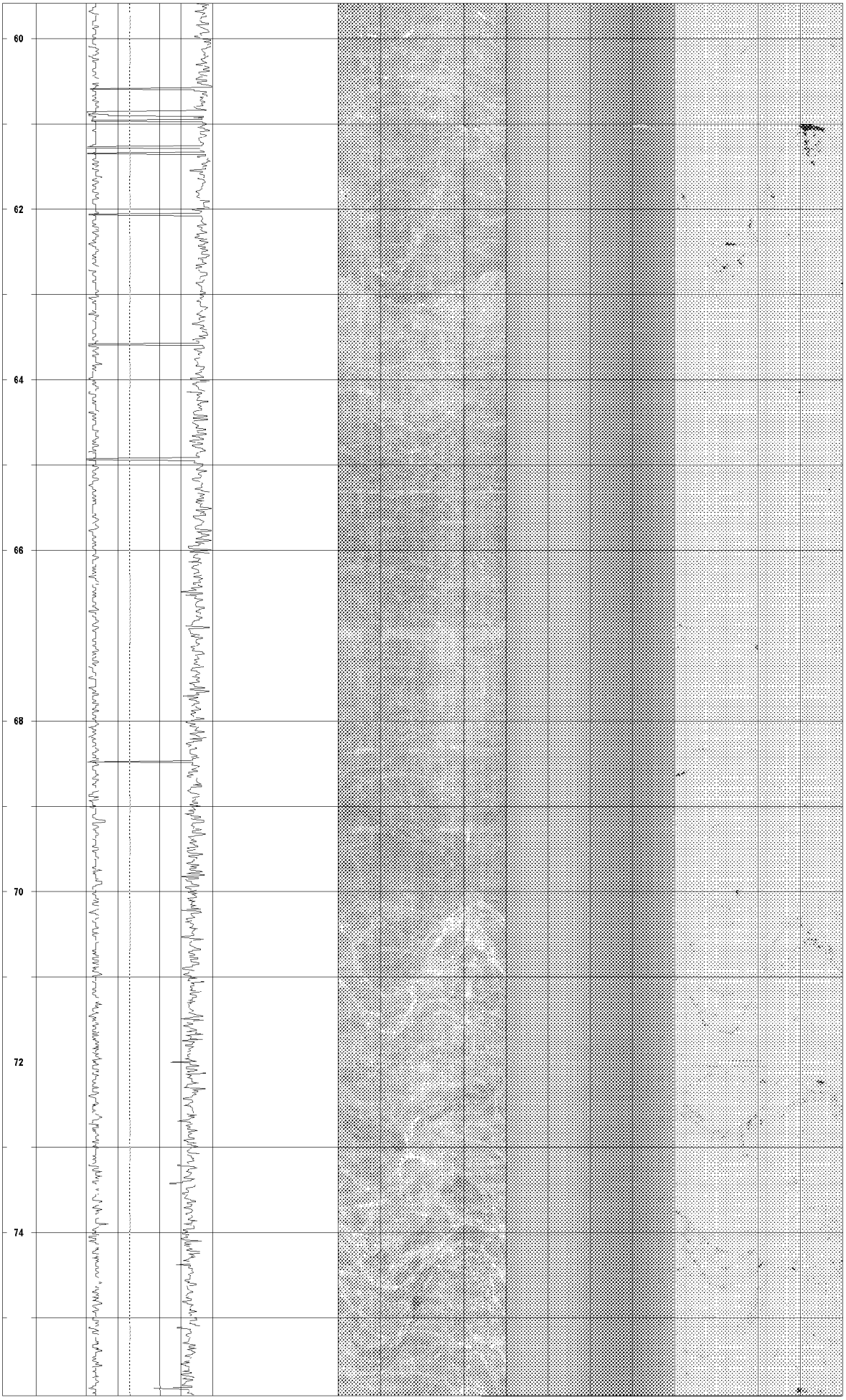
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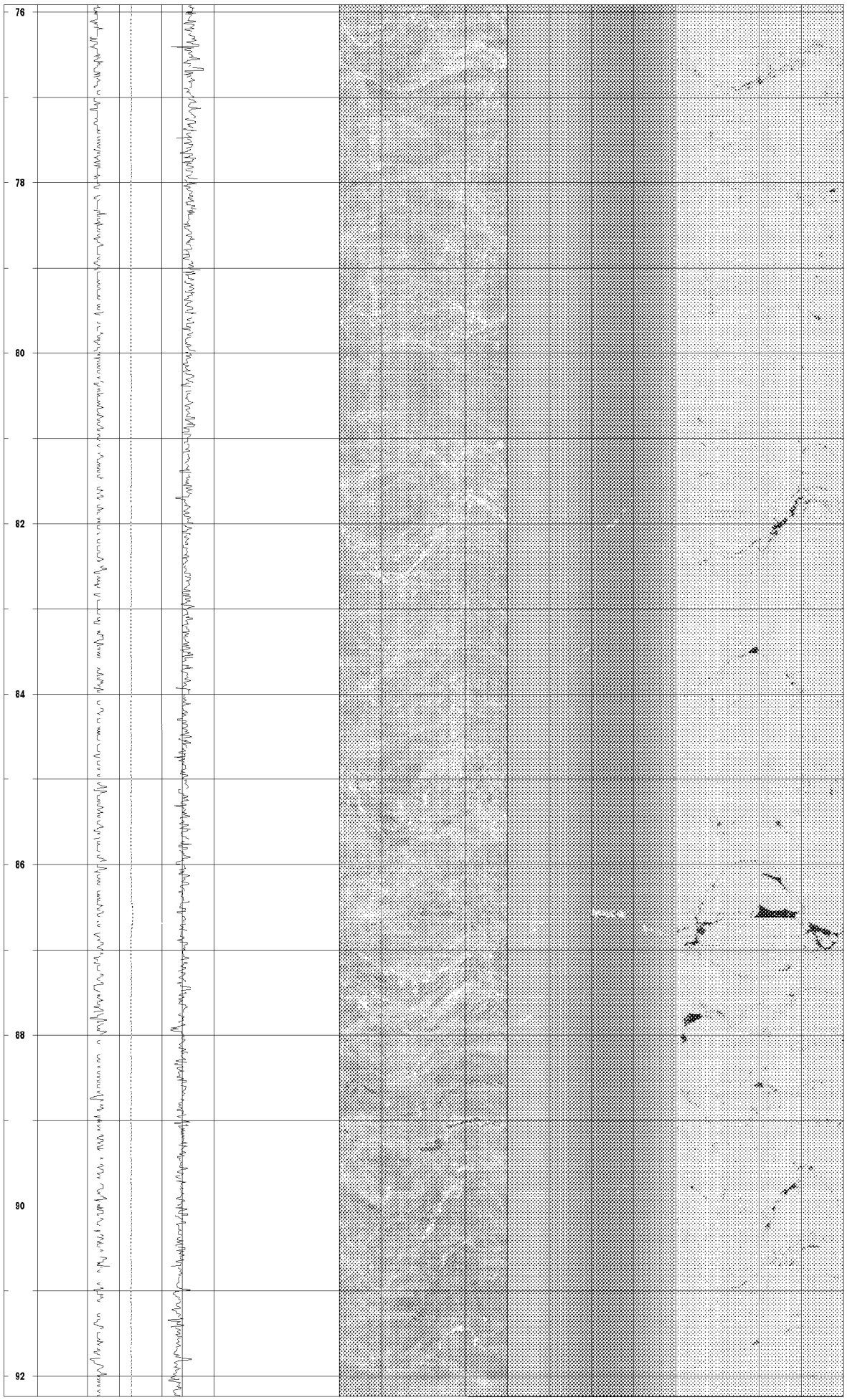
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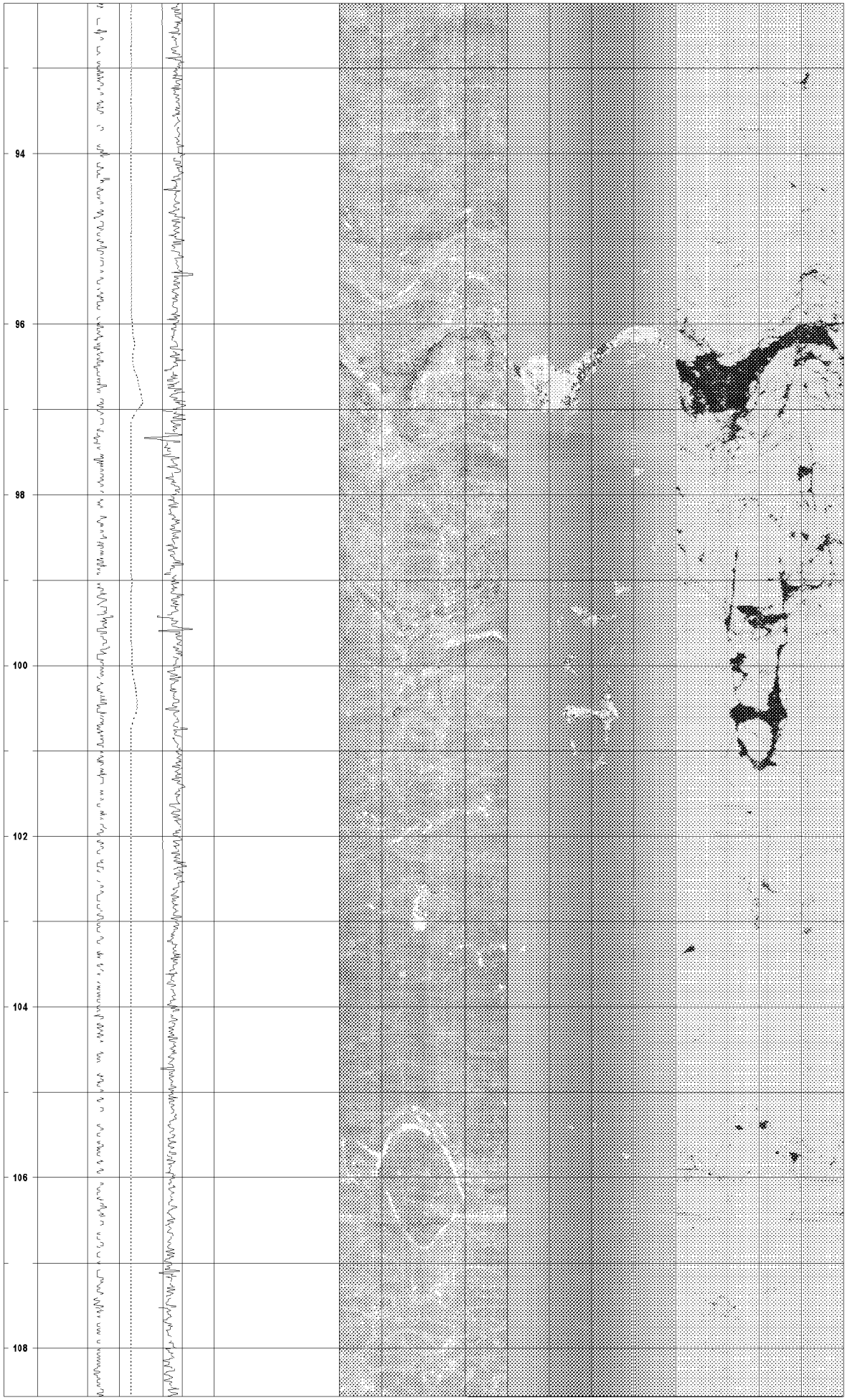
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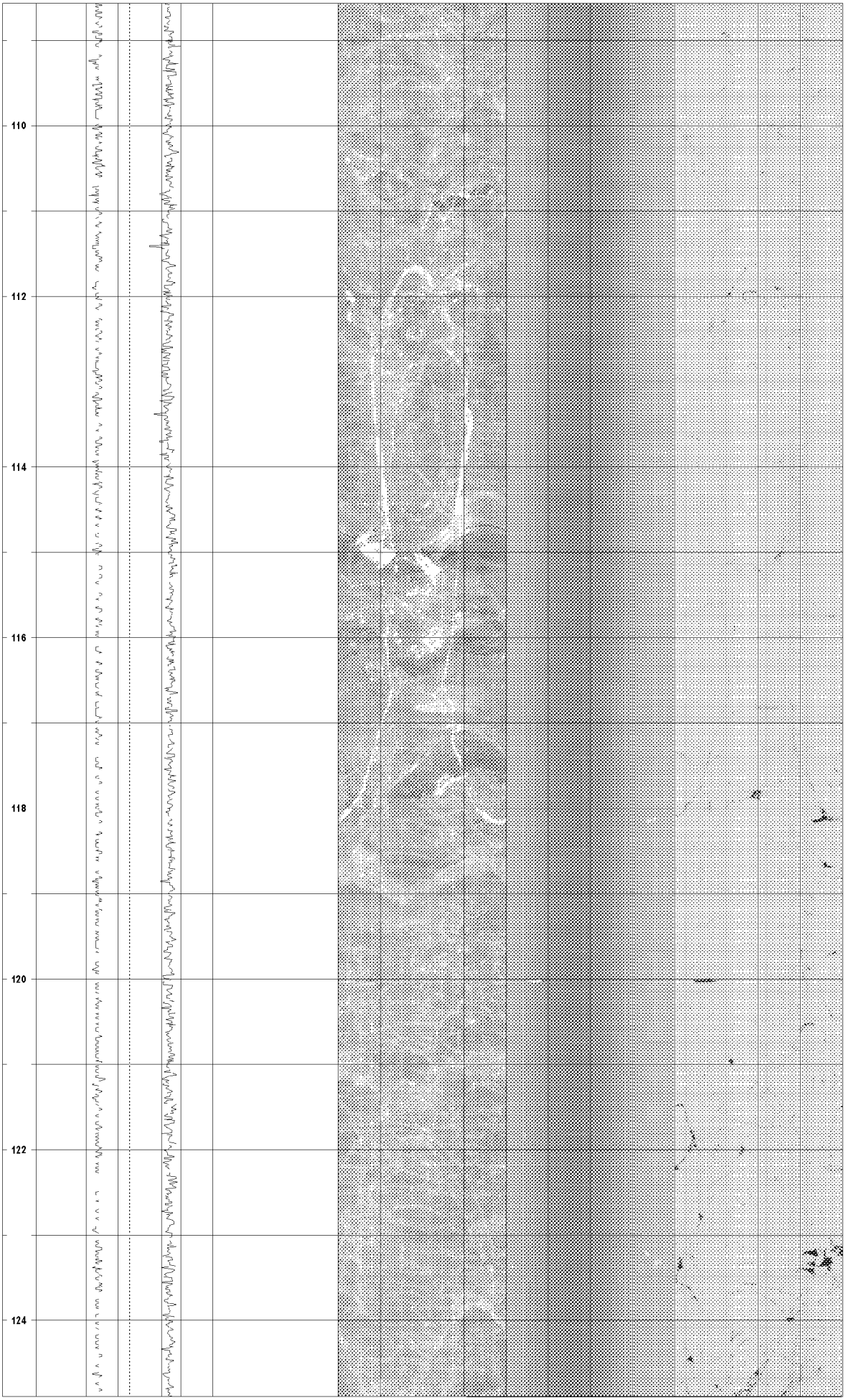
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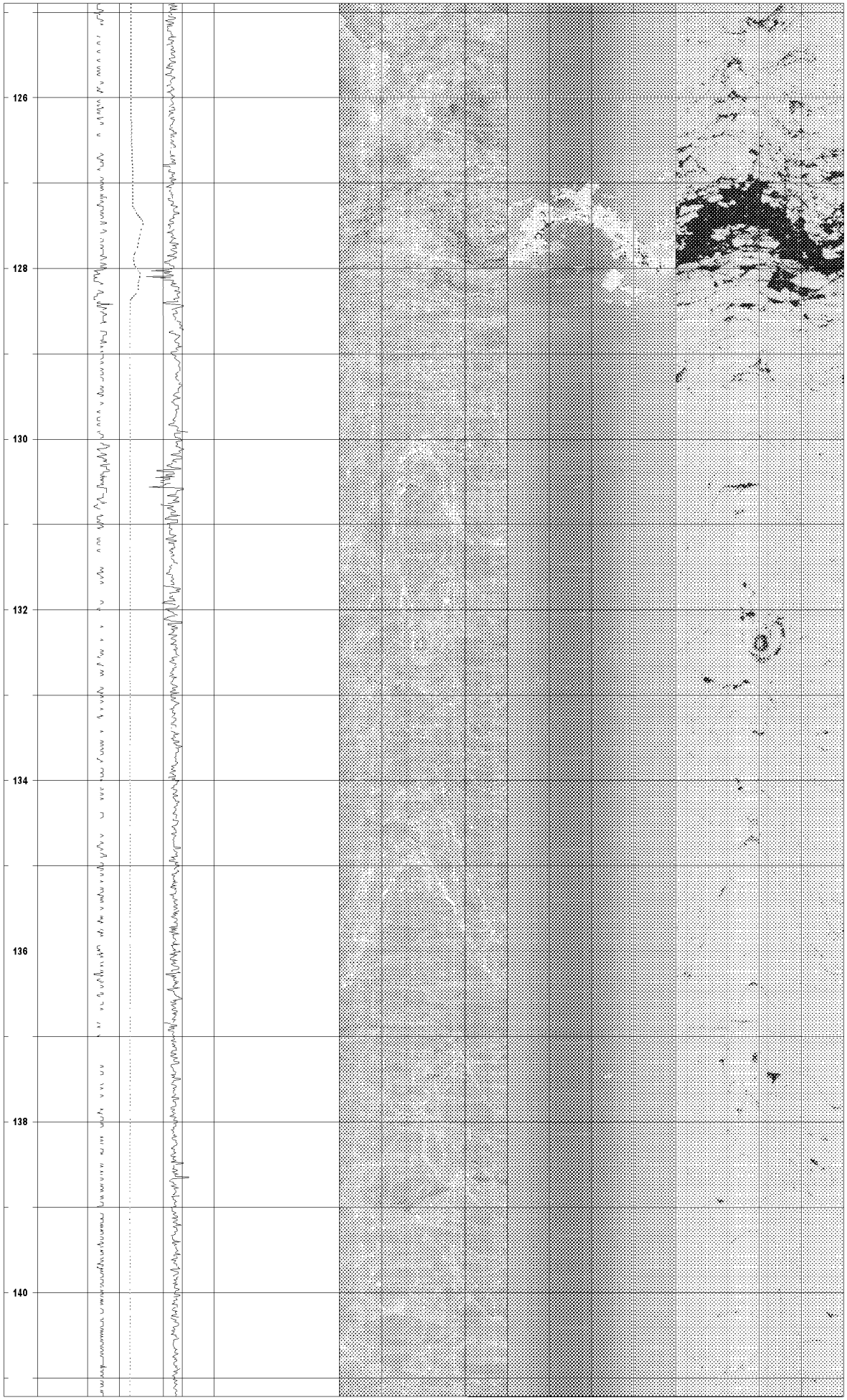

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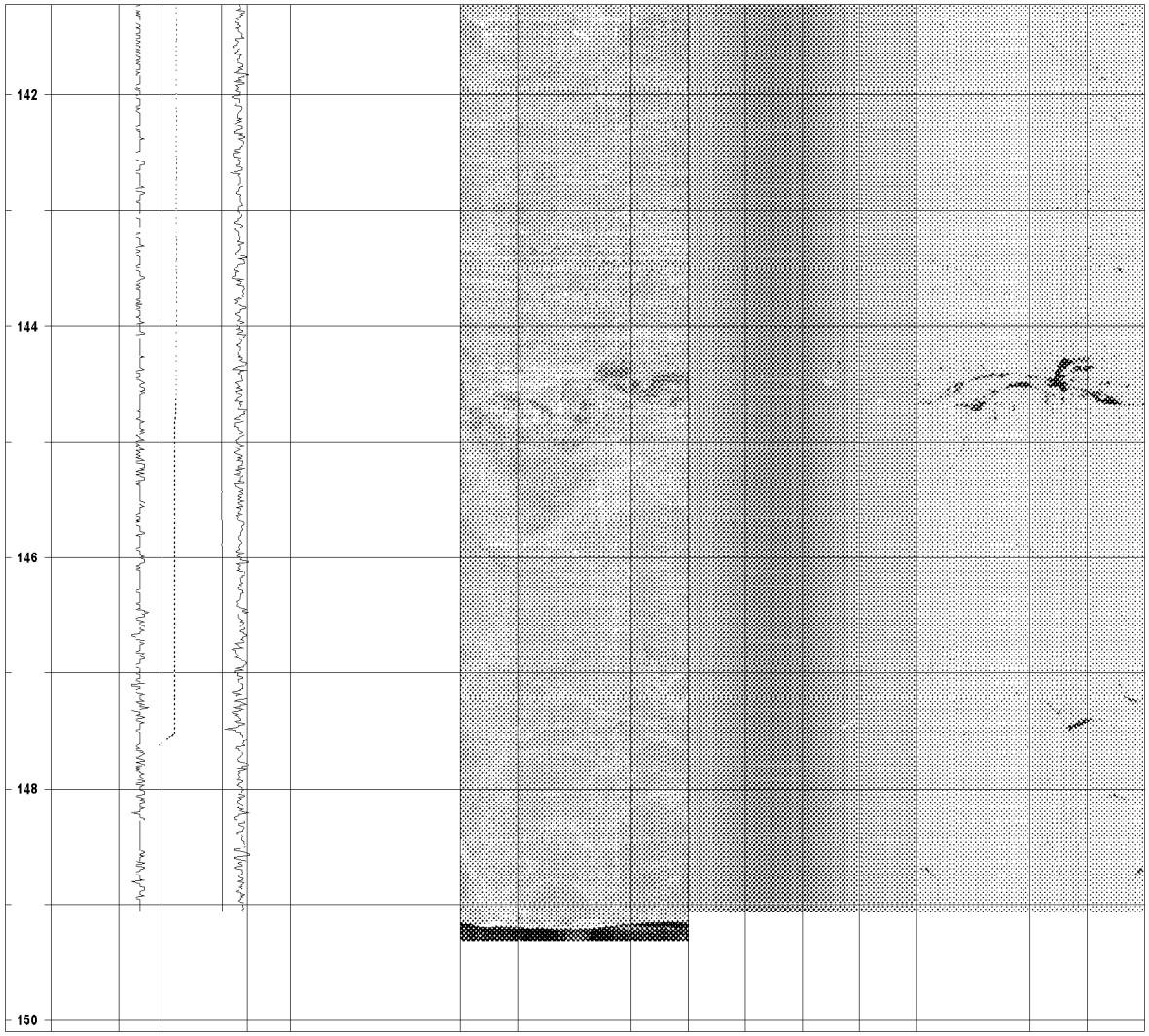
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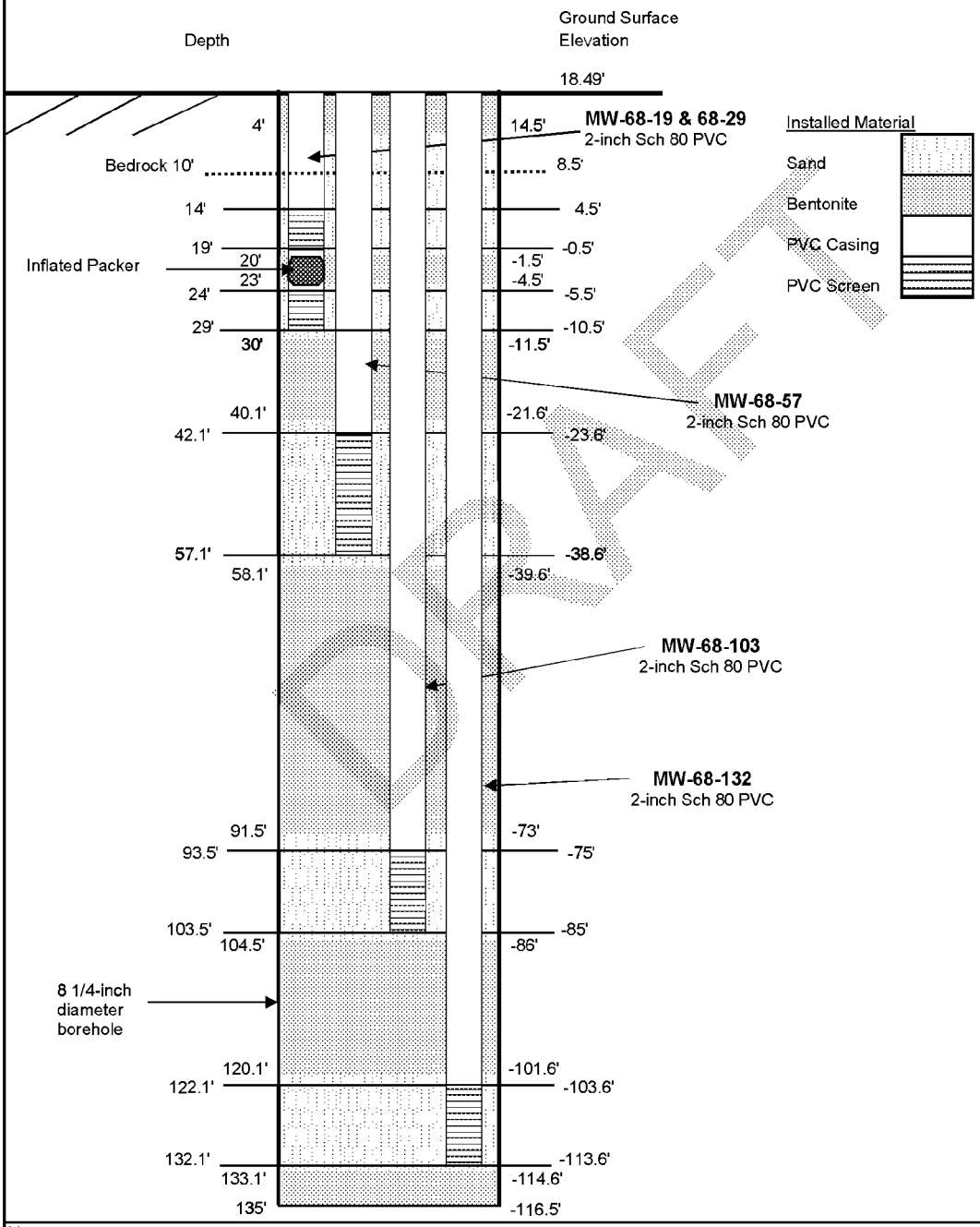
GROUNDWATER OBSERVATION WELL INSTALLATION LOG

GZA GEOENVIRONMENTAL ONE EDGEWATER DRIVE NORWOOD, MASSACHUSETTS 02062 ENGINEERS AND SCIENTISTS	ENTERGY Indian Point Energy Center Buchanan, New York	REPORT OF BORING NO.	MW-68
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		CHKD BY	

BORING CO.	Aquifer Drilling & Testing	BORING LOCATION	See Exploration Location Plan		
FOREMAN	Dave Carter	GROUND SURFACE ELEV.	18.49	DATUM	NGVD 29
GZA ENG.	Josh Simpson	DATE START	10/13/11	DATE END	12/22/11

AS-BUILT



Notes:

1. 12 inch road box installed within 2 foot by 2 foot concrete pad, flush with ground surface.

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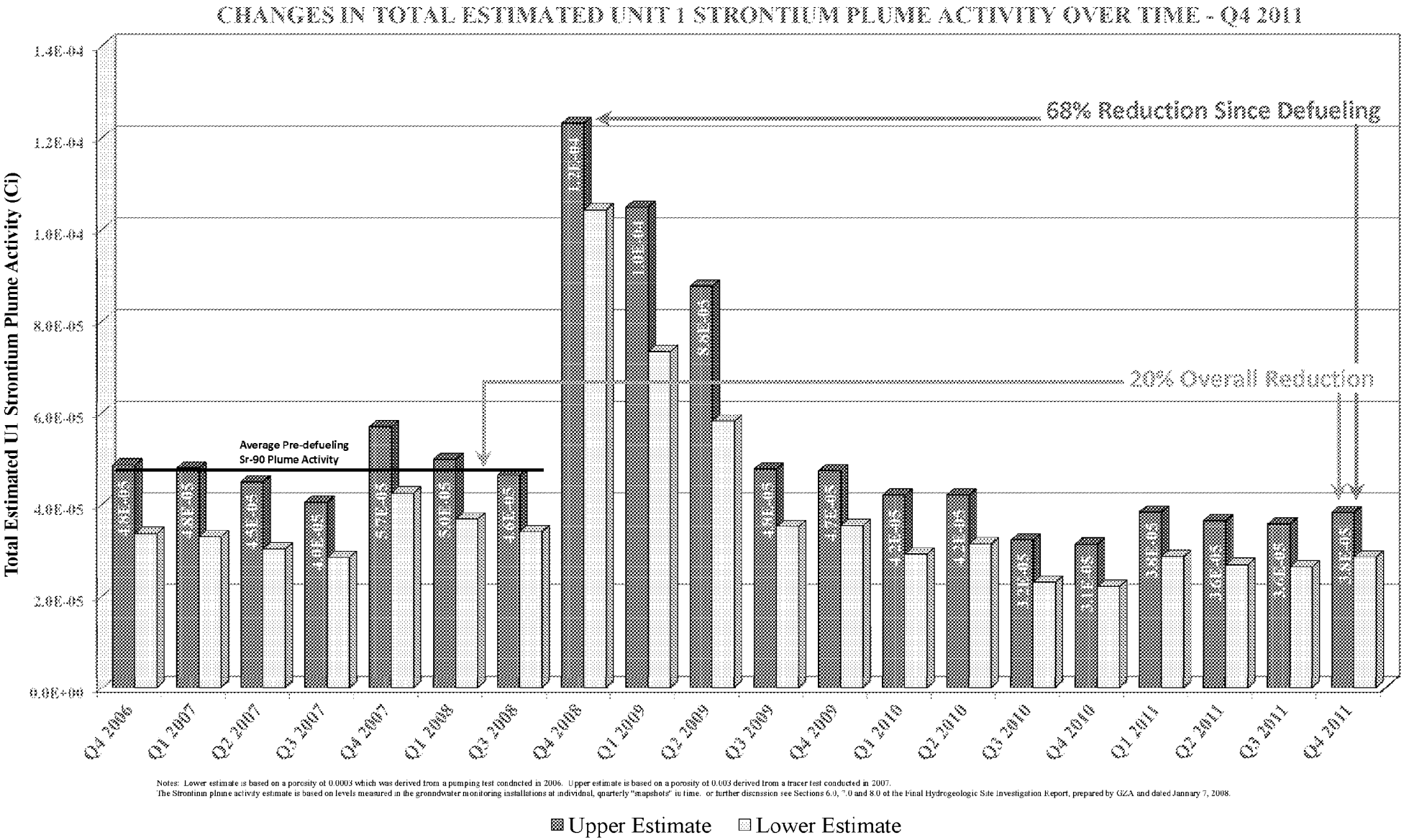
APPENDIX J: Q4 2011 UNIT 1 STRONTIUM PLUME TREND ANALYSIS

IPEC002680068



Notes: 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 Strontium plume activity estimate is based on levels measured in the groundwater monitoring installations at individual, quarterly "snapshots" in time. or 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 J-1