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NC DENR
Division of Waste Management - Solid Waste

# Environmental Monitoring Reporting Form

**Notice:** This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

## Instructions:

- **Prepare one form for each individually monitored unit.**
- **Please type or print legibly.**
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i).
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

## Solid Waste Monitoring Data Submittal Information

**Name of entity submitting data (laboratory, consultant, facility owner):**

Joyce Engineering

**Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:**

Name: Dan Girdner Phone: (336) 323-0092

E-mail: dgirdner@joyceengineering.com

| Facility name: | Facility Address: | Facility Permit # | NC Landfill Rule: (.0500 or .1600) | Actual sampling dates (e.g., October 20-24, 2006) |
|---|---|---|---|---|
| Coastal Regional Solid Waste Management Authority Tuscarora Landfills | 7400 Old Hwy 70 West New Bern, NC 28562 | 25-04 & 25-09 | .1600 | April 8-9, 2015 |

**Environmental Status: (Check all that apply)**

☐ Initial/Background Monitoring ☒ Detection Monitoring ☐ Assessment Monitoring ☐ Corrective Action

**Type of data submitted: (Check all that apply)**

☒ Groundwater monitoring data from monitoring wells
☐ Groundwater monitoring data from private water supply wells
☒ Leachate monitoring data
☒ Surface water monitoring data
☐ Methane gas monitoring data
☐ Corrective action data (specify) _____
☐ Other(specify) _____

**Notification attached?**

☐ No. No groundwater or surface water standards were exceeded.
☒ Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
☐ Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

## Certification

**To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.**

Hannu Kemppinen, P.G. Sr. Project Consultant (336) 323-0092

Facility Representative Name (Print) Title (Area Code) Telephone Number

Hannu Kemppinen July 28, 2015 Affix NC Licensed Professional Geologist Seal

Signature Date

NORTH CAROLINA LICENSED SEAL 1490 GEOLOGIST HANNU M. A. KEMPPINEN

2211 West Meadowview Rd. Suite 101, Greensboro, NC 27407

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C-0782

NC PE Firm License Number (if applicable effective May 1, 2009)

Revised 6/2009

*Environmental Engineers, Scientists & Consultants*

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July 20, 2015

Mr. Ervin Lane
Compliance Hydrogeologist
Division of Waste Management/Solid Waste Section
1646 Mail Service Center
Raleigh, NC 27699-1646

**RE: First Semiannual Water Quality Monitoring Report of 2015**
**Coastal Regional Solid Waste Management Authority Tuscarora Landfill**
**Permit Nos. 25-04 & 25-09**
**JOYCE Project No. 00618.1501.12, Task No. 01**

Dear Ervin:

On behalf of the Coastal Regional Solid Waste Management Authority (CRSWMA), Joyce Engineering is submitting the enclosed *First Semiannual Water Quality Monitoring Report of 2015* in electronic format, including the Environmental Monitoring Form. This report completes the first semiannual compliance monitoring event of 2015 for the Tuscarora Landfill, Permit Numbers 25-04 and 25-09, as required by the North Carolina Division of Waste Management, Solid Waste Section. Please feel free to contact me at (336) 323-0092 if you have any questions regarding this submittal.

Sincerely,
**JOYCE ENGINEERING**

Hannu Kemppinen, P.G.
Senior Project Consultant

Enclosure

C: Bobby Darden – Executive Director, CRSWMA (with enclosure)

***PREPARED FOR:***

COASTAL REGIONAL SOLID WASTE MANAGEMENT AUTHORITY
P.O. BOX 128
COVE CITY, NORTH CAROLINA 28523

**COASTAL REGIONAL SOLID WASTE MANAGEMENT AUTHORITY**
**TUSCARORA LANDFILL**
**PERMIT NUMBERS 25-04 & 25-09**

# FIRST SEMIANNUAL WATER QUALITY MONITORING REPORT OF 2015

**JULY 2015**

***PREPARED BY*:**

2211 WEST MEADOWVIEW ROAD, SUITE 101
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NC LICENSE NUMBER C-0782
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**First Semiannual Water Quality Monitoring Report of 2015**
**Coastal Regional Solid Waste Management Authority Tuscarora Landfill**
**Craven County, North Carolina**

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**First Semiannual Water Quality Monitoring Report of 2015**
**Coastal Regional Solid Waste Management Authority Tuscarora Landfill**
**Craven County, North Carolina**

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# 1.0 INTRODUCTION

## 1.1 Site Information

The Tuscarora Landfill is owned and operated by the Coastal Regional Solid Waste Management Authority (CRSWMA) and is currently operating under North Carolina Solid Waste Permit Nos. 25-04 and 25-09. The landfill is located off of Old Highway 70, near the town of New Bern in northwestern Craven County, North Carolina. The property boundary is indicated on an excerpt from the 7.5 minute USGS topographic map for Jasper, North Carolina (Figure No. 1).

The Tuscarora Landfill includes four contiguous waste cells; the closed Tuscarora Interim Regional Landfill (Permit 25-04-MSWLF-1993) and Phases 1, 2, and 3 of the Tuscarora Long-Term Regional Landfill (Permit 25-09-MSWLF-1999). The Interim Regional Landfill (IRL) was constructed in accordance with the Federal Subtitle D regulations with a composite liner and leachate collection and removal system. The IRL began receiving waste in 1993, and stopped receiving waste by November 1999. The Tuscarora Long-Term Regional (LTR) Landfill (LTR) is constructed in accordance with Subtitle D requirements, beginning with Phase 1, which was constructed and began receiving waste in November 1999 and stopped receiving waste in 2005. Phase 2 was constructed in 2005 and was active from 2005 until June 2013. Phase 3 is the current, active cell and began receiving waste on June 20, 2013. The Permit to Operate Phase 3 was approved by NC DENR Solid Waste Section on June 6, 2013. The current waste footprint comprises approximately 79 acres of the 101 acres approved in the permit.

## 1.2 Site Geology

The Tuscarora Landfill is located in the Coastal Plain physiographic province. The Coastal Plain consists of a wedge of continental and marine sediments that are Cretaceous, Tertiary, and Quaternary in age. These sediments are approximately 1,500 feet thick in the area of the Tuscarora Landfill according to the North Carolina State Geologic Map (Brown, 1985). Surface water is directed through a network of constructed drainage ditches to the north-northeast towards Jumping Run, a tributary of Bachelor Creek. Shallow groundwater flow is to the east-southeast towards Beaverdam Branch, which is another tributary of Bachelor Creek located approximately 2.25 miles away. Bachelor Creek flows to the east to its confluence with the Neuse River.

The uppermost (shallow) aquifer at the site consists of Miocene to Pleistocene age silty sands, clayey sands, and sandy clays. The uppermost aquifer is separated from a lower aquifer by a lean to fat clay associated with the Pungo River Formation. The Pungo River Formation is Miocene in age and consists mainly of marine fat clay to silty clay, which represents a regressive marine sequence that grades from sandy clay to silty sand at the bottom of the formation (Harris, 1991). The lower aquifer is middle to upper Eocene in age and is part of the Castle Hayne Formation. It consists of a combination of coquina and a weakly cemented calcarenite.

## 1.3 Regulatory Status

The Tuscarora Landfill groundwater monitoring is completed in accordance with North Carolina Solid Waste Management Regulations (NCSWMR) § 1633 (Detection Monitoring Program). Statistical analyses of the laboratory data has been prepared in accordance with the required compliance demonstration Rule .1632(g), (h), and (i) of the NCSWMR.

# 2.0 FACILITY MONITORING PROGRAMS

Groundwater programs for the landfill, surface water, and the leachate storage system are discussed in the following sections and locations of monitoring points are shown on Drawing Numbers 1 & 2.

## 2.1 Tuscarora Interim Regional Landfill Monitoring Program

Groundwater monitoring at the closed Tuscarora Interim Regional Landfill is completed in accordance with NCSWMR § 1633 (Detection Monitoring Program) and the approved Groundwater Monitoring Plan for the facility. Groundwater samples are collected semiannually and are analyzed for the constituents listed in NCSWMR Appendix I.

The groundwater monitoring network at the Closed Interim Regional Landfill consists of two up-gradient/background groundwater monitoring wells (IRL-1S & IRL-1D) and six down-gradient groundwater monitoring wells (IRL-3S, IRL-3D, IRL-4S, IRL-4D, IRL-5S, and MW-A). Wells IRL-2SA, IRL-2DA, IRL-5D, MW-B, and PZ-Z are measured for water levels only.

| Monitoring Well | Date Installed | Classification | Monitoring Program | Total Depth from TOC (ft.) | Lithology of Screened Interval |
|---|---|---|---|---|---|
| *IRL-1S* | 6/29/93 | Background | Detection | 18.34 | Shallow Aquifer / Sediment |
| *IRL-1D* | 6/29/93 | Background | Detection | 45.91 | Deep Aquifer / Sediment |
| *IRL-2S* | 6/30/93 | Abandoned | - | - | - |
| *IRL-2SA* | 1/13/01 | Observation | Water Level | 17.63 | Shallow Aquifer / Sediment |
| *IRL-2D* | 6/30/93 | Abandoned | - | - | - |
| *IRL-2DA* | 1/13/01 | Observation | Water Level | 41.76 | Deep Aquifer / Sediment |
| *IRL-3S* | 7/02/93 | Compliance | Detection | 16.59 | Shallow Aquifer / Sediment |
| *IRL-3D* | 7/02/93 | Compliance | Detection | 40.91 | Deep Aquifer / Sediment |
| *IRL-4S* | 7/02/93 | Compliance | Detection | 15.23 | Shallow Aquifer / Sediment |
| *IRL-4D* | 7/02/93 | Compliance | Detection | 25.87 | Deep Aquifer / Sediment |
| *IRL-5S* | 7/01/93 | Compliance | Detection | 14.69 | Shallow Aquifer / Sediment |
| *IRL-5D* | 7/01/93 | Observation | Water Level | 26.10 | Deep Aquifer / Sediment |
| *IRL-6S* | 7/02/93 | Abandoned | - | - | - |
| *IRL-6D* | 7/02/93 | Abandoned | - | - | - |
| *MW-A* | 12/13/00 | Compliance | Detection | 22.00 | Shallow Aquifer / Sediment |
| *MW-B* | 1/12/01 | Observation | Water Level | 22.06 | Shallow Aquifer / Sediment |
| *PZ-Z* | 12/15/00 | Observation | Water Level | 32.35 | Shallow Aquifer / Sediment |

## 2.2 Tuscarora Long-Term Regional Landfill Monitoring Program

Groundwater monitoring at the Tuscarora Long-Term Regional Landfill is completed in accordance with NCSWMR § 1633 (Detection Monitoring Program) and the approved Groundwater Monitoring Plan for the facility. Groundwater samples are collected semiannually and are analyzed for the constituents listed in NCSWMR Appendix I.

The groundwater monitoring network at the Tuscarora Long-Term Regional (LTR) Landfill area consists of two up-gradient/background wells (MW-12S and MW-12D) and eighteen down-gradient wells (MW-7, MW-8, MW-10, MW-11S, MW-11D, MW-13S, MW-13D, MW-14, MW-15S, MW-15D, MW-16S, MW-16D, MW-17S, MW-17D, MW-18S, MW-18D, MW-19S, and MW-19D). Well MW-9, which was previously monitored, was abandoned on July 15, 2004 to accommodate construction of Phase 2 of the Long-Term Regional Landfill. Well MW-14 was damaged by equipment in 2006 and was replaced by MW-14R prior to the April 2007 sampling event. The shallow and deep aquifer monitoring well pairs numbered MW-15S & MW-15D through MW-19S & MW-19D were installed as part of the hydrogeological investigation for Phase 3 in the summer of 2009. The individual wells in the LTR landfill are listed in the table below.

| | Monitoring Well | Date Installed | Classification | Monitoring Program | Total Depth from TOC (ft.) | Lithology of Screened Interval |
|---|---|---|---|---|---|---|
| *Phase 1* | *MW-7* | 7/15/99 | Compliance | Detection | 17.89 | Shallow Aquifer / Sediment |
| | *MW-8* | 7/15/99 | Compliance | Detection | 15.14 | Shallow Aquifer / Sediment |
| | *MW-9* | 7/15/99 | Abandoned | - | - | - |
| | *MW-10* | 7/15/99 | Compliance | Detection | 16.92 | Shallow Aquifer / Sediment |
| | *MW-11S* | 7/15/99 | Compliance | Detection | 12.07 | Shallow Aquifer / Sediment |
| | *MW-11D* | 7/15/99 | Compliance | Detection | 36.85 | Deep Aquifer / Sediment |
| *Phase 2* | *MW-12S* | 4/09/02 | Background | Detection | 18.02 | Shallow Aquifer / Sediment |
| | *MW-12D* | 4/09/02 | Background | Detection | 38.00 | Deep Aquifer / Sediment |
| | *MW-13S* | 4/21/03 | Compliance | Detection | 17.48 | Shallow Aquifer/ Sediment |
| | *MW-13D* | 4/23/03 | Compliance | Detection | 42.29 | Deep Aquifer / Sediment |
| | *MW-14* | 4/18/03 | Abandoned | - | - | - |
| | *MW-14R* | 10/04/07 | Compliance | Detection | 16.85 | Shallow Aquifer / Sediment |
| *Phase 3* | *MW-15S* | 6/22/09 | Compliance | Detection | 15.00 | Shallow Aquifer / Sediment |
| | *MW-15D* | 6/23/09 | Compliance | Detection | 38.00 | Deep Aquifer / Sediment |
| | *MW-16S* | 8/10/09 | Compliance | Detection | 12.00 | Shallow Aquifer / Sediment |
| | *MW-16D* | 6/24/09 | Compliance | Detection | 35.00 | Deep Aquifer / Sediment |
| | *MW-17S* | 6/30/09 | Compliance | Detection | 13.00 | Shallow Aquifer / Sediment |
| | *MW-17D* | 6/30/09 | Compliance | Detection | 38.00 | Deep Aquifer / Sediment |
| | *MW-18S* | 7/01/09 | Compliance | Detection | 11.00 | Shallow Aquifer / Sediment |
| | *MW-18D* | 7/01/09 | Compliance | Detection | 35.00 | Deep Aquifer / Sediment |
| | *MW-19S* | 7/01/09 | Compliance | Detection | 10.00 | Shallow Aquifer / Sediment |
| | *MW-19D* | 7/01/09 | Compliance | Detection | 25.00 | Deep Aquifer / Sediment |

## 2.3 Leachate Storage Lagoon Area Monitoring Program

Groundwater monitoring at the Leachate Storage Area Lagoons is completed in accordance with NCSWMR § 1633 (Detection Monitoring Program) and the approved Groundwater Monitoring Plan for the facility. Groundwater samples are collected semiannually and analyzed for the constituents listed in NCSWMR Appendix I.

The groundwater monitoring network at the Leachate Storage Area Lagoons consists of one up-gradient/background well (LST-5S) and seven down-gradient wells (LST-1S, LST-1D, LST-2S, LST-3S, LST-4S, LST-5D, and LST-6S). Well LST-5S replaced LST-6S as the background well due to drawdown effects from the borrow area north of the Leachate Storage Lagoons. Wells LST-2D, LST-3D, LST-4D, and LST-6D are measured for water levels only.

| Monitoring Well | Date Installed | Classification | Monitoring Program | Total Depth from TOC (ft.) | Lithology of Screened Interval |
|---|---|---|---|---|---|
| *LST-1S* | 6/24/93 | Compliance | Detection | 15.83 | Shallow Aquifer / Sediment |
| *LST-1D* | 6/24/93 | Compliance | Detection | 36.01 | Deep Aquifer / Sediment |
| *LST-2S* | 6/24/93 | Compliance | Detection | 14.74 | Shallow Aquifer / Sediment |
| *LST-2D* | 6/24/93 | Observation | Water Level | 33.96 | Deep Aquifer / Sediment |
| *LST-3S* | 6/25/93 | Compliance | Detection | 18.34 | Shallow Aquifer / Sediment |
| *LST-3D* | 6/24/93 | Observation | Water Level | 35.57 | Deep Aquifer / Sediment |
| *LST-4S* | 6/25/93 | Compliance | Detection | 18.18 | Shallow Aquifer / Sediment |
| *LST-4D* | 6/24/93 | Observation | Water Level | 36.39 | Deep Aquifer / Sediment |
| *LST-5S* | 6/28/93 | Background | Detection | 16.75 | Shallow Aquifer / Sediment |
| *LST-5D* | 6/28/93 | Compliance | Detection | 39.04 | Deep Aquifer / Sediment |
| *LST-6S* | 6/28/93 | Compliance | Detection | 17.25 | Shallow Aquifer / Sediment |
| *LST-6D* | 9/28/93 | Observation | Water Level | 35.17 | Deep Aquifer / Sediment |

## 2.4 Surface Water Monitoring Program

Surface water monitoring at the Tuscarora Landfill is completed in accordance with NCSWMR and the approved Groundwater Monitoring Plan for the facility. Surface water samples are collected semiannually and analyzed for the constituents listed in NCSWMR Appendix I. The surface water monitoring network includes one upstream surface water sampling point (SWPT-1) a downstream surface water monitoring points (SWPT-2), and two underdrain outlets (UD-1, and UD-2).

| Surface Point | Classification | Monitoring Program |
|---|---|---|
| *SWPT-1* | Upstream | Surface Water |
| *SWPT-2* | Compliance | Surface Water |
| *UD-1* | Compliance | Surface Water |
| *UD-2* | Compliance | Surface Water |

## 2.5 Leachate Monitoring Program

One leachate monitoring point (Leachate Manhole) is sampled at the Tuscarora Landfill on a semiannual basis and the laboratory results are included in this report. The following constituents are required for laboratory leachate analysis:

- North Carolina Appendix I Metals
- North Carolina Appendix I 8260 Volatiles

# 3.0 FIRST SEMIANNUAL SAMPLING EVENT OF 2015

## 3.1 Field Work

On April 8-9, 2015, personnel from Environment 1, Incorporated visited the facility to obtain depth-to-water measurements to the nearest 0.01 foot, purge, and sample monitoring wells at the closed Tuscarora Interim Regional Landfill, Tuscarora Long-Term Regional Landfill, and Leachate Storage Lagoon areas. Four surface water monitoring points and one leachate monitoring point were also sampled during the April 8-9, 2015 event. In addition, for monitoring wells not part of the compliance network, depth-to-water measurements were also obtained to the nearest 0.01 foot using an electronic water level indicator on April 8, 2015.

Monitoring wells were purged and sampled using decontaminated re-usable Teflon bailers during the April 2015 sampling event. Measurements of temperature, pH, specific conductivity, and turbidity were recorded prior to purging, after each purge volume, and during sampling. Prior to sampling, laboratory-supplied containers were prepared with the following information:

- Monitoring well number (completed by field personnel);
- Date and time of sample collection (completed by field personnel);
- Initials of sampling personnel (completed by field personnel);
- Project name and number (completed by the laboratory);
- Chemical preservative (completed by the laboratory); and
- Requested chemical analysis (completed by the laboratory).

During the April 2015 sampling event, groundwater samples from each monitoring well were collected directly from the bailers in the provided laboratory containers either immediately after purging or within 24 hours of the final purge volume. Immediately after collection, the samples were placed in a laboratory provided cooler and chilled on ice.

Surface water samples were collected directly from stream flow by lowering the prepared sample containers into the stream. Care was taken to not overflow the sample containers (which could lead to preservative loss) and to avoid sample-induced turbidity. At the time of sampling, surface water was also measured for temperature, pH, specific conductivity, and turbidity. After sample collection, the samples were placed in a laboratory provided cooler and chilled on ice.

Leachate samples were collected from a vented manhole with a peristaltic pump and disposable Teflon tubing. Prepared sampling containers were filled, placed in a cooler, and chilled on ice. At the time of sampling, leachate was measured for temperature, pH, specific conductivity, and turbidity.

### 3.2 Laboratory Analysis and JOYCE Quality Control

Groundwater, surface water, and leachate samples were submitted to Environment 1, Incorporated of Greenville, North Carolina under chain-of-custody control for analysis. As discussed earlier, the groundwater, surface water, and leachate samples were analyzed for North Carolina Appendix I constituents. Joyce Engineering (JOYCE) requested a Level II data report. The samples were received by the laboratory on April 8-9, 2015 in good condition, properly preserved, and within analysis hold times.

In addition to samples collected for compliance monitoring at the CRSWMA Landfills, an Equipment Blank was collected by Environment 1, Inc. personnel as part of the April 8-9, 2015 sampling event. Also, a Trip Blank was prepared by the laboratory to accompany the volatile sampling containers during shipment. The Equipment Blank was analyzed for North Carolina Appendix I constituents while the Trip Blank was analyzed for North Carolina Appendix I volatile organics only.

Upon receipt of laboratory data packages, the data were reviewed by JOYCE personnel for the following:

- General typographical errors;
- Correct analyses performed and within method specified hold times;
- Biased data results based on Surrogate Recoveries, Matrix Spike, Matrix Spike Duplicate, and Laboratory Control Samples;
- Blank qualified data (B-flags);
- Detections above the North Carolina Solid Waste Section Limits (SWSLs), groundwater standards, or surface water standards; and
- Detections that are above historical levels.

The laboratory data packages for the April 8-9, 2015, sampling events are included in Appendix A of this report, and the results are summarized in the detection and historical tables (Tables 5 - 14) for the CRSWMA Tuscarora Regional Landfill.

## 4.0 HYDROGEOLOGICAL CONDITIONS

Depth to groundwater was measured in the compliance monitoring wells prior to sampling. The groundwater elevation at each well was calculated relative to the surveyed measuring point (top of casing) for each monitoring well. Tables 1-3 summarize the groundwater elevations. In general, groundwater elevations for the shallow aquifer are similar to previous events. Groundwater elevations for the deep aquifer have been influenced by borrow area pumping.

Both the upper and lower aquifers at the site are primarily made up of coarse sand and silty sand. The aquifers are separated by a confining layer consisting of marine clays, silty clays, and very fine silty sands.

Groundwater elevation contours for the shallow and deep aquifers are shown on Drawings 1 and 2, and were interpreted from the April 2015 water level measurements. Groundwater at the site flows predominantly to the east-southeast for the shallow aquifer. Groundwater in the deep aquifer usually flows primarily to the northwest due to pumping in the borrow area excavations, creating a cone of depression. However, beginning September 1, 2014, pumping in the borrow area excavations stopped, allowing the deep aquifer to revert to a more gradual potentiometric surface and lower velocity for the groundwater. The hydrogeological conditions will continue to be monitored and reported semiannually.

Horizontal groundwater gradients were estimated based on April 2015 groundwater levels. The groundwater contours and the groundwater flow lines were used to calculate hydraulic gradients for the site. The horizontal gradients were estimated to range from 0.0027 to 0.0036 ft/ft (Table 4) for the shallow aquifer and 0.0082 to 0.0185 ft/ft (Table 5) for the deep aquifer. The gradients reported for this event generally reflect the shallow depth to the uppermost aquifer underlying the site, the flat topography of the site, and wet storm water drainage ditches and basins located within the site, as well as the borrow pit area was not actively pumping.

Linear groundwater flow velocities were computed using the following modified Darcy equation:

$$V = Ki/n$$

where V = average linear velocity (feet per day – ft/day), K = hydraulic conductivity (ft/day), i = horizontal hydraulic gradient, and n = effective porosity. The hydraulic conductivity used to calculate flow velocities was based on the geometric mean of hydraulic conductivities derived from slug tests for the shallow and deep aquifers. The gradient and flow velocity calculations are included in Tables 4 and 5.

The calculated linear groundwater flow velocities range from 0.009 to 0.012 ft/day (Table 4) for the shallow aquifer range and 0.177 to 0.399 ft/day (Table 5) for the deep aquifer. The linear velocity equation is based on the simplified assumption of a homogeneous and isotropic aquifer.

## 5.0 DATA ANALYSIS AND STATISTICAL RESULTS

The data from the laboratory analysis of the April 8-9, 2015 sampling event were received on April 8-9, 2014, from Environment 1, Inc. and are found in Appendix A of this report. Groundwater data are compared to the relevant North Carolina water quality standard found in 15A NCAC 2L.0202 (NC 2L) or Solid Waste Section Groundwater Protection Standards (GWPS) for NCSWMR Appendix I listed constituents. For inorganic constituents, statistical background data is determined in accordance with the procedures outlined in NCSWMR Title

15A NCAC 13B.1632 (g), (h) and (i). The statistical worksheets are found in Appendix B of this report.

## 5.1 Analytical Results and Comparisons to Standards

### 5.1.1 Tuscarora Interim Regional Landfill

The following inorganic constituents were detected at quantified concentrations during the April 2015 sampling event for the Tuscarora Interim Regional Landfill in one or more compliance monitoring wells.

| Constituent | NC2L/ (GWPS) | Background | | Down-gradient | | | | | | Blanks |
|---|---|---|---|---|---|---|---|---|---|---|
| | | IRL-1S | IRL-1D | IRL-3S | IRL-3D | IRL-4S | IRL-4D | IRL-5S | MW-A | |
| *Barium* | 700 | 162 | 43.9 J | 39.8 J | 61.4 J | 67.3 J | 41.4 J | 50.6 J | 424 | ND |
| *Zinc* | 1000 | 5.8 J | 5.9 J | 6.2 J | 3.7 B | 13 | 3.5 B | 40 | 5.5 J | 0.79 J |

All concentrations are reported in micrograms per liter (µg/L). ND = Non-detect
J = Estimated concentration below SWSL. B = Blank-qualified detection.

The inorganic and organic analytical results from the April 2015 groundwater sampling event at the closed Tuscarora Interim Regional Landfill are summarized in Table 6 and field parameters are summarized on Table 7 of this report. The results, as reported by the laboratory, the laboratory quality assurance/quality control information, and the chains-of-custody are included in Appendix A. No quantified detections of inorganic or organic constituents were reported above the NC 2L or GWPS for the Interim Regional Landfill.

### 5.1.2 Tuscarora Long-Term Regional Landfill

The following inorganic constituents were detected at quantified concentrations during the April 2015 sampling event for the Tuscarora Long-Term Regional Landfill in one or more Phases 1-2 compliance monitoring wells.

| Constituent | NC2L/ (GWPS) | Background | | Down-gradient | | | | | | | | Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-12S | MW-12D | MW-7 | MW-8 | MW-10 | MW-11S | MW-11D | MW-13S | MW-13D | MW-14R | |
| *Barium* | 700 | 40.7 J | 38.0 J | 30.1 J | 158 | 62.4 J | 21.5 J | 52.3 J | 82.5 J | 42.1 J | 59.4 J | ND |

All concentrations are reported in micrograms per liter (µg/L). ND = Non-detect
J = Estimated concentration below SWSL.

The following inorganic constituents were detected at quantified concentrations during the April 2015 sampling event for the Tuscarora Long-Term Regional Landfill in one or more Phase 3 compliance monitoring wells.

| Constituent | NC2L/ (GWPS) | Down-gradient | | | | | | | | | | Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-15S | MW-15D | MW-16S | MW-16D | MW-17S | MW-17D | MW-18S | MW-18D | MW-19S | MW-19D | |
| *Beryllium* | (4) | **6** | ND | 4 | 0.08 J | 4 | ND | 4 | 0.08 J | 0.05 J | 0.26 J | ND |
| *Cadmium* | 2 | 0.58 J | ND | 2 | ND | 0.45 J | ND | 1 | ND | ND | 0.16 J | ND |
| *Cobalt* | (1) | **18** | 0.34 J | 1.9 J | 0.40 J | 4.2 J | 0.19 J | 5.8 J | 0.17 J | 0.16 J | 1.7 J | ND |
| *Zinc* | 1,000 | 32 | 3.2 B | 12 | 4.1 J | 15 | 1.5 B | 20 | 1.3 B | 1.9 B | 19 | 0.79 J |

All concentrations are reported in micrograms per liter (µg/L). ND = Non-detect
J = Estimated concentration below SWSL. B = Blank-qualified detection.
**Bold** = result above the NC 2L or GWPS level

The inorganic and organic analytical results from the April 2015 groundwater sampling event at the Tuscarora Long-Term Regional Landfill are summarized in Table 8A for Phase 1 and Phase 2 monitoring wells and in Table 8B for Phase 3 monitoring wells. The field parameters are summarized in Tables 9A and 9B. The results as reported by the laboratory, the laboratory quality assurance/quality control information, and the chains-of-custody are included in Appendix A. See Sections 5.2 and 5.3 of this report for discussion of the statistical background for beryllium and cobalt.

### 5.1.3 Leachate Storage Lagoon Area

The following inorganic constituent was detected at a quantified concentration during the April 2015 sampling event for the Leachate Storage Lagoon Area (LST) in one or more compliance monitoring wells.

| Constituent | NC2L/ (GWPS) | Background | Down-gradient | | | | | | | Blanks |
|---|---|---|---|---|---|---|---|---|---|---|
| | | LST-5S | LST-1S | LST-1D | LST-2S | LST-3S | LST-4S | LST-5D | LST-6S | |
| *Chromium* | 10 | **14** | 3.2 J | 0.21 J | 3.0 J | 5.4 J | 3.2 J | 0.40 J | 4.3 J | ND |
| *Lead* | 15 | **21** | 3.7 J | 0.26 J | 3.2 J | 5.3 J | 2.6 J | 0.39 J | 5.6 J | ND |
| *Vanadium* | 0.3 | **27** | 5.4 J | 1.2 J | 4.9 J | 7.7 J | 4.0 J | 1.4 J | 7.9 J | ND |
| *Zinc* | 1,000 | 79 | 8.1 J | 3.3 B | 10.0 | 18 | 38 | 5.6 J | 41 | 0.79 J |

All concentrations are reported in micrograms per liter (µg/L). --- = Data not available.
J = Estimated concentration below SWSL. B = Blank-qualified detection.

The inorganic and organic analytical results from the April 2015 sampling event at the Leachate Storage Lagoon Area are summarized in the appended event summaries, Table 10 and field parameters are summarized in Table 11 of this report. The results as reported by the laboratory, the laboratory quality assurance/quality control information, and the chains-of-custody are included in the Appendix A of this report. Quantified detections of chromium, lead, vanadium and zinc were reported in LST monitoring wells. Chromium, lead, and vanadium concentrations were reported above NC 2L standards within LST-5S only, which is the up-gradient well and therefore the detections to not represent exceedences of the site GPS. In addition, the chromium, lead, and vanadium concentrations are most likely due to the high turbidity (over 1,000 n.t.u.) at the time of sample. Zinc was also reported in one or more downgradient wells, but below the NC 2L Standard. There were no exceedences in downgradient monitoring wells, and no other quantified detections of inorganic or organic constituents during the April 2015 sampling event for the Leachate Storage monitoring area.

### 5.1.4 Surface Water

The only quantified detection for the surface water monitoring locations during the April 2015 sampling event was zinc at 12 µg/L from underdrain UD-1. The concentration of zinc is below the NC 2B Surface Water Standard. The complete inorganic and organic surface water analytical results from the April 8, 2015 sampling events at the CRSWMA landfills are summarized in the appended event summaries, as well as historical data in Table 12 and Table 13. The complete results as reported by the laboratory, the laboratory quality

assurance/quality control information, and the chains-of-custody are included in the Appendix A of this report.

### 5.1.5 Leachate

The following constituents were detected at quantified concentrations in the leachate during the April 2015 sampling event.

| Constituent | Leachate | Blanks |
|---|---|---|
| *Arsenic* | 40 | ND |
| *Barium* | 1034 | ND |
| *Cadmium* | 8 | ND |
| *Cobalt* | 15 | ND |
| *Chromium* | 32 | ND |
| *Nickel* | 82 | ND |
| *Benzene* | 4.20 | ND |
| *Styrene* | 6.50 | ND |
| *1,4-Dichlorobenzene* | 12.00 | ND |
| *Ethylbenzene* | 50.40 | ND |
| *Toluene* | 25.90 | ND |
| *Xylenes* | 45.60 | ND |

All concentrations are reported in micrograms per liter (µg/L). ND = Non-detect
J = Estimated concentration below SWSL. B = Blank-qualified detection.

The leachate analytical results from the April 2015 sampling event at the CRSWMA landfills are summarized in Table 14 of this report. The complete results as reported by the laboratory, the laboratory quality assurance/quality control information, and the chains-of-custody are included in Appendix A of this report.

## 5.2 Statistical Methods

The data were evaluated in accordance with the procedures outlined in NCSWMR Title 15A NCAC 13B.1632.g-h, through the use of the Shapiro-Wilk Test, Parametric Prediction Limits, Parametric Tolerance Intervals, Aitchison's Adjustment, Non-parametric Prediction Limits, and Poisson Prediction Limits, as appropriate. Background data, tests for normality, outliers, Aitchison's adjustment, tolerance interval, or prediction limits are used, as appropriate, based on the background data.

The statistical test by which down-gradient data are compared to facility background data is based upon the nature of the data and the number of data values that are less than the laboratory limit of detection. All statistical tests are evaluated at the 0.05 level of significance, 95% confidence level, and are conducted as one-tailed tests. Statistical background values were calculated using a data pool of historical results from pre-waste background monitoring events and from up-gradient wells during successive semiannual monitoring events.

## 5.3 Statistical Results

Background concentrations for inorganic constituents are determined using statistical procedures as discussed in Section 5.2. Beryllium and cobalt were the inorganic constituents detected in down-gradient monitoring wells above NC 2L or GWPS levels requiring statistical analysis. The statistical background for beryllium was calculated at 25 ug/L using the Non-parametric Prediction Interval. The statistical background for cobalt was calculated at 258 ug/L using the Non-Parametric Prediction Interval. In accordance with rule .1634.g.5 of the NCSWMR, since the background is higher than the GWPS, the background can be considered the groundwater protection standard (GPS); therefore, the cobalt and beryllium detections in MW-15S do not constitute GPS exceedences. The statistical worksheets and a summary table are presented in Appendix B of this report.

# 6.0 CONCLUSION

Analytical results reported detections of the inorganic constituents beryllium, and cobalt above their respective NC 2L or GWPS; however, in accordance with rule .1634.g.5 of the NCSWMR, statistical analysis of background data for each of these constituents was used to determine background concentrations to be used as the site specific GPS. Beryllium was detected in MW-15S, MW-16S, MW-17S and MW-18S at concentrations below the GPS (background) during the April 2015 sampling event; therefore, these detections are not exceedences. Cadmium was detected in MW-16S, but did not exceed the NC 2L listed concentration and is below the GPS. Finally Cobalt was detected in MW-15S above the GWPS, but below its statistically determined GPS. Chromium, lead, and vanadium were detected in MW LST-5S above their respective NC 2L standards; however, LST-5S is a background well, so the chromium, lead, and vanadium concentrations are not exceedences of the GPS

Zinc was detected in the underdrain UD-1, but at a concentration well below the NC 2B Standard for Zinc

The results of the April 2015 monitoring event continue to reflect a change in the deep aquifer hydrogeological conditions due to the cessation of pumping in the borrow area in September 2014. This change in the groundwater flow regime is primarily visible in the deep aquifer. The cone of depression from the pumping operation has been relieved, affecting the potentiometric surface contours as well as the direction and rate of groundwater flow. The hydrological conditions will continue to be monitored on a semiannual basis.

Based on the results presented herein, the CRSWMA Tuscarora Landfill shall remain in the Detection Monitoring Program as outlined in Title 15A NCAC 13B .1633. The next semiannual monitoring event is tentatively scheduled for October 2015.

## 7.0 REFERENCES


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# TABLE 1

## SUMMARY OF GROUNDWATER ELEVATIONS
## C.R.S.W.M.A. TUSCARORA INTERIM REGIONAL LANDFILL

| Well No. | Background | | Downgradient | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | IRL-1S | IRL-1D | IRL-2SA | IRL-2DA | IRL-3S | IRL-3D | IRL-4S | IRL-4D | IRL-5S | IRL-5D | MW-A | MW-B | PZ-Z |
| **Well TOC Elev.** | 50.56 | 50.19 | 51.37 | 51.58 | 49.02 | 48.93 | 48.34 | 48.35 | 48.78 | 48.66 | 46.04 | 48.90 | 49.52 |
| **Well Depth** | 17.73 | 45.20 | 17.68 | 30.95 | 16.40 | 39.22 | 14.99 | 34.64 | 14.62 | 35.42 | 20.40 | 14.90 | 32.35 |
| **Jul-93** | 46.57 | 36.02 | NI | NI | 38.68 | 34.26 | 43.13 | 34.24 | 40.19 | 34.73 | NI | NI | NI |
| **Aug-93** | 44.94 | 35.46 | NI | NI | 38.57 | 33.68 | 42.02 | 33.54 | 39.58 | 34.13 | NI | NI | NI |
| **Sep-93** | 44.29 | 34.70 | NI | NI | 38.42 | 32.97 | 41.77 | 33.01 | 39.50 | 33.39 | NI | NI | NI |
| **Sep-93** | 45.07 | 34.42 | NI | NI | 38.85 | 32.58 | 41.33 | 32.69 | 39.51 | 33.07 | NI | NI | NI |
| **Apr-94** | 45.55 | 38.93 | NI | NI | 37.74 | 37.27 | 39.48 | 37.33 | 37.95 | 37.79 | NI | NI | NI |
| **Oct-94** | 44.90 | 35.97 | NI | NI | 37.84 | 34.38 | 38.54 | 34.39 | 37.52 | 34.86 | NI | NI | NI |
| **Apr-95** | 45.50 | 38.73 | NI | NI | 38.02 | 37.15 | 38.82 | 37.16 | 37.56 | 37.60 | NI | NI | NI |
| **Oct-95** | 45.12 | 35.41 | NI | NI | 37.11 | 34.06 | 38.79 | 34.05 | 37.41 | 34.44 | NI | NI | NI |
| **Apr-96** | 46.60 | 40.25 | NI | NI | 38.98 | 38.82 | 38.58 | 38.83 | 37.51 | 39.28 | NI | NI | NI |
| **Oct-96** | 46.12 | NS | NI | NI | 37.88 | 39.01 | 38.52 | 39.06 | 37.29 | NS | NI | NI | NI |
| **Dec-96** | 47.26 | 40.19 | NI | NI | 38.12 | 38.73 | 37.94 | 38.85 | 37.28 | 39.26 | NI | NI | NI |
| **Apr-97** | 45.35 | NS | NI | NI | 37.71 | 37.50 | 38.82 | 37.54 | 37.30 | NS | NI | NI | NI |
| **Mar-97** | 46.65 | 40.46 | NI | NI | 37.67 | 39.00 | 38.70 | 39.03 | 37.40 | 39.48 | NI | NI | NI |
| **Oct-97** | 43.40 | NS | NI | NI | 37.68 | NS | 38.18 | 32.92 | 37.04 | NS | NI | NI | NI |
| **Apr-98** | 46.18 | NS | NI | NI | 38.05 | 38.57 | 38.51 | 38.62 | 37.52 | NS | NI | NI | NI |
| **Oct-98** | 44.11 | 36.69 | NI | NI | 37.52 | 35.32 | 37.78 | 35.38 | 37.23 | 35.79 | NI | NI | NI |
| **Mar-99** | 46.10 | NS | NI | NI | 38.35 | 37.95 | 38.35 | 37.99 | 38.18 | 38.39 | NI | NI | NI |
| **Jul-99** | 43.89 | 36.25 | NI | NI | 38.31 | 35.06 | 39.37 | 35.10 | 38.92 | 35.47 | NI | NI | NI |
| **Aug-99** | 43.27 | 34.79 | NI | NI | 38.18 | 33.34 | 39.37 | 33.41 | 38.96 | 33.75 | NI | NI | NI |
| **Oct-99** | 47.38 | 40.16 | NI | NI | 41.56 | 38.75 | 40.85 | 38.80 | 40.21 | 39.20 | NI | NI | NI |
| **Nov-99** | 45.52 | 39.56 | NI | NI | 38.70 | 38.16 | 39.21 | 38.23 | 39.29 | 38.65 | NI | NI | NI |
| **Apr-00** | 45.71 | 39.77 | NI | NI | 39.54 | 38.35 | 39.61 | 38.45 | 39.34 | 38.84 | NI | NI | NI |
| **Oct-00** | 44.52 | 38.90 | NI | NI | 39.76 | 37.43 | 39.46 | 37.52 | 39.45 | 37.94 | NI | NI | NI |
| **Apr-01** | 46.00 | 39.96 | 43.70 | 40.19 | 40.15 | 38.62 | 40.11 | 38.69 | 39.59 | 39.06 | 40.98 | 39.55 | 40.93 |
| **Oct-01** | 43.36 | 36.31 | 39.92 | 37.28 | 38.61 | 35.03 | 38.97 | 35.08 | 39.89 | 35.46 | 38.76 | 38.65 | 38.56 |
| **Apr-02** | 44.88 | 38.85 | 41.38 | 39.20 | 39.02 | 37.53 | 39.66 | 37.60 | 39.42 | 37.99 | 39.69 | 40.16 | 41.43 |
| **Oct-02** | 44.93 | 34.93 | 40.97 | 35.38 | 39.22 | 33.76 | 40.23 | 33.87 | 39.79 | 34.21 | 39.78 | 39.35 | 37.70 |
| **Apr-03** | 46.28 | 40.03 | 44.11 | 40.35 | 39.75 | 38.65 | 42.03 | 38.73 | 40.62 | 39.16 | 40.41 | 40.94 | 40.63 |
| **Oct-03** | 46.72 | 40.36 | 44.43 | 40.67 | 40.21 | 38.97 | 41.68 | 39.03 | 40.83 | 39.46 | 40.93 | 40.80 | 41.70 |
| **15-Apr-04** | 47.23 | 39.69 | 44.93 | 40.05 | 40.72 | 38.33 | 41.40 | 38.44 | 40.54 | 38.83 | 40.94 | 40.80 | 41.25 |
| **14-Oct-04** | 44.14 | 39.23 | 42.05 | 38.60 | 40.21 | 37.88 | 40.27 | 37.96 | 40.10 | 38.41 | 39.98 | 39.50 | 40.74 |
| **05-Apr-05** | 44.81 | NS | NS | 40.33 | 40.21 | 38.56 | 40.13 | 38.66 | 39.92 | 39.12 | 37.79 | NS | 41.27 |
| **27-Oct-05** | 46.74 | NS | NS | 41.01 | 40.88 | 39.18 | 41.16 | 39.31 | 40.44 | 39.70 | 40.67 | NS | 42.03 |
| **21-Apr-06** | 44.90 | 39.71 | NS | 39.89 | 40.41 | 38.23 | 40.31 | 38.35 | 40.07 | 38.77 | 40.15 | NS | 41.10 |
| **12-Oct-06** | 45.45 | 39.71 | NS | 40.00 | 39.80 | 38.28 | 40.86 | 38.37 | 40.18 | 38.79 | 40.58 | NS | 41.01 |
| **26-Apr-07** | 45.01 | 39.44 | NS | 39.85 | 39.85 | 38.13 | 40.32 | 38.22 | 40.08 | 38.66 | 40.29 | NS | 40.80 |
| **10-Oct-07** | 40.44 | 33.90 | NS | 34.20 | 39.19 | 32.54 | 39.06 | 32.65 | 39.05 | 33.02 | 38.21 | NS | 36.30 |
| **02-Apr-08** | 45.39 | 38.21 | NS | 38.64 | 40.08 | 37.08 | 39.79 | 37.17 | 39.54 | 37.49 | 40.03 | NS | 38.67 |
| **28-Oct-08** | 42.22 | 35.12 | NS | 36.03 | 40.24 | 34.70 | 39.69 | 34.76 | 39.27 | 34.93 | 39.88 | NS | 38.53 |
| **08-Apr-09** | 45.28 | 35.45 | 43.56 | 36.66 | 40.40 | 35.60 | 42.62 | 35.63 | 40.29 | 35.65 | 40.46 | 40.70 | 39.67 |
| **27-Oct-09** | 42.34 | 31.89 | 39.37 | 33.38 | 40.19 | 32.41 | 39.09 | 32.40 | 38.96 | 32.30 | 39.24 | 39.12 | 37.48 |
| **08-Apr-10** | 45.27 | 34.66 | 44.07 | 36.19 | 40.32 | 35.28 | 40.83 | 35.31 | 40.48 | 35.16 | 40.65 | 39.46 | 39.64 |
| **13-Oct-10** | 45.69 | 33.64 | 43.89 | 35.23 | 40.03 | 34.56 | 39.80 | 34.53 | 39.73 | 34.30 | 40.39 | 40.72 | 38.42 |
| **27-Apr-11** | 44.45 | 32.47 | 42.66 | 34.28 | 39.34 | 33.53 | 40.22 | 33.51 | 39.98 | 33.24 | 40.07 | 40.48 | 38.40 |
| **20-Oct-11** | 44.95 | 32.49 | 42.13 | 34.23 | 39.37 | 33.44 | 39.64 | 34.16 | 39.55 | 33.21 | 40.15 | 39.71 | 38.19 |
| **16-Oct-12** | 44.55 | 32.59 | 42.63 | 34.44 | 39.69 | 33.93 | 39.72 | 33.91 | 39.70 | 33.52 | 39.94 | 40.10 | 39.30 |
| **11-Apr-13** | 45.06 | 31.67 | 44.17 | 33.58 | 39.72 | 33.15 | 40.14 | 33.08 | 39.76 | 32.68 | 40.38 | 39.18 | 37.78 |
| **30-Oct-13** | 42.95 | 30.20 | 42.37 | 32.16 | 39.86 | 31.42 | 39.44 | 31.38 | 39.41 | 31.07 | 40.18 | 39.32 | 36.88 |
| **09-Apr-14** | 46.28 | 32.45 | 45.24 | 34.58 | 40.78 | 34.08 | 41.30 | 34.01 | 41.08 | 33.56 | 41.10 | 40.55 | 39.08 |
| **22-Oct-14** | 44.92 | 39.22 | 44.07 | 39.53 | 40.25 | 37.77 | 40.33 | 37.84 | 40.11 | 38.33 | 40.74 | 38.97 | 40.76 |
| **8-Apr-15** | 45.55 | 40.19 | 43.23 | 40.38 | 39.76 | 38.70 | 40.04 | 38.85 | 39.20 | 40.40 | 39.89 | 39.51 | 41.12 |

**NOTES:**

1. All elevations are in feet above mean sea level.
2. NS = Not sampled and/or groundwater depths not measured.
3. NI = Well/Piezometer not installed.

# TABLE 2

## SUMMARY OF GROUNDWATER ELEVATIONS
## C.R.S.W.M.A. TUSCARORA LONG-TERM REGIONAL LANDFILL

| Well No. | Background | | Down-gradient | | | | | | | | | | | Phase 3 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MW-12S | MW-12D | MW-7 | MW-7D | MW-8 | MW-8D | MW-9 | MW-10 | MW-11S | MW-11D | MW-13S | MW-13D | MW-14R | MW-15S | MW-15D | MW-16SR | MW-16D | MW-17S | MW-17D | MW-18S | MW-18D | MW-19S | MW-19D | MW-20D | MW-21D |
| **Well TOC Elev.** | 52.12 | 51.90 | 50.69 | 50.82 | 50.94 | 50.27 | 53.11 | 47.32 | 47.67 | 47.55 | 46.21 | 45.93 | 46.98 | 47.20 | 47.22 | 47.25 | 47.17 | 45.66 | 45.93 | 46.34 | 46.14 | 46.80 | 46.75 | 46.33 | 47.21 |
| **Well Depth** | 35.95 | 17.96 | 16.22 | 42.00 | 15.61 | 36.00 | 22.00 | 15.95 | 14.03 | 34.73 | 15.00 | 33.00 | 14.00 | 15.00 | 38.00 | 12.00 | 35.00 | 13.00 | 38.00 | 11.00 | 35.00 | 10.00 | 25.00 | 11.00 | 35.00 |
| **Jul-99** | NI | NI | 46.76 | - | 46.16 | - | 44.87 | 44.60 | 38.94 | 36.60 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **Aug-99** | NI | NI | 45.10 | - | 44.41 | - | 44.76 | 43.13 | 39.19 | 34.87 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **Oct-99** | NI | NI | 46.94 | - | 46.08 | - | 46.49 | 43.34 | 40.79 | 40.34 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **Nov-99** | NI | NI | 46.19 | - | 44.13 | - | 44.75 | 42.34 | 38.85 | 39.71 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **Apr-00** | NI | NI | 46.96 | - | 45.66 | - | 45.11 | 42.96 | 39.04 | 39.93 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **Oct-00** | NI | NI | 45.79 | - | 43.94 | - | 45.59 | 42.30 | 38.74 | 39.05 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **Apr-01** | NI | NI | 47.33 | - | 45.62 | - | 44.60 | 43.60 | 39.37 | 40.16 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **Oct-01** | NI | NI | 44.81 | - | 42.99 | - | 43.26 | 41.57 | 38.92 | 35.41 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **Apr-02** | 43.69 | 40.78 | 43.86 | - | 44.74 | - | 44.26 | 43.10 | 39.39 | 39.09 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **Oct-02** | 45.15 | 36.77 | 45.18 | - | 44.19 | - | 43.91 | 41.28 | 39.49 | 35.26 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **Apr-03** | 45.77 | 42.00 | 47.26 | - | 45.74 | - | 45.86 | 43.27 | 40.40 | 40.24 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **Oct-03** | 46.32 | 42.32 | 47.98 | - | 46.34 | - | 46.33 | 42.64 | 41.67 | 40.44 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **15-Apr-04** | 46.79 | 41.70 | 47.78 | - | 46.47 | - | 46.40 | 43.40 | 41.57 | 38.78 | 43.27 | 38.93 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **14-Oct-04** | 45.16 | 41.09 | 46.69 | - | 45.04 | - | - | 43.09 | 40.29 | 39.53 | 41.28 | 38.41 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **05-Apr-05** | 44.54 | 41.89 | 47.05 | - | 44.88 | - | - | 43.29 | 40.28 | 40.18 | 43.29 | 39.19 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **27-Oct-05** | 45.51 | 42.62 | 47.16 | - | 46.12 | - | - | 42.63 | 41.93 | 40.81 | 44.51 | 39.82 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **21-Apr-06** | 45.43 | 41.59 | 47.12 | - | 46.02 | - | - | 43.53 | 40.37 | 39.89 | 43.17 | 38.82 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **12-Oct-06** | 45.70 | 41.72 | 47.20 | - | 46.27 | - | - | 43.05 | 40.85 | 39.87 | 44.03 | 38.79 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **26-Apr-07** | 45.52 | 41.49 | 47.06 | - | 45.66 | - | - | 43.34 | 41.06 | 39.74 | 43.01 | 38.59 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **11-Oct-07** | 42.18 | 35.60 | 43.67 | - | 43.94 | - | - | 41.35 | 39.98 | 34.08 | 41.19 | 33.02 | 39.25 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **03-Apr-08** | 44.74 | 39.14 | 45.99 | - | 45.68 | - | - | 42.42 | 38.85 | 38.47 | 44.00 | 37.32 | 42.10 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **28-Oct-08** | 44.67 | 35.23 | 44.56 | - | 45.67 | - | - | 41.58 | 38.95 | 35.90 | 44.07 | 34.59 | 42.13 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **08-Apr-09** | 45.31 | 33.90 | 46.77 | - | 45.98 | - | - | 42.67 | 39.69 | 36.40 | 43.17 | 34.92 | 41.94 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI |
| **27-Oct-09** | 43.96 | 29.37 | 43.45 | - | 44.89 | - | - | 40.72 | 38.59 | 33.16 | 42.66 | 31.48 | 41.32 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| **08-Apr-10** | 45.17 | 31.48 | 46.57 | - | 45.94 | - | - | 42.74 | 40.28 | 36.00 | 43.01 | 34.27 | 41.67 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| **13-Oct-10** | 45.16 | 29.72 | 45.69 | - | 45.76 | - | - | 41.11 | 39.74 | 35.02 | 43.33 | 33.29 | 41.54 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| **27-Apr-11** | 44.73 | 29.09 | 45.77 | - | 45.63 | - | - | 42.17 | 39.76 | 34.01 | 42.99 | 32.18 | 41.30 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| **20-Oct-11** | 44.86 | 29.42 | 44.98 | - | 45.99 | - | - | 41.12 | 39.94 | 33.96 | 43.31 | 32.13 | 43.65 | 41.20 | 30.31 | 40.04 | 31.76 | 39.33 | 32.70 | 40.99 | 32.80 | 39.61 | 32.78 | 26.07 | 27.21 |
| **26-Apr-12** | 44.18 | 29.11 | 45.46 | - | 45.49 | - | - | 41.80 | 40.17 | 34.05 | 43.32 | 31.68 | 42.33 | 40.86 | 30.53 | 39.64 | 32.00 | 39.27 | 33.04 | 39.62 | 33.08 | 37.08 | 33.08 | 26.15 | 19.89 |
| **16-Oct-12** | 43.81 | 29.59 | 45.18 | 31.47 | 45.39 | 31.00 | - | 41.51 | 39.87 | 34.21 | 42.77 | 32.26 | 42.17 | 41.02 | 31.22 | 39.58 | 32.88 | 39.34 | 34.02 | 39.91 | 33.93 | 38.22 | 33.82 | 26.46 | 27.61 |
| **11-Apr-13** | 44.16 | 28.14 | 45.94 | 30.08 | 45.70 | 29.84 | - | 41.90 | 40.13 | 33.43 | 43.41 | 31.28 | 42.37 | 40.97 | 29.88 | 39.82 | 31.84 | 39.33 | 33.08 | 39.54 | 33.02 | 39.06 | 33.01 | 25.11 | 27.05 |
| **30-Oct-13** | 43.86 | 27.48 | 45.16 | 29.20 | 45.23 | 28.71 | - | 40.78 | 39.82 | 31.83 | 42.95 | 29.93 | 42.18 | 40.90 | 29.11 | 39.35 | 30.75 | 39.24 | 31.83 | 39.64 | 31.59 | 38.34 | 31.45 | 24.39 | 25.51 |
| **09-Apr-14** | 44.92 | 25.27 | 47.01 | 31.12 | 46.14 | 31.27 | - | 42.93 | 40.84 | 34.22 | 43.98 | 32.03 | 44.08 | 41.82 | 30.42 | 40.80 | 32.53 | 40.62 | 34.08 | 41.60 | 34.24 | 41.36 | 34.69 | 25.70 | 26.96 |
| **22-Oct-14** | 44.47 | 40.90 | 45.74 | 39.05 | 45.05 | 39.33 | - | 42.06 | 40.33 | 39.41 | 43.11 | 38.35 | 43.54 | 41.03 | 39.71 | 39.60 | 39.56 | 39.84 | 39.15 | 41.41 | 38.84 | 40.89 | 38.54 | 36.33 | 37.07 |
| **8-Apr-15** | 44.89 | 42.20 | 46.68 | 40.11 | 45.24 | 40.44 | - | 42.78 | 40.46 | 40.32 | 42.95 | 39.29 | 43.74 | 41.47 | 40.82 | 40.11 | 40.55 | 38.54 | 40.04 | 41.93 | 39.67 | 41.58 | 39.42 | 37.43 | 38.08 |

**NOTES:**

1. All elevations are in feet above mean sea level.
2. NI = Well/Piezometer not installed.
3. NM = Not Measured.

# TABLE 3

## SUMMARY OF GROUNDWATER ELEVATIONS
## C.R.S.W.M.A. TUSCARORA LF - LEACHATE STORAGE AREA

| Well No. | Background | Downgradient | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LST-5S | LST-1S | LST-1D | LST-2S | LST-2D | LST-3S | LST-3D | LST-4S | LST-4D | LST-5D | LST-6S | LST-6D |
| **Well TOC Elev.** | 52.37 | 50.92 | 50.92 | 51.00 | 50.94 | 52.17 | 51.87 | 51.38 | 51.56 | 52.27 | 51.23 | 51.17 |
| **Well Depth** | 16.12 | 15.32 | 34.99 | 14.59 | 33.25 | 17.93 | 34.69 | 17.85 | 36.16 | 39.11 | 16.61 | 34.31 |
| **Jul-93** | 47.21 | 47.48 | 36.53 | 46.95 | 36.79 | 47.01 | 36.85 | 47.12 | 37.02 | 36.68 | 47.11 | 37.42 |
| **Aug-93** | 46.38 | 45.92 | 35.80 | 45.71 | 35.98 | 45.79 | 35.98 | 45.89 | 36.19 | 35.86 | 45.82 | 36.74 |
| **Sep-93** | 45.91 | 45.54 | 35.03 | 45.63 | 35.48 | 45.04 | 35.27 | 44.25 | 34.96 | 34.37 | 44.94 | 35.87 |
| **Sep-93** | 45.93 | 45.74 | 34.47 | 45.35 | 34.66 | 45.23 | 35.08 | 45.49 | 34.94 | 33.67 | 45.29 | 35.28 |
| **Apr-94** | 46.71 | 46.78 | 37.59 | 46.29 | 34.59 | 45.72 | 38.01 | 46.18 | 39.81 | 37.16 | 46.41 | 40.16 |
| **Oct-94** | 46.14 | 45.99 | 36.41 | 46.00 | 36.64 | 45.65 | 36.63 | 45.41 | 36.76 | 36.47 | 44.52 | 37.17 |
| **Apr-95** | 46.92 | 46.43 | 39.16 | 46.39 | 39.40 | 46.06 | 39.42 | 45.91 | 39.57 | 39.26 | 45.94 | 39.95 |
| **Oct-95** | 45.86 | 46.89 | 35.72 | 46.06 | 35.95 | 45.90 | 35.95 | 45.77 | 36.11 | 35.83 | 43.70 | 36.32 |
| **Apr-96** | 47.56 | 47.25 | 40.74 | 47.23 | 41.00 | 46.88 | 40.91 | 46.87 | 41.05 | 40.84 | 47.41 | 41.51 |
| **Oct-96** | 46.88 | 46.42 | 40.93 | 46.81 | NS | 46.38 | NS | 46.48 | NS | 41.05 | 48.06 | NS |
| **Dec-96** | 46.87 | 47.62 | 40.62 | 47.10 | 40.94 | 47.07 | 40.87 | 46.08 | 41.06 | 40.77 | 47.73 | 41.37 |
| **Apr-97** | 46.97 | 46.40 | 39.40 | 46.37 | NS | 46.05 | NS | 45.97 | NS | 39.51 | 45.89 | NS |
| **Mar-97** | 47.99 | 47.92 | 40.88 | 47.49 | 41.11 | 47.12 | 41.13 | 47.01 | 41.28 | 40.98 | 47.56 | 41.63 |
| **Oct-97** | 45.21 | 45.43 | 34.80 | 44.19 | NS | 45.03 | NS | 45.06 | NS | 34.83 | 44.09 | NS |
| **Apr-98** | 47.20 | 46.67 | 40.47 | 46.47 | NS | 46.54 | NS | 46.56 | NS | 40.54 | 46.30 | 41.63 |
| **Oct-98** | 44.65 | 43.89 | 37.00 | 44.10 | 37.19 | 44.44 | 37.22 | 44.42 | 37.35 | 37.06 | 42.24 | 37.57 |
| **Mar-99** | 46.50 | 45.92 | 39.73 | 46.00 | 39.95 | 46.54 | 40.00 | 46.73 | 40.11 | 39.81 | 45.88 | 40.45 |
| **Jul-99** | 45.86 | 45.34 | 37.48 | 45.37 | 36.64 | 45.53 | 36.75 | 45.33 | 36.80 | 36.55 | 41.58 | 36.96 |
| **Aug-99** | 44.90 | 45.07 | 34.78 | 45.30 | 34.95 | 45.29 | 35.05 | 45.12 | 35.11 | 34.84 | 40.70 | 35.26 |
| **Oct-99** | 46.97 | 46.37 | 40.52 | 46.86 | 40.76 | 47.97 | 40.85 | 47.96 | 40.94 | 40.62 | 46.35 | 41.24 |
| **Nov-99** | 45.85 | 45.44 | 39.94 | 45.51 | 40.18 | 46.35 | 40.20 | 45.22 | 40.38 | 40.06 | 44.58 | 40.62 |
| **Apr-00** | 46.87 | 45.97 | 40.09 | 46.04 | 40.35 | 46.50 | 40.42 | 46.39 | 40.56 | 40.27 | 45.59 | 40.82 |
| **Oct-00** | 45.34 | 44.92 | 39.27 | 45.10 | 39.50 | 45.38 | 39.54 | 45.28 | 39.71 | 40.37 | 43.57 | 39.98 |
| **Apr-01** | 46.85 | 46.11 | 40.30 | 46.14 | 40.49 | 46.37 | 40.56 | 46.27 | 40.65 | 40.39 | 44.93 | 40.95 |
| **Oct-01** | 45.22 | 44.58 | 36.62 | 44.79 | 36.76 | 44.92 | 36.87 | 44.82 | 36.90 | 36.72 | 42.23 | 37.22 |
| **Apr-02** | 46.47 | 45.97 | 39.22 | 45.98 | 39.43 | 46.07 | 39.51 | 45.93 | 39.64 | 39.29 | 44.25 | 39.93 |
| **Oct-02** | 45.97 | 45.61 | 35.22 | 45.57 | 35.39 | 45.72 | 35.44 | 45.39 | 35.56 | 35.27 | 42.22 | 35.85 |
| **Apr-03** | 47.04 | 46.33 | 40.39 | 46.37 | 40.61 | 46.61 | 40.68 | 46.66 | 40.80 | 40.51 | 45.38 | 41.11 |
| **Oct-03** | 47.21 | 46.52 | 40.71 | 46.76 | 40.95 | 46.99 | 41.02 | 47.18 | 41.15 | 40.83 | 45.78 | 41.42 |
| **15-Apr-04** | 47.38 | 46.62 | 40.08 | 46.82 | 40.30 | 47.38 | 40.35 | 47.75 | 40.52 | 40.17 | 45.91 | 40.78 |
| **14-Oct-04** | 46.37 | 45.72 | 39.58 | 44.82 | 39.76 | 45.76 | 39.87 | 45.68 | 39.95 | 39.67 | 44.48 | 40.22 |
| **05-Apr-05** | 46.35 | 46.02 | 40.37 | 46.03 | 40.56 | 46.17 | 40.60 | 46.00 | 40.73 | 40.45 | 44.99 | 40.99 |
| **27-Oct-05** | 46.86 | 42.38 | 41.01 | 46.39 | 41.23 | 46.99 | 41.18 | 47.50 | 41.05 | 41.10 | 45.55 | 41.75 |
| **21-Apr-06** | 46.41 | 46.05 | 40.07 | 45.98 | 40.27 | 46.05 | 40.33 | 45.93 | 40.41 | 40.24 | 44.56 | 40.75 |
| **12-Oct-06** | 46.92 | 46.51 | 40.11 | 46.38 | 40.36 | 46.49 | 40.43 | 46.40 | 40.58 | 40.24 | 44.95 | 40.88 |
| **26-Apr-07** | 46.52 | 46.05 | 39.67 | 45.99 | 39.78 | 46.17 | 40.07 | 46.03 | 40.29 | 39.76 | 44.93 | 40.59 |
| **10-Oct-07** | 43.46 | 43.34 | 34.12 | 42.53 | 34.24 | 41.99 | 34.31 | 41.81 | 34.44 | 34.15 | 41.90 | 34.70 |
| **03-Apr-08** | 46.54 | 46.17 | 38.12 | 46.00 | 38.20 | 46.42 | 38.31 | 46.28 | 38.42 | 38.23 | 44.77 | 38.48 |
| **28-Oct-08** | 45.96 | 45.99 | 34.75 | 45.66 | 34.71 | 45.28 | 34.85 | 45.13 | 34.87 | 34.83 | 43.99 | 34.58 |
| **08-Apr-09** | 45.47 | 46.27 | 34.56 | 46.07 | 34.43 | 46.40 | 34.87 | 46.26 | 34.66 | 34.84 | 44.75 | 33.79 |
| **27-Oct-09** | 45.15 | 45.05 | 30.72 | 44.55 | 30.42 | 44.66 | 30.85 | 44.54 | 30.51 | 30.94 | 43.37 | 29.33 |
| **08-Apr-10** | 46.69 | 46.00 | 33.15 | 45.95 | 32.79 | 46.16 | 33.35 | 46.09 | 32.99 | 33.47 | 44.77 | 31.42 |
| **13-Oct-10** | 46.63 | 45.99 | 31.83 | 45.99 | 31.43 | 46.41 | 32.01 | 46.41 | 31.58 | 32.26 | 44.42 | 29.69 |
| **27-Apr-11** | 46.27 | 45.75 | 30.80 | 45.72 | 30.48 | 45.63 | 30.99 | 45.53 | 30.62 | 31.17 | 44.28 | 28.87 |
| **20-Oct-11** | 46.25 | 46.25 | 30.89 | 46.07 | 30.59 | 46.07 | 31.14 | 46.18 | 30.76 | 31.70 | 44.89 | 29.23 |
| **26-Apr-12** | 46.03 | 45.76 | 30.36 | 45.65 | 30.10 | 45.72 | 30.55 | 45.69 | 30.31 | 30.76 | 44.51 | 28.72 |
| **16-Oct-12** | 46.05 | 45.65 | 30.73 | 45.53 | 30.40 | 45.71 | 31.02 | 45.66 | 30.56 | 31.15 | 44.90 | 28.87 |
| **11-Apr-13** | 46.36 | 46.20 | 29.65 | 45.89 | 29.37 | 45.79 | 30.11 | 45.62 | 29.45 | 30.13 | 44.79 | 27.96 |
| **30-Oct-13** | 45.53 | 45.68 | 28.53 | 45.48 | 28.23 | 44.96 | 28.77 | 44.75 | 28.42 | 28.85 | 44.13 | 26.94 |
| **09-Apr-14** | 48.32 | 46.52 | 30.30 | 46.41 | 29.94 | 46.86 | 30.65 | 46.97 | 30.14 | 30.73 | 45.32 | 28.26 |
| **22-Oct-14** | 47.17 | 46.11 | 39.43 | 45.99 | 39.57 | 46.04 | 39.86 | 45.98 | 39.77 | 39.55 | 44.51 | 39.94 |
| **08-Apr-15** | 46.37 | 46.08 | 40.51 | 46.03 | 40.66 | 46.31 | 40.73 | 46.36 | 40.86 | 40.63 | 44.62 | 41.23 |

**NOTES:**

1. All elevations are in feet above mean sea level.
2. NS = Not sampled and/or groundwater depths not measured.

# TABLE 4

## ESTIMATED HYDRAULIC GRADIENTS AND AVERAGE LINEAR VELOCITIES FOR THE SHALLOW AQUIFER

| | | | APRIL 8 - 9, 2015 | | | | |
|---|---|---|---|---|---|---|---|
| GRADIENT CALCULATION SEGMENT | FLOW LINE LENGTH (feet) | FLOW DIRECTION | GROUND-WATER ELEV. (feet) | HORIZ. GRADIENT, i (ft/ft) | HYDRAULIC CONDUCTIVITY, K (ft/day) | EFFECTIVE POROSITY n | LINEAR VELOCITY, V (ft/day) |
| $i_1$ | 1688 | SE | 46<br>40 | 0.0036 | 5.67E-01 | 0.17 | 0.012 |
| $i_2$ | 1204 | SE | 45<br>41 | 0.0033 | 5.67E-01 | 0.17 | 0.011 |
| $i_3$ | 1839 | NE | 45<br>40 | 0.0027 | 5.67E-01 | 0.17 | 0.009 |
| | | | Average | 0.0032 | | Average | 0.011 |

**Notes:**

1. The hydraulic conductivity value used to calculate flow velocity was determined by using the geometric mean of hydraulic conductivities of all shallow aquifer monitoring wells listed in Table 6 of the *CRSWMA Tuscarora Long-Term Regional Landfill Phase 2 Expansion, Application for a Permit to Construct* by Joyce Engineering, Inc. (Revised January 2004).
2. Velocity = Ki/n; assume homogeneous isotropic porous aquifer.
3. An effective porosity (n) of 0.17 was assumed in the velocity calculations based on site-specific soil laboratory data.

# TABLE 5

## ESTIMATED HYDRAULIC GRADIENTS AND AVERAGE LINEAR VELOCITIES FOR THE DEEP AQUIFER

| | | | APRIL 8 - 9, 2015 | | | | |
|---|---|---|---|---|---|---|---|
| GRADIENT CALCULATION SEGMENT | FLOW LINE LENGTH (feet) | FLOW DIRECTION | GROUND-WATER ELEV. (feet) | HORIZ. GRADIENT, i (ft/ft) | HYDRAULIC CONDUCTIVITY, K (ft/day) | EFFECTIVE POROSITY n | LINEAR VELOCITY, V (ft/day) |
| $i_4$ | 270 | SW | 42.0<br>37.0 | 0.0185 | 5.39E+00 | 0.25 | 0.399 |
| $i_5$ | 122 | SE | 40.0<br>39.0 | 0.0082 | 5.39E+00 | 0.25 | 0.177 |
| | | | Average | 0.0105 | | Average | 0.225 |

**Notes:**

1. The hydraulic conductivity value used to calculate flow velocity was determined by using the geometric mean of hydraulic conductivities of all deep aquifer monitoring wells listed in Table 7 of the *CRSWMA Tuscarora Long-Term Regional Landfill Phase 2 Expansion, Application for a Permit to Construct* by Joyce Engineering, Inc. (Revised January 2004).
2. Velocity = Ki/n; assume homogeneous isotropic porous aquifer.
3. An effective porosity (n) of 0.25 was assumed in the velocity calculations based on site-specific soil laboratory data.

# TABLE 6

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA INTERIM REGIONAL LANDFILL

| Analyte | Sample Collection Date | DL | SWSL | IRL-1S | IRL-1D | IRL-2S | IRL-2SA | IRL-2D | IRL-2DA | IRL-3S | IRL-3D | IRL-4S | IRL-4D | IRL-5S | IRL-5D | IRL-6S | IRL-6D | MW-A | MW-B | Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Compounds** | | | | | | | | | | | | | | | | | | | | |
| Antimony | 10-Oct-07 | 0.05 | 6.0 | 0.1 B | 0.1 B | --- | --- | --- | --- | 0.10 B | 0.50 B | 0.10 B | 0.10 B | 0.10 B | --- | --- | --- | 0.10 B | --- | 0.10 J |
| GWPS = 1.4 µg/L (10/23/07) | 2-Apr-08 | 0.08 | 6.0 | 0.5 B | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | 0.10 J |
| | 28-Oct-08 | 0.08 | 6.0 | 0.1 J | 0.1 J | --- | --- | --- | --- | 0.50 J | 0.10 J | ND | 0.10 J | 0.10 J | --- | --- | --- | ND | --- | ND |
| | 8-Apr-09 | 0.06 | 6.0 | ND | ND | --- | --- | --- | --- | 0.10 J | 0.10 J | ND | ND | 0.90 J | --- | --- | --- | 0.10 J | --- | ND |
| | 27-Oct-09 | 0.06 | 6.0 | ND | 0.7 J | --- | --- | --- | --- | 0.20 J | 0.10 J | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-10 | 0.22 | 6.0 | 1.0 B | 0.9 B | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | 0.70 J |
| GWPS = 1 µg/L (8/1/10) | 13-Oct-10 | 0.22 | 6.0 | ND | ND | --- | --- | --- | --- | 0.50 J | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 27-Apr-11 | 0.14 | 6.0 | ND | ND | --- | --- | --- | --- | 1.60 J | 0.28 J | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 20-Oct-11 | 0.14 | 6.0 | 0.2 J | 0.2 J | --- | --- | --- | --- | 0.22 J | ND | ND | ND | ND | --- | --- | --- | 0.50 J | --- | ND |
| | 26-Apr-12 | 0.14 | 6.0 | ND | ND | --- | --- | --- | --- | 0.19 J | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 16-Oct-12 | 0.02 | 6.0 | ND | 0.2 J | --- | --- | --- | --- | 0.16 J | 0.39 J | 0.23 J | 0.19 J | 0.12 J | --- | --- | --- | 0.07 J | --- | ND |
| | 11-Apr-13 | 0.02 | 6.0 | 0.2 J | 0.2 J | --- | --- | --- | --- | 0.36 J | 0.21 J | 0.39 J | 0.10 J | 0.20 J | --- | --- | --- | 0.33 J | --- | ND |
| | 30-Oct-13 | 0.02 | 6.0 | 0.2 B | 0.4 B | --- | --- | --- | --- | 0.36 B | 0.79 J | 0.09 B | 0.17 B | 0.12 B | --- | --- | --- | 0.31 B | --- | 0.08 J |
| | 9-Apr-14 | 0.02 | 6.0 | 0.2 J | 1.2 J | --- | --- | --- | --- | 0.78 J | 0.21 J | 0.18 J | 0.12 J | 0.16 J | --- | --- | --- | 0.11 J | --- | ND |
| | 22-Oct-14 | 0.12 | 6.0 | ND | 0.72 J | --- | --- | --- | --- | ND | ND | ND | 0.36 J | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-15 | 0.12 | 6.0 | ND | 0.22 J | --- | --- | --- | --- | 0.36 J | 0.23 J | ND | ND | 0.12 J | --- | --- | --- | 0.22 J | --- | ND |
| Arsenic | Jul-93 | NR | 5.0 | 11 | 8 | ND | NI | ND | NI | ND | ND | ND | 22 | ND | 34.0 | 11.0 | ND | NI | NI | ND |
| | Aug-93 | NR | 5.0 | 6 | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | 6.0 | ND | NI | NI | ND |
| | Sep-93 | NR | 5.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | 6 | ND | ND | ND | ND | NI | NI | ND |
| | Sep-93 | NR | 5.0 | 6 | 10 | ND | NI | ND | NI | ND | ND | ND | 168 | ND | ND | ND | ND | NI | NI | ND |
| | Apr-94 | NR | 5.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | Oct-94 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | Apr-95 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | Oct-95 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | Apr-96 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | Oct-96 | NR | 10.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | Apr-97 | NR | 10.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | Oct-97 | NR | 10.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | Apr-98 | NR | 10.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | 10 | --- | 14.0 | --- | NI | NI | ND |
| | Oct-98 | NR | 10.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Mar-99 | NR | 10.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Oct-99 | NR | 10.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Apr-00 | NR | 10.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Oct-00 | NR | 10.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Apr-01 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Oct-01 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Apr-02 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-02 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Apr-03 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-03 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 15-Apr-04 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 14-Oct-04 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 05-Apr-05 | NR | 10.0 | ND | --- | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 05-Oct-05 | NR | 10.0 | ND | 52 | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 21-Apr-06 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 12-Oct-06 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-07 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 10-Oct-07 | 0.5 | 10.0 | 3 J | ND | --- | --- | --- | --- | 2.3 J | ND | 1.6 J | 0.7 J | 1.2 J | --- | --- | --- | 2 J | --- | ND |
| NC 2L = 50 µg/L (10/23/07) | 02-Apr-08 | 0.1 | 10.0 | 0.8 J | 0.8 J | --- | --- | --- | --- | 0.4 J | 0.4 J | 1.7 J | 0.4 J | 2.2 J | --- | --- | --- | 1.2 J | --- | ND |
| | 28-Oct-08 | 0.1 | 10.0 | 1 B | 1.6 B | --- | --- | --- | --- | 1.7 B | 1 B | 2 B | 0.5 B | 4.3 J | --- | --- | --- | 5 J | --- | 0.5 J |
| | 08-Apr-09 | 0.17 | 10.0 | 1.2 J | 1.4 J | --- | --- | --- | --- | 1.2 J | 1.4 J | 2.7 J | 0.5 B | 4.2 J | --- | --- | --- | 3.8 J | --- | 0.2 J |
| | 27-Oct-09 | 0.17 | 10.0 | 2.1 J | 1.8 J | --- | --- | --- | --- | 1 J | 1 J | 1 J | 1 J | 5 J | --- | --- | --- | 4 J | --- | ND |
| NC 2L = 10 µg/L (1/1/10) | 08-Apr-10 | 0.04 | 10.0 | 1 J | 0.9 J | --- | --- | --- | --- | 2 J | ND | 1 J | ND | 2.8 J | --- | --- | --- | 3 J | --- | ND |
| | 13-Oct-10 | 0.04 | 10.0 | ND | 2.7 J | --- | --- | --- | --- | 3 J | 1 J | 2 J | 0.8 J | 4.8 J | --- | --- | --- | 4 J | --- | ND |
| | 27-Apr-11 | 0.10 | 10.0 | 0.18 J | 0.82 J | --- | --- | --- | --- | 0.7 J | 0.2 J | 0.8 J | 0.3 J | 2.2 J | --- | --- | --- | 2.2 J | --- | ND |
| | 20-Oct-11 | 0.10 | 10.0 | ND | 1.4 J | --- | --- | --- | --- | 1.5 J | ND | 1.3 J | 0.4 J | 0.3 J | --- | --- | --- | 3.9 J | --- | ND |
| | 26-Apr-12 | 0.10 | 10.0 | 0.42 J | 1.3 J | --- | --- | --- | --- | 1.0 J | ND | 1.3 J | 0.3 J | 2.7 J | --- | --- | --- | 2.0 J | --- | ND |
| | 16-Oct-12 | 0.13 | 10.0 | 0.45 J | 1.6 J | --- | --- | --- | --- | 2 J | 0 J | 2 J | 0.4 J | 2.5 J | --- | --- | --- | 3 J | --- | ND |
| | 11-Apr-13 | 0.05 | 10.0 | 0.82 J | 0.85 J | --- | --- | --- | --- | 1 J | 0 B | 1 J | 0.3 B | 2.5 J | --- | --- | --- | 2 J | --- | 0.15 J |
| | 30-Oct-13 | 0.05 | 10.0 | 0.77 B | 1.4 J | --- | --- | --- | --- | 1 B | ND | 2 J | 0.1 B | 3.6 J | --- | --- | --- | 5 J | --- | 0.2 J |
| | 9-Apr-14 | 0.05 | 10.0 | 0.53 J | 1.2 J | --- | --- | --- | --- | 1 J | 0.1 J | 0.76 J | 0.15 J | 2.3 J | --- | --- | --- | 3.5 J | --- | ND |
| | 22-Oct-14 | 0.10 | 10.0 | 0.31 J | 1.3 J | --- | --- | --- | --- | 0.94 J | ND | 2.0 J | ND | 1.5 J | --- | --- | --- | 5.6 J | --- | ND |
| | 8-Apr-15 | 0.10 | 10.0 | 0.70 J | 1.4 J | --- | --- | --- | --- | 1.8 J | 0.79 J | 1.5 J | 0.72 J | 0.61 J | --- | --- | --- | 3.2 J | --- | ND |
| Barium | 1-Jul-93 | NR | 50.0 | 268 | 343 | 302 | NI | 188.0 | NI | 296 | 189 | 202 | 580.0 | 280.0 | 365.0 | 785.0 | 182.0 | NI | NI | ND |
| | 1-Aug-93 | NR | 50.0 | 122 | 252 | 109 | NI | 210 | NI | 248 | 110 | 110 | 125.0 | 294.0 | 116.0 | 96.0 | 54.0 | NI | NI | ND |
| | 1-Sep-93 | NR | 50.0 | 113 | 105 | 107 | NI | 125 | NI | 159 | 166 | 91 | 215.0 | 181.0 | 80.0 | 70.0 | ND | NI | NI | ND |
| | 1-Sep-93 | NR | 50.0 | 109 | 212 | 152 | NI | 204 | NI | 200 | 145 | 143 | - | 250.0 | 137.0 | 75.0 | 87.0 | NI | NI | ND |
| | 1-Apr-94 | NR | 50.0 | 73 | 131 | 97 | NI | 113 | NI | 83 | 86 | 103 | 65 | 309 | 73.0 | ND | ND | NI | NI | ND |
| | 1-Oct-94 | NR | 500.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-95 | NR | 500.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-95 | NR | 500.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-96 | NR | 500.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-96 | NR | 500.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-97 | NR | 500.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | 986 | --- | ND | --- | NI | NI | ND |
| | 1-Oct-97 | NR | 500.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | 1084 | --- | ND | --- | NI | NI | ND |
| | 1-Apr-98 | NR | 500.0 | ND | --- | ND | NI | --- | NI | ND | 657 | ND | 515 | 971 | --- | ND | --- | NI | NI | ND |
| | 1-Oct-98 | NR | 500.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | 898 | --- | --- | --- | NI | NI | ND |
| | 1-Mar-99 | NR | 500.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-99 | NR | 500.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Apr-00 | NR | 500.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-00 | NR | 500.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Apr-01 | NR | 500.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Oct-01 | NR | 500.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Apr-02 | NR | 500.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-02 | NR | 500.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Apr-03 | NR | 500.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-03 | NR | 500.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 15-Apr-04 | NR | 500.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 14-Oct-04 | NR | 500.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 5-Apr-05 | NR | 500.0 | ND | --- | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 5-Oct-05 | NR | 500.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 21-Apr-06 | NR | 500.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 12-Oct-06 | NR | 500.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-07 | NR | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | 113 | ND | ND | --- | --- | --- | ND | --- | ND |
| | 10-Oct-07 | 0.0 | 100.0 | 44.8 J | 56.4 J | --- | --- | --- | --- | 69.9 J | 67.2 J | 133 | 39 J | 96.9 J | --- | --- | --- | 28.8 J | --- | 0.2 J |
| NC 2L = 2,000 µg/L (10/23/07) | 2-Apr-08 | 0.1 | 100.0 | 72.9 J | 33.4 J | --- | --- | --- | --- | 74.7 J | 64.2 J | 140 | 40.2 J | 69.5 J | --- | --- | --- | 33.8 J | --- | ND |
| | 28-Oct-08 | 0.1 | 100.0 | 94.9 J | 39.6 J | --- | --- | --- | --- | 91.7 J | 95.9 J | 149 | 39 J | 116.0 | --- | --- | --- | 44.2 J | --- | 0.7 J |
| | 8-Apr-09 | 0.0 | 100.0 | 118 | 41.1 J | --- | --- | --- | --- | 72.6 J | 107 | 176 | 43.8 J | 92.8 J | --- | --- | --- | 42.0 J | --- | 0.2 J |
| | 27-Oct-09 | 0.0 | 100.0 | 113 | 42.9 J | --- | --- | --- | --- | 58.4 J | 92 J | 176 | 46.9 J | 120.0 | --- | --- | --- | 29.6 J | --- | 0.1 J |
| NC 2L = 700 µg/L (1/1/10) | 8-Apr-10 | 0.0 | 100.0 | 109 | 47.0 J | --- | --- | --- | --- | 53.9 J | 81.2 J | 180 | 47.2 J | 107.0 | --- | --- | --- | 35.0 J | --- | 0.1 J |
| | 13-Oct-10 | 0.0 | 100.0 | 131 | 53.4 J | --- | --- | --- | --- | 59.9 J | 68.8 J | 140 | 44.9 J | 114.0 | --- | --- | --- | 37.7 J | --- | 0.2 J |
| | 27-Apr-11 | 0.0 | 100.0 | 170 | 45.8 J | --- | --- | --- | --- | 48.3 J | 66.5 J | 150 | 51.6 J | 107.0 | --- | --- | --- | 37.3 J | --- | 0.1 J |
| | 20-Oct-11 | 0.02 | 100.0 | 112 | 37.2 J | --- | --- | --- | --- | 46.5 J | 54.7 J | 117 | 39.4 J | 103 | --- | --- | --- | 30.2 J | --- | 0.1 J |
| | 26-Apr-12 | 0.02 | 100.0 | 133 | 49.3 J | --- | --- | --- | --- | 54.0 J | 50.6 J | 115.0 | 46.3 J | 91.5 J | --- | --- | --- | 35.1 J | --- | 0.12 J |
| | 16-Oct-12 | 0.07 | 100.0 | 139 | 42.5 J | --- | --- | --- | --- | 48.1 J | 53.5 J | 78.0 J | 34.5 J | 95.9 J | --- | --- | --- | 35.6 J | --- | 0.28 J |
| | 11-Apr-13 | 0.06 | 100.0 | 158 | 46.1 J | --- | --- | --- | --- | 40.4 J | 45.2 J | 59.5 J | 40.7 J | 86.0 J | --- | --- | --- | 31.5 J | --- | 0.06 J |
| | 30-Oct-13 | 0.06 | 100.0 | 166 | 39.7 J | --- | --- | --- | --- | 43 J | 41 J | 91 J | 43.9 J | 94.4 J | --- | --- | --- | 39.5 J | --- | 0.24 J |
| | 9-Apr-14 | 0.06 | 100.0 | 188 | 56.2 J | --- | --- | --- | --- | 48.4 J | 44.3 J | 60.4 J | 45.7 J | 110 | --- | --- | --- | 51.5 J | --- | ND |
| | 22-Oct-14 | 0.12 | 100.0 | 187 | 38.2 J | --- | --- | --- | --- | 51.8 J | 46.5 J | 82.8 J | 42.2 J | 117 | --- | --- | --- | 44.2 J | --- | ND |
| | 8-Apr-15 | 0.12 | 100.0 | 162 | 43.9 J | --- | --- | --- | --- | 39.8 J | 61.4 J | 67.3 J | 41.4 J | 50.6 J | --- | --- | --- | 424 | --- | ND |
| Beryllium | 1-Jul-93 | NR | 1.0 | 3 | 1 | ND | NI | ND | NI | ND | ND | 2 | ND | ND | 8.0 | 4.0 | ND | NI | NI | ND |
| | 1-Aug-93 | NR | 1.0 | 1 | 1 | ND | NI | 1.0 | NI | ND | 1.0 | ND | 1.0 | ND | 1.0 | ND | ND | NI | NI | ND |
| | 1-Sep-93 | NR | 1.0 | 1.0 | ND | ND | NI | ND | NI | ND | ND | ND | 3.0 | ND | ND | ND | ND | NI | NI | ND |
| | 1-Sep-93 | NR | 1.0 | 2 | 3 | ND | NI | ND | NI | ND | 2.0 | ND | ND | ND | 1.0 | ND | ND | NI | NI | ND |
| | 1-Apr-94 | NR | 1.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-94 | NR | 2.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-95 | NR | 2.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-95 | NR | 2.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-96 | NR | 2.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-96 | NR | 2.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-97 | NR | 2.0 | 3 | --- | ND | NI | --- | NI | ND | ND | ND | ND | 3 | --- | ND | --- | NI | NI | ND |
| | 1-Oct-97 | NR | 2.0 | 3 | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-98 | NR | 2.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | 2.5 | ND | --- | 2.0 | --- | NI | NI | ND |
| | 1-Oct-98 | NR | 2.0 | 2 | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Mar-99 | NR | 2.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-99 | NR | 2.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Apr-00 | NR | 2.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-00 | NR | 2.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Apr-01 | NR | 2.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Oct-01 | NR | 2.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Apr-02 | NR | 2.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-02 | NR | 2.0 | ND | --- | --- | 6 | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Apr-03 | NR | 2.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-03 | NR | 2.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 15-Apr-04 | NR | 2.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 14-Oct-04 | NR | 2.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 5-Apr-05 | NR | 2.0 | ND | --- | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 5-Oct-05 | NR | 2.0 | ND | 6.0 | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 21-Apr-06 | NR | 2.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 12-Oct-06 | NR | 2.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-07 | NR | 1.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 10-Oct-07 | 0.08 | 1.0 | 0.10 J | ND | --- | --- | --- | --- | ND | 0.3 J | 0.1 J | 0.1 J | ND | --- | --- | --- | ND | --- | ND |
| GWPS = 4 µg/L (10/23/07) | 2-Apr-08 | 0.06 | 1.0 | 0.40 J | 0.1 J | --- | --- | --- | --- | 0.1 J | 0.1 J | 0.2 J | 0.1 J | ND | --- | --- | --- | 0.2 J | --- | ND |
| | 28-Oct-08 | 0.06 | 1.0 | 0.5 J | 0.1 J | --- | --- | --- | --- | 0.1 J | 0.2 J | 0.2 J | 0.1 J | ND | --- | --- | --- | 0.2 J | --- | ND |
| | 8-Apr-09 | 0.06 | 1.0 | 0.6 J | 0.1 J | --- | --- | --- | --- | 0.2 J | 0.5 J | 0.2 J | 0.1 J | ND | --- | --- | --- | 0.2 J | --- | ND |
| | 27-Oct-09 | 0.06 | 1.0 | 0.7 J | 0.2 J | --- | --- | --- | --- | 0.2 J | 0.2 J | 0.2 J | 0.2 J | ND | --- | --- | --- | 0.2 J | --- | ND |
| | 8-Apr-10 | 0.02 | 1.0 | 0.6 J | 0.1 B | --- | --- | --- | --- | 0.3 B | 0.1 B | 0.2 B | 0.1 B | 0.10 B | --- | --- | --- | 0.2 B | --- | 0.1 J |
| GWPS = 4 µg/L (10/1/10) | 13-Oct-10 | 0.02 | 1.0 | 0.6 J | 0.3 J | --- | --- | --- | --- | 0.1 J | 0.2 J | 0.2 J | 0.2 J | 0.1 J | --- | --- | --- | 0.2 J | --- | ND |
| | 27-Apr-11 | 0.02 | 1.0 | 0.59 J | 0.06 J | --- | --- | --- | --- | 0.1 J | 0.13 J | 0.26 J | 0.13 J | ND | --- | --- | --- | 0.16 J | --- | ND |
| | 20-Oct-11 | 0.02 | 1.0 | 0.49 J | 0.15 J | --- | --- | --- | --- | 0.1 J | 0.11 J | 0.19 J | 0.14 J | ND | --- | --- | --- | 0.19 J | --- | ND |
| | 26-Apr-12 | 0.02 | 1.0 | 0.58 J | 0.09 J | --- | --- | --- | --- | 0.1 J | 0.17 J | 0.34 J | 0.15 J | ND | --- | --- | --- | 0.15 J | --- | ND |
| | 16-Oct-12 | 0.07 | 1.0 | 0.54 J | 0.08 J | --- | --- | --- | --- | 0.1 J | 0.13 J | 0.25 J | 0.15 J | ND | --- | --- | --- | 0.1 J | --- | ND |
| | 11-Apr-13 | 0.03 | 1.0 | 0.7 J | 0.09 J | --- | --- | --- | --- | 0.2 J | 0.16 J | 0.49 J | 0.15 J | ND | --- | --- | --- | 0.17 J | --- | ND |
| | 30-Oct-13 | 0.03 | 1.0 | 0.68 J | 0.12 B | --- | --- | --- | --- | 0.07 B | 0.16 B | 0.34 J | 0.12 B | ND | --- | --- | --- | 0.18 B | --- | 0.04 J |
| | 9-Apr-14 | 0.03 | 1.0 | 0.63 J | 0.08 J | --- | --- | --- | --- | 0.1 J | 0.16 J | 0.45 J | 0.19 J | --- | --- | --- | --- | 0.25 J | --- | ND |
| | 22-Oct-14 | 0.04 | 1.0 | 0.70 J | 0.10 J | --- | --- | --- | --- | 0.09 J | 0.11 J | 0.58 J | 0.12 J | ND | --- | --- | --- | 0.20 J | --- | ND |
| | 8-Apr-15 | 0.04 | 1.0 | 0.63 J | 0.08 J | --- | --- | --- | --- | 0.09 J | 0.06 J | 0.50 J | 0.14 J | 0.08 J | --- | --- | --- | 0.20 J | --- | ND |

# TABLE 6

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA INTERIM REGIONAL LANDFILL

| Analyte | Sample Collection Date | DL | SWSL | IRL-1S | IRL-1D | IRL-2S | IRL-2SA | IRL-2D | IRL-2DA | IRL-3S | IRL-3D | IRL-4S | IRL-4D | IRL-5S | IRL-5D | IRL-6S | IRL-6D | MW-A | MW-B | Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 1-Jul-93 | NR | 1.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Aug-93 | NR | 1.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Sep-93 | NR | 1.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Sep-93 | NR | 1.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | 10 | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-94 | NR | 1.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-94 | NR | 1.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-95 | NR | 1.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-95 | NR | 1.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-96 | NR | 1.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-96 | NR | 1.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-97 | NR | 1.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Oct-97 | NR | 1.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-98 | NR | 1.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Oct-98 | NR | 1.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Mar-99 | NR | 1.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-99 | NR | 1.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Apr-00 | NR | 1.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-00 | NR | 1.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Apr-01 | NR | 1.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Oct-01 | NR | 1.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Apr-02 | NR | 1.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-02 | NR | 1.0 | 1 | --- | --- | ND | --- | --- | ND | ND | 1 | ND | ND | --- | --- | --- | ND | ND | ND |
| | Apr-03 | NR | 1.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-03 | NR | 1.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 15-Apr-04 | NR | 1.0 | ND | --- | --- | 3 | --- | --- | 1 | ND | ND | ND | ND | --- | --- | --- | 1 | ND | ND |
| | 14-Oct-04 | NR | 1.0 | ND | --- | --- | 2 | --- | --- | ND | ND | ND | ND | 1 | --- | --- | --- | ND | ND | ND |
| | 5-Apr-05 | NR | 1.0 | ND | --- | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 5-Oct-05 | NR | 1.0 | ND | 4 | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 21-Apr-06 | NR | 1.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 12-Oct-06 | NR | 1.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-07 | NR | 1.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 10-Oct-07 | 0.06 | 1.0 | 0.3 B | 0.4 B | --- | --- | --- | --- | 0.6 J | 0.1 B | 0.4 B | 0.1 B | 0.4 B | --- | --- | --- | 0.1 B | --- | 0.1 J |
| NC 2L = 1.75 µg/L (10/23/07) | 2-Apr-08 | 0.04 | 1.0 | 0.2 J | 0.4 J | --- | --- | --- | --- | 0.2 J | 0.7 J | 0.5 J | 0.1 J | 0.1 J | --- | --- | --- | 0.1 J | --- | ND |
| | 28-Oct-08 | 0.04 | 1.0 | 0.3 J | 0.8 J | --- | --- | --- | --- | 0.1 J | 0.1 J | 0.2 J | 0.2 J | 0.3 J | --- | --- | --- | 0.2 J | --- | ND |
| | 8-Apr-09 | 0.04 | 1.0 | 0.2 J | 0.1 J | --- | --- | --- | --- | 0.6 J | 0.4 J | 0.6 J | 0.1 J | 0.7 J | --- | --- | --- | 0.1 J | --- | ND |
| | 27-Oct-09 | 0.04 | 1.0 | 0.4 J | 0.3 J | --- | --- | --- | --- | 0.2 J | 0.2 J | 0.2 J | 0.2 J | 0.2 J | --- | --- | --- | 0.2 J | --- | ND |
| NC 2L = 2 µg/L (1/1/10) | 8-Apr-10 | 0.02 | 1.0 | 0.4 B | 0.2 B | --- | --- | --- | --- | 0.9 J | 0.1 B | 0.2 B | 0.1 B | 0.1 B | --- | --- | --- | 0.1 B | --- | 0.1 J |
| | 13-Oct-10 | 0.02 | 1.0 | 0.7 J | 0.3 J | --- | --- | --- | --- | 0.3 J | 0.2 J | 1.1 | 0.2 J | 0.1 J | --- | --- | --- | 0.5 J | --- | ND |
| | 27-Apr-11 | 0.02 | 1.0 | 0.11 J | 0.10 J | --- | --- | --- | --- | 0.06 J | 0.19 J | 0.24 J | 0.08 J | 0.11 J | --- | --- | --- | 0.06 J | --- | ND |
| | 20-Oct-11 | 0.02 | 1.0 | 0.07 J | 0.15 J | --- | --- | --- | --- | 0.09 J | ND | 0.16 J | 0.26 J | 0.08 J | --- | --- | --- | 0.09 J | --- | ND |
| | 26-Apr-12 | 0.02 | 1.0 | 0.18 J | 0.08 J | --- | --- | --- | --- | 0.54 J | 0.30 J | 2 | 0.12 J | 0.11 J | --- | --- | --- | 0.07 J | --- | ND |
| | 16-Oct-12 | 0.03 | 1.0 | 0.20 J | 0.25 J | --- | --- | --- | --- | 0.24 J | 0.21 J | 0.39 J | 0.11 J | 0.15 J | --- | --- | --- | 0.10 J | --- | ND |
| | 11-Apr-13 | 0.05 | 1.0 | 0.16 J | 0.16 J | --- | --- | --- | --- | 0.54 J | 0.12 J | 0.32 J | 0.40 J | 0.11 J | --- | --- | --- | 0.12 J | --- | ND |
| | 30-Oct-13 | 0.05 | 1.0 | 0.97 J | 0.12 J | --- | --- | --- | --- | 0.07 J | 0.10 J | 0.55 J | 0.14 J | 0.26 J | --- | --- | --- | 0.17 J | --- | ND |
| | 9-Apr-14 | 0.05 | 1.0 | 0.46 J | 0.39 J | --- | --- | --- | --- | 0.1 J | 0.7 J | 0.39 J | 0.33 J | 0.43 J | --- | --- | --- | 0.05 J | --- | ND |
| | 22-Oct-14 | 0.04 | 1.0 | 0.06 J | 0.15 J | --- | --- | --- | --- | 0.53 J | 0.07 J | 0.33 J | 0.18 J | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-15 | 0.04 | 1.0 | 0.09 J | 0.18 J | --- | --- | --- | --- | 0.06 J | 0.06 J | 0.52 J | 0.05 J | 0.18 J | --- | --- | --- | ND | --- | ND |
| Total Chromium | 1-Jul-93 | NR | 5.0 | 36.0 | 18 | ND | NI | ND | NI | ND | 16 | ND | 49 | ND | 90.00 | 44 | 6 | NI | NI | ND |
| | 1-Aug-93 | NR | 5.0 | 14.0 | 8 | ND | NI | 7 | NI | ND | 6 | ND | 6 | ND | 18.00 | ND | ND | NI | NI | ND |
| | 1-Sep-93 | NR | 5.0 | 11.0 | 11 | ND | NI | ND | NI | ND | 10 | ND | 15 | ND | 11.00 | 7 | ND | NI | NI | ND |
| | 1-Sep-93 | NR | 5.0 | 19.0 | 43 | ND | NI | 6 | NI | ND | 22 | ND | 20 | ND | 21.00 | 6 | ND | NI | NI | ND |
| | 1-Apr-94 | NR | 5.0 | 10 | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-94 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-95 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-95 | NR | 10.0 | 13 | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-96 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-96 | NR | 10.0 | 39 | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-97 | NR | 10.0 | 23 | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Oct-97 | NR | 10.0 | 50 | --- | ND | NI | --- | NI | ND | ND | 18 | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-98 | NR | 10.0 | 18 | --- | ND | NI | --- | NI | 22.0 | ND | 14.0 | ND | ND | --- | 25.0 | --- | NI | NI | ND |
| | 1-Oct-98 | NR | 10.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Mar-99 | NR | 10.0 | 58 | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-99 | NR | 10.0 | 21 | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Apr-00 | NR | 5.0 | 87 | --- | --- | NI | --- | NI | 19.0 | ND | 18.0 | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-00 | NR | 10.0 | 21 | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Apr-01 | NR | 10.0 | 11 | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Oct-01 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Apr-02 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | 12 | ND | ND |
| | Oct-02 | NR | 10.0 | 15 | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Apr-03 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-03 | NR | 10.0 | 12 | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 15-Apr-04 | NR | 10.0 | 13 | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | 10 | ND | ND |
| | 14-Oct-04 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 5-Apr-05 | NR | 10.0 | ND | --- | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 5-Oct-05 | NR | 10.0 | ND | 29 | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 21-Apr-06 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 12-Oct-06 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-07 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 10-Oct-07 | 0.24 | 10.0 | 1.6 B | 1.2 B | --- | --- | --- | --- | 2.0 B | 2.3 B | 1.3 B | 2.1 B | 1.4 B | --- | --- | --- | 1.3 B | --- | 1.2 J |
| NC 2L = 50 µg/L (10/23/07) | 2-Apr-08 | 0.11 | 10.0 | 1.6 J | ND | --- | --- | --- | --- | 0.7 J | 0.5 J | ND | 0.5 J | ND | --- | --- | --- | 0.3 J | --- | ND |
| | 28-Oct-08 | 0.11 | 10.0 | 3 J | 1.6 J | --- | --- | --- | --- | 1.5 J | 1.1 J | 0.4 J | 1.1 J | 0.4 J | --- | --- | --- | 1.8 J | --- | ND |
| | 8-Apr-09 | 0.10 | 10.0 | 6.1 J | 1.1 J | --- | --- | --- | --- | 2.7 J | 5.9 J | 1.6 J | 1.2 J | 0.6 J | --- | --- | --- | 2.1 J | --- | ND |
| | 27-Oct-09 | 0.10 | 10.0 | 7.8 J | 2.2 J | --- | --- | --- | --- | 3.1 J | 2 J | 1 J | 1.6 J | 0.9 J | --- | --- | --- | 1.1 J | --- | ND |
| NC 2L = 10 µg/L (1/1/10) | 8-Apr-10 | 0.03 | 10.0 | 5.9 J | 0.9 J | --- | --- | --- | --- | 3.7 J | 1.1 J | 1 J | 0.6 J | 0.3 J | --- | --- | --- | 1.1 J | --- | ND |
| | 13-Oct-10 | 0.03 | 10.0 | 0.7 J | 3.4 J | --- | --- | --- | --- | 1.5 J | 1.6 J | 0.8 J | 1.5 J | 0.6 J | --- | --- | --- | 1.7 J | --- | ND |
| | 27-Apr-11 | 0.04 | 10.0 | 0.81 B | 0.56 B | --- | --- | --- | --- | 1.6 J | 1.8 J | 0.9 B | 1.4 J | 0.37 B | --- | --- | --- | 0.98 J | --- | 0.18 J |
| | 20-Oct-11 | 0.0 | 10.0 | 1.6 J | 2.3 J | --- | --- | --- | --- | 3.2 J | 1.7 J | 1.5 J | 1.9 J | 1.1 J | --- | --- | --- | 2.7 J | --- | 0.18 J |
| | 26-Apr-12 | 0.04 | 10.0 | 3.9 J | 1.5 J | --- | --- | --- | --- | 3 J | 2.7 J | 2.8 J | 2 J | 0.79 J | --- | --- | --- | 2 J | --- | 0.09 J |
| | 16-Oct-12 | 0.18 | 10.0 | 1.6 J | 1.6 J | --- | --- | --- | --- | 2 J | 2.1 J | 0.8 J | 1.5 J | 0.4 J | --- | --- | --- | 0.74 J | --- | ND |
| | 11-Apr-13 | 0.04 | 10.0 | 4.8 J | 0.56 J | --- | --- | --- | --- | 1.6 J | 2.1 J | 0.72 J | 1.3 J | 0.32 J | --- | --- | --- | 1.2 J | --- | ND |
| | 30-Oct-13 | 0.04 | 10.0 | 3.9 J | 1.1 J | --- | --- | --- | --- | 1.1 J | 1.9 J | 2.9 J | 1.4 J | 0.32 B | --- | --- | --- | 1.1 J | --- | 0.11 J |
| | 9-Apr-14 | 0.04 | 10.0 | 1.7 J | 0.91 J | --- | --- | --- | --- | 0.68 J | 1.9 J | 1 J | 1.8 J | 0.38 J | --- | --- | --- | 3.7 J | --- | ND |
| | 22-Oct-14 | 0.14 | 10.0 | 1.2 J | 1.8 J | --- | --- | --- | --- | 2.2 J | 1.7 J | 1.6 J | 1.6 J | 0.84 J | --- | --- | --- | 1.4 J | --- | ND |
| | 8-Apr-15 | 0.14 | 10.0 | 0.84 J | 0.53 J | --- | --- | --- | --- | 1.00 J | 0.69 J | 1.7 J | 1.2 J | 0.89 J | --- | --- | --- | 1.4 J | --- | ND |
| Cobalt | 1-Jul-93 | NR | 20.0 | 32 | 41 | 27 | NI | 20 | NI | 21 | 31 | ND | 93 | 29 | 118 | 45 | 23 | NI | NI | ND |
| | 1-Aug-93 | NR | 20.0 | 26 | 27 | 23 | NI | 40 | NI | 37 | 32 | 27 | 33 | 50 | 30 | 22 | 25 | NI | NI | ND |
| | 1-Sep-93 | NR | 20.0 | 22 | 21.0 | ND | NI | 21 | NI | 23 | 25 | ND | 38 | 36.0 | 32 | ND | ND | NI | NI | ND |
| | 1-Sep-93 | NR | 20.0 | ND | ND | ND | NI | 22 | NI | ND | ND | 31 | 53 | 26.0 | 21 | ND | ND | NI | NI | ND |
| | 1-Apr-94 | NR | 10.0 | 27 B | 22.0 B | 27 B | NI | 41 B | NI | 35 B | 39 B | 27 B | 41 B | 53.0 B | 34 B | 20 B | ND | NI | NI | 18.0 |
| | 1-Oct-94 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-95 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | 37 | NI | NI | ND |
| | 1-Oct-95 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-96 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-96 | NR | 10.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-97 | NR | 10.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Oct-97 | NR | 10.0 | 20 | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-98 | NR | 10.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Oct-98 | NR | 10.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Mar-99 | NR | 10.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-99 | NR | 10.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Apr-00 | NR | 10.0 | 16 | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-00 | NR | 10.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Apr-01 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Oct-01 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Apr-02 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-02 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Apr-03 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-03 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 15-Apr-04 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 14-Oct-04 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 5-Apr-05 | NR | 10.0 | ND | --- | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 5-Oct-05 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 21-Apr-06 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 12-Oct-06 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-07 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 10-Oct-07 | 0.41 | 10.0 | 0.6 J | ND | --- | --- | --- | --- | ND | ND | 1.3 J | ND | ND | --- | --- | --- | ND | --- | ND |
| GWPS = 70 µg/L (10/23/07) | 2-Apr-08 | 0.03 | 10.0 | 0.9 J | 0.1 J | --- | --- | --- | --- | 0.3 J | 0.3 J | 1.3 J | 0.1 J | 0.4 J | --- | --- | --- | 1.6 J | --- | ND |
| | 28-Oct-08 | 0.03 | 10.0 | 1.1 J | 0.5 J | --- | --- | --- | --- | 0.4 J | 0.4 J | 1.2 J | 0.4 J | 1.1 J | --- | --- | --- | 0.5 J | --- | ND |
| | 8-Apr-09 | 0.02 | 10.0 | 1.3 J | 0.8 J | --- | --- | --- | --- | 0.6 J | 1.2 J | 1.4 J | 0.5 J | 1.5 J | --- | --- | --- | 0.7 J | --- | ND |
| | 27-Oct-09 | 0.02 | 10.0 | 1.2 J | 0.5 J | --- | --- | --- | --- | 0.5 J | 0.4 J | 1.4 J | 0.6 J | 2.1 J | --- | --- | --- | 0.4 J | --- | ND |
| | 8-Apr-10 | 0.10 | 10.0 | 1.3 J | 0.9 J | --- | --- | --- | --- | 1.6 J | 0.3 J | 1.8 J | 0.4 J | 1.5 J | --- | --- | --- | 0.6 J | --- | ND |
| GWPS = 1 µg/L (10/1/10) | 13-Oct-10 | 0.10 | 10.0 | 1 J | 0.7 J | --- | --- | --- | --- | 0.7 J | 0.4 J | 1.4 J | 0.6 J | 2.1 J | --- | --- | --- | 0.4 J | --- | ND |
| | 27-Apr-11 | 0.03 | 10.0 | 1.3 J | 0.24 J | --- | --- | --- | --- | 0.69 J | 0.26 J | 2.3 J | 0.33 J | 0.71 J | --- | --- | --- | 0.50 J | --- | ND |
| | 20-Oct-11 | 0.03 | 10.0 | 0.86 J | 0.46 J | --- | --- | --- | --- | 0.80 J | 0.14 J | 2.0 J | 0.36 J | 1.1 J | --- | --- | --- | 0.42 J | --- | ND |
| | 26-Apr-12 | 0.03 | 10.0 | 1 J | 0.41 J | --- | --- | --- | --- | 0.72 J | 0.39 J | 2.6 J | 0.52 J | 1.1 J | --- | --- | --- | 0.45 J | --- | ND |
| | 16-Oct-12 | 0.02 | 10.0 | 0.93 J | 0.46 J | --- | --- | --- | --- | 0.66 J | 0.33 J | 2.6 J | 0.4 J | 1 J | --- | --- | --- | 0.3 J | --- | ND |
| | 11-Apr-13 | 0.02 | 10.0 | 1.3 J | 0.33 J | --- | --- | --- | --- | 0.49 J | 0.39 J | 3.1 J | 0.39 J | 0.77 J | --- | --- | --- | 0.52 J | --- | 0.03 J |
| | 30-Oct-13 | 0.02 | 10.0 | 1.1 J | 0.37 J | --- | --- | --- | --- | 0.33 J | 0.21 B | 2.8 J | 0.24 B | 0.79 J | --- | --- | --- | 0.35 J | --- | 0.05 J |
| | 9-Apr-14 | 0.02 | 10.0 | 1.3 J | 0.4 J | --- | --- | --- | --- | 0.32 J | 0.31 J | 3 J | 0.55 J | 1.1 J | --- | --- | --- | 0.62 J | --- | ND |
| | 22-Oct-14 | 0.12 | 10.0 | 1.3 J | 1.4 J | --- | --- | --- | --- | 0.40 J | 0.24 J | 2.9 J | 0.26 J | 0.76 J | --- | --- | --- | 0.36 J | --- | ND |
| | 8-Apr-15 | 0.12 | 10.0 | 1.3 J | 1.4 J | --- | --- | --- | --- | 0.36 J | 0.23 J | 3.5 J | 0.33 J | 0.89 J | --- | --- | --- | 0.48 J | --- | ND |

# TABLE 6

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA INTERIM REGIONAL LANDFILL

| Analyte | Sample Collection Date | DL | SWSL | IRL-1S | IRL-1D | IRL-2S | IRL-2SA | IRL-2D | IRL-2DA | IRL-3S | IRL-3D | IRL-4S | IRL-4D | IRL-5S | IRL-5D | IRL-6S | IRL-6D | MW-A | MW-B | Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | 1-Jul-93 | NR | 10.0 | 38 B | 25 B | 22 B | NI | 29 B | NI | 30 B | 29 B | 24 B | 63 B | 23 B | 54 B | 55 B | 22 B | NI | NI | 17 |
| | 1-Aug-93 | NR | 10.0 | 32 B | 26 B | 27 B | NI | 24 B | NI | 24 B | 26 B | 24 B | 20 B | 19 B | 23.0 B | 25.00 B | 17 B | NI | NI | 19.00 |
| | 1-Sep-93 | NR | 10.0 | 22 B | 24 B | 27 B | NI | 22 B | NI | 19 B | 24 B | 22 B | 29 B | 34 B | 26.00 B | 25.0 B | 27 B | NI | NI | 11.0 |
| | 1-Sep-93 | NR | 10.0 | 89 B | 101 B | 58 B | NI | 79 B | NI | 39 B | 69 B | 65 B | ND | 53 B | 62.0 B | 53.0 B | 54 B | NI | NI | 39.00 |
| | 1-Apr-94 | NR | 10.0 | 26 B | 22 B | 26 B | NI | 29 B | NI | 28 B | 29 B | 28 B | 28 B | 33 B | 24.0 B | 24.0 B | ND | NI | NI | 21.00 |
| | 1-Oct-94 | NR | 200.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-95 | NR | 200.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | 24 | NI | NI | ND |
| | 1-Oct-95 | NR | 200.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-96 | NR | 200.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-96 | NR | 200.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-97 | NR | 200.0 | 55 | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Oct-97 | NR | 200.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-98 | NR | 200.0 | ND | --- | 11 | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Oct-98 | NR | 200.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Mar-99 | NR | 200.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-99 | NR | 200.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Apr-00 | NR | 200.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-00 | NR | 200.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Apr-01 | NR | 200.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Oct-01 | NR | 200.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Apr-02 | NR | 200.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-02 | NR | 200.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Apr-03 | NR | 200.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-03 | NR | 200.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 15-Apr-04 | NR | 200.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 14-Oct-04 | NR | 200.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 5-Apr-05 | NR | 200.0 | ND | --- | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 5-Oct-05 | NR | 200.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 21-Apr-06 | NR | 200.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 12-Oct-06 | NR | 200.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-07 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 10-Oct-07 | 0.20 | 10.0 | 0.6 B | 1 B | --- | --- | --- | --- | 0 B | 1 B | 1 B | 0.5 B | 0.7 B | --- | --- | --- | 1.0 B | --- | 0.4 J |
| NC 2L = 1,000 µg/L (10/23/07) | 2-Apr-08 | 0.05 | 10.0 | 0.8 B | 0.4 B | --- | --- | --- | --- | 0.6 B | 0.5 B | 0.8 B | 0.2 B | 0.4 B | --- | --- | --- | 0.4 B | --- | 0.2 J |
| | 28-Oct-08 | 0.05 | 10.0 | 1.4 B | 1.5 B | --- | --- | --- | --- | 0.7 B | 0.5 B | 1 B | 0.5 B | 1.0 B | --- | --- | --- | 1.2 B | --- | 1.1 J |
| | 8-Apr-09 | 0.04 | 10.0 | 2.2 J | 0.9 J | --- | --- | --- | --- | 1.7 J | 1.6 J | 1.9 J | 0.4 B | 2.3 J | --- | --- | --- | 1.1 J | --- | 0.1 J |
| | 27-Oct-09 | 0.04 | 10.0 | 3.2 J | 2.1 J | --- | --- | --- | --- | 1.9 J | 3 J | 2.5 J | 1.9 J | 1.3 J | --- | --- | --- | 5.4 J | --- | 0.1 J |
| | 8-Apr-10 | 0.03 | 10.0 | 2.9 J | 2.7 J | --- | --- | --- | --- | 2.8 J | 1 B | 1.6 J | 0.8 B | 1.2 J | --- | --- | --- | 1.6 J | --- | 0.2 J |
| | 13-Oct-10 | 0.03 | 10.0 | 1.6 J | 2.6 J | --- | --- | --- | --- | 0.5 B | 0.7 B | 1.7 J | 0.6 B | 1 B | --- | --- | --- | 1.5 J | --- | 0.2 J |
| | 27-Apr-11 | 0.02 | 10.0 | 0.96 B | 1.1 B | --- | --- | --- | --- | 0.62 B | 0.68 B | 0.83 B | 0.57 B | 0.64 B | --- | --- | --- | 1.2 B | --- | 0.66 J |
| | 20-Oct-11 | 0.02 | 10.0 | 1.1 J | 1.3 J | --- | --- | --- | --- | 1.1 J | 0.97 B | 0.86 B | 1.3 J | 0.97 B | --- | --- | --- | 1.3 J | --- | 0.2 J |
| | 26-Apr-12 | 0.02 | 10.0 | 1.6 B | 1.1 B | --- | --- | --- | --- | 1.7 B | 1.7 B | 1.1 B | 0.84 B | 1 B | --- | --- | --- | 1.1 B | --- | 0.94 J |
| | 16-Oct-12 | 0.06 | 10.0 | 0.93 B | 1.4 J | --- | --- | --- | --- | 0.73 B | 0.59 B | 0.82 B | 0.69 B | 1.1 B | --- | --- | --- | 0.61 B | --- | 0.25 J |
| | 11-Apr-13 | 0.06 | 10.0 | 1.7 J | 0.64 B | --- | --- | --- | --- | 0.76 B | 0.67 B | 0.84 B | 0.68 B | 0.74 B | --- | --- | --- | 1 B | --- | 0.28 J |
| | 30-Oct-13 | 0.06 | 10.0 | 2.6 B | 1.4 B | --- | --- | --- | --- | 0.52 B | 0.63 B | 0.85 B | 0.51 B | 1.4 B | --- | --- | --- | 1.4 B | --- | 1.2 J |
| | 9-Apr-14 | 0.06 | 10.0 | 0.75 J | 2 J | --- | --- | --- | --- | 0.22 J | 0.39 J | 0.83 J | 0.44 J | 0.47 J | --- | --- | --- | 1 J | --- | ND |
| | 22-Oct-14 | 0.10 | 10.0 | 0.34 J | 0.65 J | --- | --- | --- | --- | 0.55 J | ND | 1.2 J | 0.42 J | 0.45 J | --- | --- | --- | 0.31 J | --- | --- |
| | 8-Apr-15 | 0.10 | 10.0 | 0.65 J | 0.60 J | --- | --- | --- | --- | 0.24 J | 0.20 J | 0.53 J | 0.24 J | 0.71 J | --- | --- | --- | 0.52 J | --- | ND |
| Lead | 1-Jul-93 | NR | 5.0 | 32 | 6 | ND | NI | ND | NI | 12 | 7 | ND | 30 | ND | 30.0 | 65.0 | ND | NI | NI | ND |
| | 1-Aug-93 | NR | 5.0 | 7 | 5 | 6 | NI | 10 | NI | ND | ND | 7 | ND | ND | 12.0 | 8.0 | 5.0 | NI | NI | ND |
| | 1-Sep-93 | NR | 5.0 | 14 | 9 | ND | NI | ND | NI | ND | 7 | 5 | 12 | ND | ND | 9.0 | ND | NI | NI | ND |
| | 1-Sep-93 | NR | 5.0 | 13 | 22 | ND | NI | ND | NI | ND | 8 | ND | 21 | ND | ND | 7.0 | ND | NI | NI | ND |
| | 1-Apr-94 | NR | 5.0 | 11 | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-94 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-95 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-95 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-96 | NR | 10.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-96 | NR | 10.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-97 | NR | 10.0 | 22 | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Oct-97 | NR | 10.0 | ND | --- | 11 | NI | --- | NI | ND | ND | 22 | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-98 | NR | 10.0 | 12 | --- | ND | NI | --- | NI | 16 | ND | ND | ND | ND | --- | 20.0 | --- | NI | NI | ND |
| | 1-Oct-98 | NR | 10.0 | 14.0 | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Mar-99 | NR | 10.0 | 21.0 | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-99 | NR | 10.0 | 12 | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Apr-00 | NR | 10.0 | 38 | --- | --- | NI | --- | NI | ND | ND | 14 | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-00 | NR | 10.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Apr-01 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Oct-01 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Apr-02 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-02 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Apr-03 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-03 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 15-Apr-04 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 14-Oct-04 | NR | 10.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 5-Apr-05 | NR | 10.0 | ND | --- | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 5-Oct-05 | NR | 10.0 | ND | 31.0 | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 21-Apr-06 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 12-Oct-06 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-07 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 10-Oct-07 | 0.07 | 10.0 | 0.4 B | 0.1 B | --- | --- | --- | --- | 0.1 B | 0.1 B | 0 B | 0.1 B | 0.1 B | --- | --- | --- | 0 B | --- | 0.1 J |
| NC 2L = 15 µg/L (10/23/07) | 2-Apr-08 | 0.04 | 10.0 | 1.4 J | 0.1 J | --- | --- | --- | --- | 0 J | 0 J | 0 J | ND | 0.1 J | --- | --- | --- | 0 J | --- | ND |
| | 28-Oct-08 | 0.04 | 10.0 | 3.5 J | 1.5 J | --- | --- | --- | --- | 0.9 J | 0 B | 0.7 J | 0.4 B | 0.5 B | --- | --- | --- | 1 J | --- | 0.1 J |
| | 8-Apr-09 | 0.04 | 10.0 | 4.8 J | 0.9 J | --- | --- | --- | --- | 1.9 J | 8.9 J | 1.4 J | 0.4 B | 0.6 J | --- | --- | --- | 2 J | --- | 0.1 J |
| | 27-Oct-09 | 0.04 | 10.0 | 8.7 J | 1.5 J | --- | --- | --- | --- | 2 J | 2 J | 1 J | 0.7 J | 0.9 J | --- | --- | --- | 1 J | --- | ND |
| | 8-Apr-10 | 0.01 | 10.0 | 5 J | 0.8 J | --- | --- | --- | --- | 3 J | 0 B | 0.8 J | 0.3 B | 0.3 B | --- | --- | --- | 1 J | --- | 0.1 J |
| | 13-Oct-10 | 0.01 | 10.0 | 1.2 J | 2.7 J | --- | --- | --- | --- | 1.1 J | 1.0 J | 0.5 B | 0.7 J | 0.7 J | --- | --- | --- | 2 J | --- | 0.1 J |
| | 27-Apr-11 | 0.02 | 10.0 | 1.3 J | 0.63 J | --- | --- | --- | --- | 1 J | 0.5 J | 0.5 J | 0.4 J | 0.3 J | --- | --- | --- | 1 J | --- | ND |
| | 20-Oct-11 | 0.02 | 10.0 | 1.6 J | 1.2 J | --- | --- | --- | --- | 2 J | 1 J | 1 J | 0.6 J | 0.5 J | --- | --- | --- | 1 J | --- | ND |
| | 26-Apr-12 | 0.02 | 10.0 | 3 J | 1 J | --- | --- | --- | --- | 2.2 J | 1.2 J | 1.7 J | 0.6 J | 0.4 J | --- | --- | --- | 1.1 J | --- | 0.02 J |
| | 16-Oct-12 | 0.08 | 10.0 | 1.9 J | 1.4 J | --- | --- | --- | --- | 1.6 J | 0.83 J | 0.29 J | 0.4 J | 0.5 J | --- | --- | --- | 0.6 J | --- | ND |
| | 11-Apr-13 | 0.02 | 10.0 | 4.4 J | 0.62 J | --- | --- | --- | --- | 1.5 J | 0.89 J | 0.4 J | 0.4 J | 0.1 J | --- | --- | --- | 0.9 J | --- | ND |
| | 30-Oct-13 | 0.02 | 10.0 | 4.7 J | 0.94 J | --- | --- | --- | --- | 0.66 J | 0.64 J | 1.7 J | 0.22 B | 0.33 B | --- | --- | --- | 0.65 J | --- | 0.08 J |
| | 9-Apr-14 | 0.02 | 10.0 | 1.6 J | 0.75 J | --- | --- | --- | --- | 0.75 J | 0.8 J | 0.4 J | 0.71 J | 0.44 J | --- | --- | --- | 2.4 J | --- | ND |
| | 22-Oct-14 | 0.13 | 10.0 | 1.3 J | 1.3 J | --- | --- | --- | --- | 1.5 J | 0.61 J | 3.6 J | 0.49 J | 0.27 J | --- | --- | --- | 1.0 J | --- | ND |
| | 8-Apr-15 | 0.13 | 10.0 | 1.2 J | 0.79 J | --- | --- | --- | --- | 0.99 J | 0.43 J | 1.00 J | 0.40 J | 6.4 J | --- | --- | --- | 1.2 J | --- | ND |
| Nickel | 1-Jul-93 | NR | 10.0 | 45 | 30 | 15 | NI | 21 | NI | 23 | 53 | 26 | 133 | 51 | 144.0 | 54.0 | 35.0 | NI | NI | ND |
| | 1-Aug-93 | NR | 10.0 | 25 B | 16 B | 16 B | NI | 36 B | NI | 31 B | 28 B | 99 | 62 | 60 | 42.0 B | 213.0 | 35.0 B | NI | NI | 11 |
| | 1-Sep-93 | NR | 10.0 | 25 B | 28 B | 33 B | NI | 22 B | NI | 20 B | 28 B | 27 B | 53 B | 48 B | 42.0 B | 36.0 B | 24.0 B | NI | NI | 17 |
| | 1-Sep-93 | NR | 10.0 | 24 | 32 | 16 | NI | 22 | NI | 17 | 22 | 11 | ND | 20 | 21.0 | ND | ND | NI | NI | ND |
| | 1-Apr-94 | NR | 10.0 | 34 B | 38 B | 36 B | NI | 54 B | NI | 53 B | 57 B | 45 B | 40 B | 50 B | 27.0 B | ND | ND | NI | NI | 20 |
| | 1-Oct-94 | NR | 50.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | 64 | ND | ND | ND | NI | NI | ND |
| | 1-Apr-95 | NR | 50.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | 17.0 | NI | NI | ND |
| | 1-Oct-95 | NR | 50.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-96 | NR | 50.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-96 | NR | 50.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-97 | NR | 50.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Oct-97 | NR | 50.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-98 | NR | 50.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Oct-98 | NR | 50.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Mar-99 | NR | 50.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-99 | NR | 50.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Apr-00 | NR | 50.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-00 | NR | 50.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Apr-01 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Oct-01 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Apr-02 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-02 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Apr-03 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-03 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 15-Apr-04 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 14-Oct-04 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 5-Apr-05 | NR | 50.0 | ND | --- | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 5-Oct-05 | NR | 50.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 21-Apr-06 | NR | 50.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 12-Oct-06 | NR | 50.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-07 | NR | 50.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 10-Oct-07 | 0.7 | 50.0 | 1.5 J | 0.9 J | --- | --- | --- | --- | 3.3 J | 2.7 J | 2.3 J | 2.1 J | 6.1 J | --- | --- | --- | 1 J | --- | ND |
| NC 2L = 100 µg/L (10/23/07) | 2-Apr-08 | 0.1 | 50.0 | 1.6 J | 1.4 B | --- | --- | --- | --- | 5.4 J | 3.9 J | 2 J | 2.5 J | 5.3 J | --- | --- | --- | 2.1 J | --- | 0.3 J |
| | 28-Oct-08 | 0.06 | 50.0 | 2 J | 1.6 J | --- | --- | --- | --- | 5 J | 4.8 J | 1.9 J | 2.9 J | 8.4 J | --- | --- | --- | 1.1 J | --- | 0.2 J |
| | 8-Apr-09 | 0.04 | 50.0 | 3.1 J | 1 J | --- | --- | --- | --- | 4.6 J | 6.4 J | 1.9 J | 1.7 J | 6.3 J | --- | --- | --- | 0.8 J | --- | ND |
| | 27-Oct-09 | 0.04 | 50.0 | 2.5 J | 1.4 J | --- | --- | --- | --- | 2.8 J | 2.3 J | 1.9 J | 1.8 J | 4.9 J | --- | --- | --- | 0.8 B | --- | 0.2 J |
| | 8-Apr-10 | 0.05 | 50.0 | 1.9 J | 0.5 J | --- | --- | --- | --- | 5 J | 1.9 J | 2.0 J | 1.1 J | 4.9 J | --- | --- | --- | 1.1 J | --- | ND |
| | 13-Oct-10 | 0.05 | 50.0 | 2.1 J | 4 J | --- | --- | --- | --- | 8 J | 4.5 J | 2.8 J | 3.5 J | 10.7 J | --- | --- | --- | 1.1 J | --- | 0.1 J |
| | 27-Apr-11 | 0.04 | 50.0 | 2.7 J | 0.88 B | --- | --- | --- | --- | 3 J | 2 J | 3 J | 1.6 J | 4.4 J | --- | --- | --- | 1 B | --- | 0.3 J |
| | 20-Oct-11 | 0.04 | 50.0 | 2 B | 1.3 B | --- | --- | --- | --- | 3.0 J | 1.7 B | 2.8 J | 1.6 B | 4.1 J | --- | --- | --- | 1.2 B | --- | 0.56 J |
| | 26-Apr-12 | 0.04 | 50.0 | 2.2 J | 1.2 J | --- | --- | --- | --- | 3.4 J | 2.1 J | 3.5 J | 1.9 J | 4.6 J | --- | --- | --- | 1.1 J | --- | ND |
| | 16-Oct-12 | 0.06 | 50.0 | 2.2 J | 1.6 J | --- | --- | --- | --- | 4 J | 2.6 J | 3.7 J | 2.0 J | 5.1 J | --- | --- | --- | 1.0 B | --- | 0.23 J |
| | 11-Apr-13 | 0.45 | 50.0 | 2.5 J | 1.7 J | --- | --- | --- | --- | 3.5 J | 2.7 J | 4.1 J | 2.3 J | 6.7 J | --- | --- | --- | 1.1 J | --- | ND |
| | 30-Oct-13 | 0.45 | 50.0 | 2.9 J | 1.4 J | --- | --- | --- | --- | 3.0 J | 2.1 J | 4.2 J | 2.2 J | 5.6 J | --- | --- | --- | 1.3 J | --- | ND |
| | 9-Apr-14 | 0.45 | 50.0 | 4.7 J | 1.3 J | --- | --- | --- | --- | 3.8 J | 2.5 J | 4.0 J | 3.0 J | 7.1 J | --- | --- | --- | 1.8 J | --- | ND |
| | 22-Oct-14 | 0.12 | 50.0 | 2.6 J | 1.1 J | --- | --- | --- | --- | 2.0 J | 1.1 J | 3.6 J | 1.3 J | 5.5 J | --- | --- | --- | 0.70 J | --- | ND |
| | 8-Apr-15 | 0.12 | 50.0 | 2.6 J | 2.0 J | --- | --- | --- | --- | 2.3 J | 2.0 J | 4.2 J | 1.5 J | 2.1 J | --- | --- | --- | 1.0 J | --- | ND |
| Selenium | 10-Oct-07 | 0.35 | 10.0 | 1.2 B | 1 B | --- | --- | --- | --- | 8 J | 1.7 B | 3.5 B | 1.2 B | 4.5 B | --- | --- | --- | 1.6 B | --- | 0.9 J |
| NC 2L = 50 µg/L (10/23/07) | 2-Apr-08 | 0.14 | 10.0 | ND | ND | --- | --- | --- | --- | 1 J | 0.9 J | 5.2 J | ND | 6.2 J | --- | --- | --- | 0.7 J | --- | ND |
| | 28-Oct-08 | 0.14 | 10.0 | 0.2 B | ND | --- | --- | --- | --- | 2.8 B | 2.4 B | 5 B | ND | 4.5 B | --- | --- | --- | 1.2 B | --- | 1.9 J |
| | 8-Apr-09 | 0.12 | 10.0 | ND | ND | --- | --- | --- | --- | 0.8 J | 2 J | 3 J | ND | 3.1 J | --- | --- | --- | 0.9 J | --- | ND |
| | 27-Oct-09 | 0.12 | 10.0 | 0.3 J | 0.3 J | --- | --- | --- | --- | 2 J | 1.5 J | 2.3 J | ND | 3.4 J | --- | --- | --- | 0.7 J | --- | ND |
| NC 2L = 20 µg/L (1/1/10) | 8-Apr-10 | 0.32 | 10.0 | ND | ND | --- | --- | --- | --- | 0.5 J | 0.8 J | 3.6 J | ND | 5.1 J | --- | --- | --- | 0.6 J | --- | ND |
| | 13-Oct-10 | 0.32 | 10.0 | ND | ND | --- | --- | --- | --- | 1.6 J | 1.2 J | 5.1 J | ND | 6.6 J | --- | --- | --- | 1.6 J | --- | ND |
| | 27-Apr-11 | 0.20 | 10.0 | ND | 0.31 J | --- | --- | --- | --- | 1.5 J | 0.76 J | 2.3 J | 0.34 J | 3.8 J | --- | --- | --- | 0.81 J | --- | ND |
| | 20-Oct-11 | 0.20 | 10.0 | 0.31 J | 0.26 J | --- | --- | --- | --- | 1.5 J | 1.3 J | 1.9 J | 0.22 J | 2.6 J | --- | --- | --- | 0.75 J | --- | ND |
| | 26-Apr-12 | 0.20 | 10.0 | 0.21 J | ND | --- | --- | --- | --- | 1 J | 0.32 J | 1.9 J | 0.21 J | 3.5 J | --- | --- | --- | 0.58 J | --- | ND |
| | 16-Oct-12 | 0.17 | 10.0 | 0.19 J | 0.33 J | --- | --- | --- | --- | 3 J | 0.22 J | 2.1 J | ND | 2.9 J | --- | --- | --- | 0.66 J | --- | ND |
| | 11-Apr-13 | 0.06 | 10.0 | 0.13 J | 0.38 J | --- | --- | --- | --- | 1.4 J | 0.23 J | 2.0 J | 0.12 J | 4.2 J | --- | --- | --- | 0.97 J | --- | ND |
| | 30-Oct-13 | 0.06 | 10.0 | 0.5 J | 0.38 J | --- | --- | --- | --- | 2.2 J | 0.28 J | 1.7 J | 0.17 J | 3.4 J | --- | --- | --- | 1.3 J | --- | ND |
| | 9-Apr-14 | 0.06 | 10.0 | ND | ND | --- | --- | --- | --- | 0.51 J | N | 1.1 J | ND | 1.8 J | --- | --- | --- | 0.22 J | --- | ND |
| | 22-Oct-14 | 0.16 | 10.0 | 0.92 J | 0.82 J | --- | --- | --- | --- | 1.9 J | 0.47 J | 1.7 J | 0.74 J | 2.7 J | --- | --- | --- | 1.4 J | --- | --- |
| | 8-Apr-15 | 0.16 | 10.0 | ND | 0.31 J | --- | --- | --- | --- | 1.0 J | 0.56 J | 1.2 J | 0.17 J | ND | --- | --- | --- | 1.4 J | --- | ND |

# TABLE 6

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA INTERIM REGIONAL LANDFILL

| Analyte | Sample Collection Date | DL | SWSL | IRL-1S | IRL-1D | IRL-2S | IRL-2SA | IRL-2D | IRL-2DA | IRL-3S | IRL-3D | IRL-4S | IRL-4D | IRL-5S | IRL-5D | IRL-6S | IRL-6D | MW-A | MW-B | Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Silver | 2-Apr-08 | 0.04 | 10.0 | 0.1 B | 0.1 B | --- | --- | --- | --- | 0.1 B | ND | 0.1 B | ND | ND | --- | --- | --- | 0.1 B | --- | 0.1 J |
| NC 2L = 17.5 µg/L (10/23/07) | 28-Oct-08 | 0.04 | 10.0 | 0.1 B | 0.1 B | --- | --- | --- | --- | 0.1 B | ND | ND | ND | 0.1 B | --- | --- | --- | ND | --- | 0.1 J |
| | 8-Apr-09 | 0.04 | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | 0.1 J | ND | ND | --- | --- | --- | ND | --- | ND |
| | 27-Oct-09 | 0.04 | 10.0 | ND | 0.1 J | --- | --- | --- | --- | 0.1 J | 0.1 J | 0.1 J | ND | ND | --- | --- | --- | 0.1 J | --- | ND |
| NC 2L = 20 µg/L (1/1/10) | 8-Apr-10 | 0.03 | 10.0 | ND | ND | --- | --- | --- | --- | 0.1 B | 0.1 B | 0.1 B | ND | 0.1 B | --- | --- | --- | ND | --- | 0.1 J |
| | 13-Oct-10 | 0.03 | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | 0.1 J | 0.1 J | --- | --- | --- | ND | --- | ND |
| | 27-Apr-11 | 0.02 | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 20-Oct-11 | 0.02 | 10.0 | ND | 0.07 J | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | 0.06 J | --- | ND |
| | 26-Apr-12 | 0.02 | 10.0 | ND | ND | --- | --- | --- | --- | 0.04 J | 0.06 J | 0.04 J | 0.0 J | ND | --- | --- | --- | ND | --- | ND |
| | 16-Oct-12 | 0.10 | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 11-Apr-13 | 0.03 | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 30-Oct-13 | 0.03 | 10.0 | ND | 0.04 B | --- | --- | --- | --- | ND | ND | ND | ND | 0.07 B | --- | --- | --- | 0.05 B | --- | 0.05 J |
| | 9-Apr-14 | 0.03 | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 22-Oct-14 | 0.04 | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-15 | 0.04 | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| Thallium | 2-Apr-08 | 0.04 | 5.0 | 0.1 J | 0.2 J | --- | --- | --- | --- | 0.1 J | ND | 0.1 J | ND | ND | --- | --- | --- | 0.1 J | --- | ND |
| GWPS = 0.28 µg/L (10/23/07) | 28-Oct-08 | 0.04 | 5.0 | 0.2 J | ND | --- | --- | --- | --- | 0.1 J | ND | 0.1 J | ND | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-09 | 0.03 | 5.0 | 0.1 J | ND | --- | --- | --- | --- | 0.1 J | 0.1 J | 0.1 J | ND | ND | --- | --- | --- | ND | --- | ND |
| | 27-Oct-09 | 0.03 | 5.0 | 0.1 J | 0.1 J | --- | --- | --- | --- | 0.1 J | 0.1 J | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-10 | 0.05 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| GWPS = 0.2 µg/L (10/1/10) | 13-Oct-10 | 0.05 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | 0.2 J | 0.1 J | --- | --- | --- | ND | --- | ND |
| | 27-Apr-11 | 0.02 | 5.5 | 0.03 B | ND | --- | --- | --- | --- | 0.05 B | ND | 0.04 B | ND | ND | --- | --- | --- | ND | --- | 0.03 J |
| | 20-Oct-11 | 0.02 | 5.5 | 0.03 J | 0.09 J | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | 0.03 J | --- | ND |
| | 26-Apr-12 | 0.02 | 5.5 | 0.06 J | ND | --- | --- | --- | --- | 0.18 J | 0.05 J | 0.07 J | 0.02 J | ND | --- | --- | --- | 0.02 J | --- | ND |
| | 16-Oct-12 | 0.07 | 5.5 | ND | ND | --- | --- | --- | --- | ND | ND | 0.08 J | 0.07 J | ND | --- | --- | --- | ND | --- | ND |
| | 11-Apr-13 | 0.02 | 5.5 | 0.05 B | 0.11 B | --- | --- | --- | --- | ND | ND | 0.05 B | ND | ND | --- | --- | --- | ND | --- | 0.19 J |
| | 30-Oct-13 | 0.02 | 5.5 | 0.07 B | 0.08 B | --- | --- | --- | --- | ND | ND | 0.05 B | ND | ND | --- | --- | --- | 0.2 B | --- | 0.13 J |
| | 9-Apr-14 | 0.02 | 5.5 | 0.03 J | ND | --- | --- | --- | --- | ND | ND | 0.07 J | ND | ND | --- | --- | --- | 0.03 J | --- | ND |
| | 22-Oct-14 | 0.13 | 5.5 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-15 | 0.13 | 5.5 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| Vanadium | 1-Jul-93 | NR | 2000 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Aug-93 | NR | 2000 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Sep-93 | NR | 2000 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Sep-93 | NR | 2000 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-94 | NR | 25.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-94 | NR | 40.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-95 | NR | 40.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-95 | NR | 40.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-96 | NR | 40.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-96 | NR | 40.0 | ND | --- | ND | NI | --- | NI | 48 | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-97 | NR | 40.0 | 48 | --- | ND | NI | --- | NI | 48 | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Oct-97 | NR | 40.0 | 56 | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-98 | NR | 40.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Oct-98 | NR | 40.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Mar-99 | NR | 40.0 | 63 | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-99 | NR | 40.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Apr-00 | NR | 40.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | 1-Oct-00 | NR | 40.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | ND | --- | --- | --- | NI | NI | ND |
| | Apr-01 | NR | 40.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Oct-01 | NR | 40.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | --- | --- | ND |
| | Apr-02 | NR | 40.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-02 | NR | 40.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Apr-03 | NR | 40.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | Oct-03 | NR | 40.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 15-Apr-04 | NR | 40.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 14-Oct-04 | NR | 40.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | ND | ND |
| | 5-Apr-05 | NR | 40.0 | ND | --- | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 5-Oct-05 | NR | 40.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 21-Apr-06 | NR | 40.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 12-Oct-06 | NR | 40.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-07 | NR | 25.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 10-Oct-07 | 0.42 | 25.0 | 0.6 J | ND | --- | --- | --- | --- | 2.5 J | 1.2 J | ND | 0.8 J | 1.2 J | --- | --- | --- | ND | --- | ND |
| GWPS = 3.5 µg/L (10/23/07) | 2-Apr-08 | 0.07 | 25.0 | 2 J | 0.3 J | --- | --- | --- | --- | 1.6 J | 1.1 J | 0.3 J | 1 J | 1.2 J | --- | --- | --- | 1.1 J | --- | ND |
| | 28-Oct-08 | 0.07 | 25.0 | 4.2 J | 2.1 J | --- | --- | --- | --- | 3.3 J | 1.9 J | 1 B | 1.7 J | 2 J | --- | --- | --- | 2.7 J | --- | 0.2 J |
| | 8-Apr-09 | 0.28 | 25.0 | 7.8 J | 1.9 J | --- | --- | --- | --- | 6.2 J | 8.2 J | 3.1 J | 2.1 J | 3 J | --- | --- | --- | 3.7 J | --- | ND |
| | 27-Oct-09 | 0.28 | 25.0 | 10.3 J | 2.7 J | --- | --- | --- | --- | 5.9 J | 2.5 J | 1.5 B | 2.3 J | 2.4 J | --- | --- | --- | 2.4 J | --- | 0.4 J |
| | 8-Apr-10 | 0.03 | 25.0 | 7.5 J | 1.2 B | --- | --- | --- | --- | 6 J | 1.1 B | 1.2 B | 1.2 B | 2.0 B | --- | --- | --- | 3.1 J | --- | 0.4 J |
| GWPS = 0.3 µg/L (10/1/10) | 13-Oct-10 | 0.03 | 25.0 | 1.7 B | 5.1 J | --- | --- | --- | --- | 2.9 B | 2.6 B | 1.5 B | 2.7 B | 2.2 B | --- | --- | --- | 3 B | --- | 0.6 J |
| | 27-Apr-11 | 0.14 | 25.0 | 1.2 J | 0.8 J | --- | --- | --- | --- | 2 J | 1.6 J | 0.49 J | 1.4 J | 1.5 J | --- | --- | --- | 1.3 J | --- | ND |
| | 20-Oct-11 | 0.14 | 25.0 | 1.4 J | 2.1 J | --- | --- | --- | --- | 4.4 J | 0.92 J | 0.79 J | 1.3 J | 0.8 J | --- | --- | --- | 2.8 J | --- | ND |
| | 26-Apr-12 | 0.14 | 25.0 | 4.6 J | 1.1 J | --- | --- | --- | --- | 4.4 J | 2.2 J | 2.9 J | 1.5 J | 0.99 J | --- | --- | --- | 1.9 J | --- | ND |
| | 16-Oct-12 | 0.10 | 25.0 | 2.2 J | 2.3 J | --- | --- | --- | --- | 2.7 J | 2 J | 0.29 J | 1.6 J | 1.1 J | --- | --- | --- | 1 J | --- | ND |
| | 11-Apr-13 | 0.07 | 25.0 | 7.4 J | 1.2 J | --- | --- | --- | --- | 3.1 J | 2.7 J | 0.87 J | 2 J | 1.1 J | --- | --- | --- | 2.2 J | --- | ND |
| | 30-Oct-13 | 0.07 | 25.0 | 5.8 J | 1.0 J | --- | --- | --- | --- | 2 J | 1.9 J | 3.7 J | 1.3 J | 1.2 J | --- | --- | --- | 1.4 J | --- | ND |
| | 9-Apr-14 | 0.07 | 25.0 | 2.3 J | 1.2 J | --- | --- | --- | --- | 2.2 J | 2.3 J | 1.1 J | 2.6 J | 1.7 J | --- | --- | --- | 4.9 J | --- | ND |
| | 22-Oct-14 | 0.06 | 25.0 | 1.2 J | 1.8 J | --- | --- | --- | --- | 3.8 J | 1.4 J | 5.1 J | 1.3 J | 1.4 J | --- | --- | --- | 2.1 J | --- | 0.18 J |
| | 8-Apr-15 | 0.06 | 25.0 | 1.7 J | 2.0 J | --- | --- | --- | --- | 4.0 J | 1.4 J | 3.0 J | 1.9 J | 1.1 J | --- | --- | --- | 2.7 J | --- | ND |
| Zinc | 1-Jul-93 | NR | 10.0 | 42 B | 41.0 B | 10 B | NI | 15 B | NI | 11 B | 43 B | 14 B | 293 | ND | 301 | ND | 25 B | NI | NI | 10 |
| | 1-Aug-93 | NR | 10.0 | 37 | 18.0 | 11 | NI | 14 | NI | ND | ND | 16 | 25 | ND | 64 | 12 | 22 | NI | NI | ND |
| | 1-Sep-93 | NR | 10.0 | 31 | 20.0 | ND | NI | ND | NI | ND | 13 | ND | 57 | ND | 12 | ND | ND | NI | NI | ND |
| | 1-Sep-93 | NR | 10.0 | 73 | 88 | 17 | NI | 27 | NI | 22 | 26 | 14 | 41 | 11 | 29 | 12 | 24 | NI | NI | ND |
| | 1-Apr-94 | NR | 10.0 | 36 B | 19 B | 42 B | NI | 21.0 B | NI | 155.0 | 24.0 B | 25.0 B | 30.0 B | 48.0 B | 22.0 B | 34.0 B | ND | NI | NI | 20 |
| | 1-Oct-94 | NR | 50.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | 97.0 | ND | ND | ND | NI | NI | ND |
| | 1-Apr-95 | NR | 50.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | 803.0 | ND | ND | 25.0 | NI | NI | ND |
| | 1-Oct-95 | NR | 50.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Apr-96 | NR | 50.0 | ND | ND | ND | NI | ND | NI | ND | ND | ND | ND | ND | ND | ND | ND | NI | NI | ND |
| | 1-Oct-96 | NR | 50.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | ND | --- | ND | --- | NI | NI | ND |
| | 1-Apr-97 | NR | 50.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | 1425.0 | --- | ND | --- | NI | NI | ND |
| | 1-Oct-97 | NR | 50.0 | 110 | --- | ND | NI | --- | NI | ND | ND | ND | ND | 1240.0 | --- | ND | --- | NI | NI | ND |
| | 1-Apr-98 | NR | 50.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | 6340.0 | --- | ND | --- | NI | NI | ND |
| | 1-Oct-98 | NR | 50.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | 54.0 | --- | --- | --- | NI | NI | ND |
| | 1-Mar-99 | NR | 50.0 | ND | --- | ND | NI | --- | NI | ND | ND | ND | ND | 1608.0 | --- | --- | --- | NI | NI | ND |
| | 1-Oct-99 | NR | 50.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | 65.0 | --- | --- | --- | NI | NI | ND |
| | 1-Apr-00 | NR | 50.0 | 90 | --- | --- | NI | --- | NI | ND | ND | ND | ND | 596.0 | --- | --- | --- | NI | NI | ND |
| | 1-Oct-00 | NR | 50.0 | ND | --- | --- | NI | --- | NI | ND | ND | ND | ND | 74.0 | --- | --- | --- | NI | NI | ND |
| | Apr-01 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | 1204 | --- | --- | --- | --- | --- | ND |
| | Oct-01 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | 362 | --- | --- | --- | --- | --- | ND |
| | Apr-02 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | 124 | --- | --- | --- | ND | ND | ND |
| | Oct-02 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | 131 | --- | --- | --- | ND | ND | ND |
| | Apr-03 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | 112 | --- | --- | --- | ND | ND | ND |
| | Oct-03 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | 277 | --- | --- | --- | ND | ND | ND |
| | 15-Apr-04 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | 364 | --- | --- | --- | ND | ND | ND |
| | 14-Oct-04 | NR | 50.0 | ND | --- | --- | ND | --- | --- | ND | ND | ND | ND | 63 | --- | --- | --- | ND | ND | ND |
| | 5-Apr-05 | NR | 50.0 | ND | --- | --- | --- | --- | --- | ND | ND | ND | ND | 132 | --- | --- | --- | ND | --- | ND |
| | 5-Oct-05 | NR | 50.0 | ND | 192 | --- | --- | --- | --- | ND | ND | ND | ND | 280 | --- | --- | --- | ND | --- | ND |
| | 21-Apr-06 | NR | 50.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | 76 | --- | --- | --- | ND | --- | ND |
| | 12-Oct-06 | NR | 50.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | 172 | --- | --- | --- | ND | --- | ND |
| | 26-Apr-07 | NR | 10.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | 30 | --- | --- | --- | ND | --- | ND |
| | 10-Oct-07 | 0.20 | 10.0 | 7.5 B | 5.3 B | --- | --- | --- | --- | 3.8 B | 3 B | 7.4 B | 6.8 B | 55 | --- | --- | --- | 5.2 B | --- | 6.6 |
| NC 2L = 1,050 µg/L (10/23/07) | 2-Apr-08 | 0.04 | 10.0 | 5.5 B | 14 B | --- | --- | --- | --- | 3.3 B | 2.1 B | 4.4 B | 1.6 B | 37 | --- | --- | --- | 11 B | --- | 6.3 J |
| | 28-Oct-08 | 0.04 | 10.0 | 6.8 J | 6.6 J | --- | --- | --- | --- | 7.8 J | 3.8 J | 8.7 J | 3 J | 415 | --- | --- | --- | 6.8 J | --- | 0.4 J |
| Resample | 23-Dec-08 | 4.46 | 10.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 86 | --- | --- | --- | --- | --- | NA |
| | 8-Apr-09 | 0.14 | 10.0 | 9.5 J | 13 | --- | --- | --- | --- | 18 | 18 | 11 | 2.1 B | 380 | --- | --- | --- | 6.4 J | --- | 0.8 J |
| Resample | 1-Jun-09 | 0.14 | 10.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 26 | --- | --- | --- | --- | --- | --- |
| | 27-Oct-09 | 0.14 | 10.0 | 11 | 6.7 B | --- | --- | --- | --- | 9.0 J | 5 B | 6.6 B | 4.2 B | 640 | --- | --- | --- | 7.0 B | --- | 1.4 J |
| NC 2L = 1,000 µg/L (01/01/10) Resample | 12-Feb-10 | 0.14 | 10.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 158 | --- | --- | --- | --- | --- | --- |
| | 8-Apr-10 | 0.08 | 10.0 | 12 | 9.7 J | --- | --- | --- | --- | 32 | 2.6 B | 8 J | 5.1 J | 177 | --- | --- | --- | 7.3 J | --- | 0.7 J |
| | 13-Oct-10 | 0.08 | 10.0 | 7 B | 14 B | --- | --- | --- | --- | 10 B | 4.4 B | 9.5 B | 13 B | 362 | --- | --- | --- | 9.9 B | --- | 4.1 J |
| Resample | 1-Dec-10 | 0.08 | 10.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 106.0 | --- | --- | --- | --- | --- | --- |
| | 27-Apr-11 | 0.24 | 10.0 | 4.4 B | 3.2 B | --- | --- | --- | --- | 8.7 J | 1.8 B | 8.1 J | 3.1 B | 118.0 | --- | --- | --- | 5.3 B | --- | 1.1 J |
| | 20-Oct-11 | 0.24 | 10.0 | 3.6 J | 5.4 J | --- | --- | --- | --- | 11 | 2.1 J | 6 J | 3.9 J | 152.0 | --- | --- | --- | 5.9 J | --- | 0.3 J |
| | 26-Apr-12 | 0.24 | 10.0 | 6.5 B | 4.3 B | --- | --- | --- | --- | 11 | 4.8 B | 8.9 B | 6.4 B | 150.0 | --- | --- | --- | 5.7 B | --- | 1.9 J |
| | 16-Oct-12 | 0.48 | 10.0 | 5.9 J | 7.2 J | --- | --- | --- | --- | 12 | 4 J | 7.6 J | 3.1 J | 107 | --- | --- | --- | 5 J | --- | ND |
| | 11-Apr-13 | 0.47 | 10.0 | 9.9 J | 2.9 B | --- | --- | --- | --- | 11 | 3.2 B | 9.8 J | 5.4 J | 60 | --- | --- | --- | 6.2 J | --- | 0.88 J |
| | 30-Oct-13 | 0.47 | 10.0 | 15 B | 6.9 B | --- | --- | --- | --- | 5.1 B | 3.3 B | 11 B | 3.8 B | 112 | --- | --- | --- | 6.1 B | --- | 3.2 J |
| | 9-Apr-14 | 0.47 | 10.0 | 6.5 J | 7.8 J | --- | --- | --- | --- | 3.3 J | 1.6 J | 8.4 J | 3.7 J | 151 | --- | --- | --- | 4.7 J | --- | ND |
| | 22-Oct-14 | 0.53 | 10.0 | 3.8 J | 6.4 J | --- | --- | --- | --- | 6.2 J | 2.0 J | 7.8 J | 3.6 J | 93 | --- | --- | --- | 2.8 J | --- | ND |
| | 8-Apr-15 | 0.53 | 10.0 | 5.8 J | 5.9 J | --- | --- | --- | --- | 6.2 J | 3.7 B | 13 | 3.5 B | 40 | --- | --- | --- | 5.5 J | --- | 0.79 J |

# TABLE 6

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA INTERIM REGIONAL LANDFILL

| Analyte | Sample Collection Date | DL | SWSL | IRL-1S | IRL-1D | IRL-2S | IRL-2SA | IRL-2D | IRL-2DA | IRL-3S | IRL-3D | IRL-4S | IRL-4D | IRL-5S | IRL-5D | IRL-6S | IRL-6D | MW-A | MW-B | Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Organic Compounds** | | | | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethylene | 10-Oct-07 | 0.14 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | 2.8 J | --- | --- | --- | 3.1 J | --- | ND |
| NC 2L = 7 µg/L (10/23/07) Resample | 4-Dec-07 | 0.56 | 1.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ND | --- | --- | --- | ND | --- | ND |
| | 2-Apr-08 | 0.14 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 28-Oct-08 | 0.14 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-09 | 0.14 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 27-Oct-09 | 0.17 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-10 | 0.17 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 13-Oct-10 | 0.17 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 27-Apr-11 | 0.17 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 20-Oct-11 | 0.17 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-12 | 0.17 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 16-Oct-12 | 0.17 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| NC 2L = 350 µg/L (04/01/2013) | 11-Apr-13 | 0.17 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 30-Oct-13 | 0.17 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 9-Apr-14 | 0.17 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-15 | 2.21 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| 2-Butanone | 10-Oct-07 | 0.85 | 100.0 | 2.7 J | 3.3 J | --- | --- | --- | --- | 4 J | 4 J | 3 J | 4.4 J | 2.7 J | --- | --- | --- | 4 J | --- | ND |
| NC 2L = 4,200 µg/L (10/23/07) Resample | 4-Dec-07 | 0.96 | 5.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 2-Apr-08 | 0.85 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 28-Oct-08 | 0.85 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-09 | 0.85 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 27-Oct-09 | 2.21 | 100.0 | ND | ND | --- | --- | --- | --- | 2.6 J | 2.8 J | 5.2 J | 2.9 J | 2.9 J | --- | --- | --- | 3 J | --- | ND |
| NC 2L = 4,000 µg/L (1/1/10) | 8-Apr-10 | 2.21 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 13-Oct-10 | 2.21 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | 2.5 J | --- | --- | --- | ND | --- | ND |
| | 27-Apr-11 | 2.21 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 20-Oct-11 | 2.21 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-12 | 2.21 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 16-Oct-12 | 2.21 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 11-Apr-13 | 2.21 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 30-Oct-13 | 2.21 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 9-Apr-14 | 2.21 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 22-Oct-14 | 2.21 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-15 | 2.21 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| Acetone | 10-Oct-07 | 1.210 | 100.0 | 2.2 J | 2.7 J | --- | --- | --- | --- | 7.4 J | 3.4 J | 2.6 J | 4.9 J | ND | --- | --- | --- | ND | --- | ND |
| NC 2L = 700 µg/L (10/23/07) Resample | 4-Dec-07 | 2.200 | 25.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | --- | --- | --- | --- | --- | --- | ND |
| | 2-Apr-08 | 1.210 | 100.0 | 3.5 B | 6.6 B | --- | --- | --- | --- | 4.9 B | 4.9 B | 4 B | 3.6 B | 3.9 B | --- | --- | --- | 4.20 B | --- | 1.50 J |
| | 28-Oct-08 | 1.210 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | 1.9 J | --- | --- | --- | ND | --- | ND |
| | 8-Apr-09 | 1.210 | 100.0 | ND | ND | --- | --- | --- | --- | ND | 1.4 J | ND | ND | 1.4 J | --- | --- | --- | ND | --- | ND |
| | 27-Oct-09 | 9.060 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| NC 2L = 6,000 µg/L (1/1/10) | 8-Apr-10 | 9.060 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 13-Oct-10 | 9.060 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 27-Apr-11 | 9.060 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 20-Oct-11 | 9.060 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-12 | 9.060 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 16-Oct-12 | 9.060 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 11-Apr-13 | 9.060 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 30-Oct-13 | 9.060 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | 10.3 J | --- | --- | --- | ND | --- | ND |
| | 9-Apr-14 | 9.060 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 22-Oct-14 | 9.060 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-15 | 9.060 | 100.0 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| Chloromethane | 10-Oct-07 | 0.18 | 1.00 | 0.5 J | 0.6 J | --- | --- | --- | --- | 0.8 J | 0.7 J | 0.5 J | 0.9 J | 0.5 J | --- | --- | --- | 0.8 J | --- | ND |
| NC 2L = 2.6 µg/L (10/23/07) Resample | 4-Dec-07 | 0.11 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 2-Apr-08 | 0.18 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 28-Oct-08 | 0.18 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-09 | 0.18 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 27-Oct-09 | 0.77 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | 0.9 J | ND | ND | --- | --- | --- | ND | --- | ND |
| NC 2L = 3 µg/L (1/1/10) | 8-Apr-10 | 0.77 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 13-Oct-10 | 0.77 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 27-Apr-11 | 0.77 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 20-Oct-11 | 0.77 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 26-Apr-12 | 0.77 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 16-Oct-12 | 0.77 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 11-Apr-13 | 0.77 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 30-Oct-13 | 0.77 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 9-Apr-14 | 0.77 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 22-Oct-14 | 0.77 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |
| | 8-Apr-15 | 0.77 | 1.00 | ND | ND | --- | --- | --- | --- | ND | ND | ND | ND | ND | --- | --- | --- | ND | --- | ND |

**Notes:** All concentrations are in micrograms per liter (µg/L)
IRL = Interim Regional Landfill montoring well
RL = Laboratory reporting limit (NC SWSL or lower from October 2007 to present).
ND = Not detected above laboratory reporting limit.
B = Blank-qualified data; result is expected to be biased high based on concentrations in the blanks.
NC 2L = North Carolina 2L Groundwater Standards.
GWPS = Groundwater Protection Standards.
When the NC 2L has not been established, the GWPS will be used.
Shaded values are above the NC 2L Groundwater Standards or Groundwater Protection Standards.
DL = Laboratory detection limit.
J = Estimated value between the DL and the RL
--- = Not sampled and/or not monitored

# TABLE 7

## SUMMARY OF FIELD PARAMETERS
## C.R.S.W.M.A. TUSCARORA INTERIM REGIONAL LANDFILL

| Analyte | Sample Collection Date | IRL-1S | IRL-1D | IRL-2S | IRL-2SA | IRL-2D | IRL-2DA | IRL-3S | IRL-3D | IRL-4S | IRL-4D | IRL-5S | IRL-5D | IRL-6S | IRL-6D | MW-A | MW-B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Compounds** | | | | | | | | | | | | | | | | | |
| Conductivity (at 25c) | 1-Jun-93 | 1000.00 | 480.00 | 30.00 | --- | 580.00 | --- | 430.000 | 520.000 | 370.000 | 600.000 | 800.000 | 590.000 | 310.000 | 460.000 | --- | --- |
| | 1-Aug-93 | 59.00 | 240.00 | 110.00 | --- | 360.00 | --- | 370.00 | 300.00 | 240.00 | 330.00 | 600.00 | 290.00 | 110.00 | 260.00 | --- | --- |
| | 1-Sep-93 | 75.00 | 300.00 | 150.00 | --- | 530.00 | --- | 420.00 | 450.00 | 250.00 | 460.00 | 880.00 | 400.00 | 150.00 | 400.00 | --- | --- |
| | 1-Sep-93 | 74 | 280.00 | 150 | --- | 520.00 | --- | 360.00 | 440.00 | 270.00 | 460.00 | 860.00 | 360.00 | 130.00 | 390.00 | --- | --- |
| | 1-Apr-94 | 76.00 | 350.00 | 140.00 | --- | 570.00 | --- | 360.00 | 620.00 | 290.00 | 560.00 | 990.00 | 460.00 | 77.00 | 460.00 | --- | --- |
| | 1-Oct-94 | 130 | 280.00 | 130 | --- | 820.00 | --- | 570.00 | 820.00 | 270.00 | 730.00 | 1000.00 | 82.00 | 82.00 | 420.00 | --- | --- |
| | 1-Apr-95 | 67 | 360.00 | 160 | --- | 560.00 | --- | 240.00 | 670.00 | 290.00 | 520.00 | 1900.00 | 490.00 | 69.00 | 450.00 | --- | --- |
| | 1-Oct-95 | 65 | 270.00 | 260 | --- | 660.00 | --- | 260.00 | 700.00 | 330.00 | 520.00 | 1300.00 | 480.00 | 75.00 | 450.00 | --- | --- |
| | 1-Apr-96 | 79 | 360.00 | 340 | --- | 580.00 | --- | 700.00 | 320.00 | 290.00 | 520.00 | 1500.00 | 450.00 | 77.00 | 440.00 | --- | --- |
| | 1-Oct-96 | 63.00 | --- | --- | --- | --- | --- | 410.00 | 530.00 | 250.00 | 400.00 | 1000.00 | --- | 87.00 | --- | --- | --- |
| | 1-Apr-97 | 80 | --- | 640.00 | --- | --- | --- | 330.00 | 690.00 | 270.00 | 530.00 | 1800.00 | --- | --- | --- | --- | --- |
| | 1-Oct-97 | 84.00 | --- | 630.00 | --- | --- | --- | 720.00 | 270.00 | 270.00 | 490.00 | 1200.00 | --- | --- | --- | --- | --- |
| | 1-Apr-98 | 73 | --- | 700 | --- | --- | --- | 360.00 | 770.00 | 240.00 | 520.00 | 1400.00 | --- | 110.00 | --- | --- | --- |
| | 1-Oct-98 | 74 | --- | 600 | --- | --- | --- | 480.00 | 750.00 | 230.00 | 490.00 | 1200.00 | --- | --- | --- | --- | --- |
| | 1-Mar-99 | 77 | --- | 810 | --- | --- | --- | 880.00 | 760.00 | 760.00 | 520.00 | 1200.00 | --- | --- | --- | --- | --- |
| | 1-Oct-99 | 74 | --- | --- | --- | --- | --- | 960.00 | 710.00 | 490.00 | 490.00 | 800.00 | --- | --- | --- | --- | --- |
| | 1-Apr-00 | 74 | --- | --- | --- | --- | --- | 1100.00 | 1400.00 | 170.00 | 500.00 | 900.00 | --- | --- | --- | --- | --- |
| | 1-Oct-00 | 76 | --- | --- | --- | --- | --- | 1100.00 | 720.00 | 230.00 | 500.00 | 900.00 | --- | --- | --- | --- | --- |
| | 1-Apr-14 | 67 | --- | --- | 64 | --- | --- | 1100.00 | 710.00 | 190.00 | 470.00 | 840.00 | --- | --- | --- | --- | --- |
| | 1-Oct-14 | 74 | --- | --- | 170.00 | --- | --- | 1000.00 | 710.00 | 200.00 | 500.00 | 1700.00 | --- | --- | --- | --- | --- |
| | 2-Apr-14 | 68 | --- | --- | 120.00 | --- | --- | 950.00 | 710.00 | 200.00 | 450.00 | 1700.00 | --- | --- | --- | 90.00 | 120.00 |
| | 2-Oct-14 | 19 | --- | --- | 448.00 | --- | --- | 970.00 | 830.00 | 192.00 | 550.00 | 1848.00 | --- | --- | --- | 98.00 | 132.00 |
| | 3-Apr-14 | 100 | --- | --- | 329.00 | --- | --- | 1082.00 | 804.00 | 215.00 | 486.00 | 1024.00 | --- | --- | --- | 86.00 | 157.00 |
| | 3-Oct-14 | 96 | --- | --- | 182.00 | --- | --- | 1110.00 | 849.00 | 205.00 | 506.00 | 1393.00 | --- | --- | --- | 81.00 | 180.00 |
| | 15-Apr-04 | 64 | --- | --- | 120.00 | --- | --- | 700.00 | 600.00 | 170.00 | 360.00 | 990.00 | --- | --- | --- | 56.00 | 100.00 |
| | 14-Oct-04 | 99 | --- | --- | 183.00 | --- | --- | 775.00 | 712.00 | 239.00 | 482.00 | 1188.00 | --- | --- | --- | 86.00 | 123.00 |
| | 5-Apr-05 | 96 | --- | --- | --- | --- | --- | 1033.00 | 942.00 | 287.00 | 601.00 | 1491.00 | --- | --- | --- | 89.00 | --- |
| | 27-Oct-05 | 105 | 195.00 | --- | --- | --- | --- | 876 | 775.00 | 250 | 502 | 1,323 | --- | --- | --- | 91 | --- |
| | 21-Apr-06 | 104 | 231.00 | --- | --- | --- | --- | 927.00 | 736.00 | 271.00 | 553.00 | 1424.00 | --- | --- | --- | 79.00 | --- |
| | 12-Oct-06 | 101 | 164 | --- | --- | --- | --- | 784 | 672.00 | 278 | 515 | 126 | --- | --- | --- | 87 | --- |
| | 26-Apr-07 | 103 | 155 | --- | --- | --- | --- | 850 | 721.00 | 287 | 536 | 1,287 | --- | --- | --- | 75 | --- |
| | 10-Oct-07 | 105 | 192 | --- | --- | --- | --- | 850 | 702.00 | 354 | 550 | 1,570 | --- | --- | --- | 98 | --- |
| Resample | 4-Dec-07 | 109.2 | 357 | --- | --- | --- | --- | 963 | 1052.00 | 379.00 | 610 | 1,829 | --- | --- | --- | 108.7 | --- |
| | 2-Apr-08 | 109 | 169 | --- | --- | --- | --- | 1,096 | 713.00 | 253.00 | 540 | 1,272 | --- | --- | --- | 86 | --- |
| | 28-Oct-08 | 109 | 217 | --- | --- | --- | --- | 935 | 931.00 | 266.00 | 533 | 1,468 | --- | --- | --- | 103 | --- |
| | 8-Apr-09 | 106 | 215 | --- | --- | --- | --- | 1,092 | 894.00 | 283.00 | 541 | 1,265 | --- | --- | --- | 95 | --- |
| | 27-Oct-09 | 93 | 170 | --- | --- | --- | --- | 898 | 824.00 | 372.00 | 522 | 1,144 | --- | --- | --- | 91 | --- |
| | 8-Apr-10 | 103 | 220 | --- | --- | --- | --- | 1,030 | 860.00 | 338.00 | 576 | 1,538 | --- | --- | --- | 94 | --- |
| | 13-Oct-10 | 119 | 187 | --- | --- | --- | --- | 889 | 753.00 | 464.00 | 557 | 1,303 | --- | --- | --- | 93 | --- |
| | 27-Apr-11 | 156 | 252 | --- | --- | --- | --- | 982.00 | 734.00 | 505.00 | 605.00 | 1472.00 | --- | --- | --- | 104 | --- |
| | 20-Oct-11 | 124 | 178 | --- | --- | --- | --- | 839.00 | 667.00 | 467.00 | 576.00 | 1310.00 | --- | --- | --- | 102 | --- |
| | 26-Apr-12 | 132 | 219 | --- | --- | --- | --- | 931.00 | 653.00 | 514.00 | 585.00 | 1553.00 | --- | --- | --- | 107 | --- |
| | 16-Oct-12 | 139 | 193 | --- | --- | --- | --- | 886.00 | 628.00 | 532.00 | 574.00 | 1502.00 | --- | --- | --- | 102 | --- |
| | 11-Apr-13 | 131.00 | 277 | --- | --- | --- | --- | 834.00 | 605.00 | 580.00 | 571.00 | 1300.00 | --- | --- | --- | 101 | --- |
| | 30-Oct-13 | 113.00 | 170 | --- | --- | --- | --- | 731.00 | 588.00 | 569.00 | 572.00 | 1110.00 | --- | --- | --- | 101 | --- |
| | 9-Apr-14 | 261.00 | 153 | --- | --- | --- | --- | 927.00 | 595.00 | 511.00 | 582.00 | 1568.00 | --- | --- | --- | 112 | --- |
| | 22-Oct-14 | 164 | 208 | --- | --- | --- | --- | 795 | 607 | 501 | 572 | 1507 | --- | --- | --- | 112 | --- |
| | 8-Apr-15 | 166 | 232 | --- | --- | --- | --- | 806 | 804 | 628 | 584 | 557 | --- | --- | --- | 118 | --- |
| pH | 1-Jun-93 | 5.30 | 6.3 | 6.10 | --- | 6.20 | --- | 5.40 | 6.30 | 5.70 | 6.10 | 6.00 | 6.40 | 5.80 | 6.20 | --- | --- |
| [standard units] | 1-Aug-93 | 5.50 | 6.5 | 6.30 | --- | 6.80 | --- | 6.00 | 6.80 | 6.40 | 6.9 | 6.20 | 6.80 | 6.30 | 7.00 | --- | --- |
| | 1-Sep-93 | 5.90 | 6.6 | 5.70 | --- | 6.50 | --- | 5.90 | 6.50 | 6.70 | 7 | 6.10 | 6.60 | 6.50 | 6.70 | --- | --- |
| | 1-Sep-93 | 6.10 | 6.5 | 5.80 | --- | 6.10 | --- | 5.90 | 6.50 | 5.70 | 6.3 | 6.40 | 6.90 | 6.60 | 6.60 | --- | --- |
| | 1-Apr-94 | 5.90 | 6.1 | 5.40 | --- | 6.40 | --- | 5.70 | 6.50 | 6.20 | 6.7 | 6.40 | 6.80 | 6.40 | 6.70 | --- | --- |
| | 1-Oct-94 | 5.20 | 6.4 | 5.20 | --- | 6.70 | --- | 5.70 | 6.70 | 6.00 | 6.8 | 6.20 | 7.00 | 5.50 | 6.80 | --- | --- |
| | 1-Apr-95 | 5.70 | 6.1 | 5.50 | --- | 6.40 | --- | 6.00 | 6.20 | 6.20 | 6.6 | 6.20 | 3.80 | 6.20 | 6.60 | --- | --- |
| | 1-Oct-95 | 5.00 | 6.4 | 5.60 | --- | 6.70 | --- | 5.40 | 6.60 | 5.90 | 6.8 | 6.20 | 6.90 | 5.30 | 7.00 | --- | --- |
| | 1-Apr-96 | 5 | 6.3 | 5.80 | --- | 6.60 | --- | 6.70 | 6.00 | 6.10 | 6.70 | 6.40 | 7.00 | 5.50 | 6.60 | --- | --- |
| | 1-Oct-96 | 5.2 | --- | --- | --- | --- | --- | 6.00 | 6.00 | 6.4 | 6.400 | 5.800 | --- | 6.000 | --- | --- | --- |
| | 1-Apr-97 | 6.1 | --- | 6.3 | --- | --- | --- | 6.20 | 6.50 | 6.10 | 6.60 | 6.20 | --- | --- | --- | --- | --- |
| | 1-Oct-97 | 5.3 | --- | 5.8 | --- | --- | --- | 6 | 6 | 6 | 6.10 | 5.80 | --- | --- | --- | --- | --- |
| | 1-Apr-98 | 5.8 | --- | 6.5 | --- | --- | --- | 5.4 | 6.4 | 5.6 | 6.80 | 6.10 | --- | 5.20 | --- | --- | --- |
| | 1-Oct-98 | 5.5 | --- | 6.1 | --- | --- | --- | 5.6 | 6.3 | 5.7 | 6.70 | 6.00 | --- | --- | --- | --- | --- |
| | 1-Mar-99 | 5.2 | --- | 6.3 | --- | --- | --- | 6 | 7 | 6 | 6.70 | 6.00 | --- | --- | --- | --- | --- |
| | 1-Oct-99 | 4.9 | --- | --- | --- | --- | --- | 6 | 6 | 7 | 6.80 | 5.70 | --- | --- | --- | --- | --- |
| | 1-Apr-00 | 5.2 | --- | --- | --- | --- | --- | 6 | 6 | 6 | 6.90 | 5.80 | --- | --- | --- | --- | --- |
| | 1-Oct-00 | 4.8 | --- | --- | --- | --- | --- | 6 | 6 | 6 | 6.60 | 5.20 | --- | --- | --- | --- | --- |
| | 1-Apr-14 | 4.9 | --- | --- | 4.8 | --- | --- | 6 | 7 | 5 | 6.60 | 5.50 | --- | --- | --- | --- | --- |
| | 1-Oct-14 | 5 | --- | --- | 5 | --- | --- | 6 | 7 | 6 | 6.90 | 6.10 | --- | --- | --- | --- | --- |
| | 2-Apr-14 | 4.7 | --- | --- | 4.3 | --- | --- | 6 | 6 | 5 | 6.40 | 6.00 | --- | --- | --- | 5 | 4.50 |
| | 2-Oct-14 | 5.1 | --- | --- | 4.1 | --- | --- | 6.0 | 6.4 | 5 | 7.00 | 6.10 | --- | --- | --- | 5 | 4.70 |
| | 3-Apr-14 | 5.1 | --- | --- | 4.3 | --- | --- | 6.1 | 6.5 | 5.3 | 6.80 | 5.80 | --- | --- | --- | 5 | 4.70 |
| | 3-Oct-14 | 4.8 | --- | --- | 4.3 | --- | --- | 5.8 | 6.3 | 5.1 | 6.70 | 5.90 | --- | --- | --- | 5 | 4.80 |
| | 15-Apr-04 | 5.3 | --- | --- | 4.4 | --- | --- | 6.4 | 5.6 | 5.8 | 6.8 | 6.4 | --- | --- | --- | 5 | 5.80 |
| | 14-Oct-04 | 4.9 | --- | --- | 4.4 | --- | --- | 6.1 | 6.5 | 5.3 | 6.9 | 6.1 | --- | --- | --- | 5 | 4.80 |
| | 5-Apr-05 | 5.1 | --- | --- | --- | --- | --- | 6.3 | 6.7 | 5.2 | 7.0 | 6.1 | --- | --- | --- | 5 | --- |
| | 27-Oct-05 | 4.9 | 6.60 | --- | --- | --- | --- | 6.0 | 6.5 | 5.1 | 6.9 | 6.2 | --- | --- | --- | 5 | --- |
| | 21-Apr-06 | 5 | 6.30 | --- | --- | --- | --- | 6.2 | 7.00 | 5.4 | 7.9 | 6.0 | --- | --- | --- | 5 | --- |
| | 12-Oct-06 | 5 | 6.10 | --- | --- | --- | --- | 6.2 | 6.60 | 5.1 | 6.8 | 6.1 | --- | --- | --- | 5 | --- |
| | 26-Apr-07 | 4.9 | 6.10 | --- | --- | --- | --- | 6.2 | 6.70 | 5.4 | 6.9 | 6.1 | --- | --- | --- | 5 | --- |
| | 10-Oct-07 | 5.2 | 6.20 | --- | --- | --- | --- | 6.2 | 6.80 | 5.8 | 7.0 | 6.4 | --- | --- | --- | 5 | --- |
| Resample | 4-Dec-07 | 6.6 | 6.29 | --- | --- | --- | --- | 7.1 | 6.60 | 6.6 | 7.4 | 6.3 | --- | --- | --- | 7 | --- |
| | 8-Apr-08 | 4.9 | 6.70 | --- | --- | --- | --- | 5.6 | 6.80 | 5.2 | 6.8 | 6 | --- | --- | --- | 5 | --- |
| | 28-Oct-08 | 4.7 | 6.30 | --- | --- | --- | --- | 6.0 | 6.50 | 5.3 | 6.9 | 6.3 | --- | --- | --- | 5 | --- |
| | 8-Apr-09 | 4.9 | 6.00 | --- | --- | --- | --- | 5.5 | 6.40 | 4.9 | 6.7 | 8.5 | --- | --- | --- | 5 | --- |
| | 27-Oct-09 | 4.8 | 6.20 | --- | --- | --- | --- | 5.8 | 6.30 | 5.3 | 6.8 | 6 | --- | --- | --- | 4.9 | --- |
| | 8-Apr-10 | 4.7 | 6.30 | --- | --- | --- | --- | 5.60 | 6.50 | 4.80 | 6.90 | 6.10 | --- | --- | --- | 5.00 | --- |
| | 13-Oct-10 | 5.2 | 6.3 | --- | --- | --- | --- | 5.8 | 6.50 | 5.3 | 6.7 | 6.1 | --- | --- | --- | 5.1 | --- |
| | 27-Apr-11 | 4.9 | 6.3 | --- | --- | --- | --- | 5.6 | 6.60 | 5 | 6.7 | 6 | --- | --- | --- | 4.9 | --- |
| | 20-Oct-11 | 4.6 | 6.3 | --- | --- | --- | --- | 5.9 | 6.70 | 6.1 | 6.9 | 4.7 | --- | --- | --- | 4.9 | --- |
| | 26-Apr-12 | 4.6 | 6.2 | --- | --- | --- | --- | 5.7 | 6.70 | 4.9 | 6.8 | 6 | --- | --- | --- | 5 | --- |
| | 16-Oct-12 | 4.5 | 6.2 | --- | --- | --- | --- | 5.9 | 6.80 | 4.9 | 6.9 | 6.2 | --- | --- | --- | 5.2 | --- |
| | 11-Apr-13 | 4.8 | 6.3 | --- | --- | --- | --- | 5.5 | 6.7 | 4.7 | 6.9 | 6.1 | --- | --- | --- | 5 | --- |
| | 30-Oct-13 | 5.1 | 6.3 | --- | --- | --- | --- | 6.1 | 6.90 | 5.2 | 6.9 | 6.2 | --- | --- | --- | 5.3 | --- |
| | 9-Apr-14 | 6.3 | 4.8 | --- | --- | --- | --- | 5.9 | 6.70 | 5.1 | 6.8 | 6.2 | --- | --- | --- | 5.1 | --- |
| | 22-Oct-14 | 4.3 | 6.0 | --- | --- | --- | --- | 6.0 | 6.70 | 4.8 | 6.8 | 6.2 | --- | --- | --- | 5.0 | --- |
| | 8-Apr-15 | 4.6 | 6.1 | --- | --- | --- | --- | 5.8 | 6.40 | 4..9 | 6.7 | 6.7 | --- | --- | --- | 4.9 | --- |
| Temperature | 1-Jun-93 | 22 | 20 | 23 | --- | 20.00 | --- | 23 | 22.00 | 23.0 | 21 | 23 | 21 | 22 | 21 | --- | --- |
| [oC] | 1-Aug-93 | 23 | 20 | 22 | --- | 21.00 | --- | 22 | 22.00 | 23.0 | 20.0 | 24 | 21.0 | 23 | 20 | --- | --- |
| | 1-Sep-93 | 23 | 20 | 24 | --- | 20.00 | --- | 25.0 | 20.00 | 24.0 | 20.0 | 25.0 | 20.0 | 24.0 | 21.0 | --- | --- |
| | 1-Sep-93 | 23 | 21 | 24 | --- | 21.00 | --- | 24.0 | 21.00 | 23 | 20 | 24.0 | 22 | 24.0 | 21.0 | --- | --- |
| | 1-Apr-94 | 18 | 18 | 17 | --- | 17.00 | --- | 16.0 | 16.00 | 15.0 | 16.0 | 16.0 | 16.0 | 15.0 | 15.0 | --- | --- |
| | 1-Oct-94 | 21 | 18 | 21 | --- | 20.00 | --- | 21.0 | 19.00 | 21.0 | 19.0 | 21.0 | 20.0 | 21.0 | 20.0 | --- | --- |
| | 1-Apr-95 | 15 | 15 | 15 | --- | 17.00 | --- | 16.0 | 16.00 | 16.0 | 16.0 | 16.0 | 16.0 | 15.0 | 16.0 | --- | --- |
| | 1-Oct-95 | 22.00 | 20 | 22.00 | --- | 20.00 | --- | 22.00 | 20.00 | 22.00 | 22.0 | 22.00 | 21.00 | 22.0 | 20.00 | --- | --- |
| | 1-Apr-96 | 12.0 | 13 | 13.0 | --- | 14.00 | --- | 13.0 | 13.00 | 13.0 | 13.0 | 13 | 14.0 | 12.0 | 12.0 | --- | --- |
| | 1-Oct-96 | 20.0 | --- | --- | --- | --- | --- | 22.0 | 22.00 | 22.0 | 22 | 22 | --- | 22 | --- | --- | --- |
| | 1-Apr-97 | 13.00 | --- | 14.00 | --- | --- | --- | 15.00 | 14.00 | 15.00 | 15 | 14.00 | --- | --- | --- | --- | --- |
| | 1-Oct-97 | 18.00 | --- | 21.00 | --- | --- | --- | 17.00 | 19.00 | 19.0 | 18 | 20.0 | --- | --- | --- | --- | --- |
| | 1-Apr-98 | 15.0 | --- | 16.0 | --- | --- | --- | 15.0 | 16.00 | 15.0 | 17 | 15.0 | --- | 15.0 | --- | --- | --- |
| | 1-Oct-98 | 19.0 | --- | 21.0 | --- | --- | --- | 21.0 | 19.00 | 21.0 | 20 | 21.0 | --- | --- | --- | --- | --- |
| | 1-Mar-99 | 12.0 | --- | 16.0 | --- | --- | --- | 17.0 | 17.00 | 17.0 | 18 | 17.0 | --- | --- | --- | --- | --- |
| | 1-Oct-99 | 21.00 | --- | --- | --- | --- | --- | 20.0 | 20.00 | 21.0 | 21.0 | 21.0 | --- | --- | --- | --- | --- |
| | 1-Apr-00 | 15.00 | --- | --- | --- | --- | --- | 15.0 | 17.00 | 19.0 | 18.0 | 15.0 | --- | --- | --- | --- | --- |
| | 1-Oct-00 | 18 | --- | --- | --- | --- | --- | 18.00 | 20.00 | 21.00 | 20.00 | 16.00 | --- | --- | --- | --- | --- |
| | 1-Apr-14 | 15 | --- | --- | 15 | --- | --- | 18.0 | 17.0 | 16.0 | 15.0 | 15.0 | --- | --- | --- | --- | --- |
| | 1-Oct-14 | 19 | --- | --- | 20 | --- | --- | 20 | 20 | 21 | 21 | 21 | --- | --- | --- | --- | --- |
| | 2-Apr-14 | 15 | --- | --- | 16 | --- | --- | 15.0 | 15.0 | 16.0 | 17 | 17 | --- | --- | --- | 17.0 | 16 |
| | 2-Oct-14 | 24 | --- | --- | 26 | --- | --- | 23.0 | 22.0 | 24.0 | 23 | 24 | --- | --- | --- | 25.0 | 25 |
| | 3-Apr-14 | 15 | --- | --- | 17 | --- | --- | 16 | 16 | 15 | 16 | 17 | --- | --- | --- | 16 | 16 |
| | 3-Oct-14 | 20 | --- | --- | 21 | --- | --- | 21.0 | 20.0 | 21.0 | 22 | 21 | --- | --- | --- | 21.0 | 21 |
| | 15-Apr-04 | 13 | --- | --- | 14 | --- | --- | 13.0 | 13.0 | 14.0 | 14 | 15 | --- | --- | --- | 13.0 | 13 |
| | 14-Oct-04 | 20 | --- | --- | 21 | --- | --- | 21 | 21 | 22 | 22 | 22 | --- | --- | --- | 21 | 21 |
| | 5-Apr-05 | 15 | --- | --- | --- | --- | --- | 15.0 | 15.0 | 15.0 | 15 | 15 | --- | --- | --- | 15.0 | --- |
| | 27-Oct-05 | 20 | 17 | --- | --- | --- | --- | 22.0 | 22.0 | 23.0 | 23 | 23 | --- | --- | --- | 21.0 | --- |
| | 21-Apr-06 | 20 | 18 | --- | --- | --- | --- | 14.0 | 16.0 | 15.0 | 15 | 18 | --- | --- | --- | 18.0 | --- |
| | 12-Oct-06 | 20 | 18 | --- | --- | --- | --- | 22.0 | 19.0 | 23.0 | 21 | 23 | --- | --- | --- | 21.0 | --- |
| | 26-Apr-07 | 16 | 17 | --- | --- | --- | --- | 17.0 | 18.0 | 16.0 | 18 | 17 | --- | --- | --- | 17.0 | --- |
| | 10-Oct-07 | 19 | 18 | --- | --- | --- | --- | 22.0 | 19.0 | 23.0 | 20 | 24 | --- | --- | --- | 20.0 | --- |
| Resample | 4-Dec-07 | 16.7 | 16.7 | --- | --- | --- | --- | 18.2 | 16.8 | 18.6 | 18.8 | 18.7 | --- | --- | --- | 16.9 | --- |
| | 2-Apr-08 | 15 | 17 | --- | --- | --- | --- | 17.0 | 17.0 | 16.0 | 19.0 | 16.0 | --- | --- | --- | 16.0 | --- |
| | 28-Oct-08 | 19 | 19 | --- | --- | --- | --- | 20 | 20 | 21 | 21 | 19 | --- | --- | --- | 19.0 | --- |
| | 8-Apr-09 | 14 | 16 | --- | --- | --- | --- | 14.0 | 16.0 | 15.0 | 16.0 | 15.0 | --- | --- | --- | 14.0 | --- |
| | 27-Oct-09 | 20 | 19 | --- | --- | --- | --- | 21.0 | 20.0 | 21.0 | 21.0 | 22.0 | --- | --- | --- | 21.0 | --- |
| | 8-Apr-10 | 17 | 17 | --- | --- | --- | --- | 15.0 | 16.00 | 15.0 | 17.0 | 16.0 | --- | --- | --- | 16.0 | --- |
| | 13-Oct-10 | 21 | 20 | --- | --- | --- | --- | 21.0 | 20.00 | 22.0 | 21.0 | 23.0 | --- | --- | --- | 22.0 | --- |
| | 27-Apr-11 | 17 | 16 | --- | --- | --- | --- | 16.0 | 17.00 | 17.0 | 18.0 | 17.0 | --- | --- | --- | 17.0 | --- |
| | 20-Oct-11 | 20 | 18 | --- | --- | --- | --- | 21.0 | 19.00 | 21.0 | 19.0 | 21.0 | --- | --- | --- | 20.0 | --- |
| | 26-Apr-12 | 17 | 17 | --- | --- | --- | --- | 17.0 | 17.00 | 16.0 | 18.0 | 17.0 | --- | --- | --- | 17.0 | --- |
| | 16-Oct-12 | 21 | 19 | --- | --- | --- | --- | 21.0 | 20.00 | 22.0 | 21.0 | 22.0 | --- | --- | --- | 22.0 | --- |
| | 11-Apr-13 | 15 | 17 | --- | --- | --- | --- | 15.0 | 17.00 | 14.0 | 17.0 | 15.0 | --- | --- | --- | 15.0 | --- |
| | 30-Oct-13 | 20.0 | 19 | --- | --- | --- | --- | 21.0 | 20.00 | 21.0 | 19.0 | 21.0 | --- | --- | --- | 21.0 | --- |
| | 9-Apr-14 | 16.0 | 15 | --- | --- | --- | --- | 14.0 | 15.00 | 13.0 | 15.0 | 13.0 | --- | --- | --- | 16.0 | --- |
| | 22-Oct-14 | 21 | 20 | --- | --- | --- | --- | 21 | 21 | 21 | 21 | 21 | --- | --- | --- | 21 | --- |
| | 8-Apr-15 | 16 | 16 | --- | --- | --- | --- | 16 | 16 | 15 | 16 | 17 | --- | --- | --- | 16 | --- |
| Turbidity | 1-Jun-93 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [NTU] | 1-Aug-93 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1-Sep-93 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1-Sep-93 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1-Apr-94 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1-Oct-94 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1-Apr-95 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1-Oct-95 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1-Apr-96 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1-Oct-96 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1-Apr-97 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1-Oct-97 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1-Apr-98 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 1-Oct-98 | --- | --- | 130.0 | --- | --- | --- | 60 | 180.00 | 220 | 190 | 650 | --- | --- | --- | --- | --- |
| | 1-Mar-99 | 650 | --- | 290.0 | --- | --- | --- | 85 | 180.00 | 180 | 270 | 95 | --- | --- | --- | --- | --- |
| | 1-Oct-99 | 600 | --- | --- | --- | --- | --- | 10 | 23.00 | 17 | 17 | 5.9 | --- | --- | --- | --- | --- |
| | 1-Apr-00 | 170.00 | --- | --- | --- | --- | --- | 18.00 | 40.00 | 33.00 | 40.0 | 13.00 | --- | --- | --- | --- | --- |
| | 1-Oct-00 | 700.0 | --- | --- | --- | --- | --- | 31.0 | 90.00 | 7.1 | 34.0 | 21.0 | --- | --- | --- | --- | --- |
| | 1-Apr-14 | 140.0 | --- | --- | 50.0 | --- | --- | 21.0 | 60.00 | 12.0 | 27.0 | 10.0 | --- | --- | --- | --- | --- |
| | 1-Oct-14 | 106.00 | --- | --- | 68.0 | --- | --- | 74.00 | 139.00 | 34.00 | 18 | 26.00 | --- | --- | --- | --- | --- |
| | 2-Apr-14 | 90.00 | --- | --- | 12.0 | --- | --- | 40.0 | 35.00 | 5.3 | 25 | 19.0 | --- | --- | --- | 140 | 5.9 |
| | 2-Oct-14 | 280.0 | --- | --- | 19.0 | --- | --- | 45.0 | 100.00 | 9.2 | 38 | 100.0 | --- | --- | --- | 75 | 4.0 |
| | 3-Apr-14 | 90.0 | --- | --- | 6.9 | --- | --- | 45.0 | 110.00 | 9.4 | 39 | 27.0 | --- | --- | --- | 110 | 8.8 |
| | 3-Oct-14 | 65.0 | --- | --- | 13.0 | --- | --- | 31.0 | 30.00 | 19.0 | 60 | 55.0 | --- | --- | --- | 160 | 40.0 |
| | 15-Apr-04 | 200.0 | --- | --- | 100.0 | --- | --- | 45.0 | 35.00 | 37.0 | 32.0 | 36.0 | --- | --- | --- | 110.0 | 13.0 |
| | 14-Oct-04 | 75.0 | --- | --- | 13.0 | --- | --- | 85.0 | 80.00 | 8.9 | 240.0 | 80.0 | --- | --- | --- | 95.0 | 5.9 |
| | 5-Apr-05 | 100 | --- | --- | --- | --- | --- | 40.00 | 18.00 | 13.00 | 25.00 | 32.00 | --- | --- | --- | 75.00 | --- |
| | 27-Oct-05 | 90.0 | >1,000 | --- | --- | --- | --- | 22 | 29.0 | 14.0 | 36 | 19 | --- | --- | --- | 85 | --- |
| | 21-Apr-06 | 8.9 | 14 | --- | --- | --- | --- | 5.5 | 32 | 7.3 | 53 | 25 | --- | --- | --- | 4.1 | --- |
| | 12-Oct-06 | 5.1 | 40 | --- | --- | --- | --- | 21 | 140 | 1.6 | 37 | 170 | --- | --- | --- | 20 | --- |
| | 26-Apr-07 | 7 | 4 | --- | --- | --- | --- | 22 | 160 | 200 | 200 | 90 | --- | --- | --- | 25 | --- |
| | 10-Oct-07 | 11 | 10 | --- | --- | --- | --- | 58.0 | 65 | 12 | 45 | 110 | --- | --- | --- | 22 | --- |
| Resample | 4-Dec-07 | 79.4 | 14.97 | --- | --- | --- | --- | 15 | 525.0 | 47.5 | 64.6 | 9.42 | --- | --- | --- | 73.3 | --- |
| | 2-Apr-08 | 40 | 9.5 | --- | --- | --- | --- | 3.5 | 28 | 7.7 | 55 | 11 | --- | --- | --- | 20 | --- |
| | 28-Oct-08 | 80 | 50 | --- | --- | --- | --- | 36 | 37 | 36 | 40 | 38 | --- | --- | --- | 86 | --- |
| | 8-Apr-09 | 130 | 56 | --- | --- | --- | --- | 90 | 260 | 120 | 38 | 32 | --- | --- | --- | 90 | --- |
| | 27-Oct-09 | 270 | 55 | --- | --- | --- | --- | 85 | 85.0 | 23 | 70 | 62 | --- | --- | --- | 65 | --- |
| | 8-Apr-10 | 160 | 39 | --- | --- | --- | --- | 75 | 65 | 18 | 40 | 75 | --- | --- | --- | 65 | --- |
| | 13-Oct-10 | 10 | 85 | --- | --- | --- | --- | 34 | 75 | 35 | 50 | 170 | --- | --- | --- | 140 | --- |
| | 27-Apr-11 | 16 | 29 | --- | --- | --- | --- | 44 | 110 | 31 | 70 | 65 | --- | --- | --- | 50 | --- |
| | 20-Oct-11 | 12 | 55 | --- | --- | --- | --- | 45 | 130.00 | 34 | 85 | 90 | --- | --- | --- | 85 | --- |
| | 26-Apr-12 | 85 | 45 | --- | --- | --- | --- | 31 | 120.00 | 85 | 60 | 85 | --- | --- | --- | 65 | --- |
| | 16-Oct-12 | 18 | 55 | --- | --- | --- | --- | 75 | 110.00 | 18.0 | 50 | 140 | --- | --- | --- | 45 | --- |
| | 11-Apr-13 | 150 | 25 | --- | --- | --- | --- | 35.00 | 130.00 | 19 | 45 | 110 | --- | --- | --- | 65 | --- |
| | 30-Oct-13 | 110 | 40 | --- | --- | --- | --- | 50 | 180.00 | 55 | 65 | 50.00 | --- | --- | --- | 39 | --- |
| | 9-Apr-14 | 31 | 45 | --- | --- | --- | --- | 75 | 80.00 | 24 | 65 | 100.00 | --- | --- | --- | 130 | --- |
| | 22-Oct-14 | 34 | 65 | --- | --- | --- | --- | 39 | 100 | 320 | 55 | 150 | --- | --- | --- | 95 | --- |
| | 8-Apr-15 | 21 | 27 | --- | --- | --- | --- | 75 | 80 | 50 | 45 | 45 | --- | --- | --- | 80 | --- |

**Notes:**
1. --- = Data not available.

# TABLE 8A

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA LONG-TERM REGIONAL LF PHASES 1 and 2

| | Sample | | | Background | | | | Downgraident | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | Collection Date | DL | SWSL | MW-12S | | MW-12D | | MW-7 | | MW-8 | | MW-9 | MW-10 | | MW-11S | | MW-11D | | MW-13S | | MW-13D | | MW-14 | | MW-14R | | Blanks | |
| **Inorganic Compounds** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | 1-Jul-99 | --- | 30 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Aug-99 | --- | 30 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-99 | --- | 30 | --- | | --- | | ND | | ND | | **40** | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Nov-99 | --- | 30 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Apr-00 | --- | 30 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-00 | --- | 30 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Apr-01 | --- | 30 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-01 | --- | 30 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 2-Apr-02 | --- | 30 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-02 | --- | 30 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Apr-03 | --- | 30 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-03 | --- | 30 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 15-Apr-04 | --- | 30 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 14-Oct-04 | --- | 30 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 5-Apr-05 | --- | 30 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 27-Oct-05 | --- | 30 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 21-Apr-06 | --- | 30 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 12-Oct-06 | --- | 30 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | | --- | | ND | | | |
| | 26-Apr-07 | --- | 6 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | | --- | | ND | | | |
| | 11-Oct-07 | 0.05 | 6 | ND | | ND | | 0.1 | B | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | | 0.1 | B | 0.1 | J | | |
| GWPS = 1.4 µg/L (10/23/07) | 3-Apr-08 | 0.44 | 6 | ND | | 0.5 | J | 0.1 | J | ND | | --- | ND | | ND | | 0.5 | J | 0.1 | J | ND | | --- | | ND | | ND | | | |
| | 28-Oct-08 | 0.44 | 6 | 0.1 | J | ND | | 0.9 | J | 0.2 | J | --- | 0.1 | J | ND | | ND | | ND | | ND | | --- | | ND | | ND | | | |
| | 8-Apr-09 | 0.06 | 6 | 0.1 | J | 0.2 | J | 0.1 | J | ND | | --- | ND | | ND | | ND | | 0.9 | J | 0.2 | J | --- | | 0.1 | J | ND | | | |
| | 27-Oct-09 | 0.06 | 6 | 0.1 | J | 0.6 | J | ND | | ND | | --- | ND | | ND | | ND | | 0.8 | J | 0.6 | J | --- | | 0.1 | J | ND | | | |
| | 8-Apr-10 | 0.22 | 6 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | | 0.8 | B | 0.7 | J | | |
| GWPS = 1 µg/L (8/1/10) | 13-Oct-10 | 0.22 | 6 | ND | | ND | | ND | | ND | | --- | 0.5 | J | ND | | ND | | ND | | ND | | --- | | ND | | ND | | | |
| | 27-Apr-11 | 0.14 | 6 | ND | | ND | | ND | | 0.37 | J | --- | 0.22 | J | 0.17 | J | ND | | ND | | ND | | --- | | ND | | ND | | | |
| | 20-Oct-11 | 0.14 | 6 | ND | | ND | | 0.19 | J | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | | 0.34 | J | ND | | | |
| | 26-Apr-12 | 0.14 | 6 | ND | | ND | | ND | | ND | | --- | ND | | ND | | 0.4 | J | ND | | ND | | --- | | ND | | ND | | | |
| | 16-Oct-12 | 0.02 | 6.0 | ND | | 0.76 | J | 0.15 | J | 0.17 | J | --- | 0.13 | J | 0.06 | J | 0.18 | J | 0.02 | J | 0.2 | J | --- | | 0.04 | J | ND | | | |
| | 11-Apr-13 | 0.02 | 6.0 | 0.07 | J | 0.09 | J | 0.12 | J | 0.43 | J | --- | 0.1 | J | 0.07 | J | 0.08 | J | 0.06 | J | 0.09 | J | --- | | 0.17 | J | ND | | | |
| | 30-Oct-13 | 0.02 | 6.0 | 0.15 | B | 0.94 | J | 0.24 | B | 0.12 | B | --- | 0.1 | B | 0.13 | B | 0.38 | B | 0.24 | B | 0.5 | J | --- | | 0.25 | B | 0.08 | J | | |
| | 9-Apr-14 | 0.02 | 6.0 | 0.33 | B | 1 | B | 0.14 | B | 0.18 | B | --- | 0.79 | B | 0.41 | B | 0.11 | B | 0.13 | B | 0.14 | B | --- | | 0.31 | B | 0.66 | J | | |
| | 22-Oct-14 | 0.12 | 6.0 | ND | | 0.25 | J | ND | | ND | | --- | 0.33 | J | ND | | 0.81 | J | 0.41 | J | ND | | --- | | 0.44 | J | ND | | | |
| | 8-Apr-15 | 0.12 | 6.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | 0.14 | J | ND | | ND | | --- | | 0.18 | J | ND | | | |
| Arsenic | 1-Jul-99 | --- | 10.0 | --- | | --- | | 37 | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Aug-99 | --- | 10.0 | --- | | --- | | 13 | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-99 | --- | 10.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Nov-99 | --- | 10.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Apr-00 | --- | 10.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-00 | --- | 10.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Apr-01 | --- | 10.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-01 | --- | 10.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 2-Apr-02 | --- | 10.0 | ND | | ND | | 10 | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-02 | --- | 10.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Apr-03 | --- | 10.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-03 | --- | 10.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 15-Apr-04 | --- | 10.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 14-Oct-04 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 5-Apr-05 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 27-Oct-05 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 21-Apr-06 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 12-Oct-06 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | | --- | | ND | | | |
| | 26-Apr-07 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | | --- | | ND | | | |
| | 11-Oct-07 | 0.47 | 10.0 | 6.6 | J | ND | | 3.5 | J | 4.3 | J | --- | 1.8 | J | 0.5 | J | ND | | 9.4 | J | ND | | --- | | 1.0 | J | ND | | | |
| NC 2L = 50 µg/L (10/23/07) | 3-Apr-08 | 0.57 | 10.0 | 1.4 | J | ND | | 1 | B | 1.3 | J | --- | 4.1 | J | 0.2 | B | ND | | 1.3 | J | ND | | --- | | 0.2 | B | 0.2 | J | | |
| | 28-Oct-08 | 0.57 | 10.0 | 1 | B | 0.8 | B | 2.4 | B | 5.3 | J | --- | 3.1 | J | 0.4 | B | 0.2 | B | 1.3 | B | 0.5 | B | --- | | 0.7 | B | 0.5 | J | | |
| | 8-Apr-09 | 0.17 | 10.0 | 1.2 | J | 0.8 | B | 1.2 | J | 3.9 | J | --- | 3.5 | J | 1 | B | 0 | B | 2 | J | 0.4 | B | --- | | 0.4 | B | 0.2 | J | | |
| | 27-Oct-09 | 0.17 | 10.0 | 1 | J | 0.8 | J | 1.7 | J | 5 | J | --- | 2.3 | J | 0 | J | 0 | J | 1 | J | 0.7 | J | --- | | 0.8 | J | ND | | | |
| NC 2L = 10 µg/L (1/1/10) | 8-Apr-10 | 0.04 | 10.0 | 0.4 | J | ND | | 0.7 | J | 2.5 | J | --- | 2.9 | J | ND | | ND | | 2 | J | ND | | --- | | 0.2 | J | ND | | | |
| | 13-Oct-10 | 0.04 | 10.0 | 0.9 | J | 1 | J | 1 | J | 2.3 | J | --- | 3.4 | J | 0 | J | 0 | J | 2 | J | 0.7 | J | --- | | 1.2 | J | ND | | | |
| | 27-Apr-11 | 0.10 | 10.0 | 0.28 | J | ND | | 2.9 | J | 1.5 | J | --- | 2.4 | J | 0 | J | ND | | 1 | J | ND | | --- | | 0.2 | J | ND | | | |
| | 20-Oct-11 | 0.10 | 10.0 | 0.36 | J | 0.51 | J | 2.8 | J | 1.3 | J | --- | 2.7 | J | 0.43 | J | ND | | 1 | J | 0.2 | J | --- | | 1.4 | J | ND | | | |
| | 26-Apr-12 | 0.10 | 10.0 | 0.24 | J | 0.56 | J | 1.9 | J | 1.6 | J | --- | 8 | J | 0.55 | J | ND | | 1 | J | 0.4 | J | --- | | 1.9 | J | ND | | | |
| | 16-Oct-12 | 0.13 | 10.0 | 0.22 | B | ND | | 1.3 | B | 1.2 | B | --- | 2.4 | J | 0.56 | B | ND | | 0.93 | B | 0.2 | B | --- | | 5.1 | J | 0.4 | J | | |
| | 11-Apr-13 | 0.05 | 10.0 | 0.33 | B | 0.31 | B | 1.3 | J | 2.1 | J | --- | 2.1 | J | 0.92 | J | 0.41 | J | 1.6 | J | 0.31 | B | --- | | 4.3 | J | 0.15 | J | | |
| | 30-Oct-13 | 0.05 | 10.0 | 0.46 | B | 1.4 | J | 0.93 | B | 2 | J | --- | 2.8 | J | 0.58 | B | 0.19 | B | 1.2 | J | 0.28 | B | --- | | 4.9 | J | 0.2 | J | | |
| | 9-Apr-14 | 0.05 | 10.0 | ND | | 1.6 | J | 0.82 | J | 1 | J | --- | 3 | J | ND | | ND | | 1.1 | J | ND | | --- | | 2.7 | J | ND | | | |
| | 22-Oct-14 | 0.10 | 10.0 | ND | | 1.4 | J | 0.55 | J | 1.5 | J | --- | 3.8 | J | 0.35 | J | 0.11 | J | 0.49 | J | 0.28 | J | --- | | 3.4 | J | ND | | | |
| | 8-Apr-15 | 0.10 | 10.0 | 0.25 | J | 1.3 | J | 0.60 | J | 0.56 | J | --- | 4.1 | J | 0.49 | J | ND | | 1.3 | J | 0.35 | J | --- | | 3.0 | J | ND | | | |
| Barium | 1-Jul-99 | --- | 500 | --- | | --- | | 869 | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Aug-99 | --- | 500 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-99 | --- | 500 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Nov-99 | --- | 500 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Apr-00 | --- | 500 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-00 | --- | 500 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Apr-01 | --- | 500 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-01 | --- | 500 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 2-Apr-02 | --- | 500 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-02 | --- | 500 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Apr-03 | --- | 500 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 1-Oct-03 | --- | 500.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | | | |
| | 15-Apr-04 | --- | 500.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 14-Oct-04 | --- | 500.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 5-Apr-05 | --- | 500.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 27-Oct-05 | --- | 500.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 21-Apr-06 | --- | 500.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | | |
| | 12-Oct-06 | --- | 500.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | | --- | | ND | | | |
| | 26-Apr-07 | --- | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | | --- | | ND | | | |
| | 11-Oct-07 | 0.04 | 100.0 | 81.8 | J | 47.4 | J | 63.3 | J | 32.7 | J | --- | 44.8 | J | 45.7 | J | 40.7 | J | 42.2 | J | 46.4 | J | --- | | 42.8 | J | 0.2 | J | | |
| NC 2L = 2,000 µg/L (10/23/07) | 3-Apr-08 | 0.11 | 100.0 | 88.6 | J | 36.7 | J | 67.3 | J | 43.6 | J | --- | 40.1 | J | 45.8 | J | 44 | J | 43 | J | 35 | J | --- | | 44.9 | J | 0.4 | J | | |
| | 28-Oct-08 | 0.11 | 100.0 | 85.2 | J | 30.9 | J | 115.0 | | 80.3 | J | --- | 55.1 | J | 111 | | 37.9 | J | 51.1 | J | 37.9 | J | --- | | 50.7 | J | 0.7 | J | | |
| | 8-Apr-09 | 0.04 | 100.0 | 109 | | 33.6 | J | 61.0 | J | 82.8 | J | --- | 66.5 | J | 52.4 | J | 42.8 | J | 59.4 | J | 50.4 | J | --- | | 99.7 | J | 0.2 | J | | |
| | 27-Oct-09 | 0.04 | 100.0 | 66.5 | J | 27.3 | J | 93 | J | 94.1 | J | --- | 77.7 | J | 65.4 | J | 35.9 | J | 54.9 | J | 44.8 | J | --- | | 112 | | 0.1 | J | | |
| NC 2L = 700 µg/L (1/1/10) | 8-Apr-10 | 0.03 | 100.0 | 82.1 | J | 26.8 | J | 46.4 | J | 79.9 | J | --- | 53.9 | J | 35.2 | J | 39.2 | J | 45.5 | J | 45.4 | J | --- | | 132 | | 0.1 | J | | |
| | 13-Oct-10 | 0.03 | 100.0 | 54.4 | J | 26.7 | J | 42.2 | J | 94.1 | J | --- | 65.7 | J | 36.2 | J | 45.1 | J | 70.5 | J | 43.7 | J | --- | | 197 | | 0.2 | J | | |
| | 27-Apr-11 | 0.02 | 100.0 | 64.9 | J | 26.1 | J | 52.1 | J | 86.4 | J | --- | 55.5 | J | 33.7 | J | 38.6 | J | 56.9 | J | 44.4 | J | --- | | 128 | | 0.1 | J | | |
| | 20-Oct-11 | 0.02 | 100.0 | 57.4 | J | 26.7 | J | 56 | J | 98.2 | J | --- | 60 | J | 38.4 | J | 37.3 | J | 77.7 | J | 39.5 | J | --- | | 140 | | 0.1 | J | | |
| | 26-Apr-12 | 0.02 | 100.0 | 55.1 | J | 24.2 | J | 53.4 | J | 92.2 | J | --- | 78.1 | J | 28.2 | J | 43.2 | J | 71.2 | J | 50.5 | J | --- | | 94 | J | 0.12 | J | | |
| | 16-Oct-12 | 0.07 | 100.0 | 40.5 | J | 25.5 | J | 40.7 | J | 104 | | --- | 53 | J | 25.1 | J | 39.8 | J | 64.1 | J | 43.5 | J | --- | | 106 | | 0.28 | J | | |
| | 11-Apr-13 | 0.06 | 100.0 | 42.2 | J | 47.0 | J | 43.7 | J | 99.1 | J | --- | 48.5 | J | 23.1 | J | 42.3 | J | 82 | J | 47 | J | --- | | 69.6 | J | 0.06 | J | | |
| | 30-Oct-13 | 0.06 | 100.0 | 36.5 | J | 37.5 | J | 45.3 | J | 113 | | --- | 57 | J | 27.1 | J | 34.7 | J | 70 | J | 35.2 | J | --- | | 67.3 | J | 0.24 | J | | |
| | 9-Apr-14 | 0.06 | 100.0 | 44.8 | J | 40.6 | J | 39.2 | J | 132 | | --- | 64.2 | J | 19 | J | 44.7 | J | 96.7 | J | 50.8 | J | --- | | 57.6 | J | ND | | | |
| | 22-Oct-14 | 0.12 | 100.0 | 35.9 | J | 39.0 | J | 36.6 | J | 124 | | --- | 60.6 | J | 28.5 | J | 42.3 | J | 85.6 | J | 40.4 | J | --- | | 73.0 | J | ND | | | |
| | 8-Apr-15 | 0.12 | 100.0 | 40.7 | J | 38.0 | J | 30.1 | J | 158 | | --- | 62.4 | J | 21.5 | J | 52.3 | J | 82.5 | J | 42.1 | J | --- | | 59.4 | J | ND | | | |

# TABLE 8A

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA LONG-TERM REGIONAL LF PHASES 1 and 2

| | Sample | | | Background | | | | Downgraident | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | Collection Date | DL | SWSL | MW-12S | | MW-12D | | MW-7 | | MW-8 | | MW-9 | | MW-10 | | MW-11S | | MW-11D | | MW-13S | | MW-13D | | MW-14 | | MW-14R | | Blanks | |
| Beryllium | 1-Jul-99 | --- | 2.0 | --- | | --- | | 5 | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Aug-99 | --- | 2.0 | --- | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-99 | --- | 2.0 | --- | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Nov-99 | --- | 2.0 | --- | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-00 | --- | 2.0 | --- | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-00 | --- | 2.0 | --- | | --- | | ND | | ND | | **6.0** | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-01 | --- | 2.0 | --- | | --- | | ND | | ND | | **5.0** | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-01 | --- | 2.0 | --- | | --- | | ND | | 2 | | **9.0** | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 2-Apr-02 | --- | 2.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-02 | --- | 2.0 | ND | | ND | | ND | | ND | | 3 | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-03 | --- | 2.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-03 | --- | 2.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 15-Apr-04 | --- | 2.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | |
| | 14-Oct-04 | --- | 2.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | |
| | 5-Apr-05 | --- | 2.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | |
| | 27-Oct-05 | --- | 2.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | |
| | 21-Apr-06 | --- | 2.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | |
| | 12-Oct-06 | --- | 2.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | ND | |
| | 26-Apr-07 | --- | 1.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | ND | |
| | 11-Oct-07 | 0.08 | 1.0 | 0.1 | J | ND | | 0.2 | J | 0.2 | J | --- | | 0.2 | J | 0.1 | J | 0.1 | J | 0.1 | J | ND | | --- | | 0.1 | J | ND | |
| GWPS = 4 µg/L (10/23/07) | 3-Apr-08 | 0.06 | 1.0 | 0.3 | J | ND | | ND | | 0.3 | J | --- | | 0.2 | J | 1.5 | | 0.1 | J | 0.3 | J | ND | | --- | | 0.2 | J | ND | |
| | 28-Oct-08 | 0.06 | 1.0 | 0.9 | J | 0.1 | J | 0.4 | J | 0.8 | J | --- | | 0.3 | J | 1.2 | J | 0.1 | J | 0.4 | J | ND | | --- | | 0.3 | J | ND | |
| | 8-Apr-09 | 0.06 | 1.0 | 0.6 | J | 0.1 | J | 0.1 | J | 0.7 | J | --- | | 0.3 | J | 2 | | 0.1 | J | 0.4 | J | 0.1 | J | --- | | 0.4 | J | ND | |
| | 27-Oct-09 | 0.06 | 1.0 | 0.5 | J | 0.1 | J | 0.4 | J | 0.9 | J | --- | | 0.4 | J | 3 | | 0.1 | J | 0.4 | J | 0.1 | J | --- | | 0.7 | J | ND | |
| | 8-Apr-10 | 0.02 | 1.0 | 0.6 | J | 0.1 | B | 0.2 | B | 0.6 | J | --- | | 0.3 | B | 2 | | 0.1 | B | 0.3 | B | 0.1 | B | --- | | 0.7 | J | 0.1 | J |
| GWPS = 4 µg/L (10/1/10) | 13-Oct-10 | 0.02 | 1.0 | 0.5 | J | 0.1 | J | 0.1 | J | 0.7 | J | --- | | 0.4 | J | 3 | | 0.1 | J | 0.3 | J | 0.1 | J | --- | | 1.2 | | ND | |
| | 27-Apr-11 | 0.02 | 1.0 | 0.36 | J | ND | | 0.11 | J | 0.47 | J | --- | | 0.31 | J | 3 | | ND | | 0.25 | J | ND | | --- | | 1.0 | | ND | |
| | 20-Oct-11 | 0.02 | 1.0 | 0.40 | J | 0.1 | J | 0.2 | J | 0.54 | J | --- | | 0.34 | J | 4 | | 0.06 | J | 0.4 | J | ND | | --- | | 0.32 | J | ND | |
| | 26-Apr-12 | 0.02 | 1.0 | 0.27 | J | 0.06 | J | 0.15 | J | 0.59 | J | --- | | 0.62 | J | 4 | | 0.05 | J | 0.29 | J | 0.04 | J | --- | | 0.63 | J | ND | |
| | 16-Oct-12 | 0.07 | 1.0 | 0.22 | J | ND | | 0.09 | J | 0.66 | J | --- | | 0.34 | J | 3 | | ND | | 0.3 | J | ND | | --- | | 0.1 | J | ND | |
| | 11-Apr-13 | 0.03 | 1.0 | 0.25 | J | ND | | 0.17 | J | 0.52 | J | --- | | 0.25 | J | 2 | | 0.07 | J | 0.38 | J | ND | | --- | | 0.21 | J | ND | |
| | 30-Oct-13 | 0.03 | 1.0 | 0.21 | J | 0.1 | B | 0.11 | B | 0.62 | J | --- | | 0.31 | J | 2 | | 0.12 | B | 0.4 | J | ND | | --- | | 0.1 | B | 0.04 | J |
| | 9-Apr-14 | 0.03 | 1.0 | 0.29 | J | 0.2 | J | 0.2 | J | 0.64 | J | --- | | 0.36 | J | 0.94 | J | 0.06 | J | 0.47 | J | ND | | --- | | 0.1 | J | ND | |
| | 22-Oct-14 | 0.04 | 1.0 | 0.26 | J | 0.08 | J | 0.11 | J | 0.70 | J | --- | | 0.46 | J | 0.64 | J | 0.06 | J | 0.43 | J | ND | | --- | | 0.04 | J | ND | |
| | 8-Apr-15 | 0.04 | 1.0 | 0.26 | J | 0.06 | J | 0.10 | J | 0.60 | J | --- | | 0.29 | J | 0.51 | J | 0.12 | J | 0.37 | J | ND | | --- | | 0.09 | J | ND | |
| Cadmium | 1-Jul-99 | --- | 1.0 | --- | | --- | | 1 | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Aug-99 | --- | 1.0 | --- | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-99 | --- | 1.0 | --- | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Nov-99 | --- | 1.0 | --- | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-00 | --- | 1.0 | --- | | --- | | ND | | ND | | ND | | 1.00 | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-00 | --- | 1.0 | --- | | --- | | ND | | ND | | 2 | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-01 | --- | 1.0 | --- | | --- | | ND | | ND | | **3** | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-01 | --- | 1.0 | --- | | --- | | ND | | ND | | 2 | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 2-Apr-02 | --- | 1.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-02 | --- | 1.0 | ND | | ND | | 1 | | ND | | 2 | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-03 | --- | 1.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-03 | --- | 1.0 | ND | | ND | | ND | | ND | | ND | | 1 | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 15-Apr-04 | --- | 1.0 | ND | | 2 | | ND | | ND | | ND | | **3** | | **3** | | ND | | ND | | ND | | ND | | --- | | ND | |
| | 14-Oct-04 | --- | 1.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | 1 | | ND | | --- | | ND | |
| | 5-Apr-05 | --- | 1.0 | ND | | ND | | 1 | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | |
| | 27-Oct-05 | --- | 1.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | |
| | 21-Apr-06 | --- | 1.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | |
| | 12-Oct-06 | --- | 1.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | ND | |
| | 26-Apr-07 | --- | 1.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | ND | |
| | 11-Oct-07 | 0.06 | 1.0 | 0.2 | B | 0.1 | B | 0.6 | J | 0.1 | B | --- | | 0.1 | B | 1 | B | 0.1 | B | 0.1 | B | 0.1 | B | --- | | 0.9 | J | 0.1 | J |
| NC 2L = 1.75 µg/L (10/23/07) | 3-Apr-08 | 0.05 | 1.0 | 0.4 | J | 0.1 | J | 0.2 | J | 0.1 | J | --- | | 0.2 | J | 0 | J | 0.3 | J | 0.1 | J | ND | | --- | | 0.1 | J | ND | |
| | 28-Oct-08 | 0.05 | 1.0 | 0.2 | J | 0.2 | J | 0.3 | J | 0.2 | J | --- | | 0.1 | J | 0.3 | J | 0.2 | J | 0.5 | J | 0.1 | J | --- | | 0.2 | J | ND | |
| | 8-Apr-09 | 0.04 | 1.0 | 0.2 | J | 0.2 | J | 0.3 | J | 0.3 | J | --- | | 0.2 | J | 0.7 | J | 0.5 | J | 0.3 | J | 0.2 | J | --- | | 0.2 | J | ND | |
| | 27-Oct-09 | 0.04 | 1.0 | 0.4 | J | 0.2 | J | 0.2 | J | 0.1 | J | --- | | 0.2 | J | 0.4 | J | 0.1 | J | 0.2 | J | 0.1 | J | --- | | 1.5 | | ND | |
| NC 2L = 2 µg/L (1/1/10) | 8-Apr-10 | 0.02 | 1.0 | 0.9 | J | 0.1 | B | 0.3 | B | 2 | | --- | | 0.1 | B | 0.7 | J | 0.2 | B | 9.0 | | 0.1 | B | --- | | 0.7 | J | 0.1 | J |
| Resample | 1-Jun-10 | 0.02 | 1.0 | --- | | --- | | --- | | --- | | --- | | --- | | --- | | --- | | 1.6 | | --- | | --- | | --- | | --- | |
| | 13-Oct-10 | 0.02 | 1.0 | 1 | | 0.2 | J | 0.1 | J | 0.6 | J | --- | | 0.8 | J | 1.0 | | 0.2 | J | 1.6 | | 0.1 | J | --- | | 1.0 | | ND | |
| | 27-Apr-11 | 0.02 | 1.0 | 0.2 | J | 0.09 | J | 0.21 | J | 0.11 | J | --- | | 0.3 | J | 0.5 | J | 0.1 | J | 0.1 | J | 0.1 | J | --- | | 0.3 | J | ND | |
| | 20-Oct-11 | 0.02 | 1.0 | 0.46 | J | ND | | 0.11 | J | ND | | --- | | 0.2 | J | 1 | | 0 | J | 0 | J | 0.3 | J | --- | | 0.6 | J | ND | |
| | 26-Apr-12 | 0.02 | 1.0 | 0.1 | J | ND | | 0.26 | J | 0.12 | J | --- | | 0.24 | J | ND | | 0.05 | J | 0.64 | J | 0.1 | J | --- | | 0.3 | J | ND | |
| | 16-Oct-12 | 0.03 | 1.0 | 0.12 | J | 0.09 | J | 0.12 | J | 0.1 | J | --- | | 0.12 | J | 0.31 | J | 0.12 | J | 0.45 | J | 0.1 | J | --- | | 0.1 | J | ND | |
| | 11-Apr-13 | 0.03 | 1.0 | 0.1 | J | 0.07 | J | 0.5 | J | 0.31 | J | --- | | 0.08 | J | 0.49 | J | 0.05 | J | 0.21 | J | 0.1 | J | --- | | 0.4 | J | ND | |
| | 30-Oct-13 | 0.05 | 1.0 | 0.08 | J | 0.52 | J | 0.58 | J | 0.16 | J | --- | | 0.05 | J | 0.28 | J | 0.17 | J | 0.36 | J | 0.08 | J | --- | | 0.7 | J | ND | |
| | 9-Apr-14 | 0.05 | 1.0 | 0.1 | J | 0.34 | J | 0.27 | J | 0.33 | J | --- | | 0.32 | J | 0.32 | J | 0.89 | J | 0.23 | J | 0.32 | J | --- | | 0.3 | J | ND | |
| | 22-Oct-14 | 0.04 | 1.0 | 0.41 | J | 0.16 | J | 0.28 | J | 0.12 | J | --- | | 0.17 | J | 0.14 | J | 0.97 | J | 0.56 | J | 0.06 | J | --- | | 0.25 | J | ND | |
| | 8-Apr-15 | 0.04 | 1.0 | ND | | ND | | 0.09 | J | ND | | --- | | 0.08 | J | 0.12 | J | 0.08 | J | 0.24 | J | 0.09 | J | --- | | 0.19 | J | ND | |
| Chromium | 1-Jul-99 | --- | 10 | --- | | --- | | **112** | | **35** | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Aug-99 | --- | 10 | --- | | --- | | **29** | | **38** | | 10 | | ND | | **23** | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-99 | --- | 1 | --- | | --- | | **14** | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Nov-99 | --- | 10 | --- | | --- | | **22** | | **36** | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-00 | --- | 10 | --- | | --- | | **11** | | **43** | | **37** | | ND | | **24** | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-00 | --- | 10 | --- | | --- | | **16** | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-01 | --- | 10 | --- | | --- | | **11** | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-01 | --- | 10 | --- | | --- | | **38** | | **65** | | ND | | ND | | **39** | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 2-Apr-02 | --- | 10 | ND | | ND | | **43** | | **12** | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-02 | --- | 10 | ND | | ND | | **15** | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-03 | --- | 10 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 1-Oct-03 | --- | 10.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | --- | | --- | | ND | |
| | 15-Apr-04 | --- | 10.00 | ND | | ND | | **18** | | ND | | ND | | ND | | ND | | ND | | **17** | | ND | | ND | | --- | | ND | |
| | 14-Oct-04 | --- | 10 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | |
| | 5-Apr-05 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | |
| | 27-Oct-05 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | |
| | 21-Apr-06 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | |
| | 12-Oct-06 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | ND | |
| | 26-Apr-07 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | | ND | | ND | | ND | | ND | | ND | | --- | | --- | | ND | |
| | 11-Oct-07 | 0.24 | 10.0 | ND | | ND | | 4.8 | B | 1.1 | B | --- | | 0.3 | B | ND | | ND | | 0.5 | B | ND | | --- | | ND | | 1.2 | J |
| NC 2L = 50 µg/L (10/23/07) | 3-Apr-08 | 0.11 | 10.0 | ND | | ND | | 0.4 | J | 1 | J | --- | | 0.4 | J | 0.5 | J | ND | | 0.3 | J | ND | | --- | | ND | | ND | |
| | 28-Oct-08 | 0.11 | 10.0 | ND | | 0.7 | J | 7.9 | J | 9.5 | J | --- | | 0.9 | J | 0.7 | J | ND | | 0.9 | J | 0.4 | J | --- | | 3.1 | J | ND | |
| | 8-Apr-09 | 0.10 | 10.0 | 0.5 | J | 0.90 | J | 3.3 | J | 8.3 | J | --- | | 3.1 | J | 1.4 | J | ND | | 1.2 | J | 0.6 | J | --- | | 1.3 | J | ND | |
| | 27-Oct-09 | 0.10 | 10.0 | ND | | 1.1 | J | 8.2 | J | 9.8 | J | --- | | 2.5 | J | 1.9 | J | ND | | 1.1 | J | 0.6 | J | --- | | 1.8 | J | ND | |
| NC 2L = 10 µg/L (1/1/10) | 8-Apr-10 | 0.03 | 10.0 | ND | | 0.3 | J | 3.7 | J | 3.9 | J | --- | | 1.9 | J | 0.6 | J | ND | | 1.1 | J | ND | | --- | | 1.2 | J | ND | |
| | 13-Oct-10 | 0.03 | 10.0 | 0.2 | J | 0.70 | J | 2.3 | J | 3.8 | J | --- | | 2.2 | J | 0.9 | J | 0.1 | J | 0.5 | J | ND | | --- | | 2.3 | J | ND | |
| | 27-Apr-11 | 0.04 | 10.0 | 0.43 | B | 0.78 | B | 3.3 | J | 3.2 | J | --- | | 2.2 | J | 2 | J | ND | | 1.1 | J | 0.51 | B | --- | | 1.5 | J | 0.18 | J |
| | 20-Oct-11 | 0.04 | 10.0 | 0.6 | B | 1.6 | J | 5.1 | J | 1.9 | J | --- | | 2.6 | J | 2.50 | J | ND | | 1.8 | J | 0.87 | B | --- | | 2.10 | J | 0.18 | J |
| | 26-Apr-12 | 0.04 | 10.0 | 0.4 | B | 1.2 | J | 4.9 | J | 12 | | --- | | 6.8 | J | 1.80 | J | ND | | 0.99 | J | 0.44 | B | --- | | 2.20 | J | 0.09 | J |
| | 16-Oct-12 | 0.18 | 10.0 | ND | | 0.53 | J | 2.7 | J | 1.3 | J | --- | | 1.3 | J | 1.00 | J | ND | | 0.25 | J | 0.38 | J | --- | | 1.30 | J | ND | |
| | 11-Apr-13 | 0.04 | 10.0 | 0.2 | J | 0.06 | J | 3.7 | J | 2.1 | J | --- | | 1.2 | J | 1.40 | J | ND | | 0.8 | J | 0.06 | J | --- | | 0.78 | J | ND | |
| | 30-Oct-13 | 0.04 | 10.0 | 0.2 | B | 1.1 | J | 2.6 | J | 2.6 | J | --- | | 1.4 | J | 1.20 | J | 0.07 | B | 0.6 | B | 0.12 | B | --- | | 0.89 | J | 0.11 | J |
| | 9-Apr-14 | 0.04 | 10.0 | 0.37 | J | 1.6 | J | 4.2 | J | 1.5 | J | --- | | 2.4 | J | 0.77 | J | ND | | 0.69 | J | ND | | --- | | 0.42 | J | ND | |
| | 22-Oct-14 | 0.14 | 10.0 | 0.47 | J | 1.2 | J | 2.9 | J | 2.4 | J | --- | | 3.4 | J | 1.4 | J | ND | | 0.72 | J | ND | | --- | | 0.70 | J | ND | |
| | 08-Apr-15 | 0.14 | 10.0 | 0.38 | J | 0.21 | J | 2.5 | J | 0.42 | J | --- | | 1.3 | J | 0.64 | J | ND | | ND | | ND | | --- | | 0.81 | J | ND | |

# TABLE 8A

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA LONG-TERM REGIONAL LF PHASES 1 and 2

| | Sample | | | Background | | | | Downgraident | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | Collection Date | DL | SWSL | MW-12S | | MW-12D | | MW-7 | | MW-8 | | MW-9 | MW-10 | | MW-11S | | MW-11D | | MW-13S | | MW-13D | | MW-14 | MW-14R | | Blanks | |
| Cobalt | 1-Jul-99 | --- | 10.0 | --- | | --- | | 13 | | 24 | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Aug-99 | --- | 10 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-99 | --- | 10.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Nov-99 | --- | 10.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-00 | --- | 10.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-00 | --- | 10.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-01 | --- | 10.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-01 | --- | 10 | --- | | --- | | ND | | ND | | 12.0 | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 2-Apr-02 | --- | 10 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-02 | --- | 10 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-03 | --- | 10 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-03 | --- | 10.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 15-Apr-04 | --- | 10.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 14-Oct-04 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 5-Apr-05 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 27-Oct-05 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 21-Apr-06 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 12-Oct-06 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | --- | | ND | |
| | 26-Apr-07 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | --- | | ND | |
| | 11-Oct-07 | 0.41 | 10.0 | 1.4 | J | ND | | 0.7 | J | ND | | --- | ND | | 1 | J | ND | | ND | | ND | | --- | 2.7 | J | ND | |
| GWPS = 70 µg/L (10/23/07) | 3-Apr-08 | 0.03 | 10.0 | 4.6 | J | 0.1 | J | 1.8 | J | 0.4 | J | --- | 0.7 | J | 3.1 | J | 0.1 | J | 0.3 | J | 0.1 | J | --- | 0.9 | J | ND | |
| | 28-Oct-08 | 0.03 | 10.0 | 2.8 | J | 0.2 | J | 0.8 | J | 1 | J | --- | 0.5 | J | 2.8 | J | 0.1 | J | 0.4 | J | 0.2 | J | --- | 0.7 | J | ND | |
| | 8-Apr-09 | 0.02 | 10.0 | 2.3 | J | 0.2 | J | 0.6 | J | 1.1 | J | --- | 1.1 | J | 6.1 | J | 0.1 | J | 0.5 | J | 0.2 | J | --- | 1.2 | J | ND | |
| | 27-Oct-09 | 0.02 | 10.0 | 1.6 | J | 0.2 | J | 0.7 | J | 1 | J | --- | 0.6 | J | 5.9 | J | 0.2 | J | 0.5 | J | 0.3 | J | --- | 1.2 | J | ND | |
| | 8-Apr-10 | 0.10 | 10.0 | 1.8 | J | 0.2 | J | 0.5 | J | 0.7 | J | --- | 1.2 | J | 4.4 | J | ND | | 0.5 | J | 0.2 | J | --- | 1.5 | J | ND | |
| GWPS = 1 µg/L (10/1/10) | 13-Oct-10 | 0.10 | 10.0 | 1.5 | J | 0.2 | J | 0.3 | J | 0.9 | J | --- | 0.9 | J | 3.1 | J | 0.2 | J | 0.5 | J | 0.2 | J | --- | 1.5 | J | ND | |
| | 27-Apr-11 | 0.03 | 10.0 | 1.3 | J | 0.14 | J | 0.56 | J | 0.69 | J | --- | 0.93 | J | 4.7 | J | 0.08 | J | 0.45 | J | 0.14 | J | --- | 1.5 | J | ND | |
| | 20-Oct-11 | 0.03 | 10.0 | 1.1 | J | 0.19 | J | 0.45 | J | 0.58 | J | --- | 1.2 | J | 3.5 | J | 0.1 | J | 0.57 | J | 0.19 | J | --- | 2.2 | J | ND | |
| | 26-Apr-12 | 0.03 | 10.0 | 1 | J | 0.21 | J | 0.6 | J | 0.88 | J | --- | 4 | J | 3.3 | J | 0.09 | J | 0.55 | J | 0.21 | J | --- | 2.4 | J | ND | |
| | 16-Oct-12 | 0.02 | 10.0 | 1.1 | J | 0.19 | J | 0.38 | J | 0.71 | J | --- | 0.66 | J | 2.1 | J | 0.11 | J | 0.4 | J | 0.24 | J | --- | 1.4 | J | ND | |
| | 11-Apr-13 | 0.02 | 10.0 | 0.68 | J | 0.18 | J | 0.58 | J | 0.96 | J | --- | 0.79 | J | 2.1 | J | 0.12 | J | 0.7 | J | 1.8 | J | --- | 1.8 | J | 0.03 | J |
| | 30-Oct-13 | 0.02 | 10.0 | 0.87 | J | 0.31 | J | 0.35 | J | 1.1 | J | --- | 0.63 | J | 1.4 | J | 0.1 | B | 0.66 | J | 0.14 | B | --- | 0.9 | J | 0.05 | J |
| | 9-Apr-14 | 0.02 | 10.0 | 0.71 | J | 0.45 | J | 0.56 | J | 0.86 | J | --- | 1.10 | J | 1.6 | J | 0.11 | J | 0.74 | J | 0.74 | J | --- | 1.3 | J | ND | |
| | 22-Oct-14 | 0.12 | 10.0 | 0.82 | J | 0.23 | J | 0.33 | J | 0.94 | J | --- | 1.5 | J | 1.0 | J | ND | | 0.65 | J | ND | | --- | 1.0 | J | ND | |
| | 8-Apr-15 | 0.12 | 10.0 | 0.57 | J | 0.21 | J | 0.37 | J | 0.82 | J | --- | 1.2 | J | 1.0 | J | ND | | 0.54 | J | ND | | --- | 1.2 | J | ND | |
| Copper | 1-Jul-99 | --- | 200 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Aug-99 | --- | 10.0 | --- | | --- | | 10 | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-99 | --- | 200.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Nov-99 | --- | 200.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-00 | --- | 200.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-00 | --- | 200.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-01 | --- | 200.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-01 | --- | 200.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 2-Apr-02 | --- | 200.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-02 | --- | 200.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-03 | --- | 200.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-03 | --- | 200.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 15-Apr-04 | --- | 200.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 14-Oct-04 | --- | 200.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 5-Apr-05 | --- | 200.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 27-Oct-05 | --- | 200.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 21-Apr-06 | --- | 200.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 12-Oct-06 | --- | 200.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | --- | | ND | |
| | 26-Apr-07 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | --- | | ND | |
| | 11-Oct-07 | 0.20 | 10.0 | 0.9 | B | ND | | 1.2 | B | 0.5 | B | --- | 0.3 | B | 0.4 | B | 0.2 | B | 0.6 | B | 0.2 | B | --- | 3.3 | J | 0.4 | J |
| NC 2L = 1,000 µg/L (10/23/07) | 3-Apr-08 | 0.05 | 10.0 | 0.7 | B | 0.3 | B | 0.8 | B | 0.6 | B | --- | 0.7 | B | 0.6 | B | 0.3 | B | 0.6 | B | 0.1 | B | --- | 1.2 | J | 0.2 | J |
| | 28-Oct-08 | 0.05 | 10.0 | 1.1 | B | 0.8 | B | 2.1 | B | 1.7 | B | --- | 0.90 | B | 0.8 | B | 0.3 | B | 1.5 | B | 0.9 | B | --- | 2.8 | B | 1.1 | J |
| | 8-Apr-09 | 0.04 | 10.0 | 2 | J | 0.9 | J | 1.5 | J | 1.5 | J | --- | 1.6 | J | 1.0 | J | 0.4 | B | 1.1 | J | 0.7 | J | --- | 1.9 | J | 0.1 | J |
| | 27-Oct-09 | 0.04 | 10.0 | 1.2 | J | 3.4 | J | 3.1 | J | 1.5 | J | --- | 1 | J | 0.9 | J | 0.6 | J | 1.4 | J | 0.8 | J | --- | 3.4 | J | 0.1 | J |
| | 8-Apr-10 | 0.03 | 10.0 | 1.2 | J | 0.7 | B | 1.2 | J | 1.5 | J | --- | 1.4 | J | 1.1 | J | 0.8 | B | 4.5 | J | 0.7 | B | --- | 1.3 | J | 0.2 | J |
| | 13-Oct-10 | 0.03 | 10.0 | 1.6 | J | 1 | B | 0.9 | B | 1.0 | B | --- | 1.7 | J | 1 | B | 0.4 | B | 2.1 | J | 0.7 | B | --- | 2.4 | J | 0.2 | J |
| | 27-Apr-11 | 0.02 | 10.0 | 1.2 | B | 0.77 | B | 1.5 | B | 1.0 | B | --- | 1.7 | B | 1.0 | B | 0.72 | B | 1.3 | B | 0.9 | B | --- | 1.4 | B | 0.66 | J |
| | 20-Oct-11 | 0.02 | 10.0 | 1.2 | J | 1.5 | J | 1.3 | J | 0.5 | B | --- | 1.4 | J | 1.2 | J | 0.5 | B | 1.7 | J | 1.0 | B | --- | 1.7 | J | 0.2 | J |
| | 26-Apr-12 | 0.02 | 10.0 | 0.73 | B | 5.9 | J | 1.6 | B | 0.9 | B | --- | 2.7 | B | 5 | J | 0 | B | 1.4 | B | 0.5 | B | --- | 1.2 | B | 0.94 | J |
| | 16-Oct-12 | 0.06 | 10.0 | 0.69 | B | 0.62 | B | 1.1 | B | 0.67 | B | --- | 1.0 | B | 1 | B | 0 | B | 0.4 | B | 0.4 | B | --- | 0.6 | B | 0.25 | J |
| | 11-Apr-13 | 0.06 | 10.0 | 0.4 | B | 0.74 | B | 1.3 | B | 0.76 | B | --- | 1.0 | B | 0.7 | B | ND | | 0.6 | B | 0.7 | B | --- | 0.6 | B | 0.28 | J |
| | 30-Oct-13 | 0.06 | 10.0 | 1.6 | B | 1.4 | B | 1.8 | B | 1.7 | B | --- | 1.4 | B | 2.4 | B | 1.3 | B | 1.3 | B | 1.3 | B | --- | 0.7 | B | 1.2 | J |
| | 9-Apr-14 | 0.06 | 10.0 | 0.5 | J | 0.64 | J | 1.0 | J | 1.0 | J | --- | 1.1 | J | 0.4 | J | ND | | 0.5 | J | 0.1 | J | --- | 0.3 | J | ND | |
| | 22-Oct-14 | 0.10 | 10.0 | 0.36 | J | 0.45 | J | 0.73 | J | 0.44 | J | --- | 1.3 | J | 0.45 | J | 0.51 | J | 0.36 | J | 0.24 | J | --- | 0.35 | J | ND | |
| | 8-Apr-15 | 0.10 | 10.0 | 0.46 | J | 0.24 | J | 2.2 | J | 0.20 | J | --- | 0.90 | J | 0.38 | J | 0.15 | J | 0.26 | J | ND | | --- | 0.50 | J | ND | |
| Lead | 1-Jul-99 | --- | 10 | --- | | --- | | 129 | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Aug-99 | --- | 10 | --- | | --- | | 18 | | 14 | | ND | ND | | 17 | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-99 | --- | 10 | --- | | --- | | 12 | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Nov-99 | --- | 10 | --- | | --- | | ND | | 14 | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-00 | --- | 10 | --- | | --- | | ND | | 17 | | 14 | ND | | 15 | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-00 | --- | 10 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-01 | --- | 10 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-01 | --- | 10 | --- | | --- | | 16 | | 19 | | ND | ND | | 18 | | ND | | --- | | --- | | --- | --- | | ND | |
| | 2-Apr-02 | --- | 10 | ND | | ND | | 21 | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-02 | --- | 10 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-03 | --- | 10 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-03 | --- | 10 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 15-Apr-04 | --- | 10 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | 10 | | ND | | ND | --- | | ND | |
| | 14-Oct-04 | --- | 10 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 5-Apr-05 | --- | 10 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 27-Oct-05 | --- | 10 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 21-Apr-06 | --- | 10 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 12-Oct-06 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | --- | | ND | |
| | 26-Apr-07 | --- | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | --- | | ND | |
| | 11-Oct-07 | 0.07 | 10.0 | 0.2 | B | ND | | 3 | J | 1.6 | J | --- | 0.3 | B | 0.1 | B | ND | | 1.1 | J | 0.1 | B | --- | 0.3 | B | 0.1 | J |
| NC 2L = 15 µg/L (10/23/07) | 3-Apr-08 | 0.32 | 10.0 | 0.1 | B | 0.1 | B | 0.5 | B | 1.4 | J | --- | 0.9 | J | 1.4 | J | 0.1 | B | 0.5 | B | ND | | --- | 0.3 | B | 0.10 | J |
| | 28-Oct-08 | 0.32 | 10.0 | 0.3 | B | 0.4 | B | 7.2 | J | 8 | J | --- | 1.3 | J | 1.1 | J | 0.1 | B | 0.8 | J | 0.5 | B | --- | 2.50 | J | 0.1 | J |
| | 8-Apr-09 | 0.04 | 10.0 | 0.6 | J | 0.2 | B | 2.3 | J | 6.6 | J | --- | 2.7 | J | 1.9 | J | 0.1 | B | 0.9 | J | 0.4 | B | --- | 1.0 | J | 0.10 | J |
| | 27-Oct-09 | 0.04 | 10.0 | 0.1 | J | 0.3 | J | 6.7 | J | 7.8 | J | --- | 2.4 | J | 2.3 | J | 0.1 | J | 0.8 | J | 0.4 | J | --- | 1.9 | J | ND | |
| | 8-Apr-10 | 0.01 | 10.0 | 0.4 | B | 0.3 | B | 3.1 | J | 4.1 | J | --- | 2.6 | J | 2.2 | J | 0.1 | B | 1.6 | J | 0.3 | B | --- | 1.3 | J | 0.10 | J |
| | 13-Oct-10 | 0.01 | 10.0 | 0.4 | B | 0.3 | B | 1.4 | J | 3.8 | J | --- | 2.30 | J | 2.3 | J | 0.2 | B | 0.6 | J | 0.2 | B | --- | 2.6 | J | 0.10 | J |
| | 27-Apr-11 | 0.02 | 10.0 | 0.27 | J | 0.21 | J | 2.0 | J | 2.5 | J | --- | 2.00 | J | 2.8 | J | 0.12 | J | 0.57 | J | 0.31 | J | --- | 1.2 | J | ND | |
| | 20-Oct-11 | 0.02 | 10.0 | 0.12 | J | 0.2 | J | 3.0 | J | 1.8 | J | --- | 1.9 | J | 4.8 | J | 0.11 | J | 0.55 | J | 0.35 | J | --- | 0.8 | J | ND | |
| | 26-Apr-12 | 0.02 | 10.0 | 0.35 | J | 0.8 | J | 2.7 | J | 3.00 | J | --- | 6.3 | J | 2.8 | J | 0.06 | B | 0.62 | J | 0.39 | J | --- | 1.6 | J | 0.02 | J |
| | 16-Oct-12 | 0.08 | 10.0 | 0.11 | J | 0.2 | J | 1.9 | J | 1.8 | J | --- | 1.3 | J | 2.6 | J | ND | | 0.22 | J | 0.38 | J | --- | 1 | J | ND | |
| | 11-Apr-13 | 0.02 | 10.0 | 0.35 | J | 0.2 | J | 2.7 | J | 2.6 | J | --- | 1.3 | J | 2 | J | 0.04 | J | 0.71 | J | 0.24 | J | --- | 1.3 | J | ND | |
| | 30-Oct-13 | 0.02 | 10.0 | 0.16 | B | 0.61 | J | 1.7 | J | 2.8 | J | --- | 1.4 | J | 1.9 | J | 0.11 | B | 0.36 | B | 0.25 | B | --- | 1 | J | 0.08 | J |
| | 9-Apr-14 | 0.02 | 10.0 | 0.51 | J | 0.9 | J | 3.1 | J | 2.3 | J | --- | 2.5 | J | 1.0 | J | 0.05 | B | 0.56 | J | 0.22 | J | --- | 0.69 | J | 0.04 | J |
| | 22-Oct-14 | 0.13 | 10.0 | 0.15 | J | 0.39 | J | 1.7 | J | 2.4 | J | --- | 2.6 | J | 1.2 | J | ND | | 0.29 | J | 0.16 | J | --- | 0.36 | J | ND | |
| | 8-Apr-15 | 0.13 | 10.0 | 0.27 | J | 0.20 | J | 1.5 | J | 0.97 | J | --- | 2.1 | J | 0.66 | J | ND | | 0.39 | J | ND | | --- | 0.90 | J | ND | |

# TABLE 8A

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA LONG-TERM REGIONAL LF PHASES 1 and 2

| | Sample | | | Background | | | | Downgraident | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | Collection Date | DL | SWSL | MW-12S | | MW-12D | | MW-7 | | MW-8 | | MW-9 | MW-10 | | MW-11S | | MW-11D | | MW-13S | | MW-13D | | MW-14 | MW-14R | | Blanks | |
| Nickel | 11-Oct-07 | 0.7 | 50.0 | 2 | J | 1.6 | J | 2.3 | J | ND | | --- | 0.7 | J | 1.8 | J | 1.8 | J | 0.8 | J | 1.2 | J | --- | 3.6 | J | ND | |
| NC 2L = 100 µg/L (10/23/07) | 3-Apr-08 | 0.1 | 50.0 | 4.3 | J | 2 | J | 4 | J | 0.8 | B | --- | 1.4 | B | 4.8 | J | 2.4 | J | 0.7 | B | 1.6 | J | --- | 1.4 | B | 0.3 | J |
| | 28-Oct-08 | 0.1 | 50.0 | 3.5 | J | 2.7 | J | 4 | J | 2.2 | J | --- | 1 | B | 4.9 | J | 2 | J | 1.1 | J | 2 | J | --- | 1.6 | J | 0.2 | J |
| | 8-Apr-09 | 0.0 | 50.0 | 2.9 | J | 2 | J | 2.5 | J | 1.6 | J | --- | 1.5 | J | 8.5 | J | 1.2 | J | 1.1 | J | 1.9 | J | --- | 2.2 | J | ND | |
| | 27-Oct-09 | 0.0 | 50.0 | 1.9 | J | 1.8 | J | 2.5 | J | 1.9 | J | --- | 1.3 | J | 8.7 | J | 1.1 | J | 0.5 | B | 1.3 | J | --- | 2.1 | J | 0.2 | J |
| | 8-Apr-10 | 0.1 | 50.0 | 2.8 | J | 1.4 | J | 2.1 | J | 1.4 | J | --- | 1.8 | J | 7 | J | 1 | J | 1 | J | 1.6 | J | --- | 2.4 | J | ND | |
| | 13-Oct-10 | 0.05 | 50.0 | 2 | J | 2.6 | J | 2.9 | J | 1.5 | J | --- | 2 | J | 6.1 | J | 2.5 | J | 1.3 | J | 2.1 | J | --- | 3.2 | J | 0.1 | J |
| | 27-Apr-11 | 0.04 | 50.0 | 1.9 | J | 1.2 | B | 2.2 | J | 1.3 | B | --- | 1.9 | J | 8.1 | J | 1.1 | B | 1.0 | B | 1.0 | B | --- | 3.1 | J | 0.3 | J |
| | 20-Oct-11 | 0.04 | 50.0 | 2.2 | B | 1.7 | B | 2.6 | J | 1.4 | B | --- | 2.0 | B | 6.7 | J | 0.9 | B | 1.5 | B | 1.6 | B | --- | 6.0 | J | 0.56 | J |
| | 26-Apr-12 | 0.04 | 50.0 | 1.6 | J | 1.1 | J | 2.4 | J | 4.3 | J | --- | 5.7 | J | 6.8 | J | 1.0 | J | 1 | J | 1.1 | J | --- | 4.7 | J | ND | |
| | 16-Oct-12 | 0.06 | 50.0 | 1.8 | J | 1.7 | J | 2.4 | J | 1.9 | J | --- | 1.6 | J | 5.4 | J | 1.3 | J | 1.0 | B | 1.5 | J | --- | 9.7 | J | 0.23 | J |
| | 11-Apr-13 | 0.45 | 50.0 | 0.5 | J | 2.1 | J | 2.2 | J | 1.2 | J | --- | 1.2 | J | 5.7 | J | 1.4 | J | 0.95 | J | 2.1 | J | --- | 16.2 | J | ND | |
| | 30-Oct-13 | 0.45 | 50.0 | 1.6 | J | 2.1 | J | 2.2 | J | 2.1 | J | --- | 1.5 | J | 5 | J | 1 | J | 2 | J | 1.8 | J | --- | 9.5 | J | ND | |
| | 9-Apr-14 | 0.45 | 50.0 | 0.98 | J | 2.5 | J | 2.4 | J | 1.5 | J | --- | 2.0 | J | 5 | J | 2 | J | 2 | J | 1.6 | J | --- | 14.8 | J | ND | |
| | 22-Oct-14 | 0.12 | 50.0 | 1.1 | J | 1.5 | J | 3.5 | J | 1.5 | J | --- | 2.2 | J | 2.8 | J | 1.2 | J | 1.6 | J | 1.1 | J | --- | 10.9 | J | ND | |
| | 8-Apr-15 | 0.12 | 50.0 | 0.81 | J | 1.7 | J | 1.8 | J | 1.3 | J | --- | 1.8 | J | 3.1 | J | 1.2 | J | 1.1 | J | 1.0 | J | --- | 10.0 | J | ND | |
| Selenium | 11-Oct-07 | 0.35 | 10 | 2.6 | B | ND | | 1.4 | B | ND | | --- | 0.4 | B | 0.8 | B | ND | | ND | | ND | | --- | ND | | 0.9 | J |
| NC 2L = 50 µg/L (10/23/07) | 3-Apr-08 | 0.51 | 10 | 3.1 | B | ND | | 0.7 | B | 0.2 | B | --- | 0.7 | B | 0.3 | B | ND | | 0.3 | B | ND | | --- | 0.2 | B | 1.5 | J |
| | 28-Oct-08 | 0.51 | 10 | 3.1 | B | ND | | 0.9 | B | 0.3 | B | --- | 0.7 | B | 0.5 | B | ND | | 0.6 | B | ND | | --- | 0.6 | B | 1.9 | J |
| | 8-Apr-09 | 0.12 | 10 | 2.4 | J | 0.7 | J | ND | | 0.2 | J | --- | 0.3 | J | 0.5 | J | ND | | 0.5 | J | ND | | --- | 0.9 | J | ND | |
| | 27-Oct-09 | 0.12 | 10 | 3 | J | 0.7 | J | 0.5 | J | 0.2 | J | --- | 0.3 | J | 0.4 | J | ND | | 0.8 | J | 0.2 | J | --- | 1.6 | J | ND | |
| NC 2L = 20 µg/L (1/1/10) | 8-Apr-10 | 0.32 | 10 | 1.6 | J | ND | | ND | | ND | | --- | 0.3 | J | ND | | ND | | 1.4 | J | ND | | --- | 1.6 | J | ND | |
| | 13-Oct-10 | 0.32 | 10 | 2 | J | 2 | J | 0.7 | J | ND | | --- | 1.2 | J | 0.5 | J | ND | | 2.2 | J | 1.1 | J | --- | 2.9 | J | ND | |
| | 27-Apr-11 | 0.20 | 10 | 0.83 | J | ND | | 0.28 | J | ND | | --- | 0.43 | J | 0.92 | J | ND | | 0.35 | J | ND | | --- | 1.1 | J | ND | |
| | 20-Oct-11 | 0.20 | 10 | 0.53 | J | ND | | 0.44 | J | ND | | --- | ND | | 0.87 | J | ND | | 0.35 | J | ND | | --- | 1.0 | J | ND | |
| | 26-Apr-12 | 0.20 | 10 | 0.56 | J | ND | | 0.54 | J | ND | | --- | 0.68 | J | 1.1 | J | ND | | 0.45 | J | ND | | --- | 1.4 | J | ND | |
| | 16-Oct-12 | 0.17 | 10 | 0.48 | J | ND | | 0.76 | J | ND | | --- | 0.88 | J | 0.86 | J | ND | | 0.74 | J | ND | | --- | 2.1 | J | ND | |
| | 11-Apr-13 | 0.06 | 10 | 0.77 | J | 0.19 | J | 0.66 | J | 0.27 | J | --- | 1.4 | J | 0.83 | J | 0.26 | J | 1.5 | J | 0.19 | J | --- | 3.3 | J | ND | |
| | 30-Oct-13 | 0.06 | 10 | 0.52 | J | 0.18 | J | 0.62 | J | 0.16 | J | --- | 0.87 | J | 0.70 | J | ND | | 1.2 | J | ND | | --- | 2.4 | J | ND | |
| | 9-Apr-14 | 0.06 | 10 | ND | | 0.18 | J | 0.26 | J | ND | | --- | 0.36 | J | 0.46 | J | ND | | 0.2 | J | ND | | --- | 0.9 | J | ND | |
| | 22-Oct-14 | 0.16 | 10 | 0.20 | J | 0.23 | J | 0.33 | J | ND | | --- | 0.50 | J | 0.36 | J | ND | | 0.72 | J | ND | | --- | 2.7 | J | ND | |
| | 8-Apr-15 | 0.16 | 10 | ND | | ND | | ND | | ND | | --- | 1.1 | J | ND | | ND | | 1.1 | J | ND | | --- | 1.9 | J | ND | |
| Silver | 3-Apr-08 | 0.04 | 10 | ND | | 0.1 | J | ND | | 0.1 | J | --- | ND | | ND | | 0.1 | J | ND | | ND | | --- | ND | | ND | |
| NC 2L = 17.5 µg/L (10/23/07) | 28-Oct-08 | 0.04 | 10 | 0.1 | B | ND | | 0.1 | B | 0.1 | B | --- | ND | | ND | | ND | | 0.1 | B | 0.1 | B | --- | ND | | 0.1 | J |
| | 8-Apr-09 | 0.04 | 10 | 0.1 | J | ND | | 0.1 | J | ND | | --- | ND | | ND | | ND | | 0.1 | J | ND | | --- | ND | | ND | |
| | 27-Oct-09 | 0.04 | 10 | 0.1 | J | ND | | ND | | ND | | --- | ND | | 0.1 | J | ND | | 0.2 | J | ND | | --- | ND | | ND | |
| NC 2L = 20 µg/L (1/1/10) | 8-Apr-10 | 0.03 | 10 | ND | | ND | | 0.1 | B | ND | | --- | ND | | 0.2 | B | ND | | ND | | 0.1 | B | --- | 0.1 | B | 0.1 | J |
| | 13-Oct-10 | 0.03 | 10 | 0.1 | J | ND | | ND | | ND | | --- | 0.1 | J | 0.1 | J | 0.1 | J | ND | | ND | | --- | 0.1 | J | ND | |
| | 27-Apr-11 | 0.02 | 10 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 20-Oct-11 | 0.02 | 10 | 0.10 | J | ND | | ND | | ND | | --- | ND | | ND | | 0.12 | J | 0.09 | J | ND | | --- | 0.17 | J | ND | |
| | 26-Apr-12 | 0.02 | 10 | ND | | 0.03 | J | ND | | 0.02 | J | --- | 0.02 | J | 0.04 | J | 0.02 | J | 0.05 | J | ND | | --- | 0.03 | J | ND | |
| | 16-Oct-12 | 0.10 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 11-Apr-13 | 0.03 | 10.0 | ND | | ND | | 0.03 | J | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 30-Oct-13 | 0.03 | 10.0 | 0.03 | B | ND | | ND | | ND | | --- | ND | | ND | | ND | | 0.04 | B | ND | | --- | 0.03 | B | 0.05 | J |
| | 9-Apr-14 | 0.03 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 22-Oct-14 | 0.04 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 8-Apr-15 | 0.04 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| Thallium | 11-Oct-07 | 0.07 | 5.0 | 0.2 | J | ND | | 0.1 | J | ND | | --- | 0.1 | J | ND | | ND | | 0.1 | J | 0.1 | J | --- | ND | | ND | |
| GWPS = 0.28 µg/L (10/23/07) | 3-Apr-08 | 0.63 | 5.0 | ND | | 0.1 | J | 0.1 | J | ND | | --- | ND | | ND | | 0.1 | J | ND | | ND | | --- | ND | | ND | |
| | 28-Oct-08 | 0.63 | 5.0 | 0.1 | J | 0.1 | J | 0.2 | J | 0.1 | J | --- | ND | | ND | | ND | | 0.1 | J | ND | | --- | 0.1 | J | ND | |
| | 8-Apr-09 | 0.03 | 5.0 | 0.1 | J | ND | | 0.1 | J | 0.1 | J | --- | 0.10 | J | ND | | ND | | 0.1 | J | ND | | --- | ND | | ND | |
| | 27-Oct-09 | 0.03 | 5.0 | 0.1 | J | ND | | 0.1 | J | 0.1 | J | --- | ND | | ND | | ND | | 0.1 | J | ND | | --- | ND | | ND | |
| | 8-Apr-10 | 0.05 | 5.0 | ND | | ND | | 0.1 | J | ND | | --- | ND | | ND | | ND | | ND | | 0.1 | J | --- | 0.1 | J | ND | |
| GWPS = 0.2 µg/L (10/1/10) | 13-Oct-10 | 0.05 | 5.5 | ND | | ND | | ND | | ND | | --- | 0.1 | J | ND | | 0.1 | J | ND | | ND | | --- | 0.1 | J | ND | |
| | 27-Apr-11 | 0.02 | 5.5 | ND | | ND | | 0.12 | B | 0.06 | B | --- | 0.05 | B | 0.04 | B | 0.11 | B | ND | | ND | | --- | 0.07 | B | 0.0 | J |
| | 20-Oct-11 | 0.02 | 5.5 | 0.0 | J | ND | | 0.05 | J | ND | | --- | 0.03 | J | 0.0 | J | 0.1 | J | 0.03 | J | ND | | --- | 0.1 | J | ND | |
| | 26-Apr-12 | 0.02 | 5.5 | 0.02 | J | ND | | 0.08 | J | 0.05 | J | --- | 0.13 | J | 0.12 | J | 0.03 | J | 0.02 | J | ND | | --- | 0.1 | J | ND | |
| | 16-Oct-12 | 0.07 | 5.5 | 0.19 | J | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 11-Apr-13 | 0.02 | 5.5 | ND | | ND | | 0.12 | B | 0.06 | B | --- | 0.04 | B | 0.03 | B | ND | | ND | | ND | | --- | 0.22 | B | 0.19 | J |
| | 30-Oct-13 | 0.02 | 5.5 | 0.23 | B | 0.02 | B | 0.08 | B | 0.07 | B | --- | 0.04 | B | 0.04 | B | ND | | 0.12 | B | ND | | --- | 0.06 | B | 0.13 | J |
| | 9-Apr-14 | 0.02 | 5.5 | ND | | 0.02 | J | 0.08 | J | 0.03 | J | --- | 0.06 | J | 0.02 | J | 0.02 | J | ND | | ND | | --- | 0.18 | J | ND | |
| | 22-Oct-14 | 0.13 | 5.5 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 8-Apr-15 | 0.13 | 5.5 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| Vanadium | 1-Jul-99 | --- | 40.0 | --- | | --- | | **167** | | **52** | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Aug-99 | --- | 40.0 | --- | | --- | | **41** | | **47** | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-99 | --- | 40.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Nov-99 | --- | 40.0 | --- | | --- | | ND | | **47** | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-00 | --- | 40.0 | --- | | --- | | ND | | **57** | | **43** | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-00 | --- | 40.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-01 | --- | 40.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-01 | --- | 40.0 | --- | | --- | | **55** | | **83** | | ND | ND | | **64.0** | | ND | | --- | | --- | | --- | --- | | ND | |
| | 2-Apr-02 | --- | 40.0 | ND | | ND | | **67** | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-02 | --- | 40.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-03 | --- | 40.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-03 | --- | 40.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 15-Apr-04 | --- | 40.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 14-Oct-04 | --- | 40.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 5-Apr-05 | --- | 40.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 27-Oct-05 | --- | 40.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 21-Apr-06 | --- | 40.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 12-Oct-06 | --- | 40.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | --- | | ND | |
| | 26-Apr-07 | --- | 25.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | --- | | ND | |
| | 11-Oct-07 | 0.42 | 25.0 | 0.9 | J | ND | | 8.6 | J | 3.8 | J | --- | 0.6 | J | ND | | ND | | 2.7 | J | ND | | --- | ND | | ND | |
| GWPS = 3.5 µg/L (10/23/07) | 3-Apr-08 | 0.07 | 25.0 | 0.3 | B | 0.3 | B | 1.7 | J | 3.6 | J | --- | 2.1 | J | 1.9 | J | 0.2 | B | 1.1 | J | 0.2 | B | --- | 0.3 | B | 0.1 | J |
| | 28-Oct-08 | 0.07 | 25.0 | 0.4 | B | 1 | B | 14.1 | J | 14 | J | --- | 3.1 | J | 1.9 | J | 0.4 | B | 1.5 | J | 0.9 | B | --- | 3.9 | J | 0.2 | J |
| | 8-Apr-09 | 0.28 | 25.0 | 1.5 | J | 1.7 | J | 6.9 | J | 13.5 | J | --- | 6.5 | J | 2.7 | J | 0.8 | J | 2.3 | J | 1.8 | J | --- | 2.1 | J | ND | |
| | 27-Oct-09 | 0.28 | 25.0 | ND | | 1.4 | B | 13.3 | J | 15.2 | J | --- | 7.4 | J | 3.2 | J | 0.9 | B | 1.5 | B | 1.5 | B | --- | 2.1 | J | 0.4 | J |
| | 8-Apr-10 | 0.03 | 25.0 | 1.3 | B | 1.7 | B | 8.1 | J | 9.4 | J | --- | 4.9 | J | 2.1 | J | 0.7 | B | 3.1 | J | 1.3 | B | --- | 2.3 | J | 0.4 | J |
| GWPS = 0.3 µg/L (10/1/10) | 13-Oct-10 | 0.03 | 25.0 | 0.9 | B | 1.4 | B | 4.8 | J | 7.6 | J | --- | 5.4 | J | 1.4 | B | 0.8 | B | 1.5 | B | 1 | B | --- | 2.9 | B | 0.6 | J |
| | 27-Apr-11 | 0.14 | 25.0 | ND | | ND | | 4.7 | J | 6.8 | J | --- | 3.5 | J | 2.2 | J | ND | | 0.97 | J | 0.48 | J | --- | 0.6 | J | ND | |
| | 20-Oct-11 | 0.14 | 25.0 | ND | | 0.88 | J | 6.7 | J | 3.5 | J | --- | 4.8 | J | 3.2 | J | ND | | 1.5 | J | 0.93 | J | --- | 1.9 | J | ND | |
| | 26-Apr-12 | 0.14 | 25.0 | 0.7 | J | 1.3 | J | 6.7 | J | 6.1 | J | --- | 11.7 | J | 2.2 | J | ND | | 1.4 | J | 0.91 | J | --- | 3.2 | J | ND | |
| | 16-Oct-12 | 0.10 | 25.0 | ND | | 0.62 | J | 4.0 | J | 3.8 | J | --- | 2.8 | J | 1.0 | J | ND | | 0.18 | J | 0.87 | J | --- | 2.4 | J | ND | |
| | 11-Apr-13 | 0.07 | 25.0 | 1.2 | J | 1 | J | 6.5 | J | 6.4 | J | --- | 2.5 | J | 2.4 | J | 0.5 | J | 1.7 | J | 1 | J | --- | 2.5 | J | ND | |
| | 30-Oct-13 | 0.07 | 25.0 | 0.38 | J | 1.7 | J | 4.2 | J | 6.6 | J | --- | 3.1 | J | 1.7 | J | 0.67 | J | 0.88 | J | 0.91 | J | --- | 2.2 | J | ND | |
| | 9-Apr-14 | 0.07 | 25.0 | 1.2 | J | 2.3 | J | 7.4 | J | 5.2 | J | --- | 5 | J | 1.22 | J | 0.28 | J | 1.5 | J | 0.81 | J | --- | 1.5 | J | ND | |
| | 22-Oct-14 | 0.06 | 25.0 | 0.67 | B | 1.6 | J | 4.9 | J | 6.1 | J | --- | 6.3 | J | 2.0 | J | 0.52 | B | 1.0 | J | 0.78 | B | --- | 0.99 | J | 0.18 | J |
| | 8-Apr-15 | 0.06 | 25.0 | 0.64 | J | 0.84 | J | 3.7 | J | 1.9 | J | --- | 3.4 | J | 1.2 | J | ND | | 0.9 | J | 0.43 | J | --- | 2.8 | J | ND | |

# TABLE 8A

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA LONG-TERM REGIONAL LF PHASES 1 and 2

| | Sample | | | Background | | | | Downgraident | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | Collection Date | DL | SWSL | MW-12S | | MW-12D | | MW-7 | | MW-8 | | MW-9 | MW-10 | | MW-11S | | MW-11D | | MW-13S | | MW-13D | | MW-14 | MW-14R | | Blanks | |
| Zinc | 1-Jul-99 | --- | 50.0 | --- | | --- | | 113 | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Aug-99 | --- | 50.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-99 | --- | 50.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Nov-99 | --- | 50.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-00 | --- | 50.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-00 | --- | 50.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-01 | --- | 50.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-01 | --- | 50.0 | --- | | --- | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 2-Apr-02 | --- | 50.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-02 | --- | 50.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Apr-03 | --- | 50.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 1-Oct-03 | --- | 50.0 | 11 | | ND | | ND | | ND | | ND | ND | | ND | | ND | | --- | | --- | | --- | --- | | ND | |
| | 15-Apr-04 | --- | 50.0 | ND | | ND | | ND | | ND | | ND | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 14-Oct-04 | --- | 50.0 | ND | | ND | | 72 | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 5-Apr-05 | --- | 50.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 27-Oct-05 | --- | 50.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 21-Apr-06 | --- | 50.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | ND | --- | | ND | |
| | 12-Oct-06 | --- | 50.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | --- | | ND | |
| | 26-Apr-07 | --- | 10.0 | ND | | ND | | 13 | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | --- | | ND | |
| | 11-Oct-07 | 0.2 | 10.0 | 22 | B | 2.1 | B | 28 | B | 4.9 | B | --- | 4.7 | B | 5.4 | B | 2.5 | B | 6.1 | B | 3.4 | B | --- | 14 | B | 6.6 | J |
| NC 2L = 1,050 µg/L (10/23/07) | 3-Apr-08 | 0.0 | 10.0 | 26 | | 1.9 | B | 15 | | 3.7 | B | --- | 7.8 | B | 8.7 | B | 4.7 | B | 4.7 | B | 2.1 | B | --- | 5.7 | B | 2.2 | J |
| | 28-Oct-08 | 0.04 | 10.0 | 20 | | 15 | | 22 | | 11 | | --- | 5.8 | J | 7.6 | J | 3.8 | J | 13 | | 8.3 | J | --- | 17 | | 0.4 | J |
| | 8-Apr-09 | 0.14 | 10.0 | 23.0 | | 1.3 | B | 16 | | 9.4 | J | --- | 7.5 | J | 14.0 | | 1.8 | B | 5.4 | J | 1.9 | B | --- | 8.7 | J | 0.8 | J |
| | 27-Oct-09 | 0.14 | 10.0 | 16 | | 4.2 | B | 25 | | 9.6 | J | --- | 9.3 | J | 13.0 | | 10.0 | | 4.9 | B | 2.3 | B | --- | 8.9 | J | 1.4 | J |
| NC 2L = 1,000 µg/L (1/1/10) | 8-Apr-10 | 0.08 | 10.0 | 19 | | 2.2 | B | 20 | | 9.1 | J | --- | 6.8 | J | 10 | J | 3.5 | B | 9.9 | J | 2.0 | B | --- | 7.7 | J | 0.7 | J |
| | 13-Oct-10 | 0.08 | 10.0 | 17.0 | B | 7.7 | B | 6.1 | B | 8 | B | --- | 10 | B | 9 | B | 5.2 | B | 9.3 | B | 3.3 | B | --- | 12.0 | B | 4.1 | J |
| | 27-Apr-11 | 0.24 | 10.0 | 12 | | 2 | B | 14 | | 4.9 | B | --- | 10 | | 9 | J | 4 | B | 5 | B | 1.2 | B | --- | 7.5 | J | 1.1 | J |
| | 20-Oct-11 | 0.24 | 10.0 | 8.1 | J | 2.1 | J | 10 | | 4.3 | J | --- | 7.2 | J | 9.9 | J | 1.0 | B | 4.7 | J | 1.7 | J | --- | 9.6 | J | 0.28 | J |
| | 26-Apr-12 | 0.24 | 10.0 | 9.7 | J | 8 | B | 15 | | 7.7 | B | --- | 24.0 | | 17.0 | | 2.4 | B | 6.1 | B | 2.3 | B | --- | 10.0 | | 1.9 | J |
| | 16-Oct-12 | 0.48 | 10.0 | 9.2 | J | 1.5 | J | 6.9 | J | 4.9 | J | --- | 4.8 | J | 5 | J | 1.4 | J | 2.8 | J | 2.0 | J | --- | 5.4 | J | ND | |
| | 11-Apr-13 | 0.47 | 10.0 | 5.9 | J | 1.9 | B | 13 | | 7.1 | J | --- | 6.2 | J | 6.9 | J | 0.9 | B | 6.2 | J | 1.9 | B | --- | 5.1 | J | 0.88 | J |
| | 30-Oct-13 | 0.47 | 10.0 | 9 | B | 5.1 | B | 10.0 | B | 11.0 | B | --- | 7 | B | 11.0 | B | 5.6 | B | 9.8 | B | 6.8 | B | --- | 6.1 | B | 3.2 | J |
| | 9-Apr-14 | 0.47 | 10.0 | 4.7 | J | 2.4 | J | 9.9 | J | 10.0 | | --- | 7 | J | 9.5 | J | ND | | 5.2 | J | ND | | --- | 3.5 | J | ND | |
| | 22-Oct-14 | 0.53 | 10.0 | 7.7 | J | 2.7 | J | 6.7 | J | 5.7 | J | --- | 10 | | 6.4 | J | 9.4 | J | 7.4 | J | 1.5 | J | --- | 6.4 | J | ND | |
| | 8-Apr-15 | 0.53 | 10.0 | 5.6 | J | 2.4 | B | 8.3 | J | 4.0 | J | --- | 7 | J | 3.3 | B | 2.4 | B | 8.2 | J | 1.4 | B | --- | 6.2 | J | 0.79 | J |
| **Organic Compounds** | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acetone | 11-Oct-07 | 1.21 | 100.0 | ND | | ND | | 1.4 | J | ND | | --- | 1.4 | J | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| Resample | 4-Dec-07 | 2.20 | 25.0 | --- | | --- | | ND | | --- | | --- | ND | | --- | | --- | | --- | | --- | | --- | --- | | 4.3 | J |
| NC 2L = 700 µg/L (10/23/07) | 3-Apr-08 | 1.21 | 100.0 | 5.2 | B | 4.5 | B | 4.3 | B | 2.3 | B | --- | 2.3 | B | 2.2 | B | 2 | B | 5 | B | 3.8 | B | --- | 4.4 | B | 2.1 | J |
| | 28-Oct-08 | 1.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | 1.3 | J |
| | 8-Apr-09 | 1.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 27-Oct-09 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| NC 2L = 6,000 µg/L (1/1/10) | 8-Apr-10 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 13-Oct-10 | 9.06 | 100.0 | 10.2 | J | 32.2 | J | ND | | ND | | --- | ND | | ND | | ND | | 15 | J | 22.1 | J | --- | ND | | ND | |
| | 27-Apr-11 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 20-Oct-11 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 26-Apr-12 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 16-Oct-12 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 11-Apr-13 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 30-Oct-13 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 9-Apr-14 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 22-Oct-14 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 8-Apr-15 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | 9.30 | J | --- | 14.40 | J | ND | |
| 2-Butanone | 3-Apr-08 | 0.85 | 100.0 | 0.9 | J | ND | | ND | | 1.5 | J | --- | 1.4 | J | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| Resample | 15-May-08 | 0.96 | 100.0 | ND | | --- | | --- | | ND | | --- | ND | | --- | | --- | | --- | | --- | | --- | --- | | ND | |
| NC 2L = 4,200 µg/L (10/23/07) | 28-Oct-08 | 0.85 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 8-Apr-09 | 0.85 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 27-Oct-09 | 2.21 | 100.0 | 2.3 | J | 2.5 | J | 3.6 | J | 2.8 | J | --- | 3.3 | J | 3 | J | 2.3 | J | 2.9 | J | 2.9 | J | --- | 4.6 | J | ND | |
| NC 2L = 4,000 µg/L (1/1/10) | 8-Apr-10 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 13-Oct-10 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 27-Apr-11 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 20-Oct-11 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 26-Apr-12 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 16-Oct-12 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 11-Apr-13 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 30-Oct-13 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 9-Apr-14 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 22-Oct-14 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 8-Apr-15 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| Chloromethane | 11-Oct-07 | 0.2 | 1.0 | 0.9 | J | 0.7 | J | 0.8 | J | 0.8 | J | --- | 0.9 | J | 0.8 | J | 0.9 | J | 0.9 | J | 0.7 | J | --- | 0.9 | J | ND | |
| Resample | 4-Dec-07 | 0.1 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| NC 2L = 2.6 µg/L (10/23/07) | 3-Apr-08 | 0.2 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 28-Oct-08 | 0.2 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | 0.2 | J | ND | |
| | 8-Apr-09 | 0.2 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 27-Oct-09 | 0.8 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | 0.9 | J | ND | |
| NC 2L = 3 µg/L (1/1/10) | 8-Apr-10 | 0.8 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 13-Oct-10 | 0.8 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 27-Apr-11 | 0.8 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 20-Oct-11 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 26-Apr-12 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 16-Oct-12 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 11-Apr-13 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 30-Oct-13 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 9-Apr-14 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 22-Oct-14 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 8-Apr-15 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| Methylene Chloride | 11-Oct-07 | 0.14 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | 0.2 | B | ND | | ND | | ND | | --- | ND | | 0.2 | J |
| NC 2L = 4.6 µg/L (10/23/07) | 3-Apr-08 | 0.14 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 28-Oct-08 | 0.14 | 1.0 | ND | | ND | | 0.2 | J | 0.2 | J | --- | 0.2 | J | 0.2 | J | 0 | J | ND | | ND | | --- | ND | | ND | |
| | 8-Apr-09 | 0.14 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 27-Oct-09 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| NC 2L = 5 µg/L (1/1/10) | 8-Apr-10 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 13-Oct-10 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 27-Apr-11 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 20-Oct-11 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 26-Apr-12 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 16-Oct-12 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 11-Apr-13 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 30-Oct-13 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 9-Apr-14 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 22-Oct-14 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |
| | 8-Apr-15 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | ND | | ND | | ND | | ND | | --- | ND | | ND | |

**Notes:** All concentrations are in micrograms per liter (µg/L).
RL = Laboratory reporting limit (NC SWSL or lower from October 2007 to present).
--- = Data not avaliable
B = Blank-qualified data; result is expected to be biased high based on concentrations in the blanks
NC 2L = North Carolina 2L Groundwater Standards.
GWPS = Groundwater Protection Standards.
When the NC 2L has not been established, the GWPS will be used.
**Bold** values are above the NC 2L Groundwater Standards or Groundwater Protection Standards.
DL = Laboratory detection limit.
J = Estimated value between the DL and the RL

# TABLE 8B

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. LONG-TERM REGIONAL LF PHASE 3

| Analyte | Sample Collection Date | DL | SWSL | MW-15S | | MW-15D | | MW-16S | | MW-16D | | MW-17S | | MW-17D | | MW-18S | | MW-18D | | MW-19S | | MW-19D | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Compounds** | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | 25-Aug-11 | 0.44 | 60.0 | ND | | 0.5 | J,D | ND | | ND | | ND | | 0.50 | J,D | ND | | ND | | ND | | ND | | ND | |
| GWPS = 1 ug/L | 27-Sep-11 | 0.44 | 6.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 26-Oct-11 | 0.44 | 5.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 29-Nov-11 | 0.44 | 5.0 | 1 | J,D | 0.6 | J,D | 0.6 | J,D | 0.5 | J,D | 0.5 | J,D | 0.5 | J,D | ND | | ND | | ND | | ND | | ND | |
| | 31-Oct-13 | 0.02 | 6.0 | 0.07 | B | 0.59 | J | 0.05 | B | 0.1 | B | 0.0 | B | 0.9 | J | 0 | B | 0 | J | 0 | B | 0.2 | B | 0.08 | J |
| | 10-Apr-14 | 0.02 | 6.0 | 0.12 | B | 0.58 | B | 0.27 | B | 0.29 | B | 0.11 | B | 0.16 | J | 0.17 | B | 0.19 | B | 0.26 | B | 0.15 | B | 0.66 | J |
| | 23-Oct-14 | 0.12 | 6.0 | ND | | 0.40 | J | ND | | ND | | ND | | ND | | ND | | 0.19 | J | ND | | 0.18 | J | ND | |
| | 9-Apr-15 | 0.12 | 6.0 | 0.18 | J | 0.15 | J | 0.19 | J | ND | | 0.30 | J | ND | | 0.15 | J | 0.15 | J | 0.24 | J | 0.51 | J | ND | |
| Arsenic | 25-Aug-11 | 3.69 | 10.0 | **34.3** | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| NC 2L = 10 ug/L | 27-Sep-11 | 3.69 | 10.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 26-Oct-11 | 3.69 | 10.0 | 4.13 | J | ND | | ND | | ND | | ND | | ND | | 7.4 | J | ND | | ND | | ND | | ND | |
| | 29-Nov-11 | 3.69 | 10.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 31-Oct-13 | 0.05 | 10.0 | 1.8 | J | 0.93 | B | 1.3 | J | 0.92 | B | 1.5 | J | 1.3 | J | 4 | J | 2 | J | ND | | 5.0 | J | 0.2 | J |
| | 10-Apr-14 | 0.05 | 10.0 | 0.95 | J | 0.34 | J | 1.1 | J | 0.85 | J | 0.49 | J | 0.39 | J | 0.96 | J | 1.5 | J | 0.32 | J | 1.7 | J | ND | |
| | 23-Oct-14 | 0.10 | 10.0 | 1.3 | J | 0.40 | J | 1.1 | J | 0.26 | J | 0.72 | J | 0.49 | J | 1.5 | J | 1.4 | J | 0.24 | J | 1.1 | J | ND | |
| | 9-Apr-15 | 0.10 | 10.0 | 2.6 | J | ND | | 1.0 | J | 0.7 | J | 1.00 | J | 0.34 | J | 0.42 | J | 0.55 | J | ND | | 1.1 | J | ND | |
| Barium | 25-Aug-11 | 0.39 | 100.0 | 306 | | 26 | J | 32.2 | J | 73.7 | J | 17.3 | B | 34.7 | J | 89.4 | J | 39.1 | J | 5.81 | B | 36.2 | J | 5.06 | J |
| NC 2L = 700 ug/L | 27-Sep-11 | 0.39 | 100.0 | 25 | B | 399 | | 65.7 | B | 69.6 | J | 40.1 | B | 37.8 | B | 66.1 | B | 2.48 | B | 40.2 | B | 8.4 | B | 13.3 | J |
| | 26-Oct-11 | 0.39 | 100.0 | 66.4 | B | 41.6 | B | 64.2 | B | 65.4 | B | 54.6 | B | 41.4 | B | 56.9 | B | 36 | B | 20.3 | B | 44.9 | B | 15.4 | J |
| | 29-Nov-11 | 0.39 | 100.0 | 79.3 | B | 48.3 | B | 94.2 | B | 76.2 | B | 96.8 | B | 45.8 | B | 55.3 | B | 43.8 | B | 38.6 | B | 54.4 | B | 31.4 | J |
| | 31-Oct-13 | 0.06 | 100.0 | 166 | | 48.4 | J | 111 | | 79.6 | J | 161 | | 45.8 | J | 25.1 | J | 28.5 | J | 55.3 | J | 44.6 | J | 0.24 | J |
| | 10-Apr-14 | 0.06 | 100.0 | 147 | | 35.4 | J | 47 | J | 119 | | 92.9 | J | 43 | J | 14.8 | J | 28.7 | J | 75 | J | 51.5 | J | ND | |
| | 23-Oct-14 | 0.12 | 100.0 | 98.8 | J | 33.0 | J | 36.2 | J | 76.4 | J | 138 | | 32.5 | J | 17.1 | J | 35.3 | J | 36.2 | J | 29.9 | J | ND | |
| | 9-Apr-15 | 0.12 | 100.0 | 42.9 | J | 31.2 | J | 33.4 | J | 51.3 | J | 99.6 | J | 24.2 | J | 13.7 | J | 28.3 | J | 30.9 | J | 21.5 | J | ND | |
| Beryllium | 25-Aug-11 | 0.12 | 2.0 | 0.12 | J,D | ND | | 0.12 | J,D | ND | | ND | | ND | | 0.24 | J,D | ND | | ND | | 0.14 | J,D | ND | |
| GWPS = 4 ug/L | 27-Sep-11 | 0.12 | 1.0 | ND | | ND | | 0.18 | J,D | ND | | ND | | ND | | 0.2 | J,D | ND | | ND | | ND | | ND | |
| | 26-Oct-11 | 0.12 | 1.0 | 0.12 | J,D | ND | | 0.2 | J,D | ND | | ND | | ND | | 2.04 | | ND | | ND | | ND | | ND | |
| | 29-Nov-11 | 0.12 | 1.0 | 0.2 | J,D | ND | | 0.22 | J,D | ND | | 0.22 | J,D | ND | | 0.3 | J,D | ND | | ND | | ND | | ND | |
| | 31-Oct-13 | 0.03 | 1.0 | 2 | | 0.1 | B | **6** | | 0.05 | B | 2 | | 0.13 | B | **7** | | 0.19 | B | 0.08 | B | 1 | | 0.04 | J |
| Resample | 23-Dec-13 | 0.03 | 1.0 | NS | | NS | | NS | | NS | | NS | | NS | | **7** | | NS | | NS | | NS | | ND | |
| Resample | 5-Feb-14 | 0.28 | 1.0 | NS | | NS | | NS | | NS | | NS | | NS | | **7** | | NS | | NS | | NS | | 0.48 | J |
| | 10-Apr-14 | 0.03 | 1.0 | 1 | | 0.04 | J | **6** | | 0.08 | J | 4 | | 0.04 | J | **6** | | 0.1 | J | 0.1 | J | 0.32 | J | ND | |
| | 23-Oct-14 | 0.04 | 1.0 | **5** | | ND | | **7** | | 0.05 | J | 4 | | 0.05 | J | **7** | | 0.13 | J | 0.08 | J | 0.21 | J | ND | |
| | 9-Apr-15 | 0.04 | 1.0 | **6.0** | | ND | | 4.0 | | 0.08 | J | 4.0 | | ND | | 4.0 | | 0.08 | J | 0.05 | J | 0.26 | J | ND | |
| Cadmium | 25-Aug-11 | 0.06 | 2.0 | 2.54 | J,D | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| NC 2L = 2 ug/L | 27-Sep-11 | 0.06 | 1.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 26-Oct-11 | 0.06 | 1.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 29-Nov-11 | 0.06 | 1.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 31-Oct-13 | 0.05 | 1.0 | 0.17 | J | 0.16 | J | 1 | | 0.05 | J | 0.23 | J | 0.1 | J | 1 | | 0.13 | J | 0.11 | J | 0.57 | J | ND | |
| | 10-Apr-14 | 0.05 | 1.0 | 0.14 | J | 0.06 | J | 2 | | 0.06 | J | 0.32 | J | ND | | 1 | | ND | | 0.08 | J | 0.14 | J | ND | |
| | 23-Oct-14 | 0.04 | 1.0 | 0.35 | J | 0.06 | J | **3** | | 0.07 | J | 0.39 | J | 0.06 | J | 1 | | 0.05 | J | 0.09 | J | 0.10 | J | ND | |
| | 9-Apr-15 | 0.04 | 1.0 | 0.58 | J | ND | | 2.0 | | ND | | 0.45 | J | ND | | 1.0 | | ND | | ND | | 0.16 | J | ND | |
| Total Chromium | 25-Aug-11 | 1.5 | 10.0 | **160** | | 1.72 | J | ND | | ND | | ND | | ND | | ND | | 3.32 | J | ND | | 3.66 | J | ND | |
| NC 2L = 10 ug/L | 27-Sep-11 | 1.5 | 10.0 | 1.63 | B | 1.52 | B | 1.75 | B | ND | | 1.52 | B | ND | | 1.52 | B | 5.64 | B | 3.17 | B | 2.1 | B | 1.75 | J |
| | 26-Oct-11 | 1.5 | 10.0 | 5.69 | B | 2.08 | B | 2.19 | B | 2.87 | B | **14.3** | | 2.76 | B | 2.98 | B | 2.3 | B | 2.64 | B | 2.42 | B | 2.08 | J |
| | 29-Nov-11 | 1.5 | 10.0 | 1.52 | J | 2.24 | J | 1.65 | J | 2.12 | J | 2.72 | J | ND | | 2.01 | J | 3.19 | J | 1.53 | J | 2.6 | J | ND | |
| | 31-Oct-13 | 0.04 | 10.0 | 0.34 | B | 0.22 | B | 2.4 | J | 0.37 | B | 5.9 | J | 1.5 | J | 3.2 | J | 1.3 | J | 2.2 | J | 6.5 | J | 0.1 | J |
| | 10-Apr-14 | 0.04 | 10.0 | 0.74 | J | 0.53 | J | 1.6 | J | 0.86 | J | 3.1 | J | 0.24 | J | 1.1 | J | 0.66 | J | 2.1 | J | 1.7 | J | ND | |
| | 23-Oct-14 | 0.14 | 10.0 | 1.0 | J | 0.48 | J | 1.8 | J | 0.58 | J | 4.9 | J | 0.70 | J | 2.1 | J | 1.5 | J | 1.9 | J | 0.76 | J | ND | |
| | 9-Apr-15 | 0.1 | 10 | 1.1 | J | ND | | 1.6 | J | 0.81 | J | 4.5 | J | 0.26 | J | 0.82 | J | 0.32 | J | 0.95 | J | 1.2 | J | ND | |
| Cobalt | 25-Aug-11 | 3.4 | 10.0 | **35.4** | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| GWPS = 1 ug/L | 27-Sep-11 | 3.39 | 10.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 26-Oct-11 | 3.4 | 10.0 | ND | | ND | | ND | | ND | | ND | | ND | | **12.1** | | ND | | ND | | ND | | ND | |
| | 29-Nov-11 | 3.4 | 10.0 | 4.72 | J | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 31-Oct-13 | 0.02 | 10.0 | **11** | | 0.23 | B | 3.9 | J | 0.24 | B | 3.2 | J | 0.56 | J | 8.1 | J | 0.55 | J | 0.42 | J | 4.3 | J | 0.05 | J |
| | 10-Apr-14 | 0.02 | 10.0 | **12** | | 0.32 | J | 3.5 | J | 0.33 | J | 5.7 | J | 0.19 | J | 8.8 | J | 0.21 | J | 0.29 | J | 1.2 | J | ND | |
| | 23-Oct-14 | 0.12 | 10.0 | **27** | | 0.20 | J | 2.2 | J | 0.19 | J | 3.9 | J | 0.29 | J | 8.2 | J | 0.23 | J | 0.28 | J | 0.70 | J | ND | |
| | 9-Apr-15 | 0.12 | 10.0 | **18.0** | | 0.34 | J | 1.9 | J | 0.4 | J | 4.2 | J | 0.19 | J | 5.8 | J | 0.17 | J | 0.16 | J | 1.70 | J | ND | |
| Copper | 25-Aug-11 | 0.7 | 10.0 | 60.7 | | ND | | ND | | ND | | ND | | ND | | ND | | 11 | | 1 | J | ND | | ND | |
| NC 2L = 1,000 ug/L | 27-Sep-11 | 0.7 | 10.0 | 1.88 | B | 3.56 | B | 3.28 | B | 4.03 | B | 4.28 | B | 3.89 | B | 3.58 | B | 4.85 | B | 3.83 | B | 2.58 | B | 3.38 | J |
| | 26-Oct-11 | 0.7 | 10.0 | 3.1 | B | 1.88 | B | 2.25 | B | 3.06 | B | 4.53 | B | 2.48 | B | 3.93 | B | 2.71 | B | 2.71 | B | 2.41 | B | 2.24 | J |
| | 29-Nov-11 | 0.7 | 10.0 | 1.77 | B | 0.88 | B | 1.61 | B | 0.92 | B | 1.73 | B | 1.22 | B | 1.21 | B | 0.92 | B | 1.74 | B | 1.64 | B | 0.74 | J |
| | 31-Oct-13 | 0.06 | 10.0 | 1.3 | B | 0.76 | B | 1.7 | B | 0.96 | B | 1.5 | B | 1.3 | B | 1.8 | B | 0.75 | B | 1.6 | B | 2 | B | 1.2 | J |
| | 10-Apr-14 | 0.06 | 10.0 | 0.37 | J | 0.33 | J | 1.1 | J | 0.34 | J | 0.86 | J | 0.42 | J | 1.8 | J | 0.41 | J | 1.2 | J | 0.51 | J | ND | |
| | 23-Oct-14 | 0.10 | 10.0 | 0.40 | J | 0.30 | J | 1.3 | J | 0.24 | J | 0.90 | J | 0.25 | J | 1.5 | J | 0.48 | J | 2.0 | J | 0.38 | J | ND | |
| | 9-Apr-15 | 0.10 | 10.0 | 0.71 | J | 0.38 | J | 0.93 | J | 0.50 | J | 1.00 | J | 0.21 | J | 1.2 | J | 0.24 | J | 0.47 | J | 0.61 | J | ND | |
| Lead | 25-Aug-11 | 5.41 | 10.0 | **68.2** | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| NC 2L = 15 ug/L | 27-Sep-11 | 5.41 | 10.0 | 7.22 | J | 7.42 | J | ND | | ND | | 6.4 | J | ND | | ND | | ND | | ND | | ND | | ND | |
| | 26-Oct-11 | 5.41 | 10.0 | ND | | ND | | ND | | ND | | 5.9 | J | ND | | 7.2 | J | ND | | ND | | ND | | ND | |
| | 29-Nov-11 | 5.41 | 10.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 31-Oct-13 | 0.02 | 10.0 | 0.4 | B | 0.28 | B | 4.1 | J | 0.42 | J | 6.6 | J | 0.7 | J | 5.8 | J | 1.0 | J | 1.1 | J | 2.7 | J | 0.08 | J |
| | 10-Apr-14 | 0.02 | 10.0 | 0.37 | J | 0.25 | J | 2.6 | J | 0.47 | J | 3.5 | J | 0.17 | B | 4.0 | J | 0.5 | J | 1.2 | J | 0.7 | J | 0.04 | J |
| | 23-Oct-14 | 0.13 | 10.0 | 0.36 | J | 0.23 | J | 4.7 | J | 0.43 | J | 7.2 | J | 0.33 | J | 5.2 | J | 0.94 | J | 1.2 | J | 0.39 | J | ND | |
| | 9-Apr-15 | 0.13 | 10.0 | 0.91 | J | 0.17 | J | 3.4 | J | 0.62 | J | 5.7 | J | 0.15 | J | 3.6 | J | 0.31 | J | 0.68 | J | 0.51 | J | ND | |
| Nickel | 25-Aug-11 | 3.06 | 50.0 | 43.6 | J | ND | | ND | | ND | | ND | | ND | | 4 | J | ND | | ND | | 5.8 | J | ND | |
| NC 2L = 100 ug/L | 27-Sep-11 | 3.06 | 50.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 26-Oct-11 | 3.06 | 50.0 | ND | | ND | | ND | | ND | | ND | | ND | | 20 | J | ND | | ND | | ND | | ND | |
| | 29-Nov-11 | 3.06 | 50.0 | 7.7 | J | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 31-Oct-13 | 0.45 | 5.0 | 10.8 | J | 1.8 | J | 6.2 | J | 2.3 | J | 5.6 | J | 2.2 | J | 14.1 | J | 1.7 | J | 1.7 | J | 10.8 | J | ND | |
| | 10-Apr-14 | 0.45 | 50.0 | 11.7 | J | 1.8 | J | 6.3 | J | 2.7 | J | 9.5 | J | 1.7 | J | 14.6 | J | 1.4 | J | 1.1 | J | 4.2 | J | ND | |
| | 23-Oct-14 | 0.12 | 50.0 | 27.6 | J | 1.2 | J | 4.2 | J | 1.8 | J | 7.0 | J | 1.8 | J | 13.2 | J | 1.3 | J | 0.82 | J | 2.5 | J | ND | |
| | 9-Apr-15 | 0.12 | 50..0 | 20.9 | J | 1.7 | J | 4.0 | J | 1.3 | J | 7.4 | J | 1.1 | J | 10.6 | J | 1.2 | J | 0.45 | J | 2.7 | J | ND | |
| Selenium | 25-Aug-11 | 0.82 | 100.0 | 3.9 | B,D | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | 1 | J,D |
| NC 2L = 20 ug/L | 27-Sep-11 | 0.82 | 10.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | 1.7 | J,D |
| | 26-Oct-11 | 0.82 | 5.0 | ND | | ND | | 0.9 | J,D | ND | | ND | | ND | | 3.1 | J,D | ND | | ND | | ND | | ND | |
| | 29-Nov-11 | 0.82 | 5.0 | ND | | ND | | 1.4 | J,D | ND | | ND | | 1 | J,D | ND | | ND | | ND | | ND | | ND | |
| | 31-Oct-13 | 0.06 | 10.0 | 0.34 | J | 0.49 | J | 5.2 | J | 0.22 | J | 0.76 | J | 0.5 | J | 4.7 | J | 0.16 | J | ND | | 1.5 | J | ND | |
| | 10-Apr-14 | 0.06 | 10.0 | 0.13 | J | ND | | 7.3 | J | 0.14 | J | 0.8 | J | ND | | 3.6 | J | ND | | ND | | 0.37 | J | ND | |
| | 23-Oct-14 | 0.16 | 10.0 | 0.86 | J | 0.97 | J | 8.8 | J | 0.32 | J | 1.1 | J | ND | | 3.2 | J | 0.40 | J | 0.34 | J | ND | | ND | |
| | 9-Apr-15 | 0.16 | 10.0 | 1.5 | J | 0.22 | J | 5.8 | J | 0.28 | J | 1.4 | J | ND | | 2.9 | J | ND | | ND | | ND | | ND | |
| Silver | 25-Aug-11 | 1.05 | 10.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| NC 2L = 20 ug/L | 27-Sep-11 | 1.05 | 10.0 | 1.08 | J | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 26-Oct-11 | 1.05 | 10.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 29-Nov-11 | 1.05 | 10.0 | 2.22 | B | 2.37 | B | 2.85 | B | 2.29 | B | 1.66 | B | 2.01 | B | 2.78 | B | 2.57 | B | 3.10 | B | 3.12 | B | 2.52 | J |
| | 31-Oct-13 | 0.03 | 10.0 | ND | | 0.08 | B | ND | | ND | | ND | | ND | | 0.03 | B | 0.04 | B | ND | | 0.03 | B | 0.05 | J |
| | 10-Apr-14 | 0.03 | 10.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 23-Oct-14 | 0.04 | 10.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 9-Apr-15 | 0.04 | 10.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| Thallium | 25-Aug-11 | 0.30 | 55 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| GWPS = 0.28 ug/L | 27-Sep-11 | 0.30 | 5.5 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 26-Oct-11 | 0.3 | 5.0 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 29-Nov-11 | 0.3 | 5.0 | 0.5 | B,D | 0.5 | B,D | 0.5 | B,D | 0.4 | B,D | 0.5 | B,D | 0.4 | B,D | 0.4 | B,D | 0.4 | B,D | 0.4 | B,D | 0.4 | B,D | 0.5 | J,D |
| | 31-Oct-13 | 0.0 | 5.5 | 0.06 | B | 0.22 | B | 0.1 | B | 0.03 | B | 0.12 | B | ND | | 0.16 | B | 0.4 | B | 0.1 | B | 0.26 | B | 0.13 | J |
| | 10-Apr-14 | 0.0 | 5.5 | ND | | ND | | 0.03 | J | ND | | 0.08 | J | ND | | 0.07 | J | ND | | 0.03 | J | ND | | ND | |
| | 23-Oct-14 | 0.13 | 5.5 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 9-Apr-15 | 0.13 | 5.5 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| Vanadium | 25-Aug-11 | 6.6 | 2500.0 | 355 | J,D | 13 | B,D | 8.7 | B,D | 6.6 | B,D | 10.7 | B,D | 9.8 | B,D | 8.3 | B,D | 13.9 | B,D | 10.3 | B,D | 14.4 | B,D | 10.1 | J,D |
| GWPS = 0.3 ug/L | 27-Sep-11 | 0.7 | 25.0 | 8.7 | B,D | 7.1 | B,D | 9.8 | B,D | 8.7 | B,D | 10.8 | B,D | 10.5 | B,D | 7.12 | B,D | 21.6 | B,D | 4.8 | B,D | 5.7 | B,D | 7 | J,D |
| | 26-Oct-11 | 0.7 | 5.0 | **12.6** | D | 2.6 | B,D | 4.7 | B,D | 1.8 | B,D | **23.6** | D | 4.3 | B,D | 2.9 | B,D | 2.4 | B,D | 4.9 | B,D | 1 | B,D | 2 | J,D |
| | 29-Nov-11 | 0.7 | 5.0 | 14.4 | B,D | 11.2 | B,D | 13.1 | B,D | 8.5 | B,D | 11 | B,D | 11.2 | B,D | 14.1 | B,D | 10.9 | B,D | 9.4 | B,D | 9 | B,D | 7.9 | D |
| | 31-Oct-13 | 0.1 | 25.0 | 1 | J | 1.2 | J | 5.3 | J | 1.2 | J | 10.2 | J | 2.9 | J | 5.4 | J | 1.2 | J | 2.1 | J | 9.9 | J | ND | |
| | 10-Apr-14 | 0.1 | 25.0 | 0.72 | J | 0.9 | J | 3.8 | J | 1 | J | 4.9 | J | 0.55 | J | 0.55 | J | 0.78 | J | 2.4 | J | 2.6 | J | ND | |
| | 23-Oct-14 | 0.06 | 25.0 | 1.1 | J | 0.87 | B | 4.7 | J | 0.69 | B | 11.2 | J | 0.95 | J | 3.0 | J | 1.9 | J | 2.3 | J | 1.5 | J | 0.18 | J |
| | 9-Apr-15 | 0.06 | 25.0 | 3.1 | J | 0.17 | J | 4.8 | J | 1.4 | J | 9.9 | J | 0.64 | J | 0.38 | J | 0.66 | J | 1.5 | J | 1.9 | J | ND | |

# TABLE 8B

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. LONG-TERM REGIONAL LF PHASE 3

| Analyte | Sample Collection Date | DL | SWSL | MW-15S | MW-15D | MW-16S | MW-16D | MW-17S | MW-17D | MW-18S | MW-18D | MW-19S | MW-19D | Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Zinc | 25-Aug-11 | 2.26 | 10.0 | 158 | 8.6 B | 8.1 B | 5.93 B | 9.44 B | 6.02 B | 14.2 B | 13.5 B | 9.05 B | 33.2 | 4.2 J |
| NC 2L = 1,000 ug/L | 27-Sep-11 | 2.26 | 10.0 | 8.71 J | ND | ND | ND | 5.78 J | ND | 9.21 J | ND | 2.89 J | 2.36 J | ND |
| | 26-Oct-11 | 2.26 | 10.0 | 8.92 J | ND | ND | ND | 5.08 J | ND | 26.5 | ND | ND | 3.41 J | ND |
| | 29-Nov-11 | 2.26 | 10.0 | 7.47 J | ND | 2.78 J | ND | 5.94 J | ND | 3.15 J | ND | 3.26 J | 4.49 J | ND |
| | 31-Oct-13 | 0.47 | 10.0 | 19 | 5.1 B | 18 | 6.5 B | 15 B | 7.1 B | 26 | 5.6 B | 4.6 B | 88 | 3.2 J |
| | 10-Apr-14 | 0.47 | 10.0 | 14 | 1.8 J | 12 | 4.1 J | 17 | 0.92 J | 18 | 0.97 J | 1.8 J | 22 | ND |
| | 23-Oct-14 | 0.53 | 10.0 | 41 | 4.6 J | 17 | 2.6 J | 14 | 3.1 J | 30 | 3.5 J | 2.9 J | 14 | ND |
| | 9-Apr-15 | 0.53 | 10.0 | 32 | 3.2 B | 12 | 4.1 J | 15 | 1.5 B | 20 | 1.3 B | 1.9 B | 19 | 0.79 J |
| **Organic Compounds** | | | | | | | | | | | | | | |
| Acetone | 25-Aug-11 | 0.864 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| NC 2L = 6,000 ug/L | 27-Sep-11 | 0.864 | 100.0 | ND | ND | ND | ND | ND | 2.62 B | ND | 3.25 B | 1.13 B | ND | 1.22 J |
| | 26-Oct-11 | 0.864 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 29-Nov-11 | 0.864 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 31-Oct-13 | 9.06 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 10-Apr-14 | 9.06 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 23-Oct-14 | 9.06 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 9-Apr-15 | 9.06 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromoform | 25-Aug-11 | 0.10 | 3.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| NC 2L = 4 ug/L | 27-Sep-11 | 0.10 | 3.0 | ND | ND | ND | ND | ND | ND | 0.8 J | ND | ND | ND | ND |
| | 26-Oct-11 | 0.10 | 3.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 29-Nov-11 | 0.10 | 3.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 31-Oct-13 | 0.67 | 10.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 10-Apr-14 | 0.20 | 3.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 23-Oct-14 | 0.20 | 3.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 9-Apr-15 | 0.20 | 3.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Butanone | 9-Apr-15 | 2.2 | 100 | 2.3 B | ND | ND | 2.3 B | 2.3 B | ND | 2.3 B | ND | ND | 2.3 B | 4.0 J |
| NC 2L = 4,000 ug/L | | | | | | | | | | | | | | |
| Chloroethane | 9-Apr-15 | 0.5 | 10 | ND | 0.5 J | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| NC 2L = 3,000 µg/L (01/01/10) | | | | | | | | | | | | | | |
| Carbon Disulfide | 25-Aug-11 | 0.11 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| NC 2L = 700 ug/L | 27-Sep-11 | 0.11 | 100.0 | ND | ND | ND | ND | ND | ND | ND | 0.450 J | ND | ND | ND |
| | 26-Oct-11 | 0.11 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 29-Nov-11 | 0.11 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 31-Oct-13 | 0.23 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 10-Apr-14 | 0.23 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 23-Oct-14 | 0.23 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 9-Apr-15 | 0.23 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Methyl-2-pentanone | 25-Aug-11 | 0.56 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| GWPS = 560 ug/L | 27-Sep-11 | 0.56 | 100.0 | ND | ND | ND | ND | ND | ND | ND | 1.43 J | ND | ND | ND |
| | 26-Oct-11 | 0.56 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 29-Nov-11 | 0.56 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 31-Oct-13 | 1.19 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 10-Apr-14 | 1.19 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 23-Oct-14 | 1.19 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 9-Apr-15 | 1.19 | 100.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

**Notes:** 1. MW = Groundwater monitoring well
3. DL = Detection limit
4. RL = Reporting limit
5. B = Reported concentration considered to represent blank contamination.
6. J = Reported concentration considered to represent an estimate of constituent concentration.
7. NC 2L = North Carolina 2L Groundwater Standard.
8. GWPS = Groundwater Protection Standard.
9. **Bold** typeface data are quantified detections above the NC 2L/GWPS.
10. D = Sample dilution
11. NS = Not Sampled

# TABLE 9A

## SUMMARY OF FIELD PARAMETERS
## C.R.S.W.M.A. TUSCARORA LONG-TERM REGIONAL LF PHASES 1 and 2

| | Sample | Background | | Downgraident | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | Collection Date | MW-12S | MW-12D | MW-7 | MW-8 | MW-9 | MW-10 | MW-11S | MW-11D | MW-13S | MW-13D | MW-14 | MW-14R |
| Conductivity | 1-Jul-99 | --- | --- | 180 | 110 | 320.00 | 150.00 | 200.0 | 440.0 | --- | --- | --- | --- |
| [uMhos] | 1-Aug-99 | --- | --- | 210 | 100 | 580.00 | 200.00 | 170.0 | 450.0 | --- | --- | --- | --- |
| | 1-Oct-99 | --- | --- | 140 | 89 | 2000.00 | 150.00 | 200.0 | 420.0 | --- | --- | --- | --- |
| | 1-Nov-99 | --- | --- | 140 | 91 | 1600.0 | 150.0 | 270 | 430 | --- | --- | --- | --- |
| | 1-Apr-00 | --- | --- | 150 | 88 | 1800.0 | 140.0 | 270 | 420 | --- | --- | --- | --- |
| | 1-Oct-00 | --- | --- | 140 | 92 | 1200.0 | 130.0 | 30 | 410 | --- | --- | --- | --- |
| | 1-Apr-01 | --- | --- | 140 | 88 | 1300.0 | 120.0 | 290 | 390 | --- | --- | --- | --- |
| | 1-Oct-01 | --- | --- | 140 | 98 | 1200.0 | 120.0 | 250.0 | 410.0 | --- | --- | --- | --- |
| | 2-Apr-02 | 160 | 460 | 140 | 82 | 1600.0 | 110.0 | 290.0 | 370.0 | --- | --- | --- | --- |
| | 1-Oct-02 | 153 | 478 | 356 | 93 | 1650.0 | 132.0 | 288 | 500 | --- | --- | --- | --- |
| | 1-Apr-03 | 164 | 448 | 482 | 169 | 1857.0 | 167.0 | 406 | 440 | --- | --- | --- | --- |
| | 1-Oct-03 | 146 | 434 | 373 | 76 | 1,497 | 144 | 411 | 426 | --- | --- | --- | --- |
| | 15-Apr-04 | 170 | 300 | 220 | 57 | 960 | 87 | 290 | 300 | 79 | 280.0 | 56.0 | --- |
| | 14-Oct-04 | 189 | 405 | 272 | 70 | --- | 121 | 344 | 406 | 127 | 391.0 | 79.0 | --- |
| | 5-Apr-05 | 146 | 489 | 299 | 67 | --- | 140 | 417 | 496 | 99 | 475 | 95 | --- |
| | 27-Oct-05 | 144 | 419 | 234 | 63 | --- | 125 | 353 | 430 | 114 | 396 | 138 | --- |
| | 21-Apr-06 | 184 | 465 | 216 | 64 | --- | 147 | 406 | 469 | 121 | 434 | 69 | --- |
| | 12-Oct-06 | 182 | 448 | 245 | 59 | --- | 130 | 358 | 448 | 109 | 416 | --- | --- |
| | 26-Apr-07 | 192 | 452 | 210 | 69 | --- | 143 | 310 | 448 | 103 | 415 | --- | --- |
| | 11-Oct-07 | 187 | 454 | 273 | 80 | --- | 128 | 229 | 439 | 119 | 409 | --- | 78.0 |
| Resample | 4-Dec-07 | 159.2 | 501 | 340 | 83.5 | --- | 128.9 | 232 | 497 | 146.4 | 482 | --- | 73.1 |
| | 3-Apr-08 | 155 | 481 | 453 | 64 | --- | 131 | 409 | 443 | 124 | 402 | --- | 71.0 |
| Resample | 15-May-08 | 164.2 | --- | --- | 67.4 | --- | 129.8 | --- | --- | --- | --- | --- | --- |
| | 28-Oct-08 | 140 | 437 | 528 | 63 | --- | 124.0 | 542 | 449 | 152 | 422 | --- | 75.0 |
| | 8-Apr-09 | 148 | 429 | 475 | 60 | --- | 131 | 1,200 | 460 | 149 | 435 | --- | 116.0 |
| | 27-Oct-09 | 114 | 430 | 439 | 60 | --- | 114 | 613 | 427 | 124 | 417 | --- | 119.0 |
| | 8-Apr-10 | 146 | 433 | 450 | 73 | --- | 134 | 771 | 460 | 142 | 433 | --- | 158.0 |
| | 13-Oct-10 | 124 | 450 | 455 | 75 | --- | 121 | 639 | 474 | 144 | 440 | --- | 275 |
| | 27-Apr-11 | 123 | 439 | 551 | 84 | --- | 139 | 1115 | 475 | 164 | 437 | --- | 284 |
| | 20-Oct-11 | 99 | 420 | 460 | 84 | --- | 125 | 956 | 464 | 159 | 444 | --- | 1082 |
| | 26-Apr-12 | 107 | 409 | 490 | 82 | --- | 150 | 1054 | 477 | 195 | 446 | --- | 670 |
| | 16-Oct-12 | 103 | 422 | 435 | 90 | --- | 141 | 945 | 487 | 163 | 455 | --- | 1910 |
| | 11-Apr-13 | 100 | 422 | 440 | 89 | --- | 142 | 778 | 485 | 180 | 440 | --- | 1668 |
| | 30-Oct-13 | 101 | 514 | 434 | 86 | --- | 133 | 710 | 493 | 168 | 455 | --- | 1283 |
| | 9-Apr-14 | 154 | 489 | 362 | 95 | --- | 143 | 623 | 481 | 190 | 441 | --- | 2580 |
| | 22-Oct-14 | 113 | 512 | 389 | 93 | --- | 153 | 477 | 477 | 199 | 438 | --- | 2690 |
| | 8-Apr-15 | 88 | 519 | 311 | 97 | --- | 166 | 608 | 493 | 192 | 424 | --- | 2390 |
| pH | 1-Jul-99 | --- | --- | 5.7 | 5.4 | 5.1 | 5.6 | 6 | 7 | --- | --- | --- | --- |
| [standard units] | 1-Aug-99 | --- | --- | 5.4 | 5 | 4.2 | 5 | 5.6 | 6.4 | --- | --- | --- | --- |
| | 1-Oct-99 | --- | --- | 5.3 | 4.8 | 5.8 | 5.4 | 5.1 | 6.8 | --- | --- | --- | --- |
| | 1-Nov-99 | --- | --- | 5.2 | 4.8 | 5.6 | 5.3 | 5.2 | 6.7 | --- | --- | --- | --- |
| | 1-Apr-00 | --- | --- | 5 | 5 | 6 | 5.3 | 5.4 | 7.2 | --- | --- | --- | --- |
| | 1-Oct-00 | --- | --- | 5 | 4.8 | 5.3 | 5.3 | 4.8 | 6.3 | --- | --- | --- | --- |
| | 1-Apr-01 | --- | --- | 4.7 | 4.8 | 4.7 | 4.9 | 4.4 | 6.3 | --- | --- | --- | --- |
| | 1-Oct-01 | --- | --- | 5.1 | 5 | 4.4 | 5.2 | 5 | 6.6 | --- | --- | --- | --- |
| | 2-Apr-02 | 5.4 | 6.3 | 4.7 | 4.7 | 5.2 | 5.2 | 4.9 | 6.4 | --- | --- | --- | --- |
| | 1-Oct-02 | 4.9 | 7.1 | 5.9 | 4.9 | 5 | 5.5 | 4.9 | 7.2 | --- | --- | --- | --- |
| | 1-Apr-03 | 5.1 | 7.1 | 5.9 | 4.6 | 6.2 | 5.5 | 4.5 | 7 | --- | --- | --- | --- |
| | 1-Oct-03 | 4.6 | 6.7 | 6 | 4.6 | 5.9 | 5.1 | 3.9 | 6.9 | --- | --- | --- | --- |
| | 15-Apr-04 | 6.6 | 7.3 | 7 | 6.7 | 6.7 | 6.4 | 5.2 | 7.2 | 6.8 | 7.2 | 8 | --- |
| | 14-Oct-04 | 5.4 | 7 | 10 | 5 | --- | 5.3 | 4.7 | 6.8 | 4.9 | 6.7 | 5.3 | --- |
| | 5-Apr-05 | 5.1 | 7 | 5.9 | 5.1 | --- | 5.3 | 5 | 7 | 5 | 7 | 5 | --- |
| | 27-Oct-05 | 5.1 | 6.9 | 5.8 | 5.1 | --- | 5.1 | 4 | 7 | 5 | 7.1 | 4.8 | --- |
| | 21-Apr-06 | 5.3 | 7 | 5.9 | 5 | --- | 5.2 | 4 | 7 | 5 | 7.2 | 4.9 | --- |
| | 12-Oct-06 | 5.3 | 7 | 6 | 4.8 | --- | 5.2 | 4.2 | 7.0 | 5.1 | 7.1 | --- | --- |
| | 26-Apr-07 | 5.4 | 7.1 | 6.1 | 5.0 | --- | 5.3 | 4.6 | 7.1 | 4.9 | 7.2 | --- | --- |
| | 11-Oct-07 | 5.3 | 7 | 5.8 | 5.3 | --- | 5.1 | 5.1 | 7.1 | 5.1 | 7.2 | --- | 5.3 |
| Resample | 4-Dec-07 | 5.46 | 6.01 | 6.2 | 6.55 | --- | 6.2 | 5 | 6 | 5 | 6.0 | --- | 6.0 |
| | 3-Apr-08 | 4.9 | 6.8 | 6.1 | 4.9 | --- | 5.3 | 4 | 7 | 5 | 7.1 | --- | 4.8 |
| Resample | 15-May-08 | 5.66 | --- | --- | 5.8 | --- | 5.7 | --- | --- | --- | --- | --- | --- |
| | 28-Oct-08 | 4.6 | 7 | 6.2 | 4.9 | --- | 5.0 | 4 | 7 | 5 | 7.0 | --- | 5.0 |
| | 8-Apr-09 | 4.9 | 6.8 | 6.2 | 4.9 | --- | 5.0 | 4 | 7 | 5 | 6.6 | --- | 4.6 |
| | 27-Oct-09 | 4.6 | 6.8 | 6.1 | 5 | --- | 5.1 | 3.8 | 6.9 | 4.8 | 6.9 | --- | 4.2 |
| | 8-Apr-10 | 4.4 | 6.9 | 6.4 | 4.8 | --- | 5.1 | 4 | 7 | 5 | 7.1 | --- | 4.3 |
| | 13-Oct-10 | 4.7 | 6.7 | 6.2 | 4.8 | --- | 5.5 | 4.2 | 7 | 5.1 | 6.9 | --- | 3.9 |
| | 27-Apr-11 | 4.8 | 6.8 | 6.3 | 4.8 | --- | 5.1 | 4 | 6.8 | 5.1 | 6.9 | --- | 4.0 |
| | 20-Oct-11 | 4.5 | 6.9 | 6.2 | 5.1 | --- | 4.9 | 3.8 | 6.8 | 5 | 6.9 | --- | 5.2 |
| | 26-Apr-12 | 4.6 | 6.9 | 6.2 | 4.9 | --- | 5 | 3.9 | 6.8 | 5 | 7 | --- | 4.9 |
| | 16-Oct-12 | 4.7 | 7.1 | 6.3 | 4.8 | --- | 5 | 4.1 | 7.1 | 4.7 | 7.1 | --- | 6.0 |
| | 11-Apr-13 | 4.7 | 6.8 | 6.3 | 4.5 | --- | 4.9 | 4.2 | 7 | 4.7 | 6.9 | --- | 5.7 |
| | 30-Oct-13 | 4.7 | 6.5 | 6.3 | 4.9 | --- | 5.1 | 4.6 | 6.9 | 5.3 | 7 | --- | 6.1 |
| | 9-Apr-14 | 154 | 489 | 362 | 95 | --- | 143 | 623 | 481 | 190 | 441 | --- | 2580.0 |
| | 22-Oct-14 | 4.7 | 6.4 | 6.2 | 4.9 | --- | 5.0 | 5.2 | 6.7 | 4.9 | 6.8 | --- | 6.1 |
| | 8-Apr-15 | 4.9 | 6.6 | 6.2 | 4.4 | --- | 4.9 | 5.1 | 6.7 | 4.8 | 6.7 | --- | 5.8 |
| Temperature | 1-Jul-99 | --- | --- | 20 | 23 | 21 | 23 | 20 | 24 | --- | --- | --- | --- |
| [°C] | 1-Aug-99 | --- | --- | 23 | 23 | 23 | 24 | 23 | 20 | --- | --- | --- | --- |
| | 1-Oct-99 | --- | --- | 20 | 21 | 20 | 21 | 20 | 21 | --- | --- | --- | --- |
| | 1-Nov-99 | --- | --- | 17 | 18 | 18 | 18 | 17 | 17 | --- | --- | --- | --- |
| | 1-Apr-00 | --- | --- | 15 | 15 | 15 | 14 | 14 | 17 | --- | --- | --- | --- |
| | 1-Oct-00 | --- | --- | 20 | 20 | 20 | 19 | 20 | 20 | --- | --- | --- | --- |
| | 1-Apr-01 | --- | --- | 17.0 | 15 | 14 | 14 | 14 | 14 | --- | --- | --- | --- |
| | 1-Oct-01 | --- | --- | 20.0 | 21.0 | 20 | 21.0 | 21.0 | 19 | --- | --- | --- | --- |
| | 2-Apr-02 | 17 | 17 | 17.0 | 18 | 17 | 17 | 17 | 16 | --- | --- | --- | --- |
| | 1-Oct-02 | 25 | 22 | 25.0 | 26.0 | 24 | 24.0 | 24.0 | 23 | --- | --- | --- | --- |
| | 1-Apr-03 | 16 | 18 | 15.0 | 15 | 16 | 16 | 15 | 15 | --- | --- | --- | --- |
| | 1-Oct-03 | 20 | 19 | 20.0 | 19 | 20 | 20 | 21 | 21 | --- | --- | --- | --- |
| | 15-Apr-04 | 15 | 17 | 15.0 | 16 | 14 | 14 | 14 | 12 | 15.0 | 14 | 15.0 | --- |
| | 14-Oct-04 | 21 | 20 | 21.0 | 21 | --- | 21 | 22 | 21 | 21.0 | 22 | 21 | --- |
| | 5-Apr-05 | 15 | 15 | 16.0 | 15 | --- | 14 | 15 | 15 | 14.0 | 14 | 13 | --- |
| | 27-Oct-05 | 21 | 21.0 | 21.0 | 21 | --- | 21 | 21 | 22 | 20 | 21 | 21.0 | --- |
| | 21-Apr-06 | 17 | 18.0 | 18.0 | 17 | --- | 16 | 15 | 17 | 16 | 17 | 17.0 | --- |
| | 12-Oct-06 | 22 | 19.0 | 22.0 | 23 | --- | 22 | 23 | 19 | 21 | 19 | --- | --- |
| | 26-Apr-07 | 17 | 18.0 | 17.0 | 17 | --- | 15 | 16 | 18 | 4.9 | 7.2 | --- | --- |
| | 11-Oct-07 | 21 | 19 | 22 | 22 | --- | 21 | 21 | 18 | 20 | 18 | --- | 22 |
| Resample | 4-Dec-07 | 18.2 | 18.9 | 17.4 | 18.5 | --- | 16.7 | 13.8 | 17.9 | 16 | 17.1 | --- | 16.9 |
| | 3-Apr-08 | 16 | 18.0 | 15 | 15 | --- | 14 | 15 | 17 | 16 | 17 | --- | 15 |
| Resample | 15-May-08 | 17.4 | --- | --- | 17.8 | --- | 17.1 | --- | --- | --- | --- | --- | --- |
| | 28-Oct-08 | 21 | 18.0 | 20 | 20 | --- | 19 | 20 | 20 | 18 | 19 | --- | 20 |
| | 8-Apr-09 | 14 | 17.0 | 14 | 14 | --- | 13 | 14 | 15 | 14 | 15 | --- | 13 |
| | 27-Oct-09 | 21 | 19.0 | 22 | 21 | --- | 21 | 22 | 20 | 20 | 20 | --- | 21 |
| | 8-Apr-10 | 16 | 19.0 | 16 | 15 | --- | 16 | 15 | 16 | 16 | 16 | --- | 16 |
| | 13-Oct-10 | 22 | 19.0 | 23 | 23 | --- | 22 | 22 | 21 | 22 | 21 | --- | 22 |
| | 27-Apr-11 | 17 | 18 | 18 | 18 | --- | 17 | 16 | 17 | 17 | 17 | --- | 18 |
| | 20-Oct-11 | 20 | 17 | 21 | 19 | --- | 19.0 | 20.0 | 19.0 | 20.0 | 18.0 | --- | 20.0 |
| | 26-Apr-12 | 17 | 18 | 18 | 18 | --- | 17.0 | 17.0 | 17.0 | 17.0 | 17.0 | --- | 17.0 |
| | 16-Oct-12 | 22 | 19 | 22 | 22 | --- | 21.0 | 21.0 | 21.0 | 21.0 | 20.0 | --- | 22.0 |
| | 11-Apr-13 | 16 | 19 | 16 | 15 | --- | 15.0 | 15 | 17 | 15 | 17.0 | --- | 15.0 |
| | 30-Oct-13 | 21 | 19 | 21.0 | 21 | --- | 21 | 21 | 20.0 | 20 | 19.0 | --- | 20.0 |
| | 9-Apr-14 | 14 | 17 | 16.0 | 14 | --- | 13 | 13 | 14.0 | 14 | 16.0 | --- | 14.0 |
| | 22-Oct-14 | 21 | 21 | 21 | 21 | --- | 21 | 21 | 21 | 21 | 21 | --- | 21 |
| | 8-Apr-15 | 17 | 18 | 17 | 16 | --- | 15 | 15 | 15 | 15 | 16 | --- | 16 |
| Turbidity | 1-Jul-99 | --- | --- | 450 | 650 | 18.0 | 3.0 | 75 | 70.0 | --- | --- | --- | --- |
| [NTU] | 1-Aug-99 | --- | --- | 95 | 500 | 50.0 | 100.0 | 330 | 120.0 | --- | --- | --- | --- |
| | 1-Oct-99 | --- | --- | 250 | 110 | 100.0 | 31.0 | 15 | 26.0 | --- | --- | --- | --- |
| | 1-Nov-99 | --- | --- | 110 | 290 | 150 | 100.0 | 75 | 130 | --- | --- | --- | --- |
| | 1-Apr-00 | --- | --- | 50 | 500 | 140 | 37 | 22 | 25 | --- | --- | --- | --- |
| | 1-Oct-00 | --- | --- | 70 | 110 | 17 | 16 | 33 | 31 | --- | --- | --- | --- |
| | 1-Apr-01 | --- | --- | 80 | 70 | 14 | 12 | 32 | 34 | --- | --- | --- | --- |
| | 1-Oct-01 | --- | --- | 60 | 290 | 5 | 10 | 20 | 70 | --- | --- | --- | --- |
| | 2-Apr-02 | 14 | 24 | 35 | 32 | 25 | 11 | 24 | 8 | --- | --- | --- | --- |
| | 1-Oct-02 | 3 | 14 | 22 | 8.3 | 23 | 10 | 6.2 | 50 | --- | --- | --- | --- |
| | 1-Apr-03 | 60 | 120 | 33 | 120 | 24 | 22 | 12 | 21 | --- | --- | --- | --- |
| | 1-Oct-03 | 18 | 22 | 55 | 27 | 65 | 25 | 19 | 26 | --- | --- | --- | --- |
| | 15-Apr-04 | 70 | 29 | 65 | 400 | 40 | 32 | 37 | 21 | 220 | 65 | 75 | --- |
| | 14-Oct-04 | 39 | 26 | 38 | 40 | --- | 60 | 140 | 39 | 45 | 30 | 37 | --- |
| | 5-Apr-05 | 39 | 32 | 70 | 170 | --- | 65 | 27 | 12 | 190 | 38 | 100 | --- |
| | 27-Oct-05 | 19 | 39 | 200 | 110 | --- | 37 | 55 | 25 | 26 | 50 | 26 | --- |
| | 21-Apr-06 | 5.9 | 17 | 56 | 4.8 | --- | 4.2 | 1.6 | 37 | 3.7 | 132 | 1.5 | --- |
| | 12-Oct-06 | 19 | 160 | 50 | 24 | --- | 34 | 3.0 | 60 | 19 | 70 | --- | --- |
| | 26-Apr-07 | 200 | 130 | 95 | 12 | --- | 50 | 6.6 | 90 | 2.5 | 110 | --- | --- |
| | 11-Oct-07 | 80 | 90 | 90 | 45 | --- | 8 | 7.1 | 60 | 40 | 80 | --- | 4.4 |
| Resample | 4-Dec-07 | 53.1 | 50.4 | 90.3 | 811 | --- | 31.4 | 34.3 | 9.86 | 46.1 | 17.85 | --- | 28.8 |
| | 3-Apr-08 | 35.00 | 6.4 | 13 | 50 | --- | 75.00 | 7.2 | 65 | 26 | 33.00 | --- | 5.20 |
| Resample | 15-May-08 | 26.10 | --- | --- | 630 | --- | 31.60 | --- | --- | --- | --- | --- | --- |
| | 23-Oct-08 | 18.00 | 75.00 | 200 | 320 | --- | 70.00 | 60 | 40 | 28 | 60.0 | --- | 80 |
| | 8-Apr-09 | 38.00 | 70.00 | 75 | 250 | --- | 90 | 39 | 50 | 40 | 120 | --- | 27 |
| | 27-Oct-09 | 13.00 | 100.0 | 170 | 290 | --- | 70 | 33 | 45 | 29 | 65 | --- | 60.0 |
| | 8-Apr-10 | 19.00 | 33.0 | 130 | 190 | --- | 90.00 | 38 | 45 | 90 | 55.0 | --- | 26.0 |
| | 13-Oct-10 | 11.00 | 36.0 | 70 | 170 | --- | 90.00 | 31 | 50 | 280 | 70.0 | --- | 45.0 |
| | 27-Apr-11 | 16.00 | 60.0 | 85 | 60 | --- | 75.00 | 27 | 55 | 30 | 75.0 | --- | 17.0 |
| | 20-Oct-11 | 9.20 | 100.0 | 120 | 38 | --- | 110.00 | 68 | 59 | 34 | 70.0 | --- | 70.0 |
| | 26-Apr-12 | 29.00 | 100.0 | 85 | 140 | --- | 310.00 | 65 | 65 | 25 | 95.0 | --- | 110.0 |
| | 16-Oct-12 | 7.50 | 29.0 | 74.0 | 65.0 | --- | 40.00 | 31 | 40 | 25 | 70.0 | --- | 290.0 |
| | 11-Apr-13 | 16 | 45.0 | 40.0 | 60 | --- | 35 | 17 | 60 | 40 | 75 | --- | 120 |
| | 30-Oct-13 | 14 | 45.0 | 80.0 | 80 | --- | 70 | 37 | 50 | 34 | 60 | --- | 230 |
| | 9-Apr-14 | 36 | 70.0 | 95.0 | 100 | --- | 33 | 26 | 50 | 30 | 85 | --- | 38 |
| | 22-Oct-14 | 14 | 55 | 90 | 130 | --- | 75 | 20 | 35 | 16 | 60 | --- | 160 |
| | 8-Apr-15 | 20 | 60 | 70 | 85 | --- | 110 | 50 | 90 | 22 | 70 | --- | 120 |

Notes:
1. Measurments taken in the Field by Environment 1
2. --- = No Data Avaliable

# TABLE 9B

## SUMMARY of FIELD PARAMETERS
## C.R.S.W.M.A. LONG-TERM REGIONAL LF PHASE 3

| Analyte | Sample Collection Date | MW-15S | MW-15D | MW-16S | MW-16D | MW-17S | MW-17D | MW-18S | MW-18D | MW-19S | MW-19D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Conductivity | 31-Oct-13 | 189 | 418 | 600 | 514 | 326 | 138 | 1075 | 382 | 107 | 469 |
| [uMhos] | 10-Apr-14 | 290 | 433 | 833 | 649 | 463 | 390 | 1203 | 407 | 103 | 529 |
| | 23-Oct-14 | 740 | 424 | 1015 | 498 | 431 | 402 | 1264 | 473 | 89 | 391 |
| | 8-Apr-15 | 110 | 460 | 1084 | 425 | 620 | 400 | 1266 | 403 | 78 | 351 |
| pH | 31-Oct-13 | 4.6 | 6.9 | 3.9 | 6.7 | 3.9 | 9.1 | 3.9 | 6.5 | 5.8 | 6.6 |
| [standard units] | 10-Apr-14 | 5.4 | 6.9 | 4.1 | 6.5 | 3.9 | 6.4 | 3.9 | 6.6 | 6.5 | 6.8 |
| | 23-Oct-14 | 5.2 | 6.9 | 3.9 | 6.4 | 3.9 | 7 | 3.8 | 6.6 | 5.8 | 6.7 |
| | 8-Apr-15 | 4.4 | 6.9 | 4.1 | 7.2 | 3.8 | 6.7 | 4.5 | 6.9 | 5.9 | 6.8 |
| Temperature | 31-Oct-13 | 21 | 20 | 21 | 21 | 21 | 22 | 21 | 20 | 22 | 21 |
| [°C] | 10-Apr-14 | 15 | 17 | 15 | 16 | 15 | 16 | 14 | 16 | 15 | 16 |
| | 23-Oct-14 | 20 | 20 | 21 | 20 | 19 | 19 | 20 | 21 | 21 | 21 |
| | 8-Apr-15 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 16 | 15 |
| Turbidity | 31-Oct-13 | 18 | 65 | 50 | 80 | 270 | 85.5 | 80 | 26.0 | 65.0 | 600 |
| [NTU] | 10-Apr-14 | 21 | 11 | 11 | 55 | 17 | 22 | 12 | 35.0 | 55.0 | 120 |
| | 23-Oct-14 | 7.8 | 20 | 36 | 21 | 120 | 8.4 | 7.6 | 16 | 34 | 26 |
| | 8-Apr-15 | 68 | 30 | 56 | 42 | 190 | 22 | 21 | 20 | 36 | 25 |

**Notes:**
1. Measurements entered with units and digits as reported by laboratory report.

# TABLE 10

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA LF - LEACHATE STORAGE AREA

| | Sample | | | Upgradient | | Downgraident | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Anayte** | Collection Date | DL | SWSL | LST-5S | | LST-1S | | LST-1D | | LST-2S | | LST-2D | | LST-3S | | LST-3D | | LST-4S | | LST-4D | | LST-5D | | LST-6S | | LST-6D | | Blanks | |
| **Inorganic Compounds** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antimony | 1-Jul-93 | NR | 5 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Aug-93 | NR | 5 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Sep-93 | NR | 5 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Sep-93 | NR | 5 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-94 | NR | 2 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | 2 | | ND | |
| | 1-Oct-94 | NR | 30 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-95 | NR | 30 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-95 | NR | 30 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-96 | NR | 30 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-96 | NR | 30 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 30 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 30 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Mar-99 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-99 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-00 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-01 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-02 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 3-Oct-02 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-03 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-03 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 15-Apr-04 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 14-Oct-04 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 5-Apr-05 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 27-Oct-05 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 21-Apr-06 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 12-Oct-06 | NR | 30 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 26-Apr-07 | NR | 6.0 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 10-Oct-07 | 0.05 | 6.0 | 0.2 | B | 0.1 | B | 0.1 | B | 0.1 | B | --- | | 0.1 | B | --- | | 0.5 | B | --- | | 0.1 | B | 0.1 | B | --- | | 0.1 | J |
| GWPS = 1.4 µg/L (10/23/07) | 3-Apr-08 | 0.08 | 6.0 | 0.1 | B | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | 0.5 | B | --- | | 0.1 | J |
| | 28-Oct-08 | 0.08 | 6.0 | 0.6 | J | ND | | 0.2 | J | ND | | --- | | 0.4 | J | --- | | 0.1 | J | --- | | 0.2 | J | 0.1 | J | --- | | ND | |
| | 8-Apr-09 | 0.06 | 6.0 | 0.2 | J | 0.2 | J | 0.1 | J | ND | | --- | | ND | | --- | | ND | | --- | | 0.1 | J | ND | | --- | | ND | |
| | 27-Oct-09 | 0.06 | 6.0 | 0.3 | J | 0.1 | J | 0.7 | J | 0.3 | J | --- | | 0.2 | J | --- | | ND | | --- | | 0.2 | J | 0.1 | J | --- | | ND | |
| | 8-Apr-10 | 0.22 | 6.0 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | 0.4 | B | ND | | --- | | 0.7 | J |
| GWPS = 1 µg/L (8/1/10) | 13-Oct-10 | 0.22 | 6.0 | 0.5 | J | ND | | ND | | ND | | --- | | 0.6 | J | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 27-Apr-11 | 0.14 | 6.0 | 0.36 | J | ND | | ND | | 1.5 | J | --- | | ND | | --- | | 0.30 | J | --- | | ND | | ND | | --- | | ND | |
| | 20-Oct-11 | 0.14 | 6.0 | 0.31 | J | ND | | 0.18 | J | ND | | --- | | ND | | --- | | ND | | --- | | ND | | 0.34 | J | --- | | ND | |
| | 26-Apr-12 | 0.14 | 6.0 | 0.29 | J | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 16-Oct-12 | 0.02 | 6.0 | 0.88 | J | 0.17 | J | 0.64 | J | 0.11 | J | --- | | 0.08 | J | --- | | 0.09 | J | --- | | 0.785 | | 0.04 | J | --- | | ND | |
| | 11-Apr-13 | 0.02 | 6.0 | 0.72 | J | 0.14 | J | 0.19 | J | 0.05 | J | --- | | 0.12 | J | --- | | 0.05 | J | --- | | 0.47 | J | 0.15 | J | --- | | ND | |
| | 30-Oct-13 | 0.02 | 6.0 | 0.86 | J | 0.11 | B | 0.80 | J | 0.19 | B | --- | | 0.14 | B | --- | | 0.14 | B | --- | | 0.43 | J | 0.10 | B | --- | | 0.08 | J |
| | 9-Apr-14 | 0.02 | 6.0 | 0.28 | J | 0.09 | J | 0.83 | J | 0.39 | J | ND | | 0.18 | J | --- | | 0.04 | J | --- | | 0.55 | J | 0.09 | J | --- | | ND | |
| | 22-Oct-14 | 0.12 | 6.0 | 1.2 | J | ND | | 0.22 | J | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 8-Apr-15 | 0.12 | 6.0 | 0.23 | J | ND | | 0.14 | J | 0.27 | J | --- | | ND | | --- | | 0.13 | J | --- | | ND | | ND | | --- | | ND | |
| Arsenic | 1-Jul-93 | NR | 5 | ND | | 9 | | ND | | ND | | ND | | ND | | ND | | 16 | | ND | | 5 | | ND | | 27 | | ND | |
| | 1-Aug-93 | NR | 5 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | 15 | | ND | | ND | | ND | | 6 | | ND | |
| | 1-Sep-93 | NR | 5 | ND | | ND | | ND | | 5 | | 153 | | ND | | ND | | 17 | | ND | | ND | | ND | | ND | | ND | |
| | 1-Sep-93 | NR | 5 | ND | | ND | | ND | | ND | | 8 | | ND | | ND | | 37 | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-94 | NR | 5 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | 9 | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-94 | NR | 10 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-95 | NR | 10 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-95 | NR | 10 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-96 | NR | 10 | ND | | ND | | ND | | ND | | NA | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-96 | NR | 10 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 10 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 10 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | 18 | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Mar-99 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-99 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-00 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-01 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-02 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 3-Oct-02 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-03 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-03 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 15-Apr-04 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 14-Oct-04 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 5-Apr-05 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 27-Oct-05 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 21-Apr-06 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 12-Oct-06 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 26-Apr-07 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 10-Oct-07 | 0.47 | 10.0 | 2.4 | J | 1.0 | J | ND | | 3.0 | J | --- | | 1.7 | J | --- | | 13 | | --- | | ND | | 1.0 | J | --- | | ND | |
| NC 2L = 50 µg/L (10/23/07) Resamp | 4-Dec-07 | 2.7 | 5.0 | --- | | --- | | --- | | --- | | --- | | --- | | --- | | 9.5 | | --- | | --- | | --- | | --- | | ND | |
| | 3-Apr-08 | 0.07 | 10.0 | 1.2 | J | 0.6 | J | 0.4 | J | 0.3 | J | --- | | 1.7 | J | --- | | 11 | | --- | | 0.4 | J | 0.5 | J | --- | | ND | |
| | 28-Oct-08 | 0.07 | 10.0 | 0.9 | J | 0.7 | J | 1.0 | J | 1.8 | J | --- | | 1.7 | J | --- | | 3.1 | J | --- | | 0.8 | J | 1.5 | J | --- | | ND | |
| | 8-Apr-09 | 0.17 | 10.0 | 1.9 | J | 0.8 | B | 0.8 | B | 1.0 | B | --- | | 1.0 | B | --- | | 2.1 | J | --- | | 0.9 | B | 1.5 | J | --- | | 0.2 | J |
| | 27-Oct-09 | 0.17 | 10.0 | 1.7 | J | 0.8 | J | 0.7 | J | 0.6 | J | --- | | 0.6 | J | --- | | 4.7 | J | --- | | 1 | J | 2.1 | J | --- | | ND | |
| NC 2L = 10 µg/L (1/1/10) | 8-Apr-10 | 0.04 | 10.0 | 1.9 | J | 0.5 | J | 0.3 | J | 0.8 | J | --- | | 0.2 | J | --- | | 0.9 | J | --- | | 1.3 | J | 0.9 | J | --- | | ND | |
| | 13-Oct-10 | 0.04 | 10.0 | 4.6 | J | 0.8 | J | 1.3 | J | 0.7 | J | --- | | 0.6 | J | --- | | 1.8 | J | --- | | 1.9 | J | 1 | J | --- | | ND | |
| | 27-Apr-11 | 0.10 | 10.0 | 1.7 | J | 0.41 | J | 0.44 | J | 0.72 | J | --- | | 0.31 | J | --- | | 1.7 | J | --- | | 1.4 | J | 0.54 | J | --- | | ND | |
| | 20-Oct-11 | 0.10 | 10.0 | 1.6 | J | 0.53 | J | 0.70 | J | 0.72 | J | --- | | 0.54 | J | --- | | 1.4 | J | --- | | 0.77 | J | 0.39 | J | --- | | ND | |
| | 26-Apr-12 | 0.10 | 10.0 | 1.5 | J | 0.29 | J | 0.58 | J | 0.73 | J | --- | | 0.54 | J | --- | | 1.4 | J | --- | | 0.77 | J | 0.39 | J | --- | | ND | |
| | 16-Oct-12 | 0.13 | 10.0 | 1.6 | B | 0.67 | B | 1.0 | B | 0.86 | B | --- | | 0.52 | B | --- | | 2.0 | B | --- | | 2.6 | J | 0.47 | B | --- | | 0.40 | J |
| | 11-Apr-13 | 0.05 | 10.0 | 1.3 | J | 0.75 | B | 0.83 | J | 0.75 | B | --- | | 0.38 | B | --- | | 1.2 | J | --- | | 1.1 | J | 0.37 | B | --- | | 0.15 | J |
| | 30-Oct-13 | 0.05 | 10.0 | 2.1 | J | 0.57 | B | 0.90 | B | 0.74 | B | --- | | 0.50 | B | --- | | 3.5 | J | --- | | 1.3 | J | 0.57 | B | --- | | 0.20 | J |
| | 9-Apr-14 | 0.05 | 10.0 | 1.7 | J | 0.14 | J | 1.2 | J | 1.4 | J | --- | | 0.82 | J | --- | | 2.0 | J | --- | | 2.2 | J | 0.4 | J | --- | | ND | |
| | 22-Oct-14 | 0.10 | 10.0 | 1.6 | J | 0.62 | J | 0.42 | J | 0.46 | J | --- | | 0.56 | J | --- | | 1.1 | J | --- | | 0.72 | J | 0.22 | J | --- | | ND | |
| | 8-Apr-15 | 0.10 | 10.0 | 3.2 | J | 1.1 | J | 0.78 | J | 1.3 | J | --- | | 1.9 | J | --- | | 1.0 | J | --- | | 1.0 | J | 1.1 | J | --- | | ND | |
| Barium | 1-Jul-93 | NR | 50 | 272 | | 424 | | 260 | | 151 | | 152 | | 128 | | 160 | | 208 | | 204 | | 351 | | 126 | | NA | | ND | |
| | 1-Aug-93 | NR | 50 | 196 | | 216 | | 144 | | 133 | | 128 | | 240 | | 242 | | 126 | | 256 | | 292 | | 68 | | 112 | | ND | |
| | 1-Sep-93 | NR | 50 | 92 | | 71 | | 212 | | 75 | | 460 | | 79 | | 104 | | 194 | | 94 | | 120 | | 61 | | 62 | | ND | |
| | 1-Sep-93 | NR | 50 | 113 | | 194 | | 120 | | 94 | | 121 | | 121 | | 170 | | 155 | | 132 | | 184 | | 74 | | 77 | | ND | |
| | 1-Apr-94 | NR | 50 | ND | | 84 | | 69 | | ND | | 94 | | ND | | 52 | | 80 | | ND | | 62 | | 90 | | ND | | ND | |
| | 1-Oct-94 | NR | 500 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-95 | NR | 500 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-95 | NR | 500 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-96 | NR | 500 | ND | | ND | | ND | | ND | | NA | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-96 | NR | 500 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 500 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 500 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Mar-99 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | --- | | ND | | --- | | ND | |
| | 1-Oct-99 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-00 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-01 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-02 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 3-Oct-02 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-03 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-03 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 15-Apr-04 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 14-Oct-04 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 5-Apr-05 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 27-Oct-05 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 21-Apr-06 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 12-Oct-06 | NR | 500 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 26-Apr-07 | NR | 100 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 10-Oct-07 | 0.04 | 100.0 | 30.9 | J | 63.7 | J | 37.3 | J | 42 | J | --- | | 91.5 | J | --- | | 184 | | --- | | 51.8 | J | 34 | J | --- | | 0.2 | J |
| NC 2L = 2,000 µg/L (10/23/07) | 3-Apr-08 | 0.11 | 100.0 | 27.9 | J | 66.0 | J | 38.9 | J | 36.8 | J | --- | | 119 | | --- | | 58.3 | J | --- | | 58.4 | J | 43.8 | J | --- | | ND | |
| | 28-Oct-08 | 0.11 | 100.0 | 34 | J | 53.5 | J | 47.6 | J | 64.8 | J | --- | | 158 | | --- | | 66.2 | J | --- | | 71.8 | J | 84.8 | J | --- | | 0.2 | J |
| | 8-Apr-09 | 0.04 | 100.0 | 33.1 | J | 61.2 | J | 44.5 | J | 55.6 | J | --- | | 77.3 | J | --- | | 52.9 | J | --- | | 85.0 | J | 79.7 | J | --- | | 0.2 | J |
| | 27-Oct-09 | 0.04 | 100.0 | 37.9 | J | 48.8 | J | 35.3 | J | 43.3 | J | --- | | 101 | | --- | | 68.2 | J | --- | | 82.7 | J | 81.7 | J | --- | | 0.1 | J |
| NC 2L = 700 µg/L (1/1/10) | 8-Apr-10 | 0.03 | 100.0 | 31.9 | J | 58.1 | J | 40.2 | J | 60.4 | J | --- | | 45.7 | J | --- | | 33.1 | J | --- | | 96.7 | J | 78.6 | J | --- | | 0.1 | J |
| | 13-Oct-10 | 0.03 | 100.0 | 161 | | 38.3 | J | 36.2 | J | 32 | J | --- | | 89.1 | J | --- | | 53.2 | J | --- | | 98.5 | J | 61 | J | --- | | 0.2 | J |
| | 27-Apr-11 | 0.02 | 100.0 | 41.5 | J | 46.4 | J | 38.5 | J | 37.8 | J | --- | | 59.4 | J | --- | | 41.1 | J | --- | | 95.4 | J | 51.6 | J | --- | | 0.10 | J |
| | 20-Oct-11 | 0.02 | 100.0 | 37.6 | J | 33.8 | J | 41.0 | J | 29.4 | J | --- | | 115 | | --- | | 58.6 | J | --- | | 68.1 | J | 41.3 | J | --- | | 0.10 | J |
| | 26-Apr-12 | 0.02 | 100.0 | 43.7 | J | 52.5 | J | 45.2 | J | 35.8 | J | --- | | 68.9 | J | --- | | 49.9 | J | --- | | 92.7 | J | 55.6 | J | --- | | 0.12 | J |
| | 16-Oct-12 | 0.07 | 100.0 | 37.8 | J | 57.7 | J | 49.3 | J | 52.9 | J | --- | | 57.1 | J | --- | | 58.4 | J | --- | | 96.3 | J | 44.8 | J | --- | | 0.28 | J |
| | 11-Apr-13 | 0.06 | 100.0 | 35.0 | J | 57.9 | J | 40.9 | J | 31.3 | J | --- | | 35.6 | J | --- | | 41.7 | J | --- | | 78.5 | J | 56.8 | J | --- | | 0.06 | J |
| | 30-Oct-13 | 0.06 | 100.0 | 31.1 | J | 37.3 | J | 47.8 | J | 32.6 | J | --- | | 68.7 | J | --- | | 74.9 | J | --- | | 85.0 | J | 50.8 | J | --- | | 0.24 | J |
| | 9-Apr-14 | 0.06 | 100.0 | 32.7 | J | 70.9 | J | 44.9 | J | 47.3 | J | --- | | 42.5 | J | --- | | 62 | J | --- | | 94.5 | J | 72.6 | J | --- | | ND | |
| | 22-Oct-14 | 0.12 | 100.0 | 33.7 | J | 62.4 | J | 47.1 | J | 66.3 | J | --- | | 60.6 | J | --- | | 82.8 | J | --- | | 66.6 | J | 54.7 | J | --- | | ND | |
| | 8-Apr-15 | 0.12 | 100.0 | 69.5 | J | 76.6 | J | 41.4 | J | 65.8 | J | --- | | 65.4 | J | --- | | 58.7 | J | --- | | 58.7 | J | 66.1 | J | --- | | ND | |

# TABLE 10

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA LF - LEACHATE STORAGE AREA

| | Sample | | | **Upgradient** | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | **Downgraident** | | | | | | | | | | | | | | | | | |
| **Anayte** | Collection Date | DL | SWSL | LST-5S | | LST-1S | | LST-1D | | LST-2S | | LST-2D | | LST-3S | | LST-3D | | LST-4S | | LST-4D | | LST-5D | | LST-6S | | LST-6D | | Blanks | |
| Beryllium | 1-Jul-93 | NR | 1 | 3 | | 4 | | ND | | 2 | | ND | | 2 | | ND | | 4 | | 3 | | 3 | | ND | | 4 | | ND | |
| | 1-Aug-93 | NR | 1 | 2 | | 2 | | ND | | 2 | | ND | | 4 | | ND | | 3 | | ND | | ND | | ND | | 2 | | ND | |
| | 1-Sep-93 | NR | 1 | 1 | | ND | | ND | | 2 | | 25 | | 2 | | ND | | 4 | | ND | | ND | | ND | | ND | | ND | |
| | 1-Sep-93 | NR | 1 | 2 | | 3 | | ND | | ND | | 1 | | 2 | | 1 | | 4 | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-94 | NR | 1 | ND | | ND | | ND | | ND | | ND | | 2 | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-94 | NR | 2 | ND | | ND | | ND | | ND | | ND | | 2 | | ND | | 2 | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-95 | NR | 2 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-95 | NR | 2 | ND | | ND | | ND | | 2 | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-96 | NR | 2 | ND | | ND | | ND | | ND | | NA | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-96 | NR | 2 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | 3 | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 2 | ND | | 3 | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 2 | 3 | | ND | | ND | | 2 | | ND | | ND | | --- | | 3 | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 2 | ND | | ND | | ND | | 2.1 | | --- | | ND | | --- | | 3.2 | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Mar-99 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-99 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-00 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-01 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-02 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 3-Oct-02 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-03 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-03 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 15-Apr-04 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 14-Oct-04 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 5-Apr-05 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 27-Oct-05 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 21-Apr-06 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 12-Oct-06 | NR | 2 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 26-Apr-07 | NR | 1.0 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 10-Oct-07 | 0.08 | 1.0 | ND | | 0.5 | J | 0.1 | J | 0.3 | J | --- | | 0.5 | J | --- | | 1.6 | | --- | | 0.1 | J | 0.1 | J | --- | | ND | |
| GWPS = 4 µg/L (10/23/07) | 3-Apr-08 | 0.06 | 1.0 | ND | | 0.4 | J | 0.1 | J | 0.2 | J | --- | | 1.2 | | --- | | 0.4 | J | --- | | 0.2 | J | 0.2 | J | --- | | ND | |
| | 28-Oct-08 | 0.06 | 1.0 | 0.1 | J | 0.5 | J | 0.1 | J | 0.6 | J | --- | | 1.0 | | --- | | 0.6 | J | --- | | 0.3 | J | 0.4 | J | --- | | ND | |
| | 8-Apr-09 | 0.06 | 1.0 | 0.2 | J | 0.5 | J | 0.1 | J | 0.4 | J | --- | | 0.5 | J | --- | | 0.6 | J | --- | | 0.2 | J | 0.4 | J | --- | | ND | |
| | 27-Oct-09 | 0.06 | 1.0 | 0.2 | J | 0.3 | J | 0.2 | J | 0.4 | J | --- | | 0.7 | J | --- | | 0.8 | J | --- | | 0.3 | J | 0.5 | J | --- | | ND | |
| | 8-Apr-10 | 0.02 | 1.0 | 0.1 | B | 0.3 | B | 0.1 | B | 0.4 | B | --- | | 0.3 | B | --- | | 0.3 | B | --- | | 0.3 | B | 0.3 | B | --- | | 0.1 | J |
| GWPS = 4 µg/L (10/1/10) | 13-Oct-10 | 0.02 | 1.0 | 0.1 | J | 0.3 | J | 0.2 | J | 0.3 | J | --- | | 0.6 | J | --- | | 0.6 | J | --- | | 0.2 | J | 0.3 | J | --- | | ND | |
| | 27-Apr-11 | 0.02 | 1.0 | 0.15 | J | 0.29 | J | 0.07 | J | 0.28 | J | --- | | 0.30 | J | --- | | 0.33 | J | --- | | 0.23 | J | 0.17 | J | --- | | ND | |
| | 20-Oct-11 | 0.02 | 1.0 | 0.22 | J | 0.24 | J | 0.12 | J | 0.67 | J | --- | | 0.67 | J | --- | | 0.42 | J | --- | | 0.20 | J | 0.22 | J | --- | | ND | |
| | 26-Apr-12 | 0.02 | 1.0 | 0.17 | J | 0.33 | J | 0.11 | J | 0.34 | J | --- | | 0.40 | J | --- | | 0.34 | J | --- | | 0.17 | J | 0.18 | J | --- | | ND | |
| | 16-Oct-12 | 0.07 | 1.0 | ND | | 0.42 | J | 0.13 | J | 0.40 | J | --- | | 0.25 | J | --- | | 0.40 | J | --- | | 0.47 | J | 0.20 | J | --- | | ND | |
| | 11-Apr-13 | 0.03 | 1.0 | 0.16 | J | 0.43 | J | 0.08 | J | 0.27 | J | --- | | 0.24 | J | --- | | 0.36 | J | --- | | 0.30 | J | 0.20 | J | --- | | ND | |
| | 30-Oct-13 | 0.03 | 1.0 | 0.12 | B | 0.24 | J | 0.13 | B | 0.25 | J | --- | | 0.32 | J | --- | | 0.58 | J | --- | | 0.22 | J | 0.19 | B | --- | | 0.04 | J |
| | 9-Apr-14 | 0.03 | 1.0 | 0.09 | J | 0.43 | J | 0.07 | J | 0.35 | J | --- | | 0.23 | J | --- | | 0.49 | J | --- | | 0.31 | J | 0.26 | J | --- | | ND | |
| | 22-Oct-14 | 0.04 | 1.0 | 0.08 | J | 0.42 | J | ND | | 0.38 | J | --- | | 0.22 | J | --- | | 0.49 | J | --- | | 0.24 | J | 0.17 | J | --- | | ND | |
| | 8-Apr-15 | 0.04 | 1.0 | 0.55 | J | 0.50 | J | 0.07 | J | 0.37 | J | --- | | 0.48 | J | --- | | 0.32 | J | --- | | 0.10 | J | 0.23 | J | --- | | ND | |
| Cadmium | 1-Jul-93 | NR | 1 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | 1 | | ND | | ND | | ND | |
| | 1-Aug-93 | NR | 1 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Sep-93 | NR | 1 | ND | | ND | | ND | | ND | | 5 | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Sep-93 | NR | 1 | ND | | ND | | ND | | ND | | 5 | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-94 | NR | 1 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-94 | NR | 1 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-95 | NR | 1 | ND | | ND | | ND | | ND | | ND | | 1 | | ND | | 1 | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-95 | NR | 1 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-96 | NR | 1 | ND | | ND | | ND | | ND | | NA | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-96 | NR | 1 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 1 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 1 | 1 | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Mar-99 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-99 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-00 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-01 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-02 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 3-Oct-02 | NR | 1 | 2 | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | 1 | | ND | | --- | | ND | |
| | 2-Apr-03 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-03 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | 5 | | 2 | | --- | | ND | |
| | 15-Apr-04 | NR | 1 | ND | | 3 | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 14-Oct-04 | NR | 1 | 1 | | ND | | 2 | | ND | | --- | | ND | | --- | | ND | | --- | | 1 | | 1 | | --- | | ND | |
| | 5-Apr-05 | NR | 1 | ND | | 1 | | 1 | | ND | | --- | | 1 | | --- | | 1 | | --- | | ND | | 2 | | --- | | ND | |
| | 27-Oct-05 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 21-Apr-06 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 12-Oct-06 | NR | 1 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 26-Apr-07 | NR | 1.0 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 10-Oct-07 | 0.06 | 1.0 | 0.4 | B | 0.5 | B | 0.1 | B | 0.5 | B | --- | | 0.5 | B | --- | | 0.5 | B | --- | | 0.2 | B | 1.1 | | --- | | 0.1 | J |
| NC 2L = 1.75 µg/L (10/23/07) | 3-Apr-08 | 0.04 | 1.0 | 0.1 | J | 0.1 | J | ND | | 0.1 | J | --- | | 0.3 | J | --- | | 0.2 | J | --- | | 0.1 | J | 0.4 | J | --- | | ND | |
| | 28-Oct-08 | 0.04 | 1.0 | 0.1 | J | 0.3 | J | 0.3 | J | 0.1 | J | --- | | 0.4 | J | --- | | 0.2 | J | --- | | 0.1 | J | 0.1 | J | --- | | ND | |
| | 8-Apr-09 | 0.04 | 1.0 | 0.1 | J | 0.3 | J | 0.1 | J | 0.2 | J | --- | | 0.5 | J | --- | | 0.2 | J | --- | | 0.2 | J | 0.3 | J | --- | | ND | |
| | 27-Oct-09 | 0.04 | 1.0 | 0.7 | J | 0.1 | J | ND | | 0.2 | J | --- | | 0.1 | J | --- | | 0.7 | J | --- | | 0.1 | J | 1 | | --- | | ND | |
| NC 2L = 2 µg/L (1/1/10) | 8-Apr-10 | 0.02 | 1.0 | 0.1 | B | 0.3 | B | 0.1 | B | 0.3 | B | --- | | 0.1 | B | --- | | 0.4 | B | --- | | 0.8 | J | 0.1 | B | --- | | 0.1 | J |
| | 13-Oct-10 | 0.02 | 1.0 | 0.4 | J | 0.2 | J | 0.2 | J | 0.3 | J | --- | | 0.1 | J | --- | | 0.2 | J | --- | | 0.1 | J | 0.1 | J | --- | | ND | |
| | 27-Apr-11 | 0.02 | 1.0 | 0.12 | J | 0.18 | J | 0.05 | J | 0.18 | J | --- | | 0.07 | J | --- | | 0.21 | J | --- | | 0.17 | J | 0.06 | J | --- | | ND | |
| | 20-Oct-11 | 0.02 | 1.0 | 0.04 | J | ND | | 0.20 | J | 0.07 | J | --- | | 0.06 | J | --- | | 0.15 | J | --- | | 0.08 | J | ND | | --- | | ND | |
| | 26-Apr-12 | 0.02 | 1.0 | 0.12 | J | 0.16 | J | 0.16 | J | 0.08 | J | --- | | 0.18 | J | --- | | 0.10 | J | --- | | 0.10 | J | ND | | --- | | ND | |
| | 16-Oct-12 | 0.03 | 1.0 | 0.17 | J | 0.28 | J | 0.13 | J | 0.44 | J | --- | | 0.36 | J | --- | | 0.39 | J | --- | | 0.50 | J | 0.14 | J | --- | | ND | |
| | 11-Apr-13 | 0.05 | 1.0 | 0.24 | J | 0.51 | J | 0.13 | J | 0.06 | J | --- | | 0.20 | J | --- | | 0.21 | J | --- | | 0.22 | J | 0.05 | J | --- | | ND | |
| | 30-Oct-13 | 0.05 | 1.0 | 0.28 | J | 0.05 | J | 0.17 | J | 0.17 | J | --- | | 0.23 | J | --- | | 0.32 | J | --- | | 0.15 | J | ND | | --- | | ND | |
| | 9-Apr-14 | 0.05 | 1.0 | 0.58 | J | 0.14 | J | 0.46 | J | 0.42 | J | --- | | 0.05 | J | --- | | 0.22 | J | --- | | 0.55 | J | 0.09 | J | --- | | ND | |
| | 22-Oct-14 | 0.04 | 1.0 | 0.22 | J | 0.12 | J | 0.11 | J | 0.17 | J | --- | | 0.10 | J | --- | | 0.26 | J | --- | | 0.20 | J | ND | | --- | | ND | |
| | 8-Apr-15 | 0.04 | 1.0 | 0.33 | J | 0.12 | J | ND | | 0.08 | J | --- | | 0.12 | J | --- | | 0.08 | J | --- | | ND | | 0.09 | J | --- | | ND | |
| Total Chromium | 1-Jul-93 | NR | 5 | 36 | | 72 | | 14 | | 32 | | 8 | | 7 | | ND | | ND | | 26 | | 8 | | ND | | 35 | | ND | |
| | 1-Aug-93 | NR | 5 | 18 | | 17 | | ND | | 16 | | ND | | 23 | | ND | | ND | | ND | | ND | | ND | | 11 | | ND | |
| | 1-Sep-93 | NR | 5 | 19 | | 12 | | ND | | 17 | | 136 | | 9 | | ND | | ND | | ND | | ND | | ND | | 6 | | ND | |
| | 1-Sep-93 | NR | 5 | 19 | | 29 | | ND | | 8 | | 9 | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-94 | NR | 5 | ND | | 9 | | 34 | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-94 | NR | 10 | ND | | 10 | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-95 | NR | 10 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-95 | NR | 10 | ND | | ND | | ND | | 22 | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-96 | NR | 10 | ND | | ND | | ND | | ND | | NA | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-96 | NR | 10 | ND | | 13 | | ND | | ND | | ND | | ND | | --- | | 27 | | --- | | ND | | 10 | | --- | | ND | |
| | 1-Apr-97 | NR | 10 | 16 | | 32 | | ND | | ND | | ND | | ND | | --- | | 20 | | --- | | 10 | | 14 | | --- | | ND | |
| | 1-Oct-97 | NR | 10 | 15 | | ND | | ND | | 16 | | ND | | ND | | --- | | 32 | | --- | | 21 | | 33 | | --- | | ND | |
| | 1-Apr-98 | NR | 10 | 32 | | ND | | ND | | 12 | | --- | | ND | | --- | | 26 | | --- | | ND | | 23 | | --- | | ND | |
| | 1-Oct-98 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Mar-99 | NR | 10 | 17 | | 11 | | ND | | 18 | | --- | | ND | | --- | | 34 | | --- | | ND | | 10 | | --- | | ND | |
| | 1-Oct-99 | NR | 10 | ND | | 10 | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-00 | NR | 5 | 28 | | 170 | | ND | | 18 | | --- | | ND | | --- | | 51 | | --- | | 10 | | 40 | | --- | | ND | |
| | 1-Oct-00 | NR | 10 | ND | | ND | | ND | | 11 | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-01 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 10 | ND | | ND | | ND | | 18 | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-02 | NR | 10 | 20 | | ND | | ND | | 19 | | --- | | ND | | --- | | 40 | | --- | | ND | | ND | | --- | | ND | |
| | 3-Oct-02 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-03 | NR | 10 | 14 | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | 10 | | --- | | ND | |
| | 1-Oct-03 | NR | 10 | 14 | | ND | | ND | | 17 | | --- | | ND | | --- | | 19 | | --- | | ND | | ND | | --- | | ND | |
| | 15-Apr-04 | NR | 10 | 11 | | 20 | | ND | | 22 | | --- | | ND | | --- | | ND | | --- | | 11 | | 13 | | --- | | ND | |
| | 14-Oct-04 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 5-Apr-05 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 27-Oct-05 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 21-Apr-06 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 12-Oct-06 | NR | 10 | ND | | ND | | ND | | ND | | --- | | 17 | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 26-Apr-07 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 10-Oct-07 | 0.24 | 10.0 | 3.2 | B | 1.1 | B | 1.2 | B | 1.4 | B | --- | | 1.6 | B | --- | | 2 | B | --- | | 1.4 | B | 2.2 | B | --- | | 1.2 | J |
| NC 2L = 50 µg/L (10/23/07) | 3-Apr-08 | 0.11 | 10.0 | 0.5 | J | ND | | ND | | 1.2 | J | --- | | 1.5 | J | --- | | 2.1 | J | --- | | 0.4 | J | 2.7 | J | --- | | ND | |
| | 28-Oct-08 | 0.11 | 10.0 | 3.9 | J | 5.4 | J | 1.3 | J | 8.8 | J | --- | | 3.1 | J | --- | | 7.7 | J | --- | | 1.7 | J | 9.2 | J | --- | | ND | |
| | 8-Apr-09 | 0.10 | 10.0 | 6.4 | J | 1.9 | J | 0.2 | J | 2.8 | J | --- | | 2.4 | J | --- | | 6.2 | J | --- | | 1.1 | J | 8.0 | J | --- | | ND | |
| | 27-Oct-09 | 0.10 | 10.0 | 8.7 | J | 3.8 | J | 0.7 | J | 4.2 | J | --- | | 1.6 | J | --- | | 11 | | --- | | 1 | J | 11 | | --- | | ND | |
| NC 2L = 10 µg/L (1/1/10) | 8-Apr-10 | 0.03 | 10.0 | 6.1 | J | 2.1 | J | 0.6 | J | 4.3 | J | --- | | 1.7 | J | --- | | 5.5 | J | --- | | 1.3 | J | 7.4 | J | --- | | ND | |
| | 13-Oct-10 | 0.03 | 10.0 | 8.7 | J | 0.6 | J | 0.7 | J | 1.6 | J | --- | | 1.3 | J | --- | | 6.2 | J | --- | | 0.7 | J | 6.6 | J | --- | | ND | |
| | 27-Apr-11 | 0.04 | 10.0 | 6.7 | J | 1.5 | J | 0.40 | B | 3.9 | J | --- | | 1.1 | J | --- | | 6.1 | J | --- | | 1.2 | J | 3.9 | J | --- | | 0.18 | J |
| | 20-Oct-11 | 0.04 | 10.0 | 10 | | 2.6 | J | 1.2 | J | 3.7 | J | --- | | 1.7 | J | --- | | 5.9 | J | --- | | 1.5 | J | 4.8 | J | --- | | 0.18 | J |
| | 26-Apr-12 | 0.04 | 10.0 | 9.8 | J | 3.1 | J | 1.0 | J | 5.8 | J | --- | | 1.7 | J | --- | | 6.2 | J | --- | | 1.2 | J | 6.8 | J | --- | | 0.09 | J |
| | 16-Oct-12 | 0.18 | 10.0 | 3.1 | J | 3.9 | J | 1.0 | J | 2.8 | J | --- | | 2.4 | J | --- | | **19** | | --- | | 2.7 | J | 3.4 | J | --- | | ND | |
| | 11-Apr-13 | 0.04 | 10.0 | 6.6 | J | 3.3 | J | 0.38 | J | 3.3 | J | --- | | 1.8 | J | --- | | 5.0 | J | --- | | 1.3 | J | 3.9 | J | --- | | ND | |
| | 30-Oct-13 | 0.04 | 10.0 | 6.0 | J | 2.9 | J | 0.67 | J | 3.3 | J | --- | | 2.5 | J | --- | | **11** | | --- | | 0.85 | J | 4.3 | J | --- | | 0.11 | J |
| | 9-Apr-14 | 0.04 | 10.0 | 4.7 | J | 3.1 | J | 0.34 | J | 4.8 | J | --- | | 2.7 | J | --- | | 7.0 | J | --- | | 1.7 | J | 4.6 | J | --- | | ND | |
| | 22-Oct-14 | 0.14 | 10.0 | 4.5 | J | 1.8 | J | 0.52 | J | 0.87 | J | --- | | 4.6 | J | --- | | 4.6 | J | --- | | 1.5 | J | 1.0 | J | --- | | ND | |
| | 8-Apr-15 | 0.14 | 10.0 | **14** | | 3.2 | J | 0.21 | J | 3 | J | --- | | 5.4 | J | --- | | 3.2 | J | --- | | 0.4 | J | 4.3 | J | --- | | ND | |

# TABLE 10

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA LF - LEACHATE STORAGE AREA

| | Sample | | | Upgradient | | Downgraident | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Anayte** | Collection Date | DL | SWSL | LST-5S | | LST-1S | LST-1D | LST-2S | LST-2D | LST-3S | LST-3D | LST-4S | LST-4D | LST-5D | LST-6S | LST-6D | Blanks |
| Cobalt | 1-Jul-93 | NR | 20 | 29 | | 36 | 28 | 2 | 25 | 71 | 24 | 258 | 28 | 21 | ND | 52 | ND |
| | 1-Aug-93 | NR | 20 | ND | | ND | ND | ND | ND | 62 | ND | 117 | ND | ND | 24 | 42 | ND |
| | 1-Sep-93 | NR | 20 | ND | | ND | ND | ND | 186 | 83 | ND | 205 | ND | ND | ND | ND | ND |
| | 1-Sep-93 | NR | 20 | ND | | ND | ND | ND | ND | 61 | ND | 188 | ND | ND | ND | ND | ND |
| | 1-Apr-94 | NR | 10 | 19 | B | 25 | 35 | 18 B | 37 B | 81 B | 41 B | 37 B | 31 B | 31 B | 20 B | 36 B | 18 |
| | 1-Oct-94 | NR | 10 | ND | | ND | ND | ND | ND | ND | ND | 14 | ND | ND | ND | ND | ND |
| | 1-Apr-95 | NR | 10 | ND | | ND | ND | ND | ND | 53 | ND | 14 | ND | ND | ND | ND | ND |
| | 1-Oct-95 | NR | 10 | ND | | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 1-Apr-96 | NR | 10 | ND | | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | ND | ND |
| | 1-Oct-96 | NR | 10 | ND | | ND | ND | ND | ND | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Apr-97 | NR | 10 | ND | | ND | ND | ND | ND | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-97 | NR | 10 | ND | | ND | ND | ND | ND | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Apr-98 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-98 | NR | 10 | ND | | ND | ND | ND | --- | 13 | --- | ND | --- | ND | ND | --- | ND |
| | 1-Mar-99 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-99 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Apr-00 | NR | 10 | ND | | ND | ND | ND | --- | 11 | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-00 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Apr-01 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-01 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 2-Apr-02 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 3-Oct-02 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 2-Apr-03 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-03 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 15-Apr-04 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 14-Oct-04 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 5-Apr-05 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 27-Oct-05 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 21-Apr-06 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 12-Oct-06 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 26-Apr-07 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 10-Oct-07 | 0.41 | 10.0 | 0.5 | J | 0.5 J | ND | 0.5 J | --- | 5.8 J | --- | 20 | --- | ND | ND | --- | ND |
| GWPS = 70 µg/L (10/23/07) | 3-Apr-08 | 0.03 | 10.0 | 0.5 | J | 0.4 J | 0.4 J | 0.4 J | --- | 2.8 J | --- | 2.3 J | --- | 0.2 J | 0.6 J | --- | ND |
| | 28-Oct-08 | 0.03 | 10.0 | 0.3 | J | 0.7 J | 0.7 J | 0.8 J | --- | 6.6 J | --- | 1.8 J | --- | 0.5 J | 0.8 J | --- | ND |
| | 8-Apr-09 | 0.02 | 10.0 | 0.4 | J | 0.4 J | 0.4 J | 0.6 J | --- | 2.8 J | --- | 1.6 J | --- | 0.4 J | 0.7 J | --- | ND |
| | 27-Oct-09 | 0.02 | 10.0 | 0.4 | J | 0.4 J | 0.5 J | 0.5 J | --- | 7.2 J | --- | 2.2 J | --- | 0.5 J | 0.9 J | --- | ND |
| | 8-Apr-10 | 0.10 | 10.0 | 0.4 | J | 0.4 J | 0.5 J | 0.6 J | --- | 2.9 J | --- | 1.2 J | --- | 0.5 J | 0.8 J | --- | ND |
| GWPS = 1 µg/L (10/1/10) | 13-Oct-10 | 0.10 | 10.0 | 1 | J | 0.2 J | 0.6 J | 0.3 J | --- | 6 J | --- | 2.1 J | --- | 0.4 J | 0.5 J | --- | ND |
| | 27-Apr-11 | 0.03 | 10.0 | 0.45 | J | 0.36 J | 0.26 J | 0.45 J | --- | 3.4 J | --- | 1.4 J | --- | 0.41 J | 0.50 J | --- | ND |
| | 20-Oct-11 | 0.03 | 10.0 | 0.39 | J | 0.40 J | 0.44 J | 0.37 J | --- | 6.6 J | --- | 2.1 J | --- | 0.32 J | 0.38 J | --- | ND |
| | 26-Apr-12 | 0.03 | 10.0 | 0.40 | J | 0.43 J | 0.45 J | 0.48 J | --- | 5.1 J | --- | 1.5 J | --- | 0.38 J | 0.53 J | --- | ND |
| | 16-Oct-12 | 0.02 | 10.0 | 0.23 | J | 0.45 J | 0.63 J | 0.65 J | --- | 2.4 J | --- | 1.9 J | --- | 0.76 J | 0.39 J | --- | ND |
| | 11-Apr-13 | 0.02 | 10.0 | 0.43 | J | 0.46 J | 0.43 J | 0.39 J | --- | 2.0 J | --- | 1.6 J | --- | 0.62 J | 0.54 J | --- | 0.03 J |
| | 30-Oct-13 | 0.02 | 10.0 | 0.27 | J | 0.32 J | 0.40 J | 0.42 J | --- | 3.2 J | --- | 2.4 J | --- | 0.33 J | 0.43 J | --- | 0.05 J |
| | 9-Apr-14 | 0.02 | 10.0 | 0.41 | J | 0.50 J | 0.34 J | 0.56 J | --- | 2.4 J | --- | 2.2 J | --- | 0.68 J | 0.6 J | --- | ND |
| | 22-Oct-14 | 0.12 | 10.0 | 0.21 | J | 0.43 J | 0.23 J | 0.78 J | --- | 1.8 J | --- | 2.4 J | --- | 0.44 J | 0.31 J | --- | ND |
| | 8-Apr-15 | 0.12 | 10.0 | 0.69 | J | 0.51 J | 0.30 J | 0.67 J | --- | 1.9 J | --- | 5.3 J | --- | 0.23 J | 0.52 J | --- | ND |
| Copper | 1-Jul-93 | NR | 10 | 23 | B | 62 | 25 | 26 B | 24 B | 17 B | 26 B | 22 B | 28 B | ND | 19 B | 36 B | 17 |
| | 1-Aug-93 | NR | 10 | 17 | B | 15 | 21 | 14 B | 10 B | 17 B | 13 B | ND | 12 B | 11 B | 16 B | 33 B | 19 |
| | 1-Sep-93 | NR | 10 | 18 | B | 24 | 12 | ND | 195 | 16 B | 14 B | 11 B | 13 B | 14 B | 14 B | ND | 11 |
| | 1-Sep-93 | NR | 10 | 19 | B | 27 | 12 | 36 B | 46 B | 29 B | 35 B | 44 B | 31 B | 10 B | 38 B | 37 B | 39 |
| | 1-Apr-94 | NR | 10 | 33 | B | 45 | ND | 25 B | 31 B | 15 B | 58 B | 47 B | 41 B | 31 B | 25 B | 27 B | 21 |
| | 1-Oct-94 | NR | 200 | ND | | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 1-Apr-95 | NR | 200 | ND | | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 1-Oct-95 | NR | 200 | ND | | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 1-Apr-96 | NR | 200 | ND | | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | ND | ND |
| | 1-Oct-96 | NR | 200 | ND | | ND | ND | ND | ND | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Apr-97 | NR | 200 | ND | | ND | ND | ND | ND | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-97 | NR | 200 | ND | | ND | ND | ND | ND | ND | --- | ND | --- | 17 | ND | --- | ND |
| | 1-Apr-98 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-98 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Mar-99 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-99 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Apr-00 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-00 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Apr-01 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-01 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 2-Apr-02 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 3-Oct-02 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 2-Apr-03 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-03 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 15-Apr-04 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 14-Oct-04 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 5-Apr-05 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 27-Oct-05 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 21-Apr-06 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 12-Oct-06 | NR | 200 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 26-Apr-07 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 10-Oct-07 | 0.20 | 10.0 | 1.1 | B | 0.6 B | 0.9 B | 0.8 B | --- | 0.7 B | --- | 0.7 B | --- | 0.3 B | 1.0 B | --- | 0.4 J |
| NC 2L = 1,000 µg/L (10/23/07) | 3-Apr-08 | 0.05 | 10.0 | 0.7 | B | 0.5 B | 0.2 B | 0.5 B | --- | 1.6 J | --- | 1.1 J | --- | 0.3 B | 0.8 B | --- | 0.2 J |
| | 28-Oct-08 | 0.05 | 10.0 | 1.6 | B | 2.2 J | 1.1 B | 2.6 J | --- | 1.9 B | --- | 1.9 B | --- | 1.2 B | 2.3 J | --- | 0.4 J |
| | 8-Apr-09 | 0.04 | 10.0 | 2.3 | J | 1.7 J | 0.6 J | 1.1 J | --- | 1.3 J | --- | 1.5 J | --- | 0.9 J | 1.7 J | --- | 0.1 J |
| | 27-Oct-09 | 0.04 | 10.0 | 2.4 | J | 1.9 J | 1.4 J | 3.1 J | --- | 2.3 J | --- | 3.7 J | --- | 1.3 J | 5.4 J | --- | 0.1 J |
| | 8-Apr-10 | 0.03 | 10.0 | 1.8 | J | 2.8 J | 1.7 J | 2.0 J | --- | 0.9 B | --- | 1.9 J | --- | 3.5 J | 2.1 J | --- | 0.2 J |
| | 13-Oct-10 | 0.03 | 10.0 | 3.7 | J | 1.1 J | 1.1 J | 1.1 J | --- | 0.9 B | --- | 1.5 J | --- | 0.8 B | 1.3 J | --- | 0.2 J |
| | 27-Apr-11 | 0.02 | 10.0 | 2.5 | B | 1.2 B | 0.58 B | 1.6 B | --- | 0.51 B | --- | 1.7 B | --- | 1.4 B | 1.2 B | --- | 0.66 J |
| | 20-Oct-11 | 0.02 | 10.0 | 1.8 | J | 1.0 J | 0.88 B | 1.2 J | --- | 0.86 B | --- | 1.7 J | --- | 0.84 B | 1.3 J | --- | 0.20 J |
| | 26-Apr-12 | 0.02 | 10.0 | 1.7 | B | 1.4 B | 0.78 B | 1.7 B | --- | 0.91 B | --- | 1.5 B | --- | 1.7 B | 0.79 B | --- | 0.94 J |
| | 16-Oct-12 | 0.06 | 10.0 | 1.5 | J | 1.6 J | 0.73 B | 1.4 J | --- | 1.1 B | --- | 1.9 J | --- | 1.4 J | 1.1 B | --- | 0.25 J |
| | 11-Apr-13 | 0.06 | 10.0 | 2.0 | J | 1.5 J | 0.87 B | 1.2 B | --- | 0.65 B | --- | 1.3 B | --- | 0.98 B | 1.1 B | --- | 0.28 J |
| | 30-Oct-13 | 0.06 | 10.0 | 1.6 | B | 0.97 B | 0.85 B | 1.3 B | --- | 1.1 B | --- | 2.9 B | --- | 0.86 B | 1.6 B | --- | 1.2 J |
| | 9-Apr-14 | 0.06 | 10.0 | 2.8 | J | 0.92 J | 0.22 J | 1.2 J | --- | 0.42 J | --- | 1.2 J | --- | 1.6 J | 0.89 J | --- | ND |
| | 22-Oct-14 | 0.10 | 10.0 | 1.0 | J | 0.47 J | ND | 0.34 J | --- | 0.70 J | --- | 0.73 J | --- | 0.40 J | 0.21 J | --- | ND |
| | 8-Apr-15 | 0.10 | 10.0 | 3.3 | J | 1.00 J | 0.20 J | 0.85 J | --- | 0.93 J | --- | 0.60 J | --- | 0.22 J | 1.1 J | --- | ND |
| Lead | 1-Jul-93 | NR | 5 | 34 | | 67 | ND | 7 | ND | ND | ND | ND | 8 | 28 | ND | 13 | ND |
| | 1-Aug-93 | NR | 5 | 33 | | 21 | ND | 15 | ND | 17 | ND | ND | ND | ND | 12 | 7 | ND |
| | 1-Sep-93 | NR | 5 | 17 | | ND | ND | 13 | 102 | ND | ND | ND | ND | ND | 5 | ND | ND |
| | 1-Sep-93 | NR | 5 | ND | | 16 | ND | 10 | 5 | ND | ND | ND | ND | ND | ND | ND | ND |
| | 1-Apr-94 | NR | 5 | ND | | 12 | 47 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 1-Oct-94 | NR | 10 | ND | | 13 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 1-Apr-95 | NR | 10 | ND | | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 1-Oct-95 | NR | 10 | ND | | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 1-Apr-96 | NR | 10 | ND | | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | ND | ND |
| | 1-Oct-96 | NR | 10 | ND | | ND | ND | ND | ND | ND | --- | 14 | --- | ND | ND | --- | ND |
| | 1-Apr-97 | NR | 10 | 10 | | ND | ND | ND | ND | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-97 | NR | 10 | 15 | | ND | ND | 20 | ND | ND | --- | 41 | --- | ND | 33 | --- | ND |
| | 1-Apr-98 | NR | 10 | 17 | | ND | ND | ND | --- | 22 | --- | 20 | --- | ND | ND | --- | ND |
| | 1-Oct-98 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Mar-99 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | 12 | --- | ND | ND | --- | ND |
| | 1-Oct-99 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Apr-00 | NR | 10 | 11 | | 23 | ND | ND | --- | 18 | --- | 20 | --- | 10 | 15 | --- | ND |
| | 1-Oct-00 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Apr-01 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-01 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 2-Apr-02 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | 14 | --- | ND | ND | --- | ND |
| | 3-Oct-02 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 2-Apr-03 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 1-Oct-03 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 15-Apr-04 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 14-Oct-04 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 5-Apr-05 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 27-Oct-05 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 21-Apr-06 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 12-Oct-06 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 26-Apr-07 | NR | 10 | ND | | ND | ND | ND | --- | ND | --- | ND | --- | ND | ND | --- | ND |
| | 10-Oct-07 | 0.07 | 10.0 | 1.6 | J | 1.0 J | 0.1 B | 0.8 J | --- | 1.0 J | --- | 0.6 J | --- | 0.1 B | 1.8 J | --- | 0.1 J |
| NC 2L = 15 µg/L (10/23/07) | 3-Apr-08 | 0.04 | 10.0 | 0.8 | J | 0.6 J | 0.2 J | 1.1 J | --- | 13 | --- | 5.0 J | --- | 0.2 J | 2.1 J | --- | ND |
| | 28-Oct-08 | 0.04 | 10.0 | 2.5 | J | 4 J | 0.6 J | 8.5 J | --- | 11 | --- | 9.5 J | --- | 1 J | 12 | --- | 0.1 J |
| | 8-Apr-09 | 0.04 | 10.0 | 4.4 | J | 1.6 J | 0.3 B | 3.0 J | --- | 5.2 J | --- | 6.2 J | --- | 0.8 J | 9.7 J | --- | 0.1 J |
| | 27-Oct-09 | 0.04 | 10.0 | 6.4 | J | 3.2 J | 0.5 J | 3.9 J | --- | 3.3 J | --- | 5.0 J | --- | 0.9 J | 9.7 J | --- | ND |
| | 8-Apr-10 | 0.01 | 10.0 | 5.1 | J | 1.8 J | 0.4 B | 4.4 J | --- | 2.2 J | --- | 4.3 J | --- | 1.4 J | 8.2 J | --- | 0.1 J |
| | 13-Oct-10 | 0.01 | 10.0 | 1.4 | J | 1.7 J | 0.6 J | 2.2 J | --- | 2.1 J | --- | 5.7 J | --- | 0.6 J | 7.5 J | --- | 0.1 J |
| | 27-Apr-11 | 0.02 | 10.0 | 4.9 | J | 1.4 J | 0.30 J | 3.6 J | --- | 1.7 J | --- | 5.2 J | --- | 0.77 J | 3.3 J | --- | ND |
| | 20-Oct-11 | 0.02 | 10.0 | 6.2 | J | 2.9 J | 0.54 J | 3.4 J | --- | 2.3 J | --- | 4.9 J | --- | 0.70 J | 3.7 J | --- | ND |
| | 26-Apr-12 | 0.02 | 10.0 | 5.2 | J | 2.6 J | 0.41 J | 4.5 J | --- | 1.9 J | --- | 4.6 J | --- | 0.62 J | 5.4 J | --- | 0.02 J |
| | 16-Oct-12 | 0.08 | 10.0 | 3.0 | J | 6.7 J | 0.67 J | 3.7 J | --- | 2.6 J | --- | 6.4 J | --- | 1.7 J | 3.1 J | --- | ND |
| | 11-Apr-13 | 0.02 | 10.0 | 5.2 | J | 3.8 J | 0.51 J | 3.2 J | --- | 1.9 J | --- | 4.6 J | --- | 0.99 J | 3.7 J | --- | ND |
| | 30-Oct-13 | 0.02 | 10.0 | 4.4 | J | 2.8 J | 0.51 J | 2.6 J | --- | 2.5 J | --- | 11 | --- | 0.55 J | 3.8 J | --- | 0.08 J |
| | 9-Apr-14 | 0.02 | 10.0 | 4.0 | J | 3.0 J | 0.30 J | 4.0 J | --- | 1.9 J | --- | 6.3 J | --- | 1.0 J | 3.8 J | --- | ND |
| | 22-Oct-14 | 0.13 | 10.0 | 4.4 | J | 2.6 J | 0.26 J | 1.4 J | --- | 4.1 J | --- | 3.1 J | --- | 0.82 J | 1.4 J | --- | ND |
| | 8-Apr-15 | 0.13 | 10.0 | 21 | | 3.7 J | 0.26 J | 3.2 J | --- | 5.3 J | --- | 2.6 J | --- | 0.39 J | 5.6 J | --- | ND |

# TABLE 10

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA LF - LEACHATE STORAGE AREA

| | Sample | | | Upgradient | | Downgraident | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Anayte** | Collection Date | DL | SWSL | LST-5S | | LST-1S | | LST-1D | | LST-2S | | LST-2D | | LST-3S | | LST-3D | | LST-4S | | LST-4D | | LST-5D | | LST-6S | | LST-6D | | Blanks | |
| Nickel | 1-Jul-93 | NR | 10 | 35 | | 52 | | 36 | | 18 | | 28 | | 63 | | 17 | | 253 | | 47 | | ND | | 23 | | 80 | | ND | |
| | 1-Aug-93 | NR | 10 | 39 | B | 46 | | 21 | | 41 | B | 44 | B | 103 | | 38 | B | 164 | | 39 | B | 37 | B | 26 | B | 40 | B | 11 | |
| | 1-Sep-93 | NR | 10 | 20 | B | 23 | | 51 | | 23 | B | 240 | | 89 | | 20 | B | 212 | | 15 | B | 20 | B | 12 | B | 15 | B | 17 | |
| | 1-Sep-93 | NR | 10 | 19 | | ND | | ND | | 12 | | 15 | | 60 | | 16 | | 194 | | 14 | | 13 | | 49 | | 17 | | ND | |
| | 1-Apr-94 | NR | 10 | 30 | B | 45 | | ND | | 26 | B | 32 | B | 87 | B | 19 | B | 44 | B | 45 | B | 50 | | 17 | B | 39 | B | 20 | |
| | 1-Oct-94 | NR | 50 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-95 | NR | 50 | ND | | ND | | ND | | ND | | ND | | 61 | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-95 | NR | 50 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-96 | NR | 50 | ND | | ND | | ND | | ND | | NA | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-96 | NR | 50 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 50 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 50 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Mar-99 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-99 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-00 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-01 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-02 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 3-Oct-02 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-03 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-03 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 15-Apr-04 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 14-Oct-04 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 5-Apr-05 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 27-Oct-05 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 21-Apr-06 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 12-Oct-06 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 26-Apr-07 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 10-Oct-07 | 0.66 | 50.0 | 1.6 | J | 1.2 | J | 1.9 | J | 1.3 | J | --- | | 7.4 | J | --- | | 25.5 | J | --- | | 2.2 | J | 1 | J | --- | | ND | |
| NC 2L = 100 µg/L (10/23/07) | 3-Apr-08 | 0.06 | 50.0 | 2.1 | J | 0.6 | B | 2.4 | J | 0.5 | B | --- | | 3.5 | J | --- | | 2.5 | J | --- | | 3.4 | J | 1.0 | B | --- | | 0.3 | J |
| | 28-Oct-08 | 0.06 | 50.0 | 1.4 | B | 1.4 | B | 3.3 | J | 1.5 | B | --- | | 8 | J | --- | | 2.7 | J | --- | | 3.3 | J | 1.9 | J | --- | | 0.3 | J |
| | 8-Apr-09 | 0.04 | 50.0 | 1.8 | J | 1.0 | J | 2.5 | J | 1.1 | J | --- | | 3.5 | J | --- | | 2.6 | J | --- | | 2.9 | J | 1.7 | J | --- | | ND | |
| | 27-Oct-09 | 0.04 | 50.0 | 2 | J | 1.4 | J | 1.7 | J | 1.4 | J | --- | | 7.6 | J | --- | | 3.4 | J | --- | | 2.3 | J | 3.0 | J | --- | | 0.2 | J |
| | 8-Apr-10 | 0.05 | 50.0 | 1.1 | J | 0.8 | J | 1.5 | J | 0.8 | J | --- | | 3.0 | J | --- | | 1.7 | J | --- | | 2 | J | 1.0 | J | --- | | ND | |
| | 13-Oct-10 | 0.05 | 50.0 | 11 | J | 2 | J | 3.4 | J | 1 | J | --- | | 6.8 | J | --- | | 3.1 | J | --- | | 3.7 | J | 1.2 | J | --- | | 0.1 | J |
| | 27-Apr-11 | 0.04 | 50.0 | 2.3 | J | 0.72 | B | 1.4 | B | 1.0 | B | --- | | 3.9 | J | --- | | 2.2 | J | --- | | 1.9 | J | 0.98 | B | --- | | 0.30 | J |
| | 20-Oct-11 | 0.04 | 50.0 | 2.0 | B | 1.3 | B | 2.1 | B | 0.86 | B | --- | | 7.5 | J | --- | | 3.2 | J | --- | | 1.9 | B | 1.4 | B | --- | | 0.56 | J |
| | 26-Apr-12 | 0.04 | 50.0 | 2.7 | J | 0.85 | J | 1.8 | J | 1.10 | J | --- | | 5.3 | J | --- | | 2.3 | J | --- | | 1.8 | J | 1.5 | J | --- | | ND | |
| | 16-Oct-12 | 0.06 | 50.0 | 1.7 | J | 1.5 | J | 2.8 | J | 1.6 | J | --- | | 3.2 | J | --- | | 5.8 | J | --- | | 3.5 | J | 2.2 | J | --- | | 0.23 | J |
| | 11-Apr-13 | 0.45 | 50.0 | 3.0 | J | 1.1 | J | 2.4 | J | 0.90 | J | --- | | 3.0 | J | --- | | 2.2 | J | --- | | 2.9 | J | 0.89 | J | --- | | ND | |
| | 30-Oct-13 | 0.45 | 50.0 | 1.6 | J | 0.93 | J | 2.1 | J | 1.0 | J | --- | | 4.0 | J | --- | | 3.6 | J | --- | | 2.2 | J | 2.1 | J | --- | | ND | |
| | 9-Apr-14 | 0.45 | 50.0 | 2.1 | J | 1.0 | J | 2.3 | J | 1.2 | J | --- | | 3.0 | J | --- | | 3.1 | J | --- | | 8.5 | J | 2.1 | J | --- | | ND | |
| | 22-Oct-14 | 0.12 | 50.0 | 1.7 | J | 0.76 | J | 1.2 | J | 1.1 | J | --- | | 3.0 | J | --- | | 3.5 | J | --- | | 1.7 | J | 0.47 | J | --- | | ND | |
| | 8-Apr-15 | 0.12 | 50.0 | 2.2 | J | 0.84 | J | 1.5 | J | 1.1 | J | --- | | 2.5 | J | --- | | 5.8 | J | --- | | 1.4 | J | 1.1 | J | --- | | ND | |
| Selenium | 1-Jul-93 | NR | 10 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | 49 | | ND | | ND | | ND | |
| | 1-Aug-93 | NR | 10 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Sep-93 | NR | 10 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Sep-93 | NR | 10 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-94 | NR | 10 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-94 | NR | 20 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-95 | NR | 20 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-95 | NR | 20 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-96 | NR | 20 | ND | | ND | | ND | | ND | | NA | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-96 | NR | 20 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 20 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 20 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Mar-99 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-99 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-00 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-01 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-02 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 3-Oct-02 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-02 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 5-Apr-05 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 27-Oct-05 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 21-Apr-06 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 12-Oct-06 | NR | 20 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 26-Apr-07 | NR | 10 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 10-Oct-07 | 0.35 | 10.0 | 1.4 | B | 3.4 | B | 1.1 | B | 1.4 | B | --- | | 1.3 | B | --- | | 1.3 | B | --- | | 1.1 | B | 1.0 | B | --- | | 0.9 | J |
| NC 2L = 50 µg/L (10/23/07) | 3-Apr-08 | 0.14 | 10.0 | 0.9 | J | 1.7 | J | ND | | 0.2 | J | --- | | 0.9 | J | --- | | ND | | --- | | ND | | 0.2 | J | --- | | ND | |
| | 28-Oct-08 | 0.14 | 10.0 | 0.3 | J | 0.8 | J | ND | | 0.3 | J | --- | | 0.3 | J | --- | | 0.2 | J | --- | | 0.2 | J | 0.2 | J | --- | | ND | |
| | 8-Apr-09 | 0.12 | 10.0 | 0.3 | J | 1.1 | J | ND | | 0.2 | J | --- | | ND | | --- | | 0.2 | J | --- | | 0.2 | J | 0.3 | J | --- | | ND | |
| | 27-Oct-09 | 0.12 | 10.0 | 0.6 | J | 0.9 | J | 0.5 | J | 0.5 | J | --- | | 0.7 | J | --- | | 0.8 | J | --- | | 0.6 | J | 1.3 | J | --- | | ND | |
| NC 2L = 20 µg/L (1/1/10) | 8-Apr-10 | 0.32 | 10.0 | ND | | 1.9 | J | 0.4 | J | ND | | --- | | ND | | --- | | ND | | --- | | 0.3 | J | ND | | --- | | ND | |
| | 13-Oct-10 | 0.32 | 10.0 | 12 | | 1.5 | J | 1.5 | J | 0.5 | J | --- | | 0.6 | J | --- | | 0.3 | J | --- | | 3.1 | J | 0.4 | J | --- | | ND | |
| | 27-Apr-11 | 0.20 | 10.0 | 1.1 | J | 1.1 | J | ND | | 0.26 | J | --- | | ND | | --- | | 0.42 | J | --- | | 0.52 | J | ND | | --- | | ND | |
| | 20-Oct-11 | 0.20 | 10.0 | 0.50 | J | 0.51 | J | 0.32 | J | 0.28 | J | --- | | 0.51 | J | --- | | 0.43 | J | --- | | 0.38 | J | 0.30 | J | --- | | ND | |
| | 26-Apr-12 | 0.20 | 10.0 | 0.56 | J | 0.59 | J | ND | | 0.2 | J | --- | | 0.33 | J | --- | | 0.29 | J | --- | | 0.42 | J | 0.20 | J | --- | | ND | |
| | 16-Oct-12 | 0.17 | 10.0 | 0.57 | J | 0.57 | J | ND | | 0.92 | J | --- | | 0.44 | J | --- | | 0.63 | J | --- | | 0.80 | J | 0.35 | J | --- | | ND | |
| | 11-Apr-13 | 0.06 | 10.0 | 0.68 | J | 1.1 | J | ND | | 0.11 | J | --- | | ND | | --- | | 0.15 | J | --- | | 0.58 | J | 0.11 | J | --- | | ND | |
| | 30-Oct-13 | 0.06 | 10.0 | 0.51 | J | 0.42 | J | 0.43 | J | 0.49 | J | --- | | 0.28 | J | --- | | 1.0 | J | --- | | 0.59 | J | 0.36 | J | --- | | ND | |
| | 9-Apr-14 | 0.06 | 10.0 | ND | | 0.47 | J | ND | | ND | | --- | | ND | | --- | | 0.17 | J | --- | | ND | | ND | | --- | | ND | |
| | 22-Oct-14 | 0.16 | 10.0 | 0.74 | J | 1.5 | J | 1.4 | J | 1.1 | J | --- | | 0.63 | J | --- | | 0.34 | J | --- | | 0.87 | J | 0.91 | J | --- | | ND | |
| | 8-Apr-15 | 0.16 | 10.0 | 0.91 | J | 1.1 | J | ND | | 1.1 | J | --- | | 0.38 | J | --- | | 0.22 | J | --- | | ND | | 0.27 | J | --- | | ND | |
| Silver | 3-Apr-08 | 0.04 | 10.0 | 0.1 | B | 0.1 | B | ND | | ND | | --- | | 0.1 | B | --- | | ND | | --- | | ND | | 0.1 | B | --- | | 0.1 | J |
| NC 2L = 17.5 µg/L (10/23/07) | 28-Oct-08 | 0.04 | 10.0 | ND | | 0.1 | J | ND | | ND | | --- | | 0.1 | J | --- | | 0.1 | J | --- | | 0.1 | J | 0.1 | J | --- | | ND | |
| | 8-Apr-09 | 0.04 | 10.0 | ND | | ND | | 0.1 | J | 0.1 | J | --- | | ND | | --- | | ND | | --- | | 0.1 | J | ND | | --- | | ND | |
| | 27-Oct-09 | 0.04 | 10.0 | ND | | 0.1 | J | 0.1 | J | ND | | --- | | ND | | --- | | 0.1 | J | --- | | 0.1 | J | 0.2 | J | --- | | ND | |
| NC 2L = 20 µg/L (1/1/10) | 8-Apr-10 | 0.03 | 10.0 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | 0.1 | B | --- | | 0.1 | B | 0.5 | B | --- | | 0.1 | J |
| | 13-Oct-10 | 0.03 | 10.0 | ND | | ND | | ND | | ND | | --- | | 0.1 | J | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 27-Apr-11 | 0.02 | 10.0 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 20-Oct-11 | 0.02 | 10.0 | ND | | ND | | 0.05 | J | ND | | --- | | ND | | --- | | ND | | --- | | ND | | 0.04 | J | --- | | ND | |
| | 26-Apr-12 | 0.02 | 10.0 | 0.02 | J | 0.06 | J | 0.04 | J | 0.03 | J | --- | | 0.03 | J | --- | | ND | | --- | | ND | | 0.03 | J | --- | | ND | |
| | 16-Oct-12 | 0.10 | 10.0 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 11-Apr-13 | 0.03 | 10.0 | 0.04 | J | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 30-Oct-13 | 0.03 | 10.0 | ND | | ND | | 0.05 | B | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | 0.05 | J |
| | 9-Apr-14 | 0.03 | 10.0 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 22-Oct-14 | 0.04 | 10.0 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 8-Apr-15 | 0.04 | 10.0 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| Thallium | 10-Oct-07 | 0.07 | 5.0 | ND | | 0.2 | J | 0.2 | J | 0.1 | J | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| GWPS = 0.28 µg/L (10/23/07) | 3-Apr-08 | 0.04 | 5.0 | 0.2 | J | 0.1 | J | ND | | 0.1 | J | --- | | 0.1 | J | --- | | 0.1 | J | --- | | 0.1 | J | 0.1 | J | --- | | ND | |
| | 28-Oct-08 | 0.04 | 5.0 | 0.1 | J | 0.1 | J | ND | | 0.1 | J | --- | | 0.1 | J | --- | | 0.1 | J | --- | | ND | | 0.2 | J | --- | | ND | |
| | 8-Apr-09 | 0.03 | 5.0 | 0.1 | J | 0.1 | J | 0.1 | J | 0.1 | J | --- | | 0.1 | J | --- | | 0.1 | J | --- | | ND | | 0.1 | J | --- | | ND | |
| | 27-Oct-09 | 0.03 | 5.0 | 0.1 | J | 0.1 | J | ND | | ND | | --- | | ND | | --- | | 0.1 | J | --- | | ND | | 0.3 | J | --- | | ND | |
| | 8-Apr-10 | 0.05 | 5.0 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| GWPS = 0.2 µg/L (10/1/10) | 13-Oct-10 | 0.05 | 5.5 | 0.1 | J | ND | | ND | | ND | | --- | | 0.1 | J | --- | | 0.1 | J | --- | | ND | | 0.1 | J | --- | | ND | |
| | 27-Apr-11 | 0.02 | 5.5 | 0.10 | B | 0.18 | J | 0.27 | J | 0.12 | B | --- | | 0.04 | B | --- | | 0.10 | B | --- | | ND | | 0.08 | B | --- | | 0.03 | J |
| | 20-Oct-11 | 0.02 | 5.5 | 0.09 | J | 0.05 | J | 0.09 | J | 0.05 | J | --- | | 0.05 | J | --- | | 0.09 | J | --- | | ND | | 0.09 | J | --- | | ND | |
| | 26-Apr-12 | 0.02 | 5.5 | 0.12 | J | 0.23 | J | 0.14 | J | 0.13 | J | --- | | 0.20 | J | --- | | 0.12 | J | --- | | 0.03 | J | 0.11 | J | --- | | ND | |
| | 16-Oct-12 | 0.07 | 5.5 | ND | | 0.07 | J | ND | | 0.24 | J | --- | | ND | | --- | | 0.08 | J | --- | | ND | | ND | | --- | | ND | |
| | 11-Apr-13 | 0.02 | 5..5 | 0.13 | B | 0.05 | B | ND | | 0.04 | B | --- | | 0.03 | B | --- | | 0.06 | B | --- | | ND | | 0.06 | B | --- | | 0.19 | J |
| | 30-Oct-13 | 0.02 | 5.5 | 0.06 | B | 0.08 | B | 0.10 | B | 0.07 | B | --- | | 0.06 | B | --- | | 0.18 | B | --- | | ND | | 0.08 | B | --- | | 0.13 | J |
| | 9-Apr-14 | 0.02 | 5.5 | 0.10 | J | 0.08 | J | 0.02 | J | 0.07 | J | --- | | 0.04 | J | --- | | 0.09 | J | --- | | --- | | 0.07 | J | --- | | ND | |
| | 22-Oct-14 | 0.13 | 5.5 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 8-Apr-15 | 0.13 | 5.5 | 0.34 | J | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |

# TABLE 10

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA LF - LEACHATE STORAGE AREA

| | Sample | | | Upgradient | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Anayte** | Collection Date | DL | SWSL | LST-5S | | LST-1S | | LST-1D | | LST-2S | | LST-2D | | LST-3S | | LST-3D | | LST-4S | | LST-4D | | LST-5D | | LST-6S | | LST-6D | | Blanks | |
| Vanadium | 1-Jul-93 | NR | 2,000 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Aug-93 | NR | 2,000 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Sep-93 | NR | 2,000 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Sep-93 | NR | 2,000 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-94 | NR | 40 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-94 | NR | 40 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-95 | NR | 40 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-95 | NR | 40 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-96 | NR | 40 | ND | | ND | | ND | | ND | | NA | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-96 | NR | 40 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 40 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 40 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | 50 | | --- | | ND | | 48 | | --- | | ND | |
| | 1-Apr-98 | NR | 40 | 43 | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Mar-99 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-99 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-00 | NR | 40 | 40 | | ND | | ND | | ND | | --- | | ND | | --- | | 64 | | --- | | ND | | 50 | | --- | | ND | |
| | 1-Oct-00 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-01 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-02 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | 55 | | --- | | ND | | ND | | --- | | ND | |
| | 3-Oct-02 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-03 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-03 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 15-Apr-04 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 14-Oct-04 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 5-Apr-05 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 27-Oct-05 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 21-Apr-06 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 12-Oct-06 | NR | 40 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 26-Apr-07 | NR | 25 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 10-Oct-07 | 0.42 | 25.0 | 4.0 | J | 0.5 | J | ND | | 1.3 | J | --- | | 0.9 | J | --- | | 3.2 | J | --- | | ND | | 3.1 | J | --- | | ND | |
| GWPS = 3.5 µg/L (10/23/07) | 3-Apr-08 | 0.07 | 25.0 | 2.0 | J | 0.8 | J | 0.6 | J | 2.4 | J | --- | | 2.5 | J | --- | | 9.5 | J | --- | | 0.8 | J | 4.6 | J | --- | | ND | |
| | 28-Oct-08 | 0.07 | 25.0 | 6.5 | J | 6.9 | J | 1.6 | J | 11.7 | J | --- | | 4.5 | J | --- | | 10.3 | J | --- | | 2 | J | 14.8 | J | --- | | 0.2 | J |
| | 8-Apr-09 | 0.28 | 25.0 | 12.6 | J | 4.6 | J | 2.3 | J | 6.4 | J | --- | | 5.3 | J | --- | | 10.0 | J | --- | | 2.9 | J | 14.5 | J | --- | | ND | |
| | 27-Oct-09 | 0.28 | 25.0 | 14.3 | J | 6.9 | J | 2.3 | J | 7.3 | J | --- | | 3.3 | J | --- | | 17.4 | J | --- | | 2.2 | J | 17.1 | J | --- | | 0.4 | J |
| | 8-Apr-10 | 0.03 | 25.0 | 10.4 | J | 3.0 | J | 1.0 | B | 6.3 | J | --- | | 2.2 | J | --- | | 6.9 | J | --- | | 1.5 | B | 11.5 | J | --- | | 0.4 | J |
| GWPS = 0.3 µg/L (10/1/10) | 13-Oct-10 | 0.03 | 25.0 | 3.6 | J | 2.1 | B | 1.9 | B | 3.5 | J | --- | | 2.7 | B | --- | | 9 | J | --- | | 1.6 | B | 10.4 | J | --- | | 0.6 | J |
| | 27-Apr-11 | 0.14 | 25.0 | 10.2 | J | 2.1 | J | 0.66 | J | 5.3 | J | --- | | 1.6 | J | --- | | 7.8 | J | --- | | 1.4 | J | 5.9 | J | --- | | ND | |
| | 20-Oct-11 | 0.14 | 25.0 | 13.9 | J | 3.5 | J | 0.76 | J | 5.1 | J | --- | | 1.9 | J | --- | | 6.5 | J | --- | | 0.93 | J | 5.7 | J | --- | | ND | |
| | 26-Apr-12 | 0.14 | 25.0 | 11.7 | J | 3.9 | J | 0.65 | J | 7.3 | J | --- | | 1.4 | J | --- | | 7.7 | J | --- | | 0.76 | J | 8.5 | J | --- | | ND | |
| | 16-Oct-12 | 0.10 | 25.0 | 5.6 | J | 5.7 | J | 1.5 | J | 4.1 | J | --- | | 3.3 | J | --- | | 9.6 | J | --- | | 2.9 | J | 4.6 | J | --- | | ND | |
| | 11-Apr-13 | 0.07 | 25.0 | 10.4 | J | 5.1 | J | 1.2 | J | 5.5 | J | --- | | 2.8 | J | --- | | 7.0 | J | --- | | 1.8 | J | 5.7 | J | --- | | ND | |
| | 30-Oct-13 | 0.07 | 25.0 | 9.8 | J | 4.3 | J | 0.70 | J | 4.5 | J | --- | | 2.9 | J | --- | | 15.3 | J | --- | | 0.55 | J | 5.5 | J | --- | | ND | |
| | 9-Apr-14 | 0.07 | 25.0 | 8.3 | J | 4.9 | J | 0.66 | J | 7.5 | J | --- | | 3.4 | J | --- | | 10.0 | J | --- | | 1.7 | J | 6.7 | J | --- | | ND | |
| | 22-Oct-14 | 0.06 | 25.0 | 8.0 | J | 1.7 | J | 0.81 | B | 1.9 | J | --- | | 5.5 | J | --- | | 5.0 | J | --- | | 1.1 | J | 1.2 | J | --- | | 0.18 | J |
| | 8-Apr-15 | 0.06 | 25.0 | 27.0 | | 5.4 | J | 1.2 | J | 4.9 | J | --- | | 7.7 | J | --- | | 4.0 | J | --- | | 1.4 | J | 7.9 | J | --- | | --- | |
| Zinc | 1-Jul-93 | NR | 10 | 71 | | 102 | | 26 | | 24 | B | 26 | B | 132 | | 30 | B | 797 | | 54 | | 84 | | 36 | B | 257 | | 10 | |
| | 1-Aug-93 | NR | 10 | 45 | | 36 | | 17 | | 31 | | 20 | | 182 | | 67 | | 294 | | 20 | | 23 | | 43 | | 116 | | ND | |
| | 1-Sep-93 | NR | 10 | 13 | | 12 | | 30 | | 23 | | 660 | | 135 | | 22 | | 404 | | 10 | | ND | | 19 | | 33 | | ND | |
| | 1-Sep-93 | NR | 10 | 43 | | 37 | | 25 | | 42 | | 63 | | 130 | | 36 | | 555 | | 18 | | 14 | | 19 | | 29 | | ND | |
| | 1-Apr-94 | NR | 10 | 42 | B | 78 | | 50 | | 40 | B | 33 | B | 176 | | 32 | B | 90 | B | 27 | B | 32 | B | 64 | B | 40 | B | 20 | |
| | 1-Oct-94 | NR | 50 | 800 | | ND | | ND | | ND | | ND | | 88 | | ND | | 69 | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-95 | NR | 50 | ND | | ND | | ND | | ND | | ND | | 128 | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-95 | NR | 50 | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-96 | NR | 50 | ND | | ND | | ND | | ND | | NA | | ND | | ND | | ND | | ND | | ND | | ND | | ND | | ND | |
| | 1-Oct-96 | NR | 50 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | 67 | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 50 | ND | | ND | | ND | | ND | | ND | | ND | | --- | | 51 | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 50 | 91 | | ND | | ND | | ND | | ND | | ND | | --- | | 129 | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | 62 | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Mar-99 | NR | 50 | 54 | | ND | | ND | | ND | | --- | | ND | | --- | | 60 | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-99 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-00 | NR | 50 | 161 | | ND | | ND | | ND | | --- | | 52 | | --- | | 67 | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Apr-01 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 50 | 62 | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-02 | NR | 50 | 105 | | ND | | ND | | ND | | --- | | ND | | --- | | 77 | | --- | | ND | | ND | | --- | | ND | |
| | 3-Oct-02 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 2-Apr-03 | NR | 50 | 82 | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | 148 | | --- | | ND | |
| | 1-Oct-03 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 15-Apr-04 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 14-Oct-04 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 5-Apr-05 | NR | 50 | 55 | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 27-Oct-05 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 21-Apr-06 | NR | 50 | ND | | ND | | ND | | ND | | --- | | ND | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 16-Oct-06 | NR | 50 | ND | | ND | | ND | | ND | | --- | | 68 | | --- | | ND | | --- | | ND | | ND | | --- | | ND | |
| | 26-Apr-07 | NR | 10 | 22 | | ND | | ND | | ND | | --- | | 17 | | --- | | ND | | --- | | ND | | 11 | | --- | | ND | |
| | 10-Oct-07 | 0.20 | 10.0 | 17 | B | 3.8 | B | 4.9 | B | 7.7 | B | --- | | 30 | B | --- | | 53 | | --- | | 1.8 | B | 7.7 | B | --- | | 6.6 | J |
| NC 2L = 1,050 µg/L (10/23/07) | 3-Apr-08 | 0.04 | 10.0 | 25 | B | 3.1 | B | 1.3 | B | 3.5 | B | --- | | 24 | B | --- | | 13 | B | --- | | 4.4 | B | 15 | B | --- | | 6.3 | J |
| | 28-Oct-08 | 0.04 | 10.0 | 18 | | 8 | J | 6 | J | 11 | | --- | | 35 | | --- | | 15 | | --- | | 7.5 | J | 144 | | --- | | 0.9 | J |
| | 8-Apr-09 | 0.14 | 10.0 | 29 | | 7.4 | J | 3.7 | B | 8.0 | J | --- | | 22 | | --- | | 15 | | --- | | 6.6 | J | 107 | | --- | | 0.8 | J |
| | 27-Oct-09 | 0.14 | 10.0 | 21 | | 17 | | 5.4 | B | 9.2 | J | --- | | 28 | | --- | | 22 | | --- | | 7.5 | J | 68 | | --- | | 1.4 | J |
| NC 2L = 1,000 µg/L (1/1/10) | 8-Apr-10 | 0.08 | 10.0 | 25 | | 12 | | 7.8 | J | 9.0 | J | --- | | 26 | | --- | | 11 | | --- | | 8.7 | J | 78 | | --- | | 0.7 | J |
| | 13-Oct-10 | 0.08 | 10.0 | 39 | | 5.1 | B | 8.1 | B | 5.2 | B | --- | | 44 | | --- | | 14 | B | --- | | 4.7 | B | 62 | | --- | | 4.1 | J |
| | 27-Apr-11 | 0.24 | 10.0 | 20 | | 4.0 | B | 2.4 | B | 5.2 | B | --- | | 28 | | --- | | 12 | | --- | | 5.3 | B | 24 | | --- | | 1.1 | J |
| | 20-Oct-11 | 0.24 | 10.0 | 21 | | 4.5 | J | 5.6 | J | 3.2 | J | --- | | 31 | | --- | | 15 | | --- | | 6.5 | J | 35 | | --- | | 0.28 | J |
| | 26-Apr-12 | 0.24 | 10.0 | 17 | | 6.1 | B | 4.1 | B | 6.1 | B | --- | | 26 | | --- | | 14 | | --- | | 4.7 | B | 46 | | --- | | 1.9 | J |
| | 16-Oct-12 | 0.48 | 10.0 | 15 | | 10 | | 7.9 | J | 7.5 | J | --- | | 34 | | --- | | 22 | | --- | | 12 | | 25 | | --- | | ND | |
| | 11-Apr-13 | 0.47 | 10.0 | 41 | | 8.9 | J | 7.6 | J | 5.9 | J | --- | | 21 | | --- | | 12 | | --- | | 8.6 | J | 24 | | --- | | 0.88 | J |
| | 30-Oct-13 | 0.47 | 10.0 | 12 | B | 6.2 | B | 5.4 | B | 6.1 | B | --- | | 26 | | --- | | 20 | | --- | | 6.6 | B | 28 | | --- | | 3.2 | J |
| | 9-Apr-14 | 0.47 | 10.0 | 33 | | 4.0 | J | 2.3 | J | 5.6 | J | --- | | 24 | | --- | | 13 | | --- | | 8.0 | J | 19 | | --- | | ND | |
| | 22-Oct-14 | 0.53 | 10.0 | 12 | | 3.8 | J | 3.9 | J | 5.1 | J | --- | | 19 | | --- | | 15 | | --- | | 6.2 | J | 8.5 | J | --- | | ND | |
| | 8-Apr-15 | 0.53 | 10.0 | 79 | | 8.1 | J | 3.3 | B | 10 | | --- | | 18 | | --- | | 38 | | --- | | 5.6 | J | 41 | | --- | | 0.79 | J |

# TABLE 10

## HISTORICAL DETECTIONS in GROUNDWATER
## C.R.S.W.M.A. TUSCARORA LF - LEACHATE STORAGE AREA

| | Sample | | | Upgradient | | Downgraident | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Anayte** | Collection Date | DL | SWSL | LST-5S | | LST-1S | | LST-1D | | LST-2S | | LST-2D | LST-3S | | LST-3D | LST-4S | | LST-4D | LST-5D | | LST-6S | | LST-6D | Blanks | |
| **Organic Compounds** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Butanone | 10-Oct-07 | 0.85 | 100.0 | 3.90 | J | 4.60 | J | 4.00 | J | 3.70 | J | --- | 3.80 | J | --- | 4.50 | J | --- | 4.10 | J | 2.90 | J | --- | ND | |
| NC 2L = 4,200 µg/L (10/23/07) Resar | 4-Dec-07 | 0.96 | 5.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 3-Apr-08 | 0.85 | 100.0 | ND | | ND | | 0.90 | J | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| Resample | 15-May-08 | 0.96 | 100 | --- | | --- | | ND | | --- | | --- | --- | | --- | --- | | --- | --- | | --- | | --- | ND | |
| | 28-Oct-08 | 0.85 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-09 | 0.85 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 27-Oct-09 | 2.21 | 100.0 | 2.60 | J | ND | | 2.40 | J | 2.80 | J | --- | 3.20 | J | --- | 2.40 | J | --- | ND | | 2.50 | J | --- | ND | |
| NC 2L = 4,000 µg/L (1/1/10) | 8-Apr-10 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 13-Oct-10 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 27-Apr-11 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 20-Oct-11 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 26-Apr-12 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 16-Oct-12 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 11-Apr-13 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 30-Oct-13 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 9-Apr-14 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 22-Oct-14 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-15 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| Acetone | 10-Oct-07 | 1.21 | 100.0 | 3.20 | J | 3.50 | J | 3.10 | J | 3.30 | J | --- | 2.90 | J | --- | 3.40 | J | --- | 3.50 | J | 2.50 | J | --- | ND | |
| NC 2L = 700 µg/L (10/23/07) Resar | 4-Dec-07 | 2.20 | 25.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | 4.6 | J |
| | 2-Apr-08 | 1.21 | 100.0 | 2.20 | B | 2.40 | B | 1.60 | B | 2.00 | B | --- | 1.90 | B | --- | 2.30 | B | --- | 2.00 | B | 2.20 | B | --- | 1.60 | J |
| | 28-Oct-08 | 1.21 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-09 | 1.21 | 100.0 | ND | | ND | | ND | | 1.30 | J | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 27-Oct-09 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| NC 2L = 6,000 µg/L (1/1/10) | 8-Apr-10 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 13-Oct-10 | 9.06 | 100.0 | ND | | ND | | 41.90 | J | 10.70 | J | --- | ND | | --- | ND | | --- | 42.60 | J | ND | | --- | ND | |
| | 27-Apr-11 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 20-Oct-11 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 26-Apr-12 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 16-Oct-12 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 11-Apr-13 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 30-Oct-13 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 9-Apr-14 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 22-Oct-14 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-15 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| Benzene | 13-Oct-10 | 0.24 | 1.0 | 0.30 | J | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| NC 2L = 1 µg/L (1/1/10) | 27-Apr-11 | 0.24 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 20-Oct-11 | 0.24 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 26-Apr-12 | 0.24 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 16-Oct-12 | 0.24 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 11-Apr-13 | 0.24 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 30-Oct-13 | 0.24 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 9-Apr-14 | 0.24 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 22-Oct-14 | 0.24 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-15 | 0.24 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| Toluene | 30-Oct-13 | 0.23 | 1.0 | ND | | ND | | ND | | 0.40 | J | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| NC 2L = 600 ug/L (1/1/10) | 9-Apr-14 | 0.23 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 22-Oct-14 | 0.23 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-15 | 0.23 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| Bromomethane | 10-Oct-07 | 0.26 | 10.0 | ND | | 0.30 | J | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| NC 2L = NE (10/23/07) Resar | 4-Dec-07 | 0.29 | 5.0 | --- | | ND | | --- | | --- | | --- | --- | | --- | --- | | --- | --- | | --- | | --- | ND | |
| | 2-Apr-08 | 0.26 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 28-Oct-08 | 0.26 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-09 | 0.26 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 27-Oct-09 | 0.67 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-10 | 0.67 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| GWPS = 10 (8/1/10) | 13-Oct-10 | 0.67 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 27-Apr-11 | 0.67 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 20-Oct-11 | 0.67 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 26-Apr-12 | 0.67 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 16-Oct-12 | 0.67 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 11-Apr-13 | 0.67 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 30-Oct-13 | 0.67 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 9-Apr-14 | 0.67 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 22-Oct-14 | 0.67 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-15 | 0.67 | 10.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| Bromodichloromethane | 3-Apr-08 | 0.13 | 10.0 | 1.40 | J | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| NC 2L = 0.56 µg/L (10/23/07) Resar | 4-Jun-08 | 0.13 | 10.0 | ND | | --- | | --- | | --- | | --- | --- | | --- | --- | | --- | --- | | --- | | --- | ND | |
| | 28-Oct-08 | 0.13 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-09 | 0.13 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 27-Oct-09 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| NC 2L = 0.6 µg/L (1/1/10) | 8-Apr-10 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 13-Oct-10 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 27-Apr-11 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 20-Oct-11 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 26-Apr-12 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 16-Oct-12 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 11-Apr-13 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 30-Oct-13 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 9-Apr-14 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 22-Oct-14 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-15 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| Chloromethane | 10-Oct-07 | 0.18 | 1.0 | ND | | 1.00 | | 0.80 | J | 0.70 | J | --- | 0.90 | J | --- | 0.90 | J | --- | 0.70 | J | 0.60 | J | --- | ND | |
| NC 2L = 2.6 µg/L (10/23/07) Resar | 4-Dec-07 | 0.11 | 1.0 | --- | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 3-Apr-08 | 0.18 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | 0.20 | J | --- | ND | | ND | | --- | ND | |
| Resample | 15-May-08 | 0.11 | 1.0 | --- | | --- | | --- | | --- | | --- | --- | | --- | ND | | --- | --- | | --- | | --- | ND | |
| | 28-Oct-08 | 0.18 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | 0.20 | J | --- | ND | | ND | | --- | ND | |
| | 8-Apr-09 | 0.18 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 27-Oct-09 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| NC 2L = 3 µg/L (1/1/10) | 8-Apr-10 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 13-Oct-10 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 27-Apr-11 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 20-Oct-11 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 26-Apr-12 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 16-Oct-12 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 11-Apr-13 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 30-Oct-13 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 9-Apr-14 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 22-Oct-14 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-15 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| Methylene Chloride | 10-Oct-07 | 0.14 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | 0.20 | J |
| NC 2L = 4.6 µg/L (10/23/07) | 3-Apr-08 | 0.14 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 28-Oct-08 | 0.14 | 1.0 | ND | | 0.30 | J | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-09 | 0.14 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 27-Oct-09 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| NC 2L = 5 µg/L (1/1/10) | 8-Apr-10 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 13-Oct-10 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 27-Apr-11 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 20-Oct-11 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 26-Apr-12 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 16-Oct-12 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 11-Apr-13 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 30-Oct-13 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 9-Apr-14 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 22-Oct-14 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |
| | 8-Apr-15 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | --- | ND | | --- | ND | | --- | ND | | ND | | --- | ND | |

Notes:
1. All concentrations are in mg/L.
2. LST = Leachate storage tank monitoring well.
3. RL = Laboratory reporting limit (NC SWSL or lower from October 2007 to present).
4. --- = Data not available
5. B = Blank-qualified data; result is expected to be biased high based on concentrations in the blanks.
6. NC 2L = North Carolina 2L Groundwater Standards.
7. GWPS = Groundwater Protection Standards.
8. When the NC 2L has not been established, the GWPS will be used.
9. **Bold** values are above the NC 2L Groundwater Stanards or Groundwater Protection Standards.
10. NE = Not established.
11. DL = Laboratory detection limit.
12. J = Estimated value between the DL and the RL.

# TABLE 11

## SUMMARY OF FIELD PARAMETERS
## C.R.S.W.M.A. TUSCARORA LF - LEACHATE STORAGE AREA

| | Sample | Upgradient | Downgraidient | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | Collection Date | LST-5S | LST-1S | LST-1D | LST-2S | LST-2D | LST-3S | LST-3D | LST-4S | LST-4D | LST-5D | LST-6S | LST-6D |
| Conductivity (at 25c) | Jul-93 | 110 | 80 | 490 | 73 | 460 | 190 | 430 | 390 | 650 | 560 | 60 | 480 |
| [uMhos] | Aug-93 | 140 | 110 | 400 | 81 | 400 | 210 | 360 | 280 | 520 | 500 | 62 | 270 |
| | Sep-93 | 100 | 96 | 440 | 60 | --- | 210 | 330 | 270 | 460 | 680 | 86 | 380 |
| | Sep-93 | 110 | 85 | 400 | 69 | 380 | 210 | 320 | 280 | 460 | 460 | 81 | 350 |
| | Apr-94 | 120 | 84 | 470 | 60 | 480 | 230 | 400 | 11 | 430 | 530 | 97 | 480 |
| | Oct-94 | 110 | 83 | 450 | 72 | 440 | 150 | 340 | 120 | 310 | 700 | 89 | 660 |
| | Apr-95 | 120 | 77 | 460 | 54 | 460 | 250 | 360 | 120 | 320 | 480 | 56 | 490 |
| | Oct-95 | 120 | 87 | 470 | 54 | 470 | 93 | 320 | 80 | 290 | 510 | 75 | --- |
| | Apr-96 | 120 | 73 | 460 | 54 | 450 | 61 | 370 | 91 | 340 | 490 | 60 | 470 |
| | Oct-96 | 120 | 63 | 380 | 52 | --- | 56 | --- | 98 | --- | 410 | 52 | --- |
| | Apr-97 | 140 | 65 | 500 | 72 | --- | 90 | --- | 110 | --- | 490 | 55 | --- |
| | Oct-97 | 120 | 61 | 440 | 72 | --- | 66 | --- | 110 | --- | 460 | 73 | --- |
| | Apr-98 | --- | 60 | 60 | 84 | --- | 49 | --- | --- | --- | 500 | 40 | --- |
| | Oct-98 | 130 | 64 | 440 | 77 | --- | 78 | --- | 78 | --- | 420 | 87 | --- |
| | Mar-99 | 160 | 62 | 480 | 75 | --- | 46 | --- | 81 | --- | 500 | 46 | --- |
| | Oct-99 | 210 | 56 | 450 | 77 | --- | 32 | --- | 49 | --- | 460 | 46 | --- |
| | Apr-00 | 160 | 53 | 440 | 66 | --- | 62 | --- | 81 | --- | 460 | 34 | --- |
| | Oct-00 | 160 | 53 | 460 | 68 | --- | 53 | --- | 83 | --- | 470 | 83 | --- |
| | Apr-14 | 140 | 49 | 430 | 66 | --- | --- | --- | 71 | --- | 450 | 59 | --- |
| | Oct-14 | 130 | 51 | 450 | 70 | --- | 49 | --- | 61 | --- | --- | 62 | --- |
| | Apr-14 | 160 | 59 | 420 | 62 | --- | 52 | --- | 79 | --- | 430 | 38 | --- |
| | Oct-14 | 38 | 71 | 296 | 65 | --- | 64 | --- | 11 | --- | 35 | 60 | --- |
| | Apr-14 | 272 | 65 | 466 | 80 | --- | 81 | --- | 72 | --- | 484 | 70 | --- |
| | Oct-14 | 196 | 73 | 449 | 95 | --- | 114 | --- | 77 | --- | 479 | 52 | --- |
| | Apr-04 | 150 | 58 | 330 | 54 | --- | 41 | --- | 40 | --- | 340 | 48 | --- |
| | 14-Oct-04 | 126 | 73 | 436 | 87 | --- | 50 | --- | 55 | --- | 464 | 49 | --- |
| | 05-Apr-05 | 148 | 538 | 81 | 91 | --- | 65 | --- | 61 | --- | 561 | 40 | --- |
| | 27-Oct-05 | 212 | 81 | 468 | 88 | --- | 72 | --- | 49 | --- | 485 | 60 | --- |
| | 21-Apr-06 | 150 | 96 | 508 | 100 | --- | 77 | --- | 76 | --- | 525 | 42 | --- |
| | 12-Oct-06 | 134 | 87 | 489 | 94 | --- | 48 | --- | 52 | --- | 489 | 50 | --- |
| | 26-Apr-07 | 176 | 93 | 488 | 95 | --- | 47 | --- | 64 | --- | 509 | 43 | --- |
| | 10-Oct-07 | 190 | 95 | 494 | 100 | --- | 90 | --- | 199 | --- | 531 | 40 | --- |
| Resample | 04-Dec-07 | 229 | 89.8 | 54.5 | 103 | --- | 333 | --- | 163.5 | --- | 619 | 46.5 | --- |
| | 03-Apr-08 | 271 | 86 | 476 | 85 | --- | 130 | --- | 46 | --- | 518 | 44 | --- |
| Resample | 15-May-08 | --- | --- | 442 | --- | --- | --- | --- | 68.7 | --- | --- | --- | --- |
| Resample | 04-Jun-08 | 222 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 28-Oct-08 | 185.0 | 69 | 475 | 84 | --- | 117 | --- | 44 | --- | 553 | 46 | --- |
| | 08-Apr-09 | 217 | 75 | 473 | 91 | --- | 77 | --- | 69 | --- | 560 | 47 | --- |
| | 27-Oct-09 | 148 | 68 | 472 | 88 | --- | 123 | --- | 38 | --- | 558 | 39 | --- |
| | 08-Apr-10 | 232 | 76 | 487 | 96 | --- | 65 | --- | 53 | --- | 587 | 50 | --- |
| | 13-Oct-10 | 1413 | 65 | 499 | 75 | --- | 104 | --- | 50 | --- | 608 | 53 | --- |
| | 27-Apr-11 | 390 | 74 | 494 | 76 | --- | 78 | --- | 44 | --- | 603 | 46 | --- |
| | 20-Oct-11 | 177 | 55 | 489 | 67 | --- | 142 | --- | 60 | --- | 551 | 45 | --- |
| | 26-Apr-12 | 256 | 79 | 494 | 76 | --- | 122 | --- | 58 | --- | 625 | 49 | --- |
| | 16-Oct-12 | 249 | 74 | 510 | 104 | --- | 75 | --- | 220 | --- | 589 | 49 | --- |
| | 11-Apr-13 | 248 | 89 | 484 | 76 | --- | 69 | --- | 51 | --- | 564 | 49 | --- |
| | 30-Oct-13 | 150 | 59 | 492 | 73 | --- | 92 | --- | 61 | --- | 568 | 51 | --- |
| | 09-Apr-14 | 249 | 108 | 491 | 93 | --- | 69 | --- | 62 | --- | 575 | 66 | --- |
| | 22-Oct-14 | 251 | 94 | 511 | 115 | --- | 72 | --- | 72 | --- | 530 | 57 | --- |
| | 08-Apr-15 | 191 | 96 | 524 | 113 | --- | 118 | --- | 81 | --- | 555 | 60 | |
| PH (field measurement) | 1-Jun-93 | 5.5 | 5.1 | 6.4 | 4.9 | 6.1 | 5.3 | 6.4 | 4.4 | 6.2 | 6.1 | 5.5 | 6.9 |
| [units] | Aug-93 | 6.1 | 5.8 | 6.5 | 5.9 | 6.4 | 6 | 7 | 5 | 6 | 7 | 6 | 7 |
| | Sep-93 | 6 | 5.4 | 6.6 | 5.8 | --- | 6 | 7 | 5 | 6.3 | 6.6 | 6 | 6.4 |
| | Sep-93 | 6.4 | 6.1 | 6.5 | 6.1 | 6.3 | 5 | 6 | 5 | 6.2 | 6.6 | 6 | 6.5 |
| | Apr-94 | 6.3 | 6 | 6.4 | 5.9 | 6.5 | 5.1 | 6.3 | 5.1 | 6.2 | 6.4 | 5.6 | 6.4 |
| | Oct-94 | 5.4 | 5 | 6.6 | 5.2 | 6.6 | 4.2 | 6.5 | 4.2 | 6.3 | 6.6 | 4.9 | 6.6 |
| | Apr-95 | 6 | 6.2 | 6 | 6.4 | 6.2 | 5.3 | 6.0 | 5.3 | 6.0 | 6.5 | 6.5 | 6.4 |
| | Oct-95 | 5.2 | 5 | 7 | 5.2 | 5.2 | 5 | 7 | 5 | 6.5 | 6.8 | 5 | 6.9 |
| | Apr-96 | 5.6 | 5 | 6.3 | 5.9 | 6.6 | 5 | 7 | 5 | 6.2 | 6.5 | 6 | 6.6 |
| | Oct-96 | 5.7 | 4.7 | 5.6 | 5.1 | --- | 5 | --- | 4 | --- | 5.8 | 5 | --- |
| | Apr-97 | 5.7 | 5.3 | 6.1 | 5.2 | --- | 5 | --- | 5 | --- | 6.4 | 6 | --- |
| | Oct-97 | 5.1 | 5.8 | 6.1 | 6.9 | --- | 5 | --- | 5 | --- | 5.8 | 5 | --- |
| | Apr-98 | --- | 4.8 | 4.8 | 4.8 | --- | 4.6 | --- | --- | --- | 7.0 | 4.7 | --- |
| | Oct-98 | 6.2 | 4.9 | 6.5 | --- | --- | 4.1 | --- | 4.9 | --- | 6.9 | 4.8 | --- |
| | Mar-99 | 5.8 | 5 | 6.6 | 5 | --- | 4.5 | --- | 4.8 | --- | 6.8 | 4.9 | --- |
| | Oct-99 | 5.8 | 5 | 6.8 | 4.8 | --- | 4.6 | --- | 4.6 | --- | 6.8 | 5 | --- |
| | Apr-00 | 5.6 | 5.2 | 6.4 | 5 | --- | 5.4 | --- | 5.4 | --- | 6.5 | 5 | --- |
| | Oct-00 | 5.2 | 4.8 | 6.6 | 4.8 | --- | 4.4 | --- | 4.1 | --- | 6.7 | 4.5 | --- |
| | Apr-14 | 5.2 | 4.7 | 6.3 | 4.7 | --- | 4.9 | --- | 4.4 | --- | 6.5 | 4.6 | --- |
| | Oct-14 | 5.2 | 5 | 6 | 5.2 | --- | 4.7 | --- | 4.4 | --- | 6.8 | 4.8 | --- |
| | Apr-14 | 6.1 | 5 | 6.5 | 5 | --- | 4.7 | --- | 4.8 | --- | 6.7 | 4.9 | --- |
| | Oct-14 | 5.9 | 5.1 | 7 | 5 | --- | 4.6 | --- | 4.7 | --- | 7 | 4.8 | --- |
| | Apr-14 | 6.1 | 5 | 6.9 | 5 | --- | 4.5 | --- | 4.4 | --- | 6.9 | 4.8 | --- |
| | Oct-14 | 6.4 | 4.6 | 6.7 | 4.4 | --- | 3.4 | --- | 3.9 | --- | 6.7 | 4.4 | --- |
| | Apr-04 | 6.6 | 6.0 | 7.2 | 5.6 | --- | 5.4 | --- | 5.2 | --- | 7.0 | 5.6 | --- |
| | Oct-04 | 6.7 | 4.7 | 6.7 | 4.8 | --- | 4.7 | --- | 4.5 | --- | 6.8 | 5.1 | --- |
| | 05-Apr-05 | 6.5 | 7 | 5 | 5.3 | --- | 4.9 | --- | 4.6 | --- | 6.9 | 4.9 | --- |
| | 27-Oct-05 | 6.5 | 4.8 | 6.8 | 4.9 | --- | 4.3 | --- | 4.6 | --- | 6.9 | 4.8 | --- |
| | 21-Apr-06 | 6.6 | 4.8 | 7 | 4.9 | --- | 4.5 | --- | 5.1 | --- | 7.0 | 5.1 | --- |
| | 12-Oct-06 | 6.5 | 4.8 | 7.0 | 4.8 | --- | 4.7 | --- | 5.0 | --- | 6.9 | 5 | --- |
| | 26-Apr-07 | 6.7 | 4.8 | 7.1 | 4.9 | --- | 4.8 | --- | 5.3 | --- | 7.0 | 5 | --- |
| | 10-Oct-07 | 6.1 | 4.8 | 7.1 | 5 | --- | 4.5 | --- | 4.6 | --- | 7.0 | 4.9 | --- |
| Resample | 04-Dec-07 | 7.13 | 5.8 | 6.88 | 5.3 | --- | 3.97 | --- | 4.1 | --- | 7.1 | 4.95 | --- |
| | 03-Apr-08 | 6.1 | 4.9 | 6.8 | 5.2 | --- | 5.5 | --- | 6.3 | --- | 6.9 | 5.2 | --- |
| Resample | 15-May-08 | --- | --- | 6.72 | --- | --- | --- | --- | 7.4 | --- | --- | --- | --- |
| Resample | 04-Jun-08 | 6.13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 28-Oct-08 | 6 | 4.9 | 6.5 | 5.2 | --- | 4.7 | --- | 4.7 | --- | 6.8 | 5.4 | --- |
| | 08-Apr-09 | 6.1 | 4.8 | 6.7 | 4.9 | --- | 4.6 | --- | 5 | --- | 6.7 | 6.4 | --- |
| | 27-Oct-09 | 6.3 | 4.7 | 6.7 | 4.7 | --- | 4.4 | --- | 4.5 | --- | 6.7 | 5.1 | --- |
| | 08-Apr-10 | 6.2 | 4.8 | 6.9 | 4.8 | --- | 4.4 | --- | 4.4 | --- | 6.8 | 5.2 | --- |
| | 13-Oct-10 | 6.1 | 4.8 | 6.6 | 5 | --- | 4.6 | --- | 4.8 | --- | 6.6 | 5.4 | --- |
| | 27-Apr-11 | 6.2 | 4.9 | 6.9 | 5.1 | --- | 4.7 | --- | 5.1 | --- | 7.2 | 5.4 | --- |
| | 20-Oct-11 | 6.2 | 4.9 | 6.7 | 5.1 | --- | 4.4 | --- | 4.7 | --- | 6.8 | 5.2 | --- |
| | 26-Apr-12 | 6.1 | 4.9 | 6.8 | 5.9 | --- | 4.7 | --- | 4.9 | --- | 6.6 | 5.2 | --- |
| | 16-Oct-12 | 6.1 | 4.9 | 7 | 5 | --- | 4.8 | --- | 4.8 | --- | 6.9 | 5 | --- |
| | 11-Apr-13 | 6.2 | 5.5 | 6.9 | 5 | --- | 4.7 | --- | 4.6 | --- | 6.6 | 4.9 | --- |
| | 30-Oct-13 | 6.4 | 4.8 | 6.9 | 5 | --- | 4.8 | --- | 4.7 | --- | 6.8 | 5.1 | --- |
| | 09-Apr-14 | 6.5 | 5.2 | 6.8 | 5.1 | --- | 4.9 | --- | 4.5 | --- | 6.7 | 5.1 | --- |
| | 22-Oct-14 | 6.5 | 4.9 | 6.8 | 4.9 | --- | 4.9 | --- | 4.4 | --- | 6.7 | 5.1 | --- |
| | 08-Apr-15 | 6.3 | 4.7 | 6.7 | 4.9 | --- | 4.8 | --- | 4.9 | --- | 6.6 | 5.2 | --- |
| Temperature | 01-Jun-93 | 23.0 | 25 | 21 | 26 | 22 | 27 | 19 | 23 | 20 | 18.0 | 23 | 24 |
| [oC] | 01-Aug-93 | 25.0 | 24 | 21 | 25 | 24 | 24 | 19 | 22 | 20 | 20.0 | 24 | 19 |
| | Sep-93 | 24 | 25 | 19 | 25 | --- | 24 | 21 | 24 | 20 | 20 | 24 | 21 |
| | Sep-93 | 24 | 25 | 21 | 25.0 | 21 | 24 | 20 | 24 | 21 | 21 | 25 | 21.0 |
| | Apr-94 | 18 | 17 | 17 | 19.0 | 18 | 18 | 18 | 18 | 17 | 17 | 18 | 18.0 |
| | Oct-94 | 21 | 20 | 19 | 21.0 | 20 | 21 | 19 | 21 | 16 | 19 | 20 | 19.0 |
| | Apr-95 | 17 | 16 | 16 | 17.0 | 16 | 15 | 16 | 15 | 20 | 16 | 16 | 17.0 |
| | Oct-95 | 23 | 23.0 | 20 | 23 | 20 | 22 | 20 | 22 | 13 | 20 | 21 | 20.0 |
| | Apr-96 | 13 | 12 | 14 | 13.0 | 14.0 | 12 | 13 | 12 | --- | 14 | 12 | 14.0 |
| | Oct-96 | 21 | 20 | 20 | 21.0 | --- | 22 | --- | 21 | --- | 21 | 22 | --- |
| | Apr-97 | 15 | 14 | 15 | 14.0 | --- | 13 | --- | 13 | --- | 16 | 13 | --- |
| | Oct-97 | 21 | 20 | 17 | 21.0 | --- | 20 | --- | 19 | --- | 17 | 18 | --- |
| | Apr-98 | --- | 15 | 15 | 15 | --- | 15 | --- | --- | --- | 17 | 15 | --- |
| | Oct-98 | 21 | 20 | 18 | 21 | --- | 18 | --- | 19 | --- | 19 | 20 | --- |
| | Mar-99 | 15 | 13 | 16 | 13 | --- | 13 | --- | 15 | --- | 18 | 15 | --- |
| | Oct-99 | 21 | 20 | 20 | 21 | --- | 20 | --- | 20 | --- | 20 | 19 | --- |
| | Apr-00 | 15 | 15 | 17 | 15 | --- | 15 | --- | 14 | --- | 19 | 14 | --- |
| | Oct-00 | 20 | 19 | 20 | 20 | --- | 19 | --- | 19 | --- | 20 | 20 | --- |
| | Apr-14 | 16 | 15 | 15 | 16 | --- | 15 | --- | 14 | --- | 16 | 15 | --- |
| | Oct-14 | 21 | 20 | 20 | 21 | --- | 20 | --- | 20 | --- | 21 | 21 | --- |
| | Apr-14 | 18 | 16 | 16 | 18 | --- | 18 | --- | 16 | --- | 16 | 18 | --- |
| | Oct-14 | 26 | 24 | 24 | 27 | --- | 25 | --- | 25 | --- | 22 | 21 | --- |
| | Apr-14 | 16 | 15 | 15 | 15 | --- | 15 | --- | 15 | --- | 16 | 15 | --- |
| | Oct-14 | 20 | 20 | 18 | 20 | --- | 19 | --- | 20 | --- | 20 | 20 | --- |
| | Apr-04 | 13 | 13 | 13 | 14 | --- | 12 | --- | 14 | --- | 13 | 13 | --- |
| | Oct-04 | 22 | 21 | 21 | 21 | --- | 21 | --- | 21 | --- | 21 | 21 | --- |
| | Apr-05 | 16 | 15 | 15 | 16 | --- | 15 | --- | 15 | --- | 16 | 15 | --- |
| | Oct-05 | 22 | 21 | 21 | 21 | --- | 21 | --- | 20 | --- | 22 | 20 | --- |
| | 21-Apr-06 | 18 | 17 | 18 | 17 | --- | 17 | --- | 17 | --- | 18 | 18 | --- |
| | 12-Oct-06 | 23 | 21 | 19 | 22 | --- | 21 | --- | 21 | --- | 19 | 22 | --- |
| | 26-Apr-07 | 17.0 | 16 | 18 | 16 | --- | 16 | --- | 16 | --- | 18 | 17 | --- |
| | 10-Oct-07 | 22.00 | 22 | 19 | 22 | --- | 20 | --- | 20 | --- | 20 | 22 | --- |
| Resample | 04-Dec-07 | 18.50 | 17.1 | 17.2 | 17.3 | --- | 15.5 | --- | 16.9 | --- | 17.7 | 17.3 | --- |
| | 03-Apr-08 | 15.00 | 15 | 17 | 15 | --- | 14 | --- | 14 | --- | 18 | 15 | --- |
| Resample | 15-May-08 | --- | --- | 17.9 | --- | --- | --- | --- | 17.9 | --- | --- | --- | --- |
| Resample | 04-Jun-08 | 20.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 28-Oct-08 | 21.0 | 20 | 19 | 19 | --- | 19 | --- | 20 | --- | 20 | 19 | --- |
| | 08-Apr-09 | 14.0 | 14 | 16 | 14 | --- | 14 | --- | 14 | --- | 16 | 14 | --- |
| | 27-Oct-09 | 22.0 | 21 | 19 | 21 | --- | 20 | --- | 21 | --- | 19 | 21 | --- |
| | 08-Apr-10 | 16.0 | 16 | 18 | 16 | --- | 15 | --- | 15 | --- | 18 | 15 | --- |
| | 13-Oct-10 | 23.0 | 22.0 | 20 | 22 | --- | 22 | --- | 21 | --- | 20 | 23 | --- |
| | 27-Apr-11 | 17.0 | 18.0 | 18 | 18 | --- | 17 | --- | 17 | --- | 18 | 17 | --- |
| | 20-Oct-11 | 21.0 | 21.0 | 18 | 21 | --- | 20 | --- | 20 | --- | 19 | 20 | --- |
| | 26-Apr-12 | 18.0 | 18.0 | 18 | 18 | --- | 17 | --- | 17 | --- | 18 | 17 | --- |
| | 16-Oct-12 | 22.0 | 22.0 | 19 | 21 | --- | 21 | --- | 21 | --- | 19 | 21 | --- |
| | 11-Apr-13 | 16 | 16 | 19 | 15 | --- | 15 | --- | 14 | --- | 19 | 15 | --- |
| | 30-Oct-13 | 22 | 21 | 19 | 21 | --- | 20 | --- | 20 | --- | 20 | 21 | --- |
| | 09-Apr-14 | 15 | 15 | 17 | 15 | --- | 15 | --- | 14 | --- | 17 | 15 | --- |
| | 22-Oct-14 | 22 | 21 | 21 | 20 | --- | 20 | --- | 20 | --- | 20 | 21 | --- |
| | 08-Apr-15 | 16 | 16 | 17 | 17 | --- | 15 | --- | 15 | --- | 17 | 16 | --- |
| Turbidity | 01-Jun-93 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [NTU] | 01-Aug-93 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 01-Sep-93 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 01-Sep-93 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 01-Apr-94 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Oct-94 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Apr-95 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Oct-95 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Apr-96 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Oct-96 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Apr-97 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Oct-97 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Apr-98 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Oct-98 | 150 | 330 | 170 | 270 | --- | 55 | --- | 360 | --- | 140 | 270 | --- |
| | Mar-99 | 210 | 150 | 38 | 190 | --- | 15 | --- | 400 | --- | 75 | --- | --- |
| | Oct-99 | 35 | 89 | 22 | 45 | --- | 39 | --- | 65 | --- | 18 | 32 | --- |
| | Apr-00 | 80 | 110 | 14 | 110 | --- | 18 | --- | 180 | --- | 24 | 80 | --- |
| | Oct-00 | 32 | 70 | 55 | 120 | --- | 12.0 | --- | 70 | --- | 22 | 28 | --- |
| | Apr-14 | 26 | 36 | 24 | 38 | --- | 13 | --- | 27 | --- | 33 | 26 | --- |
| | Oct-14 | 206 | 86 | 60 | 166 | --- | 20 | --- | 188 | --- | 51 | 85 | --- |
| | Apr-14 | 70 | 27 | 25 | 130 | --- | 22 | --- | 57 | --- | 23 | 35 | --- |
| | Oct-14 | 38 | 7.5 | 27 | 85 | --- | 28 | --- | 11 | --- | 35 | 21 | --- |
| | Apr-14 | 85 | 33 | 22 | 55 | --- | 12 | --- | 45 | --- | 30 | 22 | --- |
| | Oct-14 | 250 | 70 | 26 | 240 | --- | 16 | --- | 340 | --- | 100 | 36 | --- |
| | Apr-04 | 45 | 250 | 20 | 270 | --- | 60 | --- | 70 | --- | 55 | 40 | --- |
| | Oct-04 | 100 | 75 | 25 | 110 | --- | 9.3 | --- | 140 | --- | 80 | 95 | --- |
| | Apr-05 | 160 | 32 | 60 | 220 | --- | 31 | --- | 100 | --- | 22 | 80 | --- |
| | Oct-05 | 180 | 32 | 25 | 100 | --- | 36 | --- | 75 | --- | 27 | 90 | --- |
| | Apr-06 | 14 | <1.43 | 40 | 5.8 | --- | 1.7 | --- | 7.7 | --- | 75 | 45 | --- |
| | Oct-06 | 25 | 12 | 50 | <1.54 | --- | 310 | --- | 10 | --- | 60 | 70 | --- |
| | Apr-07 | 9.6 | <1.42 | 190 | <1.42 | --- | 3.2 | --- | 3.5 | --- | 75 | 21 | --- |
| | 10-Oct-07 | 45 | 7.1 | 50 | 7.5 | --- | 9.5 | --- | 13 | --- | 70 | 40 | --- |
| Resample | 04-Dec-07 | 72.1 | 29.6 | 3.17 | 62.9 | --- | 91 | --- | 124 | --- | 19.56 | 885 | --- |
| | 03-Apr-08 | 11.00 | 14 | 42 | 23 | --- | 230 | --- | 220 | --- | 95 | 65 | --- |
| Resample | 15-May-08 | --- | --- | 42.9 | --- | --- | --- | --- | 64 | --- | --- | --- | --- |
| Resample | 04-Jun-08 | 212.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 28-Oct-08 | 110.00 | 90 | 55 | 230 | --- | 90 | --- | 230 | --- | 70 | 650 | --- |
| | 08-Apr-09 | 160.0 | 40 | 55 | 85 | --- | 24 | --- | 170 | --- | 75 | 450 | --- |
| | 27-Oct-09 | 450.00 | 75 | 65 | 110 | --- | 60 | --- | 300 | --- | 55 | 230 | --- |
| | 08-Apr-10 | 190.00 | 55 | 55 | 110 | --- | 45 | --- | 150 | --- | 130 | 370 | --- |
| | 13-Oct-10 | 50.00 | 30 | 70 | 65 | --- | 50 | --- | 180 | --- | 130 | 280 | --- |
| | 27-Apr-11 | 190.00 | 60 | 55 | 120 | --- | 23 | --- | 280 | --- | 70 | 110 | --- |
| | 20-Oct-11 | 230.00 | 60 | 75 | 80 | --- | 19 | --- | 130 | --- | 180 | 180 | --- |
| | 26-Apr-12 | 280.0 | 65 | 70 | 110 | --- | 25 | --- | 110 | --- | 60 | 120 | --- |
| | 16-Oct-12 | 70.00 | 85 | 55 | 90 | --- | 55 | --- | 220 | --- | 60 | 240 | --- |
| | 11-Apr-13 | 220.0 | 110 | 40 | 130 | --- | 39 | --- | 160 | --- | 66 | 70 | --- |
| | 30-Oct-13 | 240.0 | 60 | 80 | 80 | --- | 50 | --- | 340 | --- | 100 | 100 | --- |
| | 09-Apr-14 | 120.0 | 90 | 50 | 140 | --- | 60 | --- | 280 | --- | 80 | 170 | --- |
| | 22-Oct-14 | 120 | 45 | 55 | 55 | --- | 130 | --- | 130 | --- | 80 | 180 | --- |
| | 08-Apr-15 | 1000 | 120 | 45 | 100 | --- | 260 | --- | 85 | --- | 37 | 280 | --- |

**Notes:** 1. Measurments taken in the Field by Environment 1
2. --- = No Data Avaliable

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | Downgraident SWPT-2 | | UD-1 | | UD-2 | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Compounds** | | | | | | | | | | | | | |
| Antimony | 11-Oct-07 | 0.05 | 6.0 | 0.1 | B | 0.7 | J | Dry | | Dry | | 0.1 | J |
| NC 2B = NE (5/1/2007) | 03-Apr-08 | 0.44 | 6.0 | 0.3 | B | 0.4 | B | 0.1 | B | {0.2} | J | 0.1 {ND} | J |
| | 28-Oct-08 | 0.44 | 6.0 | 0.2 | J | 0.3 | J | ND | | {0.1} | J | ND {ND} | |
| | 07-Apr-09 | 0.06 | 6.0 | 0.1 | J | 0.1 | J | ND | | 0.1 | J | ND | |
| | 27-Oct-09 | 0.06 | 6.0 | 0.8 | J | 0.2 | J | ND | | ND | | ND | |
| | 07-Apr-10 | 0.22 | 6.0 | 0.2 | B | 0.3 | B | 0.2 | B | 0.2 | B | 0.7 | J |
| | 13-Oct-10 | 0.22 | 6.0 | ND | | ND | | ND | | ND | | ND | |
| | 27-Apr-11 | 0.14 | 6.0 | ND | | ND | | 0.16 | J | ND | | ND | |
| | 20-Oct-11 | 0.14 | 6.0 | Dry | | 0.38 | J | 0.14 | J | 0.2 | J | ND | |
| | 26-Apr-12 | 0.14 | 6.0 | ND | | ND | | ND | | ND | | ND | |
| | 16-Oct-12 | 0.02 | 6.0 | 0.07 | J | 0.09 | J | 0.05 | J | ND | | ND | |
| | 11-Apr-13 | 0.02 | 6.0 | 0.14 | J | 0.2 | J | 0.15 | J | 0.04 | J | ND | |
| | 30-Oct-13 | 0.02 | 6.0 | 0.18 | B | 0.12 | B | 0.1 | B | 0.08 | B | 0.08 | J |
| | 9-Apr-14 | 0.02 | 6.0 | 0.04 | B | 0.07 | B | 0.05 | B | 0.05 | B | 0.66 | J |
| | 22-Oct-14 | 0.12 | 6.0 | ND | | ND | | ND | | ND | | ND | |
| | 8-Apr-15 | 0.12 | 6.0 | ND | | 0.14 | J | 0.42 | J | 0.2 | J | ND | |
| Arsenic | 1-Jul-93 | NR | 5 | ND | | ND | | ND | | --- | | ND | |
| | 1-Aug-93 | NR | 5 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 5 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 5 | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-94 | NR | 5 | 7 | | ND | | ND | | --- | | ND | |
| | 1-Oct-94 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-95 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-95 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-96 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-96 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 10 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 10 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 10 | --- | | Dry | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 10 | Dry | | ND | | Dry | | --- | | ND | |
| | 18-Mar-99 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Jul-99 | NR | 10.0 | --- | | --- | | --- | | ND | | ND | |
| | 1-Aug-99 | NR | 10.0 | --- | | --- | | --- | | ND | | ND | |
| | 1-Oct-99 | NR | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 1-Nov-99 | NR | 10.0 | --- | | --- | | --- | | ND | | ND | |
| | 1-Apr-00 | NR | 10.0 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-01 | NR | 10.0 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 2-Apr-02 | NR | 10.0 | --- | | ND | | ND | | ND | | ND | |
| | 2-Oct-02 | NR | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 3-Apr-03 | NR | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 3-Oct-03 | NR | 10.0 | ND | | ND | | ND | | 15 | | ND | |
| | 15-Apr-04 | NR | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 14-Oct-04 | NR | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 5-Apr-05 | NR | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-05 | NR | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 21-Apr-06 | NR | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 12-Oct-06 | NR | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 26-Apr-07 | NR | 10.0 | ND | | ND | | ND | | ND | | ND | |
| NC 2B = 50 µg/L (05/01/07) | 11-Oct-07 | 0.47 | 10.0 | 1.4 | J | 13 | | Dry | | Dry | | ND | |
| | 3-Apr-08 | 0.57 | 10.0 | 0.8 | J | 14 | | 4 | J | {2.0} | J | ND {0.2} | J |
| | 28-Oct-08 | 0.57 | 10.0 | 0.8 | B | 9.7 | J | 0.9 | B | 1.3 | B | 0.5 | J |
| | 7-Apr-09 | 0.17 | 10.0 | 0.7 | B | 1.8 | J | 1.7 | J | 0.9 | B | 0.2 | J |
| | 27-Oct-09 | 0.17 | 10.0 | 1.2 | J | 7.2 | J | 1.3 | J | 1.1 | J | ND | |
| | 7-Apr-10 | 0.04 | 10.0 | 1.2 | J | 3.9 | J | 1.0 | J | 1.3 | J | ND | |
| | 13-Oct-10 | 0.04 | 10.0 | 0.8 | J | 2.2 | J | 1.9 | J | 1.7 | J | ND | |
| | 27-Apr-11 | 0.10 | 10.0 | 0.79 | J | 2.6 | J | 0.63 | J | 0.6 | J | ND | |
| | 20-Oct-11 | 0.10 | 10.0 | Dry | | 1.4 | J | 0.76 | J | 0.6 | J | ND | |
| | 26-Apr-12 | 0.10 | 10.0 | 0.58 | J | 2.2 | J | 1.5 | J | 1.5 | J | ND | |
| | 16-Oct-12 | 0.13 | 10.0 | 1.2 | B | 1.3 | B | 1.1 | B | 0.4 | B | 0.4 | J |
| | 11-Apr-13 | 0.05 | 10.0 | 0.57 | B | 1.7 | J | 0.81 | J | 0.4 | B | 0.15 | J |
| | 30-Oct-13 | 0.05 | 10.0 | 1.1 | J | 1.1 | J | 1.4 | J | 0.66 | B | 0.2 | J |
| | 9-Apr-14 | 0.05 | 10.0 | 0.34 | J | 0.46 | J | 1.0 | J | 0.41 | J | ND | |
| | 22-Oct-14 | 0.10 | 10.0 | 5.6 | J | 2.1 | J | 0.98 | J | 0.82 | J | ND | |
| | 8-Apr-15 | 0.10 | 10.0 | 1 | J | 0.75 | J | 1.10 | J | 0.17 | J | ND | |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | SWPT-2 | | Downgraident UD-1 | | UD-2 | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Barium | 1-Jul-93 | NR | 50 | ND | | 140 | | 71 | | --- | | ND | |
| | 1-Aug-93 | NR | 50 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 50 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 50 | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-94 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-94 | NR | 500 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-95 | NR | 500 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-95 | NR | 500 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-96 | NR | 500 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-96 | NR | 500 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 500 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 500 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 500 | --- | | Dry | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 500 | Dry | | ND | | Dry | | --- | | ND | |
| | 18-Mar-99 | NR | 500 | ND | | ND | | ND | | --- | | ND | |
| | 1-Jul-99 | NR | 500.0 | --- | | --- | | --- | | ND | | ND | |
| | 1-Aug-99 | NR | 500.0 | --- | | --- | | --- | | ND | | ND | |
| | 1-Oct-99 | NR | 500.0 | ND | | ND | | ND | | ND | | ND | |
| | 1-Nov-99 | NR | 500.0 | --- | | --- | | --- | | ND | | ND | |
| | 1-Apr-00 | NR | 500.0 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 500.0 | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-01 | NR | 500.0 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 500.0 | ND | | ND | | ND | | ND | | ND | |
| | 2-Apr-02 | NR | 500.0 | --- | | ND | | ND | | ND | | ND | |
| | 2-Oct-02 | NR | 500.0 | ND | | ND | | ND | | ND | | ND | |
| | 3-Apr-03 | NR | 500.0 | ND | | ND | | ND | | ND | | ND | |
| | 3-Oct-03 | NR | 500.0 | ND | | ND | | ND | | ND | | ND | |
| | 15-Apr-04 | NR | 500.0 | ND | | ND | | ND | | ND | | ND | |
| | 14-Oct-04 | NR | 500.0 | ND | | ND | | ND | | ND | | ND | |
| | 5-Apr-05 | NR | 500.0 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-05 | NR | 500.0 | ND | | ND | | ND | | ND | | ND | |
| | 21-Apr-06 | NR | 500.0 | ND | | ND | | ND | | ND | | ND | |
| | 12-Oct-06 | NR | 500.0 | ND | | ND | | ND | | ND | | ND | |
| | 26-Apr-07 | NR | 100.0 | ND | | ND | | ND | | ND | | ND | |
| NC 2B = NE (05/01/07) | 11-Oct-07 | 0.0 | 100.0 | 47.4 | J | 187 | | Dry | | Dry | | 0.2 | J |
| | 3-Apr-08 | 0.1 | 100.0 | 30.7 | J | 72.4 | J | 94.6 | J | {71.1} | J | ND {0.4} | J |
| | 28-Oct-08 | 0.11 | 100.0 | 30.8 | J | 122 | | 36.9 | J | 93.6 | J | 0.7 | J |
| | 7-Apr-09 | 0.04 | 100.0 | 31.3 | J | 48.3 | J | 73.1 | J | 64.2 | J | 0.2 | J |
| | 27-Oct-09 | 0.04 | 100.0 | 25.5 | J | 106 | | 42.9 | J | 102.0 | | 0.1 | J |
| | 7-Apr-10 | 0.03 | 100.0 | 58.7 | J | 85.9 | J | 26.1 | J | 56.1 | J | 0.1 | J |
| | 13-Oct-10 | 0.03 | 100.0 | 14.7 | J | 61.4 | J | 62.9 | J | 85.3 | J | 0.2 | J |
| | 27-Apr-11 | 0.02 | 100.0 | 86.4 | J | 45.5 | J | 19.1 | J | 46.7 | J | 0.1 | J |
| | 20-Oct-11 | 0.02 | 100.0 | Dry | | 61.7 | J | 18.2 | J | 63.8 | J | 0.1 | J |
| | 26-Apr-12 | 0.02 | 100.0 | 75.4 | J | 28.5 | J | 7.4 | J | 21.8 | J | 0.12 | J |
| | 16-Oct-12 | 0.07 | 100.0 | 29.9 | J | 38.4 | J | 39.5 | J | 60.5 | J | 0.28 | J |
| | 11-Apr-13 | 0.06 | 100.0 | 24.3 | J | 14.2 | J | 31.2 | J | 47.7 | J | 0.06 | J |
| | 30-Oct-13 | 0.06 | 100.0 | 46.8 | J | 55.4 | J | 53.2 | J | 58 | J | 0.24 | J |
| | 9-Apr-14 | 0.06 | 100.0 | 24.8 | J | 26.1 | J | 52.2 | J | 64 | J | ND | |
| | 22-Oct-14 | 0.12 | 100.0 | 81.1 | J | 61.4 | J | 75.8 | J | 68.9 | J | ND | |
| | 8-Apr-15 | 0.12 | 100.0 | 19.2 | J | 12.1 | J | 44.1 | J | 17.9 | J | ND | |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | SWPT-2 | | UD-1 | | UD-2 | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Downgraident | | | | | | | |
| Beryllium | 1-Jul-93 | NR | 1 | ND | | ND | | ND | | --- | | ND | |
| | 1-Aug-93 | NR | 1 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 1 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 1 | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-94 | NR | 1 | ND | | ND | | 64 | | --- | | ND | |
| | 1-Oct-94 | NR | 2 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-95 | NR | 2 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-95 | NR | 2 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-96 | NR | 2 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-96 | NR | 2 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 2 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 2 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 2 | --- | | Dry | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 2 | Dry | | ND | | Dry | | --- | | ND | |
| | 18-Mar-99 | NR | 2 | ND | | ND | | ND | | --- | | ND | |
| | 1-Jul-99 | NR | 2 | --- | | --- | | --- | | ND | | ND | |
| | 1-Aug-99 | NR | 2 | --- | | --- | | --- | | ND | | ND | |
| | 1-Oct-99 | NR | 2 | ND | | ND | | ND | | ND | | ND | |
| | 1-Nov-99 | NR | 2 | --- | | --- | | --- | | ND | | ND | |
| | 1-Apr-00 | NR | 2 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 2 | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-01 | NR | 2 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 2 | ND | | ND | | ND | | ND | | ND | |
| | 2-Apr-02 | NR | 2 | --- | | ND | | ND | | ND | | ND | |
| | 2-Oct-02 | NR | 2 | ND | | ND | | ND | | ND | | ND | |
| | 3-Apr-03 | NR | 2 | ND | | ND | | ND | | ND | | ND | |
| | 3-Oct-03 | NR | 2 | ND | | ND | | ND | | ND | | ND | |
| | 15-Apr-04 | NR | 2 | ND | | ND | | ND | | ND | | ND | |
| | 14-Oct-04 | NR | 2 | ND | | ND | | ND | | ND | | ND | |
| | 5-Apr-05 | NR | 2 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-05 | NR | 2 | ND | | ND | | ND | | ND | | ND | |
| | 21-Apr-06 | NR | 2 | ND | | ND | | ND | | ND | | ND | |
| | 12-Oct-06 | NR | 2 | ND | | ND | | ND | | ND | | ND | |
| | 26-Apr-07 | NR | 1.0 | ND | | ND | | ND | | ND | | ND | |
| NC 2B = 6.5 µg/L (05/01/07) | 11-Oct-07 | 0.08 | 1.0 | ND | | 0.4 | J | Dry | | Dry | | ND | |
| | 3-Apr-08 | 0.06 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 28-Oct-08 | 0.06 | 1.0 | ND | | 0.1 | J | ND | | ND | | ND | |
| | 7-Apr-09 | 0.06 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-09 | 0.06 | 1.0 | ND | | 0.1 | J | ND | | ND | | ND | |
| | 7-Apr-10 | 0.02 | 1.0 | 0.1 | B | ND | | 0.1 | B | 0.1 | B | 0.1 | J |
| | 13-Oct-10 | 0.02 | 1.0 | 0.1 | J | 0.1 | J | 0.1 | J | 0.1 | J | ND | |
| | 27-Apr-11 | 0.02 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 20-Oct-11 | 0.02 | 1.0 | Dry | | ND | | 0.06 | J | ND | | ND | |
| | 26-Apr-12 | 0.02 | 1.0 | ND | | 0.02 | J | ND | | ND | | ND | |
| | 16-Oct-12 | 0.07 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 11-Apr-13 | 0.03 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 30-Oct-13 | 0.03 | 1.0 | 0.04 | B | ND | | ND | | ND | | 0.04 | J |
| | 9-Apr-14 | 0.03 | 1.0 | 0.03 | J | ND | | 0.04 | J | 0.1 | J | ND | |
| | 22-Oct-14 | 0.04 | 1.0 | ND | | ND | | ND | | 0.05 | J | ND | |
| | 8-Apr-15 | 0.04 | 1.0 | 0.06 | J | ND | | 0.04 | J | 0.04 | J | ND | |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | SWPT-2 | | Downgraident UD-1 | | UD-2 | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 1-Jul-93 | NR | 1 | ND | | ND | | ND | | --- | | ND | |
| | 1-Aug-93 | NR | 1 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 1 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 1 | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-94 | NR | 1 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-94 | NR | 1 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-95 | NR | 1 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-95 | NR | 1 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-96 | NR | 1 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-96 | NR | 1 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 1 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 1 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 1 | --- | | Dry | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 1 | Dry | | ND | | Dry | | --- | | ND | |
| | 18-Mar-99 | NR | 1 | ND | | ND | | ND | | --- | | ND | |
| | 1-Jul-99 | NR | 1 | --- | | --- | | --- | | ND | | ND | |
| | 1-Aug-99 | NR | 1 | --- | | --- | | --- | | ND | | ND | |
| | 1-Oct-99 | NR | 1 | ND | | ND | | ND | | ND | | ND | |
| | 1-Nov-99 | NR | 1 | --- | | --- | | --- | | ND | | ND | |
| | 1-Apr-00 | NR | 1.0 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 1.00 | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-01 | NR | 1 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 2-Apr-02 | NR | 1.0 | --- | | ND | | ND | | ND | | ND | |
| | 2-Oct-02 | NR | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 3-Apr-03 | NR | 1.0 | 2.00 | | ND | | ND | | ND | | ND | |
| | 3-Oct-03 | NR | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 15-Apr-04 | NR | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 14-Oct-04 | NR | 1.0 | ND | | 2.0 | | ND | | ND | | ND | |
| | 5-Apr-05 | NR | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-05 | NR | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 21-Apr-06 | NR | 1.0 | ND | | ND | | 2 (ND) | | 4 (ND) | | ND | |
| | 12-Oct-06 | NR | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 26-Apr-07 | NR | 1.0 | ND | | ND | | ND | | ND | | ND | |
| NC 2B = 2 µg/L (05/01/07) | 11-Oct-07 | 0.06 | 1.0 | 0.1 | B | 0.2 | B | Dry | | Dry | | 0.1 | J |
| | 3-Apr-08 | 0.05 | 1.0 | 0.1 | J | 0.1 | J | 0.1 | J | 0.1 | J | ND | |
| | 28-Oct-08 | 0.1 | 1.0 | 0.1 | J | 0.3 | J | ND | | ND | | ND | |
| | 7-Apr-09 | 0.0 | 1.0 | 0.2 | J | 0.1 | J | ND | | 0.1 | J | ND | |
| | 27-Oct-09 | 0.0 | 1.0 | 0.1 | J | 0.1 | J | 0.1 | J | 0.1 | J | ND | |
| | 7-Apr-10 | 0.0 | 1.0 | 0.1 | B | 0.3 | B | 0.1 | B | 0.1 | B | 0.1 | J |
| | 13-Oct-10 | 0.0 | 1.0 | 0.1 | J | 0.1 | J | ND | | 0.1 | J | ND | |
| | 27-Apr-11 | 0.0 | 1.0 | 0.08 | J | ND | | 0.04 | J | 0.04 | J | ND | |
| | 20-Oct-11 | 0.02 | 1 | Dry | | ND | | ND | | ND | | ND | |
| | 26-Apr-12 | 0.02 | 1.0 | 0.03 | J | 0.06 | J | 0.02 | J | ND | | ND | |
| | 16-Oct-12 | 0.03 | 1.0 | 0.04 | J | 0.05 | J | 0.05 | J | 0.1 | J | ND | |
| | 11-Apr-13 | 0.05 | 1.0 | ND | | 0.07 | J | ND | | ND | | ND | |
| | 30-Oct-13 | 0.05 | 1.0 | 0.05 | J | ND | | ND | | 0.1 | J | ND | |
| | 9-Apr-14 | 0.05 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 22-Oct-14 | 0.04 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 8-Apr-15 | 0.04 | 1.0 | ND | | ND | | ND | | ND | | ND | |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | SWPT-2 | | UD-1 | | UD-2 | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Downgraident | | | | | | | |
| Total Chromium | 1-Jul-93 | NR | 5 | ND | | ND | | ND | | --- | | ND | |
| | 1-Aug-93 | NR | 5 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 5 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 5 | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-94 | NR | 5 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-94 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-95 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-95 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-96 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-96 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 10 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 10 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 10 | --- | | Dry | | 18 | | --- | | ND | |
| | 1-Oct-98 | NR | 10 | Dry | | ND | | Dry | | --- | | ND | |
| | 18-Mar-99 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Jul-99 | NR | 10 | --- | | --- | | --- | | 12 | | ND | |
| | 1-Aug-99 | NR | 10 | --- | | --- | | --- | | 13 | | ND | |
| | 1-Oct-99 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 1-Nov-99 | NR | 10 | --- | | --- | | --- | | ND | | ND | |
| | 1-Apr-00 | NR | 5 | ND | | 28 | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 10 | ND | | 16 | | ND | | ND | | ND | |
| | 1-Apr-01 | NR | 10 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 2-Apr-02 | NR | 10 | --- | | ND | | ND | | ND | | ND | |
| | 2-Oct-02 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 3-Apr-03 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 3-Oct-03 | NR | 10 | ND | | ND | | ND | | 20 | | ND | |
| | 15-Apr-04 | NR | 10 | ND | | ND | | ND | | 22 | | ND | |
| | 14-Oct-04 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 5-Apr-05 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-05 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 21-Apr-06 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 12-Oct-06 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 26-Apr-07 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| NC 2B = 50 µg/L (05/01/07) | 11-Oct-07 | 0.24 | 10.0 | 1.7 | B | 12 | | Dry | | Dry | | 1.2 | J |
| | 3-Apr-08 | 0.11 | 10.0 | 1.3 | J | 12 | | 0.8 | J | 0.5 | J | ND | |
| | 28-Oct-08 | 0.11 | 10.0 | 0.3 | J | 13 | | 0.2 | J | 0.4 | J | ND | |
| | 7-Apr-09 | 0.10 | 10.0 | 0.3 | J | 1.2 | J | 0.5 | J | ND | | ND | |
| | 27-Oct-09 | 0.10 | 10.0 | 0.6 | J | 11 | | 0.5 | J | 0.5 | J | ND | |
| | 7-Apr-10 | 0.03 | 10.0 | 1.0 | J | 0.6 | J | 0.8 | J | 0.5 | J | ND | |
| | 13-Oct-10 | 0.03 | 10.0 | 2.5 | J | 1.1 | J | 1.3 | J | 0.3 | J | ND | |
| | 27-Apr-11 | 0.04 | 10.0 | 0.52 | B | 0.70 | B | 0.59 | B | 0.38 | B | 0.18 | J |
| | 20-Oct-11 | 0.04 | 10.0 | Dry | | 1.0 | J | 2.5 | J | 0.71 | B | 0.18 | J |
| | 26-Apr-12 | 0.04 | 10.0 | 0.28 | B | 0.7 | J | 0.42 | B | 0.38 | B | 0.09 | J |
| | 16-Oct-12 | 0.18 | 10.0 | 1.1 | J | 0.93 | J | 0.74 | J | ND | | ND | |
| | 11-Apr-13 | 0.04 | 10.0 | ND | | 0.24 | J | ND | | ND | | ND | |
| | 30-Oct-13 | 0.04 | 10.0 | 0.25 | B | 0.33 | B | 0.25 | B | ND | | 0.11 | J |
| | 9-Apr-14 | 0.04 | 10.0 | 0.73 | J | 0.16 | J | 1.2 | J | ND | | ND | |
| | 22-Oct-14 | 0.14 | 10.0 | 4.0 | J | 0.74 | J | 0.74 | J | 0.39 | J | ND | |
| | 8-Apr-15 | 0.14 | 10.0 | 4.1 | J | 0.6 | J | 1.1 | J | 3.5 | J | ND | |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | SWPT-2 | | Downgraident UD-1 | | UD-2 | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cobalt | 1-Jul-93 | NR | 20 | ND | | ND | | 28 | | --- | | ND | |
| | 1-Aug-93 | NR | 20 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 20 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 20 | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-94 | NR | 10 | 34 | B | 45 | B | 46 | B | --- | | 18 | |
| | 1-Oct-94 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-95 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-95 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-96 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-96 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 10 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 10 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 10 | --- | | Dry | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 10 | Dry | | ND | | Dry | | --- | | ND | |
| | 18-Mar-99 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Jul-99 | NR | 10 | --- | | --- | | --- | | ND | | ND | |
| | 1-Aug-99 | NR | 10 | --- | | --- | | --- | | ND | | ND | |
| | 1-Oct-99 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 1-Nov-99 | NR | 10 | --- | | --- | | --- | | ND | | ND | |
| | 1-Apr-00 | NR | 10 | ND | | 12 | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-01 | NR | 10 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 10 | 10 | | ND | | ND | | ND | | ND | |
| | 2-Apr-02 | NR | 10 | --- | | ND | | ND | | ND | | ND | |
| | 2-Oct-02 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 3-Apr-03 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 3-Oct-03 | NR | 10 | ND | | ND | | ND | | 14 | | ND | |
| | 15-Apr-04 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 14-Oct-04 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 5-Apr-05 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-05 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 21-Apr-06 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 12-Oct-06 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 26-Apr-07 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| NC 2B = NE µg/L (05/01/07) | 11-Oct-07 | 0.41 | 10.0 | 1.5 | J | 3.4 | J | Dry | | Dry | | ND | |
| | 3-Apr-08 | 0.03 | 10.0 | 0.6 | J | 3.2 | J | 3.0 | J | 1.0 | J | ND | |
| | 28-Oct-08 | 0.03 | 10.0 | 0.3 | J | 4.6 | J | 0.3 | J | 0.9 | J | ND | |
| | 7-Apr-09 | 0.02 | 10.0 | 0.7 | J | 2.7 | J | 1.7 | J | 0.7 | J | ND | |
| | 27-Oct-09 | 0.02 | 10.0 | 0.3 | J | 2.4 | J | 0.5 | J | 1.1 | J | ND | |
| | 7-Apr-10 | 0.10 | 10.0 | 1.1 | J | 2.3 | J | 0.5 | J | 1.0 | J | ND | |
| | 13-Oct-10 | 0.10 | 10.0 | 0.4 | J | 1.3 | J | 0.9 | J | 0.7 | J | ND | |
| | 27-Apr-11 | 0.03 | 10.0 | 1.7 | J | 1.8 | J | 0.20 | J | 0.52 | J | ND | |
| | 20-Oct-11 | 0.03 | 10.0 | Dry | | 0.73 | J | 0.33 | J | 0.44 | J | ND | |
| | 26-Apr-12 | 0.03 | 10.0 | 0.49 | J | 1.8 | J | 0.17 | J | 0.55 | J | ND | |
| | 16-Oct-12 | 0.02 | 10.0 | 0.52 | J | 0.96 | J | 0.38 | J | 0.37 | J | ND | |
| | 11-Apr-13 | 0.02 | 10.0 | 0.57 | J | 1.3 | J | 0.36 | J | 0.33 | J | 0.03 | J |
| | 30-Oct-13 | 0.02 | 10.0 | 0.48 | J | 0.56 | J | 0.36 | J | 0.35 | J | 0.05 | J |
| | 9-Apr-14 | 0.02 | 10.0 | 0.39 | J | 0.54 | J | 0.96 | J | 0.49 | J | ND | |
| | 22-Oct-14 | 0.12 | 10.0 | 5.6 | J | 0.98 | J | 0.70 | J | 0.59 | J | ND | |
| | 8-Apr-15 | 0.12 | 10.0 | 0.36 | J | 0.35 | J | 0.79 | J | 0.31 | J | ND | |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | Downgraident SWPT-2 | | UD-1 | | UD-2 | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | 1-Jul-93 | NR | 10 | 15 | B | 13 | B | 10 | B | --- | | 17 | |
| | 1-Aug-93 | NR | 10 | --- | | --- | | --- | | --- | | 19 | |
| | 1-Sep-93 | NR | 10 | --- | | --- | | --- | | --- | | 11 | |
| | 1-Sep-93 | NR | 10 | --- | | --- | | --- | | --- | | 39 | |
| | 1-Apr-94 | NR | 10 | 28 | B | 40 | B | 43 | B | --- | | 21 | |
| | 1-Oct-94 | NR | 200 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-95 | NR | 200 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-95 | NR | 200 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-96 | NR | 200 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-96 | NR | 200 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 200 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 200 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 200 | --- | | Dry | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 200 | Dry | | ND | | Dry | | --- | | ND | |
| | 18-Mar-99 | NR | 200 | ND | | ND | | 15 | | --- | | ND | |
| | 1-Jul-99 | NR | 200 | --- | | --- | | --- | | ND | | ND | |
| | 1-Aug-99 | NR | 200 | --- | | --- | | --- | | 11 | | ND | |
| | 1-Oct-99 | NR | 200 | ND | | ND | | ND | | ND | | ND | |
| | 1-Nov-99 | NR | 200 | --- | | --- | | --- | | ND | | ND | |
| | 1-Apr-00 | NR | 200 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 200 | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-01 | NR | 200 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 200 | ND | | ND | | ND | | ND | | ND | |
| | 2-Apr-02 | NR | 200 | --- | | ND | | ND | | ND | | ND | |
| | 2-Oct-02 | NR | 200 | ND | | ND | | ND | | ND | | ND | |
| | 3-Apr-03 | NR | 200 | ND | | ND | | ND | | ND | | ND | |
| | 3-Oct-03 | NR | 200 | ND | | ND | | ND | | ND | | ND | |
| | 15-Apr-04 | NR | 200 | ND | | ND | | ND | | ND | | ND | |
| | 14-Oct-04 | NR | 200 | ND | | ND | | ND | | ND | | ND | |
| | 5-Apr-05 | NR | 200 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-05 | NR | 200 | ND | | ND | | ND | | ND | | ND | |
| | 21-Apr-06 | NR | 200 | ND | | ND | | ND | | ND | | ND | |
| | 12-Oct-06 | NR | 200 | ND | | ND | | ND | | ND | | ND | |
| | 26-Apr-07 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| NC 2B =7 µg/L (05/01/07) | 11-Oct-07 | 0.20 | 10.0 | 0.7 | B | 3.9 | J | Dry | | Dry | | 0.4 | J |
| | 3-Apr-08 | 0.05 | 10.0 | 1.0 | B | 2.8 | J | 1.7 | J | 0.7 | B | 0.2 | J |
| | 28-Oct-08 | 0.05 | 10.0 | 0.8 | B | 3 | B | 0.7 | B | 1.4 | B | 1.1 | J |
| | 7-Apr-09 | 0.04 | 10.0 | 0.9 | J | 1.2 | J | 1.3 | J | 1.0 | J | 0.1 | J |
| | 27-Oct-09 | 0.04 | 10.0 | 3.0 | J | 1.7 | J | 0.5 | B | 0.8 | J | 0.1 | J |
| | 7-Apr-10 | 0.03 | 10.0 | 1.8 | J | 1.3 | J | 1.2 | J | 0.7 | B | 0.2 | J |
| | 13-Oct-10 | 0.03 | 10.0 | 1.3 | J | 0.9 | B | 1 | B | 0.5 | B | 0.2 | J |
| | 27-Apr-11 | 0.02 | 10.0 | 0.81 | B | 0.85 | B | 1.2 | B | 1.0 | B | 0.66 | J |
| | 20-Oct-11 | 0.02 | 10.0 | Dry | | 0.96 | B | 0.66 | B | 0.48 | B | 0.20 | J |
| | 26-Apr-12 | 0.02 | 10.0 | 0.67 | B | 1.5 | B | 1.2 | B | 0.80 | B | 0.94 | J |
| | 16-Oct-12 | 0.06 | 10.0 | 2.4 | J | 1.4 | J | 0.54 | B | 0.26 | B | 0.25 | J |
| | 11-Apr-13 | 0.06 | 10.0 | 0.66 | B | 1.1 | B | 1.1 | B | 0.48 | B | 0.28 | J |
| | 30-Oct-13 | 0.06 | 10.0 | 0.53 | B | 0.71 | B | 0.63 | B | 0.38 | B | 1.2 | J |
| | 9-Apr-14 | 0.06 | 10.0 | 0.28 | J | 0.31 | J | 0.41 | J | 0.18 | J | ND | |
| | 22-Oct-14 | 0.10 | 10.0 | 1.2 | J | 0.12 | J | 0.25 | J | ND | | ND | |
| | 8-Apr-15 | 0.10 | 10.0 | 0.70 | J | 0.35 | J | 0.54 | J | 0.34 | J | ND | |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | SWPT-2 | | UD-1 | | UD-2 | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Downgraident | | | | | | | |
| Lead | 1-Jul-93 | NR | 5 | ND | | ND | | ND | | --- | | ND | |
| | 1-Aug-93 | NR | 5 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 5 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 5 | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-94 | NR | 5 | ND | | 5 | | ND | | --- | | ND | |
| | 1-Oct-94 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-95 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-95 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-96 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-96 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 10 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 10 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 10 | --- | | Dry | | 11 | | --- | | ND | |
| | 1-Oct-98 | NR | 10 | Dry | | ND | | Dry | | --- | | ND | |
| | 18-Mar-99 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Jul-99 | NR | 10 | --- | | --- | | --- | | ND | | ND | |
| | 1-Aug-99 | NR | 10 | --- | | --- | | --- | | ND | | ND | |
| | 1-Oct-99 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 1-Nov-99 | NR | 10 | --- | | --- | | --- | | ND | | ND | |
| | 1-Apr-00 | NR | 10 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-01 | NR | 10 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 2-Apr-02 | NR | 10 | --- | | ND | | ND | | ND | | ND | |
| | 2-Oct-02 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 3-Apr-03 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 3-Oct-03 | NR | 10 | ND | | ND | | ND | | 15 | | ND | |
| | 15-Apr-04 | NR | 10 | ND | | ND | | ND | | 12 | | ND | |
| | 14-Oct-04 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 5-Apr-05 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-05 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 21-Apr-06 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 12-Oct-06 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| | 26-Apr-07 | NR | 10 | ND | | ND | | ND | | ND | | ND | |
| NC 2B = 25 µg/L (05/01/07) | 11-Oct-07 | 0.07 | 10.0 | 1.1 | J | 8.6 | J | Dry | | Dry | | 0.1 | J |
| | 3-Apr-08 | 0.32 | 10.0 | 1.0 | J | 0.8 | J | 0.3 | B | 0.1 | B | 0.1 | J |
| | 28-Oct-08 | 0.32 | 10.0 | 0.4 | B | 3.8 | J | 0.2 | B | 0.1 | B | 0.1 | J |
| | 7-Apr-09 | 0.04 | 10.0 | 0.9 | J | 0.1 | B | 0.2 | B | 0.1 | B | 0.1 | J |
| | 27-Oct-09 | 0.04 | 10.0 | 0.9 | J | 1.8 | J | 0.2 | J | 0.5 | J | ND | |
| | 7-Apr-10 | 0.01 | 10.0 | 0.8 | J | 0.3 | B | 0.5 | B | 0.3 | B | 0.1 | J |
| | 13-Oct-10 | 0.01 | 10.0 | 1.9 | J | 0.5 | B | 0.6 | J | 0.2 | B | 0.1 | J |
| | 27-Apr-11 | 0.02 | 10.0 | 0.32 | J | 0.19 | J | 0.43 | J | 0.09 | J | ND | |
| | 20-Oct-11 | 0.02 | 10.0 | Dry | | 0.29 | J | 0.92 | J | 0.28 | J | ND | |
| | 26-Apr-12 | 0.02 | 10.0 | 0.12 | J | 0.38 | J | 0.26 | J | 0.23 | J | 0.02 | J |
| | 16-Oct-12 | 0.08 | 10.0 | 0.79 | J | 0.35 | J | 0.54 | J | 0.09 | J | ND | |
| | 11-Apr-13 | 0.02 | 10.0 | 0.15 | J | 0.16 | J | 0.21 | J | ND | | ND | |
| | 30-Oct-13 | 0.02 | 10.0 | 0.20 | B | 0.09 | B | 0.16 | B | 0.03 | B | 0.08 | J |
| | 9-Apr-14 | 0.02 | 10.0 | 0.56 | J | 0.15 | B | 0.61 | J | 0.04 | B | 0.04 | J |
| | 22-Oct-14 | 0.13 | 10.0 | 0.25 | J | ND | | 0.31 | J | ND | | ND | |
| | 8-Apr-15 | 0.13 | 10.0 | 3.6 | J | 0.34 | J | 0.63 | J | ND | | ND | |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | SWPT-2 | | UD-1 | | UD-2 | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Downgraident | | | | | | | |
| Nickel | 1-Jul-93 | NR | 10 | 20 | | 20 | | 24 | | --- | | ND | |
| | 1-Aug-93 | NR | 10 | --- | | --- | | --- | | --- | | 11 | |
| | 1-Sep-93 | NR | 10 | --- | | --- | | --- | | --- | | 17 | |
| | 1-Sep-93 | NR | 10 | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-94 | NR | 10 | 37 | B | 51 | B | 57 | B | --- | | 20 | |
| | 1-Oct-94 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-95 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-95 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-96 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-96 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 50 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 50 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 50 | --- | | Dry | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 50 | Dry | | ND | | Dry | | --- | | ND | |
| | 18-Mar-99 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Jul-99 | NR | 50 | --- | | --- | | --- | | ND | | ND | |
| | 1-Aug-99 | NR | 50 | --- | | --- | | --- | | ND | | ND | |
| | 1-Oct-99 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 1-Nov-99 | NR | 50 | --- | | --- | | --- | | ND | | ND | |
| | 1-Apr-00 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-01 | NR | 50 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 2-Apr-02 | NR | 50 | --- | | ND | | ND | | ND | | ND | |
| | 2-Oct-02 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 3-Apr-03 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 3-Oct-03 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 15-Apr-04 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 14-Oct-04 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 5-Apr-05 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-05 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 21-Apr-06 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 12-Oct-06 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 26-Apr-07 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| NC 2B = 88 µg/L (05/01/07) | 11-Oct-07 | 0.66 | 50.0 | 3.4 | J | 15.2 | J | Dry | | Dry | | ND | |
| | 3-Apr-08 | 0.06 | 50.0 | 5.2 | J | 16 | J | 9.6 | J | 8.4 | J | 0.3 | J |
| | 28-Oct-08 | 0.06 | 50.0 | 3.8 | J | 14.6 | J | 2.2 | J | 7 | J | 0.2 | J |
| | 7-Apr-09 | 0.04 | 50.0 | 6.9 | J | 11.8 | J | 5.7 | J | 6.5 | J | ND | |
| | 27-Oct-09 | 0.04 | 50.0 | 2.3 | J | 13.5 | J | 2.7 | J | 3.7 | J | 0.2 | J |
| | 7-Apr-10 | 0.05 | 50.0 | 4.3 | J | 4.2 | J | 1.8 | J | 3.7 | J | ND | |
| | 13-Oct-10 | 0.05 | 50.0 | 1.7 | J | 6.7 | J | 3.1 | J | 6.2 | J | 0.1 | J |
| | 27-Apr-11 | 0.04 | 50.0 | 5.1 | J | 6.1 | J | 1.5 | B | 4.1 | J | 0.30 | J |
| | 20-Oct-11 | 0.04 | 50.0 | Dry | | 4.2 | J | 1.5 | B | 2.9 | J | 0.56 | J |
| | 26-Apr-12 | 0.04 | 50.0 | 1.7 | J | 2.7 | J | ND | | 1.9 | J | ND | |
| | 16-Oct-12 | 0.06 | 50.0 | 3.1 | J | 4.7 | J | 2.3 | J | 3.6 | J | 0.23 | J |
| | 11-Apr-13 | 0.45 | 50.0 | 4.2 | J | 6.4 | J | 2.2 | J | 5.0 | J | ND | |
| | 30-Oct-13 | 0.45 | 50.0 | 3.6 | J | 4.6 | J | 3.3 | J | 4.4 | J | ND | |
| | 9-Apr-14 | 0.45 | 50.0 | 2.4 | J | 5.2 | J | 3.0 | J | 4.6 | J | ND | |
| | 22-Oct-14 | 0.12 | 50.0 | 17.9 | J | 5.3 | J | 4.3 | J | 3.6 | J | ND | |
| | 8-Apr-15 | 0.12 | 10.0 | 1.5 | J | 1.9 | J | 2.8 | J | 3.2 | J | ND | |
| Selenium | 11-Oct-07 | 0.35 | 10.0 | 0.5 | B | 19 | | Dry | | Dry | | 0.9 | J |
| Resample | 4-Dec-07 | 3.8 | 10.0 | --- | | ND | | --- | | --- | | ND | |
| NC 2B = 5 µg/L (05/01/07) | 3-Apr-08 | 0.51 | 10.0 | 0.5 | J | 7.2 | J | ND | | {4.5} | B | ND {1.5} | J |
| | 28-Oct-08 | 0.51 | 10.0 | 0.7 | B | ND | | 0.6 | B | 3.3 | B | 1.9 | J |
| | 7-Apr-09 | 0.12 | 10.0 | 0.2 | J | 2.3 | J | 2.9 | J | 0.9 | J | ND | |
| | 27-Oct-09 | 0.12 | 10.0 | 0.4 | J | 3.1 | J | 1.5 | J | 2.0 | J | ND | |
| | 7-Apr-10 | 0.32 | 10.0 | ND | | 0.3 | J | ND | | 0.6 | J | ND | |
| | 13-Oct-10 | 0.32 | 10.0 | ND | | 3.1 | J | 2.9 | J | 2.5 | J | ND | |
| | 27-Apr-11 | 0.20 | 10.0 | 0.72 | J | 2.4 | J | ND | | 1.1 | J | ND | |
| | 20-Oct-11 | 0.20 | 10.0 | Dry | | 1.6 | J | ND | | 0.87 | J | ND | |
| | 26-Apr-12 | 0.20 | 10.0 | 0.53 | J | 1.3 | J | ND | | 1.20 | J | ND | |
| | 16-Oct-12 | 0.17 | 10.0 | 0.51 | J | 2.0 | J | 0.85 | J | 0.75 | J | ND | |
| | 11-Apr-13 | 0.06 | 10.0 | 0.52 | J | 2.1 | J | 0.78 | J | 1.4 | J | ND | |
| | 30-Oct-13 | 0.06 | 10.0 | 0.93 | J | 1.2 | J | 1.8 | J | 1.1 | J | ND | |
| | 9-Apr-14 | 0.06 | 10.0 | ND | | 0.24 | J | 0.91 | J | 0.4 | J | ND | |
| | 22-Oct-14 | 0.16 | 10.0 | 7.3 | J | 1.5 | J | 2.1 | J | 2.4 | J | ND | |
| | 8-Apr-15 | 0.16 | 10.0 | ND | | 0.21 | J | 1.0 | J | 0.37 | J | ND | |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | Downgraident SWPT-2 | | UD-1 | | UD-2 | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Silver | 28-Oct-08 | 0.04 | 10.0 | 0.1 | B | 0.1 | B | 0.1 | B | 0.1 | B | 0.1 | J |
| NC 2B = 0.06 µg/L (05/01/07) | 7-Apr-09 | 0.04 | 10.0 | ND | | 0.1 | J | ND | | 0.1 | J | ND | |
| | 27-Oct-09 | 0.04 | 10.0 | 0.1 | J | ND | | ND | | ND | | ND | |
| | 7-Apr-10 | 0.03 | 10.0 | 0.1 | B | ND | | 0.1 | B | ND | | 0.1 | J |
| | 13-Oct-10 | 0.03 | 10.0 | ND | | ND | | 0.1 | J | ND | | ND | |
| | 27-Apr-11 | 0.02 | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 20-Oct-11 | 0.02 | 10.0 | Dry | | ND | | ND | | ND | | ND | |
| | 26-Apr-12 | 0.02 | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 16-Oct-12 | 0.10 | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 11-Apr-13 | 0.03 | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 30-Oct-13 | 0.03 | 10.0 | 0.04 | B | ND | | ND | | ND | | 0.05 | J |
| | 9-Apr-14 | 0.03 | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 22-Oct-14 | 0.04 | 10.0 | ND | | ND | | ND | | ND | | ND | |
| | 8-Apr-15 | 0.04 | 10.0 | ND | | ND | | ND | | ND | | ND | |
| Thallium | 11-Oct-07 | 0.07 | 5.0 | ND | | 0.1 | J | Dry | | Dry | | ND | |
| NC 2B = 0.47 µg/L (05/01/07) | 3-Apr-08 | 0.63 | 5.0 | ND | | ND | | ND | | ND | | ND | |
| | 28-Oct-08 | 0.63 | 5.0 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-09 | 0.03 | 5.0 | 0.1 | J | ND | | ND | | ND | | ND | |
| | 7-Apr-10 | 0.05 | 5.0 | ND | | ND | | ND | | ND | | ND | |
| | 13-Oct-10 | 0.05 | 5.5 | ND | | ND | | ND | | ND | | ND | |
| | 27-Apr-11 | 0.02 | 5.5 | ND | | ND | | 0.15 | B | 0.05 | B | 0.03 | J |
| | 20-Oct-11 | 0.02 | 5.5 | Dry | | ND | | ND | | ND | | ND | |
| | 26-Apr-12 | 0.02 | 5.5 | 0.02 | J | ND | | ND | | ND | | ND | |
| | 16-Oct-12 | 0.07 | 5.5 | ND | | ND | | ND | | ND | | ND | |
| | 11-Apr-13 | 0.02 | 5.5 | ND | | ND | | ND | | ND | | 0.19 | J |
| | 30-Oct-13 | 0.02 | 5.5 | 0.28 | B | 0.1 | B | ND | | ND | | 0.13 | J |
| | 9-Apr-14 | 0.02 | 5.5 | ND | | ND | | ND | | ND | | ND | |
| | 22-Oct-14 | 0.13 | 5.5 | ND | | ND | | ND | | ND | | ND | |
| | 8-Apr-15 | 0.13 | 5.5 | ND | | ND | | ND | | ND | | ND | |
| Vanadium | 10-Oct-07 | 0.42 | 25.0 | 2.5 | J | 16.5 | J | Dry | | Dry | | ND | |
| NC 2B = NE (05/01/07) | 3-Apr-08 | 0.07 | 25.0 | 2.1 | J | 2.6 | J | 1.7 | J | {0.8} | J | ND {0.1} | J |
| | 28-Oct-08 | 0.07 | 25.0 | 0.5 | B | 8.7 | J | 1.2 | J | 0.5 | B | 0.2 | J |
| | 7-Apr-09 | 0.28 | 25.0 | 1.9 | J | 1.4 | J | 2.1 | J | 2.4 | J | ND | |
| | 27-Oct-09 | 0.28 | 25.0 | 1.8 | B | 3.4 | J | 1.2 | B | 1.5 | B | 0.4 | J |
| | 7-Apr-10 | 0.03 | 25.0 | 1.1 | B | 1.0 | B | 1.1 | B | 0.7 | B | 0.4 | J |
| | 13-Oct-10 | 0.03 | 25.0 | 3.8 | J | 1.9 | B | 2.8 | B | 1.1 | B | 0.6 | J |
| | 27-Apr-11 | 0.14 | 25.0 | 0.74 | J | 0.9 | J | 0.38 | J | ND | | ND | |
| | 20-Oct-11 | 0.14 | 25.0 | Dry | | 0.55 | J | 2.8 | J | 0.41 | J | ND | |
| | 26-Apr-12 | 0.14 | 25.0 | 0.16 | J | 1.0 | J | 0.39 | J | 0.37 | J | ND | |
| | 16-Oct-12 | 0.10 | 25.0 | 1.5 | J | 0.88 | J | 1.3 | J | 0.35 | J | ND | |
| | 11-Apr-13 | 0.07 | 25.0 | 0.59 | J | 1.1 | J | 0.47 | J | 0.52 | J | ND | |
| | 30-Oct-13 | 0.07 | 25.0 | 0.52 | J | 0.70 | J | 0.80 | J | 0.10 | J | ND | |
| | 9-Apr-14 | 0.07 | 25.0 | 1.9 | J | 0.60 | J | 2.3 | J | 0.33 | J | ND | |
| | 22-Oct-14 | 0.06 | 25.0 | 1.3 | J | 1.1 | J | 1.2 | J | 0.64 | J | ND | |
| | 8-Apr-15 | 0.06 | 25.0 | 6.9 | J | 0.67 | J | 1.5 | J | 0.50 | J | ND | |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | SWPT-2 | | UD-1 | | UD-2 | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Downgraident | | | | | | | |
| Zinc | 1-Jul-93 | NR | 10 | 11 | B | 23 | B | 11 | B | --- | | 10 | |
| | 1-Aug-93 | NR | 10 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 10 | --- | | --- | | --- | | --- | | ND | |
| | 1-Sep-93 | NR | 10 | --- | | --- | | --- | | --- | | ND | |
| | 1-Apr-94 | NR | 10 | 36 | B | 98 | B | 65 | B | --- | | 20 | |
| | 1-Oct-94 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-95 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-95 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-96 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-96 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Apr-97 | NR | 50 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-97 | NR | 50 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Apr-98 | NR | 50 | --- | | Dry | | ND | | --- | | ND | |
| | 1-Oct-98 | NR | 50 | Dry | | ND | | Dry | | --- | | ND | |
| | 18-Mar-99 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Jul-99 | NR | 50 | --- | | --- | | --- | | ND | | ND | |
| | 1-Aug-99 | NR | 50 | --- | | --- | | --- | | ND | | ND | |
| | 1-Oct-99 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 1-Nov-99 | NR | 50 | --- | | --- | | --- | | ND | | ND | |
| | 1-Apr-00 | NR | 50 | ND | | ND | | ND | | --- | | ND | |
| | 1-Oct-00 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 1-Apr-01 | NR | 50 | Dry | | Dry | | ND | | --- | | ND | |
| | 1-Oct-01 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 2-Apr-02 | NR | 50 | --- | | ND | | ND | | ND | | ND | |
| | 2-Oct-02 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 3-Apr-03 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 3-Oct-03 | NR | 50 | ND | | ND | | ND | | 81 | | ND | |
| | 15-Apr-04 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 14-Oct-04 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 5-Apr-05 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-05 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 21-Apr-06 | NR | 50 | 100 (ND) | | ND | | ND | | ND | | ND | |
| | 12-Oct-06 | NR | 50 | ND | | ND | | ND | | ND | | ND | |
| | 26-Apr-07 | NR | 10 | 45 | | ND | | 17 | | 19 | | ND | |
| NC 2B = 50 µg/L (05/01/07) | 11-Oct-07 | 0.20 | 10.0 | 44 | | 22 | B | Dry | | Dry | | 6.6 | J |
| | 3-Apr-08 | 0.04 | 10.0 | 35 | | 9.0 | B | 9.8 | B | {2.1} | B | 6.3 {2.2} | J,J |
| | 28-Oct-08 | 0.04 | 10.0 | 27 | | 25 | | 4.1 | J | 1.5 | B | 0.4 | J |
| | 7-Apr-09 | 0.14 | 10.0 | 44 | | 6.8 | J | 7.1 | J | 2.8 | B | 0.8 | J |
| | 27-Oct-09 | 0.14 | 10.0 | 23 | | 16 | | 11 | | 3.8 | B | 1.4 | J |
| | 7-Apr-10 | 0.08 | 10.0 | 24 | | 8 | J | 8.2 | J | 3.7 | J | 0.7 | J |
| | 13-Oct-10 | 0.08 | 10.0 | 6.8 | B | 4.7 | B | 12 | | 2.8 | B | 4.1 | J |
| | 27-Apr-11 | 0.24 | 10.0 | **77** | | 3.4 | B | 4.6 | B | 2.3 | B | 1.1 | J |
| | 20-Oct-11 | 0.24 | 10.0 | Dry | | 3.6 | J | 4.5 | J | 1.8 | J | 0.28 | J |
| | 26-Apr-12 | 0.24 | 10.0 | 36 | | 7.6 | B | 6.2 | B | 1.9 | B | 1.9 | J |
| | 16-Oct-12 | 0.48 | 10.0 | 36 | | 4.3 | J | 14 | | 1.2 | J | ND | |
| | 11-Apr-13 | 0.47 | 10.0 | **183** | | 6.3 | J | 37 | | 2.0 | B | 0.88 | J |
| Resample | 24-May-13 | 0.47 | 10.0 | 26 | | --- | | --- | | --- | | NR | |
| | 30-Oct-13 | 0.47 | 10.0 | **73** | | 3.2 | B | 38 | | 2.8 | B | 3.2 | J |
| | 9-Apr-14 | 0.47 | 10.0 | 6.8 | J | 1.6 | J | 6.7 | J | ND | | ND | |
| | 22-Oct-14 | 0.53 | 10.0 | **56** | | 1.9 | J | 5.1 | J | 0.98 | J | ND | |
| | 8-Apr-15 | 0.53 | 10.0 | 5.9 | J | 2.2 | B | 12 | | 2.2 | B | 0.79 | J |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | SWPT-2 | | Downgraident UD-1 | | UD-2 | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Organic Compounds** | | | | | | | | | | | | | |
| Acetone | 1-Jul-93 | NR | --- | ND | | ND | | ND | | --- | | --- | |
| | 1-Aug-93 | NR | --- | --- | | --- | | --- | | --- | | --- | |
| | 1-Sep-93 | NR | --- | --- | | --- | | --- | | --- | | --- | |
| | 1-Sep-93 | NR | --- | --- | | --- | | --- | | --- | | --- | |
| | 1-Apr-94 | NR | --- | ND | | ND | | ND | | --- | | --- | |
| | 1-Oct-94 | NR | --- | ND | | ND | | ND | | --- | | --- | |
| | 1-Apr-95 | NR | --- | ND | | ND | | ND | | --- | | --- | |
| | 1-Oct-95 | NR | --- | ND | | ND | | ND | | --- | | --- | |
| | 1-Apr-96 | NR | --- | ND | | ND | | ND | | --- | | --- | |
| | 1-Oct-96 | NR | --- | ND | | ND | | ND | | --- | | --- | |
| | 1-Apr-97 | NR | --- | Dry | | Dry | | ND | | --- | | --- | |
| | 1-Oct-97 | NR | --- | Dry | | Dry | | ND | | --- | | --- | |
| | 1-Apr-98 | NR | --- | --- | | Dry | | ND | | --- | | --- | |
| | 1-Oct-98 | NR | --- | Dry | | ND | | Dry | | --- | | --- | |
| | 18-Mar-99 | NR | --- | --- | | --- | | --- | | --- | | --- | |
| | 1-Jul-99 | NR | --- | --- | | --- | | --- | | ND | | --- | |
| | 1-Aug-99 | NR | --- | --- | | --- | | --- | | ND | | --- | |
| | 1-Oct-99 | NR | --- | ND | | 172 | | ND | | ND | | --- | |
| | 1-Nov-99 | NR | --- | --- | | --- | | --- | | ND | | --- | |
| | 1-Apr-00 | NR | --- | ND | | ND | | ND | | --- | | --- | |
| | 1-Oct-00 | NR | --- | ND | | ND | | ND | | ND | | --- | |
| | 1-Apr-01 | NR | --- | Dry | | Dry | | ND | | --- | | --- | |
| | 1-Oct-01 | NR | 100 | ND | | ND | | ND | | ND | | ND | |
| | 2-Apr-02 | NR | 100 | --- | | ND | | ND | | ND | | ND | |
| | 2-Oct-02 | NR | 100 | ND | | ND | | ND | | ND | | ND | |
| | 3-Apr-03 | NR | 100 | ND | | ND | | ND | | ND | | ND | |
| | 3-Oct-03 | NR | 100 | ND | | ND | | ND | | ND | | ND | |
| | 15-Apr-04 | NR | 100 | ND | | ND | | ND | | ND | | ND | |
| | 14-Oct-04 | NR | 100 | ND | | ND | | ND | | ND | | ND | |
| | 5-Apr-05 | NR | 100 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-05 | NR | 100 | ND | | ND | | ND | | ND | | ND | |
| | 21-Apr-06 | NR | 100 | ND | | ND | | ND | | ND | | ND | |
| | 12-Oct-06 | NR | 100 | ND | | ND | | ND | | ND | | ND | |
| | 26-Apr-07 | NR | 100 | ND | | ND | | ND | | ND | | ND | |
| NC 2B = 2,000 µg/L (05/01/07) | 11-Oct-07 | 1.21 | 100.0 | 1.40 | J | 6.40 | J | Dry | | Dry | | ND | |
| Resample | 4-Dec-07 | 2.2 | 25.0 | ND | | ND | | --- | | --- | | 4.3 | J |
| | 3-Apr-08 | 1.21 | 100.0 | 2.90 | B | 9.20 | J | 5.40 | B | {5.60} | B | 1.50 {2.10} | J,J |
| Resample | 14-May-08 | 20.0 | 100 | --- | | ND | | --- | | --- | | ND | |
| | 28-Oct-08 | 1.21 | 100.0 | 1.80 | B | 3.70 | B | 1.60 | B | 2.10 | B | 1.30 | J |
| | 7-Apr-09 | 1.21 | 100.0 | ND | | 1.70 | J | 2.00 | J | 2.00 | J | ND | |
| | 27-Oct-09 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | ND | |
| | 7-Apr-10 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | ND | |
| | 13-Oct-10 | 9.06 | 100.0 | ND | | ND | | ND | | 9.90 | J | ND | |
| | 27-Apr-11 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | ND | |
| | 20-Oct-11 | 9.06 | 100.0 | Dry | | ND | | ND | | ND | | ND | |
| | 26-Apr-12 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | ND | |
| | 16-Oct-12 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | ND | |
| | 11-Apr-13 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | ND | |
| | 30-Oct-13 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | ND | |
| | 9-Apr-14 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | ND | |
| | 22-Oct-14 | 9.06 | 100.0 | ND | | ND | | ND | | ND | | ND | |
| | 8-Apr-15 | 9.06 | 100.0 | ND | | 10.10 | J | 11.80 | J | ND | | ND | |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | Downgraident SWPT-2 | | UD-1 | | UD-2 | | Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone | 1-Jul-93 | NR | --- | ND | | ND | | ND | | --- | | --- |
| | 1-Aug-93 | NR | --- | --- | | --- | | --- | | --- | | --- |
| | 1-Sep-93 | NR | --- | --- | | --- | | --- | | --- | | --- |
| | 1-Sep-93 | NR | --- | --- | | --- | | --- | | --- | | --- |
| | 1-Apr-94 | NR | --- | ND | | ND | | ND | | --- | | --- |
| | 1-Oct-94 | NR | --- | ND | | ND | | ND | | --- | | --- |
| | 1-Apr-95 | NR | --- | ND | | ND | | ND | | --- | | --- |
| | 1-Oct-95 | NR | --- | ND | | ND | | ND | | --- | | --- |
| | 1-Apr-96 | NR | --- | ND | | ND | | ND | | --- | | --- |
| | 1-Oct-96 | NR | --- | ND | | ND | | ND | | --- | | --- |
| | 1-Apr-97 | NR | --- | Dry | | Dry | | ND | | --- | | --- |
| | 1-Oct-97 | NR | --- | Dry | | Dry | | ND | | --- | | --- |
| | 1-Apr-98 | NR | --- | --- | | Dry | | ND | | --- | | --- |
| | 1-Oct-98 | NR | --- | Dry | | ND | | Dry | | --- | | --- |
| | 18-Mar-99 | NR | --- | --- | | --- | | --- | | --- | | --- |
| | 1-Jul-99 | NR | --- | --- | | --- | | --- | | ND | | --- |
| | 1-Aug-99 | NR | --- | --- | | --- | | --- | | ND | | --- |
| | 1-Oct-99 | NR | --- | ND | | 137 | | ND | | ND | | --- |
| | 1-Nov-99 | NR | --- | --- | | --- | | --- | | ND | | --- |
| | 1-Apr-00 | NR | --- | ND | | ND | | ND | | --- | | --- |
| | 1-Oct-00 | NR | --- | ND | | ND | | ND | | ND | | --- |
| | 1-Apr-01 | NR | --- | Dry | | Dry | | ND | | --- | | --- |
| | 1-Oct-01 | NR | 100 | ND | | ND | | ND | | ND | | ND |
| | 2-Apr-02 | NR | 100 | --- | | ND | | ND | | ND | | ND |
| | 2-Oct-02 | NR | 100 | ND | | ND | | ND | | ND | | ND |
| | 3-Apr-03 | NR | 100 | ND | | ND | | ND | | ND | | ND |
| | 3-Oct-03 | NR | 100 | ND | | ND | | ND | | ND | | ND |
| | 15-Apr-04 | NR | 100 | ND | | ND | | ND | | ND | | ND |
| | 14-Oct-04 | NR | 100 | ND | | ND | | ND | | ND | | ND |
| | 5-Apr-05 | NR | 100 | ND | | ND | | ND | | ND | | ND |
| | 27-Oct-05 | NR | 100 | ND | | ND | | ND | | ND | | ND |
| | 21-Apr-06 | NR | 100 | ND | | ND | | ND | | ND | | ND |
| | 12-Oct-06 | NR | 100 | ND | | ND | | ND | | ND | | ND |
| | 26-Apr-07 | NR | 100 | ND | | ND | | ND | | ND | | ND |
| NC 2B = 160,000 µg/L (05/01/07) | 11-Oct-07 | 0.85 | 100.0 | ND | | 1.50 | J | Dry | | Dry | | ND |
| Resample | 4-Dec-07 | 0.96 | 5.0 | --- | | ND | | --- | | --- | | ND |
| | 3-Apr-08 | 0.85 | 100.0 | 1.50 | J | 2.20 | J | 1.40 | J | 2.50 | J | ND |
| | 14-May-08 | 0.96 | 100.0 | ND | | ND | | ND | | ND | | ND |
| | 28-Oct-08 | 0.85 | 100.0 | 1.20 | J | ND | | ND | | ND | | ND |
| | 7-Apr-09 | 0.85 | 100.0 | ND | | ND | | ND | | ND | | ND |
| | 27-Oct-09 | 2.21 | 100.0 | 4.50 | J | ND | | 2.40 | J | 6.60 | J | ND |
| | 7-Apr-10 | 2.21 | 100.0 | 4.70 | J | 5.20 | J | ND | | ND | | ND |
| | 13-Oct-10 | 2.21 | 100.0 | ND | | ND | | ND | | 4.10 | J | ND |
| | 27-Apr-11 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | ND |
| | 20-Oct-11 | 2.21 | 100.0 | Dry | | ND | | ND | | ND | | ND |
| | 26-Apr-12 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | ND |
| | 16-Oct-12 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | ND |
| | 11-Apr-13 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | ND |
| | 30-Oct-13 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | ND |
| | 9-Apr-14 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | ND |
| | 22-Oct-14 | 2.21 | 100.0 | ND | | ND | | ND | | ND | | ND |
| | 8-Apr-15 | 2.21 | 100.0 | ND | | 2.30 | J | 2.40 | J | 2.40 | J | ND |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | SWPT-2 | | Downgraident UD-1 | | UD-2 | | Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon Disulfide | 11-Oct-07 | 0.14 | 100.0 | ND | 0.30 | J | Dry | | Dry | | ND |
| Resample | 4-Dec-07 | 1.2 | 2.0 | --- | ND | | --- | | --- | | ND |
| NC 2B = NE (05/01/07) | 3-Apr-08 | 0.14 | 100.0 | ND | ND | | ND | | ND | | ND |
| | 28-Oct-08 | 0.14 | 100.0 | ND | ND | | ND | | ND | | ND |
| | 7-Apr-09 | 0.14 | 100.0 | ND | ND | | ND | | ND | | ND |
| | 27-Oct-09 | 0.23 | 100.0 | ND | ND | | ND | | ND | | ND |
| | 7-Apr-10 | 0.23 | 100.0 | ND | ND | | ND | | ND | | ND |
| | 13-Oct-10 | 0.23 | 100.0 | ND | ND | | ND | | ND | | ND |
| | 27-Apr-11 | 0.23 | 100.0 | ND | ND | | ND | | ND | | ND |
| | 20-Oct-11 | 0.23 | 100.0 | Dry | ND | | ND | | ND | | ND |
| | 26-Apr-12 | 0.23 | 100.0 | ND | ND | | ND | | ND | | ND |
| | 16-Oct-12 | 0.23 | 100.0 | ND | ND | | ND | | ND | | ND |
| | 11-Apr-13 | 0.23 | 100.0 | ND | ND | | ND | | ND | | ND |
| | 30-Oct-13 | 0.23 | 100.0 | ND | ND | | ND | | ND | | ND |
| | 9-Apr-14 | 0.23 | 100.0 | ND | ND | | ND | | ND | | ND |
| | 22-Oct-14 | 0.23 | 100.0 | ND | ND | | ND | | ND | | ND |
| | 8-Apr-15 | 0.23 | 100.0 | ND | ND | | ND | | ND | | ND |
| Chloromethane | 11-Oct-07 | 0.18 | 1.0 | 0.80 | J | 1.10 | Dry | | Dry | | ND |
| Resample | 4-Dec-07 | 0.11 | 1.0 | ND | | ND | --- | | --- | | ND |
| NC 2B = 96 µg/L (05/01/07) | 3-Apr-08 | 0.18 | 1.0 | ND | | 0.30 | J | 0.20 | J | 0.30 | J | ND |
| Resample | 14-May-08 | 0.11 | 1.0 | --- | | ND | | ND | | ND | | ND |
| | 28-Oct-08 | 0.18 | 1.0 | 0.20 | J | 0.20 | J | ND | | ND | | ND |
| | 7-Apr-09 | 0.18 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 27-Oct-09 | 0.77 | 1.0 | ND | | ND | | ND | | 0.90 | J | ND |
| | 7-Apr-10 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 13-Oct-10 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 27-Apr-11 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 20-Oct-11 | 0.77 | 1.0 | Dry | | ND | | ND | | ND | | ND |
| | 26-Apr-12 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 16-Oct-12 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 11-Apr-13 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 30-Oct-13 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 9-Apr-14 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 22-Oct-14 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 8-Apr-15 | 0.77 | 1.0 | ND | | ND | | ND | | ND | | ND |
| 1,1-Dichloroethane | 27-Oct-09 | 0.02 | 5.0 | ND | | 0.20 | J | ND | | ND | | ND |
| NC 2B = 20,000 µg/L (05/01/07) | 7-Apr-10 | 0.02 | 5.0 | ND | | ND | | ND | | ND | | ND |
| | 13-Oct-10 | 0.02 | 5.0 | ND | | ND | | ND | | ND | | ND |
| | 27-Apr-11 | 0.20 | 5.0 | ND | | ND | | ND | | ND | | ND |
| | 20-Oct-11 | 0.20 | 5.0 | Dry | | ND | | ND | | ND | | ND |
| | 26-Apr-12 | 0.20 | 5.0 | ND | | ND | | ND | | ND | | ND |
| | 16-Oct-12 | 0.20 | 5.0 | ND | | ND | | ND | | ND | | ND |
| | 11-Apr-13 | 0.20 | 5.0 | ND | | ND | | ND | | ND | | ND |
| | 30-Oct-13 | 0.20 | 5.0 | ND | | ND | | ND | | ND | | ND |
| | 9-Apr-14 | 0.20 | 5.0 | ND | | ND | | ND | | ND | | ND |
| | 22-Oct-14 | 0.20 | 5.0 | ND | | ND | | ND | | ND | | ND |
| | 9-Apr-15 | 0.20 | 5.0 | ND | | ND | | ND | | ND | | ND |
| 1,4-Dichlorobenzene | 3-Apr-08 | 0.21 | 1.0 | ND | | 0.40 | J | ND | | ND | | ND |
| Resample | 14-May-08 | 0.33 | 1.0 | --- | | ND | | --- | | --- | | ND |
| NC 2B = 100 µg/L (05/01/07) | 28-Oct-08 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 7-Apr-09 | 0.21 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 27-Oct-09 | 0.39 | 1.0 | ND | | 0.50 | J | ND | | ND | | ND |
| | 7-Apr-10 | 0.39 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 13-Oct-10 | 0.39 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 27-Apr-11 | 0.39 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 20-Oct-11 | 0.39 | 1.0 | Dry | | ND | | ND | | ND | | ND |
| | 26-Apr-12 | 0.39 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 16-Oct-12 | 0.39 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 11-Apr-13 | 0.39 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 30-Oct-13 | 0.39 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 9-Apr-14 | 0.39 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 22-Oct-14 | 0.39 | 1.0 | ND | | ND | | ND | | ND | | ND |
| | 8-Apr-15 | 0.39 | 1.0 | ND | | ND | | ND | | ND | | ND |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | | Downgraident SWPT-2 | | UD-1 | | UD-2 | | Blanks | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | 11-Oct-07 | 0.14 | 1.0 | ND | | ND | | Dry | | Dry | | 0.20 | J |
| NC 2B = 590 µg/L (05/01/07) | 3-Apr-08 | 0.14 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 28-Oct-08 | 0.14 | 1.0 | 0.20 | J | 0.20 | J | 0.20 | J | 0.20 | J | ND | |
| | 7-Apr-09 | 0.14 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 27-Oct-09 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 7-Apr-10 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 13-Oct-10 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 27-Apr-11 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 20-Oct-11 | 0.64 | 1.0 | Dry | | ND | | ND | | ND | | ND | |
| | 26-Apr-12 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 16-Oct-12 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 11-Apr-13 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 30-Oct-13 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 9-Apr-14 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 22-Oct-14 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 8-Apr-15 | 0.64 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| Styrene | 27-Oct-09 | 0.19 | 1.0 | ND | | 0.50 | J | ND | | ND | | ND | |
| NC 2B = NE (05/01/07) | 7-Apr-10 | 0.19 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 13-Oct-10 | 0.19 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 27-Apr-11 | 0.19 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 20-Oct-11 | 0.19 | 1.0 | Dry | | ND | | ND | | ND | | ND | |
| | 26-Apr-12 | 0.19 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 16-Oct-12 | 0.19 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 11-Apr-13 | 0.19 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 30-Oct-13 | 0.19 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 9-Apr-14 | 0.19 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 22-Oct-14 | 0.19 | 1.0 | ND | | ND | | ND | | ND | | ND | |
| | 8-Apr-15 | 0.19 | 1.0 | ND | | ND | | ND | | ND | | ND | |

# TABLE 12

## HISTORICAL DETECTIONS in SURFACE WATER
## C.R.S.W.M.A. TUSCARORA LANDFILL - SURFACE WATER MONITORING

| Analyte | Sample Collection Date | DL | SWSL | SWPT-1 | SWPT-2 | | UD-1 | | UD-2 | Blanks |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Downgraident | | | | | |
| Toluene | 1-Jul-93 | NR | --- | ND | ND | | ND | | --- | --- |
| | 1-Apr-94 | NR | --- | ND | ND | | ND | | --- | --- |
| | 1-Oct-94 | NR | --- | 12 | ND | | 33 | | --- | --- |
| | Apr-95 | NR | --- | ND | ND | | ND | | --- | --- |
| | Oct-95 | NR | --- | ND | ND | | ND | | --- | --- |
| | Apr-96 | NR | --- | ND | ND | | ND | | --- | --- |
| | Oct-96 | NR | --- | ND | 11 | | ND | | --- | --- |
| | Apr-97 | NR | --- | Dry | Dry | | ND | | --- | --- |
| | Oct-97 | NR | --- | Dry | Dry | | ND | | --- | --- |
| | Apr-98 | NR | --- | --- | Dry | | ND | | --- | --- |
| | Oct-98 | NR | --- | Dry | ND | | Dry | | --- | --- |
| | Mar-99 | NR | --- | --- | --- | | --- | | --- | --- |
| | Jul-99 | NR | --- | --- | --- | | --- | | ND | --- |
| | Aug-99 | NR | --- | --- | --- | | --- | | ND | --- |
| | Oct-99 | NR | --- | ND | ND | | ND | | ND | --- |
| | Nov-99 | NR | --- | --- | --- | | --- | | ND | --- |
| | Apr-00 | NR | --- | ND | ND | | ND | | --- | --- |
| | Oct-00 | NR | --- | ND | ND | | ND | | ND | --- |
| | Apr-01 | NR | --- | Dry | Dry | | ND | | --- | --- |
| | Oct-01 | NR | 5 | ND | ND | | ND | | ND | ND |
| | Apr-02 | NR | 5 | --- | ND | | ND | | ND | ND |
| | Oct-02 | NR | 5 | ND | ND | | ND | | ND | ND |
| | Apr-03 | NR | 5 | ND | ND | | ND | | ND | ND |
| | Oct-03 | NR | 5 | ND | ND | | ND | | ND | ND |
| | 15-Apr-04 | NR | 5 | ND | ND | | ND | | ND | ND |
| | 14-Oct-04 | NR | 5 | ND | ND | | ND | | ND | ND |
| | 05-Apr-05 | NR | 5 | ND | ND | | ND | | ND | ND |
| | 27-Oct-05 | NR | 5 | ND | ND | | ND | | ND | ND |
| | 21-Apr-06 | NR | 5 | ND | ND | | ND | | ND | ND |
| NC 2B = 11 µg/L (05/01/07) | 12-Oct-06 | NR | 5 | ND | ND | | ND | | ND | ND |
| | 26-Apr-07 | NR | 5 | ND | ND | | ND | | ND | ND |
| | 11-Oct-07 | 0.13 | 1.0 | ND | ND | | Dry | | Dry | ND |
| | 03-Apr-08 | 0.13 | 1.0 | ND | ND | | ND | | ND | ND |
| | 28-Oct-08 | 0.13 | 1.0 | ND | ND | | ND | | ND | ND |
| | 07-Apr-09 | 0.13 | 1.0 | ND | ND | | ND | | ND | ND |
| | 27-Oct-09 | 0.23 | 1.0 | ND | ND | | ND | | ND | ND |
| | 07-Apr-10 | 0.23 | 1.0 | ND | ND | | ND | | ND | ND |
| | 13-Oct-10 | 0.23 | 1.0 | ND | ND | | ND | | ND | ND |
| | 27-Apr-11 | 0.23 | 1.0 | ND | ND | | ND | | ND | ND |
| | 20-Oct-11 | 0.23 | 1.0 | Dry | ND | | ND | | ND | ND |
| | 26-Apr-12 | 0.23 | 1.0 | ND | 0.60 | J | 0.5 | J | 2.1 | ND |
| | 16-Oct-12 | 0.23 | 1.0 | ND | ND | | ND | | ND | ND |
| | 11-Apr-13 | 0.23 | 1.0 | ND | ND | | ND | | ND | ND |
| | 30-Oct-13 | 0.23 | 1.0 | ND | ND | | ND | | ND | ND |
| | 9-Apr-14 | 0.23 | 1.0 | ND | ND | | 0.90 | J | ND | ND |
| | 22-Oct-14 | 0.23 | 1.0 | ND | 0.90 | J | ND | | ND | ND |
| | 8-Apr-15 | 0.23 | 1.0 | ND | ND | | ND | | ND | ND |

**Notes:**
1. All concentrations are in micrograms per Liter (µg/L).
2. SWPT = Surface water monitoring point
3. UD = Underdrain surface water monitoring point.
4. RL = Laboratory reporting limit (NC SWSL or lower October 2007 to present).
5. --- = Data not available
6. B = Blank-qualified data; result is expected to be biased high based on concentratio--- in the blanks
7. Shaded values are above the NC 2B Surface Water Standards (NC2B)
11. Dry = Surface water monitoring point was considered to be dry.
12. ( ) = Resample event results
13. DL = Laboratory detection limit.
14. J = Concentrations detected between the DL and RL and are considered estimated.
15. Surface waters are classified as Freshwater Aquatic life, nutrient sensitive, and swamp waters (Jumping Run).
16. { } = Samples assigned a different Eequipment Blank set containing Equipment Blank concentrations higher than the Trip and/or Method Blanks.
17. NE = Not established.

# TABLE 13

## SUMMARY OF FIELD PARAMETERS
## C.R.S.W.M.A. TUSCARORA LF - SURFACE WATER MONITORING

| | Sample | Upgraident | Downgraident | | |
|---|---|---|---|---|---|
| **Analyte** | Collection Date | SWPT-1 | SWPT-2 | UD-1 | UD-2 |
| Conductivity (at 25c) | 1-Jul-93 | 80 | 340 | 50 | NA |
| [uMhos] | 1-Apr-94 | 310 | 450 | 610 | NA |
| | 1-Oct-94 | 490 | 500 | 1,100 | NA |
| | 1-Apr-95 | 500 | 380 | 480 | NA |
| | 1-Oct-95 | 480 | 910 | 500 | NA |
| | 1-Apr-96 | 400 | 560 | 390 | NA |
| | 1-Oct-96 | 460 | 920 | 260 | NA |
| | 1-Apr-97 | Dry | Dry | 840 | NA |
| | 1-Oct-97 | Dry | Dry | 1,900 | NA |
| | 1-Apr-98 | NA | Dry | 420 | NA |
| | 1-Oct-98 | Dry | 680 | Dry | NA |
| | 1-Jul-99 | NA | NA | NA | 160 |
| | 1-Aug-99 | NA | NA | NA | 1,300 |
| | 1-Oct-99 | 450 | 880 | 320 | 980 |
| | 1-Nov-99 | NA | NA | NA | 780 |
| | 1-Apr-00 | 420 | 3,000 | 470 | NA |
| | 1-Oct-00 | 110 | 1,100 | 480 | 790 |
| | 1-Apr-14 | Dry | Dry | 380 | NA |
| | 1-Oct-14 | 320 | 320 | 870 | 630 |
| | 2-Apr-14 | NA | 1,800 | 510 | 640 |
| | 2-Oct-14 | 1,000 | 1,700 | 620 | 778 |
| | 3-Apr-14 | 601 | 1,048 | 1,181 | 894 |
| | 3-Oct-14 | 741 | 974 | 481 | 1,331 |
| | 15-Apr-04 | 340 | 380 | 120 | 690 |
| | 14-Oct-04 | 255 | 363 | 375 | 329 |
| | 5-Apr-05 | 677 | 795 | 1,281 | 1,021 |
| | 27-Oct-05 | 722 | 522 | 199 | 607 |
| | 21-Apr-06 | 616 | 1,010 | 1,122 | 1,034 |
| | 12-Oct-06 | 456 | 523 | 530 | 538 |
| | 26-Apr-07 | 517 | 758 | 837 | 1,022 |
| | 11-Oct-07 | 562 | 2,820 | Dry | Dry |
| Resample | 4-Dec-07 | 2,140 | 3,630 | NS | NS |
| | 3-Apr-08 | 643 | 1,836 | 1,647 | 1,220 |
| Resample | 14-May-08 | 2,890 | 1,198 | 1,191 | 1,458 |
| | 28-Oct-08 | 571 | 2,320 | 410 | 1,245 |
| | 7-Apr-09 | 1,038 | 1,432 | 583 | 1,128 |
| | 27-Oct-09 | 521.0 | 1,820 | 319 | 1,004 |
| | 7-Apr-10 | 991 | 995 | 420 | 978 |
| | 13-Oct-10 | 78 | 911 | 625 | 896 |
| | 27-Apr-11 | 1,196 | 1,283 | 268 | 1,116 |
| | 20-Oct-11 | Dry | 819 | 295 | 838 |
| | 26-Apr-12 | 1,124 | 1,050 | 250 | 1,046 |
| | 16-Oct-12 | 625 | 967 | 562 | 1038 |
| [uMhos/ cm] | 11-Apr-13 | 846 | 992 | 436 | 1003 |
| | 30-Oct-13 | 821 | 935 | 758 | 924 |
| | 9-Apr-14 | 753 | 893 | 683 | 1099 |
| | 22-Oct-14 | 2510 | 1055 | 951 | 1022 |
| | 8-Apr-15 | 286 | 481 | 619 | 733 |
| PH (field measurement) | 1-Jun-93 | 5.9 | 6.3 | 6.3 | - |
| [standard units] | 1-Apr-94 | 6.7 | 7 | 7.2 | NA |
| | 1-Oct-94 | 7.2 | 7.3 | 7.6 | NA |
| | 1-Apr-95 | 7.2 | 7.1 | 7.3 | NA |
| | 1-Oct-95 | 7.1 | 7.5 | 7.4 | NA |
| | 1-Apr-96 | 7.1 | 6 | 7.1 | NA |
| | 1-Oct-96 | 6.1 | 6.8 | 6.8 | NA |
| | 1-Apr-97 | Dry | Dry | 6.3 | NA |
| | 1-Oct-97 | Dry | Dry | 7.1 | NA |
| | 1-Apr-98 | NA | Dry | 7 | NA |
| | 1-Oct-98 | Dry | 6.1 | Dry | NA |
| | 1-Jul-99 | NA | NA | NA | 7.0 |
| | 1-Aug-99 | NA | NA | NA | 6.2 |
| | 1-Oct-99 | 7.4 | 7.2 | 7.1 | 7.1 |
| | 1-Nov-99 | NA | NA | NA | 6.6 |
| | 1-Apr-00 | 6.9 | 8.1 | 6.6 | NA |
| | 1-Oct-00 | 7 | 7.6 | 6.6 | 6.4 |
| | 1-Apr-14 | Dry | Dry | 6.5 | NA |
| | 1-Oct-14 | 7 | 7.3 | 7.4 | 5.2 |
| | 2-Apr-14 | NA | 7.4 | 7.4 | 6.2 |
| | 2-Oct-14 | 7.5 | 7.9 | 7 | 6.2 |
| | 3-Apr-14 | 7.2 | 7.3 | 7.5 | 6.2 |
| | 3-Oct-14 | 7.3 | 7.2 | 6.9 | 6.4 |
| | 15-Apr-04 | 7.2 | 7.1 | 7.6 | 6.8 |
| | 14-Oct-04 | 7.4 | 4 | 7 | 7.2 |
| | 5-Apr-05 | 7.4 | 7.5 | 8.0 | 7.3 |
| | 27-Oct-05 | 7.3 | 7.0 | 6.9 | 7.1 |
| | 21-Apr-06 | 7 | 7.1 | 8.0 | 6.8 |
| | 12-Oct-06 | 7.1 | 7.8 | 7.2 | 7.1 |
| | 26-Apr-07 | 7.3 | 8.8 | 7.5 | 6.9 |
| | 11-Oct-07 | 7.1 | 7.1 | Dry | Dry |
| Resample | 4-Dec-07 | 8.09 | 7.5 | NS | NS |
| | 3-Apr-08 | 7.7 | 6.6 | 7.4 | 6.6 |
| Resample | 14-May-08 | 7.74 | 7.8 | 8.1 | 7.41 |
| | 28-Oct-08 | 7.3 | 7.4 | 7.2 | 6.8 |
| | 7-Apr-09 | 6.8 | 6.9 | 6.8 | 6.4 |
| | 27-Oct-09 | 6.6 | 7.0 | 7.3 | 6.8 |
| | 7-Apr-10 | 6.8 | 7.0 | 7.1 | 6.5 |
| | 13-Oct-10 | 6.8 | 7.1 | 7 | 6.2 |
| | 27-Apr-11 | 6.8 | 7.0 | 7 | 6.6 |
| | 20-Oct-11 | Dry | 7.3 | 7.7 | 6.8 |
| | 26-Apr-12 | 7.0 | 7.4 | 8.8 | 7.2 |
| | 16-Oct-12 | 7.2 | 7.2 | 7.5 | 6.7 |
| | 11-Apr-13 | 7.4 | 6.8 | 7.7 | 6.7 |
| | 30-Oct-13 | 7.6 | 7.3 | 7.6 | 6.8 |
| | 9-Apr-14 | 7.0 | 7.2 | 7.3 | 6.7 |
| | 22-Oct-14 | 7.5 | 7.1 | 7.5 | 6.6 |
| | 8-Apr-15 | 7.1 | 7.1 | 7.2 | 6.7 |

# TABLE 13

## SUMMARY OF FIELD PARAMETERS
## C.R.S.W.M.A. TUSCARORA LF - SURFACE WATER MONITORING

| | Sample | Upgraident | Downgraident | | |
|---|---|---|---|---|---|
| **Analyte** | Collection Date | SWPT-1 | SWPT-2 | UD-1 | UD-2 |
| Temperature | 1-Jun-93 | 17.0 | 15 | 15 | NA |
| [oC] | 1-Apr-94 | 23.0 | 20 | 23 | NA |
| | 1-Oct-94 | 17.0 | 16 | 18 | NA |
| | 1-Apr-95 | 20.0 | 22 | 18 | NA |
| | 1-Oct-95 | 19.0 | 19 | 22 | NA |
| | 1-Apr-96 | 11.0 | 10 | 11 | NA |
| | 1-Oct-96 | 21 | 21 | 23 | NA |
| | 1-Apr-97 | Dry | Dry | 15 | NA |
| | 1-Oct-97 | Dry | Dry | 15 | NA |
| | 1-Apr-98 | NA | Dry | 19 | NA |
| | 1-Oct-98 | Dry | 20 | Dry | NA |
| | 1-Jul-99 | NA | NA | NA | 24 |
| | 1-Aug-99 | NA | NA | NA | 23.0 |
| | 1-Oct-99 | 21 | 18 | 18 | 19.0 |
| | 1-Nov-99 | NA | NA | NA | 14.0 |
| | 1-Apr-00 | 11 | 15 | 19 | NA |
| | 1-Oct-00 | 13 | 13 | 15 | 15 |
| | 1-Apr-14 | Dry | Dry | 20 | NA |
| | 1-Oct-14 | 16 | 16 | 18 | 18 |
| | 2-Apr-14 | NA | 16 | 20 | 18 |
| | 2-Oct-14 | 25 | 22 | 22 | 22 |
| | 3-Apr-14 | 20 | 19 | 17 | 24 |
| | 3-Oct-14 | 17 | 15 | 15 | 15 |
| | 15-Apr-04 | 13 | 12 | 13 | 13 |
| | 14-Oct-04 | 20 | 20 | 19 | 19 |
| | 5-Apr-05 | 17 | 15 | 16 | 14 |
| | 27-Oct-05 | 15 | 13 | 14 | 14 |
| | 21-Apr-06 | 18 | 16 | 24 | 17 |
| | 12-Oct-06 | 21 | 26 | 21 | 23 |
| | 26-Apr-07 | 19 | 29 | 20 | 17 |
| | 11-Oct-07 | 21 | 23 | Dry | Dry |
| Resample | 4-Dec-07 | 8.5 | 8.1 | NS | NS |
| | 3-Apr-08 | 14 | 13 | 14 | 15 |
| Resample | 14-May-08 | 23.5 | 28.9 | 22.6 | 22.6 |
| | 28-Oct-08 | 14.0 | 9 | 12 | 13 |
| | 7-Apr-09 | 15.00 | 11 | 15 | 15 |
| | 27-Oct-09 | 18.00 | 17 | 18 | 18 |
| | 7-Apr-10 | 16.00 | 18 | 19 | 19 |
| | 13-Oct-10 | 21.0 | 21 | 19 | 21 |
| | 27-Apr-11 | 19.0 | 23 | 23 | 23 |
| | 20-Oct-11 | Dry | 16 | 18 | 18 |
| | 26-Apr-12 | 12.0 | 14 | 15 | 15 |
| | 16-Oct-12 | 18.0 | 17 | 18 | 18 |
| | 11-Apr-13 | 16.0 | 19 | 18 | 19 |
| | 30-Oct-13 | 17.0 | 16.0 | 16.0 | 16 |
| | 9-Apr-14 | 15.0 | 16.0 | 16.0 | 16 |
| | 22-Oct-14 | 18 | 17 | 16 | 18 |
| | 8-Apr-15 | 19 | 20 | 20 | 20 |
| Turbidity | 1-Jun-93 | NA | NA | NA | NA |
| [NTU] | 1-Apr-94 | NA | NA | NA | NA |
| | 1-Oct-94 | NA | NA | NA | NA |
| | 1-Apr-95 | NA | NA | NA | NA |
| | 1-Oct-95 | NA | NA | NA | NA |
| | 1-Apr-96 | NA | NA | NA | NA |
| | 1-Oct-96 | NA | NA | NA | NA |
| | 1-Apr-97 | Dry | Dry | NA | NA |
| | 1-Oct-97 | Dry | Dry | NA | NA |
| | 1-Apr-98 | NA | Dry | NA | NA |
| | 1-Oct-98 | Dry | 38 | Dry | NA |
| | 1-Jul-99 | NA | NA | NA | NA |
| | 1-Aug-99 | NA | NA | NA | 300 |
| | 1-Oct-99 | 160 | 120 | 65 | 70 |
| | 1-Nov-99 | NA | NA | NA | 21 |
| | 1-Apr-00 | 14 | 310 | 25 | NA |
| | 1-Oct-00 | 100 | 120 | 46 | 11 |
| | 1-Apr-14 | Dry | Dry | 26 | NA |
| | 1-Oct-14 | 70 | 60 | 4.2 | 60 |
| | 2-Apr-14 | NA | 21 | 8.6 | 140 |
| | 2-Oct-14 | 28 | 32 | 25 | 130 |
| | 3-Apr-14 | 33 | 60 | 35 | 170 |
| | 3-Oct-14 | 26 | 14 | 27 | 39 |
| | 15-Apr-04 | 28 | 55 | 50 | 330 |
| | 14-Oct-04 | 180 | 90 | 80 | 110 |
| | 5-Apr-05 | 23 | 80 | 27 | 8.1 |
| | 27-Oct-05 | 25 | 45 | 27 | 40 |
| | 21-Apr-06 | 34 | 21 | 13 | 11 |
| | 12-Oct-06 | 50 | 70 | 28 | 80 |
| | 26-Apr-07 | 50 | 80 | 31 | 12 |
| | 11-Oct-07 | 37 | 350 | Dry | Dry |
| Resample | 4-Dec-07 | 10.49 | 21.2 | NS | NS |
| | 3-Apr-08 | 40 | 65 | 28 | 40 |
| Resample | 14-May-08 | 43.2 | 45.5 | 11.64 | 79 |
| | 28-Oct-08 | 17 | 120 | 26 | 60 |
| | 7-Apr-09 | 17 | 15 | 12 | 80 |
| | 27-Oct-09 | 34 | 150 | 12 | 37 |
| | 7-Apr-10 | 33 | 26 | 15 | 35 |
| | 13-Oct-10 | 60 | 22 | 20 | 110 |
| | 27-Apr-11 | 32 | 16 | 15 | 28 |
| | 20-Oct-11 | Dry | 13 | 38 | 36 |
| | 26-Apr-12 | 36 | 38 | 7.9 | 45 |
| | 16-Oct-12 | 32 | 22 | 16 | 45 |
| | 11-Apr-13 | 18 | 9.7 | 60 | 40 |
| | 30-Oct-13 | 9.7 | 11 | 8.3 | 40 |
| | 9-Apr-14 | 39 | 8.2 | 38 | 65 |
| | 22-Oct-14 | 34 | 16 | 20 | 65 |
| | 8-Apr-15 | 160 | 18 | 36 | 23 |

**Notes:** 1. NA = Not available.
2. NS = Not sampled.
3. Dry = Surface water monitoring point was considered to be dry.

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| Analyte | Sample Collection Date | DL | SWSL | Leachate | | Blanks | |
|---|---|---|---|---|---|---|---|
| **Inorganic Compounds** | | | | | | | |
| Antimony | 1-Oct-99 | --- | 30 | 47 | | ND | |
| | 1-Apr-00 | --- | 30 | ND | | ND | |
| | 1-Oct-00 | --- | 30 | ND | | ND | |
| | 1-Apr-01 | --- | 30 | ND | | ND | |
| | 1-Oct-01 | --- | 30 | ND | | ND | |
| | 2-Apr-02 | --- | 30 | ND | | ND | |
| | 3-Apr-03 | --- | 30 | ND | | ND | |
| | 5-Apr-05 | --- | 30 | ND | | ND | |
| | 15-Dec-05 | --- | 30 | ND | | ND | |
| | 21-Apr-06 | --- | --- | --- | | ND | |
| | 12-Oct-06 | --- | --- | --- | | ND | |
| | 26-Apr-07 | --- | 6.0 | 7 | | ND | |
| | 11-Oct-07 | 0.05 | 6.0 | 4.0 | J | 0.1 | J |
| | 3-Apr-08 | 0.08 | 6.0 | 6.2 | | ND | |
| | 28-Oct-08 | 0.08 | 6.0 | 8.8 | | ND | |
| | 7-Apr-09 | 0.06 | 6.0 | 5.7 | J | ND | |
| | 27-Oct-09 | 0.06 | 6.0 | 39 | | ND | |
| | 8-Apr-10 | 0.22 | 6.0 | 1.8 | B | 0.7 | J |
| | 13-Oct-10 | 0.22 | 6.0 | 4.6 | J | ND | |
| | 27-Apr-11 | 0.14 | 6.0 | 7 | | ND | |
| | 20-Oct-11 | 0.14 | 6.0 | 46 | | ND | |
| | 26-Apr-12 | 0.14 | 6.0 | 12 | | ND | |
| | 16-Oct-12 | 0.02 | 6.0 | 44 | | ND | |
| | 11-Apr-13 | 0.02 | 6.0 | 8 | | ND | |
| | 30-Oct-13 | 0.02 | 6.0 | 12 | | 0.08 | J |
| | 9-Apr-14 | 0.02 | 6.0 | 12 | | ND | |
| | 22-Oct-14 | 0.12 | 6.0 | 2.0 | J | ND | |
| | 8-Apr-15 | 0.12 | 6.0 | 1.5 | J | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | Blanks | |
|---|---|---|---|---|---|---|
| Arsenic | 1-Oct-99 | --- | 10 | ND | ND | |
| | 1-Apr-00 | --- | 10 | ND | ND | |
| | 1-Oct-00 | --- | 10 | ND | ND | |
| | 1-Apr-01 | --- | 10 | ND | ND | |
| | 1-Oct-01 | --- | 10 | 12 | ND | |
| | 2-Apr-02 | --- | 10 | 27 | ND | |
| | 3-Apr-03 | --- | 10 | 55 | ND | |
| | 5-Apr-05 | --- | 10 | 74 | ND | |
| | 15-Dec-05 | --- | 10 | 52 | ND | |
| | 21-Apr-06 | --- | --- | --- | ND | |
| | 12-Oct-06 | --- | --- | --- | ND | |
| | 26-Apr-07 | --- | 10 | 14 | ND | |
| | 11-Oct-07 | 0.47 | 10.0 | 59 | ND | |
| | 3-Apr-08 | 0.07 | 10.0 | 45 | 0.2 | J |
| | 28-Oct-08 | 0.07 | 10.0 | 66 | 0.5 | J |
| | 7-Apr-09 | 0.17 | 10.0 | 58 | 0.2 | J |
| | 27-Oct-09 | 0.17 | 10.0 | 124 | ND | |
| | 8-Apr-10 | 0.04 | 10.0 | 86 | ND | |
| | 13-Oct-10 | 0.35 | 10.0 | 75 | ND | |
| | 27-Apr-11 | 0.43 | 10.0 | 114 | ND | |
| | 20-Oct-11 | 0.10 | 10.0 | 120 | ND | |
| | 26-Apr-12 | 0.10 | 10.0 | 149 | ND | |
| | 16-Oct-12 | 0.25 | 10.0 | 147 | 0.4 | J |
| | 11-Apr-13 | 0.05 | 10.0 | 150 | 0.15 | J |
| | 30-Oct-13 | 0.05 | 10.0 | 140 | 0.20 | J |
| | 9-Apr-14 | 0.05 | 10.0 | 130 | ND | |
| | 22-Oct-14 | 0.10 | 10.0 | 63 | ND | |
| | 8-Apr-15 | 0.63 | 10.0 | 40 | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | Blanks | |
|---|---|---|---|---|---|---|
| Barium | 1-Oct-99 | --- | 500 | ND | ND | |
| | 1-Apr-00 | --- | 500 | ND | ND | |
| | 1-Oct-00 | --- | 500 | ND | ND | |
| | 1-Apr-01 | --- | 500 | ND | ND | |
| | 1-Oct-01 | --- | 500 | 537 | ND | |
| | 2-Apr-02 | --- | 500 | 1,358 | ND | |
| | 3-Apr-03 | --- | 500 | 794 | ND | |
| | 5-Apr-05 | --- | 500 | 542 | ND | |
| | 15-Dec-05 | --- | 500 | ND | ND | |
| | 21-Apr-06 | --- | --- | --- | ND | |
| | 12-Oct-06 | --- | --- | --- | ND | |
| | 26-Apr-07 | --- | 100 | 112 | ND | |
| | 11-Oct-07 | 0.04 | 100.0 | 754 | 0.2 | J |
| | 3-Apr-08 | 0.11 | 100.0 | 838 | 0.4 | J |
| | 28-Oct-08 | 0.11 | 100.0 | 868 | 0.7 | J |
| | 7-Apr-09 | 0.04 | 100.0 | 788 | 0.2 | J |
| | 27-Oct-09 | 0.04 | 100.0 | 1,055 | 0.1 | J |
| | 8-Apr-10 | 0.03 | 100.0 | 1,001 | 0.1 | J |
| | 13-Oct-10 | 0.03 | 100.0 | 1,022 | 0.2 | J |
| | 27-Apr-11 | 0.02 | 100.0 | 934 | 0.10 | J |
| | 20-Oct-11 | 0.02 | 100.0 | 727 | 0.10 | J |
| | 26-Apr-12 | 0.02 | 100.0 | 983 | 0.12 | J |
| | 16-Oct-12 | 0.07 | 100.0 | 826 | 0.28 | J |
| | 11-Apr-13 | 0.06 | 100.0 | 1050 | 0.06 | J |
| | 30-Oct-13 | 0.06 | 100.0 | 801 | 0.24 | J |
| | 9-Apr-14 | 0.06 | 100.0 | 923 | ND | |
| | 22-Oct-14 | 0.12 | 100.0 | 1189 | ND | |
| | 8-Apr-15 | 0.12 | 100.0 | 1034 | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks | |
|---|---|---|---|---|---|---|---|
| Beryllium | 1-Oct-99 | --- | 2 | ND | | ND | |
| | 1-Apr-00 | --- | 2 | ND | | ND | |
| | 1-Oct-00 | --- | 2 | ND | | ND | |
| | 1-Apr-01 | --- | 2 | ND | | ND | |
| | 1-Oct-01 | --- | 2 | ND | | ND | |
| | 2-Apr-02 | --- | 2 | ND | | ND | |
| | 3-Apr-03 | --- | 2 | ND | | ND | |
| | 5-Apr-05 | --- | 2 | ND | | ND | |
| | 15-Dec-05 | --- | 2 | ND | | ND | |
| | 21-Apr-06 | --- | --- | --- | | ND | |
| | 12-Oct-06 | --- | --- | --- | | ND | |
| | 26-Apr-07 | --- | 1.0 | ND | | ND | |
| | 11-Oct-07 | 0.08 | 1.0 | 0.1 | J | ND | |
| | 3-Apr-08 | 0.06 | 1.0 | 0.1 | J | ND | |
| | 28-Oct-08 | 0.06 | 1.0 | 0.2 | J | ND | |
| | 7-Apr-09 | 0.06 | 1.0 | 0.1 | J | ND | |
| | 27-Oct-09 | 0.06 | 1.0 | 0.5 | J | ND | |
| | 8-Apr-10 | 0.02 | 1.0 | 0.1 | B | 0.1 | J |
| | 13-Oct-10 | 0.02 | 1.0 | 0.1 | J | ND | |
| | 27-Apr-11 | 0.02 | 1.0 | 0.10 | J | ND | |
| | 20-Oct-11 | 0.02 | 1.0 | 0.09 | J | ND | |
| | 26-Apr-12 | 0.02 | 1.0 | 0.09 | J | ND | |
| | 16-Oct-12 | 0.07 | 1.0 | 0.12 | J | ND | |
| | 11-Apr-13 | 0.03 | 1.0 | 0.14 | J | ND | |
| | 30-Oct-13 | 0.03 | 1.0 | 0.13 | B | 0.04 | J |
| | 9-Apr-14 | 0.03 | 1.0 | 0.15 | J | ND | |
| | 22-Oct-14 | 0.04 | 1.0 | 0.18 | J | ND | |
| | 8-Apr-15 | 0.04 | 1.0 | 0.18 | J | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | Blanks | |
|---|---|---|---|---|---|---|
| Cadmium | 1-Oct-99 | --- | 1 | ND | ND | |
| | 1-Apr-00 | --- | 1 | ND | ND | |
| | 1-Oct-00 | --- | 1 | ND | ND | |
| | 1-Apr-01 | --- | 1 | ND | ND | |
| | 1-Oct-01 | --- | 1 | ND | ND | |
| | 2-Apr-02 | --- | 1 | 2 | ND | |
| | 3-Apr-03 | --- | 1 | ND | ND | |
| | 5-Apr-05 | --- | 1 | ND | ND | |
| | 15-Dec-05 | --- | 1 | ND | ND | |
| | 21-Apr-06 | --- | --- | --- | ND | |
| | 12-Oct-06 | --- | --- | --- | ND | |
| | 26-Apr-07 | --- | 1 | ND | ND | |
| | 11-Oct-07 | 0.06 | 1 | 2 | 0.1 | J |
| | 3-Apr-08 | 0.04 | 1 | 4 | ND | |
| | 28-Oct-08 | 0.04 | 1 | 3.6 | ND | |
| | 7-Apr-09 | 0.04 | 1 | 3 | ND | |
| | 27-Oct-09 | 0.04 | 1 | 2.5 | ND | |
| | 8-Apr-10 | 0.02 | 1 | 5 | 0.1 | J |
| | 13-Oct-10 | 0.02 | 1 | 7 | ND | |
| | 27-Apr-11 | 0.02 | 1 | 4 | ND | |
| | 20-Oct-11 | 0.02 | 1 | 3 | ND | |
| | 26-Apr-12 | 0.02 | 1 | 3 | ND | |
| | 16-Oct-12 | 0.03 | 1 | 5.0 | ND | |
| | 11-Apr-13 | 0.05 | 1.0 | 6.0 | ND | |
| | 30-Oct-13 | 0.1 | 1.0 | 6.0 | ND | |
| | 9-Apr-14 | 0.1 | 1.0 | 5.0 | ND | |
| | 22-Oct-14 | 0.0 | 1.0 | 7.0 | ND | |
| | 8-Apr-15 | 0.0 | 1.0 | 8.0 | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | Blanks | |
|---|---|---|---|---|---|---|
| Total Chromium | 1-Oct-99 | --- | 10 | ND | ND | |
| | 1-Apr-00 | --- | 10 | ND | ND | |
| | 1-Oct-00 | --- | 10 | ND | ND | |
| | 1-Apr-01 | --- | 10 | 20 | ND | |
| | 1-Oct-01 | --- | 10 | 37 | ND | |
| | 2-Apr-02 | --- | 10 | 158 | ND | |
| | 3-Apr-03 | --- | 10 | 50 | ND | |
| | 5-Apr-05 | --- | 10 | 48 | ND | |
| | 15-Dec-05 | --- | 10 | 36 | ND | |
| | 21-Apr-06 | --- | --- | --- | ND | |
| | 12-Oct-06 | --- | --- | --- | ND | |
| | 26-Apr-07 | --- | 10 | ND | ND | |
| | 11-Oct-07 | 0.24 | 10.0 | 81 | 1.2 | J |
| | 3-Apr-08 | 0.11 | 10.0 | 61 | ND | |
| | 28-Oct-08 | 0.11 | 10.0 | 72 | ND | |
| | 7-Apr-09 | 0.10 | 10.0 | 47 | ND | |
| | 27-Oct-09 | 0.10 | 10.0 | 108 | ND | |
| | 8-Apr-10 | 0.03 | 10.0 | 56 | ND | |
| | 13-Oct-10 | 0.03 | 10.0 | 49 | ND | |
| | 27-Apr-11 | 0.04 | 10.0 | 42 | 0.18 | J |
| | 20-Oct-11 | 0.04 | 10.0 | 43 | 0.18 | J |
| | 26-Apr-12 | 0.04 | 10.0 | 41 | 0.09 | J |
| | 16-Oct-12 | 0.18 | 10.0 | 51 | ND | |
| | 11-Apr-13 | 0.04 | 10.0 | 63 | ND | |
| | 30-Oct-13 | 0.04 | 10.0 | 33 | 0.11 | J |
| | 9-Apr-14 | 0.04 | 10.0 | 58 | ND | |
| | 22-Oct-14 | 0.14 | 10.0 | 35 | ND | |
| | 8-Apr-15 | 0.14 | 10.0 | 32 | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | Blanks | |
|---|---|---|---|---|---|---|
| Cobalt | 1-Oct-99 | --- | 10 | ND | ND | |
| | 1-Apr-00 | --- | 10 | ND | ND | |
| | 1-Oct-00 | --- | 10 | ND | ND | |
| | 1-Apr-01 | --- | 10 | ND | ND | |
| | 1-Oct-01 | --- | 10 | ND | ND | |
| | 2-Apr-02 | --- | 10 | ND | ND | |
| | 3-Apr-03 | --- | 10 | 23 | ND | |
| | 5-Apr-05 | --- | 10 | 15 | ND | |
| | 15-Dec-05 | --- | 10 | 22 | ND | |
| | 21-Apr-06 | --- | --- | --- | ND | |
| | 12-Oct-06 | --- | --- | --- | ND | |
| | 26-Apr-07 | --- | 10 | ND | ND | |
| | 11-Oct-07 | 0.41 | 10.0 | 14 | ND | |
| | 3-Apr-08 | 0.03 | 10.0 | 13 | ND | |
| | 28-Oct-08 | 0.03 | 10.0 | 15 | ND | |
| | 7-Apr-09 | 0.02 | 10.0 | 12 | ND | |
| | 27-Oct-09 | 0.02 | 10.0 | 18 | ND | |
| | 8-Apr-10 | 0.10 | 10.0 | 15 | ND | |
| | 13-Oct-10 | 0.10 | 10.0 | 15 | ND | |
| | 27-Apr-11 | 0.03 | 10.0 | 14 | ND | |
| | 20-Oct-11 | 0.03 | 10.0 | 13 | ND | |
| | 26-Apr-12 | 0.03 | 10.0 | 13 | ND | |
| | 16-Oct-12 | 0.02 | 10.0 | 17 | ND | |
| | 11-Apr-13 | 0.02 | 10.0 | 18 | 0.03 | J |
| | 30-Oct-13 | 0.02 | 10.0 | 12 | 0.05 | J |
| | 9-Apr-14 | 0.02 | 10.0 | 13 | ND | |
| | 22-Oct-14 | 0.12 | 10.0 | 13 | ND | |
| | 8-Apr-15 | 0.12 | 10.0 | 15.0 | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks | |
|---|---|---|---|---|---|---|---|
| Copper | 1-Oct-99 | --- | 200 | ND | | ND | |
| | 1-Apr-00 | --- | 200 | ND | | ND | |
| | 1-Oct-00 | --- | 200 | ND | | ND | |
| | 1-Apr-01 | --- | 200 | --- | | ND | |
| | 1-Oct-01 | --- | 200 | ND | | ND | |
| | 2-Apr-02 | --- | 200 | ND | | ND | |
| | 3-Apr-03 | --- | 200 | ND | | ND | |
| | 5-Apr-05 | --- | 200 | ND | | ND | |
| | 15-Dec-05 | --- | 200 | ND | | ND | |
| | 21-Apr-06 | --- | --- | --- | | ND | |
| | 12-Oct-06 | --- | --- | --- | | ND | |
| | 26-Apr-07 | --- | 10 | ND | | ND | |
| | 11-Oct-07 | 0.20 | 10.0 | 9.4 | J | 0.4 | J |
| | 3-Apr-08 | 0.05 | 10.0 | 12 | | 0.2 | J |
| | 28-Oct-08 | 0.05 | 10.0 | 6.5 | J | 1.1 | J |
| | 7-Apr-09 | 0.04 | 10.0 | 10 | | 0.1 | J |
| | 27-Oct-09 | 0.04 | 10.0 | 31 | | 0.1 | J |
| | 8-Apr-10 | 0.03 | 10.0 | 10 | | 0.2 | J |
| | 13-Oct-10 | 0.03 | 10.0 | 9.6 | J | 0.2 | J |
| | 27-Apr-11 | 0.02 | 10.0 | 6.7 | J | 0.66 | J |
| | 20-Oct-11 | 0.02 | 10.0 | 7.3 | J | 0.2 | J |
| | 26-Apr-12 | 0.02 | 10.0 | 9.6 | J | 0.94 | J |
| | 16-Oct-12 | 0.06 | 10.0 | 25 | | 0.25 | J |
| | 11-Apr-13 | 0.06 | 10.0 | 13 | | 0.28 | J |
| | 30-Oct-13 | 0.06 | 10.0 | 6.7 | J | 1.2 | J |
| | 9-Apr-14 | 0.06 | 10.0 | 5.8 | J | ND | |
| | 22-Oct-14 | 0.10 | 10.0 | 5.3 | J | ND | |
| | 8-Apr-15 | 0.10 | 10.0 | 5.6 | J | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks | |
|---|---|---|---|---|---|---|---|
| Lead | 1-Oct-99 | --- | 10 | ND | | ND | |
| | 1-Apr-00 | --- | 10 | ND | | ND | |
| | 1-Oct-00 | --- | 10 | ND | | ND | |
| | 1-Apr-01 | --- | 10 | ND | | ND | |
| | 1-Oct-01 | --- | 10 | ND | | ND | |
| | 2-Apr-02 | --- | 10 | 30 | | ND | |
| | 3-Apr-03 | --- | 10 | ND | | ND | |
| | 5-Apr-05 | --- | 10 | 11 | | ND | |
| | 15-Dec-05 | --- | 10 | ND | | ND | |
| | 21-Apr-06 | --- | --- | --- | | ND | |
| | 12-Oct-06 | --- | --- | --- | | ND | |
| | 26-Apr-07 | --- | 10 | ND | | ND | |
| | 11-Oct-07 | 0.07 | 10.0 | 1.4 | J | 0.1 | J |
| | 3-Apr-08 | 0.04 | 10.0 | 0.7 | J | 0.1 | J |
| | 28-Oct-08 | 0.04 | 10.0 | 1.1 | J | 0.1 | J |
| | 7-Apr-09 | 0.04 | 10.0 | 0.3 | B | 0.1 | J |
| | 27-Oct-09 | 0.04 | 10.0 | 16 | | ND | |
| | 8-Apr-10 | 0.01 | 10.0 | 0.2 | B | 0.1 | J |
| | 13-Oct-10 | 0.01 | 10.0 | 0.2 | B | 0.1 | J |
| | 27-Apr-11 | 0.02 | 10.0 | 0.13 | J | ND | |
| | 20-Oct-11 | 0.02 | 10.0 | 0.22 | J | ND | |
| | 26-Apr-12 | 0.02 | 10.0 | 0.12 | J | 0.02 | J |
| | 16-Oct-12 | 0.08 | 10.0 | 0.34 | J | ND | |
| | 11-Apr-13 | 0.02 | 10.0 | 0.42 | J | ND | |
| | 30-Oct-13 | 0.02 | 10.0 | 0.30 | B | 0.08 | J |
| | 9-Apr-14 | 0.02 | 10.0 | 0.26 | J | ND | |
| | 22-Oct-14 | 0.13 | 10.0 | 0.28 | J | ND | |
| | 8-Apr-15 | 0.13 | 10.0 | 0.3 | J | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | Blanks | |
|---|---|---|---|---|---|---|
| Nickel | 1-Oct-99 | --- | 50 | ND | ND | |
| | 1-Apr-00 | --- | 50 | ND | ND | |
| | 1-Oct-00 | --- | 50 | ND | ND | |
| | 1-Apr-01 | --- | 50 | ND | ND | |
| | 1-Oct-01 | --- | 50 | 77 | ND | |
| | 2-Apr-02 | --- | 50 | 394 | ND | |
| | 3-Apr-03 | --- | 50 | 141 | ND | |
| | 5-Apr-05 | --- | 50 | 112 | ND | |
| | 15-Dec-05 | --- | 50 | 84 | ND | |
| | 21-Apr-06 | --- | --- | --- | ND | |
| | 12-Oct-06 | --- | --- | --- | ND | |
| | 26-Apr-07 | --- | 50 | ND | ND | |
| | 11-Oct-07 | 0.66 | 50.0 | 77 | ND | |
| | 3-Apr-08 | 0.06 | 50.0 | 77 | 0.3 | J |
| | 28-Oct-08 | 0.06 | 50.0 | 81 | 0.2 | J |
| | 7-Apr-09 | 0.04 | 50.0 | 70 | ND | |
| | 27-Oct-09 | 0.04 | 50.0 | 130 | 0.2 | J |
| | 8-Apr-10 | 0.05 | 50.0 | 85 | ND | |
| | 13-Oct-10 | 0.05 | 50.0 | 82 | 0.1 | J |
| | 27-Apr-11 | 0.04 | 50.0 | 74 | 0.3 | J |
| | 20-Oct-11 | 0.04 | 50.0 | 72 | 0.56 | J |
| | 26-Apr-12 | 0.04 | 50.0 | 68 | ND | |
| | 16-Oct-12 | 0.06 | 50.0 | 81 | 0.23 | J |
| | 11-Apr-13 | 0.45 | 50.0 | 91 | ND | |
| | 30-Oct-13 | 0.45 | 50.0 | 62 | ND | |
| | 9-Apr-14 | 0.45 | 50.0 | 108 | ND | |
| | 22-Oct-14 | 0.12 | 50.0 | 71 | ND | |
| | 8-Apr-15 | 0.12 | 50.0 | 82.0 | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks | |
|---|---|---|---|---|---|---|---|
| Selenium | 1-Oct-99 | --- | 20 | ND | | ND | |
| | 1-Apr-00 | --- | 20 | ND | | ND | |
| | 1-Oct-00 | --- | 10 | ND | | ND | |
| | 1-Apr-01 | --- | 20 | ND | | ND | |
| | 1-Oct-01 | --- | 20 | ND | | ND | |
| | 2-Apr-02 | --- | 20 | ND | | ND | |
| | 3-Apr-03 | --- | 20 | ND | | ND | |
| | 5-Apr-05 | --- | 20 | 20 | | ND | |
| | 15-Dec-05 | --- | 20 | 33 | | ND | |
| | 21-Apr-06 | --- | --- | --- | | ND | |
| | 12-Oct-06 | --- | --- | --- | | ND | |
| | 26-Apr-07 | --- | 10 | 20 | | ND | |
| | 11-Oct-07 | 0.35 | 10.0 | 51 | | 0.9 | J |
| | 3-Apr-08 | 0.14 | 10.0 | 0.6 | B | 1.5 | J |
| | 28-Oct-08 | 0.14 | 10.0 | ND | | 1.9 | J |
| | 7-Apr-09 | 0.12 | 10.0 | 42 | | ND | |
| | 27-Oct-09 | 0.12 | 10.0 | 60 | | ND | |
| | 8-Apr-10 | 0.32 | 10.0 | 65 | | ND | |
| | 13-Oct-10 | 0.30 | 10.0 | ND | | ND | |
| | 27-Apr-11 | 0.32 | 10.0 | ND | | ND | |
| | 20-Oct-11 | 0.32 | 10.0 | ND | | ND | |
| | 26-Apr-12 | 0.32 | 10.0 | 28 | | ND | |
| | 16-Oct-12 | 0.54 | 10.0 | ND | | ND | |
| | 11-Apr-13 | 0.06 | 10.0 | 82 | | ND | |
| | 30-Oct-13 | 0.06 | 10.0 | 47 | | ND | |
| | 9-Apr-14 | 0.06 | 10.0 | 59 | | ND | |
| | 22-Oct-14 | 0.16 | 10.0 | 66 | | ND | |
| | 8-Apr-15 | 0.44 | 10.0 | ND | | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks | |
|---|---|---|---|---|---|---|---|
| Silver | 1-Oct-99 | --- | 10 | ND | | ND | |
| | 1-Apr-00 | --- | 10 | ND | | ND | |
| | 1-Oct-00 | --- | 10 | ND | | ND | |
| | 1-Apr-01 | --- | 10 | ND | | ND | |
| | 1-Oct-01 | --- | 10 | ND | | ND | |
| | 2-Apr-02 | --- | 10 | ND | | ND | |
| | 3-Apr-03 | --- | 10 | ND | | ND | |
| | 5-Apr-05 | --- | 10 | ND | | ND | |
| | 15-Dec-05 | --- | 10 | ND | | ND | |
| | 21-Apr-06 | --- | --- | --- | | ND | |
| | 12-Oct-06 | --- | --- | --- | | ND | |
| | 26-Apr-07 | --- | 10 | ND | | ND | |
| | 11-Oct-07 | --- | 10 | ND | | ND | |
| | 3-Apr-08 | 0.04 | 10.0 | 0.7 | J | ND | |
| | 28-Oct-08 | 0.04 | 10.0 | 0.7 | J | 0.1 | J |
| | 7-Apr-09 | 0.04 | 10.0 | 0.8 | J | ND | |
| | 27-Oct-09 | 0.04 | 10.0 | 0.8 | J | ND | |
| | 8-Apr-10 | 0.03 | 10.0 | 1.0 | J | 0.1 | J |
| | 13-Oct-10 | 0.03 | 10.0 | 1.5 | J | ND | |
| | 27-Apr-11 | 0.02 | 10.0 | 0.82 | J | ND | |
| | 20-Oct-11 | 0.02 | 10.0 | 0.73 | J | ND | |
| | 26-Apr-12 | 0.02 | 10.0 | 0.94 | J | ND | |
| | 16-Oct-12 | 0.10 | 10.0 | 1.20 | J | ND | |
| | 11-Apr-13 | 0.03 | 10.0 | 1.2 | J | ND | |
| | 30-Oct-13 | 0.03 | 10.0 | 1.1 | J | 0.05 | J |
| | 9-Apr-14 | 0.03 | 10.0 | 0.92 | J | ND | |
| | 22-Oct-14 | 0.04 | 10.0 | 1.4 | J | ND | |
| | 8-Apr-15 | 0.04 | 10.0 | 2.2 | J | ND | |
| Thallium | 27-Apr-11 | 0.02 | 5.5 | 0.04 | B | 0.03 | J |
| | 20-Oct-11 | 0.02 | 5.5 | ND | | ND | |
| | 26-Apr-12 | 0.02 | 5.5 | ND | | ND | |
| | 16-Oct-12 | 0.07 | 5.5 | 0.29 | J | ND | |
| | 11-Apr-13 | 0.02 | 5.5 | 0.04 | B | 0.19 | J |
| | 30-Oct-13 | 0.02 | 5.5 | 0.08 | B | 0.13 | J |
| | 9-Apr-14 | 0.02 | 5.5 | ND | | ND | |
| | 22-Oct-14 | 0.13 | 5.5 | ND | | ND | |
| | 8-Apr-15 | 0.13 | 5.5 | ND | | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks | |
|---|---|---|---|---|---|---|---|
| Vanadium | 1-Oct-99 | --- | 40 | ND | | ND | |
| | 1-Apr-00 | --- | 40 | ND | | ND | |
| | 1-Oct-00 | --- | 40 | ND | | ND | |
| | 1-Apr-01 | --- | 40 | ND | | ND | |
| | 1-Oct-01 | --- | 40 | ND | | ND | |
| | 2-Apr-02 | --- | 40 | ND | | ND | |
| | 3-Apr-03 | --- | 40 | ND | | ND | |
| | 5-Apr-05 | --- | 40 | ND | | ND | |
| | 15-Dec-05 | --- | 40 | 51 | | ND | |
| | 21-Apr-06 | --- | --- | --- | | ND | |
| | 12-Oct-06 | --- | --- | --- | | ND | |
| | 26-Apr-07 | --- | 25 | ND | | ND | |
| | 11-Oct-07 | 0.42 | 25.0 | 17.6 | J | ND | |
| | 3-Apr-08 | 0.07 | 25.0 | 14.9 | J | 0.1 | J |
| | 28-Oct-08 | 0.07 | 25.0 | 18.5 | J | 0.2 | J |
| | 7-Apr-09 | 0.28 | 25.0 | 13.3 | J | ND | |
| | 27-Oct-09 | 0.28 | 25.0 | 28 | | 0.4 | J |
| | 8-Apr-10 | 0.03 | 25.0 | 17.2 | | 0.4 | J |
| | 13-Oct-10 | 0.03 | 25.0 | 15.6 | J | 0.6 | J |
| | 27-Apr-11 | 0.14 | 25.0 | 13.3 | J | ND | |
| | 20-Oct-11 | 0.14 | 25.0 | 12.9 | J | ND | |
| | 26-Apr-12 | 0.14 | 25.0 | 12.5 | J | ND | |
| | 16-Oct-12 | 0.10 | 25.0 | 15.3 | J | ND | |
| | 11-Apr-13 | 0.07 | 25.0 | 20.6 | J | ND | |
| | 30-Oct-13 | 0.07 | 25.0 | 12.3 | J | ND | |
| | 9-Apr-14 | 0.07 | 25.0 | 15.3 | J | ND | |
| | 22-Oct-14 | 0.06 | 25.0 | 10.5 | J | 0.18 | J |
| | 8-Apr-15 | 0.06 | 25.0 | 11.3 | J | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks | |
|---|---|---|---|---|---|---|---|
| Zinc | 1-Oct-99 | --- | 50 | ND | | ND | |
| | 1-Apr-00 | --- | 50 | ND | | ND | |
| | 1-Oct-00 | --- | 50 | ND | | ND | |
| | 1-Apr-01 | --- | 50 | 60 | | ND | |
| | 1-Oct-01 | --- | 50 | 101 | | ND | |
| | 2-Apr-02 | --- | 50 | 298 | | ND | |
| | 3-Apr-03 | --- | 50 | 691 | | ND | |
| | 5-Apr-05 | --- | 50 | 721 | | ND | |
| | 15-Dec-05 | --- | 50 | ND | | ND | |
| | 21-Apr-06 | --- | --- | --- | | ND | |
| | 12-Oct-06 | --- | --- | --- | | ND | |
| | 26-Apr-07 | --- | 10 | 22 | | ND | |
| | 11-Oct-07 | 0.20 | 10.0 | 42 | | 6.6 | J |
| | 3-Apr-08 | 0.04 | 10.0 | 23 | | 2.2 | J |
| | 28-Oct-08 | 0.04 | 10.0 | 20 | | 0.4 | J |
| | 7-Apr-09 | 0.14 | 10.0 | 11 | | 0.8 | J |
| | 27-Oct-09 | 0.14 | 10.0 | 822 | | 1.4 | J |
| | 8-Apr-10 | 0.08 | 10.0 | 12 | | 0.7 | J |
| | 13-Oct-10 | 0.08 | 10.0 | 8.4 | B | 4.1 | J |
| | 27-Apr-11 | 0.24 | 10.0 | 8.2 | J | 1.1 | J |
| | 20-Oct-11 | 0.24 | 10.0 | 5.3 | J | 0.28 | J |
| | 26-Apr-12 | 0.24 | 10.0 | 7.7 | J | 1.9 | J |
| | 16-Oct-12 | 0.48 | 10.0 | 28 | | ND | |
| | 11-Apr-13 | 0.47 | 10.0 | 12 | | 0.88 | J |
| | 30-Oct-13 | 0.47 | 10.0 | 12 | B | 3.2 | J |
| | 9-Apr-14 | 0.47 | 10.0 | 4.4 | J | ND | |
| | 22-Oct-14 | 0.53 | 10.0 | 4.5 | J | ND | |
| | 8-Apr-15 | 0.53 | 10.0 | 4.9 | J | 0.79 | J |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks | |
|---|---|---|---|---|---|---|---|
| Organic Compounds | | | | | | | |
| Acetone | 1-Oct-99 | --- | --- | ND | | ND | |
| | 1-Apr-00 | --- | --- | 3,829 | | ND | |
| | 1-Oct-00 | --- | --- | ND | | ND | |
| | 1-Apr-01 | --- | --- | ND | | ND | |
| | 1-Oct-01 | --- | 100 | --- | | ND | |
| | 2-Apr-02 | --- | 100 | 9,690 | | ND | |
| | 3-Apr-03 | --- | 500 | 1,090 | | ND | |
| | 5-Apr-05 | --- | 500 | 4,570 | | ND | |
| | 15-Dec-05 | --- | 500 | ND | | ND | |
| | 21-Apr-06 | --- | --- | --- | | ND | |
| | 12-Oct-06 | --- | --- | --- | | ND | |
| | 26-Apr-07 | --- | 100 | ND | | ND | |
| | 11-Oct-07 | 1.21 | 100.0 | 81.70 | J | ND | |
| | 3-Apr-08 | 1.21 | 100.0 | 148.00 | | 2.10 | J |
| | 28-Oct-08 | 1.21 | 100.0 | 237.00 | | 1.30 | J |
| | 7-Apr-09 | 1.21 | 100.0 | 40.60 | J | ND | |
| | 27-Oct-09 | 9.06 | 100.0 | 50.20 | J | ND | |
| | 8-Apr-10 | 9.06 | 100.0 | 13.60 | J | ND | |
| | 13-Oct-10 | 9.06 | 100.0 | 26.50 | J | ND | |
| | 27-Apr-11 | 9.06 | 100.0 | ND | | ND | |
| | 20-Oct-11 | 9.06 | 100.0 | 211.00 | | ND | |
| | 26-Apr-12 | 9.06 | 100.0 | 20.20 | J | ND | |
| | 16-Oct-12 | 9.06 | 100.0 | 708.00 | | ND | |
| | 11-Apr-13 | 9.06 | 100.0 | 26.60 | J | ND | |
| | 30-Oct-13 | 9.06 | 100.0 | 57.60 | J | ND | |
| | 9-Apr-14 | 9.06 | 100.0 | 38.8 | J | ND | |
| | 22-Oct-14 | 9.06 | 100.0 | 24.10 | J | ND | |
| | 8-Apr-15 | 9.06 | 100.0 | 24.90 | J | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks |
|---|---|---|---|---|---|---|
| Benzene | 1-Oct-99 | --- | --- | ND | | ND |
| | 1-Apr-00 | --- | --- | ND | | ND |
| | 1-Oct-00 | --- | --- | ND | | ND |
| | 1-Apr-01 | --- | --- | 12 | | ND |
| | 1-Oct-01 | --- | 5 | --- | | ND |
| | 2-Apr-02 | --- | 5 | --- | | ND |
| | 3-Apr-03 | --- | 25 | ND | | ND |
| | 5-Apr-05 | --- | 25 | 7.3 | | ND |
| | 15-Dec-05 | --- | 25 | ND | | ND |
| | 21-Apr-06 | --- | --- | --- | | ND |
| | 12-Oct-06 | --- | --- | --- | | ND |
| | 26-Apr-07 | --- | 3.00 | ND | | ND |
| | 11-Oct-07 | 0.16 | 1.0 | 3.90 | | ND |
| | 3-Apr-08 | 0.16 | 1.0 | 2.60 | | ND |
| | 28-Oct-08 | 0.16 | 1.0 | 1.80 | | ND |
| | 7-Apr-09 | 0.16 | 1.0 | 1.50 | | ND |
| | 27-Oct-09 | 0.24 | 1.0 | 1.60 | | ND |
| | 8-Apr-10 | 0.24 | 1.0 | 2.10 | | ND |
| | 13-Oct-10 | 0.24 | 1.0 | 2.20 | | ND |
| | 27-Apr-11 | 0.24 | 1.0 | 3.50 | | ND |
| | 20-Oct-11 | 0.24 | 1.0 | 3.70 | | ND |
| | 26-Apr-12 | 0.24 | 1.0 | 3.50 | | ND |
| | 16-Oct-12 | 0.24 | 1.0 | 3.80 | | ND |
| | 11-Apr-13 | 0.24 | 1.0 | 4.10 | | ND |
| | 30-Oct-13 | 0.24 | 1.0 | 4.30 | | ND |
| | 9-Apr-14 | 0.24 | 1.0 | 4.20 | | ND |
| | 22-Oct-14 | 0.24 | 1.0 | 2.60 | | ND |
| | 8-Apr-15 | 0.24 | 1.0 | 4.20 | | ND |
| Chlorobenzene | 11-Oct-07 | 0.13 | 3.0 | 1.80 | J | ND |
| | 3-Apr-08 | 0.13 | 3.0 | 1.30 | J | ND |
| | 28-Oct-08 | 0.13 | 3.0 | 0.90 | J | ND |
| | 7-Apr-09 | 0.13 | 3.0 | 0.60 | J | ND |
| | 27-Oct-09 | 0.30 | 3.0 | 0.50 | J | ND |
| | 8-Apr-10 | 0.30 | 3.0 | 0.70 | J | ND |
| | 13-Oct-10 | 0.30 | 3.0 | 0.70 | J | ND |
| | 27-Apr-11 | 0.30 | 3.0 | 1.10 | J | ND |
| | 20-Oct-11 | 0.30 | 3.0 | 1.10 | J | ND |
| | 26-Apr-12 | 0.30 | 3.0 | 1.10 | J | ND |
| | 16-Oct-12 | 0.30 | 3.0 | 1.20 | J | ND |
| | 11-Apr-13 | 0.30 | 3.0 | 1.10 | J | ND |
| | 30-Oct-13 | 0.30 | 3.0 | 1.40 | J | ND |
| | 9-Apr-14 | 0.30 | 3.0 | 1.40 | J | ND |
| | 22-Oct-14 | 0.30 | 3.0 | 0.70 | J | ND |
| | 8-Apr-15 | 0.30 | 3.0 | 1.20 | J | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks |
|---|---|---|---|---|---|---|
| Chloroethane | 1-Oct-99 | --- | --- | ND | | ND |
| | 1-Apr-00 | --- | --- | ND | | ND |
| | 1-Oct-00 | --- | --- | ND | | ND |
| | 1-Apr-01 | --- | --- | 19 | | ND |
| | 1-Oct-01 | --- | 10 | --- | | ND |
| | 2-Apr-02 | --- | 10 | --- | | ND |
| | 3-Apr-03 | --- | 50 | ND | | ND |
| | 5-Apr-05 | --- | 50 | ND | | ND |
| | 15-Dec-05 | --- | 50 | ND | | ND |
| | 21-Apr-06 | --- | --- | --- | | ND |
| | 12-Oct-06 | --- | --- | --- | | ND |
| | 26-Apr-07 | --- | 5.00 | ND | | ND |
| | 11-Oct-07 | 0.29 | 10.0 | 0.50 | J | ND |
| | 3-Apr-08 | 0.29 | 10.0 | 0.40 | J | ND |
| | 28-Oct-08 | 0.29 | 10.0 | ND | | ND |
| | 7-Apr-09 | 0.29 | 10.0 | ND | | ND |
| | 27-Oct-09 | 0.48 | 10.0 | ND | | ND |
| | 8-Apr-10 | 0.48 | 10.0 | ND | | ND |
| | 13-Oct-10 | 0.48 | 10.0 | ND | | ND |
| | 27-Apr-11 | 0.48 | 10.0 | ND | | ND |
| | 20-Oct-11 | 0.48 | 10.0 | 0.50 | J | ND |
| | 26-Apr-12 | 0.48 | 10.0 | ND | | ND |
| | 16-Oct-12 | 0.48 | 10.0 | ND | | ND |
| | 11-Apr-13 | 0.48 | 10.0 | ND | | ND |
| | 30-Oct-13 | 0.48 | 10.0 | ND | | ND |
| | 9-Apr-14 | 0.48 | 10.0 | ND | | ND |
| | 22-Oct-14 | 0.48 | 10.0 | ND | | ND |
| | 8-Apr-15 | 0.48 | 10.0 | ND | | ND |
| Chloromethane | 11-Oct-07 | 0.18 | 1.0 | 2.40 | | ND |
| | 3-Apr-08 | 0.18 | 1.0 | ND | | ND |
| | 28-Oct-08 | 0.18 | 1.0 | ND | | ND |
| | 7-Apr-09 | 0.18 | 1.0 | ND | | ND |
| | 27-Oct-09 | 0.77 | 1.0 | ND | | ND |
| | 8-Apr-10 | 0.77 | 1.0 | ND | | ND |
| | 13-Oct-10 | 0.77 | 1.0 | ND | | ND |
| | 27-Apr-11 | 0.77 | 1.0 | ND | | ND |
| | 20-Oct-11 | 0.77 | 1.0 | ND | | ND |
| | 26-Apr-12 | 0.77 | 1.0 | ND | | ND |
| | 16-Oct-12 | 0.77 | 1.0 | ND | | ND |
| | 11-Apr-13 | 0.77 | 1.0 | ND | | ND |
| | 30-Oct-13 | 0.77 | 1.0 | ND | | ND |
| | 9-Apr-14 | 0.77 | 1.0 | ND | | ND |
| | 22-Oct-14 | 0.77 | 1.0 | ND | | ND |
| | 8-Apr-15 | 0.77 | 1.0 | ND | | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| Analyte | Sample Collection Date | DL | SWSL | Leachate | | Blanks |
|---|---|---|---|---|---|---|
| Cis-1,2-Dichloroethene | 11-Oct-07 | 0.14 | 5.0 | 2.00 | J | ND |
| | 3-Apr-08 | 0.14 | 5.0 | 2.00 | J | ND |
| | 28-Oct-08 | 0.14 | 5.0 | 1.40 | J | ND |
| | 7-Apr-09 | 0.14 | 5.0 | 0.70 | J | ND |
| | 27-Oct-09 | 0.25 | 5.0 | 0.80 | J | ND |
| | 8-Apr-10 | 0.25 | 5.0 | 2.10 | J | ND |
| | 13-Oct-10 | 0.25 | 5.0 | 1.70 | J | ND |
| | 27-Apr-11 | 0.25 | 5.0 | 3.00 | J | ND |
| | 20-Oct-11 | 0.25 | 5.0 | 2.50 | J | ND |
| | 26-Apr-12 | 0.25 | 5.0 | 1.90 | J | ND |
| | 16-Oct-12 | 0.25 | 5.0 | 1.10 | J | ND |
| | 11-Apr-13 | 0.25 | 5.0 | 1.60 | J | ND |
| | 30-Oct-13 | 0.25 | 5.0 | 2.80 | J | ND |
| | 9-Apr-14 | 0.25 | 5.0 | 1.7 | J | ND |
| | 22-Oct-14 | 0.25 | 5.0 | 1.00 | J | ND |
| | 8-Apr-15 | 0.25 | 5.0 | 1.70 | J | ND |
| 1,1-Dichloroethane | 1-Oct-99 | --- | --- | ND | | ND |
| | 1-Apr-00 | --- | --- | 15 | | ND |
| | 1-Oct-00 | --- | --- | ND | | ND |
| | 1-Apr-01 | --- | --- | ND | | ND |
| | 1-Oct-01 | --- | 5 | --- | | ND |
| | 2-Apr-02 | --- | 5 | --- | | ND |
| | 3-Apr-03 | --- | 25 | ND | | ND |
| | 5-Apr-05 | --- | 25 | ND | | ND |
| | 15-Dec-05 | --- | 25 | ND | | ND |
| | 21-Apr-06 | --- | --- | --- | | ND |
| | 12-Oct-06 | --- | --- | --- | | ND |
| | 26-Apr-07 | --- | 5.00 | ND | | ND |
| | 11-Oct-07 | 0.16 | 5.0 | 0.30 | J | ND |
| | 3-Apr-08 | 0.14 | 5.0 | ND | | ND |
| | 28-Oct-08 | 0.16 | 5.0 | ND | | ND |
| | 7-Apr-09 | 0.16 | 5.0 | ND | | ND |
| | 27-Oct-09 | 0.20 | 5.0 | ND | | ND |
| | 8-Apr-10 | 0.20 | 5.0 | ND | | ND |
| | 13-Oct-10 | 0.20 | 5.0 | ND | | ND |
| | 27-Apr-11 | 0.20 | 5.0 | 0.30 | J | ND |
| | 20-Oct-11 | 0.17 | 5.0 | ND | | ND |
| | 26-Apr-12 | 0.17 | 5.0 | ND | | ND |
| | 16-Oct-12 | 0.20 | 5.0 | ND | | ND |
| | 11-Apr-13 | 0.20 | 5.0 | ND | | ND |
| | 30-Oct-13 | 0.20 | 5.0 | 0.30 | J | ND |
| | 9-Apr-14 | 0.20 | 5.0 | 0.20 | J | ND |
| | 22-Oct-14 | 0.20 | 5.0 | ND | | ND |
| | 8-Apr-15 | 0.20 | 5.0 | ND | | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | 11-Oct-07 | 0.12 | 1.0 | 0.40 | J | ND |
| | 3-Apr-08 | 0.12 | 1.0 | 0.30 | J | ND |
| | 28-Oct-08 | 0.12 | 1.0 | 0.20 | J | ND |
| | 7-Apr-09 | 0.12 | 1.0 | ND | | ND |
| | 27-Oct-09 | 0.27 | 1.0 | ND | | ND |
| | 8-Apr-10 | 0.27 | 1.0 | ND | | ND |
| | 13-Oct-10 | 0.27 | 1.0 | ND | | ND |
| | 27-Apr-11 | 0.27 | 1.0 | ND | | ND |
| | 20-Oct-11 | 0.27 | 1.0 | ND | | ND |
| | 26-Apr-12 | 0.27 | 1.0 | ND | | ND |
| | 16-Oct-12 | 0.27 | 1.0 | ND | | ND |
| | 11-Apr-13 | 0.27 | 1.0 | ND | | ND |
| | 30-Oct-13 | 0.27 | 1.0 | ND | | ND |
| | 9-Apr-14 | 0.27 | 1.0 | 1.1 | | ND |
| | 22-Oct-14 | 0.27 | 1.0 | ND | | ND |
| | 8-Apr-15 | 0.27 | 1.0 | ND | | ND |
| 1,2-Dichloropropane | 11-Oct-07 | 0.17 | 1.0 | 0.30 | J | ND |
| | 3-Apr-08 | 0.17 | 1.0 | ND | | ND |
| | 28-Oct-08 | 0.17 | 1.0 | 0.20 | J | ND |
| | 7-Apr-09 | 0.17 | 1.0 | ND | | ND |
| | 27-Oct-09 | 0.21 | 1.0 | ND | | ND |
| | 8-Apr-10 | 0.21 | 1.0 | ND | | ND |
| | 13-Oct-10 | 0.21 | 1.0 | ND | | ND |
| | 27-Apr-11 | 0.21 | 1.0 | 0.30 | J | ND |
| | 20-Oct-11 | 0.21 | 1.0 | 0.30 | J | ND |
| | 26-Apr-12 | 0.21 | 1.0 | 0.40 | J | ND |
| | 16-Oct-12 | 0.21 | 1.0 | ND | | ND |
| | 11-Apr-13 | 0.21 | 1.0 | ND | | ND |
| | 30-Oct-13 | 0.21 | 1.0 | ND | | ND |
| | 9-Apr-14 | 0.21 | 1.0 | 0.30 | J | ND |
| | 22-Oct-14 | 0.21 | 1.0 | ND | | ND |
| | 8-Apr-15 | 0.21 | 1.0 | ND | | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks |
|---|---|---|---|---|---|---|
| 2-Butanone | 1-Oct-99 | --- | --- | ND | | ND |
| | 1-Apr-00 | --- | --- | 5,343 | | ND |
| | 1-Oct-00 | --- | --- | ND | | ND |
| | 1-Apr-01 | --- | --- | ND | | ND |
| | 1-Oct-01 | --- | 100 | ND | | ND |
| | 2-Apr-02 | --- | 100 | 5,640 | | ND |
| | 3-Apr-03 | --- | 500 | 861 | | ND |
| | 5-Apr-05 | --- | 500 | 1,580 | | ND |
| | 15-Dec-05 | --- | 500 | ND | | ND |
| | 21-Apr-06 | --- | --- | --- | | ND |
| | 12-Oct-06 | --- | --- | --- | | ND |
| | 26-Apr-07 | --- | 100.00 | ND | | ND |
| | 11-Oct-07 | 0.85 | 100.0 | 45.1 | J | ND |
| | 3-Apr-08 | 0.85 | 100.0 | 81.9 | J | ND |
| | 28-Oct-08 | 0.85 | 100.0 | 166.0 | | ND |
| | 7-Apr-09 | 0.85 | 100.0 | 33.3 | J | ND |
| | 27-Oct-09 | 2.21 | 100.0 | 6.70 | J | ND |
| | 8-Apr-10 | 2.21 | 100.0 | ND | | ND |
| | 13-Oct-10 | 2.21 | 100.0 | 5.30 | J | ND |
| | 27-Apr-11 | 2.21 | 100.0 | 4.60 | J | ND |
| | 20-Oct-11 | 2.21 | 100.0 | 81.7 | J | ND |
| | 26-Apr-12 | 2.21 | 100.0 | 3.00 | J | ND |
| | 16-Oct-12 | 2.21 | 100.0 | 276.0 | | ND |
| | 11-Apr-13 | 2.21 | 100.0 | 4.11 | J | ND |
| | 30-Oct-13 | 2.21 | 100.0 | 11.7 | J | ND |
| | 9-Apr-14 | 2.21 | 100.0 | 14.4 | J | ND |
| | 22-Oct-14 | 2.21 | 100.0 | ND | | ND |
| | 8-Apr-15 | 2.21 | 100.0 | 2.9 | J | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | Blanks |
|---|---|---|---|---|---|
| 2-Hexanone | 5-Apr-05 | --- | 50 | 67.1 | ND |
| | 15-Dec-05 | --- | 250 | ND | ND |
| | 21-Apr-06 | --- | --- | --- | ND |
| | 12-Oct-06 | --- | --- | --- | ND |
| | 26-Apr-07 | --- | 50.00 | ND | ND |
| | 11-Oct-07 | 1.00 | 50.0 | ND | ND |
| | 3-Apr-08 | 1.00 | 50.0 | ND | ND |
| | 28-Oct-08 | 1.00 | 50.0 | ND | ND |
| | 7-Apr-09 | 1.00 | 50.0 | ND | ND |
| | 27-Oct-09 | 1.57 | 50.0 | ND | ND |
| | 8-Apr-10 | 1.57 | 50.0 | ND | ND |
| | 13-Oct-10 | 1.57 | 50.0 | ND | ND |
| | 27-Apr-11 | 1.57 | 50.0 | ND | ND |
| | 20-Oct-11 | 1.57 | 50.0 | ND | ND |
| | 26-Apr-12 | 1.57 | 50.0 | ND | ND |
| | 16-Oct-12 | 1.57 | 50.0 | 4.00 | ND |
| | 11-Apr-13 | 1.57 | 50.0 | ND | ND |
| | 30-Oct-13 | 1.57 | 50.0 | ND | ND |
| | 9-Apr-14 | 1.57 | 50.0 | ND | ND |
| | 22-Oct-14 | 1.57 | 50.0 | ND | ND |
| | 8-Apr-15 | 1.57 | 50.0 | ND | ND |
| Styrene | 5-Apr-05 | --- | 10 | 33.2 | ND |
| | 15-Dec-05 | --- | 50 | ND | ND |
| | 21-Apr-06 | --- | --- | --- | ND |
| | 12-Oct-06 | --- | --- | --- | ND |
| | 26-Apr-07 | --- | 10.00 | ND | ND |
| | 11-Oct-07 | 0.16 | 1.0 | 2.10 | ND |
| | 3-Apr-08 | 0.16 | 1.0 | 1.70 | ND |
| | 28-Oct-08 | 0.16 | 1.0 | ND | ND |
| | 7-Apr-09 | 0.16 | 1.0 | 2.00 | ND |
| | 27-Oct-09 | 0.19 | 1.0 | 1.90 | ND |
| | 8-Apr-10 | 0.19 | 1.0 | 7.30 | ND |
| | 13-Oct-10 | 0.19 | 1.0 | 5.90 | ND |
| | 27-Apr-11 | 0.19 | 1.0 | 11.70 | ND |
| | 20-Oct-11 | 0.19 | 1.0 | 10.20 | ND |
| | 26-Apr-12 | 0.19 | 1.0 | 6.50 | ND |
| | 16-Oct-12 | 0.19 | 1.0 | 2.00 | ND |
| | 11-Apr-13 | 0.19 | 1.0 | 11.30 | ND |
| | 30-Oct-13 | 0.19 | 1.0 | 8.80 | ND |
| | 9-Apr-14 | 0.19 | 1.0 | 5.5 | ND |
| | 22-Oct-14 | 0.19 | 1.0 | 5.50 | ND |
| | 8-Apr-15 | 0.19 | 1.0 | 6.50 | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks |
|---|---|---|---|---|---|---|
| 1,2-Dichlorobenzene | 11-Oct-07 | 0.13 | 5.0 | 1.10 | J | ND |
| | 3-Apr-08 | 0.13 | 5.0 | 1.10 | J | ND |
| | 28-Oct-08 | 0.13 | 5.0 | 0.90 | J | ND |
| | 7-Apr-09 | 0.13 | 5.0 | ND | | ND |
| | 27-Oct-09 | 0.32 | 5.0 | 0.80 | J | ND |
| | 8-Apr-10 | 0.32 | 5.0 | ND | | ND |
| | 13-Oct-10 | 0.32 | 5.0 | ND | | ND |
| | 27-Apr-11 | 0.32 | 5.0 | ND | | ND |
| | 20-Oct-11 | 0.32 | 5.0 | ND | | ND |
| | 26-Apr-12 | 0.32 | 5.0 | 0.60 | J | ND |
| | 16-Oct-12 | 0.32 | 5.0 | 0.40 | J | ND |
| | 11-Apr-13 | 0.32 | 5.0 | ND | | ND |
| | 30-Oct-13 | 0.32 | 5.0 | ND | | ND |
| | 9-Apr-14 | 0.32 | 5.0 | ND | | ND |
| | 22-Oct-14 | 0.32 | 5.0 | ND | | ND |
| | 8-Apr-15 | 0.32 | 5.0 | ND | | ND |
| 1,4-Dichlorobenzene | 5-Apr-05 | --- | 5 | 12.5 | | ND |
| | 15-Dec-05 | --- | 25 | ND | | ND |
| | 21-Apr-06 | --- | --- | --- | | ND |
| | 12-Oct-06 | --- | --- | --- | | ND |
| | 26-Apr-07 | --- | 3.00 | 13.40 | | ND |
| | 11-Oct-07 | 0.21 | 1.0 | 15.70 | | ND |
| | 3-Apr-08 | 0.21 | 1.0 | 14.90 | | ND |
| | 28-Oct-08 | 0.21 | 1.0 | 13.40 | | ND |
| | 7-Apr-09 | 0.21 | 1.0 | 9.60 | | ND |
| | 27-Oct-09 | 0.39 | 1.0 | 11.90 | | ND |
| | 8-Apr-10 | 0.39 | 1.0 | 13.10 | | ND |
| | 13-Oct-10 | 0.39 | 1.0 | 11.30 | | ND |
| | 27-Apr-11 | 0.39 | 1.0 | 13.90 | | ND |
| | 20-Oct-11 | 0.39 | 1.0 | 11.80 | | ND |
| | 26-Apr-12 | 0.39 | 1.0 | 15.30 | | ND |
| | 16-Oct-12 | 0.39 | 1.0 | 13.20 | | ND |
| | 11-Apr-13 | 0.39 | 1.0 | 13.80 | | ND |
| | 30-Oct-13 | 0.39 | 1.0 | 15.10 | | ND |
| | 9-Apr-14 | 0.39 | 1.0 | 16.6 | | ND |
| | 22-Oct-14 | 0.39 | 1.0 | 7.50 | | ND |
| | 8-Apr-15 | 0.39 | 1.0 | 12.00 | | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks |
|---|---|---|---|---|---|---|
| Trichloroethylene | 1-Oct-99 | --- | --- | ND | | ND |
| | 1-Apr-00 | --- | --- | 5.6 | | ND |
| | 1-Oct-00 | --- | --- | ND | | ND |
| | 1-Apr-01 | --- | --- | ND | | ND |
| | 1-Oct-01 | --- | 5 | --- | | ND |
| | 2-Apr-02 | --- | 5 | --- | | ND |
| | 3-Apr-03 | --- | 25 | ND | | ND |
| | 5-Apr-05 | --- | 25 | ND | | ND |
| | 15-Dec-05 | --- | 25 | ND | | ND |
| | 21-Apr-06 | --- | --- | --- | | ND |
| | 12-Oct-06 | --- | --- | --- | | ND |
| | 26-Apr-07 | --- | 3.00 | ND | | ND |
| | 11-Oct-07 | 0.13 | 1.0 | 0.30 | J | ND |
| | 3-Apr-08 | 0.13 | 1.0 | 0.20 | J | ND |
| | 28-Oct-08 | 0.13 | 1.0 | 0.50 | J | ND |
| | 7-Apr-09 | 0.13 | 1.0 | ND | | ND |
| | 27-Oct-09 | 0.23 | 1.0 | ND | | ND |
| | 8-Apr-10 | 0.23 | 1.0 | 0.50 | J | ND |
| | 13-Oct-10 | 0.23 | 1.0 | ND | | ND |
| | 27-Apr-11 | 0.23 | 1.0 | 1.40 | | ND |
| | 20-Oct-11 | 0.23 | 1.0 | 2.60 | | ND |
| | 26-Apr-12 | 0.23 | 1.0 | 0.60 | J | ND |
| | 16-Oct-12 | --- | --- | --- | | ND |
| | 11-Apr-13 | 0.23 | 1.0 | ND | | ND |
| | 30-Oct-13 | 0.23 | 1.0 | ND | | ND |
| | 9-Apr-14 | 0.23 | 1.0 | ND | | ND |
| | 22-Oct-14 | 0.23 | 1.0 | ND | | ND |
| | 8-Apr-15 | 0.23 | 1.0 | ND | | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | Blanks |
|---|---|---|---|---|---|
| Tetrachloroethylene | 1-Oct-99 | --- | --- | ND | ND |
| | 1-Apr-00 | --- | --- | 22 | ND |
| | 1-Oct-00 | --- | --- | ND | ND |
| | 1-Apr-01 | --- | --- | ND | ND |
| | 1-Oct-01 | --- | 5 | --- | ND |
| | 2-Apr-02 | --- | 5 | ND | ND |
| | 3-Apr-03 | --- | 25 | ND | ND |
| | 5-Apr-05 | --- | 25 | ND | ND |
| | 15-Dec-05 | --- | 25 | ND | ND |
| | 21-Apr-06 | --- | --- | --- | ND |
| | 12-Oct-06 | --- | --- | --- | ND |
| | 26-Apr-07 | --- | 3.00 | ND | ND |
| | 11-Oct-07 | 0.16 | 1.0 | ND | ND |
| | 3-Apr-08 | 0.16 | 1.0 | ND | ND |
| | 28-Oct-08 | 0.16 | 1.0 | ND | ND |
| | 7-Apr-09 | 0.16 | 1.0 | ND | ND |
| | 27-Oct-09 | 0.17 | 1.0 | ND | ND |
| | 8-Apr-10 | 0.17 | 1.0 | ND | ND |
| | 13-Oct-10 | 0.17 | 1.0 | ND | ND |
| | 27-Apr-11 | 0.17 | 1.0 | ND | ND |
| | 20-Oct-11 | 0.17 | 1.0 | ND | ND |
| | 26-Apr-12 | 0.17 | 1.0 | ND | ND |
| | 16-Oct-12 | --- | --- | --- | ND |
| | 11-Apr-13 | 0.17 | 1.0 | ND | ND |
| | 30-Oct-13 | 0.17 | 1.0 | ND | ND |
| | 9-Apr-14 | 0.17 | 1.0 | ND | ND |
| | 22-Oct-14 | 0.17 | 1.0 | ND | ND |
| | 8-Apr-15 | 0.17 | 1.0 | ND | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | Blanks |
|---|---|---|---|---|---|
| Ethylbenzene | 1-Oct-99 | --- | --- | ND | ND |
| | 1-Apr-00 | --- | --- | ND | ND |
| | 1-Oct-00 | --- | --- | ND | ND |
| | 1-Apr-01 | --- | --- | 66 | ND |
| | 1-Oct-01 | --- | 5 | --- | ND |
| | 2-Apr-02 | --- | 5 | 93.8 | ND |
| | 3-Apr-03 | --- | 25 | 128 | ND |
| | 5-Apr-05 | --- | 25 | 176 | ND |
| | 15-Dec-05 | --- | 25 | 126 | ND |
| | 21-Apr-06 | --- | --- | --- | ND |
| | 12-Oct-06 | --- | --- | --- | ND |
| | 26-Apr-07 | --- | 5.00 | 9.50 | ND |
| | 11-Oct-07 | 0.16 | 1.0 | 179.00 | ND |
| | 3-Apr-08 | 0.16 | 1.0 | 160.00 | ND |
| | 28-Oct-08 | 0.16 | 1.0 | 105.00 | ND |
| | 7-Apr-09 | 0.16 | 1.0 | 34.60 | ND |
| | 27-Oct-09 | 0.21 | 1.0 | 37.80 | ND |
| | 8-Apr-10 | 0.21 | 1.0 | 113.00 | ND |
| | 13-Oct-10 | 0.21 | 1.0 | 93.70 | ND |
| | 27-Apr-11 | 0.21 | 1.0 | 97.60 | ND |
| | 20-Oct-11 | 0.21 | 1.0 | 70.20 | ND |
| | 26-Apr-12 | 0.21 | 1.0 | 80.50 | ND |
| | 16-Oct-12 | 0.21 | 1.0 | 25.00 | ND |
| | 11-Apr-13 | 0.21 | 1.0 | 69.10 | ND |
| | 30-Oct-13 | 0.21 | 1.0 | 91.30 | ND |
| | 9-Apr-14 | 0.21 | 1.0 | 63.5 | ND |
| | 22-Oct-14 | 0.21 | 1.0 | 41.20 | ND |
| | 8-Apr-15 | 0.21 | 1.0 | 50.40 | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks | |
|---|---|---|---|---|---|---|---|
| Methylene Chloride | 1-Oct-99 | --- | --- | 32 | | ND | |
| | 1-Apr-00 | --- | --- | 234 | | ND | |
| | 1-Oct-00 | --- | --- | ND | | ND | |
| | 1-Apr-01 | --- | --- | 69 | | ND | |
| | 1-Oct-01 | --- | 10 | --- | | ND | |
| | 2-Apr-02 | --- | 10 | --- | | ND | |
| | 3-Apr-03 | --- | 50 | ND | | ND | |
| | 5-Apr-05 | --- | 50 | ND | | ND | |
| | 15-Dec-05 | --- | 50 | ND | | ND | |
| | 21-Apr-06 | --- | --- | --- | | ND | |
| | 12-Oct-06 | --- | --- | --- | | ND | |
| | 26-Apr-07 | --- | 5.00 | ND | | ND | |
| | 11-Oct-07 | 0.14 | 1.0 | 0.30 | B | 0.20 | J |
| | 3-Apr-08 | 0.14 | 1.0 | ND | | ND | |
| | 28-Oct-08 | 0.14 | 1.0 | 0.20 | J | ND | |
| | 7-Apr-09 | 0.14 | 1.0 | ND | | ND | |
| | 27-Oct-09 | 0.64 | 1.0 | ND | | ND | |
| | 8-Apr-10 | 0.64 | 1.0 | ND | | ND | |
| | 13-Oct-10 | 0.64 | 1.0 | ND | | ND | |
| | 27-Apr-11 | 0.64 | 1.0 | ND | | ND | |
| | 20-Oct-11 | 0.64 | 1.0 | ND | | ND | |
| | 26-Apr-12 | 0.64 | 1.0 | ND | | ND | |
| | 16-Oct-12 | 0.61 | 1.0 | ND | | ND | |
| | 11-Apr-13 | 0.64 | 1.0 | ND | | ND | |
| | 30-Oct-13 | 0.64 | 1.0 | ND | | ND | |
| | 9-Apr-14 | 0.64 | 1.0 | ND | | ND | |
| | 22-Oct-14 | 0.64 | 1.0 | ND | | ND | |
| | 8-Apr-15 | 0.64 | 1.0 | ND | | ND | |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | Blanks |
|---|---|---|---|---|---|
| Toluene | 1-Oct-99 | --- | --- | 9 | ND |
| | 1-Apr-00 | --- | --- | 16 | ND |
| | 1-Oct-00 | --- | --- | ND | ND |
| | 1-Apr-01 | --- | --- | 251 | ND |
| | 1-Oct-01 | --- | 5 | --- | ND |
| | 2-Apr-02 | --- | 5 | 148 | ND |
| | 3-Apr-03 | --- | 25 | 125 | ND |
| | 5-Apr-05 | --- | 25 | 108 | ND |
| | 15-Dec-05 | --- | 25 | ND | ND |
| | 21-Apr-06 | --- | --- | --- | ND |
| | 12-Oct-06 | --- | --- | --- | ND |
| | 26-Apr-07 | --- | 5.00 | 5.6 | ND |
| | 11-Oct-07 | 0.13 | 1.0 | 22.8 | ND |
| | 3-Apr-08 | 0.13 | 1.0 | 20.1 | ND |
| | 28-Oct-08 | 0.13 | 1.0 | 24.0 | ND |
| | 7-Apr-09 | 0.13 | 1.0 | 12.0 | ND |
| | 27-Oct-09 | 0.23 | 1.0 | 14.0 | ND |
| | 8-Apr-10 | 0.23 | 1.0 | 23.9 | ND |
| | 13-Oct-10 | 0.23 | 1.0 | 20.4 | ND |
| | 27-Apr-11 | 0.23 | 1.0 | 36.4 | ND |
| | 20-Oct-11 | 0.23 | 1.0 | 31.8 | ND |
| | 26-Apr-12 | 0.23 | 1.0 | 13.0 | ND |
| | 16-Oct-12 | 0.23 | 1.0 | 8.2 | ND |
| | 11-Apr-13 | 0.23 | 1.0 | 31.5 | ND |
| | 30-Oct-13 | 0.23 | 1.0 | 32.7 | ND |
| | 9-Apr-14 | 0.23 | 1.0 | 22.6 | ND |
| | 22-Oct-14 | 0.23 | 1.0 | 14.80 | ND |
| | 8-Apr-15 | 0.23 | 1.0 | 25.90 | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | Blanks |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 1-Oct-99 | --- | --- | 75 | ND |
| | 1-Apr-00 | --- | --- | 29 | ND |
| | 1-Oct-00 | --- | --- | ND | ND |
| | 1-Apr-01 | --- | --- | ND | ND |
| | 1-Oct-01 | --- | 5 | --- | ND |
| | 2-Apr-02 | --- | 5 | --- | ND |
| | 3-Apr-03 | --- | 25 | ND | ND |
| | 5-Apr-05 | --- | 25 | ND | ND |
| | 15-Dec-05 | --- | 25 | ND | ND |
| | 21-Apr-06 | --- | --- | --- | ND |
| | 12-Oct-06 | --- | --- | --- | ND |
| | 26-Apr-07 | --- | 5.00 | ND | ND |
| | 11-Oct-07 | 0.11 | 1.0 | ND | ND |
| | 3-Apr-08 | 0.11 | 1.0 | ND | ND |
| | 28-Oct-08 | 0.11 | 1.0 | ND | ND |
| | 7-Apr-09 | 0.11 | 1.0 | ND | ND |
| | 27-Oct-09 | 0.19 | 1.0 | ND | ND |
| | 8-Apr-10 | 0.19 | 1.0 | ND | ND |
| | 13-Oct-10 | 0.19 | 1.0 | ND | ND |
| | 27-Apr-11 | 0.19 | 1.0 | ND | ND |
| | 20-Oct-11 | 0.19 | 1.0 | ND | ND |
| | 26-Apr-12 | 0.19 | 1.0 | ND | ND |
| | 16-Oct-12 | 0.19 | 1.0 | ND | ND |
| | 11-Apr-13 | 0.19 | 1.0 | ND | ND |
| | 30-Oct-13 | 0.19 | 1.0 | ND | ND |
| | 9-Apr-14 | 0.19 | 1.0 | ND | ND |
| | 22-Oct-14 | 0.19 | 1.0 | ND | ND |
| | 8-Apr-15 | 0.19 | 1.0 | ND | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks |
|---|---|---|---|---|---|---|
| 1,2,3-Trichloropropane | 11-Oct-07 | 0.06 | 1.0 | 0.10 | J | ND |
| | 3-Apr-08 | 0.06 | 1.0 | ND | | ND |
| | 28-Oct-08 | 0.06 | 1.0 | ND | | ND |
| | 7-Apr-09 | 0.06 | 1.0 | ND | | ND |
| | 27-Oct-09 | 0.43 | 1.0 | ND | | ND |
| | 8-Apr-10 | 0.43 | 1.0 | ND | | ND |
| | 13-Oct-10 | 0.43 | 1.0 | ND | | ND |
| | 27-Apr-11 | 0.43 | 1.0 | ND | | ND |
| | 20-Oct-11 | 0.43 | 1.0 | ND | | ND |
| | 26-Apr-12 | 0.43 | 1.0 | ND | | ND |
| | 16-Oct-12 | 0.43 | 1.0 | ND | | ND |
| | 11-Apr-13 | 0.43 | 1.0 | ND | | ND |
| | 30-Oct-13 | 0.43 | 1.0 | ND | | ND |
| | 9-Apr-14 | 0.43 | 1.0 | ND | | ND |
| | 22-Oct-14 | 0.43 | 1.0 | ND | | ND |
| | 8-Apr-15 | 0.43 | 1.0 | ND | | ND |
| 1,1,2,2-Tetrachloroethane | 11-Oct-07 | 0.16 | 3.0 | 0.30 | J | ND |
| | 3-Apr-08 | 0.16 | 3.0 | ND | | ND |
| | 28-Oct-08 | 0.16 | 3.0 | ND | | ND |
| | 7-Apr-09 | 0.16 | 3.0 | ND | | ND |
| | 27-Oct-09 | 0.26 | 3.0 | ND | | ND |
| | 8-Apr-10 | 0.26 | 3.0 | ND | | ND |
| | 13-Oct-10 | 0.26 | 3.0 | ND | | ND |
| | 27-Apr-11 | 0.26 | 3.0 | ND | | ND |
| | 20-Oct-11 | 0.26 | 3.0 | ND | | ND |
| | 26-Apr-12 | 0.26 | 3.0 | 0.30 | J | ND |
| | 16-Oct-12 | 0.26 | 3.0 | ND | | ND |
| | 11-Apr-13 | 0.26 | 3.0 | ND | | ND |
| | 30-Oct-13 | 0.26 | 3.0 | ND | | ND |
| | 9-Apr-14 | 0.26 | 3.0 | ND | | ND |
| | 22-Oct-14 | 0.26 | 3.0 | ND | | ND |
| | 8-Apr-15 | 0.26 | 3.0 | ND | | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | Blanks |
|---|---|---|---|---|---|
| Trichlorofluoromethane | 1-Oct-99 | --- | --- | 220 | ND |
| | 1-Apr-00 | --- | --- | 37 | ND |
| | 1-Oct-00 | --- | --- | ND | ND |
| | 1-Apr-01 | --- | --- | 10 | ND |
| | 1-Oct-01 | --- | 5 | --- | ND |
| | 2-Apr-02 | --- | 5 | --- | ND |
| | 3-Apr-03 | --- | 25 | ND | ND |
| | 5-Apr-05 | --- | 25 | ND | ND |
| | 15-Dec-05 | --- | 25 | ND | ND |
| | 21-Apr-06 | --- | --- | --- | ND |
| | 12-Oct-06 | --- | --- | --- | ND |
| | 26-Apr-07 | --- | 5.00 | ND | ND |
| | 11-Oct-07 | 0.13 | 1.0 | ND | ND |
| | 3-Apr-08 | 0.13 | 1.0 | ND | ND |
| | 28-Oct-08 | 0.13 | 1.0 | ND | ND |
| | 7-Apr-09 | 0.13 | 1.0 | ND | ND |
| | 27-Oct-09 | 0.24 | 1.0 | ND | ND |
| | 8-Apr-10 | 0.24 | 1.0 | ND | ND |
| | 13-Oct-10 | 0.24 | 1.0 | ND | ND |
| | 27-Apr-11 | 0.24 | 1.0 | ND | ND |
| | 20-Oct-11 | 0.24 | 1.0 | ND | ND |
| | 26-Apr-12 | 0.24 | 1.0 | ND | ND |
| | 16-Oct-12 | 0.24 | 1.0 | ND | ND |
| | 11-Apr-13 | 0.24 | 1.0 | ND | ND |
| | 30-Oct-13 | 0.24 | 1.0 | ND | ND |
| | 9-Apr-14 | 0.24 | 1.0 | ND | ND |
| | 22-Oct-14 | 0.24 | 1.0 | ND | ND |
| | 8-Apr-15 | 0.24 | 1.0 | ND | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks |
|---|---|---|---|---|---|---|
| Vinyl Chloride | 1-Oct-99 | --- | --- | ND | | ND |
| | 1-Apr-00 | --- | --- | ND | | ND |
| | 1-Oct-00 | --- | --- | ND | | ND |
| | 1-Apr-01 | --- | --- | 36 | | ND |
| | 1-Oct-01 | --- | 10 | --- | | ND |
| | 2-Apr-02 | --- | 10 | --- | | ND |
| | 3-Apr-03 | --- | 50 | ND | | ND |
| | 5-Apr-05 | --- | 50 | ND | | ND |
| | 15-Dec-05 | --- | 50 | ND | | ND |
| | 21-Apr-06 | --- | --- | --- | | ND |
| | 12-Oct-06 | --- | --- | --- | | ND |
| | 26-Apr-07 | --- | 5.00 | ND | | ND |
| | 11-Oct-07 | 0.34 | 1.0 | 1.10 | | ND |
| | 3-Apr-08 | 0.34 | 1.0 | ND | | ND |
| | 28-Oct-08 | 0.34 | 1.0 | ND | | ND |
| | 7-Apr-09 | 0.34 | 1.0 | ND | | ND |
| | 27-Oct-09 | 0.63 | 1.0 | ND | | ND |
| | 8-Apr-10 | 0.63 | 1.0 | ND | | ND |
| | 13-Oct-10 | 0.63 | 1.0 | ND | | ND |
| | 27-Apr-11 | 0.63 | 1.0 | ND | | ND |
| | 20-Oct-11 | 0.63 | 1.0 | ND | | ND |
| | 26-Apr-12 | 0.63 | 1.0 | ND | | ND |
| | 16-Oct-12 | 0.63 | 1.0 | ND | | ND |
| | 11-Apr-13 | 0.63 | 1.0 | ND | | ND |
| | 30-Oct-13 | 0.63 | 1.0 | 0.80 | J | ND |
| | 9-Apr-14 | 0.63 | 1.0 | ND | | ND |
| | 22-Oct-14 | 0.63 | 1.0 | ND | | ND |
| | 8-Apr-15 | 0.63 | 1.0 | ND | | ND |

# TABLE 14

## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | | Blanks |
|---|---|---|---|---|---|---|
| 4-Methyl-2-Pentanone | 1-Oct-99 | --- | --- | ND | | ND |
| | 1-Apr-00 | --- | --- | 116 | | ND |
| | 1-Oct-00 | --- | --- | ND | | ND |
| | 1-Apr-01 | --- | --- | 471 | | ND |
| | 1-Oct-01 | --- | 50 | --- | | ND |
| | 2-Apr-02 | --- | 50 | --- | | ND |
| | 3-Apr-03 | --- | 500 | 923 | | ND |
| | 5-Apr-05 | --- | 500 | 2530 | | ND |
| | 15-Dec-05 | --- | 500 | ND | | ND |
| | 21-Apr-06 | --- | --- | --- | | ND |
| | 12-Oct-06 | --- | --- | --- | | ND |
| | 26-Apr-07 | --- | 100.00 | ND | | ND |
| | 11-Oct-07 | 0.68 | 100.0 | 51.50 | J | ND |
| | 3-Apr-08 | 0.68 | 100.0 | 130.00 | | ND |
| | 28-Oct-08 | 0.68 | 100.0 | 230.00 | | ND |
| | 7-Apr-09 | 0.68 | 100.0 | 25.80 | J | ND |
| | 27-Oct-09 | 1.19 | 100.0 | 1.40 | J | ND |
| | 8-Apr-10 | 1.19 | 100.0 | 3.60 | J | ND |
| | 13-Oct-10 | 1.19 | 100.0 | 7.10 | J | ND |
| | 27-Apr-11 | 1.19 | 100.0 | 2.20 | J | ND |
| | 20-Oct-11 | 1.19 | 100.0 | 46.50 | J | ND |
| | 26-Apr-12 | 1.19 | 100.0 | 3.70 | J | ND |
| | 16-Oct-12 | 1.19 | 100.0 | 52.30 | J | ND |
| | 11-Apr-13 | 1.19 | 100.0 | 4.00 | J | ND |
| | 30-Oct-13 | 1.19 | 100.0 | 11.80 | J | ND |
| | 9-Apr-14 | 1.19 | 100.0 | 5.2 | J | ND |
| | 22-Oct-14 | 1.19 | 100.0 | ND | | ND |
| | 8-Apr-15 | 1.19 | 100.0 | ND | | ND |

# TABLE 14

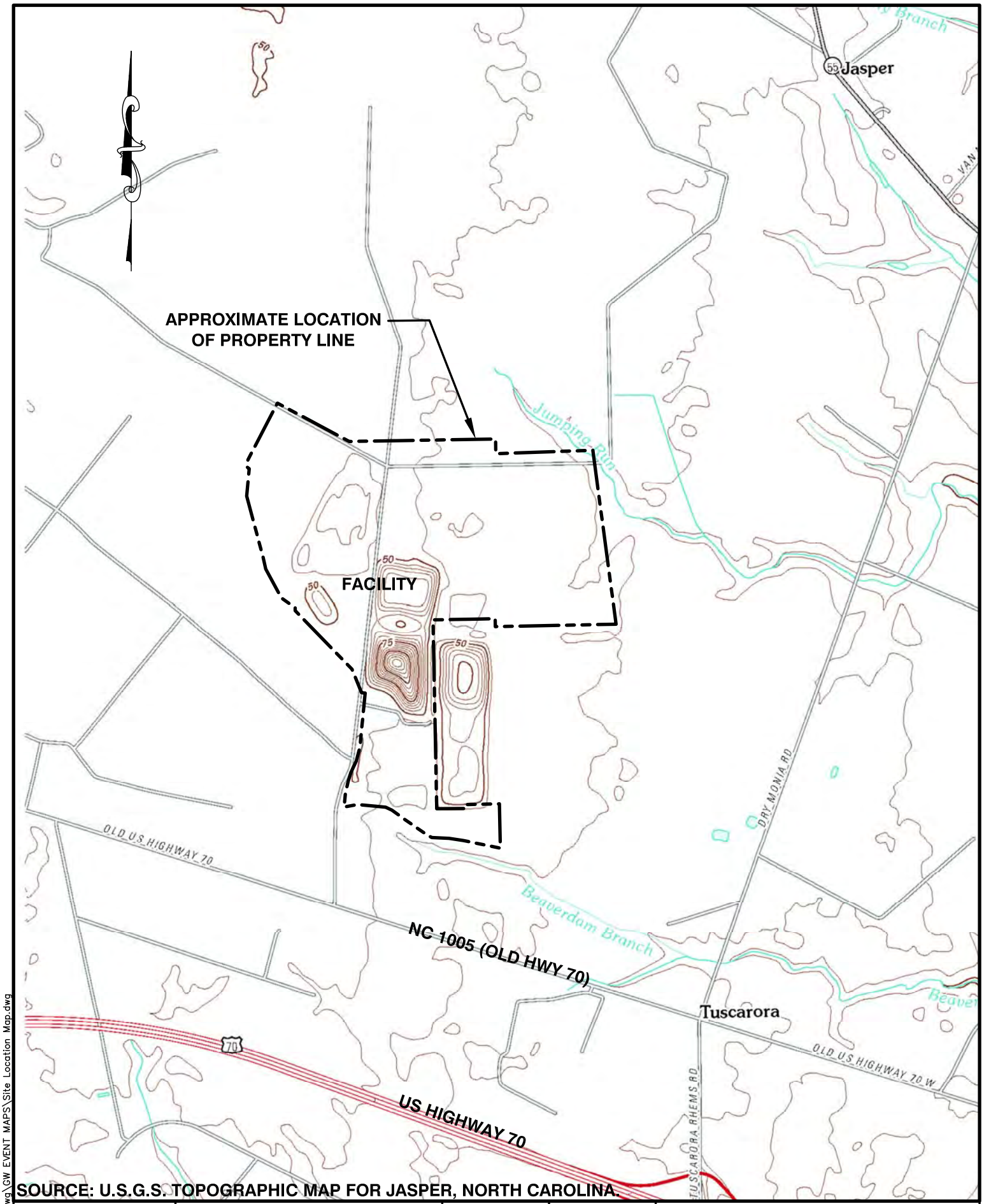
## HISTORICAL DETECTIONS IN LEACHATE
## TUSCARORA REGIONAL LANDFILL

| **Analyte** | Sample Collection Date | DL | SWSL | Leachate | Blanks |
|---|---|---|---|---|---|
| Xylenes | 1-Oct-99 | --- | --- | ND | ND |
| | 1-Apr-00 | --- | --- | ND | ND |
| | 1-Oct-00 | --- | --- | ND | ND |
| | 1-Apr-01 | --- | --- | 52 | ND |
| | 1-Oct-01 | --- | 5 | --- | ND |
| | 2-Apr-02 | --- | 5 | 60.6 | ND |
| | 3-Apr-03 | --- | 25 | 102 | ND |
| | 5-Apr-05 | --- | 25 | 147 | ND |
| | 15-Dec-05 | --- | 25 | 189 | ND |
| | 21-Apr-06 | --- | --- | --- | ND |
| | 12-Oct-06 | --- | --- | --- | ND |
| | 26-Apr-07 | --- | 4.00 | 37.20 | ND |
| | 11-Oct-07 | 0.48 | 5.0 | 158.00 | ND |
| | 3-Apr-08 | 0.48 | 5.0 | 97.20 | ND |
| | 23-Oct-08 | 0.48 | 5.0 | 61.70 | ND |
| | 7-Apr-09 | 0.48 | 5.0 | 33.20 | ND |
| | 27-Oct-09 | 0.68 | 5.0 | 36.00 | ND |
| | 8-Apr-10 | 0.68 | 5.0 | 55.40 | ND |
| | 13-Oct-10 | 0.68 | 5.0 | 51.20 | ND |
| | 27-Apr-11 | 0.68 | 5.0 | 90.90 | ND |
| | 20-Oct-11 | 0.68 | 5.0 | 64.50 | ND |
| | 26-Apr-12 | 0.68 | 5.0 | 29.60 | ND |
| | 16-Oct-12 | 0.68 | 5.0 | 36.50 | ND |
| | 11-Apr-13 | 0.68 | 5.0 | 55.90 | ND |
| | 30-Oct-13 | 0.68 | 5.0 | 52.00 | ND |
| | 9-Apr-14 | 0.68 | 5.0 | 40.6 | ND |
| | 22-Oct-14 | 0.68 | 5.0 | 22.40 | ND |
| | 8-Apr-15 | 0.68 | 5.0 | 45.60 | ND |

**Notes:**
1. All concentrations are in µg/L.
2. RL = Laboratory reporting limit (NC SWSL or lower from October 2007 to present)
3. --- = No data avaliable
4. J = Estimated value between the DL and the QL
5. B = Blank-qualified data; result is expected to be biased high based on concentrations in
6. DL = Laboratory detection limit

# *Figure*

Figure No. 1 Site Location Map




SOURCE: U.S.G.S. TOPOGRAPHIC MAP FOR JASPER, NORTH CAROLINA.

| FIGURE NO. 1 | JOYCE ENGINEERING | 2211 WEST MEADOWVIEW ROAD<br>GREENSBORO, N.C. 27407<br>PHONE: (336) 323-0092<br>© 2015 Joyce Engineering, Inc.<br>All rights reserved. | SCALE<br>1"=2000' | PROJECT NO.<br>618.1501.12 | CRSWMA: TUSCARORA LANDFILLS<br>SITE LOCATION MAP |
|---|---|---|---|---|---|

L:\CRSWMA\dwg\GW EVENT MAPS\Site Location Map.dwg

# *Drawings*

Drawing No. 1 Shallow Aquifer Potentiometric Surface Contour Map
Drawing No. 2 Deep Aquifer Potentiometric Surface Contour Map

## LEGEND

| | |
|---|---|
| POINT IN TIME GROUNDWATER CONTOUR (APPROXIMATE) 1 FT. CONTOUR INTERVAL | 46 |
| GROUNDWATER FLOW PATHWAY USED TO CALCULATE HYDRAULIC GRADIENT | |
| SEGMENT USED FOR GRADIENT CALCULATION | $i_1$ |
| GROUNDWATER MONITORING WELL LOCATION, IDENTIFICATION, AND GROUNDWATER ELEVATION | MW-10 42.78 |
| SURFACE WATER MONITORING LOCATIONS AND IDENTIFICATIONS | SWPT-1 |
| LEACHATE MONITORING LOCATION AND IDENTIFICATION | LEACHATE MANHOLE |
| NOT MONITORED | NM |
| EXISTING 10 FT CONTOUR | 45 |
| EXISTING 2 FT CONTOUR | |
| GRAVEL ROAD | |
| PAVED ROAD | |
| EDGE OF LINER | |

## SEGMENT LENGTH

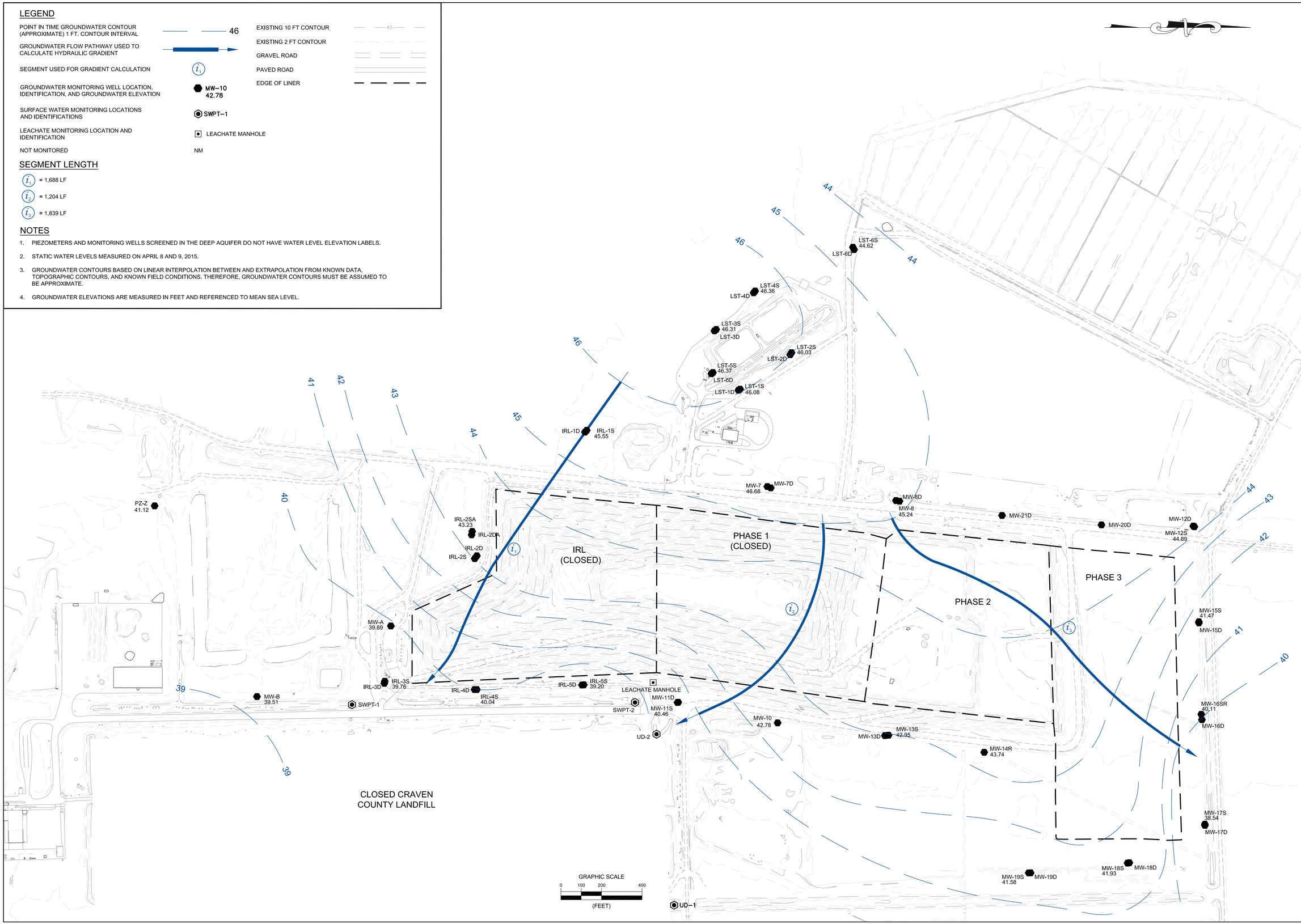
$i_1$ = 1,688 LF

$i_2$ = 1,204 LF

$i_3$ = 1,839 LF

## NOTES

1. PIEZOMETERS AND MONITORING WELLS SCREENED IN THE DEEP AQUIFER DO NOT HAVE WATER LEVEL ELEVATION LABELS.
2. STATIC WATER LEVELS MEASURED ON APRIL 8 AND 9, 2015.
3. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATA, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MUST BE ASSUMED TO BE APPROXIMATE.
4. GROUNDWATER ELEVATIONS ARE MEASURED IN FEET AND REFERENCED TO MEAN SEA LEVEL.




| DATE | REVISIONS AND RECORD OF ISSUE | NO | BY | CK | APP |
|---|---|---|---|---|---|

DESIGNED GE
DRAWN RWH
CHECKED DSG
APPROVED VB
DATE 06/09/15

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JOYCE ENGINEERING
2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0092
NC CORP LIC: C-0782

CRSWMA: TUSCARORA LANDFILL
TUSCARORA, NORTH CAROLINA

SHALLOW AQUIFER POTENTIOMETRIC SURFACE CONTOUR MAP
APRIL 8 AND 9, 2015

PROJECT NO. 618

SCALE AS NOTED

DRAWING NO. 1

L:\CRSWMA\dwg\GW EVENT MAPS\2015\CRSWMA GW Event shallow Aquifer April 2015.dwg Layout=Layout1

## LEGEND

| | |
|---|---|
| POINT IN TIME GROUNDWATER CONTOUR (APPROXIMATE) 1 FT. CONTOUR INTERVAL | 30 |
| GROUNDWATER FLOW PATHWAY USED TO CALCULATE HYDRAULIC GRADIENT | |
| SEGMENT USED FOR GRADIENT CALCULATION | $i_1$ |
| GROUNDWATER MONITORING WELL LOCATION, IDENTIFICATION, AND GROUNDWATER ELEVATION | MW-20D 37.43 |
| SURFACE WATER MONITORING LOCATIONS AND IDENTIFICATIONS | SWPT-1 |
| LEACHATE MONITORING LOCATION AND IDENTIFICATION | LEACHATE MANHOLE |
| NOT MONITORED | NM |
| EXISTING 10 FT CONTOUR | 45 |
| EXISTING 2 FT CONTOUR | |
| GRAVEL ROAD | |
| PAVED ROAD | |
| EDGE OF LINER | |

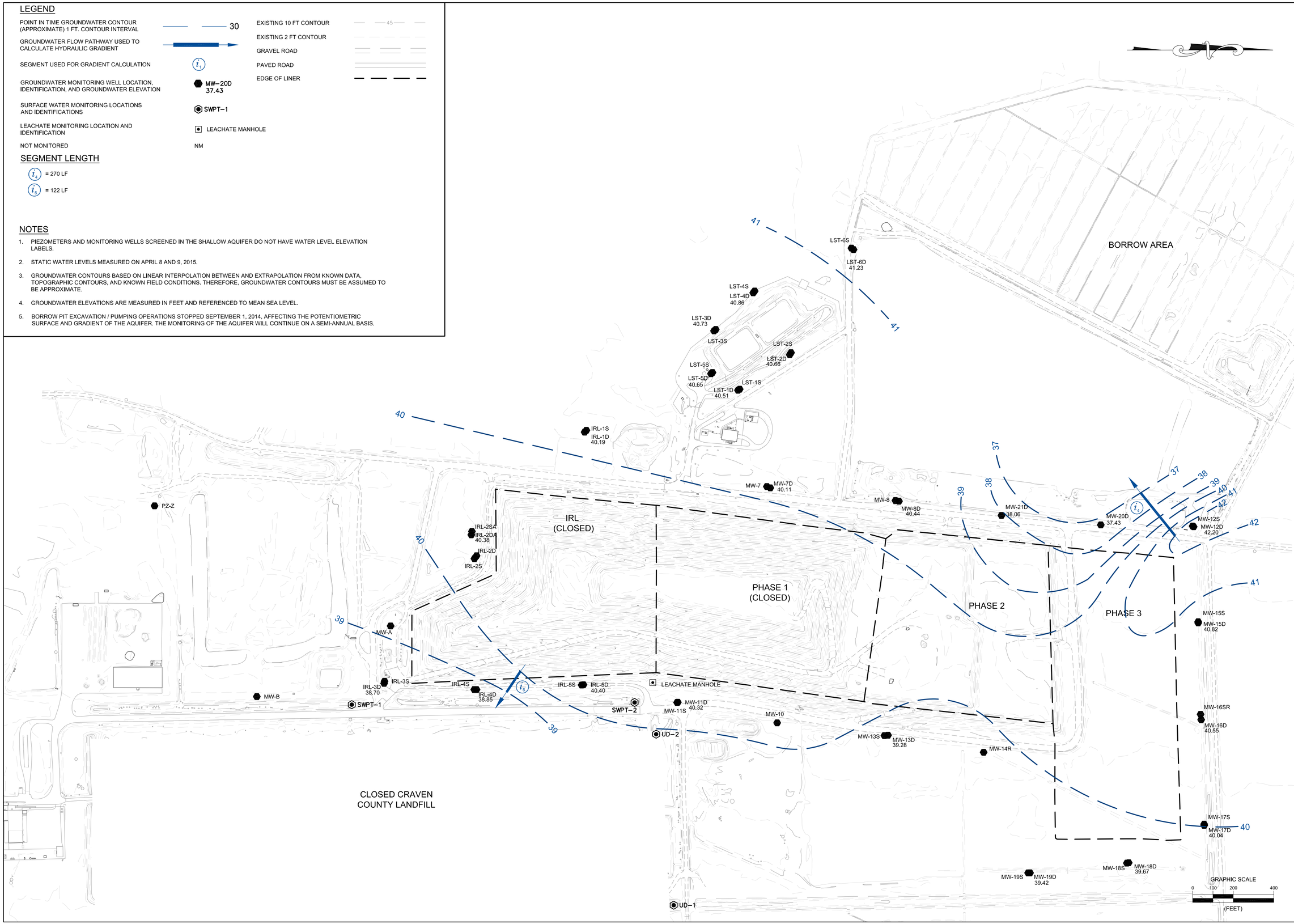
## SEGMENT LENGTH

$i_4$ = 270 LF

$i_5$ = 122 LF

## NOTES

1. PIEZOMETERS AND MONITORING WELLS SCREENED IN THE SHALLOW AQUIFER DO NOT HAVE WATER LEVEL ELEVATION LABELS.
2. STATIC WATER LEVELS MEASURED ON APRIL 8 AND 9, 2015.
3. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATA, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MUST BE ASSUMED TO BE APPROXIMATE.
4. GROUNDWATER ELEVATIONS ARE MEASURED IN FEET AND REFERENCED TO MEAN SEA LEVEL.
5. BORROW PIT EXCAVATION / PUMPING OPERATIONS STOPPED SEPTEMBER 1, 2014, AFFECTING THE POTENTIOMETRIC SURFACE AND GRADIENT OF THE AQUIFER. THE MONITORING OF THE AQUIFER WILL CONTINUE ON A SEMI-ANNUAL BASIS.

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|---|---|---|---|---|---|

DESIGNED GE
DRAWN RWH
CHECKED VB
APPROVED VB
DATE 01/19/14

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JOYCE ENGINEERING
2211 W. MEADOWVIEW ROAD
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PHONE: (336) 323-0092
NC CORP. LIC. C-0782

CRSWMA: TUSCARORA LANDFILL
TUSCARORA, NORTH CAROLINA

DEEP AQUIFER POTENTIOMETRIC SURFACE CONTOUR MAP
APRIL 8 AND 9, 2015

PROJECT NO. 618

SCALE AS NOTED

DRAWING NO. 2

L:\CRSWMA\dwg\GW EVENT MAPS\2015\CRSWMA GW Event DEEP Aquifer APRIL 2015.dwg LayoutLayout1

# *Appendices*

| | |
|---|---|
| ***Appendix A*** | Laboratory Analytical Reports and Field Data Logs |
| ***Appendix B*** | Statistical Analysis Worksheets and Summary of Statistical Results |
| ***Appendix C*** | Summary of Field Parameters |
| ***Appendix D*** | Summary of Detections |
| ***Appendix E*** | Summary of Exceedences |
| ***Appendix F*** | Summary of Monitoring Well Construction |

# *Appendix A*

Laboratory Analytical Reports and Field Data Logs

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6036

CRSWMA TUSCARORA REGIONAL LF (2504)
INTERIM REGIONAL LANDFILL
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | IRL1S | IRL1D | IRL2SA | IRL2DA | IRL3S | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|---|---|---|---|
| PH (field measurement), Units | | | 4.6 | 6.1 | | | 5.8 | 04/08/15 | BF | 4500HB-00 |
| Antimony, ug/l | 0.12 | 6.0 | --- U | 0.22 J | | | 0.36 J | 04/13/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | 0.70 J | 1.4 J | | | 1.8 J | 04/13/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | 162 | 43.9 J | | | 39.8 J | 04/13/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | 0.63 J | 0.08 J | | | 0.09 J | 04/13/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | 0.09 J | 0.18 J | | | 0.06 J | 04/13/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | 1.3 J | 1.4 J | | | 0.36 J | 04/13/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | 0.65 J | 0.60 J | | | 0.24 J | 04/13/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | 0.84 J | 0.53 J | | | 1.00 J | 04/13/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | 1.2 J | 0.79 J | | | 0.99 J | 04/13/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | 2.6 J | 2.0 J | | | 2.3 J | 04/13/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | --- U | 0.31 J | | | 1.0 J | 04/13/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | --- U | --- U | | | --- U | 04/13/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | --- U | --- U | | | --- U | 04/13/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | 1.7 J | 2.0 J | | | 4.0 J | 04/13/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | 5.8 J | 5.9 J | | | 6.2 J | 04/13/15 | LFJ | EPA200.8 |
| Turbidity, NTU | 1.0 | 1.0 | 21.0 | 27.0 | | | 75.0 | 04/08/15 | LW | 2130B-01 |
| Conductivity (at 25c), uMhos/cm | 1.0 | 1.0 | 166 | 232 | | | 806 | 04/08/15 | BF | 2510B-97 |
| Temperature, °C | | | 16 | 16 | | | 16 | 04/08/15 | BF | 2550B-00 |
| Static Water Level, feet | | | 5.01 | 10.00 | 8.14 | 11.20 | 9.26 | 04/08/15 | BF | |
| Well Depth, feet | | | 17.72 | 43.96 | 17.78 | 30.99 | 16.34 | 04/08/15 | BF | |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6036

CRSWMA TUSCARORA REGIONAL LF (2504)
INTERIM REGIONAL LANDFILL
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | IRL3D | IRL4S | IRL4D | IRL5S | IRL5D | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|---|---|---|---|
| PH (field measurement), Units | | | 6.4 | 4.9 | 6.7 | 6.7 | | 04/08/15 | BF | 4500HB-00 |
| Antimony, ug/l | 0.12 | 6.0 | 0.23 J | --- U | --- U | | | 04/13/15 | LFJ | EPA200.8 |
| Antimony, ug/l | 0.12 | 6.0 | | | | 0.12 J | | 04/14/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | 0.79 J | 1.5 J | 0.72 J | | | 04/13/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | | | | 0.61 J | | 04/14/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | 61.4 J | 67.3 J | 41.4 J | | | 04/13/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | | | | 50.6 J | | 04/14/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | 0.06 J | 0.50 J | 0.14 J | | | 04/13/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | | | | 0.08 J | | 04/14/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | 0.06 J | 0.52 J | 0.05 J | | | 04/13/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | | | | 0.18 J | | 04/14/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | 0.23 J | 3.5 J | 0.33 J | | | 04/13/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | | | | 0.89 J | | 04/14/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | 0.20 J | 0.53 J | 0.24 J | | | 04/13/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | | | | 0.71 J | | 04/14/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | 0.69 J | 1.7 J | 1.2 J | | | 04/13/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | | | | 0.89 J | | 04/14/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | 0.43 J | 1.00 J | 0.40 J | | | 04/13/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | | | | 6.4 J | | 04/14/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | 2.0 J | 4.2 J | 1.5 J | | | 04/13/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | | | | 2.1 J | | 04/14/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | 0.56 J | 1.2 J | 0.17 J | | | 04/13/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | | | | --- U | | 04/14/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | --- U | --- U | --- U | | | 04/13/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | | | | --- U | | 04/14/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | --- U | --- U | --- U | | | 04/13/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | | | | --- U | | 04/17/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | 1.4 J | 3.0 J | 1.9 J | | | 04/13/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | | | | 1.1 J | | 04/14/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | 3.7 J | 13 | 3.5 J | | | 04/13/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | | | | 40 | | 04/14/15 | LFJ | EPA200.8 |
| Turbidity, NTU | 1.0 | 1.0 | 80.0 | 50.0 | 45.0 | 45.0 | | 04/08/15 | LW | 2130B-01 |
| Conductivity (at 25c), uMhos/cm | 1.0 | 1.0 | 804 | 628 | 584 | 554 | | 04/08/15 | BF | 2510B-97 |
| Temperature, °C | | | 16 | 15 | 16 | 17 | | 04/08/15 | BF | 2550B-00 |
| Static Water Level, feet | | | 10.23 | 8.30 | 9.50 | 9.58 | 8.26 | 04/08/15 | BF | |
| Well Depth, feet | | | 38.50 | 14.98 | 34.19 | 14.61 | 35.63 | 04/08/15 | BF | |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6036

CRSWMA TUSCARORA REGIONAL LF (2504)
INTERIM REGIONAL LANDFILL
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | MWA | MWB | Piezometer #1 | Trip Blank | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|---|---|---|
| PH (field measurement), Units | | | 4.9 | | | | 04/08/15 | BF | 4500HB-00 |
| Antimony, ug/l | 0.12 | 6.0 | 0.22 J | | | | 04/13/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | 3.2 J | | | | 04/13/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | 424 | | | | 04/13/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | 0.20 J | | | | 04/13/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | --- U | | | | 04/13/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | 0.48 J | | | | 04/13/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | 0.52 J | | | | 04/13/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | 1.4 J | | | | 04/13/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | 1.2 J | | | | 04/13/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | 1.0 J | | | | 04/13/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | 1.4 J | | | | 04/13/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | --- U | | | | 04/13/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | --- U | | | | 04/13/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | 2.7 J | | | | 04/13/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | 5.5 J | | | | 04/13/15 | LFJ | EPA200.8 |
| Turbidity, NTU | 1.0 | 1.0 | 80.0 | | | | 04/08/15 | LW | 2130B-01 |
| Conductivity (at 25c), uMhos/cm | 1.0 | 1.0 | 118 | | | | 04/08/15 | BF | 2510B-97 |
| Temperature, °C | | | 16 | | | | 04/08/15 | BF | 2550B-00 |
| Static Water Level, feet | | | 6.15 | 9.39 | 8.40 | | 04/08/15 | BF | |
| Well Depth, feet | | | 20.46 | | | | 04/08/15 | BF | |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2504)
INTERIM REGIONAL LANDFILL
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6036

ANALYST: MAO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 05/01/15



REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

| PARAMETERS, ug/l | MDL | SWSL | IRL1S | IRL1D | IRL3S | IRL3D | IRL4S |
|---|---|---|---|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 2. Vinyl Chloride | 0.63 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 3. Bromomethane | 0.67 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 4. Chloroethane | 0.48 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 7. Acetone | 9.06 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 8. Iodomethane | 0.26 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 9. Carbon Disulfide | 0.23 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 10. Methylene Chloride | 0.64 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 13. Vinyl Acetate | 0.20 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 14. Cis-1,2-Dichloroethene | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 15. 2-Butanone | 2.21 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 16. Bromochloromethane | 0.27 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 17. Chloroform | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 20. Benzene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 22. Trichloroethene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 24. Bromodichloromethane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 25. Cis-1,3-Dichloropropene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 26. 4-Methyl-2-Pentanone | 1.19 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 27. Toluene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 30. Tetrachloroethene | 0.17 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 31. 2-Hexanone | 1.57 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 32. Dibromochloromethane | 0.24 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 34. Chlorobenzene | 0.30 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 36. Ethylbenzene | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 37. Xylenes | 0.68 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 38. Dibromomethane | 0.28 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 39. Styrene | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 40. Bromoform | 0.20 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.0 | --- U | --- U | --- U | --- U | --- U |
| 46. Acrylonitrile | 2.72 | 200.0 | --- U | --- U | --- U | --- U | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.0 | --- U | --- U | --- U | --- U | --- U |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2504)
INTERIM REGIONAL LANDFILL
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6036

ANALYST: MAO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 05/01/15



REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

| PARAMETERS, ug/l | MDL | SWSL | IRL4D | IRL5S | MWA | Trip Blank |
|---|---|---|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.0 | --- U | --- U | --- U | --- U |
| 2. Vinyl Chloride | 0.63 | 1.0 | --- U | --- U | --- U | --- U |
| 3. Bromomethane | 0.67 | 10.0 | --- U | --- U | --- U | --- U |
| 4. Chloroethane | 0.48 | 10.0 | --- U | --- U | --- U | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.0 | --- U | --- U | --- U | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.0 | --- U | --- U | --- U | --- U |
| 7. Acetone | 9.06 | 100.0 | --- U | --- U | --- U | --- U |
| 8. Iodomethane | 0.26 | 10.0 | --- U | --- U | --- U | --- U |
| 9. Carbon Disulfide | 0.23 | 100.0 | --- U | --- U | --- U | --- U |
| 10. Methylene Chloride | 0.64 | 1.0 | --- U | --- U | --- U | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.0 | --- U | --- U | --- U | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.0 | --- U | --- U | --- U | --- U |
| 13. Vinyl Acetate | 0.20 | 50.0 | --- U | --- U | --- U | --- U |
| 14. Cis-1,2-Dichloroethene | 0.25 | 5.0 | --- U | --- U | --- U | --- U |
| 15. 2-Butanone | 2.21 | 100.0 | --- U | --- U | --- U | --- U |
| 16. Bromochloromethane | 0.27 | 3.0 | --- U | --- U | --- U | --- U |
| 17. Chloroform | 0.25 | 5.0 | --- U | --- U | --- U | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.0 | --- U | --- U | --- U | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.0 | --- U | --- U | --- U | --- U |
| 20. Benzene | 0.24 | 1.0 | --- U | --- U | --- U | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.0 | --- U | --- U | --- U | --- U |
| 22. Trichloroethene | 0.23 | 1.0 | --- U | --- U | --- U | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.0 | --- U | --- U | --- U | --- U |
| 24. Bromodichloromethane | 0.21 | 1.0 | --- U | --- U | --- U | --- U |
| 25. Cis-1,3-Dichloropropene | 0.24 | 1.0 | --- U | --- U | --- U | --- U |
| 26. 4-Methyl-2-Pentanone | 1.19 | 100.0 | --- U | --- U | --- U | --- U |
| 27. Toluene | 0.23 | 1.0 | --- U | --- U | --- U | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.0 | --- U | --- U | --- U | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.0 | --- U | --- U | --- U | --- U |
| 30. Tetrachloroethene | 0.17 | 1.0 | --- U | --- U | --- U | --- U |
| 31. 2-Hexanone | 1.57 | 50.0 | --- U | --- U | --- U | --- U |
| 32. Dibromochloromethane | 0.24 | 3.0 | --- U | --- U | --- U | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.0 | --- U | --- U | --- U | --- U |
| 34. Chlorobenzene | 0.30 | 3.0 | --- U | --- U | --- U | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.0 | --- U | --- U | --- U | --- U |
| 36. Ethylbenzene | 0.21 | 1.0 | --- U | --- U | --- U | --- U |
| 37. Xylenes | 0.68 | 5.0 | --- U | --- U | --- U | --- U |
| 38. Dibromomethane | 0.28 | 10.0 | --- U | --- U | --- U | --- U |
| 39. Styrene | 0.19 | 1.0 | --- U | --- U | --- U | --- U |
| 40. Bromoform | 0.20 | 3.0 | --- U | --- U | --- U | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.0 | --- U | --- U | --- U | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.0 | --- U | --- U | --- U | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.0 | --- U | --- U | --- U | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.0 | --- U | --- U | --- U | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.0 | --- U | --- U | --- U | --- U |
| 46. Acrylonitrile | 2.72 | 200.0 | --- U | --- U | --- U | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.0 | --- U | --- U | --- U | --- U |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
INTERIM REGIONAL LANDFILL
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6036

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
METHOD BLANK RESULTS

| PARAMETERS, ug/l | MDL | SWSL | Concentration |
|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.00 | --- U |
| 2. Vinyl Chloride | 0.63 | 1.00 | --- U |
| 3. Bromomethane | 0.67 | 10.00 | --- U |
| 4. Chloroethane | 0.48 | 10.00 | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.00 | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.00 | --- U |
| 7. Acetone | 9.06 | 100.00 | --- U |
| 8. Iodomethane | 0.26 | 10.00 | --- U |
| 9. Carbon Disulfide | 0.23 | 100.00 | --- U |
| 10. Methylene Chloride | 0.64 | 1.00 | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.00 | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.00 | --- U |
| 13. Vinyl Acetate | 0.20 | 50.00 | --- U |
| 14. cis-1,2-Dichloroethene | 0.25 | 5.00 | --- U |
| 15. 2-Butanone | 2.21 | 100.00 | --- U |
| 16. Bromochloromethane | 0.27 | 3.00 | --- U |
| 17. Chloroform | 0.25 | 5.00 | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.00 | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.00 | --- U |
| 20. Benzene | 0.24 | 1.00 | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.00 | --- U |
| 22. Trichloroethene | 0.23 | 1.00 | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.00 | --- U |
| 24. Bromodichloromethane | 0.21 | 1.00 | --- U |
| 25. cis-1,3-Dichloropropene | 0.24 | 1.00 | --- U |
| 26. 4-methyl-2-Pentanone | 1.19 | 100.00 | --- U |
| 27. Toluene | 0.23 | 1.00 | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.00 | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.00 | --- U |
| 30. Tetrachloroethene | 0.17 | 1.00 | --- U |
| 31. 2-Hexanone | 1.57 | 50.00 | --- U |
| 32. Dibromochloromethane | 0.24 | 3.00 | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.00 | --- U |
| 34. Chlorobenzene | 0.30 | 3.00 | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.00 | --- U |
| 36. Ethylbenzene | 0.21 | 1.00 | --- U |
| 37. Xylenes | 0.68 | 5.00 | --- U |
| 38. Dibromomethane | 0.28 | 10.00 | --- U |
| 39. Styrene | 0.19 | 1.00 | --- U |
| 40. Bromoform | 0.20 | 3.00 | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.00 | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.00 | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.00 | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.00 | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.00 | --- U |
| 46. Acrylonitrile | 2.72 | 200.00 | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.00 | --- U |

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
INTERIM REGIONAL LANDFILL
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6036

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
SURROGATE RECOVERY RESULTS

| Sample Name | Limits (% recovery) | 1,2-DCA-d4 (% recovery) | Toluene-d8 (% recovery) | 4-BFB (% recovery) |
|---|---|---|---|---|
| Continuing Calibration std. | 70-130 | 98.1 | 101 | 101 |
| Laboratory Control std. | 70-130 | 101 | 101 | 99.3 |
| Method Blank | 70-130 | 102 | 102 | 100 |
| IRL1S | 70-130 | 108 | 100 | 97.6 |
| IRL1D | 70-130 | 102 | 99.9 | 97.3 |
| IRL3S | 70-130 | 103 | 99.8 | 96.6 |
| IRL3D | 70-130 | 104 | 101 | 96.6 |
| IRL4S | 70-130 | 106 | 99.8 | 98.6 |
| IRL4D | 70-130 | 103 | 102 | 94.9 |
| IRL5S | 70-130 | 103 | 101 | 97.1 |
| MWA | 70-130 | 101 | 99.8 | 97.7 |
| Trip Blank | 70-130 | 102 | 101 | 96.8 |
| LST1S M.S. | 70-130 | 102 | 101 | 99.6 |
| LST1S M.S.D. | 70-130 | 99.6 | 101 | 96.5 |

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
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CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
INTERIM REGIONAL LANDFILL
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6036

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

| Sample Spiked: LST1S (6035) | Spike Amount Ug/l | Sample Result Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) | Spike Dup. Result Ug/l | Spike Dup. Recovery (70-130%) | MS/MSD RPD (50%) |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 20.0 | --- U | 17.67 | 88.4 | 16.86 | 84.3 | 4.7 |
| Benzene | 20.0 | --- U | 19.13 | 95.7 | 18.40 | 92.0 | 3.9 |
| Trichloroethene | 20.0 | --- U | 17.27 | 86.4 | 17.33 | 86.7 | 0.3 |
| Toluene | 20.0 | --- U | 18.70 | 93.5 | 18.54 | 92.7 | 0.9 |
| Chlorobenzene | 20.0 | --- U | 18.21 | 91.1 | 17.38 | 86.9 | 4.7 |

LABORATORY CONTROL SAMPLE RESULTS

| Sample Compound: | Spike Amount Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) |
|---|---|---|---|
| 1,1-Dichloroethene | 20.00 | 18.76 | 93.8 |
| Benzene | 20.00 | 16.30 | 81.5 |
| Trichloroethene | 20.00 | 15.95 | 80.0 |
| Toluene | 20.00 | 15.48 | 77.4 |
| Chlorobenzene | 20.00 | 15.24 | 76.2 |

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858
environment1inc.com
Phone (252) 756-6208 • Fax (252) 756-0633

# CHAIN OF CUSTODY RECORD



**CLIENT:** 6036 **Week: 17**

**CRSWMA TUSCARORA REGIONAL LF (2504)**
**INTERIM REGIONAL LANDFILL**
**MR. BOBBY DARDEN**
**P.O. BOX 128**
**COVE CITY NC 28523**

**(252) 633-1564**

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CHLORINE NEUTRALIZED AT COLLECTION | | | | | | | | | | | | | | | | | | | |
| pH CHECK (LAB) | | 12 | | | | | 12 | 12 | 12 | | | | | | | | | | |
| CONTAINER TYPE, P/G | | P | P | P | P | P | | G | G | G | | | | | | | | | |
| CHEMICAL PRESERVATION | | A | A | A | A | A | | E | E | E | | | | | | | | | |
| SAMPLE LOCATION | COLLECTION DATE | COLLECTION TIME | TOTAL CHLORINE (mg/L OR ug/L) AT COLLECTION | TEMPERATURE °C AT COLLECTION | # OF CONTAINERS | Field pH | Metals | Turbidity | Conductivity | Temperature | Field Parameter | EPA 8260B | 8260 Dup. 1 | 8260 Dup. 2 | | | | | |
| IRL1S | 4-8-15 | 1220 | | 16 | 6 | G | G | G | G | G | G | G | G | G | | | | | |
| IRL1D | 4-8-15 | 1215 | | 16 | 5 | G | G | G | G | G | G | G | G | | | | | | |
| IRL2SA | 4-8-15 | 1235 | | | 1 | | | | | | G | | | | | | | | |
| IRL2DA | 4-8-15 | 1233 | | | 1 | | | | | | G | | | | | | | | |
| IRL3S | 4-8-15 | 0755 | | 16 | 5 | G | G | G | G | G | G | G | G | | | | | | |
| IRL3D | 4-8-15 | 0750 | | 16 | 5 | G | G | G | G | G | G | G | G | | | | | | |
| IRL4S | 4-8-15 | 0815 | | 15 | 5 | G | G | G | G | G | G | G | G | | | | | | |
| IRL4D | 4-8-15 | 0810 | | 16 | 5 | G | G | G | G | G | G | G | G | | | | | | |
| IRL5S | 4-8-15 | 0820 | | 17 | 6 | G | G | G | G | G | G | G | G | G | | | | | |
| IRL5D | 4-8-15 | 0824 | | | 1 | | | | | | G | | | | | | | | |
| MWA | 4-8-15 | 1230 | | 16 | 5 | G | G | G | G | G | G | G | G | | | | | | |

PARAMETERS/TESTS — PRESERVATIVES:
A - NONE, B - $HNO_3$, C - $H_2SO_4$, D - NAOH, E - HCL, F - ZINC ACETATE/NAOH, G - NA THIOSULFATE

CLASSIFICATION:
- ☐ WASTEWATER (NPDES)
- ☐ DRINKING WATER
- ☐ DWQ/GW
- ☒ SOLID WASTE SECTION

CHAIN OF CUSTODY (SEAL) MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) Bobby Fox / Tom Beasley

SAMPLES RECEIVED IN LAB AT 0.2 °C

| RELINQUISHED BY (SIG.) (SAMPLER) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
|---|---|---|---|
| Bobby Fox | 4-8-15 2:25 | [signature] | 4/8/15 235 |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 294574

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858
environment1@nc.com
Phone (252) 756-6208 • Fax (252) 756-0633

# CHAIN OF CUSTODY RECORD



**CLIENT:** 6036 **Week: 17**

**CRSWMA TUSCARORA REGIONAL LF (2504)**
**INTERIM REGIONAL LANDFILL**
**MR. BOBBY DARDEN**
**P.O. BOX 128**
**COVE CITY NC 28523**

**(252) 633-1564**

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

| SAMPLE LOCATION | COLLECTION DATE | COLLECTION TIME | TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION | TEMPERATURE, °C AT COLLECTION | # OF CONTAINERS | Field pH | Metals | Turbidity | Conductivity | Temperature | Field Parameter | EPA 8260B | 8260 Dup. 1 | 8260 Dup. 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | L2 | L2 | |
| CONTAINER TYPE, P/G | | | | | | P | P | P | P | P | | G | G | G |
| CHEMICAL PRESERVATION | | | | | | A | A | A | A | A | | E | E | E |
| **MWB** | 4-8-15 | 1240 | | | 1 | | | | | | G | | | |
| **Piezometer #1** | 4-8-15 | 1245 | | | 1 | | | | | | G | | | |
| **Trip Blank** | | | | | 2 | | | | | | | G | G | |

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

PARAMETERS/TESTS

A - NONE D - NAOH
B - $HNO_3$ E - HCL
C - $H_2SO_4$ F - ZINC ACETATE/NAOH
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY (SEAL) MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) Bobby Fox / Tom Beasley

SAMPLES RECEIVED IN LAB AT 0.2 °C

| RELINQUISHED BY (SIG.) (SAMPLER) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
|---|---|---|---|
| Bobby Fox | 4-8-15 2:25 | [signature] | 4/8/15 2:35 |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 294573

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6044

CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 1 AND 2
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | MW7 | MW8 | MW10 | MW11S | MW11D | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|---|---|---|---|
| PH (field measurement), Units | | | 6.2 | 4.4 | 4.9 | 5.1 | 6.7 | 04/08/15 | BF | 4500HB-00 |
| Antimony, ug/l | 0.12 | 6.0 | --- U | --- U | --- U | | | 04/14/15 | LFJ | EPA200.8 |
| Antimony, ug/l | 0.12 | 6.0 | | | | --- U | 0.14 J | 04/17/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | 0.60 J | 0.56 J | 4.1 J | 0.49 J | --- U | 04/14/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | 30.1 J | 158 | 62.4 J | 21.5 J | 52.3 J | 04/14/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | 0.10 J | 0.60 J | 0.29 J | 0.51 J | 0.12 J | 04/14/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | 0.09 J | --- U | 0.08 J | | | 04/14/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | | | | 0.12 J | 0.08 J | 04/17/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | 0.37 J | 0.82 J | 1.2 J | 1.0 J | --- U | 04/14/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | 2.2 J | 0.20 J | 0.90 J | 0.38 J | 0.15 J | 04/14/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | 2.5 J | 0.42 J | 1.3 J | 0.64 J | --- U | 04/14/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | 1.5 J | 0.97 J | 2.1 J | 0.66 J | --- U | 04/14/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | 1.8 J | 1.3 J | 1.8 J | 3.1 J | 1.2 J | 04/14/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | --- U | --- U | 1.1 J | --- U | --- U | 04/14/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | --- U | --- U | --- U | --- U | --- U | 04/14/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | --- U | --- U | --- U | --- U | --- U | 04/17/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | 3.7 J | 1.9 J | 3.4 J | 1.2 J | --- U | 04/14/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | 8.3 J | 4.0 J | 6.5 J | | | 04/14/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | | | | 3.3 J | 2.4 J | 04/15/15 | LFJ | EPA200.8 |
| Turbidity, NTU | 1.0 | 1.0 | 70.0 | 85.0 | 110 | 50.0 | 90.0 | 04/08/15 | LW | 2130B-01 |
| Conductivity (at 25c), uMhos/cm | 1.0 | 1.0 | 311 | 97 | 166 | 608 | 493 | 04/08/15 | BF | 2510B-97 |
| Temperature, °C | | | 17 | 16 | 15 | 15 | 15 | 04/08/15 | BF | 2550B-00 |
| Static Water Level, feet | | | 4.01 | 5.70 | 4.54 | 7.21 | 7.23 | 04/08/15 | BF | |
| Well Depth, feet | | | 16.59 | 15.62 | 15.95 | 14.04 | 34.42 | 04/08/15 | BF | |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6044

CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 1 AND 2
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | MW12S | MW12D | MW13S | MW13D | MW14R | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|---|---|---|---|
| PH (field measurement), Units | | | 4.9 | 6.6 | 4.8 | 6.7 | 5.8 | 04/08/15 | BF | 4500HB-00 |
| Antimony, ug/l | 0.12 | 6.0 | --- U | | | | | 04/14/15 | LFJ | EPA200.8 |
| Antimony, ug/l | 0.12 | 6.0 | | --- U | --- U | --- U | 0.18 J | 04/17/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | 0.25 J | 1.3 J | 1.3 J | 0.35 J | 3.0 J | 04/14/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | 40.7 J | 38.0 J | 82.5 J | 42.1 J | 59.4 J | 04/14/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | 0.26 J | 0.06 J | 0.37 J | --- U | 0.09 J | 04/14/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | --- U | | | | | 04/14/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | | --- U | 0.24 J | 0.09 J | 0.19 J | 04/17/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | 0.57 J | 0.21 J | 0.54 J | --- U | 1.2 J | 04/14/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | 0.46 J | 0.24 J | 0.26 J | --- U | 0.50 J | 04/14/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | 0.38 J | 0.21 J | --- U | --- U | 0.81 J | 04/14/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | 0.27 J | 0.20 J | 0.39 J | --- U | 0.90 J | 04/14/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | 0.81 J | 1.7 J | 1.1 J | 1.00 J | 10.0 J | 04/14/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | --- U | --- U | 1.1 J | --- U | 1.9 J | 04/14/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | --- U | --- U | --- U | --- U | --- U | 04/14/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | --- U | --- U | --- U | --- U | --- U | 04/17/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | 0.64 J | 0.84 J | 0.85 J | 0.43 J | 2.8 J | 04/14/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | 5.6 J | 2.4 J | 8.2 J | 1.4 J | 6.2 J | 04/15/15 | LFJ | EPA200.8 |
| Turbidity, NTU | 1.0 | 1.0 | 20.0 | 60.0 | 22.0 | 70.0 | 120 | 04/08/15 | LW | 2130B-01 |
| Conductivity (at 25c), uMhos/cm | 1.0 | 1.0 | 88 | 519 | 192 | 424 | 2390 | 04/08/15 | BF | 2510B-97 |
| Temperature, °C | | | 17 | 18 | 15 | 16 | 16 | 04/08/15 | BF | 2550B-00 |
| Static Water Level, feet | | | 7.23 | 9.70 | 3.26 | 6.64 | 3.24 | 04/08/15 | BF | |
| Well Depth, feet | | | 17.99 | 36.03 | 17.74 | 34.31 | 17.37 | 04/08/15 | BF | |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 1 AND 2
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6044

ANALYST: MAO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/17/15
DATE REPORTED: 05/01/15



REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

| PARAMETERS, ug/l | MDL | SWSL | MW7 | MW8 | MW10 | MW11S | MW11D |
|---|---|---|---|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 2. Vinyl Chloride | 0.63 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 3. Bromomethane | 0.67 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 4. Chloroethane | 0.48 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 7. Acetone | 9.06 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 8. Iodomethane | 0.26 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 9. Carbon Disulfide | 0.23 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 10. Methylene Chloride | 0.64 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 13. Vinyl Acetate | 0.20 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 14. Cis-1,2-Dichloroethene | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 15. 2-Butanone | 2.21 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 16. Bromochloromethane | 0.27 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 17. Chloroform | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 20. Benzene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 22. Trichloroethene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 24. Bromodichloromethane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 25. Cis-1,3-Dichloropropene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 26. 4-Methyl-2-Pentanone | 1.19 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 27. Toluene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 30. Tetrachloroethene | 0.17 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 31. 2-Hexanone | 1.57 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 32. Dibromochloromethane | 0.24 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 34. Chlorobenzene | 0.30 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 36. Ethylbenzene | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 37. Xylenes | 0.68 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 38. Dibromomethane | 0.28 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 39. Styrene | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 40. Bromoform | 0.20 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.0 | --- U | --- U | --- U | --- U | --- U |
| 46. Acrylonitrile | 2.72 | 200.0 | --- U | --- U | --- U | --- U | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.0 | --- U | --- U | --- U | --- U | --- U |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 1 AND 2
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6044

ANALYST: MAO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/17/15
DATE REPORTED: 05/01/15



REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

| PARAMETERS, ug/l | MDL | SWSL | MW12S | MW12D | MW13S | MW13D | MW14R |
|---|---|---|---|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 2. Vinyl Chloride | 0.63 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 3. Bromomethane | 0.67 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 4. Chloroethane | 0.48 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 7. Acetone | 9.06 | 100.0 | --- U | --- U | --- U | 9.30 J | 14.40 J |
| 8. Iodomethane | 0.26 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 9. Carbon Disulfide | 0.23 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 10. Methylene Chloride | 0.64 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 13. Vinyl Acetate | 0.20 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 14. Cis-1,2-Dichloroethene | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 15. 2-Butanone | 2.21 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 16. Bromochloromethane | 0.27 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 17. Chloroform | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 20. Benzene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 22. Trichloroethene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 24. Bromodichloromethane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 25. Cis-1,3-Dichloropropene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 26. 4-Methyl-2-Pentanone | 1.19 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 27. Toluene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 30. Tetrachloroethene | 0.17 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 31. 2-Hexanone | 1.57 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 32. Dibromochloromethane | 0.24 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 34. Chlorobenzene | 0.30 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 36. Ethylbenzene | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 37. Xylenes | 0.68 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 38. Dibromomethane | 0.28 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 39. Styrene | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 40. Bromoform | 0.20 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.0 | --- U | --- U | --- U | --- U | --- U |
| 46. Acrylonitrile | 2.72 | 200.0 | --- U | --- U | --- U | --- U | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.0 | --- U | --- U | --- U | --- U | --- U |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
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CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 1 AND 2
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6044

ANALYST: MAO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/17/15
DATE REPORTED: 05/01/15



REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

| PARAMETERS, ug/l | MDL | SWSL | Trip Blank |
|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.0 | --- U |
| 2. Vinyl Chloride | 0.63 | 1.0 | --- U |
| 3. Bromomethane | 0.67 | 10.0 | --- U |
| 4. Chloroethane | 0.48 | 10.0 | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.0 | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.0 | --- U |
| 7. Acetone | 9.06 | 100.0 | --- U |
| 8. Iodomethane | 0.26 | 10.0 | --- U |
| 9. Carbon Disulfide | 0.23 | 100.0 | --- U |
| 10. Methylene Chloride | 0.64 | 1.0 | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.0 | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.0 | --- U |
| 13. Vinyl Acetate | 0.20 | 50.0 | --- U |
| 14. Cis-1,2-Dichloroethene | 0.25 | 5.0 | --- U |
| 15. 2-Butanone | 2.21 | 100.0 | --- U |
| 16. Bromochloromethane | 0.27 | 3.0 | --- U |
| 17. Chloroform | 0.25 | 5.0 | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.0 | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.0 | --- U |
| 20. Benzene | 0.24 | 1.0 | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.0 | --- U |
| 22. Trichloroethene | 0.23 | 1.0 | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.0 | --- U |
| 24. Bromodichloromethane | 0.21 | 1.0 | --- U |
| 25. Cis-1,3-Dichloropropene | 0.24 | 1.0 | --- U |
| 26. 4-Methyl-2-Pentanone | 1.19 | 100.0 | --- U |
| 27. Toluene | 0.23 | 1.0 | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.0 | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.0 | --- U |
| 30. Tetrachloroethene | 0.17 | 1.0 | --- U |
| 31. 2-Hexanone | 1.57 | 50.0 | --- U |
| 32. Dibromochloromethane | 0.24 | 3.0 | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.0 | --- U |
| 34. Chlorobenzene | 0.30 | 3.0 | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.0 | --- U |
| 36. Ethylbenzene | 0.21 | 1.0 | --- U |
| 37. Xylenes | 0.68 | 5.0 | --- U |
| 38. Dibromomethane | 0.28 | 10.0 | --- U |
| 39. Styrene | 0.19 | 1.0 | --- U |
| 40. Bromoform | 0.20 | 3.0 | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.0 | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.0 | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.0 | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.0 | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.0 | --- U |
| 46. Acrylonitrile | 2.72 | 200.0 | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.0 | --- U |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 1 AND 2
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6044

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/17/15
DATE REPORTED: 04/30/15

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
METHOD BLANK RESULTS

| PARAMETERS, ug/l | MDL | SWSL | Concentration |
|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.00 | --- U |
| 2. Vinyl Chloride | 0.63 | 1.00 | --- U |
| 3. Bromomethane | 0.67 | 10.00 | --- U |
| 4. Chloroethane | 0.48 | 10.00 | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.00 | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.00 | --- U |
| 7. Acetone | 9.06 | 100.00 | --- U |
| 8. Iodomethane | 0.26 | 10.00 | --- U |
| 9. Carbon Disulfide | 0.23 | 100.00 | --- U |
| 10. Methylene Chloride | 0.64 | 1.00 | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.00 | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.00 | --- U |
| 13. Vinyl Acetate | 0.20 | 50.00 | --- U |
| 14. cis-1,2-Dichloroethene | 0.25 | 5.00 | --- U |
| 15. 2-Butanone | 2.21 | 100.00 | --- U |
| 16. Bromochloromethane | 0.27 | 3.00 | --- U |
| 17. Chloroform | 0.25 | 5.00 | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.00 | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.00 | --- U |
| 20. Benzene | 0.24 | 1.00 | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.00 | --- U |
| 22. Trichloroethene | 0.23 | 1.00 | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.00 | --- U |
| 24. Bromodichloromethane | 0.21 | 1.00 | --- U |
| 25. cis-1,3-Dichloropropene | 0.24 | 1.00 | --- U |
| 26. 4-methyl-2-Pentanone | 1.19 | 100.00 | --- U |
| 27. Toluene | 0.23 | 1.00 | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.00 | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.00 | --- U |
| 30. Tetrachloroethene | 0.17 | 1.00 | --- U |
| 31. 2-Hexanone | 1.57 | 50.00 | --- U |
| 32. Dibromochloromethane | 0.24 | 3.00 | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.00 | --- U |
| 34. Chlorobenzene | 0.30 | 3.00 | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.00 | --- U |
| 36. Ethylbenzene | 0.21 | 1.00 | --- U |
| 37. Xylenes | 0.68 | 5.00 | --- U |
| 38. Dibromomethane | 0.28 | 10.00 | --- U |
| 39. Styrene | 0.19 | 1.00 | --- U |
| 40. Bromoform | 0.20 | 3.00 | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.00 | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.00 | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.00 | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.00 | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.00 | --- U |
| 46. Acrylonitrile | 2.72 | 200.00 | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.00 | --- U |

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 1 AND 2
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6044

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/17/15
DATE REPORTED: 04/30/15

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
SURROGATE RECOVERY RESULTS

| Sample Name | Limits (% recovery) | 1,2-DCA-d4 (% recovery) | Toluene-d8 (% recovery) | 4-BFB (% recovery) |
|---|---|---|---|---|
| Continuing Calibration std. | 70-130 | 99.5 | 101 | 98.7 |
| Laboratory Control std. | 70-130 | 96.6 | 100 | 101 |
| Method Blank | 70-130 | 97.8 | 98.3 | 99.1 |
| MW7 | 70-130 | 101 | 101 | 97.6 |
| MW8 | 70-130 | 101 | 102 | 98.2 |
| MW10 | 70-130 | 104 | 101 | 97.0 |
| MW11S | 70-130 | 102 | 101 | 98.5 |
| MW11D | 70-130 | 101 | 101 | 97.3 |
| MW12S | 70-130 | 100 | 102 | 98.6 |
| MW12D | 70-130 | 98.1 | 101 | 94.5 |
| MW13S | 70-130 | 99.7 | 100 | 98.9 |
| MW13D | 70-130 | 99.4 | 101 | 97.5 |
| MW14R | 70-130 | 103 | 100 | 98.1 |
| Trip Blank | 70-130 | 102 | 101 | 101 |
| MW7 M.S. | 70-130 | 96.9 | 101 | 99.9 |
| MW7 M.S.D. | 70-130 | 97.3 | 101 | 100 |

Environment 1, Incorporated

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CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 1 AND 2
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6044

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/17/15
DATE REPORTED: 04/30/15

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

| Sample Spiked: MW7 (6044) | Spike Amount Ug/l | Sample Result Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) | Spike Dup. Result Ug/l | Spike Dup. Recovery (70-130%) | MS/MSD RPD (50%) |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 20.0 | --- U | 23.63 | 118 | 22.27 | 111 | 5.9 |
| Benzene | 20.0 | --- U | 20.84 | 104 | 20.28 | 101 | 2.7 |
| Trichloroethene | 20.0 | --- U | 20.07 | 100 | 19.07 | 95.4 | 5.1 |
| Toluene | 20.0 | --- U | 20.79 | 104 | 19.95 | 99.8 | 4.1 |
| Chlorobenzene | 20.0 | --- U | 19.28 | 96.4 | 19.08 | 95.4 | 1.0 |

LABORATORY CONTROL SAMPLE RESULTS

| Sample Compound: | Spike Amount Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) |
|---|---|---|---|
| 1,1-Dichloroethene | 20.00 | 16.99 | 85.0 |
| Benzene | 20.00 | 16.55 | 82.8 |
| Trichloroethene | 20.00 | 15.99 | 80.0 |
| Toluene | 20.00 | 16.23 | 81.2 |
| Chlorobenzene | 20.00 | 15.63 | 78.2 |

Environment 1, Inc.
P.O. Box 7085, 114 Oakmoor Dr.
Greenville, NC 27858
environment1inc.com
Phone (252) 756-6208 • Fax (252) 756-0633

# CHAIN OF CUSTODY RECORD



**CLIENT:** 6044 **Week: 17**

**CRSWMA TUSCARORA REGIONAL LF (2509)**
**PHASE 1 AND 2**
**MR. BOBBY DARDEN**
**P.O. BOX 128**
**COVE CITY NC 28523**

**(252) 633-1564**

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

| SAMPLE LOCATION | COLLECTION DATE | COLLECTION TIME | TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION | TEMPERATURE, °C AT COLLECTION | # OF CONTAINERS | Field pH | Metals | Turbidity | Conductivity | Temperature | Field Parameter | EPA 8260B | 8260 Dup. 1 | 8260 Dup. 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CHLORINE NEUTRALIZED AT COLLECTION | | | | | | | | | | | | | | |
| pH CHECK (LAB) | | | | | | | 12 | | | | | 12 | 12 | 12 |
| CONTAINER TYPE, P/G | | | | | | P | P | P | P | P | | G | G | G |
| CHEMICAL PRESERVATION | | | | | | A | A | A | A | A | | E | E | E |
| MW7 | 4-8-15 | 1120 | | 17 | 6 | G | G | G | G | G | G | G | G | G |
| MW8 | 4-8-15 | 1110 | | 16 | 5 | G | G | G | G | G | G | G | G | |
| MW10 | 4-8-15 | 0915 | | 15 | 5 | G | G | G | G | G | G | G | G | |
| MW11S | 4-8-15 | 0850 | | 15 | 5 | G | G | G | G | G | G | G | G | |
| MW11D | 4-8-15 | 0855 | | 15 | 5 | G | G | G | G | G | G | G | G | |
| MW12S | 4-8-15 | 1050 | | 17 | 5 | G | G | G | G | G | G | G | G | |
| MW12D | 4-8-15 | 1045 | | 18 | 5 | G | G | G | G | G | G | G | G | |
| MW13S | 4-8-15 | 0930 | | 15 | 5 | G | G | G | G | G | G | G | G | |
| MW13D | 4-8-15 | 0925 | | 16 | 5 | G | G | G | G | G | G | G | G | |
| MW14R | 4-8-15 | 0940 | | 16 | 5 | G | G | G | G | G | G | G | G | |
| Trip Blank | | | | | 2 | | | | | | | G | G | |

PARAMETERS/TESTS

A - NONE D - NAOH
B - $HNO_3$ E - HCL
C - $H_2SO_4$ F - ZINC ACETATE/NAOH
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY (SEAL) MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) Bobby / For / Tom Beasley

SAMPLES RECEIVED IN LAB AT 0.2 °C

| RELINQUISHED BY (SIG.) (SAMPLER) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
|---|---|---|---|
| Bobby For | 4-8-15 2:25 | [signature] | 4/8/15 2:35 |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 294570

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6046

CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 3
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/09/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | MW7D | MW8D | MW15S | MW15D | MW16S | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|---|---|---|---|
| PH (field measurement), Units | | | | | 4.4 | 6.9 | 4.1 | 04/09/15 | BF | 4500HB-00 |
| Antimony, ug/l | 0.12 | 6.0 | | | 0.18 J | | | 04/14/15 | LFJ | EPA200.8 |
| Antimony, ug/l | 0.12 | 6.0 | | | | 0.15 J | 0.19 J | 04/17/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | | | 2.6 J | --- U | | 04/14/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | | | | | 1.0 J | 04/17/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | | | 42.9 J | 31.2 J | | 04/14/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | | | | | 33.4 J | 04/17/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | | | 6 | --- U | | 04/14/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | | | | | 4 | 04/17/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | | | 0.58 J | --- U | 2 | 04/17/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | | | 18 | 0.34 J | | 04/14/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | | | | | 1.9 J | 04/17/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | | | 0.71 J | 0.38 J | | 04/14/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | | | | | 0.93 J | 04/17/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | | | 1.1 J | --- U | | 04/14/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | | | | | 1.6 J | 04/17/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | | | 0.91 J | 0.17 J | | 04/14/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | | | | | 3.4 J | 04/17/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | | | 20.9 J | 1.7 J | | 04/14/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | | | | | 4.0 J | 04/17/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | | | 1.5 J | 0.22 J | | 04/14/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | | | | | 5.8 J | 04/17/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | | | --- U | --- U | | 04/14/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | | | | | --- U | 04/17/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | | | --- U | --- U | --- U | 04/17/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | | | 3.1 J | 0.17 J | | 04/14/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | | | | | 4.8 J | 04/17/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | | | 32 | | | 04/14/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | | | | 3.2 J | | 04/15/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | | | | | 12 | 04/17/15 | LFJ | EPA200.8 |
| Turbidity, NTU | 1.0 | 1.0 | | | 68.0 | 30.0 | 56.0 | 04/09/15 | SDB | 2130B-01 |
| Conductivity (at 25c), uMhos/cm | 1.0 | 1.0 | | | 110 | 460 | 1084 | 04/09/15 | BP | 2510B-97 |
| Temperature, °C | | | | | 14 | 14 | 14 | 04/09/15 | BF | 2550B-00 |
| Static Water Level, feet | | | 10.71 | 9.83 | 5.73 | 6.40 | 7.14 | 04/09/15 | BF | |
| Well Depth, feet | | | | | 17.95 | 37.65 | 15.02 | 04/09/15 | BF | |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6046

CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 3
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/09/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | MW16D | MW17S | MW17D | MW18S | MW18D | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|---|---|---|---|
| PH (field measurement), Units | | | 7.2 | 3.8 | 6.7 | 4.5 | 6.9 | 04/09/15 | BF | 4500HB-00 |
| Antimony, ug/l | 0.12 | 6.0 | --- U | 0.30 J | --- U | | 0.15 J | 04/17/15 | LFJ | EPA200.8 |
| Antimony, ug/l | 0.12 | 6.0 | | | | 0.15 J | | 04/14/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | 0.70 J | 1.00 J | 0.34 J | | 0.55 J | 04/17/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | | | | 0.42 J | | 04/14/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | 51.3 J | 99.6 J | 24.2 J | | 28.3 J | 04/17/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | | | | 13.7 J | | 04/14/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | 0.08 J | 4 | --- U | | 0.08 J | 04/17/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | | | | 4 | | 04/14/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | --- U | 0.45 J | --- U | | --- U | 04/17/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | | | | 1 | | 04/14/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | 0.40 J | 4.2 J | 0.19 J | | 0.17 J | 04/17/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | | | | 5.8 J | | 04/14/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | 0.50 J | 1.0 J | 0.21 J | | 0.24 J | 04/17/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | | | | 1.2 J | | 04/14/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | 0.81 J | 4.5 J | 0.26 J | | 0.32 J | 04/17/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | | | | 0.82 J | | 04/14/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | 0.62 J | 5.7 J | 0.15 J | | 0.31 J | 04/17/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | | | | 3.6 J | | 04/14/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | 1.3 J | 7.4 J | 1.1 J | | 1.2 J | 04/17/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | | | | 10.6 J | | 04/14/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | 0.28 J | 1.4 J | --- U | | --- U | 04/17/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | | | | 2.9 J | | 04/14/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | --- U | --- U | --- U | | --- U | 04/17/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | | | | --- U | | 04/14/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | --- U | --- U | --- U | --- U | --- U | 04/17/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | 1.4 J | 9.9 J | 0.64 J | | 0.66 J | 04/17/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | | | | 0.38 J | | 04/14/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | 4.1 J | 15 | 1.5 J | | 1.3 J | 04/17/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | | | | 20 | | 04/14/15 | LFJ | EPA200.8 |
| Turbidity, NTU | 1.0 | 1.0 | 42.0 | 190 | 22.0 | 21.0 | 20.0 | 04/09/15 | SDB | 2130B-01 |
| Conductivity (at 25c), uMhos/cm | 1.0 | 1.0 | 425 | 620 | 400 | 1266 | 403 | 04/09/15 | BF | 2510B-97 |
| Temperature, °C | | | 14 | 14 | 14 | 15 | 15 | 04/09/15 | BF | 2550B-00 |
| Static Water Level, feet | | | 6.62 | 7.12 | 5.89 | 4.41 | 6.47 | 04/09/15 | BF | |
| Well Depth, feet | | | 35.00 | 15.01 | 38.00 | 13.70 | 36.70 | 04/09/15 | BF | |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6046

CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 3
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/09/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | MW19S | MW19D | MW20D | MW21D | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|---|---|---|
| PH (field measurement), Units | | | 5.9 | 6.8 | | | 04/09/15 | BF | 4500HB-00 |
| Antimony, ug/l | 0.12 | 6.0 | 0.24 J | 0.51 J | | | 04/17/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | --- U | 1.1 J | | | 04/17/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | 30.9 J | 21.5 J | | | 04/17/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | 0.05 J | 0.26 J | | | 04/17/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | --- U | 0.16 J | | | 04/17/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | 0.16 J | 1.7 J | | | 04/17/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | 0.47 J | 0.61 J | | | 04/17/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | 0.95 J | 1.2 J | | | 04/17/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | 0.68 J | 0.51 J | | | 04/17/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | 0.45 J | 2.7 J | | | 04/17/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | --- U | --- U | | | 04/17/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | --- U | --- U | | | 04/17/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | --- U | --- U | | | 04/17/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | 1.5 J | 1.9 J | | | 04/17/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | 1.9 J | 19 | | | 04/17/15 | LFJ | EPA200.8 |
| Turbidity, NTU | 1.0 | 1.0 | 36.0 | 25.0 | | | 04/09/15 | SDB | 2130B-01 |
| Conductivity (at 25c), uMhos/cm | 1.0 | 1.0 | 78 | 351 | | | 04/09/15 | BF | 2510B-97 |
| Temperature, °C | | | 16 | 15 | | | 04/09/15 | BF | 2550B-00 |
| Static Water Level, feet | | | 5.22 | 7.33 | 8.90 | 9.13 | 04/09/15 | BF | |
| Well Depth, feet | | | 13.81 | 26.26 | | | 04/09/15 | BF | |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 3
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6046

ANALYST: MAO
DATE COLLECTED: 04/09/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 05/01/15



REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

| PARAMETERS, ug/l | MDL | SWSL | MW15S | MW15D | MW16S | MW16D | MW17S |
|---|---|---|---|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 2. Vinyl Chloride | 0.63 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 3. Bromomethane | 0.67 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 4. Chloroethane | 0.48 | 10.0 | --- U | 0.50 J | --- U | --- U | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 7. Acetone | 9.06 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 8. Iodomethane | 0.26 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 9. Carbon Disulfide | 0.23 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 10. Methylene Chloride | 0.64 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 13. Vinyl Acetate | 0.20 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 14. Cis-1,2-Dichloroethene | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 15. 2-Butanone | 2.21 | 100.0 | 2.30 J | --- U | --- U | 2.30 J | 2.30 J |
| 16. Bromochloromethane | 0.27 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 17. Chloroform | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 20. Benzene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 22. Trichloroethene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 24. Bromodichloromethane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 25. Cis-1,3-Dichloropropene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 26. 4-Methyl-2-Pentanone | 1.19 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 27. Toluene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 30. Tetrachloroethene | 0.17 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 31. 2-Hexanone | 1.57 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 32. Dibromochloromethane | 0.24 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 34. Chlorobenzene | 0.30 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 36. Ethylbenzene | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 37. Xylenes | 0.68 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 38. Dibromomethane | 0.28 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 39. Styrene | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 40. Bromoform | 0.20 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.0 | --- U | --- U | --- U | --- U | --- U |
| 46. Acrylonitrile | 2.72 | 200.0 | --- U | --- U | --- U | --- U | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.0 | --- U | --- U | --- U | --- U | --- U |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 3
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC, 28523

CLIENT ID: 6046

ANALYST: MAO
DATE COLLECTED: 04/09/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 05/01/15



REVIEWED BY: _____

## VOLATILE ORGANICS
## EPA METHOD 8260B R1(96)

| PARAMETERS, ug/l | MDL | SWSL | MW17D | MW18S | MW18D | MW19S | MW19D |
|---|---|---|---|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 2. Vinyl Chloride | 0.63 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 3. Bromomethane | 0.67 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 4. Chloroethane | 0.48 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 7. Acetone | 9.06 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 8. Iodomethane | 0.26 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 9. Carbon Disulfide | 0.23 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 10. Methylene Chloride | 0.64 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 13. Vinyl Acetate | 0.20 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 14. Cis-1,2-Dichloroethene | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 15. 2-Butanone | 2.21 | 100.0 | --- U | 2.30 J | --- U | --- U | 2.30 J |
| 16. Bromochloromethane | 0.27 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 17. Chloroform | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 20. Benzene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 22. Trichloroethene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 24. Bromodichloromethane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 25. Cis-1,3-Dichloropropene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 26. 4-Methyl-2-Pentanone | 1.19 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 27. Toluene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 30. Tetrachloroethene | 0.17 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 31. 2-Hexanone | 1.57 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 32. Dibromochloromethane | 0.24 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 34. Chlorobenzene | 0.30 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 36. Ethylbenzene | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 37. Xylenes | 0.68 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 38. Dibromomethane | 0.28 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 39. Styrene | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 40. Bromoform | 0.20 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.0 | --- U | --- U | --- U | --- U | --- U |
| 46. Acrylonitrile | 2.72 | 200.0 | --- U | --- U | --- U | --- U | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.0 | --- U | --- U | --- U | --- U | --- U |

J = Between MDL and SWSL, U = Below ALL Quantitation Limite.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 3
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6046

ANALYST: MO
DATE COLLECTED: 04/09/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
METHOD BLANK RESULTS

| PARAMETERS, ug/l | MDL | SWSL | Concentration |
|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.00 | --- U |
| 2. Vinyl Chloride | 0.63 | 1.00 | --- U |
| 3. Bromomethane | 0.67 | 10.00 | --- U |
| 4. Chloroethane | 0.48 | 10.00 | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.00 | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.00 | --- U |
| 7. Acetone | 9.06 | 100.00 | --- U |
| 8. Iodomethane | 0.26 | 10.00 | --- U |
| 9. Carbon Disulfide | 0.23 | 100.00 | --- U |
| 10. Methylene Chloride | 0.64 | 1.00 | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.00 | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.00 | --- U |
| 13. Vinyl Acetate | 0.20 | 50.00 | --- U |
| 14. cis-1,2-Dichloroethene | 0.25 | 5.00 | --- U |
| 15. 2-Butanone | 2.21 | 100.00 | 4.0 J |
| 16. Bromochloromethane | 0.27 | 3.00 | --- U |
| 17. Chloroform | 0.25 | 5.00 | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.00 | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.00 | --- U |
| 20. Benzene | 0.24 | 1.00 | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.00 | --- U |
| 22. Trichloroethene | 0.23 | 1.00 | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.00 | --- U |
| 24. Bromodichloromethane | 0.21 | 1.00 | --- U |
| 25. cis-1,3-Dichloropropene | 0.24 | 1.00 | --- U |
| 26. 4-methyl-2-Pentanone | 1.19 | 100.00 | --- U |
| 27. Toluene | 0.23 | 1.00 | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.00 | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.00 | --- U |
| 30. Tetrachloroethene | 0.17 | 1.00 | --- U |
| 31. 2-Hexanone | 1.57 | 50.00 | --- U |
| 32. Dibromochloromethane | 0.24 | 3.00 | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.00 | --- U |
| 34. Chlorobenzene | 0.30 | 3.00 | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.00 | --- U |
| 36. Ethylbenzene | 0.21 | 1.00 | --- U |
| 37. Xylenes | 0.68 | 5.00 | --- U |
| 38. Dibromomethane | 0.28 | 10.00 | --- U |
| 39. Styrene | 0.19 | 1.00 | --- U |
| 40. Bromoform | 0.20 | 3.00 | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.00 | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.00 | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.00 | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.00 | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.00 | --- U |
| 46. Acrylonitrile | 2.72 | 200.00 | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.00 | --- U |

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LANDFILL (2509)
PHASE 3
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6046

ANALYST: MO
DATE COLLECTED: 04/09/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
SURROGATE RECOVERY RESULTS

| Sample Name | Limits (% recovery) | 1,2-DCA-d4 (% recovery) | Toluene-d8 (% recovery) | 4-BFB (% recovery) |
|---|---|---|---|---|
| Continuing Calibration std. | 70-130 | 95.6 | 99.6 | 101 |
| Laboratory Control std. | 70-130 | 97.5 | 100 | 103 |
| Method Blank | 70-130 | 96.8 | 101 | 99.7 |
| MW15S | 70-130 | 96.6 | 101 | 99.9 |
| MW15D | 70-130 | 98.9 | 102 | 100 |
| MW16S | 70-130 | 96.1 | 99.1 | 100 |
| MW16D | 70-130 | 91.8 | 94.3 | 93.1 |
| MW17S | 70-130 | 97.0 | 101 | 100 |
| MW17D | 70-130 | 96.7 | 100 | 99.4 |
| MW18S | 70-130 | 110 | 113 | 112 |
| MW18D | 70-130 | 97.0 | 102 | 102 |
| MW19S | 70-130 | 98.7 | 102 | 99.6 |
| MW19D | 70-130 | 97.4 | 101 | 100 |
| MW15S M.S. | 70-130 | 99.6 | 103 | 102 |
| MW15S M.S.D. | 70-130 | 101 | 105 | 105 |

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
PHASE 3
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6046

ANALYST: MO
DATE COLLECTED: 04/09/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

| Sample Spiked: MW15S (6046) | Spike Amount Ug/l | Sample Result Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) | Spike Dup. Result Ug/l | Spike Dup. Recovery (70-130%) | MS/MSD RPD (50%) |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 20.0 | --- U | 19.53 | 97.7 | 18.37 | 91.9 | 6.1 |
| Benzene | 20.0 | --- U | 21.22 | 106 | 19.09 | 95.5 | 10.6 |
| Trichloroethene | 20.0 | --- U | 19.71 | 98.6 | 18.24 | 91.2 | 7.7 |
| Toluene | 20.0 | --- U | 20.42 | 102 | 18.77 | 93.9 | 8.4 |
| Chlorobenzene | 20.0 | --- U | 19.28 | 96.4 | 17.64 | 88.2 | 8.9 |

LABORATORY CONTROL SAMPLE RESULTS

| Sample Compound: | Spike Amount Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) |
|---|---|---|---|
| 1,1-Dichloroethene | 20.00 | 19.23 | 96.2 |
| Benzene | 20.00 | 19.29 | 96.5 |
| Trichloroethene | 20.00 | 19.49 | 97.5 |
| Toluene | 20.00 | 19.58 | 97.9 |
| Chlorobenzene | 20.00 | 18.65 | 93.3 |

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858
environment1inc.com
Phone (252) 756-6208 • Fax (252) 756-0633

# CHAIN OF CUSTODY RECORD



**CLIENT:** 6046 **Week:** 17

**CRSWMA TUSCARORA REGIONAL LF (2509)**
**PHASE 3**
**MR. BOBBY DARDEN**
**P.O. BOX 128**
**COVE CITY NC 28523**

**(252) 633-1564**

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

| SAMPLE LOCATION | COLLECTION DATE | COLLECTION TIME | TOTAL CHLORINE, mg/l OR µg/l AT COLLECTION | TEMPERATURE, °C AT COLLECTION | # OF CONTAINERS | Field pH | Metals | Turbidity | Conductivity | Temperature | Field Parameter | EPA 8260B | 8260 Dup. 1 | 8260 Dup. 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CHLORINE NEUTRALIZED AT COLLECTION | | | | | | | | | | | | | | |
| pH CHECK (LAB) | | | | | | | LL | | | | | LLLLL | | |
| CONTAINER TYPE, P/G | | | | | | P | P | P | P | P | | G | G | G |
| CHEMICAL PRESERVATION | | | | | | A | A | A | A | A | | E | E | E |
| MW7D | 4-9-15 | 1005 | | | 1 | | | | | | G | | | |
| MW8D | 4-9-15 | 1010 | | | 1 | | | | | | G | | | |
| MW15S | 4-9-15 | 1000 | | 14 | 6 | G | G | G | G | G | G | G | G | G |
| MW15D | 4-9-15 | 1005 | | 14 | 5 | G | G | G | G | G | G | G | G | |
| MW16S | 4-9-15 | 0955 | | 14 | 5 | G | G | G | G | G | G | G | G | |
| MW16D | 4-9-15 | 0950 | | 15 | 5 | G | G | G | G | G | G | G | G | |
| MW17S | 4-9-15 | 0935 | | 14 | 5 | G | G | G | G | G | G | G | G | |
| MW17D | 4-9-15 | 0940 | | 14 | 5 | G | G | G | G | G | G | G | G | |
| MW18S | 4-9-15 | 0930 | | 15 | 5 | G | G | G | G | G | G | G | G | |
| MW18D | 4-9-15 | 0925 | | 15 | 5 | G | G | G | G | G | G | G | G | |
| MW19S | 4-9-15 | 0920 | | 16 | 5 | G | G | G | G | G | G | G | G | |

PARAMETERS/TESTS

CHEMICAL PRESERVATION: A - NONE; B - $HNO_3$; C - $H_2SO_4$; D - NAOH; E - HCL; F - ZINC ACETATE/NAOH; G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY (SEAL) MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) Bobby Fox / Tom BEASLEY

SAMPLES RECEIVED IN LAB AT 0.3 °C

| RELINQUISHED BY (SIG.) (SAMPLER) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
|---|---|---|---|
| Tom Beasley | 4-9-15 1400 | [illegible] | 4/9/15 1555 |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
| | | | |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
| | | | |

COMMENTS:

PLEASE READ instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 294568

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858
environment1inc.com
Phone (252) 756-6208 • Fax (252) 756-0633

# CHAIN OF CUSTODY RECORD



**CLIENT:** 6046 **Week:** 17

**CRSWMA TUSCARORA REGIONAL LF (2509)**
**PHASE 3**
**MR. BOBBY DARDEN**
**P.O. BOX 128**
**COVE CITY NC 28523**

**(252) 633-1564**

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐

| SAMPLE LOCATION | COLLECTION DATE | COLLECTION TIME | TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION | TEMPERATURE, °C AT COLLECTION | # OF CONTAINERS | Field pH | Metals | Turbidity | Conductivity | Temperature | Field Parameter | EPA 8260B | 8260 Dup. 1 | 8260 Dup. 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CONTAINER TYPE, P/G | | | | | | P | P | P | P | P | | G | G | G |
| CHEMICAL PRESERVATION | | | | | | A | A | A | A | A | | E | E | E |
| **MW19D** | 4-9-15 | 0915 | | 15 | 5 | G | G | G | G | G | G | G | G | |
| **MW20D** | 4-9-15 | 1055 | | | 1 | | | | | | G | | | |
| **MW21D** | 4-9-15 | 1050 | | | 1 | | | | | | G | | | |

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

PARAMETERS/TESTS

A - NONE D - NAOH
B - $HNO_3$ E - HCL
C - $H_2SO_4$ F - ZINC ACETATE/NAOH
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY (SEAL) MAINTAINED DURING SHIPMENT/DELIVERY
(Y) N

SAMPLES COLLECTED BY: (Please Print)
Bobby Fox / Tom BEASLEY

SAMPLES RECEIVED IN LAB AT 0.3 °C

| RELINQUISHED BY (SIG.) (SAMPLER) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
|---|---|---|---|
| Tom Beasley | 4-9-15 1400 | [illegible] | 4/9/15 155 |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 294567

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035

CRSWMA TUSCARORA REGIONAL LF (2509)
LEACHATE STORAGE LAGOON
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | LST1S | LST1D | LST2S | LST2D | LST3S | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|---|---|---|---|
| PH (field measurement), Units | | | 4.7 | 6.7 | 4.9 | | 4.8 | 04/08/15 | BF | 4500HB-00 |
| Antimony, ug/l | 0.12 | 6.0 | --- U | 0.14 J | 0.27 J | | --- U | 04/13/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | 1.1 J | 0.78 J | 1.3 J | | 1.9 J | 04/13/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | 76.6 J | 41.4 J | 65.8 J | | 65.4 J | 04/13/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | 0.50 J | 0.07 J | 0.37 J | | 0.48 J | 04/13/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | 0.12 J | --- U | 0.08 J | | 0.12 J | 04/13/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | 0.51 J | 0.30 J | 0.67 J | | 1.9 J | 04/13/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | 1.00 J | 0.20 J | 0.85 J | | 0.93 J | 04/13/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | 3.2 J | 0.21 J | 3.0 J | | 5.4 J | 04/13/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | 3.7 J | 0.26 J | 3.2 J | | 5.3 J | 04/13/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | 0.84 J | 1.5 J | 1.1 J | | 2.5 J | 04/13/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | 1.1 J | --- U | 1.1 J | | 0.38 J | 04/13/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | --- U | --- U | --- U | | --- U | 04/13/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | --- U | --- U | --- U | | --- U | 04/13/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | 5.4 J | 1.2 J | 4.9 J | | 7.7 J | 04/13/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | 8.1 J | 3.3 J | 10 | | 18 | 04/13/15 | LFJ | EPA200.8 |
| Turbidity, NTU | 1.0 | 1.0 | 120 | 45.0 | 100 | | 260 | 04/08/15 | LW | 2130B-01 |
| Conductivity (at 25c), uMhos/cm | 1.0 | 1.0 | 96 | 524 | 113 | | 118 | 04/08/15 | BF | 2510B-97 |
| Temperature, °C | | | 16 | 17 | 17 | | 15 | 04/08/15 | BF | 2550B-00 |
| Static Water Level, feet | | | 4.84 | 10.41 | 4.97 | 10.28 | 5.86 | 04/08/15 | BF | |
| Well Depth, feet | | | 15.04 | 34.86 | 14.45 | 33.29 | 17.65 | 04/08/15 | BF | |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035

CRSWMA TUSCARORA REGIONAL LF (2509)
LEACHATE STORAGE LAGOON
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | LST3D | LST4S | LST4D | LST5S | LST5D | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|---|---|---|---|
| PH (field measurement), Units | | | | 4.9 | | 6.3 | 6.6 | 04/08/15 | BF | 4500HB-00 |
| Antimony, ug/l | 0.12 | 6.0 | | 0.13 J | | 0.23 J | --- U | 04/13/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | | 1.0 J | | 3.2 J | 1.0 J | 04/13/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | | 58.7 J | | 69.5 J | 58.7 J | 04/13/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | | 0.32 J | | 0.55 J | 0.10 J | 04/13/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | | 0.08 J | | 0.33 J | --- U | 04/13/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | | 5.3 J | | 0.69 J | 0.23 J | 04/13/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | | 0.60 J | | 3.3 J | 0.22 J | 04/13/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | | 3.2 J | | 14 | 0.40 J | 04/13/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | | 2.6 J | | 21 | 0.39 J | 04/13/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | | 5.8 J | | 2.2 J | 1.4 J | 04/13/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | | 0.22 J | | 0.91 J | --- U | 04/13/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | | --- U | | --- U | --- U | 04/13/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | | --- U | | 0.34 J | --- U | 04/13/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | | 4.0 J | | 27 | 1.4 J | 04/13/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | | 38 | | 79 | 5.6 J | 04/13/15 | LFJ | EPA200.8 |
| Turbidity, NTU | 1.0 | 1.0 | | 85.0 | | 1000 | 37.0 | 04/08/15 | LW | 2130B-01 |
| Conductivity (at 25c), uMhos/cm | 1.0 | 1.0 | | 81 | | 191 | 555 | 04/08/15 | BF | 2510B-97 |
| Temperature, °C | | | | 15 | | 16 | 17 | 04/08/15 | BF | 2550B-00 |
| Static Water Level, feet | | | 11.14 | 5.02 | 10.70 | 6.00 | 11.64 | 04/08/15 | BF | |
| Well Depth, feet | | | 34.85 | 17.62 | 36.12 | 15.41 | 38.66 | 04/08/15 | BF | |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035

CRSWMA TUSCARORA REGIONAL LF (2509)
LEACHATE STORAGE LAGOON
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | LST6S | LST6D | Trip Blank | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|---|---|
| PH (field measurement), Units | | | 5.2 | | | 04/08/15 | BF | 4500HB-00 |
| Antimony, ug/l | 0.12 | 6.0 | --- U | | | 04/13/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | 1.1 J | | | 04/13/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | 66.1 J | | | 04/13/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | 0.23 J | | | 04/13/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | 0.09 J | | | 04/13/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | 0.52 J | | | 04/13/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | 1.1 J | | | 04/13/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | 4.3 J | | | 04/13/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | 5.6 J | | | 04/13/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | 1.1 J | | | 04/13/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | 0.27 J | | | 04/13/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | --- U | | | 04/13/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | --- U | | | 04/13/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | 7.9 J | | | 04/13/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | 41 | | | 04/13/15 | LFJ | EPA200.8 |
| Turbidity, NTU | 1.0 | 1.0 | 280 | | | 04/08/15 | LW | 2130B-01 |
| Conductivity (at 25c), uMhos/cm | 1.0 | 1.0 | 60 | | | 04/08/15 | BF | 2510B-97 |
| Temperature, °C | | | 16 | | | 04/08/15 | BF | 2550B-00 |
| Static Water Level, feet | | | 6.61 | 9.94 | | 04/08/15 | BF | |
| Well Depth, feet | | | 16.44 | 34.37 | | 04/08/15 | BF | |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
LEACHATE STORAGE LAGOON
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MAO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 05/01/15



REVIEWED BY: _____

## VOLATILE ORGANICS
## EPA METHOD 8260B R1(96)

| PARAMETERS, ug/l | MDL | SWSL | LST1S | LST1D | LST2S | LST3S | LST4S |
|---|---|---|---|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 2. Vinyl Chloride | 0.63 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 3. Bromomethane | 0.67 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 4. Chloroethane | 0.48 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 7. Acetone | 9.06 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 8. Iodomethane | 0.26 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 9. Carbon Disulfide | 0.23 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 10. Methylene Chloride | 0.64 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 13. Vinyl Acetate | 0.20 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 14. Cis-1,2-Dichloroethene | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 15. 2-Butanone | 2.21 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 16. Bromochloromethane | 0.27 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 17. Chloroform | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 20. Benzene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 22. Trichloroethene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 24. Bromodichloromethane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 25. Cis-1,3-Dichloropropene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 26. 4-Methyl-2-Pentanone | 1.19 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 27. Toluene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 30. Tetrachloroethene | 0.17 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 31. 2-Hexanone | 1.57 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 32. Dibromochloromethane | 0.24 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 34. Chlorobenzene | 0.30 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 36. Ethylbenzene | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 37. Xylenes | 0.68 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 38. Dibromomethane | 0.28 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 39. Styrene | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 40. Bromoform | 0.20 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.0 | --- U | --- U | --- U | --- U | --- U |
| 46. Acrylonitrile | 2.72 | 200.0 | --- U | --- U | --- U | --- U | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.0 | --- U | --- U | --- U | --- U | --- U |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
LEACHATE STORAGE LAGOON
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MAO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 05/01/15



REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

| PARAMETERS, ug/l | MDL | SWSL | LST5S | LST5D | LST6S | Trip Blank |
|---|---|---|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.0 | --- U | --- U | --- U | --- U |
| 2. Vinyl Chloride | 0.63 | 1.0 | --- U | --- U | --- U | --- U |
| 3. Bromomethane | 0.67 | 10.0 | --- U | --- U | --- U | --- U |
| 4. Chloroethane | 0.48 | 10.0 | --- U | --- U | --- U | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.0 | --- U | --- U | --- U | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.0 | --- U | --- U | --- U | --- U |
| 7. Acetone | 9.06 | 100.0 | --- U | --- U | --- U | --- U |
| 8. Iodomethane | 0.26 | 10.0 | --- U | --- U | --- U | --- U |
| 9. Carbon Disulfide | 0.23 | 100.0 | --- U | --- U | --- U | --- U |
| 10. Methylene Chloride | 0.64 | 1.0 | --- U | --- U | --- U | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.0 | --- U | --- U | --- U | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.0 | --- U | --- U | --- U | --- U |
| 13. Vinyl Acetate | 0.20 | 50.0 | --- U | --- U | --- U | --- U |
| 14. Cis-1,2-Dichloroethene | 0.25 | 5.0 | --- U | --- U | --- U | --- U |
| 15. 2-Butanone | 2.21 | 100.0 | --- U | --- U | --- U | --- U |
| 16. Bromochloromethane | 0.27 | 3.0 | --- U | --- U | --- U | --- U |
| 17. Chloroform | 0.25 | 5.0 | --- U | --- U | --- U | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.0 | --- U | --- U | --- U | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.0 | --- U | --- U | --- U | --- U |
| 20. Benzene | 0.24 | 1.0 | --- U | --- U | --- U | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.0 | --- U | --- U | --- U | --- U |
| 22. Trichloroethene | 0.23 | 1.0 | --- U | --- U | --- U | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.0 | --- U | --- U | --- U | --- U |
| 24. Bromodichloromethane | 0.21 | 1.0 | --- U | --- U | --- U | --- U |
| 25. Cis-1,3-Dichloropropene | 0.24 | 1.0 | --- U | --- U | --- U | --- U |
| 26. 4-Methyl-2-Pentanone | 1.19 | 100.0 | --- U | --- U | --- U | --- U |
| 27. Toluene | 0.23 | 1.0 | --- U | --- U | --- U | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.0 | --- U | --- U | --- U | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.0 | --- U | --- U | --- U | --- U |
| 30. Tetrachloroethene | 0.17 | 1.0 | --- U | --- U | --- U | --- U |
| 31. 2-Hexanone | 1.57 | 50.0 | --- U | --- U | --- U | --- U |
| 32. Dibromochloromethane | 0.24 | 3.0 | --- U | --- U | --- U | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.0 | --- U | --- U | --- U | --- U |
| 34. Chlorobenzene | 0.30 | 3.0 | --- U | --- U | --- U | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.0 | --- U | --- U | --- U | --- U |
| 36. Ethylbenzene | 0.21 | 1.0 | --- U | --- U | --- U | --- U |
| 37. Xylenes | 0.68 | 5.0 | --- U | --- U | --- U | --- U |
| 38. Dibromomethane | 0.28 | 10.0 | --- U | --- U | --- U | --- U |
| 39. Styrene | 0.19 | 1.0 | --- U | --- U | --- U | --- U |
| 40. Bromoform | 0.20 | 3.0 | --- U | --- U | --- U | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.0 | --- U | --- U | --- U | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.0 | --- U | --- U | --- U | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.0 | --- U | --- U | --- U | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.0 | --- U | --- U | --- U | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.0 | --- U | --- U | --- U | --- U |
| 46. Acrylonitrile | 2.72 | 200.0 | --- U | --- U | --- U | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.0 | --- U | --- U | --- U | --- U |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
LEACHATE STORAGE LAGOON
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
METHOD BLANK RESULTS

| PARAMETERS, ug/l | MDL | SWSL | Concentration |
|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.00 | --- U |
| 2. Vinyl Chloride | 0.63 | 1.00 | --- U |
| 3. Bromomethane | 0.67 | 10.00 | --- U |
| 4. Chloroethane | 0.48 | 10.00 | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.00 | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.00 | --- U |
| 7. Acetone | 9.06 | 100.00 | --- U |
| 8. Iodomethane | 0.26 | 10.00 | --- U |
| 9. Carbon Disulfide | 0.23 | 100.00 | --- U |
| 10. Methylene Chloride | 0.64 | 1.00 | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.00 | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.00 | --- U |
| 13. Vinyl Acetate | 0.20 | 50.00 | --- U |
| 14. cis-1,2-Dichloroethene | 0.25 | 5.00 | --- U |
| 15. 2-Butanone | 2.21 | 100.00 | --- U |
| 16. Bromochloromethane | 0.27 | 3.00 | --- U |
| 17. Chloroform | 0.25 | 5.00 | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.00 | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.00 | --- U |
| 20. Benzene | 0.24 | 1.00 | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.00 | --- U |
| 22. Trichloroethene | 0.23 | 1.00 | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.00 | --- U |
| 24. Bromodichloromethane | 0.21 | 1.00 | --- U |
| 25. cis-1,3-Dichloropropene | 0.24 | 1.00 | --- U |
| 26. 4-methyl-2-Pentanone | 1.19 | 100.00 | --- U |
| 27. Toluene | 0.23 | 1.00 | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.00 | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.00 | --- U |
| 30. Tetrachloroethene | 0.17 | 1.00 | --- U |
| 31. 2-Hexanone | 1.57 | 50.00 | --- U |
| 32. Dibromochloromethane | 0.24 | 3.00 | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.00 | --- U |
| 34. Chlorobenzene | 0.30 | 3.00 | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.00 | --- U |
| 36. Ethylbenzene | 0.21 | 1.00 | --- U |
| 37. Xylenes | 0.68 | 5.00 | --- U |
| 38. Dibromomethane | 0.28 | 10.00 | --- U |
| 39. Styrene | 0.19 | 1.00 | --- U |
| 40. Bromoform | 0.20 | 3.00 | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.00 | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.00 | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.00 | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.00 | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.00 | --- U |
| 46. Acrylonitrile | 2.72 | 200.00 | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.00 | --- U |

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
LEACHATE STORAGE LAGOON
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
SURROGATE RECOVERY RESULTS

| Sample Name | Limits (% recovery) | 1,2-DCA-d4 (% recovery) | Toluene-d8 (% recovery) | 4-BFB (% recovery) |
|---|---|---|---|---|
| Continuing Calibration std. | 70-130 | 98.1 | 101 | 101 |
| Laboratory Control std. | 70-130 | 101 | 101 | 99.3 |
| Method Blank | 70-130 | 102 | 102 | 100 |
| LST1S | 70-130 | 104 | 102 | 98.7 |
| LST1D | 70-130 | 103 | 102 | 99.8 |
| LST2S | 70-130 | 105 | 100 | 97.8 |
| LST3S | 70-130 | 105 | 100 | 98.5 |
| LST4S | 70-130 | 104 | 100 | 99.2 |
| LST5S | 70-130 | 108 | 101 | 98.6 |
| LST5D | 70-130 | 105 | 100 | 97.3 |
| LST6S | 70-130 | 105 | 101 | 97.1 |
| Trip Blank | 70-130 | 104 | 101 | 99.7 |
| LST1S M.S. | 70-130 | 102 | 101 | 99.6 |
| LST1S M.S.D. | 70-130 | 99.6 | 101 | 96.5 |

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
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CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
LEACHATE STORAGE LAGOON
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

| Sample Spiked: LST1S (6035) | Spike Amount Ug/l | Sample Result Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) | Spike Dup. Result Ug/l | Spike Dup. Recovery (70-130%) | MS/MSD RPD (50%) |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 20.0 | --- U | 17.67 | 88.4 | 16.86 | 84.3 | 4.7 |
| Benzene | 20.0 | --- U | 19.13 | 95.7 | 18.40 | 92.0 | 3.9 |
| Trichloroethene | 20.0 | --- U | 17.27 | 86.4 | 17.33 | 86.7 | 0.3 |
| Toluene | 20.0 | --- U | 18.70 | 93.5 | 18.54 | 92.7 | 0.9 |
| Chlorobenzene | 20.0 | --- U | 18.21 | 91.1 | 17.38 | 86.9 | 4.7 |

LABORATORY CONTROL SAMPLE RESULTS

| Sample Compound: | Spike Amount Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) |
|---|---|---|---|
| 1,1-Dichloroethene | 20.00 | 18.76 | 93.8 |
| Benzene | 20.00 | 16.30 | 81.5 |
| Trichloroethene | 20.00 | 15.95 | 80.0 |
| Toluene | 20.00 | 15.48 | 77.4 |
| Chlorobenzene | 20.00 | 15.24 | 76.2 |

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858
environment1inc.com
Phone (252) 756-6208 • Fax (252) 756-0633

# CHAIN OF CUSTODY RECORD



**CLIENT:** 6035 **Week: 17**

**CRSWMA TUSCARORA REGIONAL LF (2509)**
**LEACHATE STORAGE LAGOON**
**MR. BOBBY DARDEN**
**P.O. BOX 128**
**COVE CITY NC 28523**

**(252) 633-1564**

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CHLORINE NEUTRALIZED AT COLLECTION | | | | | | | | | | | | | | | | | | | | | | |
| pH CHECK (LAB) | | | | 12 | | | | | 12 | 12 | 12 | 12 | | | | | | | | | | |
| CONTAINER TYPE, P/G | | | | P | P | P | P | P | | G | G | G | G | | | | | | | | | |
| CHEMICAL PRESERVATION | | | | A | A | A | A | A | | E | E | E | E | | | | | | | | | |
| SAMPLE LOCATION | COLLECTION DATE | COLLECTION TIME | TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION | TEMPERATURE, °C AT COLLECTION | # OF CONTAINERS | Field pH | Metals | Turbidity | Conductivity | Temperature | Field Parameter | EPA 8260B | 8260 Dup. 1 | 8260 Dup. 2 | 8260 Dup. 3 | | | | | | | |
| LST1S | 4-8-15 | 1140 | | 16 | 7 | G | G | G | G | G | G | G | G | G | G | | | | | | | |
| LST1D | 4-8-15 | 1145 | | 17 | 5 | G | G | G | G | G | G | G | G | | | | | | | | | |
| LST2S | 4-8-15 | 1135 | | 17 | 5 | G | G | G | G | G | G | G | G | | | | | | | | | |
| LST2D | 4-8-15 | 1137 | | | 1 | | | | | | G | | | | | | | | | | | |
| LST3S | 4-8-15 | 1205 | | 15 | 5 | G | G | G | G | G | G | G | G | | | | | | | | | |
| LST3D | 4-8-15 | 1203 | | | 1 | | | | | | G | | | | | | | | | | | |
| LST4S | 4-8-15 | 1200 | | 15 | 5 | G | G | G | G | G | G | G | G | | | | | | | | | |
| LST4D | 4-8-15 | 1157 | | | 1 | | | | | | G | | | | | | | | | | | |
| LST5S | 4-8-15 | 1150 | | 16 | 5 | G | G | G | G | G | G | G | G | | | | | | | | | |
| LST5D | 4-8-15 | 1155 | | 17 | 5 | G | G | G | G | G | G | G | G | | | | | | | | | |
| LST6S | 4-8-15 | 1130 | | 16 | 6 | G | G | G | G | G | G | G | G | G | | | | | | | | |

PARAMETERS/TESTS

A - NONE D - NAOH
B - $HNO_3$ E - HCL
C - $H_2SO_4$ F - ZINC ACETATE/NAOH
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY (SEAL) MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) Bobby Fox / Tom Beasley

SAMPLES RECEIVED IN LAB AT 0.2 °C

| RELINQUISHED BY (SIG.) (SAMPLER) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
|---|---|---|---|
| Bobby Fox | 4-8-15 2:25 | [signature] | 4/8/15 235 |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
| | | | |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
| | | | |

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

№ 294576

FORM #5

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858
environment1inc.com
Phone (252) 756-6208 • Fax (252) 756-0633

# CHAIN OF CUSTODY RECORD



**CLIENT:** 6035 **Week: 17**

**CRSWMA TUSCARORA REGIONAL LF (2509)**
**LEACHATE STORAGE LAGOON**
**MR. BOBBY DARDEN**
**P.O. BOX 128**
**COVE CITY NC 28523**

**(252) 633-1564**

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

| SAMPLE LOCATION | COLLECTION DATE | COLLECTION TIME | TOTAL CHLORINE, mg/l OR Log1 AT COLLECTION | TEMPERATURE, °C AT COLLECTION | # OF CONTAINERS | Field pH | Metals | Turbidity | Conductivity | Temperature | Field Parameter | EPA 8260B | 8260 Dup. 1 | 8260 Dup. 2 | 8260 Dup. 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CHLORINE NEUTRALIZED AT COLLECTION | | | | | | | | | | | | | | | |
| pH CHECK (LAB) | | | | | | | | | | | | 12 | 12 | 12 | |
| CONTAINER TYPE, P/G | | | | | | P | P | P | P | P | | G | G | G | G |
| CHEMICAL PRESERVATION | | | | | | A | A | A | A | A | | E | E | E | E |
| LST6D | 4-8-15 | 1125 | | | 1 | | | | | | G | | | | |
| Trip Blank | 4-8-15 | | | | 3 | | | | | | | G | G | G | |

PARAMETERS/TESTS — CHEMICAL PRESERVATION:
A - NONE D - NAOH
B - $HNO_3$ E - HCL
C - $H_2SO_4$ F - ZINC ACETATE/NAOH
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY (SEAL) MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) Bobby Fox/Tom Beasley

SAMPLES RECEIVED IN LAB AT 0.2 °C

| RELINQUISHED BY (SIG.) (SAMPLER) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
|---|---|---|---|
| Bobby Fox | 4-8-15 2:25 | [illegible] | 4/8/15 2:35 |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 294575

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6039

CRSWMA TUSCARORA REGIONAL LF (2509)
SURFACE WATER
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | SWPT1 | SWPT2 | UD1 | UD2 | Trip Blank | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|---|---|---|---|
| PH (field measurement), Units | | | 7.1 | 7.1 | 7.2 | 6.7 | | 04/08/15 | BF | 4500HB-00 |
| Antimony, ug/l | 0.12 | 6.0 | --- U | 0.14 J | 0.42 J | 0.20 J | | 04/14/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | 1.00 J | 0.75 J | 1.1 J | 0.17 J | | 04/14/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | 19.2 J | 12.1 J | 44.1 J | 17.9 J | | 04/14/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | 0.06 J | --- U | 0.04 J | 0.04 J | | 04/14/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | --- U | --- U | --- U | --- U | | 04/14/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | 0.36 J | 0.35 J | 0.79 J | 0.31 J | | 04/14/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | 0.70 J | 0.35 J | 0.54 J | 0.34 J | | 04/14/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | 4.1 J | 0.60 J | 1.1 J | 3.5 J | | 04/14/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | 3.6 J | 0.34 J | 0.63 J | --- U | | 04/14/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | 1.5 J | 1.9 J | 2.8 J | 3.2 J | | 04/14/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | --- U | 0.21 J | 1.0 J | 0.37 J | | 04/14/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | --- U | --- U | --- U | --- U | | 04/14/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | --- U | --- U | --- U | --- U | | 04/17/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | 6.9 J | 0.67 J | 1.5 J | 0.50 J | | 04/14/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | 5.9 J | 2.2 J | 12 | 2.2 J | | 04/14/15 | LFJ | EPA200.8 |
| Turbidity, NTU | 1.0 | 1.0 | 160 | 18.0 | 36.0 | 23.0 | | 04/08/15 | LW | 2130B-01 |
| Conductivity (at 25c), uMhos/cm | 1.0 | 1.0 | 286 | 481 | 619 | 733 | | 04/08/15 | BF | 2510B-97 |
| Temperature, °C | | | 19 | 20 | 20 | 20 | | 04/08/15 | BF | 2550B-00 |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
SURFACE WATER
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6039

ANALYST: MAO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 05/01/15



REVIEWED BY: _____

## VOLATILE ORGANICS
## EPA METHOD 8260B R1(96)

| PARAMETERS, ug/l | MDL | SWSL | SWPT1 | SWPT2 | UD1 | UD2 | Trip Blank |
|---|---|---|---|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 2. Vinyl Chloride | 0.63 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 3. Bromomethane | 0.67 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 4. Chloroethane | 0.48 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 7. Acetone | 9.06 | 100.0 | --- U | 10.10 J | 11.80 J | --- U | --- U |
| 8. Iodomethane | 0.26 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 9. Carbon Disulfide | 0.23 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 10. Methylene Chloride | 0.64 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 13. Vinyl Acetate | 0.20 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 14. Cis-1,2-Dichloroethene | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 15. 2-Butanone | 2.21 | 100.0 | --- U | 2.30 J | 2.40 J | 2.40 J | 2.80 J |
| 16. Bromochloromethane | 0.27 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 17. Chloroform | 0.25 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 20. Benzene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 22. Trichloroethene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 24. Bromodichloromethane | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 25. Cis-1,3-Dichloropropene | 0.24 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 26. 4-Methyl-2-Pentanone | 1.19 | 100.0 | --- U | --- U | --- U | --- U | --- U |
| 27. Toluene | 0.23 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 30. Tetrachloroethene | 0.17 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 31. 2-Hexanone | 1.57 | 50.0 | --- U | --- U | --- U | --- U | --- U |
| 32. Dibromochloromethane | 0.24 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 34. Chlorobenzene | 0.30 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 36. Ethylbenzene | 0.21 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 37. Xylenes | 0.68 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 38. Dibromomethane | 0.28 | 10.0 | --- U | --- U | --- U | --- U | --- U |
| 39. Styrene | 0.19 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 40. Bromoform | 0.20 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.0 | --- U | --- U | --- U | --- U | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.0 | --- U | --- U | --- U | --- U | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.0 | --- U | --- U | --- U | --- U | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.0 | --- U | --- U | --- U | --- U | --- U |
| 46. Acrylonitrile | 2.72 | 200.0 | --- U | --- U | --- U | --- U | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.0 | --- U | --- U | --- U | --- U | --- U |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
SURFACE WATER
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6039

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
METHOD BLANK RESULTS

| PARAMETERS, ug/l | MDL | SWSL | Concentration |
|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.00 | --- U |
| 2. Vinyl Chloride | 0.63 | 1.00 | --- U |
| 3. Bromomethane | 0.67 | 10.00 | --- U |
| 4. Chloroethane | 0.48 | 10.00 | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.00 | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.00 | --- U |
| 7. Acetone | 9.06 | 100.00 | --- U |
| 8. Iodomethane | 0.26 | 10.00 | --- U |
| 9. Carbon Disulfide | 0.23 | 100.00 | --- U |
| 10. Methylene Chloride | 0.64 | 1.00 | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.00 | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.00 | --- U |
| 13. Vinyl Acetate | 0.20 | 50.00 | --- U |
| 14. cis-1,2-Dichloroethene | 0.25 | 5.00 | --- U |
| 15. 2-Butanone | 2.21 | 100.00 | 4.0 J |
| 16. Bromochloromethane | 0.27 | 3.00 | --- U |
| 17. Chloroform | 0.25 | 5.00 | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.00 | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.00 | --- U |
| 20. Benzene | 0.24 | 1.00 | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.00 | --- U |
| 22. Trichloroethene | 0.23 | 1.00 | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.00 | --- U |
| 24. Bromodichloromethane | 0.21 | 1.00 | --- U |
| 25. cis-1,3-Dichloropropene | 0.24 | 1.00 | --- U |
| 26. 4-methyl-2-Pentanone | 1.19 | 100.00 | --- U |
| 27. Toluene | 0.23 | 1.00 | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.00 | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.00 | --- U |
| 30. Tetrachloroethene | 0.17 | 1.00 | --- U |
| 31. 2-Hexanone | 1.57 | 50.00 | --- U |
| 32. Dibromochloromethane | 0.24 | 3.00 | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.00 | --- U |
| 34. Chlorobenzene | 0.30 | 3.00 | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.00 | --- U |
| 36. Ethylbenzene | 0.21 | 1.00 | --- U |
| 37. Xylenes | 0.68 | 5.00 | --- U |
| 38. Dibromomethane | 0.28 | 10.00 | --- U |
| 39. Styrene | 0.19 | 1.00 | --- U |
| 40. Bromoform | 0.20 | 3.00 | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.00 | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.00 | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.00 | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.00 | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.00 | --- U |
| 46. Acrylonitrile | 2.72 | 200.00 | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.00 | --- U |

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
SURFACE WATER
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6039

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
SURROGATE RECOVERY RESULTS

| Sample Name | Limits (% recovery) | 1,2-DCA-d4 (% recovery) | Toluene-d8 (% recovery) | 4-BFB (% recovery) |
|---|---|---|---|---|
| Continuing Calibration std. | 70-130 | 95.6 | 99.6 | 101 |
| Laboratory Control std. | 70-130 | 97.5 | 100 | 103 |
| Method Blank | 70-130 | 96.8 | 101 | 99.7 |
| SWPT1 | 70-130 | 98.2 | 100 | 100 |
| SWPT2 | 70-130 | 109 | 113 | 113 |
| UD1 | 70-130 | 98.0 | 101 | 99.9 |
| UD2 | 70-130 | 99.8 | 101 | 101 |
| Trip Blank | 70-130 | 97.5 | 101 | 99.3 |
| MW15S M.S. | 70-130 | 99.6 | 103 | 102 |
| MW15S M.S.D. | 70-130 | 101 | 105 | 105 |

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
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CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
SURFACE WATER
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6039

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

| Sample Spiked: MW15S (6046) | Spike Amount Ug/l | Sample Result Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) | Spike Dup. Result Ug/l | Spike Dup. Recovery (70-130%) | MS/MSD RPD (50%) |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 20.0 | --- U | 19.53 | 97.7 | 18.37 | 91.9 | 6.1 |
| Benzene | 20.0 | --- U | 21.22 | 106 | 19.09 | 95.5 | 10.6 |
| Trichloroethene | 20.0 | --- U | 19.71 | 98.6 | 18.24 | 91.2 | 7.7 |
| Toluene | 20.0 | --- U | 20.42 | 102 | 18.77 | 93.9 | 8.4 |
| Chlorobenzene | 20.0 | --- U | 19.28 | 96.4 | 17.64 | 88.2 | 8.9 |

LABORATORY CONTROL SAMPLE RESULTS

| Sample Compound: | Spike Amount Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) |
|---|---|---|---|
| 1,1-Dichloroethene | 20.00 | 19.23 | 96.2 |
| Benzene | 20.00 | 19.29 | 96.5 |
| Trichloroethene | 20.00 | 19.49 | 97.5 |
| Toluene | 20.00 | 19.58 | 97.9 |
| Chlorobenzene | 20.00 | 18.65 | 93.3 |

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858
environment1inc.com
Phone (252) 756-6208 • Fax (252) 756-0633

# CHAIN OF CUSTODY RECORD



CLIENT: 6039 Week: 17

**CRSWMA TUSCARORA REGIONAL LF (2509)**
**SURFACE WATER**
**MR. BOBBY DARDEN**
**P.O. BOX 128**
**COVE CITY NC 28523**

**(252) 633-1564**

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

| SAMPLE LOCATION | COLLECTION DATE | COLLECTION TIME | TOTAL CHLORINE mg/l OR ug/l AT COLLECTION | TEMPERATURE °C AT COLLECTION | # OF CONTAINERS | Field pH | Metals | Turbidity | Conductivity | Temperature | EPA 8260B | 8260 Dup. 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CHLORINE NEUTRALIZED AT COLLECTION | | | | | | | | | | | | |
| pH CHECK (LAB) | | | | | | | 12 | | | | 12 | 12 |
| CONTAINER TYPE, P/G | | | | | | P | P | P | P | P | G | G |
| CHEMICAL PRESERVATION | | | | | | A | A | A | A | A | E | E |
| **SWPT1** | 4-8-15 | 0800 | | 19 | 5 | G | G | G | G | G | G | G |
| **SWPT2** | 4-8-15 | 0830 | | 20 | 5 | G | G | G | G | G | G | G |
| **UD1** | 4-8-15 | 0905 | | 20 | 5 | G | G | G | G | G | G | G |
| **UD2** | 4-8-15 | 0900 | | 20 | 5 | G | G | G | G | G | G | G |
| **Trip Blank** | | | | | 2 | | | | | | G | G |

PARAMETERS/TESTS

A - NONE D - NAOH
B - $HNO_3$ E - HCL
C - $H_2SO_4$ F - ZINC ACETATE/NAOH
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY (SEAL) MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) Bobby Fry / Tom Beasley

SAMPLES RECEIVED IN LAB AT 0.2 °C

| RELINQUISHED BY (SIG.) (SAMPLER) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
|---|---|---|---|
| Bobby Fry | 4-8-15 2125 | [signature] | 4/8/15 2225 |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |

COMMENTS:

PLEASE READ instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 294572

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6045

CRSWMA TUSCARORA REGIONAL LF (2509)
LEACHATE MANHOLE
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | Leachate Manhole | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|
| PH (field measurement), Units | | | 7.2 | 04/08/15 | BF | 4500HB-00 |
| Antimony, ug/l | 0.12 | 6.0 | 1.5 J | 04/17/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.63 | 10.0 | 40 | 04/20/15 | MTM | 3113B-04 |
| Barium, ug/l | 0.12 | 100.0 | 1034 | 04/14/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | 0.18 J | 04/14/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | 8 | 04/17/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | 15 | 04/14/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | 5.6 J | 04/14/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | 32 | 04/14/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | 0.30 J | 04/14/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | 82 | 04/14/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.44 | 10.0 | --- U | 04/17/15 | MTM | 3113B-04 |
| Silver, ug/l | 0.04 | 10.0 | 2.2 J | 04/14/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | --- U | 04/17/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | 11.3 J | 04/14/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | 4.9 J | 04/15/15 | LFJ | EPA200.8 |
| Turbidity, NTU | 1.0 | 1.0 | 12.0 | 04/08/15 | LW | 2130B-01 |
| Conductivity (at 25c), uMhos/cm | 1.0 | 1.0 | 10670 | 04/08/15 | BF | 2510B-97 |
| Temperature, °C | | | 25 | 04/08/15 | BF | 2550B-00 |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
LEACHATE MANHOLE
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6045

ANALYST: MAO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/17/15
DATE REPORTED: 05/01/15



REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

| PARAMETERS, ug/l | MDL | SWSL | Leachate Manhole |
|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.0 | --- U |
| 2. Vinyl Chloride | 0.63 | 1.0 | --- U |
| 3. Bromomethane | 0.67 | 10.0 | --- U |
| 4. Chloroethane | 0.48 | 10.0 | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.0 | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.0 | --- U |
| 7. Acetone | 9.06 | 100.0 | 24.90 J |
| 8. Iodomethane | 0.26 | 10.0 | --- U |
| 9. Carbon Disulfide | 0.23 | 100.0 | --- U |
| 10. Methylene Chloride | 0.64 | 1.0 | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.0 | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.0 | --- U |
| 13. Vinyl Acetate | 0.20 | 50.0 | --- U |
| 14. Cis-1,2-Dichloroethene | 0.25 | 5.0 | 1.70 J |
| 15. 2-Butanone | 2.21 | 100.0 | 2.90 J |
| 16. Bromochloromethane | 0.27 | 3.0 | --- U |
| 17. Chloroform | 0.25 | 5.0 | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.0 | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.0 | --- U |
| 20. Benzene | 0.24 | 1.0 | 4.20 |
| 21. 1,2-Dichloroethane | 0.27 | 1.0 | --- U |
| 22. Trichloroethene | 0.23 | 1.0 | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.0 | --- U |
| 24. Bromodichloromethane | 0.21 | 1.0 | --- U |
| 25. Cis-1,3-Dichloropropene | 0.24 | 1.0 | --- U |
| 26. 4-Methyl-2-Pentanone | 1.19 | 100.0 | --- U |
| 27. Toluene | 0.23 | 1.0 | 25.90 |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.0 | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.0 | --- U |
| 30. Tetrachloroethene | 0.17 | 1.0 | --- U |
| 31. 2-Hexanone | 1.57 | 50.0 | --- U |
| 32. Dibromochloromethane | 0.24 | 3.0 | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.0 | --- U |
| 34. Chlorobenzene | 0.30 | 3.0 | 1.20 J |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.0 | --- U |
| 36. Ethylbenzene | 0.21 | 1.0 | 50.40 |
| 37. Xylenes | 0.68 | 5.0 | 45.60 |
| 38. Dibromomethane | 0.28 | 10.0 | --- U |
| 39. Styrene | 0.19 | 1.0 | 6.50 |
| 40. Bromoform | 0.20 | 3.0 | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.0 | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.0 | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.0 | 12.00 |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.0 | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.0 | --- U |
| 46. Acrylonitrile | 2.72 | 200.0 | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.0 | --- U |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
LEACHATE MANHOLE
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6045

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/17/15
DATE REPORTED: 04/30/15

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
METHOD BLANK RESULTS

| PARAMETERS, ug/l | MDL | SWSL | Concentration |
|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.00 | --- U |
| 2. Vinyl Chloride | 0.63 | 1.00 | --- U |
| 3. Bromomethane | 0.67 | 10.00 | --- U |
| 4. Chloroethane | 0.48 | 10.00 | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.00 | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.00 | --- U |
| 7. Acetone | 9.06 | 100.00 | --- U |
| 8. Iodomethane | 0.26 | 10.00 | --- U |
| 9. Carbon Disulfide | 0.23 | 100.00 | --- U |
| 10. Methylene Chloride | 0.64 | 1.00 | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.00 | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.00 | --- U |
| 13. Vinyl Acetate | 0.20 | 50.00 | --- U |
| 14. cis-1,2-Dichloroethene | 0.25 | 5.00 | --- U |
| 15. 2-Butanone | 2.21 | 100.00 | --- U |
| 16. Bromochloromethane | 0.27 | 3.00 | --- U |
| 17. Chloroform | 0.25 | 5.00 | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.00 | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.00 | --- U |
| 20. Benzene | 0.24 | 1.00 | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.00 | --- U |
| 22. Trichloroethene | 0.23 | 1.00 | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.00 | --- U |
| 24. Bromodichloromethane | 0.21 | 1.00 | --- U |
| 25. cis-1,3-Dichloropropene | 0.24 | 1.00 | --- U |
| 26. 4-methyl-2-Pentanone | 1.19 | 100.00 | --- U |
| 27. Toluene | 0.23 | 1.00 | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.00 | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.00 | --- U |
| 30. Tetrachloroethene | 0.17 | 1.00 | --- U |
| 31. 2-Hexanone | 1.57 | 50.00 | --- U |
| 32. Dibromochloromethane | 0.24 | 3.00 | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.00 | --- U |
| 34. Chlorobenzene | 0.30 | 3.00 | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.00 | --- U |
| 36. Ethylbenzene | 0.21 | 1.00 | --- U |
| 37. Xylenes | 0.68 | 5.00 | --- U |
| 38. Dibromomethane | 0.28 | 10.00 | --- U |
| 39. Styrene | 0.19 | 1.00 | --- U |
| 40. Bromoform | 0.20 | 3.00 | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.00 | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.00 | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.00 | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.00 | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.00 | --- U |
| 46. Acrylonitrile | 2.72 | 200.00 | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.00 | --- U |

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
LEACHATE MANHOLE
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6045

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/17/15
DATE REPORTED: 04/30/15

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
SURROGATE RECOVERY RESULTS

| Sample Name | Limits (% recovery) | 1,2-DCA-d4 (% recovery) | Toluene-d8 (% recovery) | 4-BFB (% recovery) |
|---|---|---|---|---|
| Continuing Calibration std. | 70-130 | 99.5 | 101 | 98.7 |
| Laboratory Control std. | 70-130 | 96.6 | 100 | 101 |
| Method Blank | 70-130 | 97.8 | 98.3 | 99.1 |
| Leachate Manhole | 70-130 | 98.6 | 101 | 100 |
| MW7 M.S. | 70-130 | 96.9 | 101 | 99.9 |
| MW7 M.S.D. | 70-130 | 97.3 | 101 | 100 |

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
LEACHATE MANHOLE
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6045

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/17/15
DATE REPORTED: 04/30/15

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

| Sample Spiked: MW7 (6044) | Spike Amount Ug/l | Sample Result Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) | Spike Dup. Result Ug/l | Spike Dup. Recovery (70-130%) | MS/MSD RPD (50%) |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 20.0 | --- U | 23.63 | 118 | 22.27 | 111 | 5.9 |
| Benzene | 20.0 | --- U | 20.84 | 104 | 20.28 | 101 | 2.7 |
| Trichloroethene | 20.0 | --- U | 20.07 | 100 | 19.07 | 95.4 | 5.1 |
| Toluene | 20.0 | --- U | 20.79 | 104 | 19.95 | 99.8 | 4.1 |
| Chlorobenzene | 20.0 | --- U | 19.28 | 96.4 | 19.08 | 95.4 | 1.0 |

LABORATORY CONTROL SAMPLE RESULTS

| Sample Compound: | Spike Amount Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) |
|---|---|---|---|
| 1,1-Dichloroethene | 20.00 | 16.99 | 85.0 |
| Benzene | 20.00 | 16.55 | 82.8 |
| Trichloroethene | 20.00 | 15.99 | 80.0 |
| Toluene | 20.00 | 16.23 | 81.2 |
| Chlorobenzene | 20.00 | 15.63 | 78.2 |

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858
environment1inc.com
Phone (252) 756-6208 • Fax (252) 756-0633

# CHAIN OF CUSTODY RECORD



**CLIENT:** 6045 **Week: 17**

**CRSWMA TUSCARORA REGIONAL LF (2509)**
**LEACHATE MANHOLE**
**MR. BOBBY DARDEN**
**P.O. BOX 128**
**COVE CITY NC 28523**

**(252) 633-1564**

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

| SAMPLE LOCATION | COLLECTION DATE | COLLECTION TIME | TOTAL CHLORINE, mg/l OR mg/l AT COLLECTION | TEMPERATURE, °C AT COLLECTION | # OF CONTAINERS | Field pH | Metals | Turbidity | Conductivity | Temperature | EPA 8260B | 8260 Dup. 1 | 8260 Dup. 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CHLORINE NEUTRALIZED AT COLLECTION | | | | | | | | | | | | | |
| pH CHECK (LAB) | | | | | | | 12 | | | | 12 | 12 | 12 |
| CONTAINER TYPE, P/G | | | | | | P | P | P | P | P | G | G | G |
| CHEMICAL PRESERVATION | | | | | | A | A | A | A | A | E | E | E |
| PARAMETERS/TESTS | | | | | | | | | | | | | |
| Leachate Manhole | 4-8-15 | 0840 | | 25 | 6 | G | G | G | G | G | G | G | G |

PARAMETERS/TESTS: A - NONE, B - $HNO_3$, C - $H_2SO_4$, D - NAOH, E - HCL, F - ZINC ACETATE/NAOH, G - NA THIOSULFATE

CLASSIFICATION:
- ☐ WASTEWATER (NPDES)
- ☐ DRINKING WATER
- ☐ DWQ/GW
- ☒ SOLID WASTE SECTION

CHAIN OF CUSTODY (SEAL) MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) Bobby Fry / Tom Beasley

SAMPLES RECEIVED IN LAB AT 0.2 °C

| RELINQUISHED BY (SIG.) (SAMPLER) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
|---|---|---|---|
| Bobby Fry | 4-8-15 2:25 | [signature] | 4/8/15 235 |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |

COMMENTS:

PLEASE READ instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 294569

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6043

CRSWMA TUSCARORA REGIONAL LF (2509)
BLANKS
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/15
DATE REPORTED : 05/01/15

REVIEWED BY:

| PARAMETERS | MDL | SWSL | Equipment Blank | | Analysis Date | Analyst | Method Code |
|---|---|---|---|---|---|---|---|
| Antimony, ug/l | 0.12 | 6.0 | --- | U | 04/14/15 | LFJ | EPA200.8 |
| Arsenic, ug/l | 0.10 | 10.0 | --- | U | 04/14/15 | LFJ | EPA200.8 |
| Barium, ug/l | 0.12 | 100.0 | --- | U | 04/14/15 | LFJ | EPA200.8 |
| Beryllium, ug/l | 0.04 | 1.0 | --- | U | 04/14/15 | LFJ | EPA200.8 |
| Cadmium, ug/l | 0.04 | 1.0 | --- | U | 04/14/15 | LFJ | EPA200.8 |
| Cobalt, ug/l | 0.12 | 10.0 | --- | U | 04/14/15 | LFJ | EPA200.8 |
| Copper, ug/l | 0.10 | 10.0 | --- | U | 04/14/15 | LFJ | EPA200.8 |
| Total Chromium, ug/l | 0.14 | 10.0 | --- | U | 04/14/15 | LFJ | EPA200.8 |
| Lead, ug/l | 0.13 | 10.0 | --- | U | 04/14/15 | LFJ | EPA200.8 |
| Nickel, ug/l | 0.12 | 50.0 | --- | U | 04/14/15 | LFJ | EPA200.8 |
| Selenium, ug/l | 0.16 | 10.0 | --- | U | 04/14/15 | LFJ | EPA200.8 |
| Silver, ug/l | 0.04 | 10.0 | --- | U | 04/14/15 | LFJ | EPA200.8 |
| Thallium, ug/l | 0.13 | 5.5 | --- | U | 04/17/15 | LFJ | EPA200.8 |
| Vanadium, ug/l | 0.06 | 25.0 | --- | U | 04/14/15 | LFJ | EPA200.8 |
| Zinc, ug/l | 0.53 | 10.0 | 0.79 | J | 04/14/15 | LFJ | EPA200.8 |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
BLANKS
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6043

ANALYST: MAO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 05/01/15



REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

| PARAMETERS, ug/l | MDL | SWSL | Equipment Blank |
|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.0 | --- U |
| 2. Vinyl Chloride | 0.63 | 1.0 | --- U |
| 3. Bromomethane | 0.67 | 10.0 | --- U |
| 4. Chloroethane | 0.48 | 10.0 | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.0 | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.0 | --- U |
| 7. Acetone | 9.06 | 100.0 | --- U |
| 8. Iodomethane | 0.26 | 10.0 | --- U |
| 9. Carbon Disulfide | 0.23 | 100.0 | --- U |
| 10. Methylene Chloride | 0.64 | 1.0 | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.0 | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.0 | --- U |
| 13. Vinyl Acetate | 0.20 | 50.0 | --- U |
| 14. Cis-1,2-Dichloroethene | 0.25 | 5.0 | --- U |
| 15. 2-Butanone | 2.21 | 100.0 | --- U |
| 16. Bromochloromethane | 0.27 | 3.0 | --- U |
| 17. Chloroform | 0.25 | 5.0 | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.0 | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.0 | --- U |
| 20. Benzene | 0.24 | 1.0 | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.0 | --- U |
| 22. Trichloroethene | 0.23 | 1.0 | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.0 | --- U |
| 24. Bromodichloromethane | 0.21 | 1.0 | --- U |
| 25. Cis-1,3-Dichloropropene | 0.24 | 1.0 | --- U |
| 26. 4-Methyl-2-Pentanone | 1.19 | 100.0 | --- U |
| 27. Toluene | 0.23 | 1.0 | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.0 | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.0 | --- U |
| 30. Tetrachloroethene | 0.17 | 1.0 | --- U |
| 31. 2-Hexanone | 1.57 | 50.0 | --- U |
| 32. Dibromochloromethane | 0.24 | 3.0 | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.0 | --- U |
| 34. Chlorobenzene | 0.30 | 3.0 | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.0 | --- U |
| 36. Ethylbenzene | 0.21 | 1.0 | --- U |
| 37. Xylenes | 0.68 | 5.0 | --- U |
| 38. Dibromomethane | 0.28 | 10.0 | --- U |
| 39. Styrene | 0.19 | 1.0 | --- U |
| 40. Bromoform | 0.20 | 3.0 | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.0 | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.0 | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.0 | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.0 | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.0 | --- U |
| 46. Acrylonitrile | 2.72 | 200.0 | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.0 | --- U |

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
BLANKS
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6043

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
SURROGATE RECOVERY RESULTS

| Sample Name | Limits (% recovery) | 1,2-DCA-d4 (% recovery) | Toluene-d8 (% recovery) | 4-BFB (% recovery) |
|---|---|---|---|---|
| Continuing Calibration std. | 70-130 | 98.1 | 101 | 101 |
| Laboratory Control std. | 70-130 | 101 | 101 | 99.3 |
| Method Blank | 70-130 | 102 | 102 | 100 |
| Equipment Blank | 70-130 | 102 | 100 | 99.5 |
| LST1S M.S. | 70-130 | 102 | 101 | 99.6 |
| LST1S M.S.D. | 70-130 | 99.6 | 101 | 96.5 |

Environment 1, Incorporated

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CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
BLANKS
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6043

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

| Sample Spiked: LST1S (6035) | Spike Amount Ug/l | Sample Result Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) | Spike Dup. Result Ug/l | Spike Dup. Recovery (70-130%) | MS/MSD RPD (50%) |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 20.0 | --- U | 17.67 | 88.4 | 16.86 | 84.3 | 4.7 |
| Benzene | 20.0 | --- U | 19.13 | 95.7 | 18.40 | 92.0 | 3.9 |
| Trichloroethene | 20.0 | --- U | 17.27 | 86.4 | 17.33 | 86.7 | 0.3 |
| Toluene | 20.0 | --- U | 18.70 | 93.5 | 18.54 | 92.7 | 0.9 |
| Chlorobenzene | 20.0 | --- U | 18.21 | 91.1 | 17.38 | 86.9 | 4.7 |

LABORATORY CONTROL SAMPLE RESULTS

| Sample Compound: | Spike Amount Ug/l | Spike Result Ug/l | Spike Recovery (70-130%) |
|---|---|---|---|
| 1,1-Dichloroethene | 20.00 | 18.76 | 93.8 |
| Benzene | 20.00 | 16.30 | 81.5 |
| Trichloroethene | 20.00 | 15.95 | 80.0 |
| Toluene | 20.00 | 15.48 | 77.4 |
| Chlorobenzene | 20.00 | 15.24 | 76.2 |

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

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CLIENT: CRSWMA TUSCARORA REGIONAL LF (2509)
BLANKS
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6043

ANALYST: MO
DATE COLLECTED: 04/08/15
DATE ANALYZED: 04/20/15
DATE REPORTED: 04/30/15

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1 (96)
METHOD BLANK RESULTS

| PARAMETERS, ug/l | MDL | SWSL | Concentration |
|---|---|---|---|
| 1. Chloromethane | 0.77 | 1.00 | --- U |
| 2. Vinyl Chloride | 0.63 | 1.00 | --- U |
| 3. Bromomethane | 0.67 | 10.00 | --- U |
| 4. Chloroethane | 0.48 | 10.00 | --- U |
| 5. Trichlorofluoromethane | 0.24 | 1.00 | --- U |
| 6. 1,1-Dichloroethene | 0.17 | 5.00 | --- U |
| 7. Acetone | 9.06 | 100.00 | --- U |
| 8. Iodomethane | 0.26 | 10.00 | --- U |
| 9. Carbon Disulfide | 0.23 | 100.00 | --- U |
| 10. Methylene Chloride | 0.64 | 1.00 | --- U |
| 11. trans-1,2-Dichloroethene | 0.23 | 5.00 | --- U |
| 12. 1,1-Dichloroethane | 0.20 | 5.00 | --- U |
| 13. Vinyl Acetate | 0.20 | 50.00 | --- U |
| 14. cis-1,2-Dichloroethene | 0.25 | 5.00 | --- U |
| 15. 2-Butanone | 2.21 | 100.00 | --- U |
| 16. Bromochloromethane | 0.27 | 3.00 | --- U |
| 17. Chloroform | 0.25 | 5.00 | --- U |
| 18. 1,1,1-Trichloroethane | 0.19 | 1.00 | --- U |
| 19. Carbon Tetrachloride | 0.22 | 1.00 | --- U |
| 20. Benzene | 0.24 | 1.00 | --- U |
| 21. 1,2-Dichloroethane | 0.27 | 1.00 | --- U |
| 22. Trichloroethene | 0.23 | 1.00 | --- U |
| 23. 1,2-Dichloropropane | 0.21 | 1.00 | --- U |
| 24. Bromodichloromethane | 0.21 | 1.00 | --- U |
| 25. cis-1,3-Dichloropropene | 0.24 | 1.00 | --- U |
| 26. 4-methyl-2-Pentanone | 1.19 | 100.00 | --- U |
| 27. Toluene | 0.23 | 1.00 | --- U |
| 28. trans-1,3-Dichloropropene | 0.28 | 1.00 | --- U |
| 29. 1,1,2-Trichloroethane | 0.25 | 1.00 | --- U |
| 30. Tetrachloroethene | 0.17 | 1.00 | --- U |
| 31. 2-Hexanone | 1.57 | 50.00 | --- U |
| 32. Dibromochloromethane | 0.24 | 3.00 | --- U |
| 33. 1,2-Dibromoethane | 0.26 | 1.00 | --- U |
| 34. Chlorobenzene | 0.30 | 3.00 | --- U |
| 35. 1,1,1,2-Tetrachloroethane | 0.22 | 5.00 | --- U |
| 36. Ethylbenzene | 0.21 | 1.00 | --- U |
| 37. Xylenes | 0.68 | 5.00 | --- U |
| 38. Dibromomethane | 0.28 | 10.00 | --- U |
| 39. Styrene | 0.19 | 1.00 | --- U |
| 40. Bromoform | 0.20 | 3.00 | --- U |
| 41. 1,1,2,2-Tetrachloroethane | 0.26 | 3.00 | --- U |
| 42. 1,2,3-Trichloropropane | 0.43 | 1.00 | --- U |
| 43. 1,4-Dichlorobenzene | 0.39 | 1.00 | --- U |
| 44. 1,2-Dichlorobenzene | 0.32 | 5.00 | --- U |
| 45. 1,2-Dibromo-3-Chloropropane | 0.34 | 13.00 | --- U |
| 46. Acrylonitrile | 2.72 | 200.00 | --- U |
| 47. trans-1,4-Dichloro-2-Butene | 0.42 | 100.00 | --- U |

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858
environment1inc.com
Phone (252) 756-6208 • Fax (252) 756-0633

# CHAIN OF CUSTODY RECORD



**CLIENT:** 6043 **Week:** 17

**CRSWMA TUSCARORA REGIONAL LF (2509)**
**BLANKS**
**MR. BOBBY DARDEN**
**P.O. BOX 128**
**COVE CITY NC 28523**

**(252) 633-1564**

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | CHLORINE NEUTRALIZED AT COLLECTION |
| | | | | | | | | | | | | | | | | | | | | | pH CHECK (LAB) |
| | | | | | | | | | | | | | | | | | | | | | CONTAINER TYPE, P/G |
| | | | | | | | | | | | | | | | | | | | | | CHEMICAL PRESERVATION |
| | | | | | | | | | | | | | | | | | | | | | PARAMETERS/TESTS |
| SAMPLE LOCATION | COLLECTION DATE | COLLECTION TIME | TOTAL CHLORINE, mg/l (DP, ug) AT COLLECTION | TEMPERATURE, °C AT COLLECTION | # OF CONTAINERS | Metals | EPA 8260B | 8260 Dup. 1 | | | | | | | | | | | | | |
| | | | | | | 12 | 12 | 12 | | | | | | | | | | | | | |
| | | | | | | P | G | G | | | | | | | | | | | | | |
| | | | | | | A | E | E | | | | | | | | | | | | | |
| **Equipment Blank** | 4-8-15 | 0745 | | | 3 | C | C | C | | | | | | | | | | | | | |

A - NONE D - NAOH
B - $HNO_3$ E - HCL
C - $H_2SO_4$ F - ZINC ACETATE/NAOH
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY (SEAL) MAINTAINED DURING SHIPMENT/DELIVERY
(Y) N

SAMPLES COLLECTED BY: (Please Print)
Bobby Fox / Tom Beasley

SAMPLES RECEIVED IN LAB AT 0°C

| RELINQUISHED BY (SIG.) (SAMPLER) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
|---|---|---|---|
| Bobby Fox | 4-8-15 2:25 | [signature] | 4/8/15 2:35 |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |
| RELINQUISHED BY (SIG.) | DATE/TIME | RECEIVED BY (SIG.) | DATE/TIME |

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 294571

# *Appendix B*

Statistical Analysis Worksheets and Summary of Statistical Results

JOYCE Project: CRSWMA Tuscarora Regional Landfill
Project No: 618.1501.12
Task No: 01
Date: **08-Apr-15**

Analyte: **Beryllium**

| Sample No. | Sample Date | Location | Concentration | Notes | Quantitation Limit | Sorted Concentration |
|---|---|---|---|---|---|---|
| 1 | 1-Jul-93 | IRL-1S | 3 | | 1 | |
| 2 | 1-Aug-93 | IRL-1S | 1 | | 1 | |
| 3 | 1-Sep-93 | IRL-1S | 1 | | 1 | |
| 4 | 1-Sep-93 | IRL-1S | 2 | | 1 | |
| 5 | 1-Apr-94 | IRL-1S | ND | | 1 | |
| 6 | 1-Oct-94 | IRL-1S | ND | | 2 | |
| 7 | 1-Apr-95 | IRL-1S | ND | | 2 | |
| 8 | 1-Oct-95 | IRL-1S | ND | | 2 | |
| 9 | 1-Apr-96 | IRL-1S | ND | | 2 | |
| 10 | 1-Oct-96 | IRL-1S | ND | | 2 | |
| 11 | 1-Apr-97 | IRL-1S | 3 | | 2 | |
| 12 | 1-Oct-97 | IRL-1S | 3 | | 2 | |
| 13 | 1-Apr-98 | IRL-1S | ND | | 2 | |
| 14 | 1-Oct-98 | IRL-1S | 2 | | 2 | |
| 15 | 1-Mar-99 | IRL-1S | ND | | 2 | |
| 16 | 1-Oct-99 | IRL-1S | ND | | 2 | |
| 17 | 1-Apr-00 | IRL-1S | ND | | 2 | |
| 18 | 1-Oct-00 | IRL-1S | ND | | 2 | |
| 19 | 1-Apr-14 | IRL-1S | ND | | 2 | |
| 20 | 1-Oct-14 | IRL-1S | ND | | 2 | |
| 21 | 2-Apr-14 | IRL-1S | ND | | 2 | |
| 22 | 2-Oct-14 | IRL-1S | ND | | 2 | |
| 23 | 3-Apr-14 | IRL-1S | ND | | 2 | |
| 24 | 3-Oct-14 | IRL-1S | ND | | 2 | |
| 25 | 15-Apr-04 | IRL-1S | ND | | 2 | |
| 26 | 14-Oct-04 | IRL-1S | ND | | 2 | |
| 27 | 5-Apr-05 | IRL-1S | ND | | 2 | |
| 28 | 5-Oct-05 | IRL-1S | ND | | 2 | |
| 29 | 21-Apr-06 | IRL-1S | ND | | 2 | |
| 30 | 12-Oct-06 | IRL-1S | ND | | 2 | |
| 31 | 26-Apr-07 | IRL-1S | ND | | 1 | |
| 32 | 10-Oct-07 | IRL-1S | 0.1 | J | 1 | |
| 33 | 2-Apr-08 | IRL-1S | 0.4 | J | 1 | |
| 34 | 28-Oct-08 | IRL-1S | 0.5 | J | 1 | |
| 35 | 8-Apr-09 | IRL-1S | 0.6 | J | 1 | |
| 36 | 27-Oct-09 | IRL-1S | 0.7 | J | 1 | |
| 37 | 8-Apr-10 | IRL-1S | 0.6 | J | 1 | |
| 38 | 13-Oct-10 | IRL-1S | 0.6 | J | 1 | |
| 39 | 27-Apr-11 | IRL-1S | 0.59 | J | 1 | |
| 40 | 20-Oct-11 | IRL-1S | 0.49 | J | 1 | |
| 41 | 26-Apr-12 | IRL-1S | 0.58 | J | 1 | |
| 42 | 16-Oct-12 | IRL-1S | 0.54 | J | 1 | |
| 43 | 11-Apr-13 | IRL-1S | 0.7 | J | 1 | |
| 44 | 30-Oct-13 | IRL-1S | 0.68 | J | 1 | |
| 45 | 9-Apr-14 | IRL-1S | 0.63 | J | 1 | |
| 46 | 22-Oct-14 | IRL-1S | 0.7 | J | 1 | |
| 47 | 8-Apr-15 | IRL-1S | 0.63 | J | 1 | |
| 48 | 1-Jul-93 | IRL-1D | 1 | | 1 | |
| 49 | 1-Aug-93 | IRL-1D | 1 | | 1 | |
| 50 | 1-Sep-93 | IRL-1D | ND | | 1 | |
| 51 | 1-Sep-93 | IRL-1D | 3 | | 1 | |

| Sample No. | Sample Date | Location | Concentration | Notes | Quantitation Limit | Sorted Concentration |
|---|---|---|---|---|---|---|
| 52 | 1-Apr-94 | IRL-1D | ND | | 1 | |
| 53 | 1-Oct-94 | IRL-1D | ND | | 2 | |
| 54 | 1-Apr-95 | IRL-1D | ND | | 2 | |
| 55 | 1-Oct-95 | IRL-1D | ND | | 2 | |
| 56 | 1-Apr-96 | IRL-1D | ND | | 2 | |
| 57 | 5-Oct-05 | IRL-1D | 6 | | 2 | |
| 58 | 21-Apr-06 | IRL-1D | ND | | 2 | |
| 59 | 12-Oct-06 | IRL-1D | ND | | 2 | |
| 60 | 26-Apr-07 | IRL-1D | ND | | 1 | |
| 61 | 10-Oct-07 | IRL-1D | ND | | 1 | |
| 62 | 2-Apr-08 | IRL-1D | 0.1 | J | 1 | |
| 63 | 28-Oct-08 | IRL-1D | 0.1 | J | 1 | |
| 64 | 8-Apr-09 | IRL-1D | 0.1 | J | 1 | |
| 65 | 27-Oct-09 | IRL-1D | 0.2 | J | 1 | |
| 66 | 13-Oct-10 | IRL-1D | 0.3 | J | 1 | |
| 67 | 27-Apr-11 | IRL-1D | 0.06 | J | 1 | |
| 68 | 20-Oct-11 | IRL-1D | 0.15 | J | 1 | |
| 69 | 26-Apr-12 | IRL-1D | 0.09 | J | 1 | |
| 70 | 16-Oct-12 | IRL-1D | 0.08 | J | 1 | |
| 71 | 11-Apr-13 | IRL-1D | 0.09 | J | 1 | |
| 72 | 9-Apr-14 | IRL-1D | 0.08 | J | 1 | |
| 73 | 22-Oct-14 | IRL-1D | 0.1 | J | 1 | |
| 74 | 8-Apr-15 | IRL-1D | 0.08 | J | 1 | |
| 75 | 1-Jul-93 | IRL-2S | ND | | 1 | |
| 76 | 1-Aug-93 | IRL-2S | ND | | 1 | |
| 77 | 1-Sep-93 | IRL-2S | ND | | 1 | |
| 78 | 1-Sep-93 | IRL-2S | ND | | 1 | |
| 79 | 1-Jul-93 | IRL-2D | ND | | 1 | |
| 80 | 1-Aug-93 | IRL-2D | 1 | | 1 | |
| 81 | 1-Sep-93 | IRL-2D | ND | | 1 | |
| 82 | 1-Sep-93 | IRL-2D | ND | | 1 | |
| 83 | 1-Jul-93 | IRL-3S | ND | | 1 | |
| 84 | 1-Aug-93 | IRL-3S | ND | | 1 | |
| 85 | 1-Sep-93 | IRL-3S | ND | | 1 | |
| 86 | 1-Sep-93 | IRL-3S | ND | | 1 | |
| 87 | 1-Jul-93 | IRL-3D | ND | | 1 | |
| 88 | 1-Aug-93 | IRL-3D | 1 | | 1 | |
| 89 | 1-Sep-93 | IRL-3D | ND | | 1 | |
| 90 | 1-Sep-93 | IRL-3D | 2 | | 1 | |
| 91 | 1-Jul-93 | IRL-4S | 2 | | 1 | |
| 92 | 1-Aug-93 | IRL-4S | ND | | 1 | |
| 93 | 1-Sep-93 | IRL-4S | ND | | 1 | |
| 94 | 1-Sep-93 | IRL-4S | ND | | 1 | |
| 95 | 1-Jul-93 | IRL-4D | ND | | 1 | |
| 96 | 1-Aug-93 | IRL-4D | 1 | | 1 | |
| 97 | 1-Sep-93 | IRL-4D | 3 | | 1 | |
| 98 | 1-Sep-93 | IRL-4D | ND | | 1 | |
| 99 | 1-Jul-93 | IRL-5S | ND | | 1 | |
| 100 | 1-Aug-93 | IRL-5S | ND | | 1 | |
| 101 | 1-Sep-93 | IRL-5S | ND | | 1 | |
| 102 | 1-Sep-93 | IRL-5S | ND | | 1 | |
| 103 | 1-Jul-93 | IRL-5D | 8 | | 1 | |
| 104 | 1-Aug-93 | IRL-5D | 1 | | 1 | |
| 105 | 1-Sep-93 | IRL-5D | ND | | 1 | |
| 106 | 1-Sep-93 | IRL-5D | 1 | | 1 | |
| 107 | 1-Jul-93 | IRL-6S | 4 | | 1 | |
| 108 | 1-Aug-93 | IRL-6S | ND | | 1 | |

| Sample No. | Sample Date | Location | Concentration | Notes | Quantitation Limit | Sorted Concentration |
|---|---|---|---|---|---|---|
| 109 | 1-Sep-93 | IRL-6S | ND | | 1 | |
| 110 | 1-Sep-93 | IRL-6S | ND | | 1 | |
| 111 | 1-Jul-93 | IRL-6D | ND | | 1 | |
| 112 | 1-Aug-93 | IRL-6D | ND | | 1 | |
| 113 | 1-Sep-93 | IRL-6D | ND | | 1 | |
| 114 | 1-Sep-93 | IRL-6D | ND | | 1 | |
| 115 | 2-Apr-02 | MW-12S | ND | | 2 | |
| 116 | 1-Oct-02 | MW-12S | ND | | 2 | |
| 117 | 1-Apr-03 | MW-12S | ND | | 2 | |
| 118 | 1-Oct-03 | MW-12S | ND | | 2 | |
| 119 | 15-Apr-04 | MW-12S | ND | | 2 | |
| 120 | 14-Oct-04 | MW-12S | ND | | 2 | |
| 121 | 5-Apr-05 | MW-12S | ND | | 2 | |
| 122 | 27-Oct-05 | MW-12S | ND | | 2 | |
| 123 | 21-Apr-06 | MW-12S | ND | | 2 | |
| 124 | 12-Oct-06 | MW-12S | ND | | 2 | |
| 125 | 26-Apr-07 | MW-12S | ND | | 1 | |
| 126 | 11-Oct-07 | MW-12S | 0.1 | J | 1 | |
| 127 | 3-Apr-08 | MW-12S | 0.3 | J | 1 | |
| 128 | 28-Oct-08 | MW-12S | 0.9 | J | 1 | |
| 129 | 8-Apr-09 | MW-12S | 0.6 | J | 1 | |
| 130 | 27-Oct-09 | MW-12S | 0.5 | J | 1 | |
| 131 | 8-Apr-10 | MW-12S | 0.6 | J | 1 | |
| 132 | 13-Oct-10 | MW-12S | 0.5 | J | 1 | |
| 133 | 27-Apr-11 | MW-12S | 0.36 | J | 1 | |
| 134 | 20-Oct-11 | MW-12S | 0.4 | J | 1 | |
| 135 | 26-Apr-12 | MW-12S | 0.27 | J | 1 | |
| 136 | 16-Oct-12 | MW-12S | 0.22 | J | 1 | |
| 137 | 11-Apr-13 | MW-12S | 0.25 | J | 1 | |
| 138 | 30-Oct-13 | MW-12S | 0.21 | J | 1 | |
| 139 | 9-Apr-14 | MW-12S | 0.29 | J | 1 | |
| 140 | 22-Oct-14 | MW-12S | 0.26 | J | 1 | |
| 141 | 8-Apr-15 | MW-12S | 0.26 | J | 1 | |
| 142 | 2-Apr-02 | MW-12D | ND | | 2 | |
| 143 | 1-Oct-02 | MW-12D | ND | | 2 | |
| 144 | 1-Apr-03 | MW-12D | ND | | 2 | |
| 145 | 1-Oct-03 | MW-12D | ND | | 2 | |
| 146 | 15-Apr-04 | MW-12D | ND | | 2 | |
| 147 | 14-Oct-04 | MW-12D | ND | | 2 | |
| 148 | 5-Apr-05 | MW-12D | ND | | 2 | |
| 149 | 27-Oct-05 | MW-12D | ND | | 2 | |
| 150 | 21-Apr-06 | MW-12D | ND | | 2 | |
| 151 | 12-Oct-06 | MW-12D | ND | | 2 | |
| 152 | 26-Apr-07 | MW-12D | ND | | 1 | |
| 153 | 11-Oct-07 | MW-12D | ND | | 1 | |
| 154 | 3-Apr-08 | MW-12D | ND | | 1 | |
| 155 | 28-Oct-08 | MW-12D | 0.1 | J | 1 | |
| 156 | 8-Apr-09 | MW-12D | 0.1 | J | 1 | |
| 157 | 27-Oct-09 | MW-12D | 0.1 | J | 1 | |
| 158 | 13-Oct-10 | MW-12D | 0.1 | J | 1 | |
| 159 | 27-Apr-11 | MW-12D | ND | | 1 | |
| 160 | 20-Oct-11 | MW-12D | 0.1 | J | 1 | |
| 161 | 26-Apr-12 | MW-12D | 0.06 | J | 1 | |
| 162 | 16-Oct-12 | MW-12D | ND | | 1 | |
| 163 | 11-Apr-13 | MW-12D | ND | | 1 | |
| 164 | 9-Apr-14 | MW-12D | 0.2 | J | 1 | |
| 165 | 22-Oct-14 | MW-12D | 0.08 | J | 1 | |

| Sample No. | Sample Date | Location | Concentration | Notes | Quantitation Limit | Sorted Concentration |
|---|---|---|---|---|---|---|
| 166 | 8-Apr-15 | MW-12D | 0.06 | J | 1 | |
| 167 | 1-Jul-93 | LST-5S | 3 | | 1 | |
| 168 | 1-Aug-93 | LST-5S | 2 | | 1 | |
| 169 | 1-Sep-93 | LST-5S | 1 | | 1 | |
| 170 | 1-Sep-93 | LST-5S | 2 | | 1 | |
| 171 | 1-Apr-94 | LST-5S | ND | | 1 | |
| 172 | 1-Oct-94 | LST-5S | ND | | 2 | |
| 173 | 1-Apr-95 | LST-5S | ND | | 2 | |
| 174 | 1-Oct-95 | LST-5S | ND | | 2 | |
| 175 | 1-Apr-96 | LST-5S | ND | | 2 | |
| 176 | 1-Oct-96 | LST-5S | ND | | 2 | |
| 177 | 1-Apr-97 | LST-5S | ND | | 2 | |
| 178 | 1-Oct-97 | LST-5S | 3 | | 2 | |
| 179 | 1-Apr-98 | LST-5S | ND | | 2 | |
| 180 | 1-Oct-98 | LST-5S | ND | | 2 | |
| 181 | 1-Mar-99 | LST-5S | ND | | 2 | |
| 182 | 1-Oct-99 | LST-5S | ND | | 2 | |
| 183 | 1-Apr-00 | LST-5S | ND | | 2 | |
| 184 | 1-Oct-00 | LST-5S | ND | | 2 | |
| 185 | 1-Apr-01 | LST-5S | ND | | 2 | |
| 186 | 1-Oct-01 | LST-5S | ND | | 2 | |
| 187 | 2-Apr-02 | LST-5S | ND | | 2 | |
| 188 | 3-Oct-02 | LST-5S | ND | | 2 | |
| 189 | 2-Apr-03 | LST-5S | ND | | 2 | |
| 190 | 1-Oct-03 | LST-5S | ND | | 2 | |
| 191 | 15-Apr-04 | LST-5S | ND | | 2 | |
| 192 | 14-Oct-04 | LST-5S | ND | | 2 | |
| 193 | 5-Apr-05 | LST-5S | ND | | 2 | |
| 194 | 27-Oct-05 | LST-5S | ND | | 2 | |
| 195 | 21-Apr-06 | LST-5S | ND | | 2 | |
| 196 | 12-Oct-06 | LST-5S | ND | | 2 | |
| 197 | 26-Apr-07 | LST-5S | ND | | 1 | |
| 198 | 10-Oct-07 | LST-5S | ND | | 1 | |
| 199 | 3-Apr-08 | LST-5S | ND | | 1 | |
| 200 | 28-Oct-08 | LST-5S | 0.1 | J | 1 | |
| 201 | 8-Apr-09 | LST-5S | 0.2 | J | 1 | |
| 202 | 27-Oct-09 | LST-5S | 0.2 | J | 1 | |
| 203 | 13-Oct-10 | LST-5S | 0.1 | J | 1 | |
| 204 | 27-Apr-11 | LST-5S | 0.15 | J | 1 | |
| 205 | 20-Oct-11 | LST-5S | 0.22 | J | 1 | |
| 206 | 26-Apr-12 | LST-5S | 0.17 | J | 1 | |
| 207 | 16-Oct-12 | LST-5S | ND | | 1 | |
| 208 | 11-Apr-13 | LST-5S | 0.16 | J | 1 | |
| 209 | 9-Apr-14 | LST-5S | 0.09 | J | 1 | |
| 210 | 22-Oct-14 | LST-5S | 0.08 | J | 1 | |
| 211 | 8-Apr-15 | LST-5S | 0.55 | J | 1 | |
| 212 | 1-Jul-93 | LST-1S | 4 | | 1 | |
| 213 | 1-Aug-93 | LST-1S | 2 | | 1 | |
| 214 | 1-Sep-93 | LST-1S | ND | | 1 | |
| 215 | 1-Sep-93 | LST-1S | 3 | | 1 | |
| 216 | 1-Jul-93 | LST-1D | ND | | 1 | |
| 217 | 1-Aug-93 | LST-1D | ND | | 1 | |
| 218 | 1-Sep-93 | LST-1D | ND | | 1 | |
| 219 | 1-Sep-93 | LST-1D | ND | | 1 | |
| 220 | 1-Jul-93 | LST-2S | 2 | | 1 | |
| 221 | 1-Aug-93 | LST-2S | 2 | | 1 | |
| 222 | 1-Sep-93 | LST-2S | 2 | | 1 | |

| Sample No. | Sample Date | Location | Concentration | Notes | Quantitation Limit | Sorted Concentration |
|---|---|---|---|---|---|---|
| 223 | 1-Sep-93 | LST-2S | ND | | 1 | |
| 224 | 1-Jul-93 | LST-2D | ND | | 1 | |
| 225 | 1-Aug-93 | LST-2D | ND | | 1 | |
| 226 | 1-Sep-93 | LST-2D | 25 | | 1 | |
| 227 | 1-Sep-93 | LST-2D | 1 | | 1 | |
| 228 | 1-Jul-93 | LST-3S | 2 | | 1 | |
| 229 | 1-Aug-93 | LST-3S | 4 | | 1 | |
| 230 | 1-Sep-93 | LST-3S | 2 | | 1 | |
| 231 | 1-Sep-93 | LST-3S | 2 | | 1 | |
| 232 | 1-Jul-93 | LST-3D | ND | | 1 | |
| 233 | 1-Aug-93 | LST-3D | ND | | 1 | |
| 234 | 1-Sep-93 | LST-3D | ND | | 1 | |
| 235 | 1-Sep-93 | LST-3D | 1 | | 1 | |
| 236 | 1-Jul-93 | LST-4S | 4 | | 1 | |
| 237 | 1-Aug-93 | LST-4S | 3 | | 1 | |
| 238 | 1-Sep-93 | LST-4S | 4 | | 1 | |
| 239 | 1-Sep-93 | LST-4S | 4 | | 1 | |
| 240 | 1-Jul-93 | LST-4D | 3 | | 1 | |
| 241 | 1-Aug-93 | LST-4D | ND | | 1 | |
| 242 | 1-Sep-93 | LST-4D | ND | | 1 | |
| 243 | 1-Sep-93 | LST-4D | ND | | 1 | |
| 244 | 1-Jul-93 | LST-5D | 3 | | 1 | |
| 245 | 1-Aug-93 | LST-5D | ND | | 1 | |
| 246 | 1-Sep-93 | LST-5D | ND | | 1 | |
| 247 | 1-Sep-93 | LST-5D | ND | | 1 | |
| 248 | 1-Jul-93 | LST-6S | ND | | 1 | |
| 249 | 1-Aug-93 | LST-6S | ND | | 1 | |
| 250 | 1-Sep-93 | LST-6S | ND | | 1 | |
| 251 | 1-Sep-93 | LST-6S | ND | | 1 | |
| 252 | 1-Jul-93 | LST-6D | 4 | | 1 | |
| 253 | 1-Aug-93 | LST-6D | 2 | | 1 | |
| 254 | 1-Sep-93 | LST-6D | ND | | 1 | |
| 255 | 1-Sep-93 | LST-6D | ND | | 1 | |
| 256 | 1-Jul-99 | MW-7 | 5 | | 2 | |
| 257 | 1-Aug-99 | MW-7 | ND | | 2 | |
| 258 | 1-Oct-99 | MW-7 | ND | | 2 | |
| 259 | 1-Nov-99 | MW-7 | ND | | 2 | |
| 260 | 1-Jul-99 | MW-8 | ND | | 2 | |
| 261 | 1-Aug-99 | MW-8 | ND | | 2 | |
| 262 | 1-Oct-99 | MW-8 | ND | | 2 | |
| 263 | 1-Nov-99 | MW-8 | ND | | 2 | |
| 264 | 1-Jul-99 | MW-9 | ND | | 2 | |
| 265 | 1-Aug-99 | MW-9 | ND | | 2 | |
| 266 | 1-Oct-99 | MW-9 | ND | | 2 | |
| 267 | 1-Nov-99 | MW-9 | ND | | 2 | |
| 268 | 1-Jul-99 | MW-10 | ND | | 2 | |
| 269 | 1-Aug-99 | MW-10 | ND | | 2 | |
| 270 | 1-Oct-99 | MW-10 | ND | | 2 | |
| 271 | 1-Nov-99 | MW-10 | ND | | 2 | |
| 272 | 1-Jul-99 | MW-11S | ND | | 2 | |
| 273 | 1-Aug-99 | MW-11S | ND | | 2 | |
| 274 | 1-Oct-99 | MW-11S | ND | | 2 | |
| 275 | 1-Nov-99 | MW-11S | ND | | 2 | |
| 276 | 1-Jul-99 | MW-11D | ND | | 2 | |
| 277 | 1-Aug-99 | MW-11D | ND | | 2 | |
| 278 | 1-Oct-99 | MW-11D | ND | | 2 | |
| 279 | 1-Nov-99 | MW-11D | ND | | 2 | |

| Sample No. | Sample Date | Location | Concentration | Notes | Quantitation Limit | Sorted Concentration |
|---|---|---|---|---|---|---|
| 280 | 25-Aug-11 | MW-16S | 0.12 | | 2 | |
| 281 | 27-Sep-11 | MW-16S | 0.18 | | 1 | |
| 282 | 26-Oct-11 | MW-16S | 0.2 | | 1 | |
| 283 | 29-Nov-11 | MW-16S | 0.22 | | 1 | |
| 284 | 25-Aug-11 | MW-16D | ND | | 2 | |
| 285 | 27-Sep-11 | MW-16D | ND | | 1 | |
| 286 | 26-Oct-11 | MW-16D | ND | | 1 | |
| 287 | 29-Nov-11 | MW-16D | ND | | 1 | |
| 288 | 25-Aug-11 | MW-17S | ND | | 2 | |
| 289 | 27-Sep-11 | MW-17S | ND | | 1 | |
| 290 | 26-Oct-11 | MW-17S | ND | | 1 | |
| 291 | 29-Nov-11 | MW-17S | 0.22 | | 1 | |
| 292 | 25-Aug-11 | MW-17D | ND | | 2 | |
| 293 | 27-Sep-11 | MW-17D | ND | | 1 | |
| 294 | 26-Oct-11 | MW-17D | ND | | 1 | |
| 295 | 29-Nov-11 | MW-17D | ND | | 1 | |
| 296 | 25-Aug-11 | MW-18S | 0.24 | | 2 | |
| 297 | 27-Sep-11 | MW-18S | 0.2 | | 1 | |
| 298 | 26-Oct-11 | MW-18S | 2.04 | | 1 | |
| 299 | 29-Nov-11 | MW-18S | 0.3 | | 1 | |
| 300 | 25-Aug-11 | MW-18D | ND | | 2 | |
| 301 | 27-Sep-11 | MW-18D | ND | | 1 | |
| 302 | 26-Oct-11 | MW-18D | ND | | 1 | |
| 303 | 29-Nov-11 | MW-18D | ND | | 1 | |
| 304 | 25-Aug-11 | MW-19S | ND | | 2 | |
| 305 | 27-Sep-11 | MW-19S | ND | | 1 | |
| 306 | 26-Oct-11 | MW-19S | ND | | 1 | |
| 307 | 29-Nov-11 | MW-19S | ND | | 1 | |
| 308 | 25-Aug-11 | MW-19D | 0.14 | | 2 | |
| 309 | 27-Sep-11 | MW-19D | ND | | 1 | |
| 310 | 26-Oct-11 | MW-19D | ND | | 1 | |
| 311 | 29-Nov-11 | MW-19D | ND | | 1 | |
| 312 | 25-Aug-11 | MW-15S | 0.12 | | 2 | |
| 313 | 27-Sep-11 | MW-15S | ND | | 1 | |
| 314 | 26-Oct-11 | MW-15S | 0.12 | | 1 | |
| 315 | 29-Nov-11 | MW-15S | 0.2 | | 1 | |
| 316 | 25-Aug-11 | MW-15D | ND | | 2 | |
| 317 | 27-Sep-11 | MW-15D | ND | | 1 | |
| 318 | 26-Oct-11 | MW-15D | ND | | 1 | |
| 319 | 29-Nov-11 | MW-15D | ND | | 1 | |

| | |
|---|---|
| Number of Data: | 319 |
| Number of Truncated Data: | 193 |
| Percentage of Truncated Data: | 61% |

**Non Parametric Prediction Limit (NPPL): 25**

- All concentrations in micrograms per liter (µg/L).
- B = Blank qualified data not used in statistical calculations.
- Background data included from MW-8, MW-10S, and P-19S.
- Background well MW-6.

JOYCE Project: CRSWMA Tuscarora Regional Landfill
Project No: 618.1501.12.
Task No: 01
Date: **08-Apr-15**

Analyte: **Cobalt**

| Sample No. | Sample Date | Location | Concentration | Notes | Quantitation Limit | Sorted Concentration | |
|---|---|---|---|---|---|---|---|
| 1 | 1-Jul-93 | IRL-1S | 32 | | 1 | 0.1 | 258 |
| 2 | 1-Aug-93 | IRL-1S | 26 | | 1 | 0.1 | 205 |
| 3 | 1-Sep-93 | IRL-1S | 22 | | 1 | 0.14 | 188 |
| 4 | 1-Sep-93 | IRL-1S | ND | | 1 | 0.18 | 186 |
| 5 | 1-Oct-94 | IRL-1S | ND | | 1 | 0.19 | 118 |
| 6 | 1-Apr-95 | IRL-1S | ND | | 1 | 0.19 | 117 |
| 7 | 1-Oct-95 | IRL-1S | ND | | 1 | 0.2 | 93 |
| 8 | 1-Apr-96 | IRL-1S | ND | | 1 | 0.2 | 83 |
| 9 | 1-Oct-96 | IRL-1S | ND | | 1 | 0.2 | 71 |
| 10 | 1-Apr-97 | IRL-1S | ND | | 1 | 0.2 | 62 |
| 11 | 1-Oct-97 | IRL-1S | 20 | | 1 | 0.2 | 61 |
| 12 | 1-Apr-98 | IRL-1S | ND | | 1 | 0.21 | 53 |
| 13 | 1-Oct-98 | IRL-1S | ND | | 1 | 0.21 | 52 |
| 14 | 1-Mar-99 | IRL-1S | ND | | 1 | 0.21 | 50 |
| 15 | 1-Oct-99 | IRL-1S | ND | | 1 | 0.23 | 45 |
| 16 | 1-Apr-00 | IRL-1S | 16 | | 1 | 0.23 | 42 |
| 17 | 1-Oct-00 | IRL-1S | ND | | 1 | 0.24 | 41 |
| 18 | 1-Apr-14 | IRL-1S | ND | | 1 | 0.27 | 40 |
| 19 | 1-Oct-14 | IRL-1S | ND | | 1 | 0.3 | 38 |
| 20 | 2-Apr-14 | IRL-1S | ND | | 1 | 0.31 | 37 |
| 21 | 2-Oct-14 | IRL-1S | ND | | 1 | 0.33 | 36.0 |
| 22 | 3-Apr-14 | IRL-1S | ND | | 1 | 0.37 | 36 |
| 23 | 3-Oct-14 | IRL-1S | ND | | 1 | 0.39 | 35.4 |
| 24 | 15-Apr-04 | IRL-1S | ND | | 1 | 0.4 | 33 |
| 25 | 14-Oct-04 | IRL-1S | ND | | 1 | 0.4 | 32 |
| 26 | 5-Apr-05 | IRL-1S | ND | | 1 | 0.4 | 32 |
| 27 | 5-Oct-05 | IRL-1S | ND | | 1 | 0.4 | 32 |
| 28 | 21-Apr-06 | IRL-1S | ND | | 1 | 0.40 | 31 |
| 29 | 12-Oct-06 | IRL-1S | ND | | 1 | 0.41 | 31 |
| 30 | 26-Apr-07 | IRL-1S | ND | | 1 | 0.41 | 30 |
| 31 | 10-Oct-07 | IRL-1S | 0.6 | J | 1 | 0.43 | 29 |
| 32 | 2-Apr-08 | IRL-1S | 0.9 | J | 1 | 0.45 | 29 |
| 33 | 28-Oct-08 | IRL-1S | 1.1 | J | 1 | 0.45 | 28 |
| 34 | 8-Apr-09 | IRL-1S | 1.3 | J | 1 | 0.46 | 28 |
| 35 | 27-Oct-09 | IRL-1S | 1.2 | J | 1 | 0.46 | 27 |
| 36 | 8-Apr-10 | IRL-1S | 1.3 | J | 1 | 0.5 | 27 |
| 37 | 13-Oct-10 | IRL-1S | 1 | J | 1 | 0.5 | 27 |
| 38 | 27-Apr-11 | IRL-1S | 1.3 | J | 1 | 0.5 | 26 |
| 39 | 20-Oct-11 | IRL-1S | 0.86 | J | 1 | 0.5 | 26.0 |
| 40 | 26-Apr-12 | IRL-1S | 1 | J | 1 | 0.57 | 25 |
| 41 | 16-Oct-12 | IRL-1S | 0.93 | J | 1 | 0.6 | 25 |
| 42 | 11-Apr-13 | IRL-1S | 1.3 | J | 1 | 0.68 | 25 |
| 43 | 30-Oct-13 | IRL-1S | 1.1 | J | 1 | 0.69 | 24 |
| 44 | 9-Apr-14 | IRL-1S | 1.3 | J | 1 | 0.7 | 24 |
| 45 | 22-Oct-14 | IRL-1S | 1.3 | J | 1 | 0.71 | 24 |
| 46 | 1-Jul-93 | IRL-1D | 41 | | 1 | 0.8 | 23 |
| 47 | 1-Aug-93 | IRL-1D | 27 | | 1 | 0.82 | 23 |
| 48 | 1-Sep-93 | IRL-1D | 21.0 | | 1 | 0.86 | 23 |
| 49 | 1-Sep-93 | IRL-1D | ND | | 1 | 0.87 | 22 |
| 50 | 1-Oct-94 | IRL-1D | ND | | 1 | 0.9 | 22 |
| 51 | 1-Apr-95 | IRL-1D | ND | | 1 | 0.9 | 22 |

| Sample No. | Sample Date | Location | Concentration | Notes | Quantitation Limit | Sorted Concentration | |
|---|---|---|---|---|---|---|---|
| 52 | 1-Oct-95 | IRL-1D | ND | | 1 | 0.93 | 21.0 |
| 53 | 1-Apr-96 | IRL-1D | ND | | 1 | 1 | 21 |
| 54 | 5-Oct-05 | IRL-1D | ND | | 1 | 1 | 21 |
| 55 | 21-Apr-06 | IRL-1D | ND | | 1 | 1 | 21 |
| 56 | 12-Oct-06 | IRL-1D | ND | | 1 | 1 | 21 |
| 57 | 26-Apr-07 | IRL-1D | ND | | 1 | 1.1 | 20 |
| 58 | 10-Oct-07 | IRL-1D | ND | | 1 | 1.1 | 20 |
| 59 | 2-Apr-08 | IRL-1D | 0.1 | J | 1 | 1.1 | 16 |
| 60 | 28-Oct-08 | IRL-1D | 0.5 | J | 1 | 1.1 | 13 |
| 61 | 8-Apr-09 | IRL-1D | 0.8 | J | 1 | 1.2 | 12.1 |
| 62 | 27-Oct-09 | IRL-1D | 0.5 | J | 1 | 1.3 | 4.72 |
| 63 | 8-Apr-10 | IRL-1D | 0.9 | J | 1 | 1.3 | 4.6 |
| 64 | 13-Oct-10 | IRL-1D | 0.7 | J | 1 | 1.3 | 2.8 |
| 65 | 27-Apr-11 | IRL-1D | 0.24 | J | 1 | 1.3 | 2.3 |
| 66 | 20-Oct-11 | IRL-1D | 0.46 | J | 1 | 1.3 | 2 |
| 67 | 26-Apr-12 | IRL-1D | 0.41 | J | 1 | 1.3 | 1.8 |
| 68 | 16-Oct-12 | IRL-1D | 0.46 | J | 1 | 1.3 | 1.6 |
| 69 | 11-Apr-13 | IRL-1D | 0.33 | J | 1 | 1.3 | 1.5 |
| 70 | 30-Oct-13 | IRL-1D | 0.37 | J | 1 | 1.4 | 1.4 |
| 71 | 9-Apr-14 | IRL-1D | 0.4 | J | 1 | 1.4 | 1.4 |
| 72 | 22-Oct-14 | IRL-1D | 1.4 | J | 1 | 1.4 | 1.4 |
| 73 | 1-Jul-93 | IRL-2S | 27 | | 1 | 1.5 | 1.3 |
| 74 | 1-Aug-93 | IRL-2S | 23 | | 1 | 1.6 | 1.3 |
| 75 | 1-Sep-93 | IRL-2S | ND | | 1 | 1.8 | 1.3 |
| 76 | 1-Sep-93 | IRL-2S | ND | | 1 | 2 | 1.3 |
| 77 | 1-Jul-93 | IRL-2D | 20 | | 1 | 2.3 | 1.3 |
| 78 | 1-Aug-93 | IRL-2D | 40 | | 1 | 2.8 | 1.3 |
| 79 | 1-Sep-93 | IRL-2D | 21 | | 1 | 4.6 | 1.3 |
| 80 | 1-Sep-93 | IRL-2D | 22 | | 1 | 4.72 | 1.3 |
| 81 | 1-Jul-93 | IRL-3S | 21 | | 1 | 12.1 | 1.2 |
| 82 | 1-Aug-93 | IRL-3S | 37 | | 1 | 13 | 1.1 |
| 83 | 1-Sep-93 | IRL-3S | 23 | | 1 | 16 | 1.1 |
| 84 | 1-Sep-93 | IRL-3S | ND | | 1 | 20 | 1.1 |
| 85 | 1-Jul-93 | IRL-3D | 31 | | 1 | 20 | 1.1 |
| 86 | 1-Aug-93 | IRL-3D | 32 | | 1 | 21.0 | 1 |
| 87 | 1-Sep-93 | IRL-3D | 25 | | 1 | 21 | 1 |
| 88 | 1-Sep-93 | IRL-3D | ND | | 1 | 21 | 1 |
| 89 | 1-Jul-93 | IRL-4S | ND | | 1 | 21 | 1 |
| 90 | 1-Aug-93 | IRL-4S | 27 | | 1 | 21 | 0.93 |
| 91 | 1-Sep-93 | IRL-4S | ND | | 1 | 22 | 0.9 |
| 92 | 1-Sep-93 | IRL-4S | 31 | | 1 | 22 | 0.9 |
| 93 | 1-Jul-93 | IRL-4D | 93 | | 1 | 22 | 0.87 |
| 94 | 1-Aug-93 | IRL-4D | 33 | | 1 | 23 | 0.86 |
| 95 | 1-Sep-93 | IRL-4D | 38 | | 1 | 23 | 0.82 |
| 96 | 1-Sep-93 | IRL-4D | 53 | | 1 | 23 | 0.8 |
| 97 | 1-Jul-93 | IRL-5S | 29 | | 1 | 24 | 0.71 |
| 98 | 1-Aug-93 | IRL-5S | 50 | | 1 | 24 | 0.7 |
| 99 | 1-Sep-93 | IRL-5S | 36.0 | | 1 | 24 | 0.69 |
| 100 | 1-Sep-93 | IRL-5S | 26.0 | | 1 | 25 | 0.68 |
| 101 | 1-Jul-93 | IRL-5D | 118 | | 1 | 25 | 0.6 |
| 102 | 1-Aug-93 | IRL-5D | 30 | | 1 | 25 | 0.57 |
| 103 | 1-Sep-93 | IRL-5D | 32 | | 1 | 26 | 0.5 |
| 104 | 1-Sep-93 | IRL-5D | 21 | | 1 | 26.0 | 0.5 |
| 105 | 1-Jul-93 | IRL-6S | 45 | | 1 | 27 | 0.5 |
| 106 | 1-Aug-93 | IRL-6S | 22 | | 1 | 27 | 0.5 |
| 107 | 1-Sep-93 | IRL-6S | ND | | 1 | 27 | 0.46 |
| 108 | 1-Sep-93 | IRL-6S | ND | | 1 | 28 | 0.46 |

| Sample No. | Sample Date | Location | Concentration | Notes | Quantitation Limit | Sorted Concentration | |
|---|---|---|---|---|---|---|---|
| 109 | 1-Jul-93 | IRL-6D | 23 | | 1 | 28 | 0.45 |
| 110 | 1-Aug-93 | IRL-6D | 25 | | 1 | 29 | 0.45 |
| 111 | 1-Sep-93 | IRL-6D | ND | | 1 | 29 | 0.43 |
| 112 | 1-Sep-93 | IRL-6D | ND | | 1 | 30 | 0.41 |
| 113 | 2-Apr-02 | MW-12S | ND | | 1 | 31 | 0.41 |
| 114 | 1-Oct-02 | MW-12S | ND | | 1 | 31 | 0.4 |
| 115 | 1-Apr-03 | MW-12S | ND | | 1 | 32 | 0.4 |
| 116 | 1-Oct-03 | MW-12S | ND | | 1 | 32 | 0.4 |
| 117 | 15-Apr-04 | MW-12S | ND | | 1 | 32 | 0.4 |
| 118 | 14-Oct-04 | MW-12S | ND | | 1 | 33 | 0.40 |
| 119 | 5-Apr-05 | MW-12S | ND | | 1 | 35.4 | 0.39 |
| 120 | 27-Oct-05 | MW-12S | ND | | 1 | 36.0 | 0.37 |
| 121 | 21-Apr-06 | MW-12S | ND | | 1 | 36 | 0.33 |
| 122 | 12-Oct-06 | MW-12S | ND | | 1 | 37 | 0.31 |
| 123 | 26-Apr-07 | MW-12S | ND | | 1 | 38 | 0.3 |
| 124 | 11-Oct-07 | MW-12S | 1.4 | J | 1 | 40 | 0.27 |
| 125 | 3-Apr-08 | MW-12S | 4.6 | J | 1 | 41 | 0.24 |
| 126 | 28-Oct-08 | MW-12S | 2.8 | J | 1 | 42 | 0.23 |
| 127 | 8-Apr-09 | MW-12S | 2.3 | J | 1 | 45 | 0.23 |
| 128 | 27-Oct-09 | MW-12S | 1.6 | J | 1 | 50 | 0.21 |
| 129 | 8-Apr-10 | MW-12S | 1.8 | J | 1 | 52 | 0.21 |
| 130 | 13-Oct-10 | MW-12S | 1.5 | J | 1 | 53 | 0.21 |
| 131 | 27-Apr-11 | MW-12S | 1.3 | J | 1 | 61 | 0.2 |
| 132 | 20-Oct-11 | MW-12S | 1.1 | J | 1 | 62 | 0.2 |
| 133 | 26-Apr-12 | MW-12S | 1 | J | 1 | 71 | 0.2 |
| 134 | 16-Oct-12 | MW-12S | 1.1 | J | 1 | 83 | 0.2 |
| 135 | 11-Apr-13 | MW-12S | 0.68 | J | 1 | 93 | 0.2 |
| 136 | 30-Oct-13 | MW-12S | 0.87 | J | 1 | 117 | 0.19 |
| 137 | 9-Apr-14 | MW-12S | 0.71 | J | 1 | 118 | 0.19 |
| 138 | 22-Oct-14 | MW-12S | 0.82 | J | 1 | 186 | 0.18 |
| 139 | 2-Apr-02 | MW-12D | ND | | 1 | 188 | 0.14 |
| 140 | 1-Oct-02 | MW-12D | ND | | 1 | 205 | 0.1 |
| 141 | 1-Apr-03 | MW-12D | ND | | 1 | 258 | 0.1 |
| 142 | 1-Oct-03 | MW-12D | ND | | 1 | | |
| 143 | 15-Apr-04 | MW-12D | ND | | 1 | | |
| 144 | 14-Oct-04 | MW-12D | ND | | 1 | | |
| 145 | 5-Apr-05 | MW-12D | ND | | 1 | | |
| 146 | 27-Oct-05 | MW-12D | ND | | 1 | | |
| 147 | 21-Apr-06 | MW-12D | ND | | 1 | | |
| 148 | 12-Oct-06 | MW-12D | ND | | 1 | | |
| 149 | 26-Apr-07 | MW-12D | ND | | 1 | | |
| 150 | 11-Oct-07 | MW-12D | ND | | 1 | | |
| 151 | 3-Apr-08 | MW-12D | 0.1 | J | 1 | | |
| 152 | 28-Oct-08 | MW-12D | 0.2 | J | 1 | | |
| 153 | 8-Apr-09 | MW-12D | 0.2 | J | 1 | | |
| 154 | 27-Oct-09 | MW-12D | 0.2 | J | 1 | | |
| 155 | 8-Apr-10 | MW-12D | 0.2 | J | 1 | | |
| 156 | 13-Oct-10 | MW-12D | 0.2 | J | 1 | | |
| 157 | 27-Apr-11 | MW-12D | 0.14 | J | 1 | | |
| 158 | 20-Oct-11 | MW-12D | 0.19 | J | 1 | | |
| 159 | 26-Apr-12 | MW-12D | 0.21 | J | 1 | | |
| 160 | 16-Oct-12 | MW-12D | 0.19 | J | 1 | | |
| 161 | 11-Apr-13 | MW-12D | 0.18 | J | 1 | | |
| 162 | 30-Oct-13 | MW-12D | 0.31 | J | 1 | | |
| 163 | 9-Apr-14 | MW-12D | 0.45 | J | 1 | | |
| 164 | 22-Oct-14 | MW-12D | 0.23 | J | 1 | | |
| 165 | 1-Jul-93 | LST-5S | 29 | | 1 | | |

| Sample No. | Sample Date | Location | Concentration | Notes | Quantitation Limit | Sorted Concentration |
|---|---|---|---|---|---|---|
| 166 | 1-Aug-93 | LST-5S | ND | | 1 | |
| 167 | 1-Sep-93 | LST-5S | ND | | 1 | |
| 168 | 1-Sep-93 | LST-5S | ND | | 1 | |
| 169 | 1-Oct-94 | LST-5S | ND | | 1 | |
| 170 | 1-Apr-95 | LST-5S | ND | | 1 | |
| 171 | 1-Oct-95 | LST-5S | ND | | 1 | |
| 172 | 1-Apr-96 | LST-5S | ND | | 1 | |
| 173 | 1-Oct-96 | LST-5S | ND | | 1 | |
| 174 | 1-Apr-97 | LST-5S | ND | | 1 | |
| 175 | 1-Oct-97 | LST-5S | ND | | 1 | |
| 176 | 1-Apr-98 | LST-5S | ND | | 1 | |
| 177 | 1-Oct-98 | LST-5S | ND | | 1 | |
| 178 | 1-Mar-99 | LST-5S | ND | | 1 | |
| 179 | 1-Oct-99 | LST-5S | ND | | 1 | |
| 180 | 1-Apr-00 | LST-5S | ND | | 1 | |
| 181 | 1-Oct-00 | LST-5S | ND | | 1 | |
| 182 | 1-Apr-01 | LST-5S | ND | | 1 | |
| 183 | 1-Oct-01 | LST-5S | ND | | 1 | |
| 184 | 2-Apr-02 | LST-5S | ND | | 1 | |
| 185 | 3-Oct-02 | LST-5S | ND | | 1 | |
| 186 | 2-Apr-03 | LST-5S | ND | | 1 | |
| 187 | 1-Oct-03 | LST-5S | ND | | 1 | |
| 188 | 15-Apr-04 | LST-5S | ND | | 1 | |
| 189 | 14-Oct-04 | LST-5S | ND | | 1 | |
| 190 | 5-Apr-05 | LST-5S | ND | | 1 | |
| 191 | 27-Oct-05 | LST-5S | ND | | 1 | |
| 192 | 21-Apr-06 | LST-5S | ND | | 1 | |
| 193 | 12-Oct-06 | LST-5S | ND | | 1 | |
| 194 | 26-Apr-07 | LST-5S | ND | | 1 | |
| 195 | 11-Oct-07 | LST-5S | 0.5 | J | 1 | |
| 196 | 3-Apr-08 | LST-5S | 0.5 | J | 1 | |
| 197 | 28-Oct-08 | LST-5S | 0.3 | J | 1 | |
| 198 | 8-Apr-09 | LST-5S | 0.4 | J | 1 | |
| 199 | 27-Oct-09 | LST-5S | 0.4 | J | 1 | |
| 200 | 8-Apr-10 | LST-5S | 0.4 | J | 1 | |
| 201 | 13-Oct-10 | LST-5S | 1 | J | 1 | |
| 202 | 27-Apr-11 | LST-5S | 0.45 | J | 1 | |
| 203 | 20-Oct-11 | LST-5S | 0.39 | J | 1 | |
| 204 | 26-Apr-12 | LST-5S | 0.40 | J | 1 | |
| 205 | 16-Oct-12 | LST-5S | 0.23 | J | 1 | |
| 206 | 11-Apr-13 | LST-5S | 0.43 | J | 1 | |
| 207 | 30-Oct-13 | LST-5S | 0.27 | J | 1 | |
| 208 | 9-Apr-14 | LST-5S | 0.41 | J | 1 | |
| 209 | 22-Oct-14 | LST-5S | 0.21 | J | 1 | |
| 210 | 1-Jul-93 | LST-1S | 36 | | 1 | |
| 211 | 1-Aug-93 | LST-1S | ND | | 1 | |
| 212 | 1-Sep-93 | LST-1S | ND | | 1 | |
| 213 | 1-Sep-93 | LST-1S | ND | | 1 | |
| 214 | 1-Jul-93 | LST-1D | 28 | | 1 | |
| 215 | 1-Aug-93 | LST-1D | ND | | 1 | |
| 216 | 1-Sep-93 | LST-1D | ND | | 1 | |
| 217 | 1-Sep-93 | LST-1D | ND | | 1 | |
| 218 | 1-Jul-93 | LST-2S | 2 | | 1 | |
| 219 | 1-Aug-93 | LST-2S | ND | | 1 | |
| 220 | 1-Sep-93 | LST-2S | ND | | 1 | |
| 221 | 1-Sep-93 | LST-2S | ND | | 1 | |
| 222 | 1-Jul-93 | LST-2D | 25 | | 1 | |

| Sample No. | Sample Date | Location | Concentration | Notes | Quantitation Limit | Sorted Concentration |
|---|---|---|---|---|---|---|
| 223 | 1-Aug-93 | LST-2D | ND | | 1 | |
| 224 | 1-Sep-93 | LST-2D | 186 | | 1 | |
| 225 | 1-Sep-93 | LST-2D | ND | | 1 | |
| 226 | 1-Jul-93 | LST-3S | 71 | | 1 | |
| 227 | 1-Aug-93 | LST-3S | 62 | | 1 | |
| 228 | 1-Sep-93 | LST-3S | 83 | | 1 | |
| 229 | 1-Sep-93 | LST-3S | 61 | | 1 | |
| 230 | 1-Jul-93 | LST-3D | 24 | | 1 | |
| 231 | 1-Aug-93 | LST-3D | ND | | 1 | |
| 232 | 1-Sep-93 | LST-3D | ND | | 1 | |
| 233 | 1-Sep-93 | LST-3D | ND | | 1 | |
| 234 | 1-Jul-93 | LST-4S | 258 | | 1 | |
| 235 | 1-Aug-93 | LST-4S | 117 | | 1 | |
| 236 | 1-Sep-93 | LST-4S | 205 | | 1 | |
| 237 | 1-Sep-93 | LST-4S | 188 | | 1 | |
| 238 | 1-Jul-93 | LST-4D | 28 | | 1 | |
| 239 | 1-Aug-93 | LST-4D | ND | | 1 | |
| 240 | 1-Sep-93 | LST-4D | ND | | 1 | |
| 241 | 1-Sep-93 | LST-4D | ND | | 1 | |
| 242 | 1-Jul-93 | LST-5D | 21 | | 1 | |
| 243 | 1-Aug-93 | LST-5D | ND | | 1 | |
| 244 | 1-Sep-93 | LST-5D | ND | | 1 | |
| 245 | 1-Sep-93 | LST-5D | ND | | 1 | |
| 246 | 1-Jul-93 | LST-6S | ND | | 1 | |
| 247 | 1-Aug-93 | LST-6S | 24 | | 1 | |
| 248 | 1-Sep-93 | LST-6S | ND | | 1 | |
| 249 | 1-Sep-93 | LST-6S | ND | | 1 | |
| 250 | 1-Jul-93 | LST-6D | 52 | | 1 | |
| 251 | 1-Aug-93 | LST-6D | 42 | | 1 | |
| 252 | 1-Sep-93 | LST-6D | ND | | 1 | |
| 253 | 1-Sep-93 | LST-6D | ND | | 1 | |
| 254 | 1-Jul-99 | MW-7 | 13 | | 1 | |
| 255 | 1-Aug-99 | MW-7 | ND | | 1 | |
| 256 | 1-Oct-99 | MW-7 | ND | | 1 | |
| 257 | 1-Nov-99 | MW-7 | ND | | 1 | |
| 258 | 1-Jul-99 | MW-8 | 24 | | 1 | |
| 259 | 1-Aug-99 | MW-8 | ND | | 1 | |
| 260 | 1-Oct-99 | MW-8 | ND | | 1 | |
| 261 | 1-Nov-99 | MW-8 | ND | | 1 | |
| 262 | 1-Jul-99 | MW-9 | ND | | 1 | |
| 263 | 1-Aug-99 | MW-9 | ND | | 1 | |
| 264 | 1-Oct-99 | MW-9 | ND | | 1 | |
| 265 | 1-Nov-99 | MW-9 | ND | | 1 | |
| 266 | 1-Jul-99 | MW-10 | ND | | 1 | |
| 267 | 1-Aug-99 | MW-10 | ND | | 1 | |
| 268 | 1-Oct-99 | MW-10 | ND | | 1 | |
| 269 | 1-Nov-99 | MW-10 | ND | | 1 | |
| 270 | 1-Jul-99 | MW-11S | ND | | 1 | |
| 271 | 1-Aug-99 | MW-11S | ND | | 1 | |
| 272 | 1-Oct-99 | MW-11S | ND | | 1 | |
| 273 | 1-Nov-99 | MW-11S | ND | | 1 | |
| 274 | 1-Jul-99 | MW-11D | ND | | 1 | |
| 275 | 1-Aug-99 | MW-11D | ND | | 1 | |
| 276 | 1-Oct-99 | MW-11D | ND | | 1 | |
| 277 | 1-Nov-99 | MW-11D | ND | | 1 | |
| 278 | 25-Aug-11 | MW-16S | ND | | 1 | |
| 279 | 27-Sep-11 | MW-16S | ND | | 1 | |

| Sample No. | Sample Date | Location | Concentration | Notes | Quantitation Limit | Sorted Concentration |
|---|---|---|---|---|---|---|
| 280 | 26-Oct-11 | MW-16S | ND | | 1 | |
| 281 | 29-Nov-11 | MW-16S | ND | | 1 | |
| 282 | 25-Aug-11 | MW-16D | ND | | 1 | |
| 283 | 27-Sep-11 | MW-16D | ND | | 1 | |
| 284 | 26-Oct-11 | MW-16D | ND | | 1 | |
| 285 | 29-Nov-11 | MW-16D | ND | | 1 | |
| 286 | 25-Aug-11 | MW-17S | ND | | 1 | |
| 287 | 27-Sep-11 | MW-17S | ND | | 1 | |
| 288 | 26-Oct-11 | MW-17S | ND | | 1 | |
| 289 | 29-Nov-11 | MW-17S | ND | | 1 | |
| 290 | 25-Aug-11 | MW-17D | ND | | 1 | |
| 291 | 27-Sep-11 | MW-17D | ND | | 1 | |
| 292 | 26-Oct-11 | MW-17D | ND | | 1 | |
| 293 | 29-Nov-11 | MW-17D | ND | | 1 | |
| 294 | 25-Aug-11 | MW-18S | ND | | 1 | |
| 295 | 27-Sep-11 | MW-18S | ND | | 1 | |
| 296 | 26-Oct-11 | MW-18S | 12.1 | | 1 | |
| 297 | 29-Nov-11 | MW-18S | ND | | 1 | |
| 298 | 25-Aug-11 | MW-18D | ND | | 1 | |
| 299 | 27-Sep-11 | MW-18D | ND | | 1 | |
| 300 | 26-Oct-11 | MW-18D | ND | | 1 | |
| 301 | 29-Nov-11 | MW-18D | ND | | 1 | |
| 302 | 25-Aug-11 | MW-19S | ND | | 1 | |
| 303 | 27-Sep-11 | MW-19S | ND | | 1 | |
| 304 | 26-Oct-11 | MW-19S | ND | | 1 | |
| 305 | 29-Nov-11 | MW-19S | ND | | 1 | |
| 306 | 25-Aug-11 | MW-19D | ND | | 1 | |
| 307 | 27-Sep-11 | MW-19D | ND | | 1 | |
| 308 | 26-Oct-11 | MW-19D | ND | | 1 | |
| 309 | 29-Nov-11 | MW-19D | ND | | 1 | |
| 310 | 25-Aug-11 | MW-15S | 35.4 | | 1 | |
| 311 | 27-Sep-11 | MW-15S | ND | | 1 | |
| 312 | 26-Oct-11 | MW-15S | ND | | 1 | |
| 313 | 29-Nov-11 | MW-15S | 4.72 | J | 1 | |
| 314 | 25-Aug-11 | MW-15D | ND | | 1 | |
| 315 | 27-Sep-11 | MW-15D | ND | | 1 | |
| 316 | 26-Oct-11 | MW-15D | ND | | 1 | |
| 317 | 29-Nov-11 | MW-15D | ND | | 1 | |
| 318 | 08-Apr-15 | IRL-1S | 1.3 | J | 1 | |
| 319 | 08-Apr-15 | IRL-1D | 1.4 | J | 1 | |
| 320 | 08-Apr-15 | MW-12S | 0.57 | J | 1 | |
| 321 | 08-Apr-15 | MW-12D | 0.21 | J | 1 | |
| 322 | 08-Apr-15 | LST-5S | 0.69 | J | 1 | |

| | |
|---|---|
| Number of Data: | 322 |
| Number of Truncated Data: | 181 |
| Percentage of Truncated Data: | 56% |

**Non Parametric Prediction Limit (NPPL): 258**

- All concentrations in micrograms per liter (µg/L).
- B = Blank qualified data not used in statistical calculations.
- Background data included from upgradient wells and pre-waste data across facility.

*APPENDIX B*

## SUMMARY OF STATISTICAL ANALYSES

## First Semiannual 2015 Groundwater Monitoring Results - CRSWMA Tuscarora Landfill

| Constituent | NC 2L | GWPS | Data Distribution | Statistical Method used to Establish Background | Calculated Background Concentration | Sample Location | Sample Result in (µg/L) | SSI |
|---|---|---|---|---|---|---|---|---|
| Beryllium | - | 4 | N/A | Non-parametric Prediction Interval | 25 | MW-15S | 6 | NO |
| Cobalt | - | 1 | N/A | Non-parametric Prediction Interval | 258 | MW-15S | 18 | NO |

**Notes:**

1. Concentrations are in micrograms per liter (µg/L).
2. NC 2L = North Carolina 2L Groundwater Standard.
3. GWPS = Groundwater Protection Standard.
4. SSI = Statistically significant increase over background.
5. N/E = Not established.
5. N/A = Not applicable.

# *Appendix C*

Summary of Field Parameters

# Summary of Field Parameters
## Permit 25-04

| WELL ID | PARAMETER | RESULT | UNITS | COLLECT DATE |
|---|---|---|---|---|
| 2504-IRL1D | Conductivity (at 25c) | 232.0 | µS | 4/8/2015 |
| 2504-IRL1D | PH (field measurement) | 6.1 | S.U. | 4/8/2015 |
| 2504-IRL1D | Static Water Level | 10.0 | ft | 4/8/2015 |
| 2504-IRL1D | Temperature | 16.0 | °C | 4/8/2015 |
| 2504-IRL1D | Turbidity | 27.0 | NTU | 4/8/2015 |
| 2504-IRL1S | Conductivity (at 25c) | 166.0 | µS | 4/8/2015 |
| 2504-IRL1S | PH (field measurement) | 4.6 | S.U. | 4/8/2015 |
| 2504-IRL1S | Static Water Level | 5.0 | ft | 4/8/2015 |
| 2504-IRL1S | Temperature | 16.0 | °C | 4/8/2015 |
| 2504-IRL1S | Turbidity | 21.0 | NTU | 4/8/2015 |
| 2504-IRL2DA | Static Water Level | 11.2 | ft | 4/8/2015 |
| 2504-IRL2SA | Static Water Level | 8.1 | ft | 4/8/2015 |
| 2504-IRL3D | Conductivity (at 25c) | 804.0 | µS | 4/8/2015 |
| 2504-IRL3D | PH (field measurement) | 6.4 | S.U. | 4/8/2015 |
| 2504-IRL3D | Static Water Level | 10.2 | ft | 4/8/2015 |
| 2504-IRL3D | Temperature | 16.0 | °C | 4/8/2015 |
| 2504-IRL3D | Turbidity | 80.0 | NTU | 4/8/2015 |
| 2504-IRL3S | Conductivity (at 25c) | 806.0 | µS | 4/8/2015 |
| 2504-IRL3S | PH (field measurement) | 5.8 | S.U. | 4/8/2015 |
| 2504-IRL3S | Static Water Level | 9.3 | ft | 4/8/2015 |
| 2504-IRL3S | Temperature | 16.0 | °C | 4/8/2015 |
| 2504-IRL3S | Turbidity | 75.0 | NTU | 4/8/2015 |

# Summary of Field Parameters
## Permit 25-04

| WELL ID | PARAMETER | RESULT | UNITS | COLLECT DATE |
|---|---|---|---|---|
| 2504-IRL4D | Conductivity (at 25c) | 584.0 | µS | 4/8/2015 |
| 2504-IRL4D | PH (field measurement) | 6.7 | S.U. | 4/8/2015 |
| 2504-IRL4D | Static Water Level | 9.5 | ft | 4/8/2015 |
| 2504-IRL4D | Temperature | 16.0 | °C | 4/8/2015 |
| 2504-IRL4D | Turbidity | 45.0 | NTU | 4/8/2015 |
| 2504-IRL4S | Conductivity (at 25c) | 628.0 | µS | 4/8/2015 |
| 2504-IRL4S | PH (field measurement) | 4.9 | S.U. | 4/8/2015 |
| 2504-IRL4S | Static Water Level | 8.3 | ft | 4/8/2015 |
| 2504-IRL4S | Temperature | 15.0 | °C | 4/8/2015 |
| 2504-IRL4S | Turbidity | 50.0 | NTU | 4/8/2015 |
| 2504-IRL5D | Static Water Level | 8.3 | ft | 4/8/2015 |
| 2504-IRL5S | Conductivity (at 25c) | 554.0 | µS | 4/8/2015 |
| 2504-IRL5S | PH (field measurement) | 6.7 | S.U. | 4/8/2015 |
| 2504-IRL5S | Static Water Level | 9.6 | ft | 4/8/2015 |
| 2504-IRL5S | Temperature | 17.0 | °C | 4/8/2015 |
| 2504-IRL5S | Turbidity | 45.0 | NTU | 4/8/2015 |
| 2504-MWA | Conductivity (at 25c) | 118.0 | µS | 4/8/2015 |
| 2504-MWA | PH (field measurement) | 4.9 | S.U. | 4/8/2015 |
| 2504-MWA | Static Water Level | 6.2 | ft | 4/8/2015 |
| 2504-MWA | Temperature | 16.0 | °C | 4/8/2015 |
| 2504-MWA | Turbidity | 80.0 | NTU | 4/8/2015 |
| 2504-MWB | Static Water Level | 9.4 | ft | 4/8/2015 |
| 2504-Piezometer | Static Water Level | 8.4 | ft | 4/8/2015 |

Notes: ºc = degrees Centigrade
S.U. = Standard Units
µS = MicroSiemens
NTU = Nephelometric Turbidity Units

# Summary of Field Parameters
## Permit 25-09

| WELL ID | PARAMETER | RESULT | UNITS | COLLECT DATE |
|---|---|---|---|---|
| 2509-MW10 | PH (field measurement) | 4.9 | S.U. | 4/8/2015 |
| 2509-MW10 | Turbidity | 110 | NTU | 4/8/2015 |
| 2509-MW10 | Conductivity (at 25c) | 166 | µS | 4/8/2015 |
| 2509-MW10 | Temperature | 15 | ºC | 4/8/2015 |
| 2509-MW10 | Static Water Level | 4.54 | ft | 4/8/2015 |
| 2509-MW10 | Well Depth | 15.95 | ft | 4/8/2015 |
| 2509-MW11D | PH (field measurement) | 6.7 | S.U. | 4/8/2015 |
| 2509-MW11D | Turbidity | 90 | NTU | 4/8/2015 |
| 2509-MW11D | Conductivity (at 25c) | 493 | µS | 4/8/2015 |
| 2509-MW11D | Temperature | 15 | ºC | 4/8/2015 |
| 2509-MW11D | Static Water Level | 7.23 | ft | 4/8/2015 |
| 2509-MW11D | Well Depth | 34.42 | ft | 4/8/2015 |
| 2509-MW11S | PH (field measurement) | 5.1 | S.U. | 4/8/2015 |
| 2509-MW11S | Turbidity | 50 | NTU | 4/8/2015 |
| 2509-MW11S | Conductivity (at 25c) | 608 | µS | 4/8/2015 |
| 2509-MW11S | Temperature | 15 | ºC | 4/8/2015 |
| 2509-MW11S | Static Water Level | 7.21 | ft | 4/8/2015 |
| 2509-MW11S | Well Depth | 14.04 | ft | 4/8/2015 |
| 2509-MW12D | PH (field measurement) | 6.6 | S.U. | 4/8/2015 |
| 2509-MW12D | Turbidity | 60 | NTU | 4/8/2015 |
| 2509-MW12D | Conductivity (at 25c) | 519 | µS | 4/8/2015 |
| 2509-MW12D | Temperature | 18 | ºC | 4/8/2015 |
| 2509-MW12D | Static Water Level | 9.7 | ft | 4/8/2015 |
| 2509-MW12D | Well Depth | 36.03 | ft | 4/8/2015 |

# Summary of Field Parameters
## Permit 25-09

| WELL ID | PARAMETER | RESULT | UNITS | COLLECT DATE |
|---|---|---|---|---|
| 2509-MW12S | PH (field measurement) | 4.9 | S.U. | 4/8/2015 |
| 2509-MW12S | Turbidity | 20 | NTU | 4/8/2015 |
| 2509-MW12S | Conductivity (at 25c) | 88 | µS | 4/8/2015 |
| 2509-MW12S | Temperature | 17 | ºC | 4/8/2015 |
| 2509-MW12S | Static Water Level | 7.23 | ft | 4/8/2015 |
| 2509-MW12S | Well Depth | 17.99 | ft | 4/8/2015 |
| 2509-MW13D | PH (field measurement) | 6.7 | S.U. | 4/8/2015 |
| 2509-MW13D | Turbidity | 70 | NTU | 4/8/2015 |
| 2509-MW13D | Conductivity (at 25c) | 424 | µS | 4/8/2015 |
| 2509-MW13D | Temperature | 16 | ºC | 4/8/2015 |
| 2509-MW13D | Static Water Level | 6.64 | ft | 4/8/2015 |
| 2509-MW13D | Well Depth | 34.31 | ft | 4/8/2015 |
| 2509-MW13S | PH (field measurement) | 4.8 | S.U. | 4/8/2015 |
| 2509-MW13S | Turbidity | 22 | NTU | 4/8/2015 |
| 2509-MW13S | Conductivity (at 25c) | 192 | µS | 4/8/2015 |
| 2509-MW13S | Temperature | 15 | ºC | 4/8/2015 |
| 2509-MW13S | Static Water Level | 3.26 | ft | 4/8/2015 |
| 2509-MW13S | Well Depth | 17.74 | ft | 4/8/2015 |
| 2509-MW14R | PH (field measurement) | 5.8 | S.U. | 4/8/2015 |
| 2509-MW14R | Turbidity | 120 | NTU | 4/8/2015 |
| 2509-MW14R | Conductivity (at 25c) | 2390 | µS | 4/8/2015 |
| 2509-MW14R | Temperature | 16 | ºC | 4/8/2015 |
| 2509-MW14R | Static Water Level | 3.24 | ft | 4/8/2015 |
| 2509-MW14R | Well Depth | 17.37 | ft | 4/8/2015 |

# Summary of Field Parameters
## Permit 25-09

| WELL ID | PARAMETER | RESULT | UNITS | COLLECT DATE |
|---|---|---|---|---|
| 2509-MW7 | PH (field measurement) | 6.2 | S.U. | 4/8/2015 |
| 2509-MW7 | Turbidity | 70 | NTU | 4/8/2015 |
| 2509-MW7 | Conductivity (at 25c) | 311 | µS | 4/8/2015 |
| 2509-MW7 | Temperature | 17 | ºC | 4/8/2015 |
| 2509-MW7 | Static Water Level | 4.01 | ft | 4/8/2015 |
| 2509-MW7 | Well Depth | 16.59 | ft | 4/8/2015 |
| 2509-MW8 | PH (field measurement) | 4.4 | S.U. | 4/8/2015 |
| 2509-MW8 | Turbidity | 85 | NTU | 4/8/2015 |
| 2509-MW8 | Conductivity (at 25c) | 97 | µS | 4/8/2015 |
| 2509-MW8 | Temperature | 16 | ºC | 4/8/2015 |
| 2509-MW8 | Static Water Level | 5.7 | ft | 4/8/2015 |
| 2509-MW8 | Well Depth | 15.62 | ft | 4/8/2015 |
| 2509-MW15D | Temperature | 14 | ºC | 4/9/2015 |
| 2509-MW15D | Static Water Level | 6.4 | ft | 4/9/2015 |
| 2509-MW15D | Well Depth | 37.65 | ft | 4/9/2015 |
| 2509-MW15D | Turbidity | 30 | NTU | 4/9/2015 |
| 2509-MW15D | Conductivity (at 25c) | 460 | µS | 4/9/2015 |
| 2509-MW15D | PH (field measurement) | 6.9 | S.U. | 4/9/2015 |
| 2509-MW15S | Temperature | 14 | ºC | 4/9/2015 |
| 2509-MW15S | Static Water Level | 5.73 | ft | 4/9/2015 |
| 2509-MW15S | Well Depth | 17.95 | ft | 4/9/2015 |
| 2509-MW15S | Turbidity | 68 | NTU | 4/9/2015 |
| 2509-MW15S | Conductivity (at 25c) | 110 | µS | 4/9/2015 |
| 2509-MW15S | PH (field measurement) | 4.4 | S.U. | 4/9/2015 |

# Summary of Field Parameters
## Permit 25-09

| WELL ID | PARAMETER | RESULT | UNITS | COLLECT DATE |
|---|---|---|---|---|
| 2509-MW16D | Temperature | 14 | ºC | 4/9/2015 |
| 2509-MW16D | Static Water Level | 6.62 | ft | 4/9/2015 |
| 2509-MW16D | Well Depth | 35 | ft | 4/9/2015 |
| 2509-MW16D | Turbidity | 42 | NTU | 4/9/2015 |
| 2509-MW16D | Conductivity (at 25c) | 425 | µS | 4/9/2015 |
| 2509-MW16D | PH (field measurement) | 7.2 | S.U. | 4/9/2015 |
| 2509-MW16S | Temperature | 14 | ºC | 4/9/2015 |
| 2509-MW16S | Static Water Level | 7.14 | ft | 4/9/2015 |
| 2509-MW16S | Well Depth | 15.02 | ft | 4/9/2015 |
| 2509-MW16S | Turbidity | 56 | NTU | 4/9/2015 |
| 2509-MW16S | Conductivity (at 25c) | 1084 | µS | 4/9/2015 |
| 2509-MW16S | PH (field measurement) | 4.1 | S.U. | 4/9/2015 |
| 2509-MW17D | Temperature | 14 | ºC | 4/9/2015 |
| 2509-MW17D | Static Water Level | 5.89 | ft | 4/9/2015 |
| 2509-MW17D | Well Depth | 38 | ft | 4/9/2015 |
| 2509-MW17D | Turbidity | 22 | NTU | 4/9/2015 |
| 2509-MW17D | Conductivity (at 25c) | 400 | µS | 4/9/2015 |
| 2509-MW17D | PH (field measurement) | 6.7 | S.U. | 4/9/2015 |
| 2509-MW17S | Temperature | 14 | ºC | 4/9/2015 |
| 2509-MW17S | Static Water Level | 7.12 | ft | 4/9/2015 |
| 2509-MW17S | Well Depth | 15.01 | ft | 4/9/2015 |
| 2509-MW17S | Turbidity | 190 | NTU | 4/9/2015 |
| 2509-MW17S | Conductivity (at 25c) | 620 | µS | 4/9/2015 |
| 2509-MW17S | PH (field measurement) | 3.8 | S.U. | 4/9/2015 |

# Summary of Field Parameters
## Permit 25-09

| WELL ID | PARAMETER | RESULT | UNITS | COLLECT DATE |
|---|---|---|---|---|
| 2509-MW18D | Temperature | 15 | ºC | 4/9/2015 |
| 2509-MW18D | Static Water Level | 6.47 | ft | 4/9/2015 |
| 2509-MW18D | Well Depth | 36.7 | ft | 4/9/2015 |
| 2509-MW18D | Turbidity | 20 | NTU | 4/9/2015 |
| 2509-MW18D | Conductivity (at 25c) | 403 | µS | 4/9/2015 |
| 2509-MW18D | PH (field measurement) | 6.9 | S.U. | 4/9/2015 |
| 2509-MW18S | Temperature | 15 | ºC | 4/9/2015 |
| 2509-MW18S | Static Water Level | 4.41 | ft | 4/9/2015 |
| 2509-MW18S | Well Depth | 13.7 | ft | 4/9/2015 |
| 2509-MW18S | Turbidity | 21 | NTU | 4/9/2015 |
| 2509-MW18S | Conductivity (at 25c) | 1266 | µS | 4/9/2015 |
| 2509-MW18S | PH (field measurement) | 4.5 | S.U. | 4/9/2015 |
| 2509-MW19D | Temperature | 15 | ºC | 4/9/2015 |
| 2509-MW19D | Static Water Level | 7.33 | ft | 4/9/2015 |
| 2509-MW19D | Well Depth | 26.26 | ft | 4/9/2015 |
| 2509-MW19D | Turbidity | 25 | NTU | 4/9/2015 |
| 2509-MW19D | Conductivity (at 25c) | 351 | µS | 4/9/2015 |
| 2509-MW19D | PH (field measurement) | 6.8 | S.U. | 4/9/2015 |
| 2509-MW19S | Temperature | 16 | ºC | 4/9/2015 |
| 2509-MW19S | Static Water Level | 5.22 | ft | 4/9/2015 |
| 2509-MW19S | Well Depth | 13.81 | ft | 4/9/2015 |
| 2509-MW19S | Turbidity | 36 | NTU | 4/9/2015 |
| 2509-MW19S | Conductivity (at 25c) | 78 | µS | 4/9/2015 |
| 2509-MW19S | PH (field measurement) | 5.9 | S.U. | 4/9/2015 |

# Summary of Field Parameters
## Permit 25-09

| WELL ID | PARAMETER | RESULT | UNITS | COLLECT DATE |
|---|---|---|---|---|
| 2509-SWPT1 | PH (field measurement) | 7.1 | S.U. | 4/8/2015 |
| 2509-SWPT1 | Turbidity | 160 | NTU | 4/8/2015 |
| 2509-SWPT1 | Conductivity (at 25c) | 286 | µS | 4/8/2015 |
| 2509-SWPT1 | Temperature | 19 | ºC | 4/8/2015 |
| 2509-SWPT2 | PH (field measurement) | 7.1 | S.U. | 4/8/2015 |
| 2509-SWPT2 | Turbidity | 18 | NTU | 4/8/2015 |
| 2509-SWPT2 | Conductivity (at 25c) | 481 | µS | 4/8/2015 |
| 2509-SWPT2 | Temperature | 20 | ºC | 4/8/2015 |
| 2509-UD1 | PH (field measurement) | 7.2 | S.U. | 4/8/2015 |
| 2509-UD1 | Turbidity | 36 | NTU | 4/8/2015 |
| 2509-UD1 | Conductivity (at 25c) | 619 | µS | 4/8/2015 |
| 2509-UD1 | Temperature | 20 | ºC | 4/8/2015 |
| 2509-UD2 | PH (field measurement) | 6.7 | S.U. | 4/8/2015 |
| 2509-UD2 | Turbidity | 23 | NTU | 4/8/2015 |
| 2509-UD2 | Conductivity (at 25c) | 733 | µS | 4/8/2015 |
| 2509-UD2 | Temperature | 20 | ºC | 4/8/2015 |
| 2509-LST1D | Temperature | 17 | ºC | 4/8/2015 |
| 2509-LST1D | Static Water Level | 10.41 | ft | 4/8/2015 |
| 2509-LST1D | Well Depth | 34.86 | ft | 4/8/2015 |
| 2509-LST1D | Turbidity | 45 | NTU | 4/8/2015 |
| 2509-LST1D | Conductivity (at 25c) | 524 | µS | 4/8/2015 |
| 2509-LST1D | PH (field measurement) | 6.7 | S.U. | 4/8/2015 |

# Summary of Field Parameters
## Permit 25-09

| WELL ID | PARAMETER | RESULT | UNITS | COLLECT DATE |
|---|---|---|---|---|
| 2509-LST1S | Temperature | 16 | ºC | 4/8/2015 |
| 2509-LST1S | Static Water Level | 4.84 | ft | 4/8/2015 |
| 2509-LST1S | Well Depth | 15.04 | ft | 4/8/2015 |
| 2509-LST1S | Turbidity | 120 | NTU | 4/8/2015 |
| 2509-LST1S | Conductivity (at 25c) | 96 | µS | 4/8/2015 |
| 2509-LST1S | PH (field measurement) | 4.7 | S.U. | 4/8/2015 |
| 2509-LST2D | Static Water Level | 10.28 | feet | 4/8/2015 |
| 2509-LST2D | Well Depth | 33.29 | feet | 4/8/2015 |
| 2509-LST2S | Temperature | 17 | ºC | 4/8/2015 |
| 2509-LST2S | Static Water Level | 4.97 | feet | 4/8/2015 |
| 2509-LST2S | Well Depth | 14.45 | feet | 4/8/2015 |
| 2509-LST2S | Turbidity | 100 | NTU | 4/8/2015 |
| 2509-LST2S | Conductivity (at 25c) | 113 | µS | 4/8/2015 |
| 2509-LST2S | PH (field measurement) | 4.9 | S.U. | 4/8/2015 |
| 2509-LST3D | Static Water Level | 11.14 | feet | 4/8/2015 |
| 2509-LST3D | Well Depth | 34.85 | feet | 4/8/2015 |
| 2509-LST3S | Temperature | 15 | ºC | 4/8/2015 |
| 2509-LST3S | Static Water Level | 5.86 | feet | 4/8/2015 |
| 2509-LST3S | Well Depth | 17.65 | feet | 4/8/2015 |
| 2509-LST3S | Turbidity | 260 | NTU | 4/8/2015 |
| 2509-LST3S | Conductivity (at 25c) | 118 | µS | 4/8/2015 |
| 2509-LST3S | PH (field measurement) | 4.8 | S.U. | 4/8/2015 |
| 2509-LST4D | Static Water Level | 10.7 | feet | 4/8/2015 |
| 2509-LST4D | Well Depth | 36.12 | feet | 4/8/2015 |

# Summary of Field Parameters
## Permit 25-09

| WELL ID | PARAMETER | RESULT | UNITS | COLLECT DATE |
|---|---|---|---|---|
| 2509-LST4S | Temperature | 15 | ºC | 4/8/2015 |
| 2509-LST4S | Static Water Level | 5.02 | feet | 4/8/2015 |
| 2509-LST4S | Well Depth | 17.62 | feet | 4/8/2015 |
| 2509-LST4S | Turbidity | 85 | NTU | 4/8/2015 |
| 2509-LST4S | Conductivity (at 25c) | 81 | µS | 4/8/2015 |
| 2509-LST4S | PH (field measurement) | 4.9 | S.U. | 4/8/2015 |
| 2509-LST5D | Temperature | 17 | ºC | 4/8/2015 |
| 2509-LST5D | Static Water Level | 11.64 | feet | 4/8/2015 |
| 2509-LST5D | Well Depth | 38.66 | feet | 4/8/2015 |
| 2509-LST5D | Turbidity | 37 | NTU | 4/8/2015 |
| 2509-LST5D | Conductivity (at 25c) | 555 | µS | 4/8/2015 |
| 2509-LST5D | PH (field measurement) | 6.6 | S.U. | 4/8/2015 |
| 2509-LST5S | Temperature | 16 | ºC | 4/8/2015 |
| 2509-LST5S | Static Water Level | 6 | ft | 4/8/2015 |
| 2509-LST5S | Well Depth | 15.41 | ft | 4/8/2015 |
| 2509-LST5S | Turbidity | 1000 | NTU | 4/8/2015 |
| 2509-LST5S | Conductivity (at 25c) | 191 | µS | 4/8/2015 |
| 2509-LST5S | PH (field measurement) | 6.3 | S.U. | 4/8/2015 |
| 2509-LST6D | Static Water Level | 9.94 | ft | 4/8/2015 |
| 2509-LST6D | Well Depth | 34.37 | ft | 4/8/2015 |

# Summary of Field Parameters
## Permit 25-09

| WELL ID | PARAMETER | RESULT | UNITS | COLLECT DATE |
|---|---|---|---|---|
| 2509-LST6S | Temperature | 16 | ºC | 4/8/2015 |
| 2509-LST6S | Static Water Level | 6.61 | ft | 4/8/2015 |
| 2509-LST6S | Well Depth | 16.44 | ft | 4/8/2015 |
| 2509-LST6S | Turbidity | 280 | NTU | 4/8/2015 |
| 2509-LST6S | Conductivity (at 25c) | 60 | µS | 4/8/2015 |
| 2509-LST6S | PH (field measurement) | 5.2 | S.U. | 4/8/2015 |
| 2509-Leachate | Temperature | 25 | ºC | 4/8/2015 |
| 2509-Leachate | Turbidity | 12 | NTU | 4/8/2015 |
| 2509-Leachate | Conductivity (at 25c) | 10670 | µS | 4/8/2015 |
| 2509-Leachate | PH (field measurement) | 7.2 | S.U. | 4/8/2015 |

Notes: ºC = degrees Centigrade

S.U. = Standard Units

µS = MicroSiemens

NTU = Nephlometric Turbidity Units

# *Appendix D*

Summary of Detections

# Summary of Detections
## Permit 25-04

| WELL ID | PARAMETER | RESULT | UNITS | SWSL | DATE |
|---|---|---|---|---|---|
| 2504-IRL1S | Barium | 162 | µg/l | 100 | 4/13/2015 |
| 2504-IRL4S | Zinc | 13 | µg/l | 10 | 4/13/2015 |
| 2504-IRL5S | Zinc | 40 | µg/l | 10 | 4/14/2015 |
| 2504-MWA | Barium | 424 | µg/l | 100 | 4/13/2015 |

Notes: µg/l = Micrograms per liter
SWSL = NC Soild Waste Section Reporting Limit

# Summary of Detections
## Permit 25-09

| WELL ID | PARAMETER | RESULT | UNITS | SWSL | DATE |
|---|---|---|---|---|---|
| 2509-MW8 | Barium | 158 | µg/l | 100 | 4/8/2015 |
| 2509-MW15S | Beryllium | 6 | µg/l | 1 | 4/9/2015 |
| 2509-MW15S | Cobalt | 18 | µg/l | 10 | 4/9/2015 |
| 2509-MW15S | Zinc | 32 | µg/l | 10 | 4/9/2015 |
| 2509-MW16S | Beryllium | 4 | µg/l | 1 | 4/9/2015 |
| 2509-MW16S | Cadmium | 2 | µg/l | 1 | 4/9/2015 |
| 2509-MW16S | Zinc | 12 | µg/l | 10 | 4/9/2015 |
| 2509-MW17S | Beryllium | 4 | µg/l | 1 | 4/9/2015 |
| 2509-MW17S | Zinc | 15 | µg/l | 10 | 4/9/2015 |
| 2509-MW18S | Beryllium | 4 | µg/l | 1 | 4/9/2015 |
| 2509-MW18S | Cadmium | 1 | µg/l | 1 | 4/9/2015 |
| 2509-MW18S | Zinc | 20 | µg/l | 10 | 4/9/2015 |
| 2509-MW19D | Zinc | 19 | µg/l | 10 | 4/9/2015 |
| 2509-LST2S | Zinc | 10 | µg/l | 10 | 4/8/2015 |
| 2509-LST3S | Zinc | 18 | µg/l | 10 | 4/8/2015 |
| 2509-LST4S | Zinc | 38 | µg/l | 10 | 4/8/2015 |
| 2509-LST5S | Total Chromium | 14 | µg/l | 10 | 4/8/2015 |
| 2509-LST5S | Lead | 21 | µg/l | 10 | 4/8/2015 |
| 2509-LST5S | Vanadium | 27 | µg/l | 25 | 4/8/2015 |
| 2509-LST5S | Zinc | 79 | µg/l | 10 | 4/8/2015 |
| 2509-LST6S | Zinc | 41 | µg/l | 10 | 4/8/2015 |
| 2509-UD1 | Zinc | 12 | µg/l | 10 | 4/8/2015 |

Notes: µg/l = Micrograms per liter
SWSL = NC Soild Waste Section Reporting Limit

# *Appendix E*

Summary of Exceedences

# Summary of Exceedances
## Permit 25-09

| WELL ID | PARAMETER | RESULT | UNITS | SWSL | NC2L/*GWPS | GPS | DATE |
|---|---|---|---|---|---|---|---|
| 2509-MW15S | Beryllium | 6 | µg/l | 1 | 4* | 25 | 4/9/2015 |
| 2509-MW15S | Cobalt | 18 | µg/l | 10 | 1* | 258 | 4/9/2015 |
| 2509-LST5S | Total Chromium | 14 | µg/l | 10 | 10 | 14 | 4/8/2015 |
| 2509-LST5S | Lead | 21 | µg/l | 10 | 15 | 21 | 4/8/2015 |
| 2509-LST5S | Vanadium | 27 | µg/l | 25 | 0.3* | 27 | 4/8/2015 |

Notes: All Results in micorgrams per liter (µg/L)
SWSL = NC Soild Waste Section Reporting Limit
NC2L = NC Groundwater Standard from 15A NCAC 2L.0202
GWPS = NC Solid Waste Section Groundwater Protection Standard (for constituents with no NC2L)
GPS = Groundwater Protection Standard as defined by 15A NCAC 13B.1634(g)
2509-LST5S is classified as an up gradient, or background, monitoring well for the facility.

# *Appendix F*

Summary of Monitoring Well Construction

# Summary of Monitoring Well Construction

## Permits 25-04 and 25-09

| Area | Well or Piezometer ID | Date Installed | Casing Diameter (inches) | Well Elevations | | Total Boring Depth | | Screened Interval of Well | | | | Screened Interval Aquifer | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ground Surface | TOC | Depth | Elevation | Depth (feet B.G.S.) | | Elev. (feet M.S.L.) | | | |
| | | | | (feet above M.S.L.) | | (feet B.G.S.) | (feet M.S.L.) | from | to | from | to | | |
| Leachate Storage Lagoon Area | LST-1S | 24-Jun-93 | 2 | 48.59 | 50.92 | 13.5 | 35.09 | 3.5 | 13.5 | 45.09 | 35.09 | Upper | Compliance Well |
| | LST-1D | 24-Jun-93 | 2 | 48.61 | 50.92 | 33.7 | 14.91 | 23.7 | 33.7 | 24.91 | 14.91 | Lower | Compliance Well |
| | LST-2S | 24-Jun-93 | 2 | 48.56 | 51.00 | 12.3 | 36.26 | 7.3 | 12.3 | 41.26 | 36.26 | Upper | Compliance Well |
| | LST-2D | 24-Jun-93 | 2 | 48.78 | 50.94 | 31.8 | 16.98 | 21.8 | 31.8 | 26.98 | 16.98 | Lower | Compliance Well |
| | LST-3S | 25-Jun-93 | 2 | 49.53 | 52.17 | 15.7 | 33.83 | 5.7 | 15.7 | 43.83 | 33.83 | Upper | Compliance Well |
| | LST-3D | 24-Jun-93 | 2 | 49.30 | 51.87 | 33.0 | 16.30 | 23.0 | 33.0 | 26.30 | 16.30 | Lower | Water Levels Only |
| | LST-4S | 25-Jun-93 | 2 | 49.00 | 51.38 | 15.8 | 33.20 | 5.8 | 15.8 | 43.20 | 33.20 | Upper | Compliance Well |
| | LST-4D | 24-Jun-93 | 2 | 48.87 | 51.56 | 33.7 | 15.17 | 23.7 | 33.7 | 25.17 | 15.17 | Lower | Water Levels Only |
| | LST-5S | 28-Jun-93 | 2 | 50.22 | 52.37 | 14.6 | 35.62 | 4.6 | 14.6 | 45.62 | 35.62 | Upper | Background |
| | LST-5D | 28-Jun-93 | 2 | 50.13 | 52.27 | 36.9 | 13.23 | 26.9 | 36.9 | 23.23 | 13.23 | Lower | Compliance Well |
| | LST-6S | 28-Jun-93 | 2 | 49.08 | 51.23 | 15.1 | 33.98 | 5.1 | 15.1 | 43.98 | 33.98 | Upper | Compliance Well |
| | LST-6D | 28-Jun-93 | 2 | 49.10 | 51.17 | 33.1 | 16.00 | 23.1 | 33.1 | 26.00 | 16.00 | Lower | Compliance Well |
| Interim Regional Landfill (Closed) | IRL-1S | 29-Jun-93 | 2 | 48.12 | 50.56 | 15.9 | 32.22 | 5.9 | 15.9 | 42.22 | 32.22 | Upper | Background |
| | IRL-1D | 29-Jun-03 | 2 | 48.08 | 50.19 | 43.8 | 4.28 | 28.8 | 43.8 | 19.28 | 4.28 | Lower | Compliance Well |
| | IRL-2SA | 13-Jan-01 | 2 | 48.74 | 51.37 | 15.0 | 33.74 | 10.0 | 15.0 | 38.74 | 33.74 | Upper | Water Levels Only |
| | IRL-2DA | 13-Jan-01 | 2 | 48.82 | 51.58 | 39.0 | 9.82 | 23.0 | 28.0 | 25.82 | 20.82 | Lower | Water Levels Only |
| | IRL-3S | 02-Jul-93 | 2 | 45.73 | 49.02 | 13.3 | 32.43 | 8.3 | 13.3 | 37.43 | 32.43 | Upper | Compliance Well |
| | IRL-3D | 02-Jul-93 | 2 | 45.82 | 48.93 | 37.8 | 8.02 | 27.8 | 37.8 | 18.02 | 8.02 | Lower | Compliance Well |
| | IRL-4S | 02-Jul-93 | 2 | 46.11 | 48.34 | 13.0 | 33.11 | 8.0 | 13.0 | 38.11 | 33.11 | Upper | Compliance Well |
| | IRL-4D | 02-Jul-93 | 2 | 46.28 | 48.35 | 33.8 | 12.48 | 23.8 | 33.8 | 22.48 | 12.48 | Lower | Compliance Well |
| | IRL-5S | 01-Jul-93 | 2 | 46.69 | 48.78 | 12.6 | 34.09 | 7.6 | 12.6 | 39.09 | 34.09 | Upper | Compliance Well |
| | IRL-5D | 01-Jul-93 | 2 | 46.46 | 48.66 | 33.9 | 12.56 | 23.9 | 33.9 | 22.56 | 12.56 | Lower | Compliance Well |
| | MW-A | 13-Dec-00 | 2 | 44.04 | 46.04 | 20.0 | 24.04 | 15.0 | 20.0 | 29.04 | 24.04 | Upper | Compliance Well |
| | MW-B | 12-Jan-01 | 2 | 46.84 | 48.90 | 20.0 | 26.84 | 7.0 | 12.0 | 39.84 | 34.84 | Upper | Water Levels Only |
| | PZ-Z | 15-Dec-00 | 2 | 47.17 | 49.52 | 30.0 | 17.17 | 15.0 | 20.0 | 32.17 | 27.17 | Upper | Water Levels Only |
| Tuscarora Landfill Phases 1 & 2 | MW-7 | 15-Jul-99 | 2 | 48.80 | 50.69 | 16.0 | 32.80 | 3.0 | 16.0 | 45.80 | 32.80 | Upper | Compliance Well |
| | MW-7D | 18-Jun-09 | 2 | 47.82 | 50.82 | 42.0 | 5.82 | 31.0 | 41.0 | 16.82 | 6.82 | Lower | Compliance Well |
| | MW-8 | 15-Jul-99 | 2 | 48.80 | 50.94 | 13.0 | 35.80 | 3.0 | 13.0 | 45.80 | 35.80 | Upper | Water Levels Only |
| | MW-8D | 18-Jun-09 | 2 | 47.27 | 50.27 | 36.0 | 11.27 | 25.0 | 35.0 | 22.27 | 12.27 | Lower | Compliance Well |
| | MW-10 | 15-Jul-99 | 2 | 45.40 | 47.32 | 15.0 | 30.40 | 3.0 | 13.0 | 42.40 | 32.40 | Upper | Compliance Well |
| | MW-11S | 15-Jul-99 | 2 | 47.70 | 47.67 | 12.1 | 35.60 | 5.0 | 12.0 | 42.70 | 35.70 | Upper | Compliance Well |
| | MW-11D | 15-Jul-99 | 2 | 45.80 | 47.55 | 35.1 | 10.70 | 25.0 | 35.0 | 20.80 | 10.80 | Lower | Compliance Well |
| | MW-13S | 21-Apr-03 | 2 | 43.73 | 46.21 | 15.0 | 28.73 | 5.0 | 15.0 | 38.73 | 28.73 | Upper | Compliance Well |
| | MW-13D | 23-Apr-03 | 2 | 43.64 | 45.93 | 40.0 | 3.64 | 23.0 | 33.0 | 20.64 | 10.64 | Lower | Background |
| | MW-14R | 04-Oct-07 | 2 | 44.13 | 46.98 | 14.0 | 30.13 | 4.0 | 14.0 | 40.13 | 30.13 | Upper | Compliance Well |
| | MW-21D | 17-Jun-09 | 2 | 46.71 | 49.71 | 43.0 | 3.71 | 32.0 | 42.0 | 14.71 | 4.71 | Lower | Compliance Well |
| Tuscarora Landfill Phase 3 | MW-12S | 09-Apr-02 | 2 | 49.10 | 52.12 | 15.0 | 34.10 | 5.0 | 15.0 | 44.10 | 34.10 | Upper | Background |
| | MW-12D | 09-Apr-02 | 2 | 48.90 | 51.90 | 35.0 | 13.90 | 25.0 | 35.0 | 23.90 | 13.90 | Lower | Compliance Well |
| | MW-15S | 22-Jun-09 | 2 | 44.20 | 47.20 | 15.0 | 29.20 | 6.0 | 16.0 | 38.20 | 28.20 | Upper | Compliance Well |
| | MW-15D | 23-Jun-09 | 2 | 44.22 | 47.22 | 38.0 | 6.22 | 27.0 | 37.0 | 17.22 | 7.22 | Lower | Compliance Well |
| | MW-16S | 10-Aug-09 | 2 | 44.25 | 47.25 | 12.0 | 32.25 | 2.0 | 12.0 | 42.25 | 32.25 | Upper | Compliance Well |
| | MW-16D | 24-Jun-09 | 2 | 44.17 | 47.17 | 35.0 | 9.17 | 23.0 | 33.0 | 21.17 | 11.17 | Lower | Compliance Well |
| | MW-17S | 30-Jun-09 | 2 | 42.66 | 45.66 | 13.0 | 29.66 | 2.0 | 12.0 | 40.66 | 30.66 | Upper | Compliance Well |
| | MW-17D | 30-Jun-09 | 2 | 42.93 | 45.93 | 38.0 | 4.93 | 26.0 | 36.0 | 16.93 | 6.93 | Lower | Compliance Well |
| | MW-18S | 01-Jul-09 | 2 | 43.34 | 46.34 | 11.0 | 32.34 | 6.0 | 11.0 | 37.34 | 32.34 | Upper | Compliance Well |
| | MW-18D | 01-Jul-09 | 2 | 43.14 | 46.14 | 35.0 | 8.14 | 25.0 | 35.0 | 18.14 | 8.14 | Lower | Compliance Well |
| | MW-19S | 01-Jul-09 | 2 | 43.80 | 46.80 | 10.0 | 33.80 | 5.0 | 10.0 | 38.80 | 33.80 | Upper | Compliance Well |
| | MW-19D | 01-Jul-09 | 2 | 43.75 | 46.75 | 25.0 | 18.75 | 15.0 | 25.0 | 28.75 | 18.75 | Lower | Compliance Well |
| | MW-20D | 16-Jun-09 | 2 | 46.58 | 49.58 | 35.0 | 11.58 | 23.0 | 33.0 | 23.58 | 13.58 | Lower | Compliance Well |

**Notes:**

1. All elevations are referenced to mean sea level (M.S.L.); depths are referenced to ground surface.
2. B.G.S. = Below ground surface.
3. M.S.L = Mean sea level.
4. T.O.C. = Top of casing.