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New York State Department of Environmental Conservation
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Buffalo, New York 14203-2999

Subject:

2013 Groundwater Monitoring Report and IC/EC Certification Form
Schreck's Scrapyard Site (Site No. 932099)
North Tonawanda, New York

Dear Mr. Sadowski:

On behalf of RockTenn CP, LLC, owner of the above referenced site, ARCADIS submits to the Department the enclosed 2013 Annual Groundwater Monitoring Report with Institutional and Engineering Controls Certification Form.

One hard copy and one electronic copy on CD of the document are enclosed.

If you have any questions pertaining to this document, please do not hesitate to call me at 716/667-6645.

Sincerely,

Ben Girard
Project Manager
ARCADIS

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04320055.0002

Imagine the result

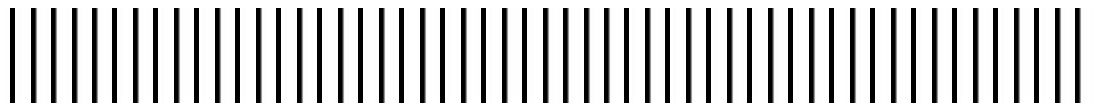


51 Robinson Street North Tonawanda, New York 14120

Groundwater Monitoring Report for Schreck's Scrapyard Site

North Tonawanda, New York
Site No. 932099

June 2013



Report Prepared By:

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1. Introduction

1.1. Background

As shown on Figure 1, RockTenn CP, LLC (RockTenn) (formerly known as Smurfit Stone Container Corporation) owns a parcel of land located east of Tonawanda Island and just north of the confluence of the Erie Canal and the Niagara River. The property is commonly referred to as the Schreck's Scrapyard Site (the Site) and is listed as a Class 4 site (Site Number 932099) in the Registry of Inactive Hazardous Waste Disposal Sites in New York State. Operational uses of the Site from 1951 to 1977 included a former metal and scrap iron business, disposal of drummed phenolic waste and salvage of electrical transformers.

Subsequent to termination of the disposal and salvaging operations, an environmental audit and remedial investigation were implemented to characterize potential impacts to soil and groundwater media. The results of these investigations determined that onsite soil materials and a press pit were contaminated with elevated concentrations of PCBs petroleum derivatives (fuel oil) and metals. The Record of Decision completed in September 1990, presented the NYSDEC's selected remedial alternative for the site. Remedial actions implemented at the Site in 1991 and 2000 resulted in the excavation and disposal of drums, liquids, soil materials, remediation of the press pit, and the demolition of selected buildings.

Based on the Post-Remediation Groundwater Monitoring Plan (Camp Dresser & McKee, November 1994) the NYSDEC collected groundwater samples from the Site monitoring well network during the period of time of 1995 until 2002. In May 2008, the NYSDEC issued the Reclassification Decision Report recommending that the Schreck's Scrapyard Site remain in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as a Class 4 site which will continue to require long term monitoring and an institutional control listing the Site in the registry of Former Hazardous Waste Disposal Sites.

1.2. Purpose

This report summarizes the results of a groundwater quality monitoring event completed for the Schreck's Scrapyard Site on May 13, 2013. This report was prepared as an element of the requisite NYSDEC Periodic Review and provides a comparison of the May 2013 results with regulatory guidelines and historic monitoring results.

2. Monitoring Network and Requirements

2.1 Monitoring Network

The groundwater monitoring network at the Schreck's Scrapyard Site consists of five monitoring wells designated: MW-3, MW-4, MW-5A (replacement MW-5R), MW-6R and MW-7. Figure 2 illustrates the existing Scrapyard Site monitoring network.

The NYSDEC monitoring program requires the collection of groundwater samples from the monitoring well network. The program also requires:

- n Inspection of the physical integrity of each groundwater monitoring well;
- n PID measurements to characterize presence of volatile organic vapors in monitoring well headspaces and;
- n Procedural determination to check for presence of floating light non-aqueous phase liquid (LNAPL) product.

The wells are sampled for volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and Target Analyte List (TAL) metals.

3. Monitoring Methods

3.1. Post Remediation Inspection

The Post-Remediation Groundwater Monitoring Plan (Camp Dresser & McKee, 1994) stipulated that inspection and monitoring of the Scrapyard Site be performed on a quarterly basis during the first year (1995) and thereafter at the discretion of the NYSDEC. Accordingly, a long term inspection and monitoring program was implemented on a yearly basis for a period of seven years from 1996 to 2002. Groundwater sampling was not performed during calendar years 2003 to 2008 at the discretion of the NYSDEC. As documented in the Reclassification Decision Report (NYSDEC, May 2008) the long term inspection and monitoring program will be continued indefinitely on an annual basis beginning in 2009. The inspection includes an assessment of the monitoring well network integrity and measurement of organic vapors in the well headspace, and screening for floating LNAPL product. The integrity and functionality of the monitoring wells, and related infrastructure are addressed during the periodic inspection.

The most recent periodic inspection was performed concurrently with the groundwater sampling event on May 13, 2013. The Well Inspection Checklist is included as Table 1.

3.2. Sampling Procedures

During the May 2013 monitoring event, field sampling personnel collected groundwater samples from each of the five monitoring wells identified in Section 2.0. Accutest Laboratories of New England analyzed the samples collected for the analytical parameters listed in Table 2.

Groundwater was purged from monitoring locations prior to sampling, and periodically measured for the field parameters identified in Table 3. The groundwater sampling field data sheets are included in Appendix A.

3.2.1. Monitoring Wells

Prior to purging, static water levels were measured in all of the monitoring wells. Table 4 is a compilation of water level data measured during the May 2013 sampling event. The monitoring wells were then purged in accordance with the procedures specified in the Post-Remediation Groundwater Monitoring Plan (Reference 1). All sampled wells exhibited rapid or continuous recovery after purging and were allowed to recharge prior to sampling. Groundwater samples were collected using dedicated disposable bailers in accordance with the protocols identified in Reference 1. Samples for laboratory analysis were stored in the appropriate plastic or glass bottles, pre-preserved by the lab and placed

on ice in the field, and picked up by an Accutest carrier to be shipped to Accutest Laboratories of New England.

3.3. QA/QC Procedures

Quality Assurance and Quality Control (QA/QC) measures taken to verify the reliability of the generated data were as follows:

- n The analytical laboratory provided in-house QA/QC including method blank and laboratory control summary results. QA/QC documentation, including chain-of-custody forms, is provided in Appendix C with the analytical report prepared by Accutest Laboratories.

4. Data Usability

4.1. Analytical Data Assessment

4.1.1. Introduction

The results reported by Accutest for samples collected at the Schreck's Scrapyard Site during May 2013 are assessed in this section. The data was evaluated to determine conformance with the requirements specified in the Groundwater Monitoring Plan (Reference 1).

Evaluation of the data was based on information supplied by the field data sheets, chain-of-custody forms and duplicate data. In addition, the assessment of analytical data included a review of data consistency.

4.1.2. Data Usability

A discussion of laboratory quality control (QC) analytical results is presented in the case narrative of the laboratory analytical report. Based upon a review of laboratory and field QC data, the analytical results reported by the laboratory are usable for assessing groundwater quality at the Scrapyard site.

4.1.3. Sample Holding Times

Holding time criteria for each of the parameters monitored at the Scrapyard Site are outlined in protocols mandated by the NYSDEC. Comparison of the sample collection dates listed on the chain-of-custody form with the reported dates of analysis listed on the laboratory chronicle indicates that all samples were analyzed prior to expiration of their prescribed holding times.

4.1.4. Laboratory/Reagent Blank Analyses

Laboratory (method) blank analyses were performed to identify the existence and magnitude of sample contamination originating during sample preparation and/or analysis. Laboratory blanks were prepared from deionized water and were analyzed for volatile organic compounds.

Since none of the inorganic compounds were detected in site samples, no qualifications of analytical data were made. All blank spike recoveries for inorganic elements were within QC limits.

5. Summary of 2013 Annual Monitoring Results

5.1. Water Quality Data

The groundwater water quality results for historical groundwater samples and the May 2013 monitoring event are presented in Tables 5, 6, and 7. The complete laboratory analytical report for the 2013 sampling event is attached in Appendix C. Examination of the tabulated data highlighted specific analyte concentrations detected above NYSDEC Groundwater Water Quality Standards / Guidance Values.

5.2. Evaluation of Monitoring Results

A comparison of the groundwater monitoring data to Class "GA" Groundwater Water Quality Standards/Guidance Values (GWQS) is presented in Tables 5, 6, and 7. Based on this information, a historical summary of analytical detections that exceed NYSDEC Class GA groundwater standards is presented below:

VOCs

VOCs that were detected above groundwater standards include benzene and chlorobenzene. Benzene and chlorobenzene was detected in the groundwater sample collected at MW-6R during the May 2013 sampling event. Benzene was detected in the groundwater sample collected at MW-6R at a concentration of 1.1 µg/L. The Class GA threshold for benzene is 1.0 µg/L. Chlorobenzene was detected in the groundwater sample collected at MW-6R at concentrations of 5.7 µg/L. The Class GA threshold for chlorobenzene is 5.0 µg/L. No other VOCs were detected in any of the wells sampled.

PCBs

Two wells, MW-3 and MW-4, have had historical pesticide detections in the groundwater samples. Three PCB aroclors (aroclor-1242, aroclor-1248, and aroclor-1254) have been detected at concentrations above the Class GA groundwater standard of 0.09 at well MW-3 during more than one historical sampling event. However, no PCBs or pesticides were detected in the any of the groundwater samples collected during the May 2013 sampling event and it has been over four years since the last PCB or pesticide detection.

Metals / Inorganics

Several metals have been detected in each monitoring well at concentrations above class GA standards since sampling began in 1995. Of these metals, three are essential nutrients and are commonly found naturally occurring at such levels in local groundwater, these include iron, magnesium, and sodium. Other metals detected at elevated concentrations

include: aluminum, arsenic, barium, calcium, chromium, copper, lead, mercury, manganese, potassium, and zinc.

With the exception of the common essential nutrients mentioned above, no metals were present at concentrations above standards during the May 2013 monitoring event.

Although elevated concentrations of iron, magnesium and sodium were routinely detected in groundwater samples, it is important to recognize that these common and naturally occurring elements are necessary for human health and development. As summarized in Tables 5, 6, and 7, results of the May 2013 sampling event are generally consistent with and at lesser concentrations than those reported for historic groundwater samples collected during the initial quarterly Post-Remediation sampling events (1995) as well as subsequent annual monitoring events (1996 – 2002).

5.3. Evaluation of Groundwater

To assess the existing groundwater quality at the Schreck's Scrapyard Site, analytical data determined to be historically persistent with regards to groundwater impacts, and were graphed and evaluated for observable concentration trends. Based on concentrations and frequency of detection, manganese was selected for evaluation as a Constituent of Interest (COI) in each of the five monitoring wells. Total lead and total chromium were also selected as COIs for wells MW-4, MW- 6R, and MW-7. Benzene was selected as a COI for well MW-6R, and total PCBs were selected as COI for wells MW-3 and MW-4.

Analytical data presented in Tables 5, 6, and 7 were used to establish graphs of concentration(s) vs. time for the above-cited COIs during the period of time from May 1995 through May 2013.

Review of the graphed concentrations shows the COIs, when present, are generally at the lower end of the range detected and in most cases below the respective groundwater standard. An exception to this is benzene and chlorobenzene in well MW-6R which was present in 2013 above the standard.

The development of a groundwater monitoring database over a period of several years may reveal seasonal and/or water chemistry influences on contaminant concentrations. DEC may be petitioned in the future to reduce the number of sample parameters tested or frequency of testing based on constituent trend data. Concentration vs. time graphs for the selected COIs are presented in Appendix D.

6. Summary of Groundwater Elevation Data

Prior to collection of groundwater samples at the Schreck's Scrapyard Site, depth to groundwater measurements were recorded at each on-site shallow overburden monitoring well to establish water table elevations. A tabulated summary of water level data is presented in Table 4. Groundwater elevation data from the five wells were used to prepare the isopotential groundwater contour map, Figure 3.

The general direction of overburden groundwater flow for the Schreck's Scrapyard Site on May 13, 2013 is shown on the shallow groundwater isopotential map (Figure 3). This map shows a general overburden groundwater flow direction from northeast to west.

7. Post-Closure Inspection Results

A review of the Post Remediation monitoring well inspection results conducted May 13, 2013 generally indicate that the monitoring network is performing as designed. Free product light non-aqueous phase liquid (LNAPL) was not observed in any of the sampled wells. The institutional control, a soil cover system, remains in place. Currently the Site is listed on the Hazardous Waste Site Registry and long term groundwater monitoring is scheduled to continue on an annual basis. Appendix E provides a copy of the Institutional and Engineering Controls Certification form signed by the Site Owner.

As shown on Table 1 physical elements of the monitoring well network that require resolution are as follows:

- Replacement of old, cracked slip cover on MW-3

Although several metals have been detected in each monitoring well at concentrations above class GA standards since sampling began in 1995, the past three years metals have only seen exceedances in iron, magnesium, and sodium. These three are essential nutrients and are commonly found naturally occurring at such levels in local groundwater. With the exception of the common essential nutrients mentioned above, no metals were present at concentrations above standards since selenium was detected in the 2010 sampling, 2 µg/l over the standard limit, and chromium, manganese, and nickel were detected during the 2009 sampling.

No PCBs or pesticides have been detected in any of the wells at the Site for the past four years. Also, the two VOCs that were detected as part of the 2013 sampling event were only slightly above the Class GA Standard, and generally consistent with previous year's results.

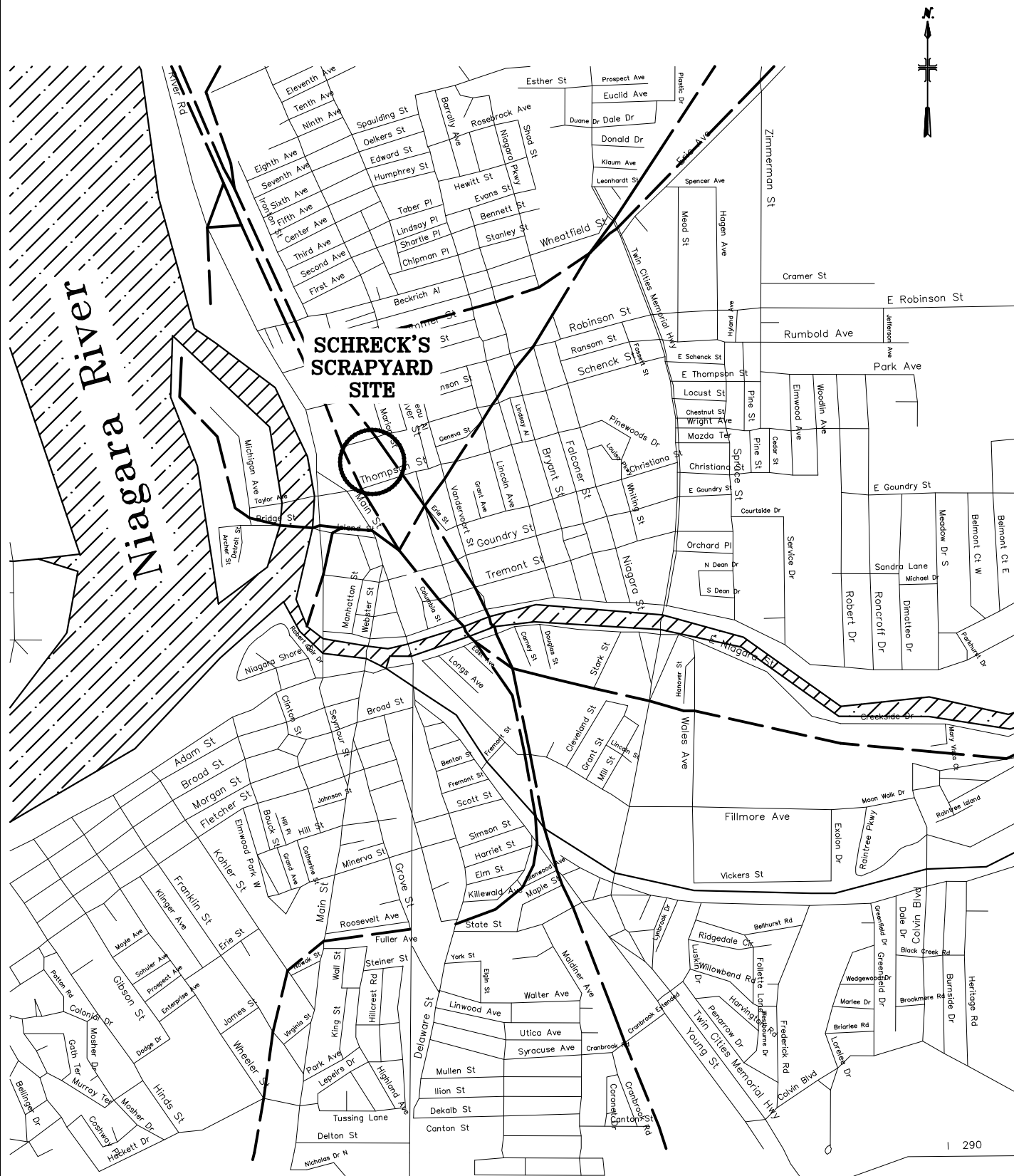
Based on the inspection results summary described above, it is requested that annual groundwater sampling no longer be required at the Site.

8. References

Camp Dresser & McKee. November 1994. *Post-Remediation Groundwater Monitoring Plan for the Schreck's Scrapyard*.

Department of Environmental Conservation. May 2008. *Reclassification Decision Report, Schreck's Scrapyard Site, Site No. 932099, City of North Tonawanda, Niagara County, New York*.

Figures

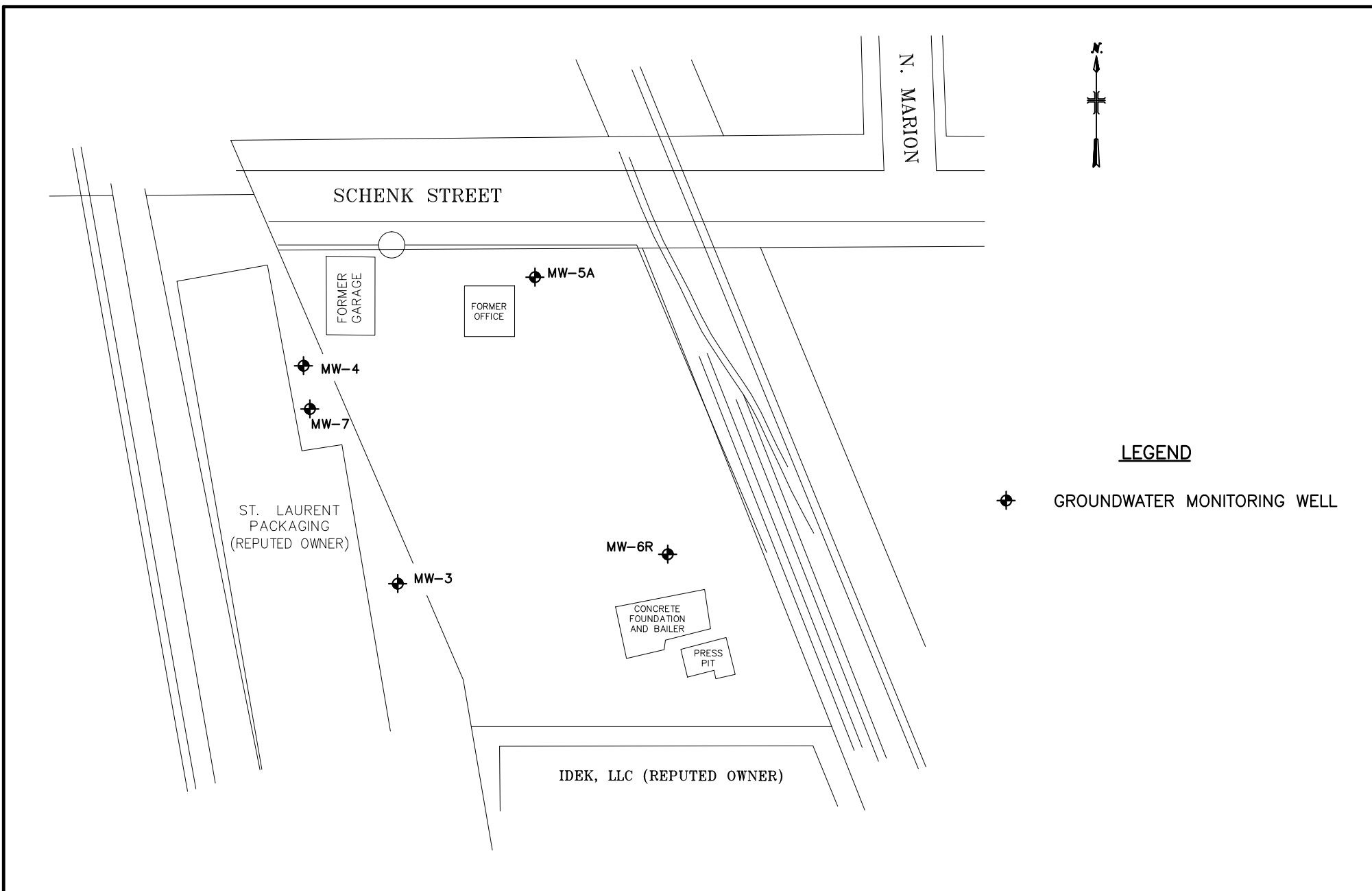


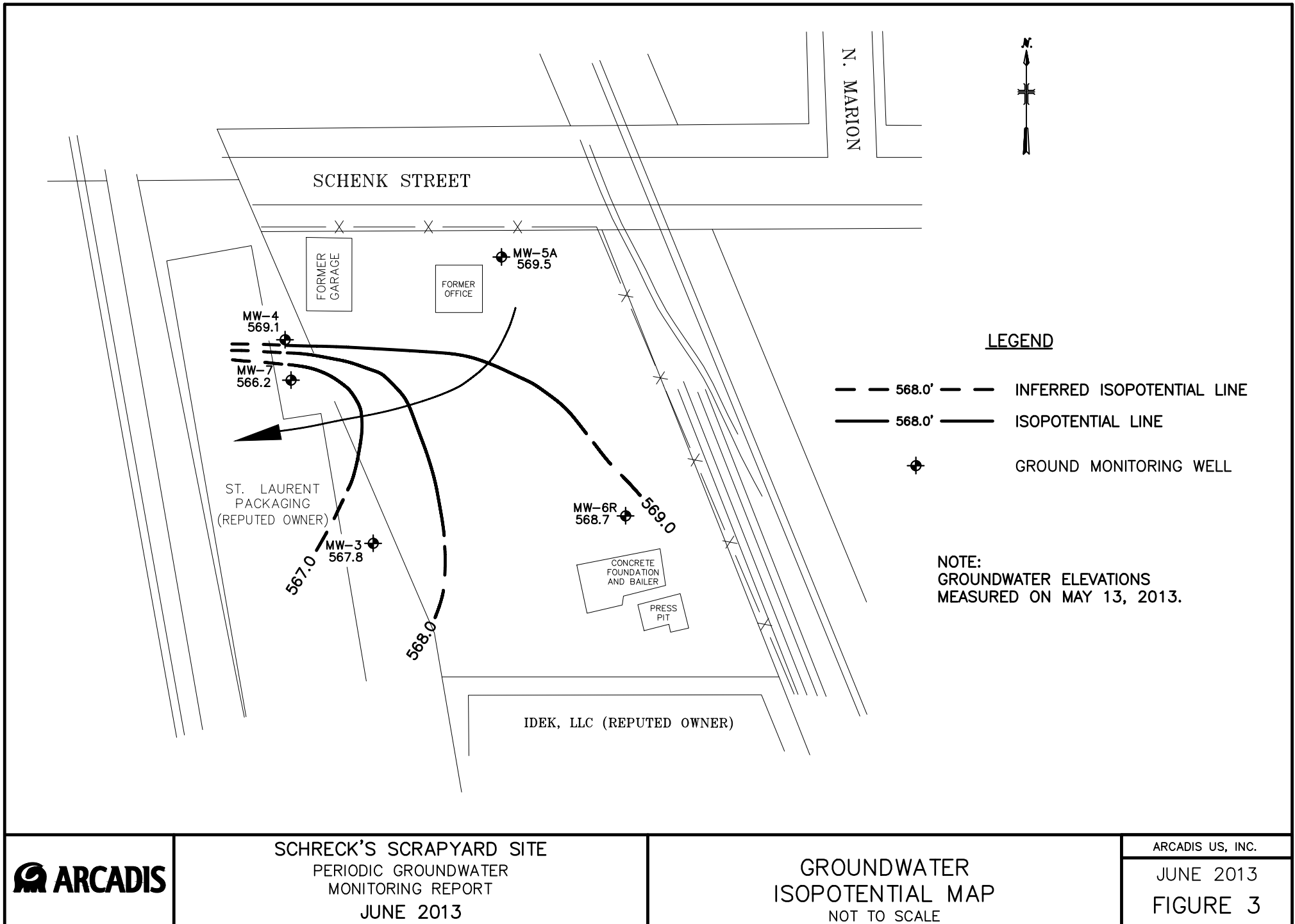
SCHRECK'S SCRAPYARD SITE
PERIODIC GROUNDWATER
MONITORING REPORT
JUNE 2013

SITE LOCATION MAP

ARCADIS US, INC.

FIGURE 1





Tables

TABLE 1

**MONITORING WELL INSPECTION CHECKLIST - May 13, 2013
Schreck's Scrapyard Site**

LOCATION	INSPECTION DATE	Water Level Ft./ BTOR	Well Identification	Casing Lock	Protective Cover	PVC Well Cap	Well Obstruction(s)	Water in Protective Casing Annulus	Condition of Concrete Pad
MW-3	05/13/13	10.72	Good	Good	Fair	Poor	None	No	Good
MW-4	05/13/13	9.34	Good	Good	Fair	Fair	None	No	Fair
MW-5A	05/13/13	9.01	None	Fair	Good	Good	None	No	Good
MW-6R	05/13/13	11.42	Good	Good	Good	Good	None	No	Good
MW-7	05/13/13	8.01	None	Good	Fair	Good	None	No	Good

Notes :

BTOR - Below top of Riser

TABLE 2

GROUNDWATER ANALYTICAL PARAMETERS
PERIODIC GROUNDWATER MONITORING EVENT- MAY 13, 2013
SCHRECK'S SCRAPYARD SITE

	Sampling Parameters
FIELD PARAMETERS⁽¹⁾	
Water Level	X
Specific Conductance	X
Temperature	X
Turbidity	X
pH	X
Dissolved Oxygen	X
Floaters / Sinkers	X
Field Observations	X
TCL Volatile Organics⁽²⁾	X
PCBs	X
TAL METALS	X

Notes:

(1) All field parameters (i.e., pH, Eh, DO, Specific Conductance, Temperature, and Turbidity) measured in the field by the sampling team.

(2) Volatile organic compounds are those compounds Identified by Method 8260 .

TABLE 3
SUMMARY OF FIELD MEASUREMENTS⁽¹⁾
Groundwater Monitoring Event - May 24 - 25, 2012
Schreck's Scrapyard Site

MONITORING WELL DESIGNATION	SAMPLING DATE	SAMPLING TIME	TEMP (°C)	pH (units)	CONDUCTANCE (mS/cm)	TURBIDITY ⁽³⁾ (NTU)	DISSOLVED OXYGEN (mg/l)	LNAPL ⁽²⁾	SAMPLE APPEARANCE ⁽³⁾
MW-3	05/13/13	14:30	8.30	7.17	1.26	45.4	1.8	NP	Clear, floating orange fines
MW-4 ⁽⁴⁾	05/13/13	16:00	8.40	7.97	0.24	26.9	8.6	NP	Clear to light gray
MW-5A	05/13/13	11:45	9.8	7.22	1.19	34.8	1.7	NP	Clear to slightly turbid
MW-6R	05/13/13	15:30	8.70	7.73	0.98	8.5	3.4	NP	Clear
MW-7 ⁽⁴⁾	05/13/13	16:25	10.50	7.79	1.14	25.6	2.4	NP	Clear to light red

Notes :

(1) Except where noted, all measurements are readings collected immediately prior to sampling.

(2) Light Non-aqueous Phase Liquid.

(3) Turbidity and Sample Appearance are based on last measurement interval prior to sampling.

(4) Due to the well previously going dry only turbidity was measured immediately prior to sampling.

NP=Not Present

TABLE 4
SUMMARY OF GROUNDWATER ELEVATION MEASUREMENTS
PERIODIC REVIEW REPORT
SCHRECK'S SCRAPYARD SITE

Location	PVC Riser Elevation (ft)	28-May-2009		13-May-2010		11-May-2011		24-May-2012		13-May-2013			
		Depth ⁽¹⁾ (ft)	Elevation (ft)	Depth ⁽¹⁾ (ft)	Elevation (ft)	Depth ⁽¹⁾ (ft)	Elevation (ft)	Depth ⁽¹⁾ (ft)	Elevation (ft)	Depth ⁽¹⁾ (ft)	Elevation (ft)	Depth ⁽¹⁾ (ft)	Elevation (ft)
MW - 3	578.50	10.82	567.68	10.6	567.90	10.1	568.4	10.85	567.7	10.72	567.8		
MW - 4	578.47	10.80	567.67	11.03	567.44	8.8	569.7	11.25	567.2	9.34	569.1		
MW - 5A ⁽²⁾	578.50	10.85	567.65	10.68	567.82	NA	NA	9.00	569.5	9.01	569.5		
MW - 6R	580.11	11.60	568.51	11.4	568.71	11.1	569.1	11.56	568.6	11.42	568.7		
MW - 7	575.52	8.80	566.72	8.43	567.09	8.5	567.1	9.64	565.9	9.34	566.2		

Notes:

- (1) All depths measured as feet below top of PVC riser.
(2) MW-5A was built in order to replace MW-5R

TABLE 5
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF VOLATILE ORGANIC COMPOUND RESULTS
SHRECK'S SCRAPYARD SITE

Well MW-3

Analyte	Groundwater Standards*	4/16/97	6/17/98	4/21/99	5/31/00	5/16/01	6/11/02	5/28/09	5/13/10	5/13/10	5/27/11	5/24/12	5/13/13
Chloromethane	NS	U	U	U	U	NA	NA	U	U	U	U	U	U
Bromochloromethane	5	U	U	U	U	NA	NA	U	U	U	U	U	U
Vinyl Chloride	2	U	U	U	U	NA	NA	U	U	U	U	U	U
Chloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U	U
Methylene Chloride	5	U	9 BJ	U	U	NA	NA	U	U	U	U	U	U
Acetone	50 G	U	3 BJ	U	2J	NA	NA	2.6 J	U	U	U	U	U
Carbon Disulfide	NS	U	U	U	U	NA	NA	U	U	U	U	U	U
1,1-Dichloroethene	5	U	U	U	U	NA	NA	U	U	U	U	U	U
1,1-Dichloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U	U
1,2-Dichloroethene (total)	5	U	U	U	U	NA	NA	U	U	U	U	U	U
Chloroform	7	U	U	U	U	NA	NA	U	U	U	U	U	U
1,2-Dichloroethane	0.6	U	U	U	U	NA	NA	U	U	U	U	U	U
2-Butanone	50 G	U	2 BJ	U	U	NA	NA	U	U	U	U	U	U
1,1,1-Trichloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U	U
Carbon Tetrachloride	5	U	U	U	U	NA	NA	U	U	U	U	U	U
Bromodichloromethane	50 G	U	U	U	U	NA	NA	U	U	U	U	U	U
1,2-Dichloropropane	1	U	U	U	U	NA	NA	U	U	U	U	U	U
cis-1,3-dichloropropene	0.4	U	U	U	U	NA	NA	U	U	U	U	U	U
Trichloroethene	5	U	U	U	U	NA	NA	U	U	U	U	U	U
Dibromochloromethane	50 G	U	U	U	U	NA	NA	U	U	U	U	U	U
1,1,2-Trichloroethane	1	U	U	U	U	NA	NA	U	U	U	U	U	U
Benzene	1	U	U	U	U	NA	NA	U	U	U	U	U	U
Trans-1,3-dichloropropene	0.4	U	U	U	U	NA	NA	U	U	U	U	U	U
Bromoform	50 G	U	U	U	U	NA	NA	U	U	U	U	U	U
4-Methyl-2-Pentanone	NS	U	U	U	U	NA	NA	U	U	U	U	U	U
2-Hexanone	50 G	U	U	U	U	NA	NA	U	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	NA	NA	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U	U
Toluene	5	U	U	U	U	NA	NA	U	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	NA	NA	U	U	U	U	U	U
Ethylbenzene	5	U	U	U	U	NA	NA	U	U	U	U	U	U
Styrene	5	U	U	U	U	NA	NA	U	U	U	U	U	U
Total Xylenes	5	U	U	U	U	NA	NA	U	U	U	U	U	U

All concentrations in ug/l.

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

G Guidance value.

B Analyte found in the associated blank as well as the sample.

J Estimated value. The indicated value is less than the sample quantification limit but greater than zero.

NA Not analyzed. Compound removed from long term monitoring in 2001 due to consistent non-detections.

NS No standard or guidance value available.

U Indicates that the compound was not detected.

Shaded values equal or exceed groundwater standards or guidance values.

TABLE 5
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF VOLATILE ORGANIC COMPOUND RESULTS
SCHRECK'S SCRAPYARD SITE

Well MW-4

Analyte	Groundwater Standards*	6/23/97	6/18/98	4/21/99	5/31/00	5/16/01	6/11/02	5/29/09	5/13/10	5/27/11	5/25/12	5/13/13
Chloromethane	NS	U	U	U	U	NA	NA	U	U	U	U	U
Bromochloromethane	5	U	U	U	U	NA	NA	U	U	U	U	U
Vinyl Chloride	2	U	U	U	U	NA	NA	U	U	U	U	U
Chloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U
Methylene Chloride	5	U	8 BJ	U	U	NA	NA	U	U	U	U	U
Acetone	50 G	U	3 BJ	U	U	NA	NA	U	U	U	U	U
Carbon Disulfide	NS	U	U	U	U	NA	NA	U	U	U	U	U
1,1-Dichloroethene	5	U	U	U	U	NA	NA	U	U	U	U	U
1,1-Dichloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U
1,2-Dichloroethene (total)	5	U	U	U	U	NA	NA	U	U	U	U	U
Chloroform	7	U	U	U	U	NA	NA	1.7	U	U	3.74	U
1,2-Dichloroethane	0.6	U	U	U	U	NA	NA	U	U	U	U	U
2-Butanone	50 G	U	2 BJ	U	U	NA	NA	U	U	U	U	U
1,1,1-Trichloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U
Carbon Tetrachloride	5	U	U	U	U	NA	NA	U	U	U	U	U
Bromodichloromethane	50 G	U	U	U	U	NA	NA	0.66	U	U	U	U
1,2-Dichloropropane	1	U	U	U	U	NA	NA	U	U	U	U	U
cis-1,3-dichloropropene	0.4	U	U	U	U	NA	NA	U	U	U	U	U
Trichloroethene	5	U	U	U	U	NA	NA	U	U	U	U	U
Dibromochloromethane	50 G	U	U	U	U	NA	NA	U	U	U	U	U
1,1,2-Trichloroethane	1	U	U	U	U	NA	NA	U	U	U	U	U
Benzene	1	U	U	U	U	NA	NA	U	U	U	U	U
Trans-1,3-dichloropropene	0.4	U	U	U	U	NA	NA	U	U	U	U	U
Bromoform	50 G	U	U	U	U	NA	NA	U	U	U	U	U
4-Methyl-2-Pentanone	NS	U	U	U	U	NA	NA	U	U	U	U	U
2-Hexanone	50 G	U	U	U	U	NA	NA	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	NA	NA	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U
Toluene	5	U	U	U	U	NA	NA	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	NA	NA	U	U	U	U	U
Ethylbenzene	5	U	U	U	U	NA	NA	U	U	U	U	U
Styrene	5	U	U	U	U	NA	NA	U	U	U	U	U
Total Xylenes	5	U	U	U	U	NA	NA	U	U	U	U	U

All concentrations in ug/l.

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

G Guidance value.

B Analyte found in the associated blank as well as the sample.

J Estimated value. The indicated value is less than the sample quantification limit but greater than zero.

NA Not analyzed. Compound removed from long term monitoring in 2001 due to consistent non-detections.

NS No standard or guidance value available.

U Indicates that the compound was not detected.

Shaded values equal or exceed groundwater standards or guidance values.

TABLE 5
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF VOLATILE ORGANIC COMPOUND RESULTS
SCHRECK'S SCRAPYARD SITE

Well MW-5A⁽¹⁾

Analyte	Groundwater Standards*	4/16/97	6/18/98	4/21/99	5/31/00	5/16/01	6/11/02	5/28/09	5/13/10	5/27/11	5/25/12	5/13/13
Chloromethane	NS	U	U	U	U	NA	NA	U	U	NA	U	U
Bromochloromethane	5	U	U	U	U	NA	NA	U	U	NA	U	U
Vinyl Chloride	2	U	U	U	U	NA	NA	U	U	NA	U	U
Chloroethane	5	U	U	U	U	NA	NA	U	U	NA	U	U
Methylene Chloride	5	U	9 BJ	U	U	NA	NA	U	U	NA	U	U
Methyl tert-Butyl Ether	10	NA	NA	NA	NA	NA	NA	11	12	NA	U	U
Acetone	51 G	U	U	U	U	NA	NA	2.4	U	NA	16.5	U
Carbon Disulfide	NS	U	U	U	U	NA	NA	U	U	NA	2.35	U
1,1-Dichloroethene	5	U	U	U	U	NA	NA	U	U	NA	U	U
1,1-Dichloroethane	5	U	U	U	U	NA	NA	U	U	NA	U	U
1,2-Dichloroethene (total)	5	U	U	U	U	NA	NA	U	U	NA	U	U
Chloroform	7	U	U	U	U	NA	NA	U	U	NA	U	U
1,2-Dichloroethane	0.6	U	U	U	U	NA	NA	U	U	NA	U	U
2-Butanone	50 G	U	U	U	U	NA	NA	U	U	NA	U	U
1,1,1-Trichloroethane	5	U	U	U	U	NA	NA	U	U	NA	U	U
Carbon Tetrachloride	5	U	U	U	U	NA	NA	U	U	NA	U	U
Bromodichloromethane	50 G	U	U	U	U	NA	NA	U	U	NA	U	U
1,2-Dichloropropane	1	U	U	U	U	NA	NA	U	U	NA	U	U
cis-1,3-dichloropropene	0.4	U	U	U	U	NA	NA	U	U	NA	U	U
Trichloroethene	5	U	U	U	U	NA	NA	U	U	NA	U	U
Dibromochloromethane	50 G	U	U	U	U	NA	NA	U	U	NA	U	U
1,1,2-Trichloroethane	1	U	U	U	U	NA	NA	U	U	NA	U	U
Benzene	1	U	U	U	U	NA	NA	U	U	NA	U	U
Trans-1,3-dichloropropene	0.4	U	U	U	U	NA	NA	U	U	NA	U	U
Bromoform	50 G	U	U	U	U	NA	NA	U	U	NA	U	U
4-Methyl-2-Pentanone	NS	U	U	U	U	NA	NA	U	U	NA	U	U
2-Hexanone	50 G	U	U	U	U	NA	NA	U	U	NA	U	U
Tetrachloroethene	5	U	U	U	U	NA	NA	U	U	NA	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	NA	NA	U	U	NA	U	U
Toluene	5	U	U	U	U	NA	NA	U	U	NA	U	U
Chlorobenzene	5	U	U	U	U	NA	NA	U	U	NA	U	U
Ethylbenzene	5	U	U	U	U	NA	NA	U	U	NA	U	U
Styrene	5	U	U	U	U	NA	NA	U	U	NA	U	U
Total Xylenes	5	U	U	U	U	NA	NA	U	U	NA	U	U

All concentrations in ug/l.

⁽¹⁾ Formerly MW-5R

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

G Guidance value.

B Analyte found in the associated blank as well as the sample.

J Estimated value. The indicated value is less than the sample quantification limit but greater than zero.

NA Not analyzed. Compound removed from long term monitoring in 2001 due to consistent non-detections.

NS No standard or guidance value available.

U Indicates that the compound was not detected.

Well MW-5R not sampled in 2011 due to well blockage

Shaded values equal or exceed groundwater standards or guidance values.

TABLE 5
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF VOLATILE ORGANIC COMPOUND RESULTS
SCHRECK'S SCRAPYARD SITE

Well MW-6R

Analyte	Groundwater Standards*	4/16/97	6/17/98	4/21/99	5/31/00	5/16/01	6/11/02	5/28/09	5/13/10	5/27/11	5/24/12	5/13/13
Chloromethane	NS	U	U	U	U	NA	NA	U	U	U	U	U
Bromochloromethane	5	U	U	U	U	NA	NA	U	U	U	U	U
Vinyl Chloride	2	U	U	U	U	NA	NA	U	U	U	U	U
Chloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U
Methylene Chloride	5	U	9 BJ	U	U	NA	NA	U	U	U	U	U
Acetone	50 G	U	U	U	3J	NA	NA	2.2 J	U	U	U	U
Carbon Disulfide	NS	U	U	U	U	NA	NA	U	U	U	U	U
1,1-Dichloroethene	5	U	U	U	U	NA	NA	U	U	U	U	U
1,1-Dichloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U
1,2-Dichloroethene (total)	5	U	U	U	U	NA	NA	U	U	U	U	U
Chloroform	7	U	U	U	U	NA	NA	U	U	U	U	U
1,2-Dichloroethane	0.6	U	U	U	U	NA	NA	U	U	U	U	U
2-Butanone	50 G	U	U	U	U	NA	NA	U	U	U	U	U
1,1,1-Trichloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U
Carbon Tetrachloride	5	U	U	U	U	NA	NA	U	U	U	U	U
Bromodichloromethane	50 G	U	U	U	U	NA	NA	U	U	U	U	U
1,2-Dichloropropane	1	U	U	U	U	NA	NA	U	U	U	U	U
cis-1,3-dichloropropene	0.4	U	U	U	U	NA	NA	U	U	U	U	U
Trichloroethene	5	U	U	U	U	NA	NA	U	U	U	U	U
Dibromochloromethane	50 G	U	U	U	U	NA	NA	U	U	U	U	U
1,1,2-Trichloroethane	1	U	U	U	U	NA	NA	U	U	U	U	U
1,4-Dichlorobenzene	3							0.45 J	U	U	U	U
Benzene	1	6 J	U	2 J	27	NA	16	0.40 J	U	2.36	U	1.1
Trans-1,3-dichloropropene	0.4	U	U	U	U	NA	NA	U	U	U	U	U
Bromoform	50 G	U	U	U	U	NA	NA	U	U	U	U	U
4-Methyl-2-Pentanone	NS	U	U	U	U	NA	NA	U	U	U	U	U
2-Hexanone	50 G	U	U	U	U	NA	NA	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	NA	NA	U	U	U	U	U
1,1,1,2,2-Tetrachloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U
Toluene	5	2 J	U	U	U	NA	U	U	U	U	U	U
Chlorobenzene	5	U	U	1 J	4 J	NA	NA	3.9	U	U	U	5.7
Ethylbenzene	5	U	U	U	U	NA	U	U	U	U	U	U
Styrene	5	U	U	U	U	NA	NA	U	U	U	U	U
Total Xylenes	5	U	U	U	U	NA	U	U	U	U	U	U

All concentrations in ug/l.

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

G Guidance value.

B Analyte found in the associated blank as well as the sample.

J Estimated value. The indicated value is less than the sample quantification limit but greater than zero.

NA Not analyzed. Compound removed from long term monitoring in 2001 due to consistent non-detections. 8021 STARS ran on 6/11/02.

NS No standard or guidance value available.

U Indicates that the compound was not detected.

Shaded values equal or exceed groundwater standards or guidance values.

TABLE 5
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF VOLATILE ORGANIC COMPOUND RESULTS
SCHRECK'S SCRAPYARD SITE

Well MW-7

Analyte	Groundwater Standards*	4/16/97	6/17/98	4/21/99	5/31/00	5/16/01	6/11/02	5/28/09	5/13/10	5/27/11	5/25/12	5/13/13
Chloromethane	NS	U	U	U	U	NA	NA	U	U	U	U	U
Bromochloromethane	5	U	U	U	U	NA	NA	U	U	U	U	U
Vinyl Chloride	2	U	U	U	U	NA	NA	U	U	U	U	U
Chloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U
Methylene Chloride	5	U	10 BJ	U	U	NA	NA	U	U	U	U	U
Acetone	50 G	U	U	U	U	NA	NA	U	U	U	U	U
Carbon Disulfide	NS	U	U	U	U	NA	NA	U	U	U	U	U
1,1-Dichloroethene	5	U	U	U	U	NA	NA	U	U	U	U	U
1,1-Dichloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U
1,2-Dichloroethene (total)	5	U	U	U	U	NA	NA	U	U	U	U	U
Chloroform	7	U	U	U	U	NA	NA	U	U	U	U	U
1,2-Dichloroethane	0.6	U	U	U	U	NA	NA	U	U	U	U	U
2-Butanone	50 G	U	U	U	U	NA	NA	U	U	U	U	U
1,1,1-Trichloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U
Carbon Tetrachloride	5	U	U	U	U	NA	NA	U	U	U	U	U
Bromodichloromethane	50 G	U	U	U	U	NA	NA	U	U	U	U	U
1,2-Dichloropropane	1	U	U	U	U	NA	NA	U	U	U	U	U
cis-1,3-dichloropropene	0.4	U	U	U	U	NA	NA	U	U	U	U	U
Trichloroethene	5	U	U	U	U	NA	NA	U	U	U	U	U
Dibromochloromethane	50 G	U	U	U	U	NA	NA	U	U	U	U	U
1,1,2-Trichloroethane	1	U	U	U	U	NA	NA	U	U	U	U	U
Benzene	1	U	U	U	U	NA	NA	U	U	U	U	U
Trans-1,3-dichloropropene	0.4	U	U	U	U	NA	NA	U	U	U	U	U
Bromoform	50 G	U	U	U	U	NA	NA	U	U	U	U	U
4-Methyl-2-Pentanone	NS	U	U	U	U	NA	NA	U	U	U	U	U
2-Hexanone	50 G	U	U	U	U	NA	NA	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	NA	NA	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	NA	NA	U	U	U	U	U
Toluene	5	U	U	U	U	NA	NA	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	NA	NA	U	U	U	U	U
Ethylbenzene	5	U	U	U	U	NA	NA	U	U	U	U	U
Styrene	5	U	U	U	U	NA	NA	U	U	U	U	U
Total Xylenes	5	U	U	U	U	NA	NA	U	U	U	U	U

All concentrations in ug/l.

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

G Guidance value.

B Analyte found in the associated blank as well as the sample.

J Estimated value. The indicated value is less than the sample quantification limit but greater than zero.

NA Not analyzed. Compound removed from long term monitoring in 2001 due to consistent non-detections.

NS No standard or guidance value available.

U Indicates that the compound was not detected.

Shaded values equal or exceed groundwater standards or guidance values.

TABLE 6
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF PESTICIDES/PCB RESULTRY
SCHRECK'S SCRAPYARD SITE

Well MW-3

Date Sampled	Groundwater Standard*	5/10/95	9/5/95	12/19/95	8/1/96	4/16/97	6/17/98	4/21/99	5/31/00	5/16/01	6/11/02	5/28/09	5/13/10	5/27/11	5/24/12	5/13/13
alpha-BHC	0.01	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
beta-BHC	0.04	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
delta-BHC	0.04	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	0.05	0.029 JP	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Heptachlor	0.04	U	U	U	U	0.0034 JP	U	U	U	U	U	NA	NA	NA	NA	NA
Aldrin	ND	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Heptachlor epoxide	0.03	U	U	U	U	0.010 JP	U	U	U	U	U	NA	NA	NA	NA	NA
Endosulfan I	ND	U	U	U	U	0.0086 JP	U	U	U	U	U	NA	NA	NA	NA	NA
Dieldrin	0.004	U	U	U	U	0.012 J	U	U	U	U	U	NA	NA	NA	NA	NA
4,4'-DDE	0.2	U	0.016 JP	U	U	0.0070 JP	U	U	U	U	U	NA	NA	NA	NA	NA
Endrin	ND	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Endosulfan II	ND	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
4,4' - DDD	0.3	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Endosulfan sulfate	ND	U	U	U	U	U	U	U	0.10 P	U	U	NA	NA	NA	NA	NA
4,4'-DDT	0.2	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Methoxychlor	35	U	U	U	U	U	U	U	0.34 JP	U	U	NA	NA	NA	NA	NA
Endrin ketone	5	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Endrin aldehyde	5	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
alpha-Chlordane	0.05	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
gamma -Chlordane	0.05	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Toxaphene	0.06	U	U	U	U	U	U	U	U	NA	U	NA	NA	NA	NA	NA
Aroclor-1016	0.09 ⁽¹⁾	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1221		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1232		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1242		0.48 JP	1.2	0.31 JP	U	U	U	1.0 PX	U	U	U	U	U	U	U	U
Aroclor-1248		U	U	U	U	U	U	U	4.1	U	U	0.46	U	U	U	U
Aroclor-1254		U	U	U	U	U	U	0.59 JPX	U	U	U	U	U	U	U	U
Aroclor-1260		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U

All concentrations in ug/l.

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

J - Estimated value. The indicated value is less than the sample quantification limit but greater than zero.

NA - Not analyzed.

ND - No detection standard established.

P >25% difference between the analytical results on two GC columns. The lower value is reported.

X - Manually integrated and calculated.

U - Indicates that the compound was not detected.

(1) Groundwater standard 0.09 applies to the sum of these substances.

Shaded values equal or exceed groundwater standards or guidance values.

TABLE 6
 PERIODIC REVIEW GROUNDWATER MONITORING REPORT
 SUMMARY OF PESTICIDES/PCB RESULTS
 SCHRECK'S SCRAPYARD SITE

Well MW-4

Date Sampled	Groundwater Standard*	5/10/95	9/5/95	12/19/95	8/1/96	6/23/97	6/18/98	4/21/99	5/31/00	5/16/01	6/11/02	5/28/09	5/13/10	5/27/11	5/25/12	5/13/13
alpha-BHC	0.01	U	U	U	U	0.0072 J	U	U	U	U	U	NA	NA	NA	NA	NA
beta-BHC	0.04	U	U	U	U	0.0090 JP	U	U	U	U	U	NA	NA	NA	NA	NA
delta-BHC	0.04	U	U	U	U	0.0067 J	U	U	U	U	U	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	0.05	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Heptachlor	0.04	U	U	U	U	0.0054 JP	U	U	U	U	U	NA	NA	NA	NA	NA
Aldrin	ND	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Heptachlor epoxide	0.03	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Endosulfan I	ND	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Dieldrin	0.004	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
4,4'-DDE	0.2	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Endrin	ND	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Endosulfan II	ND	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
4,4' - DDD	0.3	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Endosulfan sulfate	ND	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
4,4'-DDT	0.2	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Methoxychlor	35	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Endrin ketone	5	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Endrin aldehyde	5	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
alpha-Chlordane	0.05	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
gamma -Chlordane	0.05	U	U	U	U	U	U	U	U	U	U	NA	NA	NA	NA	NA
Toxaphene	0.06	U	U	U	U	U	U	U	U	NA	U	NA	NA	NA	NA	NA
Aroclor-1016	0.09 ⁽¹⁾	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1221		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1232		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1242		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1248		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1254		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor-1260		U	0.14 JP	0.57 JP	U	0.18 JP	U	0.69 JPX	1.1 P	U	0.39 JP	U	U	U	U	U

All concentrations in ug/l.

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

J - Estimated value. The indicated value is less than the sample quantification limit but greater than zero.

NA - Not analyzed.

ND - No detection standard established.

P >25% difference between the analytical results on two GC columns. The lower value is reported.

X - Manually integrated and calculated.

U - Indicates that the compound was not detected.

(1) Groundwater standard 0.09 applies to the sum of these substances.

Shaded values equal or exceed groundwater standards or guidance values.

TABLE 6
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF PESTICIDES/PCB RESULTS
SCHRECK'S SCRAPYARD SITE

Well MW-5A⁽¹⁾

Date Sampled	Groundwater Standard*	5/10/95	9/5/95	12/19/95	8/1/96	4/16/97	6/18/98	4/21/99	5/31/00	5/16/01	6/11/02	5/28/09	5/13/10	5/27/11	5/25/12	5/13/13
alpha-BHC	0.01	U	U	U	U	U	U	U	U	U	NOT SAMPLED	NA	NA	NOT SAMPLED	NA	NA
beta-BHC	0.04	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
delta-BHC	0.04	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
gamma-BHC (Lindane)	0.05	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
Heptachlor	0.04	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
Aldrin	ND	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
Heptachlor epoxide	0.03	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
Endosulfan I	ND	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
Dieldrin	0.004	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
4,4'-DDE	0.2	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
Endrin	ND	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
Endosulfan II	ND	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
4,4' - DDD	0.3	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
Endosulfan sulfate	ND	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
4,4'-DDT	0.2	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
Methoxychlor	35	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
Endrin ketone	5	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
Endrin aldehyde	5	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
alpha-Chlordane	0.05	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
gamma -Chlordane	0.05	U	U	U	U	U	U	U	U	U		NA	NA		NA	NA
Toxaphene	0.06	U	U	U	U	U	U	U	U	NA		NA	NA		NA	NA
Aroclor-1016	0.09 ⁽¹⁾	U	U	U	U	U	U	U	U	U	NOT SAMPLED	U	U	NOT SAMPLED	U	U
Aroclor-1221		U	U	U	U	U	U	U	U	U		U	U		U	U
Aroclor-1232		U	U	U	U	U	U	U	U	U		U	U		U	U
Aroclor-1242		U	U	U	U	U	U	U	U	U		U	U		U	U
Aroclor-1248		U	U	U	U	U	U	U	U	U		U	U		U	U
Aroclor-1254		U	U	U	U	U	U	U	U	U		U	U		U	U
Aroclor-1260		U	U	U	U	U	U	U	U	U		U	U		U	U

All concentrations in ug/l.

⁽¹⁾ Formerly MW-5R

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

J - Estimated value. The indicated value is less than the sample quantification limit but greater than zero.

NA - Not analyzed.

ND - No detection standard established.

P >25% difference between the analytical results on two GC columns. The lower value is reported.

X - Manually integrated and calculated.

U - Indicates that the compound was not detected.

(1) Groundwater standard 0.09 applies to the sum of these substances.

Well MW-5R not sampled in 2011 due to well blockage

Shaded values equal or exceed groundwater standards or guidance values.

TABLE 6
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF PESTICIDES/PCB RESULTS
SCHRECK'S SCRAPYARD SITE

Well MW-6R

Date Sampled	Groundwater Standard*	5/10/95	9/5/95	12/19/95	8/1/96	4/16/97	6/17/98	4/21/99	5/31/00	5/16/01	6/11/02	11/2/06	5/13/10	5/27/11	5/25/12	5/13/13
alpha-BHC	0.01	U	U	U	U	U	U	U	U	U	NOT SAMPLED	NA	NA	NA	U	NA
beta-BHC	0.04	0.019 JP	0.020 JP	U	U	U	U	U	U	U		NA	NA	NA	U	NA
delta-BHC	0.04	U	U	U	U	U	U	U	U	U		NA	NA	NA	U	NA
gamma-BHC (Lindane)	0.05	U	U	U	U	0.018 JP	U	U	U	U		NA	NA	NA	U	NA
Heptachlor	0.04	U	U	U	U	U	U	U	0.011 JP	U		NA	NA	NA	U	NA
Aldrin	ND	U	U	U	U	U	U	U	U	U		NA	NA	NA	NA	NA
Heptachlor epoxide	0.03	U	U	U	U	U	U	U	U	U		NA	NA	NA	NA	NA
Endosulfan I	ND	U	U	U	U	U	U	U	U	U		NA	NA	NA	U	NA
Dieldrin	0.004	U	U	U	U	U	U	U	U	U		NA	NA	NA	U	NA
4,4'-DDE	0.2	U	U	U	U	U	U	U	U	U		NA	NA	NA	U	NA
Endrin	ND	U	U	U	U	U	U	0.14	U	U		NA	NA	NA	U	NA
Endosulfan II	ND	U	U	U	U	U	U	U	U	U		NA	NA	NA	U	NA
4,4' - DDD	0.3	U	U	U	U	U	U	U	U	U		NA	NA	NA	U	NA
Endosulfan sulfate	ND	U	U	U	U	U	U	U	U	U		NA	NA	NA	U	NA
4,4'-DDT	0.2	U	U	U	U	U	U	U	U	U		NA	NA	NA	U	NA
Methoxychlor	35	U	U	U	U	U	U	U	U	U		NA	NA	NA	U	NA
Endrin ketone	5	U	U	U	U	U	U	U	U	U		NA	NA	NA	U	NA
Endrin aldehyde	5	U	U	U	U	U	U	U	U	U		NA	NA	NA	U	NA
alpha-Chlordane	0.05	U	U	U	U	U	U	U	U	U		NA	NA	NA	U	NA
gamma -Chlordane	0.05	U	U	U	U	U	U	U	U	U		NA	NA	NA	U	NA
Toxaphene	0.06	U	U	U	U	U	U	U	U	NA		NA	NA	NA	U	NA
Aroclor-1016	0.09 ⁽¹⁾	U	U	U	U	U	U	U	U	U		U	U	U	U	U
Aroclor-1221		U	U	U	U	U	U	U	U	U		U	U	U	U	U
Aroclor-1232		U	U	U	U	U	U	U	U	U		U	U	U	U	U
Aroclor-1242		U	U	U	U	U	U	U	U	U		U	U	U	U	U
Aroclor-1248		U	U	U	U	U	U	U	U	U		U	U	U	U	U
Aroclor-1254		U	U	U	U	U	U	U	U	U		U	U	U	U	U
Aroclor-1260		U	U	U	U	U	U	U	U	U		U	U	U	U	U

All concentrations in ug/l.

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

J - Estimated value. The indicated value is less than the sample quantification limit but greater than zero.

NA - Not analyzed.

ND - No detection standard established.

P >25% difference between the analytical results on two GC columns. The lower value is reported.

X - Manually integrated and calculated.

U - Indicates that the compound was not detected.

(1) Groundwater standard 0.09 applies to the sum of these substances.

Shaded values equal or exceed groundwater standards or guidance values.

TABLE 6
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF PESTICIDES/PCB RESULTS
SCHRECK'S SCRAPYARD SITE

Well MW-7

Date Sampled	Groundwater Standard*	5/10/95	9/5/95	12/19/95	8/1/96	6/23/97	6/18/98	4/21/99	5/31/00	5/16/01	6/11/02	5/28/09	5/13/10	5/27/11	5/25/12	5/13/13
alpha-BHC	0.01					U	U	U	U	U	NOT SAMPLED	NA	NA	NA	U	NA
beta-BHC	0.04					U	U	U	U	U		NA	NA	NA	U	NA
delta-BHC	0.04					0.0069 JP	U	U	U	U		NA	NA	NA	U	NA
gamma-BHC (Lindane)	0.05					U	U	U	U	U		NA	NA	NA	U	NA
Heptachlor	0.04					U	U	U	U	U		NA	NA	NA	U	NA
Aldrin	ND					U	U	U	U	U		NA	NA	NA	U	NA
Heptachlor epoxide	0.03					U	U	U	U	U		NA	NA	NA	NA	NA
Endosulfan I	ND					U	U	U	U	U		NA	NA	NA	NA	NA
Dieldrin	0.004					U	U	U	U	U		NA	NA	NA	U	NA
4,4'-DDE	0.2					0.011 JP	U	U	U	U		NA	NA	NA	U	NA
Endrin	ND					U	U	0.073 J	U	U		NA	NA	NA	U	NA
Endosulfan II	ND					U	U	U	U	U		NA	NA	NA	U	NA
4,4' - DDD	0.3					U	U	U	U	U		NA	NA	NA	U	NA
Endosulfan sulfate	ND					U	U	U	U	U		NA	NA	NA	U	NA
4,4'-DDT	0.2					U	U	U	U	U		NA	NA	NA	U	NA
Methoxychlor	35					U	U	U	U	U		NA	NA	NA	U	NA
Endrin ketone	5					U	U	U	U	U		NA	NA	NA	U	NA
Endrin aldehyde	5					U	U	U	U	U		NA	NA	NA	U	NA
alpha-Chlordane	0.05					U	U	U	U	U		NA	NA	NA	U	NA
gamma -Chlordane	0.05					U	U	U	U	U		NA	NA	NA	U	NA
Toxaphene	0.06					U	U	U	U	NA		NA	NA	NA	U	NA
Aroclor-1016	0.09 ⁽¹⁾					U	U	U	U	U		U	U	U	U	U
Aroclor-1221						U	U	U	U	U		U	U	U	U	U
Aroclor-1232						U	U	U	U	U		U	U	U	U	U
Aroclor-1242						U	U	U	U	U		U	U	U	U	U
Aroclor-1248						U	U	U	U	U		U	U	U	U	U
Aroclor-1254						U	U	U	U	U		U	U	U	U	U
Aroclor-1260						U	U	U	U	U		U	U	U	U	U

All concentrations in ug/l.

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

J - Estimated value. The indicated value is less than the sample quantification limit but greater than zero.

NA - Not analyzed.

ND - No detection standard established.

P >25% difference between the analytical results on two GC columns. The lower value is reported.

X - Manually integrated and calculated.

U - Indicates that the compound was not detected.

(1) Groundwater standard 0.09 applies to the sum of these substances.

Shaded values equal or exceed groundwater standards or guidance values.

TABLE 7
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF TOTAL METAL RESULTS
SCHRECK'S SCRAPYARD SITE

Well MW-3

Date Sampled	Groundwater Standards*	4/16/97	6/17/98	4/21/99	5/31/00	5/16/01	6/11/02	Dissolved 5/28/09	Total 5/28/09	Total 5/13/10	Total 5/27/11	Total 5/24/12	Total 5/13/13
Aluminum	NS	7,880	5,810	6,160	2,490	NOT SAMPLED	1,700	U	U	U	U	1,220	762
Antimony	3	U	U	U	U		U	U	U	U	U	U	U
Arsenic	25	U	4.6 B	11.7	9.5 B		U	U	U	U	U	U	U
Barium	1,000	152 B	112 B	142 B	128 B		101 B	134	138	115	U	109	113
Beryllium	3 G	U	U	U	U		0.30 B	U	U	U	U	U	U
Cadmium	5	U	0.64 B	U	U		0.30 B	U	U	U	U	U	U
Calcium	NS	158,000	139,000	143,000	163,000		148,000	203,000	207,000	184,000	U	170,000	184,000
Chromium	50	11.3	9.7 B	12.7	8.8 B		4.8 B	U	U	U	U	U	U
Cobalt	NS	5.4 B	3.3 B	4.4 B	1.9 B		1.9 B	U	U	U	U	U	U
Copper	200	14.8 B	16.3 B	20.0 B	14.4 B		7.6 B	U	U	U	U	U	U
Iron	500	11,300	17,200	26,300	19,000		3,800	534	1,970	370	U	2,200	1,800
Lead	25	7.2	7.6	12.4	10.2		3.7	U	U	U	U	U	U
Magnesium	35,000 G	28,300	26,000	27,500	30,500		27,100	29,400	28,800	24,800	U	24,700	26,900
Manganese	300	790	982	1,050	568		729	275	323	179	U	393	291
Mercury	0.7	0.2	0.1	U	U		U	U	U	U	U	U	U
Nickel	100	12.1 B	9.8 B	10.1 B	7.4 B		6.1 B	11.9	14.2	U	U	U	U
Potassium	NS	5,480	3,350	3,630 B	3,670 B		3,220 B	4,220	4,060	3,800	U	5,450	U
Selenium	10	4.0 B	U	U	U		U	U	U	11	U	U	U
Silver	50	U	U	2.1	U		U	U	U	U	U	U	U
Sodium	20,000	19,500	15,600	11,000	12,700		8,690	22,400	21,900	29,900	U	38,000	42,300
Thallium	0.5 G	U	U	U	U		U	U	U	U	U	U	U
Vanadium	NS	16.9	12.0 B	26.3 B	8.0 B		3.6 B	U	U	U	U	U	U
Zinc	2,000	76.6	32.5	59.6	44.9		12.0 B	30.9	10.7	U	U	U	26

All concentrations in µg/l.

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

G - Guidance value.

B - Value greater than or equal to the instrument detection limit, but less than the contract required detection limit.

NA - Compound not analyzed.

NS - No standard or guidance value available.

U - Indicates that the compound was not detected.

Total represents a total metal analysis including the metal content dissolved in the water and present in the particles in the water.

Dissolved represents a dissolved metals analysis of a water sample after removing the particles with a filter then analyzing the filtered water for metals.

Shaded values equal or exceed groundwater standards or guidance values.

TABLE 7
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF TOTAL METAL RESULTS
SCHRECK'S SCRAPYARD SITE

Well MW-4

Date Sampled	Groundwater Standards*	6/23/97	6/18/98	4/21/99	5/31/00	5/16/01	6/11/02	Dissolved 5/29/09	Total 5/29/09	Total 5/13/10	Total 5/27/11	Total 5/24/12	Total 5/13/13
Aluminum	NS	21,900	208	111,000	31,500	NOT SAMPLED	31,700	U	2,650	740	481	U	2,470
Antimony	3	U	U	U	14.1 B		U	U	U	U	U	U	U
Arsenic	25	19.3	U	9.9 B	23		21.9	U	U	U	U	U	U
Barium	1,000	190 B	25.5 B	93.3 B	229		245	224	37.9	35	U	U	U
Beryllium	3 G	1.5 B	U	U	1.6 B		1.9 B	U	U	U	U	U	U
Cadmium	5	U	1.3 B	1.3 B	2.8 B		2.0 B	U	U	U	U	U	U
Calcium	NS	80,800	36,700	38,000	60,400		73,900	35,200	35,200	44,300	U	81,400	41,400
Chromium	50	49.9	2.2 B	39.3 B	92.8		72.9	U	6	U	U	U	44.6
Cobalt	NS	12.4 B	U	5.9 B	16.8 B		18.8 B	U	U	U	U	U	U
Copper	200	82.7	7.9 B	52.9	151		116	U	U	U	U	U	U
Iron	500	34,200	360	16,900	50,600		50,000	U	2,660	660	U	143	2,620
Lead	25	79.8	U	59.1	225		122	U	11.6	U	U	U	14.5
Magnesium	35,000 G	26,300	5,290	11,700	24,200		29,100	4,310	5,100	5,800	U	14,500	6,870
Manganese	300	537	8.6 B	256	622		674	19.8	63.7	U	U	86	52.4
Mercury	0.7	3.6	U	U	9.9		6	U	U	U	U	U	U
Nickel	100	46.7	U	26.2 B	77.2		66.7	U	U	U	U	U	U
Potassium	NS	6,490	1,320 B	3,910 B	8,780		8,760	1,300	2,080	2500	U	3,350	U
Selenium	10	U	U	U	7.4		7.6	U	U	U	U	U	U
Silver	50	U	U	U	U		U	U	U	U	U	U	U
Sodium	20,000	7,600	907 B	4,050 B	5,550		1,650 B	3,000	3,200	11700	U	28,600	5,310
Thallium	0.5 G	U	U	U	U		U	U	U	U	U	U	U
Vanadium	NS	43.6 B	U	23.1 B	62.6		57.3	U	U	U	U	U	U
Zinc	2,000	2,790	229	1,730	5,320		3,700	30.9	266	61	U	U	174

All concentrations in µg/l.

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

G - Guidance value.

B - Value greater than or equal to the instrument detection limit, but less than the contract required detection limit.

NA - Compound not analyzed.

NS - No standard or guidance value available.

U - Indicates that the compound was not detected.

Total represents a total metal analysis including the metal content dissolved in the water and present in the particles in the water.

Dissolved represents a dissolved metals analysis of a water sample after removing the particles with a filter then analyzing the filtered water for metals.

Shaded values equal or exceed groundwater standards or guidance values.

TABLE 7
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF TOTAL METAL RESULTS
SCHRECK'S SCRAPYARD SITE

Well MW-5A⁽¹⁾

Date Sampled	Groundwater Standards*	4/16/97	6/18/98	4/21/99	5/31/00	5/16/01	6/11/02	Dissolved 5/28/09	Total 5/28/09	Total 5/13/10	Total 5/27/11	Total 5/24/12	Total 5/13/13
Aluminum	NS	1,550	577	1,240	9,320	NOT SAMPLED	523	U	U	U	NOT SAMPLED	U	4,220
Antimony	3	U	U	U	U		U	U	U	U		U	U
Arsenic	25	5.4 B	U	7.7 B	15.8		U	U	U	U		U	21.8
Barium	1,000	63.1 B	46.7 B	63.7 B	122 B		49.9 B	29.1	31.4	32		U	53.3
Beryllium	3 G	U	U	U	U		0.30 B	U	U	U		U	U
Cadmium	5	1.7 B	1.7 B	2.1 B	2.8 B		7	U	U	U		U	U
Calcium	NS	124,000	120,000	132,000	152,000		126,000	106,000	111,000	113,000		140,000	126,000
Chromium	50	8.8 B	4.4 B	10.2	17		59	U	U	U		U	U
Cobalt	NS	U	1.5	2.3 B	7 B		1.4 B	U	U	U		U	U
Copper	200	11.0 B	13.7 B	12.9 B	16.1 B		4.3 B	U	U	4		U	U
Iron	500	2,330	935	1,740	13,000		1,320	225	380	420		753	11,700
Lead	25	U	U	U	9.4		2.4 B	U	U	U		U	U
Magnesium	35,000 G	55,300	52,600	54,700	62,600		57,300	50,500	51,300	48,700		54,300	54,600
Manganese	300	246	130	189	448		180	114	130	113		144	163
Mercury	0.7	U	U	U	0.3		U	U	U	U		U	U
Nickel	100	20.2 B	14.9 B	18.8 B	24.8 B		37.8 B	U	U	U		U	U
Potassium	NS	3,350 B	2,250 B	2,520 B	5,060		2,270 B	1,430	1,510	U		4,130	U
Selenium	10	U	U	U	U		U	U	U	14		U	U
Silver	50	U	U	U	U		U	U	U	U		U	U
Sodium	20,000	61,000	56,300	67,100	68,500		69,600	56,800	58,800	59,400		64,500	64,900
Thallium	0.5 G	U	U	U	U		U	U	U	U		U	U
Vanadium	NS	3.3 B	U	6.4 B	17.5 B		1.8 B	U	U	U		U	U
Zinc	2,000	34.1	22.4	50.7	67.6		11.3 B	U	U	U		63	85.3

⁽¹⁾ Formerly MW-5R

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

All concentrations in µg/l.

G - Guidance value.

B - Value greater than or equal to the instrument detection limit, but less than the contract required detection limit.

NA - Compound not analyzed.

NS - No standard or guidance value available.

U - Indicates that the compound was not detected.

Total represents a total metal analysis including the metal content dissolved in the water and present in the particles in the water.

Dissolved represents a dissolved metals analysis of a water sample after removing the particles with a filter then analyzing the filtered water for metals.

Well MW-5R not sampled in 2011 due to blockage in well.

Shaded values equal or exceed groundwater standards or guidance values.

TABLE 7
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF TOTAL METAL RESULTS
SCHRECK'S SCRAPYARD SITE

Well MW-6R

Date Sampled	Groundwater Standards*	4/16/97	6/17/98	4/21/99	5/31/00	5/16/01	6/11/02	Dissolved 5/28/09	Total 5/28/09	Total 5/13/10	Total 5/27/11	Total 5/24/12	Total 5/13/13
Aluminum	NS	19,100	3,630	13,900	7,990	NOT SAMPLED	19,900	U	8,650	190	U	205	401
Antimony	3	U	U	U	U		U	U	U	U	U	U	U
Arsenic	25	6.8 B	U	13.8	U		8.9 B	U	U	U	U	U	U
Barium	1,000	375	212	185 B	299		282	167	213	185	U	112	90.5
Beryllium	3 G	1.2 B	U	U	U		1.0 B	U	U	U	U	U	U
Cadmium	5	U	1.1 B	U	U		1.4 B	U	U	U	U	U	U
Calcium	NS	194,000	112,000	252,000	163,000		179,000	172,000	184,000	182,000	U	145	148,000
Chromium	50	31.3	22.1	24.6	13.7		37.4	U	135	U	U	U	U
Cobalt	NS	18.8 B	2.6 B	11.2 B	6.6 B		18.5 B	U	9.7	U	U	U	U
Copper	200	35.9	11.3 B	30.1	12.4 B		43.2	U	12.5	U	U	U	U
Iron	500	29,900	5,670	22,600	10,700		31,100	314	11,300	380	U	438	505
Lead	25	14.9	4.8	11.8	9.7		18.9	U	5.2	U	U	U	U
Magnesium	35,000 G	35,800	21,100	37,600	31,000		38,800	32,100	35,400	31,400	U	29,000	30,100
Manganese	300	793	263	554	392		852	294	505	283	U	257	207
Mercury	0.7	U	U	U	U		U	U	U	U	U	U	U
Nickel	100	37.7 B	12.8 B	35.5 B	15.3 B		198	U	163	U	U	U	U
Potassium	NS	16,800	8,980	11,000	12,600		14,400 B	6,300	9030	5,900	U	7,250	6,100
Selenium	10	U	U	7.5	U		U	U	U	14	U	U	U
Silver	50	U	U	U	U		U	U	U	U	U	U	U
Sodium	20,000	84,300	74,200	92,800	140,000		97,400	73,800	72,000	87,900	U	76,300	77,100
Thallium	0.5 G	5.1 B	U	U	U		U	U	U	U	U	U	U
Vanadium	NS	45.1 B	9.3 B	34.3 B	17.5 B		40.4 B	U	18.4	U	U	U	U
Zinc	2,000	209	21.5	113	46.8		107	U	33.2	U	U	U	U

All concentrations in µg/l.

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

G - Guidance value.

B - Value greater than or equal to the instrument detection limit, but less than the contract required detection limit.

NA - Compound not analyzed.

NS - No standard or guidance value available.

U - Indicates that the compound was not detected.

Total represents a total metal analysis including the metal content dissolved in the water and present in the particles in the water.

Dissolved represents a dissolved metals analysis of a water sample after removing the particles with a filter then analyzing the filtered water for metals.

Shaded values equal or exceed groundwater standards or guidance values.

**TABLE 7
PERIODIC REVIEW GROUNDWATER MONITORING REPORT
SUMMARY OF TOTAL METAL RESULTS
SCHRECK'S SCRAPYARD SITE**

Well MW-7

Date Sampled	Groundwater Standards*	6/23/97	6/18/98	4/21/99	5/31/00	5/16/01	6/11/02	Dissolved 5/28/09	Total 5/28/09	Dissolved 5/13/10	Total 5/13/10	Total 5/27/11	Total 5/25/12	Total 5/13/13
Aluminum	NS	276,000	45,700	17,200	49,200	NOT SAMPLED	31,600	U	592	U	3,680	714	7,390	2,380
Antimony	3	U	U	U	U		U	U	U	U	U	U	U	U
Arsenic	25	151	19.5	9.0 B	22.4		14.3	U	U	U	NA	U	U	U
Barium	1,000	2,080	347	137 B	370		202	15	16.2	U	NA	U	U	U
Beryllium	3 G	12.5	2.3 B	U	1.9 B		1.6 B	U	U	U	NA	U	U	U
Cadmium	5	U	U	U	1.9 B		0.79 B	U	U	U	NA	U	U	U
Calcium	NS	1,190,000	232,000	141,000	242,000		167,000	112,000	106,000	110,000	NA	101,000	107,000	111,000
Chromium	50	403	67.3	24.4	71.9		45.6	U	U	U	NA	U	U	U
Cobalt	NS	224	34.6 B	12.2 B	41.9 B		25.3 B	U	U	U	NA	U	U	U
Copper	200	653	74.8	34.5	67		40.7	U	U	U	NA	U	U	U
Iron	500	486,000	78,400	24,700	80,400		51,700	U	519	U	NA	735	7,110	3,000
Lead	25	281	37.1	10.8	42		24.7	U	U	U	NA	U	U	U
Magnesium	35,000 G	333,000	86,800	59,100	91,500		69,600	52,100	48,400	48,400	NA	46,300	48,000	48,800
Manganese	300	9,470	1,570	486	1,810		1,250	8	35	19	NA	15	146	72.9
Mercury	0.7	0.69	U	U	U		U	U	U	U	NA	U	U	0.48
Nickel	100	500	79.8	25.1 B	84.2		51.6	U	U	U	NA	U	U	U
Potassium	NS	46,000	12,500	7,200	13,200		9,640	1,600	1,500	U	NA	U	4,470	U
Selenium	10	47.1	U	5.2	5.6		4.4 B	U	U	12	NA	U	U	U
Silver	50	U	U	U	U		U	U	U	U	NA	U	U	U
Sodium	20,000	71,800	61,400	73,100	79,800		73,200	73,500	69,700	75,900	NA	62,700	69,800	74,300
Thallium	0.5 G	30.1	U	U	U		U	U	U	U	NA	U	U	U
Vanadium	NS	516	83.5	36.8 B	87.8		57.6	U	U	U	NA	U	U	U
Zinc	2,000	1,660	225	93.9	278		131	32	U	U	NA	U	U	U

All concentrations in µg/l.

* NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

G - Guidance value.

B - Value greater than or equal to the instrument detection limit, but less than the contract required detection limit.

NA - Compound not analyzed.

NS - No standard or guidance value available.

U - Indicates that the compound was not detected.

Total represents a total metal analysis including the metal content dissolved in the water and present in the particles in the water.

Dissolved represents a dissolved metals analysis of a water sample after removing the particles with a filter then analyzing the filtered water for metals.

Shaded values equal or exceed groundwater standards or guidance values.



Appendix A

Field Data Sheets

MONITORING WELL INTEGRITY ASSESSMENT

Site Name: Rock Tenn

Well I.D.: MW-3

Date: 5/13/13

(For each item, circle the appropriate response or fill in the blank)

Well I.D. Clearly Marked: YES NO

Well Completion: FLUSH MOUNT ABOVE-GRADE STANDPIPE

Protective Casing Diameter (inches): 6"

Lockable Lid: YES NO REPLACE

Lock Present: YES NO REPLACE

Key Brand/Number: ABUS

Measuring Point Marked: YES NO

Well Riser Diameter (inches): 2"

Well Riser Type: PVC Steel Other (Describe) _____

Surface Condition

Curb Box Usable: YES NO REPLACE

Well Lid Present: YES NO REPLACE

Flush Mount Lid Seal: YES NO REPLACE

Bolt Holes Threaded/Usable: YES (# Usable: _____ out of _____) RETHEAD (# _____ out of _____) NONE

All Bolts Present: YES NO REPLACE (# To Add: _____ out of _____)

Well Condition

Well Cap: J-PLUG SLIP CAP NONE REPLACE NEXT YEAR

Lockable J-Plug: YES NO REPLACE

Sediment in Road Box: YES NO CLEAN OUT

Well Riser: GOOD BROKEN CUT DOWN [1/10': (____)] ADD [1/10': (____)]

Well Obstructed: YES NO If yes, depth Below top of Inner Casing: [1/10': (____)]

Well Bottom: SOFT FIRM Sediment on probe: YES NO

GRAY

Recommendations

Install New Surface Completion: YES NO

Re-Survey Casing Elevation: YES NO

Develop and Re-Measure Depth: YES NO

Replace Well: YES NO

Other/Miscellaneous Observations: _____

Inspector(s): _____

MONITORING WELL INTEGRITY ASSESSMENT

Site Name: Rock Tenn

Well I.D.: MW-4

Date: 5/13/13

(For each item, circle the appropriate response or fill in the blank)

Well I.D. Clearly Marked: YES NO

Well Completion: FLUSH MOUNT

ABOVE-GRADE STANDPIPE

Protective Casing Diameter (inches): _____

Lockable Lid: YES NO REPLACE

Lock Present: YES NO REPLACE

Key Brand/Number: _____

Measuring Point Marked: YES NO

Well Riser Diameter (inches): 2"

Well Riser Type: PVC Steel Other (Describe) _____

Surface Condition

Curb Box Usable: YES NO REPLACE

Well Lid Present: YES NO REPLACE

Flush Mount Lid Seal: YES NO REPLACE

Bolt Holes Threaded/Usable: YES (# Usable: _____ out of _____) RETHEAD (# _____ out of _____) NONE

All Bolts Present: YES NO REPLACE (# To Add: _____ out of _____)

Well Condition

Well Cap: J-PLUG SLIP CAP NONE REPLACE

Lockable J-Plug: YES NO REPLACE

Sediment in Road Box: YES NO CLEAN OUT

Well Riser: GOOD BROKEN CUT DOWN [1/10': (____)] ADD [1/10': (____)]

Well Obstructed: YES NO If yes, depth Below top of Inner Casing: [1/10': (____)]

Well Bottom: SOFT FIRM Sediment on probe: YES NO

Recommendations

Install New Surface Completion: YES NO

Re-Survey Casing Elevation: YES NO

Develop and Re-Measure Depth: YES NO

Replace Well: YES NO

Other/Miscellaneous Observations: _____

Inspector(s): AMC

MONITORING WELL INTEGRITY ASSESSMENT

Site Name: Rock Tena

Well I.D.: MW-5A

Date: 5/13/13

(For each item, circle the appropriate response or fill in the blank)

Well I.D. Clearly Marked: YES NO

Well Completion: FLUSH MOUNT ABOVE-GRADE STANDPIPE

Protective Casing Diameter (inches): 6"

Lockable Lid: YES NO REPLACE SC: YES

Lock Present: YES NO REPLACE

Key Brand/Number: ABUS, SALT DAMAGE BUT
STILL FUNCTIONING

Measuring Point Marked: YES NO

Well Riser Diameter (inches): 2"

Well Riser Type: PVC Steel Other (Describe) _____

Surface Condition

Curb Box Usable: YES NO REPLACE

Well Lid Present: YES NO REPLACE

Flush Mount Lid Seal: YES NO REPLACE

Bolt Holes Threaded/Usable: YES (# Usable: 2 out of 2) RETHEAD (# _____ out of _____) NONE

All Bolts Present: YES NO REPLACE (# To Add: _____ out of _____)

Well Condition

Well Cap: J-PLUG SLIP CAP NONE REPLACE

Lockable J-Plug: YES NO REPLACE

Sediment in Road Box: YES NO CLEAN OUT

Well Riser: GOOD BROKEN CUT DOWN [1/10': (____)] ADD [1/10': (____)]

Well Obstructed: YES NO If yes, depth Below top of Inner Casing: [1/10': (____)]

Well Bottom: SOFT FIRM Sediment on probe: YES NO

Recommendations

Install New Surface Completion: YES NO

Re-Survey Casing Elevation: YES NO

Develop and Re-Measure Depth: YES NO

Replace Well: YES NO

Other/Miscellaneous Observations: _____

Inspector(s): AML

MONITORING WELL INTEGRITY ASSESSMENT

Site Name: Rock Island

Well I.D.: MW-6R

Date: 5/13/13

(For each item, circle the appropriate response or fill in the blank)

Well I.D. Clearly Marked: YES NO

Well Completion: FLUSH MOUNT ABOVE-GRADE STANDPIPE

Protective Casing Diameter (inches): 8"

Lockable Lid: YES NO REPLACE

Lock Present: YES NO REPLACE

Key Brand/Number: ABUS

Measuring Point Marked: YES NO

Well Riser Diameter (inches): 2"

Well Riser Type: PVC Steel Other (Describe) _____

Surface Condition

Curb Box Usable: YES NO REPLACE

Well Lid Present: YES NO REPLACE

Flush Mount Lid Seal: YES NO REPLACE

Bolt Holes Threaded/Usable: YES (# Usable: _____ out of _____) RETHEAD (# _____ out of _____) NONE

All Bolts Present: YES NO REPLACE (# To Add: _____ out of _____)

Well Condition

Well Cap: J-PLUG SLIP CAP NONE REPLACE

Lockable J-Plug: YES NO REPLACE

Sediment in Road Box: YES NO CLEAN OUT

Well Riser: GOOD BROKEN CUT DOWN [1/10': (____)] ADD [1/10': (____)]

Well Obstructed: YES NO If yes, depth Below top of Inner Casing: [1/10': (____)]

Well Bottom: SOFT FIRM Sediment on probe: YES NO

GRAY

Recommendations

Install New Surface Completion: YES NO

Re-Survey Casing Elevation: YES NO

Develop and Re-Measure Depth: YES NO

Replace Well: YES NO

Other/Miscellaneous Observations: _____

Inspector(s): _____

MONITORING WELL INTEGRITY ASSESSMENT

Site Name: Rock Team

Well I.D.: MW-7

Date: 5/13/13

(For each item, circle the appropriate response or fill in the blank)

Well I.D. Clearly Marked: YES NO

Well Completion: FLUSH MOUNT ABOVE-GRADE STANDPIPE

Protective Casing Diameter (inches): 6"

Lockable Lid: YES NO REPLACE Secured

Lock Present: YES NO REPLACE

Key Brand/Number: ABW

Measuring Point Marked: YES NO

Well Riser Diameter (inches): 2"

Well Riser Type: PVC Steel Other (Describe) _____

Surface Condition

Curb Box Usable: YES NO REPLACE

Well Lid Present: YES NO REPLACE

Flush Mount Lid Seal: YES NO REPLACE

Bolt Holes Threaded/Usable: YES (# Usable: 3 out of 3) RETHEAD (# _____ out of _____) NONE

All Bolts Present: YES NO REPLACE (# To Add: 1 out of 3)

Well Condition

Well Cap: J-PLUG SLIP CAP NONE REPLACE

Lockable J-Plug: YES NO REPLACE

Sediment in Road Box: YES NO CLEAN OUT - As Fdn

Well Riser: GOOD BROKEN CUT DOWN [1/10': (____)] ADD [1/10': (____)]

Well Obstructed: YES NO If yes, depth Below top of Inner Casing: [1/10': (____)]

Well Bottom: SOFT FIRM Sediment on probe: YES NO

Recommendations

Install New Surface Completion: YES NO

Re-Survey Casing Elevation: YES NO

Develop and Re-Measure Depth: YES NO

Replace Well: YES NO

Other/Miscellaneous Observations: _____

Inspector(s): _____

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Water Sampling Log

Project ROCKTENN Project No. 04320055.0001 Page 1 of 1
 Site Location N. TOWAWANDA, NY Date 5/13/13
 Site/Well No. MW-3 Replicate No. —
 Weather OVERCAST, 45°F Sampling Time: Begin 1430 End 1435

Evacuation Data

Measuring Point TOP OF METAL
 Sounded Well Depth (ft bmp) 14.40
 Depth to Water (ft bmp) 10.72
 Depth to Packer (ft bmp) —
 Water Column in Well (ft) 3.68
 Casing Diameter 2.59 2"
 Gallons in Well 0.59
 Gallons Pumped/Bailed
 Prior to Sampling 4.5
 Sample Pump Intake
 Setting (ft bmp) —
 Packer Pressure (psi) —
 Pumping Rate (ml/min) —
 Evacuation Method BAILER
 Sampling Method BAILER
 Purge Time Begin 1350 End 1417

Field Parameters

Color CLEAR
 Odor NONE
 Appearance PARTICULATE

	1	1V	2V	3V	4V
pH (s.u.)	7.49	7.18	7.11	7.07	7.07
Conductivity (mS/cm)	1.25	1.30	1.36	1.35	1.30
(µmhos/cm)	—	—	—	—	—
Temperature (°C)	8.6	8.3	8.3	8.4	8.6
DO (mg/L)	0.70	1.37	1.73	2.27	1.09
Turbidity (NTU)	64.2	+1000	+1000	+1000	119
Time	1353	1357	1400	1402	1407
DTW (ft bmp)	—	—	—	—	—
ORP	43.1	10.7	-14.3	-9.0	-2.5

Remarks: Water Quality Meter: YSI 4400 PRO, LAMATE 2020

System On/Off:

Initial Purge: 1/2 BAILER ORANGE / MUST PARTICULATE

Constituents Sampled: See COC

Sampling Personnel: AML

Well Casing Volumes

Gal./Ft. 1^{1/4}" = 0.06 2" = 0.16 3" = 0.37 4" = 0.65
 1^{1/2}" = 0.09 2-1/2" = 0.26 3-1/2" = 0.50 6" = 1.47

bmp below measuring point mS/cm Millisiemens per centimeter VOC Volatile Organic Compounds
 °C Degrees Celsius s.u. Standard units umhos/cm Micromhos per centimeter
 ft feet NTU Nephelometric Turbidity Units
 gpm Gallons per minute N/A Not Applicable
 mg/L Milligrams per liter COC Chain of Custody

3.68
 .16
 2208
 3680
 5888

	<u>7.8V</u>	
PH	7.17	
Conduct.	1.26	
TEMP	8.3	
DO	1.79	
TURB.	45.4	
TIME	1415	
ORP	16.1	

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Water Sampling Log

Project ROCKTENN Project No. 04320055-0001 Page 1 of 1
 Site Location N. TOWAWANOA, NM Date 5/13/13
 Site/Well No. MW-4 Replicate No. —
 Weather OVERCAST, 43°F Sampling Time: Begin 16⁰⁰ End 16⁰⁰ 15⁵⁰ TURBIDITY = 26.9 NTU

Evacuation Data

Measuring Point TOP OF METAL PIPE
 Sounded Well Depth (ft bmp) 13.86
 Depth to Water (ft bmp) 9.72
 Depth to Packer (ft bmp) —
 Water Column in Well (ft) 4.14
 Casing Diameter 2"
 Gallons in Well 0.66
 Gallons Pumped/Bailed
 Prior to Sampling 1.9
 Sample Pump Intake
 Setting (ft bmp) —
 Packer Pressure (psi) —
 Pumping Rate (ml/min) —
 Evacuation Method BAILER
 Sampling Method BAILER
 Purge Time Begin 12²⁰ End 12³³

Field Parameters

Color CLEAR TO LIGHT GRAY
 Odor NONE
 Appearance CLEAR TO SLIGHTLY TURBID

	1	1V	2V	3V
pH (s.u.)	8.51	8.18	8.07	7.97
Conductivity (mS/cm)	7.72	0.247	0.250	0.237
Conductivity (µmhos/cm)	—	—	—	—
Temperature (°C)	8.7	8.4	8.4	8.4
DO (mg/L)	8.01	7.29	7.77	8.61
Turbidity (NTU)	5.66	59	+1000	+1000
Time	1223	1226	1229	1234
DTW (ft bmp)	—	—	—	—
ORP	100.0	102.3	102.2	99.8

Remarks: Water Quality Meter: YSI PRO QUATRO, TURBIDITY METER - LAMOTTE 2020
 System On/Off: ON
 Initial Purge: 1/2 BAILER, CLEAR
37 LAST BAILER EXTREMELY TURBID, IS BROWN

Constituents Sampled: See COC Sampling Personnel: AML

Well Casing Volumes				
Gal./Ft.	1 ^{1/4"} = 0.06	2" = 0.16	3" = 0.3	4" = 0.65
	1 ^{1/2"} = 0.09	2-1/2" = 0.26	3-1/2" = 0.50	6" = 1.47

bmp	below measuring point	mS/cm	Milisiemens per centimeter	VOC	Volatile Organic Compounds
°C	Degrees Celsius	s.u.	Standard units	umhos/cm	Micromhos per centimeter
ft	feet	NTU	Nephelometric Turbidity Units		
gpm	Gallons per minute	N/A	Not Applicable		
mg/L	Miligrams per liter	COC	Chain of Custody		

4.4
 2484
 4140
 6624

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Water Sampling Log

Project Rock Team Project No. 0432055-0001 Page 1 of 1
 Site Location N. TONAWANDA, NY Date 5-13-13
 Site/Well No. MW-5A Replicate No. — TURB. D.M. = 34.8 NTU
 Weather OVERCAST, 41°F Sampling Time: Begin 11⁴⁵ End 11⁵⁴

Evacuation Data

Measuring Point Top of PVC
 Sounded Well Depth (ft bmp) 17.50
 Depth to Water (ft bmp) 9.00
 Depth to Packer (ft bmp) —
 Water Column in Well (ft) 8.50
 Casing Diameter 2"
 Gallons in Well 1.36
 Gallons Pumped/Bailed
 Prior to Sampling 4.25
 Sample Pump Intake
 Setting (ft bmp) —
 Packer Pressure (psi) —
 Pumping Rate (ml/min) —
 Evacuation Method BAILER
 Sampling Method BAILER
 Purge Time Begin 10⁵⁹ End 11²⁹

Field Parameters

Color CLEAR
 Odor NONE
 Appearance CLEAR TO SLIGHTLY CLOUDY

	I	1V	2V	3V
pH (s.u.)	7.20	7.15	7.18	7.22
Conductivity (mS/cm)	1.37	0.74	1.19	1.19
(µmhos/cm)	—	—	—	—
Temperature (°C)	9.6	9.5	9.6	9.8
DO (mg/L)	2.30	1.80	1.84	1.73
Turbidity (NTU)	3.86	33.0	31.9	86.6
Time	11 ⁰²	11 ⁰⁷	11 ²⁵	11 ³⁰
DTW (ft bmp)	—	—	—	—
ORP	-17.4	-64.1	-72.3	-80.5

Remarks: Water Quality Meter: YSI, TURB. D.M. METER - LA MOTE 2020
System On/Off:
Initial Purge: 1/2 BAILER, CLEAR

Constituents Sampled: See COC Sampling Personnel: AML

Well Casing Volumes

Gal./Ft.	1 ^{1/4"} = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1 ^{1/2"} = 0.09	2-1/2" = 0.26	3-1/2" = 0.50	6" = 1.47

bmp	below measuring point	mS/cm	Milisiemens per centimeter	VOC	Volatile Organic Compounds
°C	Degrees Celsius	s.u.	Standard units	umhos/cm	Micromhos per centimeter
ft	feet	NTU	Nephelometric Turbidity Units		
gpm	Gallons per minute	N/A	Not Applicable		
mg/L	Miligrams per liter	COC	Chain of Custody		

3
 8.50
 .16
 51.00
 85.00
 136.00

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Water Sampling Log

Project ROCKTOWN Project No. 04320055-0001 Page 1 of 1
 Site Location N. TONAWANDA, NY Date 5/13/13
 Site/Well No. MW-6R Replicate No. —
 Weather OVERCAST, 48°F Sampling Time: Begin 15³⁰ End 15³⁵

Evacuation Data

Field Parameters

Measuring Point TIP of METAL
 Sounded Well Depth (ft bmp) 18.39
 Depth to Water (ft bmp) 11.42
 Depth to Packer (ft bmp) —
 Water Column in Well (ft) 6.97
 Casing Diameter 2"
 Gallons in Well 1.1
 Gallons Pumped/Bailed
 Prior to Sampling 3.3
 Sample Pump Intake
 Setting (ft bmp) —
 Packer Pressure (psi) —
 Pumping Rate (ml/min) —
 Evacuation Method BAILER
 Sampling Method BAILER
 Purge Time Begin 15⁰² End 15¹⁴

Color CLEAR
 Odor NONE
 Appearance CLEAR

	I	1V	2V	3V
pH (s.u.)	7.73	7.51	7.47	7.47
Conductivity (mS/cm)	0.98	1.01	1.06	1.10
(umhos/cm)	—	—	—	—
Temperature (°C)	8.7	8.7	8.8	8.9
DO (mg/L)	3.39	2.26	1.49	1.63
Turbidity (NTU)	8.53	652 AU	117	43.1
Time	15 ⁰³	15 ⁰⁷	15 ¹⁰	15 ¹⁵
DTW (ft bmp)	—	—	—	—
ORP	79.4	82.4	-2.1	-132.8

Remarks: Water Quality Meter: YSI QUANTRO PRO, LAUTE 2020

System On/Off:

Initial Purge: 1/2 BAILER, CLEAR

Constituents Sampled: See COC

Sampling Personnel: AML

Well Casing Volumes

Gal./Ft.	1 1/4" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.09	2 1/2" = 0.26	3 1/2" = 0.50	6" = 1.47

bmp	below measuring point	mS/cm	Milisiemens per centimeter	VOC	Volatile Organic Compounds
°C	Degrees Celsius	s.u.	Standard units	umhos/cm	Micromhos per centimeter
ft	feet	NTU	Nephelometric Turbidity Units		
gpm	Gallons per minute	N/A	Not Applicable		
mg/L	Miligrams per liter	COC	Chain of Custody		

6.97
 41.82
 6970
 11252

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Water Sampling Log

Project BUCKTEEN Project No. 04320055-0001 Page 1 of 1
 Site Location N. TOWAWANDA, NY Date 5/13/13
 Site/Well No. MW-7 Replicate No. —
 Weather OVERCAST, 43°F Sampling Time: Begin 16²⁵ End 16³² TURBIDITY AT 1612 = 25.6 NTU

Evacuation Data

Measuring Point TOP OF PK
 Sounded Well Depth (ft bmp) 23.83
 Depth to Water (ft bmp) 8.82
 Depth to Packer (ft bmp) —
 Water Column in Well (ft) 15.01
 Casing Diameter 2"
 Gallons in Well 2.4
 Gallons Pumped/Bailed
 Prior to Sampling 6.0
 Sample Pump Intake
 Setting (ft bmp) —
 Packer Pressure (psi) —
 Pumping Rate (ml/min) —
 Evacuation Method BAILER
 Sampling Method BAILER
 Purge Time Begin 12⁵¹ End 13¹⁵

Field Parameters

	METALS/VOL		PCBS	
Color	CLEAR		RED/BROWN	
Odor	NONE		NONE	
Appearance	CLEAR, SLIGHTLY TURBID		TURBID	
	I	1V	2V	3V
pH (s.u.)	7.72	7.75	7.79	
Conductivity (mS/cm)	1.12	1.13	1.14	
(µmhos/cm)	—	—	—	—
Temperature (°C)	9.0	9.7	10.5	
DO (mg/L)	5.21	2.41	2.41	
Turbidity (NTU)	11.1	133	205	
Time	12 ⁵³	13 ⁰⁰	13 ⁰⁸	
DTW (ft bmp)	—	—	—	—
ORP	108.9	107.7	107.4	

Remarks: Water Quality Meter: YSI PROF QUATRO TURBIDITY METER - LAMOTTE 2020
System On/Off:
Initial Purge: 1/2 BAILER, CLEAR TO VERY TURBID PRIOR TO GOING DRY

Constituents Sampled: See COC Sampling Personnel: AML

Well Casing Volumes

Gal./Ft.	1 1/4" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.09	2-1/2" = 0.26	3-1/2" = 0.50	6" = 1.47

bmp	below measuring point	mS/cm	Milisiemens per centimeter	VOC	Volatile Organic Compounds
°C	Degrees Celsius	s.u.	Standard units	umhos/cm	Micromhos per centimeter
ft	feet	NTU	Nephelometric Turbidity Units		
gpm	Gallons per minute	N/A	Not Applicable		
mg/L	Miligrams per liter	COC	Chain of Custody		

35.01
 .16
 15006
 + 15010
 24016



Appendix B

**Groundwater Analytical Report -
Accutest Laboratories of New
England**



05/31/13

Technical Report for

Arcadis

RockTenn, Robinson, NY

04320055.0001

Accutest Job Number: MC20972

Sampling Dates: 05/09/13 - 05/13/13

Report to:

Arcadis U.S., Inc
50 Fountain Plaza
Buffalo, NY 14202
Ben.Girard@arcadis-us.com; Adam.Lavelle@arcadis-us.com
ATTN: Ben Girard

Total number of pages in report: **69**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Pand
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) ISO 17025:2005 (L2235)

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Test results relate only to samples analyzed.

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Sample Summary

Arcadis

Job No: MC20972

RockTenn, Robinson, NY
Project No: 04320055.0001

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
MC20972-1	05/13/13	14:30 AL	05/17/13	AQ	Ground Water	MW-3
MC20972-2	05/13/13	16:00 AL	05/17/13	AQ	Ground Water	MW-4
MC20972-3	05/13/13	11:45 AL	05/17/13	AQ	Ground Water	MW-5A
MC20972-4	05/13/13	15:30 AL	05/17/13	AQ	Ground Water	MW-6R
MC20972-5	05/13/13	16:25 AL	05/17/13	AQ	Ground Water	MW-7
MC20972-6	05/09/13	00:00 AL	05/17/13	AQ	Trip Blank Water	TRIP BLANK

Summary of Hits

Job Number: MC20972
Account: Arcadis
Project: RockTenn, Robinson, NY
Collected: 05/09/13 thru 05/13/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

MC20972-1 MW-3

Aluminum	762	200		ug/l	SW846 6010C
Barium	113	50		ug/l	SW846 6010C
Calcium	184000	5000		ug/l	SW846 6010C
Iron	1800	100		ug/l	SW846 6010C
Magnesium	26900	5000		ug/l	SW846 6010C
Manganese	291	15		ug/l	SW846 6010C
Sodium	42300	5000		ug/l	SW846 6010C
Zinc	26.0	20		ug/l	SW846 6010C

MC20972-2 MW-4

Aluminum	2470	200		ug/l	SW846 6010C
Calcium	41400	5000		ug/l	SW846 6010C
Chromium	44.6	10		ug/l	SW846 6010C
Iron	2620	100		ug/l	SW846 6010C
Lead	14.5	5.0		ug/l	SW846 6010C
Magnesium	6870	5000		ug/l	SW846 6010C
Manganese	52.4	15		ug/l	SW846 6010C
Sodium	5310	5000		ug/l	SW846 6010C
Zinc	174	20		ug/l	SW846 6010C

MC20972-3 MW-5A

Aluminum	4220	200		ug/l	SW846 6010C
Arsenic	21.8	4.0		ug/l	SW846 6010C
Barium	53.3	50		ug/l	SW846 6010C
Calcium	126000	5000		ug/l	SW846 6010C
Iron	11700	100		ug/l	SW846 6010C
Magnesium	54600	5000		ug/l	SW846 6010C
Manganese	163	15		ug/l	SW846 6010C
Sodium	64900	5000		ug/l	SW846 6010C
Zinc	85.3	20		ug/l	SW846 6010C

MC20972-4 MW-6R

Benzene	1.1	0.50		ug/l	SW846 8260B
Chlorobenzene	5.7	1.0		ug/l	SW846 8260B
Aluminum	401	200		ug/l	SW846 6010C
Barium	90.5	50		ug/l	SW846 6010C
Calcium	148000	5000		ug/l	SW846 6010C
Iron	505	100		ug/l	SW846 6010C
Magnesium	30100	5000		ug/l	SW846 6010C
Manganese	207	15		ug/l	SW846 6010C

Summary of Hits

Page 2 of 2

Job Number: MC20972
Account: Arcadis
Project: RockTenn, Robinson, NY
Collected: 05/09/13 thru 05/13/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

Potassium		6100	5000		ug/l	SW846 6010C
Sodium		77100	5000		ug/l	SW846 6010C

MC20972-5 MW-7

Aluminum	2380	200		ug/l	SW846 6010C
Calcium	111000	5000		ug/l	SW846 6010C
Iron	3000	100		ug/l	SW846 6010C
Magnesium	48800	5000		ug/l	SW846 6010C
Manganese	72.9	15		ug/l	SW846 6010C
Mercury	0.48	0.20		ug/l	SW846 7470A
Sodium	74300	5000		ug/l	SW846 6010C

MC20972-6 TRIP BLANK

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-1	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	RockTenn, Robinson, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N76448.D	1	05/23/13	JB	n/a	n/a	MSN2867
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-1	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	RockTenn, Robinson, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-1	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082 SW846 3510C		
Project:	RockTenn, Robinson, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ80665.D	1	05/24/13	CZ	05/20/13	OP33233	GYZ7145
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%		30-150%
877-09-8	Tetrachloro-m-xylene	70%		30-150%
2051-24-3	Decachlorobiphenyl	53%		30-150%
2051-24-3	Decachlorobiphenyl	54%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-3
Lab Sample ID: MC20972-1
Matrix: AQ - Ground Water
Project: RockTenn, Robinson, NY

Date Sampled: 05/13/13
Date Received: 05/17/13
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Aluminum	762	200	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Antimony	< 6.0	6.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Arsenic	< 4.0	4.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Barium	113	50	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Beryllium	< 4.0	4.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Calcium	184000	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Cobalt	< 50	50	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Iron	1800	100	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Magnesium	26900	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Manganese	291	15	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	05/22/13	05/23/13 SA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Potassium	< 5000	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Sodium	42300	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Thallium	< 5.0	5.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Vanadium	< 10	10	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Zinc	26.0	20	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³

(1) Instrument QC Batch: MA15636

(2) Instrument QC Batch: MA15642

(3) Prep QC Batch: MP21007

(4) Prep QC Batch: MP21019

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-2	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	RockTenn, Robinson, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N76449.D	1	05/23/13	JB	n/a	n/a	MSN2867
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-2	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	RockTenn, Robinson, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-2	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082 SW846 3510C		
Project:	RockTenn, Robinson, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ80666.D	1	05/24/13	CZ	05/20/13	OP33233	GYZ7145
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.28	ug/l	
11104-28-2	Aroclor 1221	ND	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.28	ug/l	
53469-21-9	Aroclor 1242	ND	0.28	ug/l	
12672-29-6	Aroclor 1248	ND	0.28	ug/l	
11097-69-1	Aroclor 1254	ND	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	68%		30-150%
877-09-8	Tetrachloro-m-xylene	76%		30-150%
2051-24-3	Decachlorobiphenyl	52%		30-150%
2051-24-3	Decachlorobiphenyl	52%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-4
Lab Sample ID: MC20972-2
Matrix: AQ - Ground Water
Project: RockTenn, Robinson, NY

Date Sampled: 05/13/13
Date Received: 05/17/13
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Aluminum	2470	200	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Antimony	< 6.0	6.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Arsenic	< 4.0	4.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Barium	< 50	50	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Beryllium	< 4.0	4.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Calcium	41400	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Chromium	44.6	10	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Cobalt	< 50	50	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Iron	2620	100	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Lead	14.5	5.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Magnesium	6870	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Manganese	52.4	15	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	05/22/13	05/23/13 SA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Potassium	< 5000	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Sodium	5310	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Thallium	< 5.0	5.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Vanadium	< 10	10	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³
Zinc	174	20	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ³

(1) Instrument QC Batch: MA15636

(2) Instrument QC Batch: MA15642

(3) Prep QC Batch: MP21007

(4) Prep QC Batch: MP21019

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-5A	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-3	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	RockTenn, Robinson, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N76450.D	1	05/23/13	JB	n/a	n/a	MSN2867
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5A	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-3	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	RockTenn, Robinson, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5A	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-3	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082 SW846 3510C		
Project:	RockTenn, Robinson, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ80667.D	1	05/24/13	CZ	05/20/13	OP33233	GYZ7145
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		30-150%
877-09-8	Tetrachloro-m-xylene	69%		30-150%
2051-24-3	Decachlorobiphenyl	47%		30-150%
2051-24-3	Decachlorobiphenyl	48%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-5A
Lab Sample ID: MC20972-3
Matrix: AQ - Ground Water
Project: RockTenn, Robinson, NY

Date Sampled: 05/13/13
Date Received: 05/17/13
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Aluminum	4220	200	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Antimony	< 6.0	6.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Arsenic	21.8	4.0	ug/l	1	05/21/13	05/23/13 EAL	SW846 6010C ³	SW846 3010A ⁴
Barium	53.3	50	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Beryllium	< 4.0	4.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Cadmium	< 4.0	4.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Calcium	126000	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Chromium	< 10	10	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Cobalt	< 50	50	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Copper	< 25	25	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Iron	11700	100	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Lead	< 5.0	5.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Magnesium	54600	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Manganese	163	15	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Mercury	< 0.20	0.20	ug/l	1	05/22/13	05/23/13 SA	SW846 7470A ¹	SW846 7470A ⁵
Nickel	< 40	40	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Potassium	< 5000	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Selenium	< 10	10	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Silver	< 5.0	5.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Sodium	64900	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Thallium	< 5.0	5.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Vanadium	< 10	10	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴
Zinc	85.3	20	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ²	SW846 3010A ⁴

(1) Instrument QC Batch: MA15636

(2) Instrument QC Batch: MA15642

(3) Instrument QC Batch: MA15649

(4) Prep QC Batch: MP21007

(5) Prep QC Batch: MP21019

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-6R	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-4	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	RockTenn, Robinson, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N76451.D	1	05/23/13	JB	n/a	n/a	MSN2867
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	1.1	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	5.7	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6R	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-4	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	RockTenn, Robinson, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6R	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-4	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082 SW846 3510C		
Project:	RockTenn, Robinson, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ80668.D	1	05/25/13	CZ	05/20/13	OP33233	GYZ7145
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	74%		30-150%
877-09-8	Tetrachloro-m-xylene	81%		30-150%
2051-24-3	Decachlorobiphenyl	57%		30-150%
2051-24-3	Decachlorobiphenyl	58%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-6R
Lab Sample ID: MC20972-4
Matrix: AQ - Ground Water
Project: RockTenn, Robinson, NY

Date Sampled: 05/13/13
Date Received: 05/17/13
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	401	200	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Antimony	< 6.0	6.0	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Arsenic	< 4.0	4.0	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Barium	90.5	50	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Beryllium	< 4.0	4.0	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Cadmium	< 4.0	4.0	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Calcium	148000	5000	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Chromium	< 10	10	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Cobalt	< 50	50	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Copper	< 25	25	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Iron	505	100	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Lead	< 5.0	5.0	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Magnesium	30100	5000	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Manganese	207	15	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Mercury	< 0.20	0.20	ug/l	1	05/28/13	05/29/13	SA	SW846 7470A ²
Nickel	< 40	40	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Potassium	6100	5000	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Selenium	< 10	10	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Silver	< 5.0	5.0	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Sodium	77100	5000	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Thallium	< 5.0	5.0	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Vanadium	< 10	10	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹
Zinc	< 20	20	ug/l	1	05/21/13	05/22/13	EAL	SW846 6010C ¹

(1) Instrument QC Batch: MA15642

(2) Instrument QC Batch: MA15664

(3) Prep QC Batch: MP21007

(4) Prep QC Batch: MP21064

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-7	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-5	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	RockTenn, Robinson, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N76452.D	1	05/23/13	JB	n/a	n/a	MSN2867
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-7	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-5	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	RockTenn, Robinson, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%
2037-26-5	Toluene-D8	107%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-7	Date Sampled:	05/13/13
Lab Sample ID:	MC20972-5	Date Received:	05/17/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082 SW846 3510C		
Project:	RockTenn, Robinson, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ80669.D	1	05/25/13	CZ	05/20/13	OP33233	GYZ7145
Run #2							

	Initial Volume	Final Volume
Run #1	820 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.30	ug/l	
11104-28-2	Aroclor 1221	ND	0.30	ug/l	
11141-16-5	Aroclor 1232	ND	0.30	ug/l	
53469-21-9	Aroclor 1242	ND	0.30	ug/l	
12672-29-6	Aroclor 1248	ND	0.30	ug/l	
11097-69-1	Aroclor 1254	ND	0.30	ug/l	
11096-82-5	Aroclor 1260	ND	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	66%		30-150%
877-09-8	Tetrachloro-m-xylene	68%		30-150%
2051-24-3	Decachlorobiphenyl	51%		30-150%
2051-24-3	Decachlorobiphenyl	52%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-7
Lab Sample ID: MC20972-5
Matrix: AQ - Ground Water
Project: RockTenn, Robinson, NY

Date Sampled: 05/13/13
Date Received: 05/17/13
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	2380	200	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Antimony	< 6.0	6.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Arsenic	< 4.0	4.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Barium	< 50	50	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Beryllium	< 4.0	4.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Calcium	111000	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Chromium	< 10	10	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Cobalt	< 50	50	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Copper	< 25	25	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Iron	3000	100	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Magnesium	48800	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Manganese	72.9	15	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Mercury	0.48	0.20	ug/l	1	05/28/13	05/29/13 SA	SW846 7470A ²	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Potassium	< 5000	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Selenium	< 10	10	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Sodium	74300	5000	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Thallium	< 5.0	5.0	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Vanadium	< 10	10	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³
Zinc	< 20	20	ug/l	1	05/21/13	05/22/13 EAL	SW846 6010C ¹	SW846 3010A ³

(1) Instrument QC Batch: MA15642

(2) Instrument QC Batch: MA15664

(3) Prep QC Batch: MP21007

(4) Prep QC Batch: MP21064

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	05/09/13
Lab Sample ID:	MC20972-6	Date Received:	05/17/13
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	RockTenn, Robinson, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N76334.D	1	05/21/13	JB	n/a	n/a	MSN2863
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	05/09/13
Lab Sample ID:	MC20972-6	Date Received:	05/17/13
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	RockTenn, Robinson, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC20972 **Client:** ARCADIS **Immediate Client Services Action Required:** No
Date / Time Received: 5/17/2013 **Delivery Method:** **Client Service Action Required at Login:** No
Project: ROCK TENN **No. Coolers:** 1 **Airbill #'s:**

Cooler Security **Y or N** **Y or N**
1. Custody Seals Present: ☒ ☐ 3. COC Present: ☒ ☐
2. Custody Seals Intact: ☒ ☐ 4. Smpl Dates/Time OK: ☒ ☐

Cooler Temperature **Y or N**
1. Temp criteria achieved: ☒ ☐
2. Cooler temp verification: Infrared gun
3. Cooler media: Ice (bag)

Quality Control Preservation **Y or N** **N/A**
1. Trip Blank present / cooler: ☒ ☐ ☐
2. Trip Blank listed on COC: ☒ ☐ ☐
3. Samples preserved properly: ☒ ☐ ☐
4. VOCs headspace free: ☒ ☐ ☐

Sample Integrity - Documentation **Y or N**
1. Sample labels present on bottles: ☒ ☐
2. Container labeling complete: ☒ ☐
3. Sample container label / COC agree: ☒ ☐

Sample Integrity - Condition **Y or N**
1. Sample recvd within HT: ☒ ☐
2. All containers accounted for: ☒ ☐
3. Condition of sample: Intact

Sample Integrity - Instructions **Y or N** **N/A**
1. Analysis requested is clear: ☒ ☐
2. Bottles received for unspecified tests: ☐ ☒
3. Sufficient volume recvd for analysis: ☒ ☐
4. Compositing instructions clear: ☐ ☐ ☒
5. Filtering instructions clear: ☐ ☐ ☒

Comments

GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

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Job Number: MC20972

Account: ACNYB Arcadis

Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN2863-MB	N76333.D	1	05/21/13	JB	n/a	n/a	MSN2863

The QC reported here applies to the following samples:

Method: SW846 8260B

MC20972-6

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

Method Blank Summary

Job Number: MC20972
Account: ACNYB Arcadis
Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN2863-MB	N76333.D	1	05/21/13	JB	n/a	n/a	MSN2863

The QC reported here applies to the following samples:

Method: SW846 8260B

MC20972-6

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	110% 70-130%
2037-26-5	Toluene-D8	106% 70-130%
460-00-4	4-Bromofluorobenzene	102% 70-130%

5.1.1
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Method Blank Summary

Page 1 of 2

Job Number: MC20972

Account: ACNYB Arcadis

Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN2867-MB	N76431.D	1	05/23/13	JB	n/a	n/a	MSN2867

The QC reported here applies to the following samples:

Method: SW846 8260B

MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

Method Blank Summary

Job Number: MC20972
Account: ACNYB Arcadis
Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN2867-MB	N76431.D	1	05/23/13	JB	n/a	n/a	MSN2867

The QC reported here applies to the following samples:

Method: SW846 8260B

MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	105% 70-130%
2037-26-5	Toluene-D8	105% 70-130%
460-00-4	4-Bromofluorobenzene	100% 70-130%

Blank Spike Summary

Page 1 of 2

Job Number: MC20972
Account: ACNYB Arcadis
Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN2863-BS	N76330.D	1	05/21/13	JB	n/a	n/a	MSN2863

The QC reported here applies to the following samples:

Method: SW846 8260B

MC20972-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	63.1	126	70-130
71-43-2	Benzene	50	47.4	95	70-130
75-27-4	Bromodichloromethane	50	63.3	127	70-130
75-25-2	Bromoform	50	50.4	101	70-130
74-83-9	Bromomethane	50	47.6	95	70-130
78-93-3	2-Butanone (MEK)	50	57.9	116	70-130
75-15-0	Carbon disulfide	50	51.8	104	70-130
56-23-5	Carbon tetrachloride	50	66.4	133* a	70-130
108-90-7	Chlorobenzene	50	44.5	89	70-130
75-00-3	Chloroethane	50	47.9	96	70-130
67-66-3	Chloroform	50	56.1	112	70-130
74-87-3	Chloromethane	50	52.5	105	70-130
124-48-1	Dibromochloromethane	50	50.8	102	70-130
75-34-3	1,1-Dichloroethane	50	50.8	102	70-130
107-06-2	1,2-Dichloroethane	50	63.6	127	70-130
75-35-4	1,1-Dichloroethene	50	46.2	92	70-130
156-59-2	cis-1,2-Dichloroethene	50	47.2	94	70-130
156-60-5	trans-1,2-Dichloroethene	50	46.5	93	70-130
78-87-5	1,2-Dichloropropane	50	49.5	99	70-130
10061-01-5	cis-1,3-Dichloropropene	50	57.2	114	70-130
10061-02-6	trans-1,3-Dichloropropene	50	56.4	113	70-130
100-41-4	Ethylbenzene	50	48.9	98	70-130
591-78-6	2-Hexanone	50	53.6	107	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	61.7	123	70-130
75-09-2	Methylene chloride	50	48.8	98	70-130
100-42-5	Styrene	50	49.2	98	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	55.5	111	70-130
127-18-4	Tetrachloroethene	50	49.2	98	70-130
108-88-3	Toluene	50	51.5	103	70-130
71-55-6	1,1,1-Trichloroethane	50	60.4	121	70-130
79-00-5	1,1,2-Trichloroethane	50	53.7	107	70-130
79-01-6	Trichloroethene	50	52.4	105	70-130
75-01-4	Vinyl chloride	50	58.9	118	70-130
1330-20-7	Xylene (total)	150	136	91	70-130

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: MC20972

Account: ACNYB Arcadis

Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN2863-BS	N76330.D	1	05/21/13	JB	n/a	n/a	MSN2863

The QC reported here applies to the following samples:

Method: SW846 8260B

MC20972-6

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	70-130%
2037-26-5	Toluene-D8	105%	70-130%
460-00-4	4-Bromofluorobenzene	100%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC20972
Account: ACNYB Arcadis
Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN2867-BS	N76428.D	1	05/23/13	JB	n/a	n/a	MSN2867

The QC reported here applies to the following samples:

Method: SW846 8260B

MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	51.7	103	70-130
71-43-2	Benzene	50	45.6	91	70-130
75-27-4	Bromodichloromethane	50	56.4	113	70-130
75-25-2	Bromoform	50	42.9	86	70-130
74-83-9	Bromomethane	50	32.2	64* a	70-130
78-93-3	2-Butanone (MEK)	50	52.6	105	70-130
75-15-0	Carbon disulfide	50	48.8	98	70-130
56-23-5	Carbon tetrachloride	50	57.8	116	70-130
108-90-7	Chlorobenzene	50	41.4	83	70-130
75-00-3	Chloroethane	50	47.0	94	70-130
67-66-3	Chloroform	50	50.3	101	70-130
74-87-3	Chloromethane	50	42.8	86	70-130
124-48-1	Dibromochloromethane	50	45.5	91	70-130
75-34-3	1,1-Dichloroethane	50	48.0	96	70-130
107-06-2	1,2-Dichloroethane	50	55.6	111	70-130
75-35-4	1,1-Dichloroethene	50	45.0	90	70-130
156-59-2	cis-1,2-Dichloroethene	50	45.3	91	70-130
156-60-5	trans-1,2-Dichloroethene	50	44.2	88	70-130
78-87-5	1,2-Dichloropropane	50	47.8	96	70-130
10061-01-5	cis-1,3-Dichloropropene	50	52.9	106	70-130
10061-02-6	trans-1,3-Dichloropropene	50	51.8	104	70-130
100-41-4	Ethylbenzene	50	45.6	91	70-130
591-78-6	2-Hexanone	50	48.8	98	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	55.4	111	70-130
75-09-2	Methylene chloride	50	45.2	90	70-130
100-42-5	Styrene	50	44.8	90	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	48.7	97	70-130
127-18-4	Tetrachloroethene	50	44.3	89	70-130
108-88-3	Toluene	50	48.0	96	70-130
71-55-6	1,1,1-Trichloroethane	50	53.9	108	70-130
79-00-5	1,1,2-Trichloroethane	50	50.6	101	70-130
79-01-6	Trichloroethene	50	47.5	95	70-130
75-01-4	Vinyl chloride	50	52.9	106	70-130
1330-20-7	Xylene (total)	150	128	85	70-130

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: MC20972

Account: ACNYB Arcadis

Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN2867-BS	N76428.D	1	05/23/13	JB	n/a	n/a	MSN2867

The QC reported here applies to the following samples:

Method: SW846 8260B

MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	70-130%
2037-26-5	Toluene-D8	107%	70-130%
460-00-4	4-Bromofluorobenzene	99%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: MC20972
Account: ACNYB Arcadis
Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC20790-5MS	N76347.D	5	05/21/13	JB	n/a	n/a	MSN2863
MC20790-5MSD	N76348.D	5	05/21/13	JB	n/a	n/a	MSN2863
MC20790-5	N76336.D	1	05/21/13	JB	n/a	n/a	MSN2863

The QC reported here applies to the following samples:

Method: SW846 8260B

MC20972-6

CAS No.	Compound	MC20790-5 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	250	291	116	283	113	3	70-130/30
71-43-2	Benzene	ND	250	221	88	224	90	1	70-130/30
75-27-4	Bromodichloromethane	ND	250	294	118	301	120	2	70-130/30
75-25-2	Bromoform	ND	250	227	91	224	90	1	70-130/30
74-83-9	Bromomethane	ND	250	73.0	29* a	123	49* a	51* b	70-130/30
78-93-3	2-Butanone (MEK)	ND	250	269	108	258	103	4	70-130/30
75-15-0	Carbon disulfide	ND	250	238	95	240	96	1	70-130/30
56-23-5	Carbon tetrachloride	ND	250	307	123	308	123	0	70-130/30
108-90-7	Chlorobenzene	ND	250	202	81	206	82	2	70-130/30
75-00-3	Chloroethane	ND	250	224	90	220	88	2	70-130/30
67-66-3	Chloroform	ND	250	268	107	265	106	1	70-130/30
74-87-3	Chloromethane	ND	250	186	74	196	78	5	70-130/30
124-48-1	Dibromochloromethane	ND	250	231	92	233	93	1	70-130/30
75-34-3	1,1-Dichloroethane	ND	250	240	96	237	95	1	70-130/30
107-06-2	1,2-Dichloroethane	ND	250	305	122	300	120	2	70-130/30
75-35-4	1,1-Dichloroethene	ND	250	216	86	218	87	1	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND	250	224	90	222	89	1	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND	250	217	87	217	87	0	70-130/30
78-87-5	1,2-Dichloropropane	ND	250	226	90	231	92	2	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	250	255	102	263	105	3	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND	250	259	104	259	104	0	70-130/30
100-41-4	Ethylbenzene	ND	250	218	87	225	90	3	70-130/30
591-78-6	2-Hexanone	ND	250	244	98	241	96	1	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	286	114	280	112	2	70-130/30
75-09-2	Methylene chloride	ND	250	226	90	226	90	0	70-130/30
100-42-5	Styrene	ND	250	215	86	221	88	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	244	98	250	100	2	70-130/30
127-18-4	Tetrachloroethene	ND	250	213	85	222	89	4	70-130/30
108-88-3	Toluene	ND	250	241	96	243	97	1	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	250	287	115	285	114	1	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	250	248	99	251	100	1	70-130/30
79-01-6	Trichloroethene	ND	250	239	96	240	96	0	70-130/30
75-01-4	Vinyl chloride	ND	250	265	106	269	108	1	70-130/30
1330-20-7	Xylene (total)	ND	750	611	81	629	84	3	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: MC20972

Account: ACNYB Arcadis

Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC20790-5MS	N76347.D	5	05/21/13	JB	n/a	n/a	MSN2863
MC20790-5MSD	N76348.D	5	05/21/13	JB	n/a	n/a	MSN2863
MC20790-5	N76336.D	1	05/21/13	JB	n/a	n/a	MSN2863

The QC reported here applies to the following samples:

Method: SW846 8260B

MC20972-6

CAS No.	Surrogate Recoveries	MS	MSD	MC20790-5	Limits
1868-53-7	Dibromofluoromethane	111%	107%	108%	70-130%
2037-26-5	Toluene-D8	105%	109%	106%	70-130%
460-00-4	4-Bromofluorobenzene	98%	100%	101%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

(b) High RPD due to possible matrix interference and/or sample non-homogeneity.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: MC20972
Account: ACNYB Arcadis
Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC20976-1MS	N76441.D	5	05/23/13	JB	n/a	n/a	MSN2867
MC20976-1MSD	N76442.D	5	05/23/13	JB	n/a	n/a	MSN2867
MC20976-1	N76432.D	1	05/23/13	JB	n/a	n/a	MSN2867

The QC reported here applies to the following samples:

Method: SW846 8260B

MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

CAS No.	Compound	MC20976-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	250	245	98	271	108	10	70-130/30
71-43-2	Benzene	ND	250	219	88	230	92	5	70-130/30
75-27-4	Bromodichloromethane	ND	250	264	106	278	111	5	70-130/30
75-25-2	Bromoform	ND	250	209	84	226	90	8	70-130/30
74-83-9	Bromomethane	ND	250	163	65* a	202	81	21	70-130/30
78-93-3	2-Butanone (MEK)	ND	250	256	102	275	110	7	70-130/30
75-15-0	Carbon disulfide	ND	250	232	93	243	97	5	70-130/30
56-23-5	Carbon tetrachloride	ND	250	263	105	277	111	5	70-130/30
108-90-7	Chlorobenzene	ND	250	202	81	217	87	7	70-130/30
75-00-3	Chloroethane	ND	250	226	90	232	93	3	70-130/30
67-66-3	Chloroform	ND	250	244	98	250	100	2	70-130/30
74-87-3	Chloromethane	ND	250	206	82	219	88	6	70-130/30
124-48-1	Dibromochloromethane	ND	250	216	86	232	93	7	70-130/30
75-34-3	1,1-Dichloroethane	ND	250	232	93	238	95	3	70-130/30
107-06-2	1,2-Dichloroethane	ND	250	256	102	267	107	4	70-130/30
75-35-4	1,1-Dichloroethene	ND	250	213	85	222	89	4	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND	250	219	88	224	90	2	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND	250	217	87	225	90	4	70-130/30
78-87-5	1,2-Dichloropropane	ND	250	232	93	240	96	3	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	250	254	102	265	106	4	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND	250	244	98	252	101	3	70-130/30
100-41-4	Ethylbenzene	ND	250	218	87	235	94	8	70-130/30
591-78-6	2-Hexanone	ND	250	261	104	270	108	3	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	274	110	301	120	9	70-130/30
75-09-2	Methylene chloride	ND	250	223	89	229	92	3	70-130/30
100-42-5	Styrene	ND	250	223	89	243	97	9	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	244	98	273	109	11	70-130/30
127-18-4	Tetrachloroethene	ND	250	212	85	227	91	7	70-130/30
108-88-3	Toluene	ND	250	233	93	244	98	5	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	250	253	101	256	102	1	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	250	252	101	256	102	2	70-130/30
79-01-6	Trichloroethene	ND	250	229	92	239	96	4	70-130/30
75-01-4	Vinyl chloride	ND	250	244	98	261	104	7	70-130/30
1330-20-7	Xylene (total)	ND	750	615	82	655	87	6	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: MC20972

Account: ACNYB Arcadis

Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC20976-1MS	N76441.D	5	05/23/13	JB	n/a	n/a	MSN2867
MC20976-1MSD	N76442.D	5	05/23/13	JB	n/a	n/a	MSN2867
MC20976-1	N76432.D	1	05/23/13	JB	n/a	n/a	MSN2867

The QC reported here applies to the following samples:

Method: SW846 8260B

MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

CAS No.	Surrogate Recoveries	MS	MSD	MC20976-1	Limits
1868-53-7	Dibromofluoromethane	104%	103%	105%	70-130%
2037-26-5	Toluene-D8	106%	105%	106%	70-130%
460-00-4	4-Bromofluorobenzene	102%	101%	101%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: MC20972

Account: ACNYB Arcadis

Project: RockTenn, Robinson, NY

Method: SW846 8260B

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC20972-1	N76448.D	103.0	106.0	99.0
MC20972-2	N76449.D	106.0	104.0	99.0
MC20972-3	N76450.D	106.0	105.0	101.0
MC20972-4	N76451.D	104.0	106.0	100.0
MC20972-5	N76452.D	107.0	107.0	99.0
MC20972-6	N76334.D	107.0	105.0	101.0
MC20790-5MS	N76347.D	111.0	105.0	98.0
MC20790-5MSD	N76348.D	107.0	109.0	100.0
MC20976-1MS	N76441.D	104.0	106.0	102.0
MC20976-1MSD	N76442.D	103.0	105.0	101.0
MSN2863-BS	N76330.D	107.0	105.0	100.0
MSN2863-MB	N76333.D	110.0	106.0	102.0
MSN2867-BS	N76428.D	107.0	107.0	99.0
MSN2867-MB	N76431.D	105.0	105.0	100.0

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane

70-130%

S2 = Toluene-D8

70-130%

S3 = 4-Bromofluorobenzene

70-130%

5.4.1

5

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: MC20972

Account: ACNYB Arcadis

Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33233-MB	BK25063.D	1	05/23/13	NK	05/20/13	OP33233	GBK873

The QC reported here applies to the following samples:

Method: SW846 8082

MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	115% 30-150%
877-09-8	Tetrachloro-m-xylene	116% 30-150%
2051-24-3	Decachlorobiphenyl	106% 30-150%
2051-24-3	Decachlorobiphenyl	116% 30-150%

Blank Spike Summary

Page 1 of 1

Job Number: MC20972

Account: ACNYB Arcadis

Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33233-BS	BB48011.D	1	05/23/13	CZ	05/20/13	OP33233	GBB2874

The QC reported here applies to the following samples:

Method: SW846 8082

MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	2.3	115	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	2.5	125	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	122%	30-150%
877-09-8	Tetrachloro-m-xylene	132%	30-150%
2051-24-3	Decachlorobiphenyl	140%	30-150%
2051-24-3	Decachlorobiphenyl	137%	30-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: MC20972
Account: ACNYB Arcadis
Project: RockTenn, Robinson, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP33233-MS	BB48012.D	1	05/23/13	CZ	05/20/13	OP33233	GBB2874
OP33233-MSD	BB48013.D	1	05/23/13	CZ	05/20/13	OP33233	GBB2874
MC21000-17	BB48014.D	1	05/23/13	CZ	05/20/13	OP33233	GBB2874

The QC reported here applies to the following samples:

Method: SW846 8082

MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

CAS No.	Compound	MC21000-17 Spike ug/l	Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	2		2.3	115	2.2	110	4	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND	2		2.5	125	2.3	115	8	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	MC21000-17 Limits
877-09-8	Tetrachloro-m-xylene	120%	109%	122% 30-150%
877-09-8	Tetrachloro-m-xylene	126%	118%	128% 30-150%
2051-24-3	Decachlorobiphenyl	135%	125%	135% 30-150%
2051-24-3	Decachlorobiphenyl	129%	120%	128% 30-150%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: MC20972

Account: ACNYB Arcadis

Project: RockTenn, Robinson, NY

Method: SW846 8082

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
MC20972-1	YZ80665.D	65.0	70.0	53.0	54.0
MC20972-2	YZ80666.D	68.0	76.0	52.0	52.0
MC20972-3	YZ80667.D	69.0	69.0	47.0	48.0
MC20972-4	YZ80668.D	74.0	81.0	57.0	58.0
MC20972-5	YZ80669.D	66.0	68.0	51.0	52.0
OP33233-BS	BB48011.D	122.0	132.0	140.0	137.0
OP33233-MB	BK25063.D	115.0	116.0	106.0	116.0
OP33233-MS	BB48012.D	120.0	126.0	135.0	129.0
OP33233-MSD	BB48013.D	109.0	118.0	125.0	120.0

Surrogate Compounds

Recovery Limits

S1 = Tetrachloro-m-xylene

30-150%

S2 = Decachlorobiphenyl

30-150%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

6.4.1

6

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC20972
Account: ACNYB - Arcadis
Project: RockTenn, Robinson, NY

QC Batch ID: MP21007
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/21/13 05/21/13

Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	200	12	40	-0.50	<200	4.2	<200
Antimony	6.0	1.1	1.9	1.9	<6.0	0.20	<6.0
Arsenic	4.0	1.7	2.9	0.0	<4.0	0.0	<4.0
Barium	50	.32	.81	0.0	<50	0.50	<50
Beryllium	4.0	.1	.25	0.10	<4.0	0.20	<4.0
Boron	100	1.1	1.4				
Cadmium	4.0	.25	.5	0.20	<4.0	0.40	<4.0
Calcium	5000	21	38	-12	<5000	66.8	<5000
Chromium	10	.48	1.4	0.0	<10	-0.10	<10
Cobalt	50	.29	.4	-0.20	<50	-0.20	<50
Copper	25	.93	7	1.0	<25	2.3	<25
Gold	50	1.5	5				
Iron	100	3.5	20	2.7	<100	1.1	<100
Lead	5.0	1.2	1.7	-0.60	<5.0	-0.20	<5.0
Magnesium	5000	30	59	5.3	<5000	22.6	<5000
Manganese	15	.16	.81	0.40	<15	0.40	<15
Molybdenum	100	.31	.77				
Nickel	40	.45	.57	-0.30	<40	-0.60	<40
Palladium	50	2.2	7.6				
Platinum	50	6.4	14				
Potassium	5000	54	160	77.9	<5000	125	<5000
Selenium	10	1.7	4.8	0.70	<10	1.5	<10
Silicon	100	2	45				
Silver	5.0	.81	1	-0.30	<5.0	0.0	<5.0
Sodium	5000	16	60	28.6	<5000	91.5	<5000
Strontium	10	.12	.26				
Thallium	5.0	1.2	1.9	-3.7	<5.0	-4.5	<5.0
Tin	100	.87	1.4				
Titanium	50	.66	1.8				
Tungsten	100	9.3	16				
Vanadium	10	.82	2.8	0.10	<10	0.30	<10
Zinc	20	.45	.5	-0.20	<20	0.60	<20
Zirconium	50	.45	2.2				

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC20972
Account: ACNYB - Arcadis
Project: RockTenn, Robinson, NY

QC Batch ID: MP21007
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Associated samples MP21007: MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC20972
Account: ACNYB - Arcadis
Project: RockTenn, Robinson, NY

QC Batch ID: MP21007
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/21/13

Metal	MC20938-8F Original MS		Spikelot MPICP	% Rec	QC Limits
Aluminum	0.0	2080	2000	104.0	75-125
Antimony	1.3	548	500	109.3	75-125
Arsenic	3.5	543	500	107.9	75-125
Barium	101	2170	2000	103.5	75-125
Beryllium	0.30	541	500	108.1	75-125
Boron					
Cadmium	0.90	544	500	108.6	75-125
Calcium	200000	230000	25000	120.0	75-125
Chromium	0.80	540	500	107.8	75-125
Cobalt	11.1	555	500	108.8	75-125
Copper	2.8	513	500	102.0	75-125
Gold					
Iron	10300	12600	2000	115.0	75-125
Lead	0.0	1030	1000	103.0	75-125
Magnesium	49900	76500	25000	106.4	75-125
Manganese	10700	11100	500	80.0	75-125
Molybdenum					
Nickel	4.8	521	500	103.2	75-125
Palladium					
Platinum					
Potassium	15500	42100	25000	106.4	75-125
Selenium	5.5	524	500	103.7	75-125
Silicon					
Silver	0.0	218	200	109.0	75-125
Sodium	116000	142000	25000	104.0	75-125
Strontium					
Thallium	0.0	515	500	103.0	75-125
Tin					
Titanium					
Tungsten					
Vanadium	1.4	525	500	104.7	75-125
Zinc	6.3	527	500	104.1	75-125
Zirconium					

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC20972
Account: ACNYB - Arcadis
Project: RockTenn, Robinson, NY

QC Batch ID: MP21007
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Associated samples MP21007: MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC20972
 Account: ACNYB - Arcadis
 Project: RockTenn, Robinson, NY

QC Batch ID: MP21007
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 05/21/13

Metal	MC20938-8F Original	MSD	Spikelet MPICP	% Rec	MSD RPD	QC Limit
Aluminum	0.0	2100	2000	105.0	1.0	20
Antimony	1.3	551	500	109.9	0.5	20
Arsenic	3.5	548	500	108.9	0.9	20
Barium	101	2180	2000	104.0	0.5	20
Beryllium	0.30	545	500	108.9	0.7	20
Boron						
Cadmium	0.90	547	500	109.2	0.5	20
Calcium	200000	226000	25000	104.0	1.8	20
Chromium	0.80	545	500	108.8	0.9	20
Cobalt	11.1	559	500	109.6	0.7	20
Copper	2.8	515	500	102.4	0.4	20
Gold						
Iron	10300	12400	2000	105.0	1.6	20
Lead	0.0	1040	1000	104.0	1.0	20
Magnesium	49900	75500	25000	102.4	1.3	20
Manganese	10700	11100	500	80.0	0.0	20
Molybdenum						
Nickel	4.8	526	500	104.2	1.0	20
Palladium						
Platinum						
Potassium	15500	41900	25000	105.6	0.5	20
Selenium	5.5	527	500	104.3	0.6	20
Silicon						
Silver	0.0	220	200	110.0	0.9	20
Sodium	116000	143000	25000	108.0	0.7	20
Strontium						
Thallium	0.0	518	500	103.6	0.6	20
Tin						
Titanium						
Tungsten						
Vanadium	1.4	530	500	105.7	0.9	20
Zinc	6.3	531	500	104.9	0.8	20
Zirconium						

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC20972
Account: ACNYB - Arcadis
Project: RockTenn, Robinson, NY

QC Batch ID: MP21007
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Associated samples MP21007: MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC20972
 Account: ACNYB - Arcadis
 Project: RockTenn, Robinson, NY

QC Batch ID: MP21007
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

05/21/13

05/21/13

Metal	BSP Result	SpikeLot MPICP	% Rec	QC Limits	BSP Result	SpikeLot MPICP	% Rec	BSP RPD	QC Limit
Aluminum	2120	2000	106.0	80-120	2110	2000	105.5	0.5	20
Antimony	528	500	105.6	80-120	536	500	107.2	1.5	20
Arsenic	521	500	104.2	80-120	532	500	106.4	2.1	20
Barium	2050	2000	102.5	80-120	2010	2000	100.5	2.0	20
Beryllium	532	500	106.4	80-120	542	500	108.4	1.9	20
Boron									
Cadmium	527	500	105.4	80-120	524	500	104.8	0.6	20
Calcium	25400	25000	101.6	80-120	25200	25000	100.8	0.8	20
Chromium	546	500	109.2	80-120	541	500	108.2	0.9	20
Cobalt	536	500	107.2	80-120	542	500	108.4	1.1	20
Copper	502	500	100.4	80-120	484	500	96.8	3.7	20
Gold									
Iron	2070	2000	103.5	80-120	2040	2000	102.0	1.5	20
Lead	1020	1000	102.0	80-120	1040	1000	104.0	1.9	20
Magnesium	25800	25000	103.2	80-120	24700	25000	98.8	4.4	20
Manganese	514	500	102.8	80-120	527	500	105.4	2.5	20
Molybdenum									
Nickel	506	500	101.2	80-120	522	500	104.4	3.1	20
Palladium									
Platinum									
Potassium	25900	25000	103.6	80-120	25300	25000	101.2	2.3	20
Selenium	503	500	100.6	80-120	517	500	103.4	2.7	20
Silicon									
Silver	213	200	106.5	80-120	208	200	104.0	2.4	20
Sodium	25900	25000	103.6	80-120	26100	25000	104.4	0.8	20
Strontium									
Thallium	518	500	103.6	80-120	522	500	104.4	0.8	20
Tin									
Titanium									
Tungsten									
Vanadium	526	500	105.2	80-120	515	500	103.0	2.1	20
Zinc	528	500	105.6	80-120	533	500	106.6	0.9	20
Zirconium									

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC20972
Account: ACNYB - Arcadis
Project: RockTenn, Robinson, NY

QC Batch ID: MP21007
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Associated samples MP21007: MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC20972
 Account: ACNYB - Arcadis
 Project: RockTenn, Robinson, NY

QC Batch ID: MP21007
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 05/21/13

Metal	MC20938-8F Original	SDL 1:5	%DIF	QC Limits
Aluminum	0.00	0.00	NC	0-10
Antimony	1.30	0.00	100.0(a)	0-10
Arsenic	3.50	0.00	100.0(a)	0-10
Barium	101	101	0.5	0-10
Beryllium	0.300	0.00	100.0(a)	0-10
Boron				
Cadmium	0.900	1.40	55.6 (a)	0-10
Calcium	200000	209000	4.1	0-10
Chromium	0.800	0.00	100.0(a)	0-10
Cobalt	11.1	11.4	2.7	0-10
Copper	2.80	10.9	289.3(a)	0-10
Gold				
Iron	10300	10800	4.6	0-10
Lead	0.00	0.00	NC	0-10
Magnesium	49900	51500	3.2	0-10
Manganese	10700	11600	8.2	0-10
Molybdenum				
Nickel	4.80	2.40	50.0 (a)	0-10
Palladium				
Platinum				
Potassium	15500	16200	4.5	0-10
Selenium	5.50	0.00	100.0(a)	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium	116000	117000	1.1	0-10
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Tungsten				
Vanadium	1.40	0.00	100.0(a)	0-10
Zinc	6.30	6.30	0.0	0-10
Zirconium				

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC20972
Account: ACNYB - Arcadis
Project: RockTenn, Robinson, NY

QC Batch ID: MP21007
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Associated samples MP21007: MC20972-1, MC20972-2, MC20972-3, MC20972-4, MC20972-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

7.1.4

7

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC20972
Account: ACNYB - Arcadis
Project: RockTenn, Robinson, NY

QC Batch ID: MP21019
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 05/22/13

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.018	.067	-0.0060	<0.20

Associated samples MP21019: MC20972-1, MC20972-2, MC20972-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC20972
 Account: ACNYB - Arcadis
 Project: RockTenn, Robinson, NY

QC Batch ID: MP21019
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 05/22/13

Metal	MC21031-30		SpikeLot		QC
	Original	MS	HGRWS1	% Rec	Limits
Mercury	0.0	3.2	3	106.7	75-125

Associated samples MP21019: MC20972-1, MC20972-2, MC20972-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.2.2

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC20972
 Account: ACNYB - Arcadis
 Project: RockTenn, Robinson, NY

QC Batch ID: MP21019
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 05/22/13

Metal	MC21031-30 Original MSD		SpikeLot HGRWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	3.2	3	106.7	0.0	20

Associated samples MP21019: MC20972-1, MC20972-2, MC20972-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.2.2

7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC20972
 Account: ACNYB - Arcadis
 Project: RockTenn, Robinson, NY

QC Batch ID: MP21019
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 05/22/13 05/22/13

Metal	BSP Result	SpikeLot HGRWS1	% Rec	QC Limits	BSD Result	SpikeLot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	3.0	3	100.0	80-120	3.0	3	100.0	0.0	20

Associated samples MP21019: MC20972-1, MC20972-2, MC20972-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

7.2.3
7

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC20972
Account: ACNYB - Arcadis
Project: RockTenn, Robinson, NY

QC Batch ID: MP21064
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 05/28/13

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.018	.067	0.038	<0.20

Associated samples MP21064: MC20972-4, MC20972-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.3.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC20972
 Account: ACNYB - Arcadis
 Project: RockTenn, Robinson, NY

QC Batch ID: MP21064
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 05/28/13

Metal	MC21104-23		SpikeLot		QC
	Original	MS	HGRWS1	% Rec	Limits
Mercury	0.0	3.2	3	106.7	75-125

Associated samples MP21064: MC20972-4, MC20972-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.3.2
7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: MC20972
 Account: ACNYB - Arcadis
 Project: RockTenn, Robinson, NY

QC Batch ID: MP21064
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 05/28/13

Metal	MC21104-23 Original MSD		SpikeLot HGRWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	3.3	3	110.0	3.1	20

Associated samples MP21064: MC20972-4, MC20972-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.3.2

7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC20972
 Account: ACNYB - Arcadis
 Project: RockTenn, Robinson, NY

QC Batch ID: MP21064
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 05/28/13 05/28/13

Metal	BSP Result	SpikeLot HGRWS1	% Rec	QC Limits	BSD Result	SpikeLot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	3.1	3	103.3	80-120	2.9	3	96.7	6.7	20

Associated samples MP21064: MC20972-4, MC20972-5

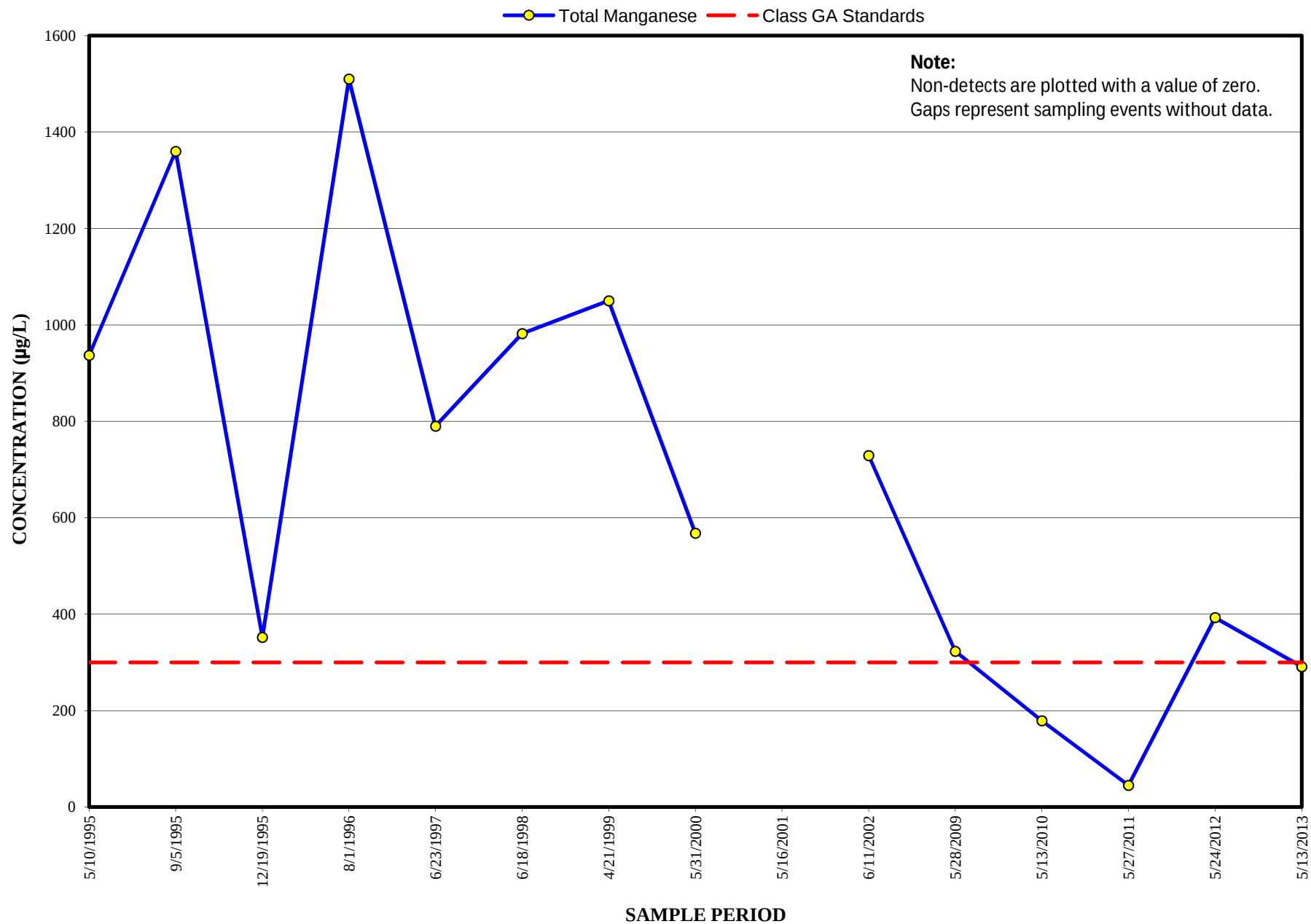
Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

Appendix C

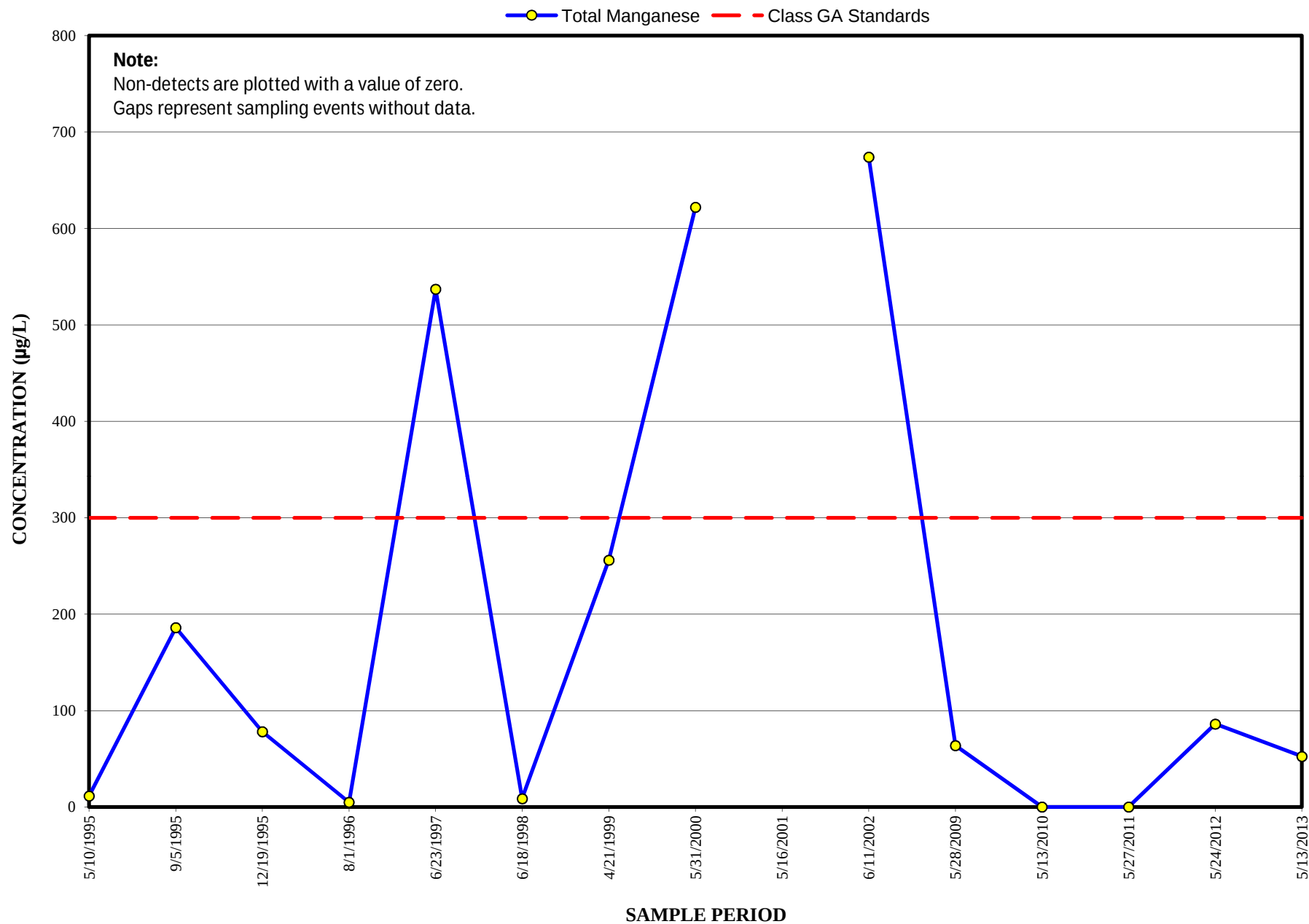
Selected Historical Analyte Concentration Trends

- **Manganese**
(MW-3, MW-4, MW-5A, MW-6R, MW-7)
- **Total Lead**
(MW-4, MW-6R, MW-7)
- **Total PCBs**
(MW-3, MW-4)
- **Total Chromium**
(MW-4, MW-6R, MW-7)
- **Benzene**
(MW-6R)

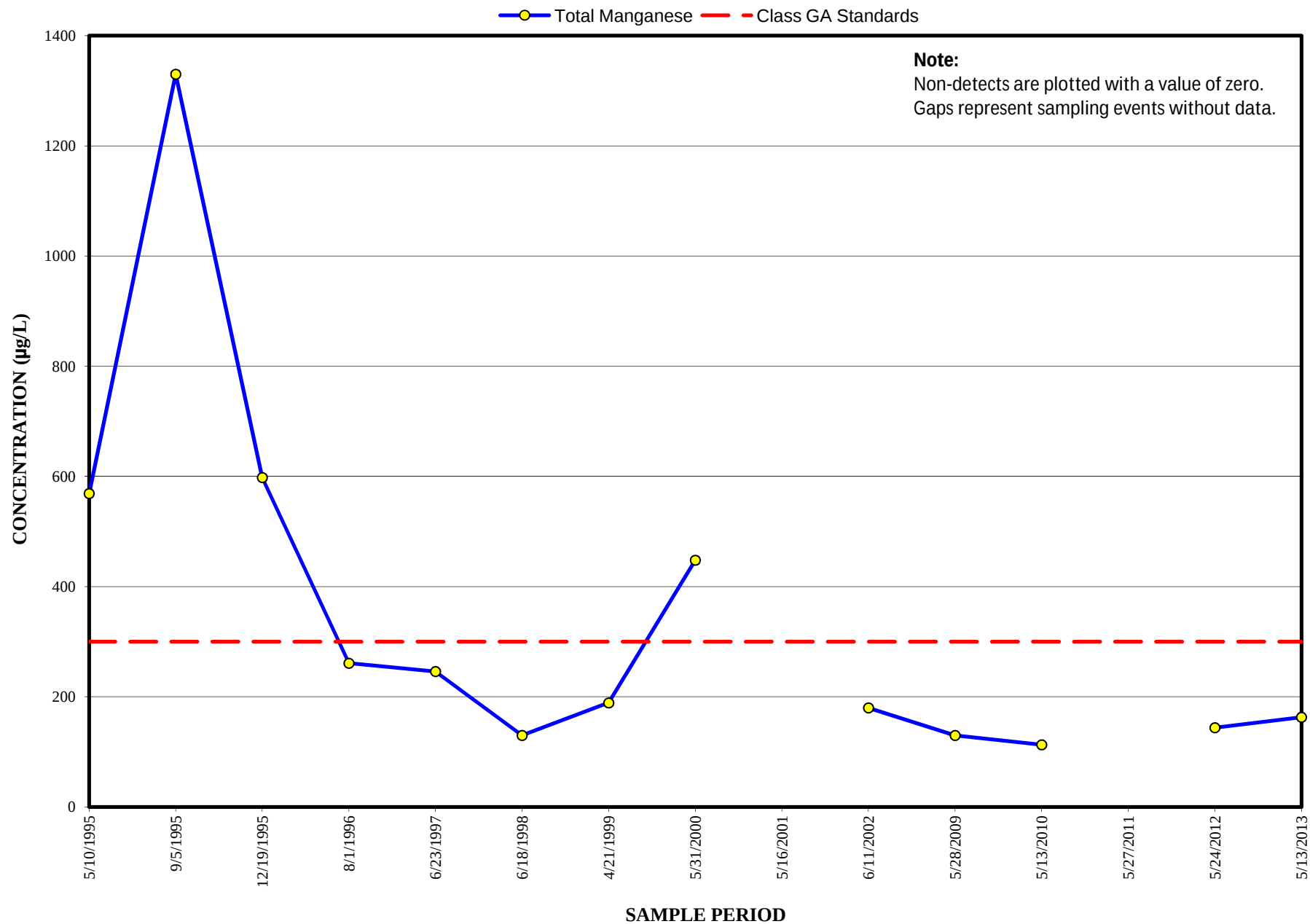
SHRECK'S SCRAPYARD SITE
MW-3
TOTAL MANGANESE



SHRECK'S SCRAPYARD SITE
MW-4
TOTAL MANGANESE



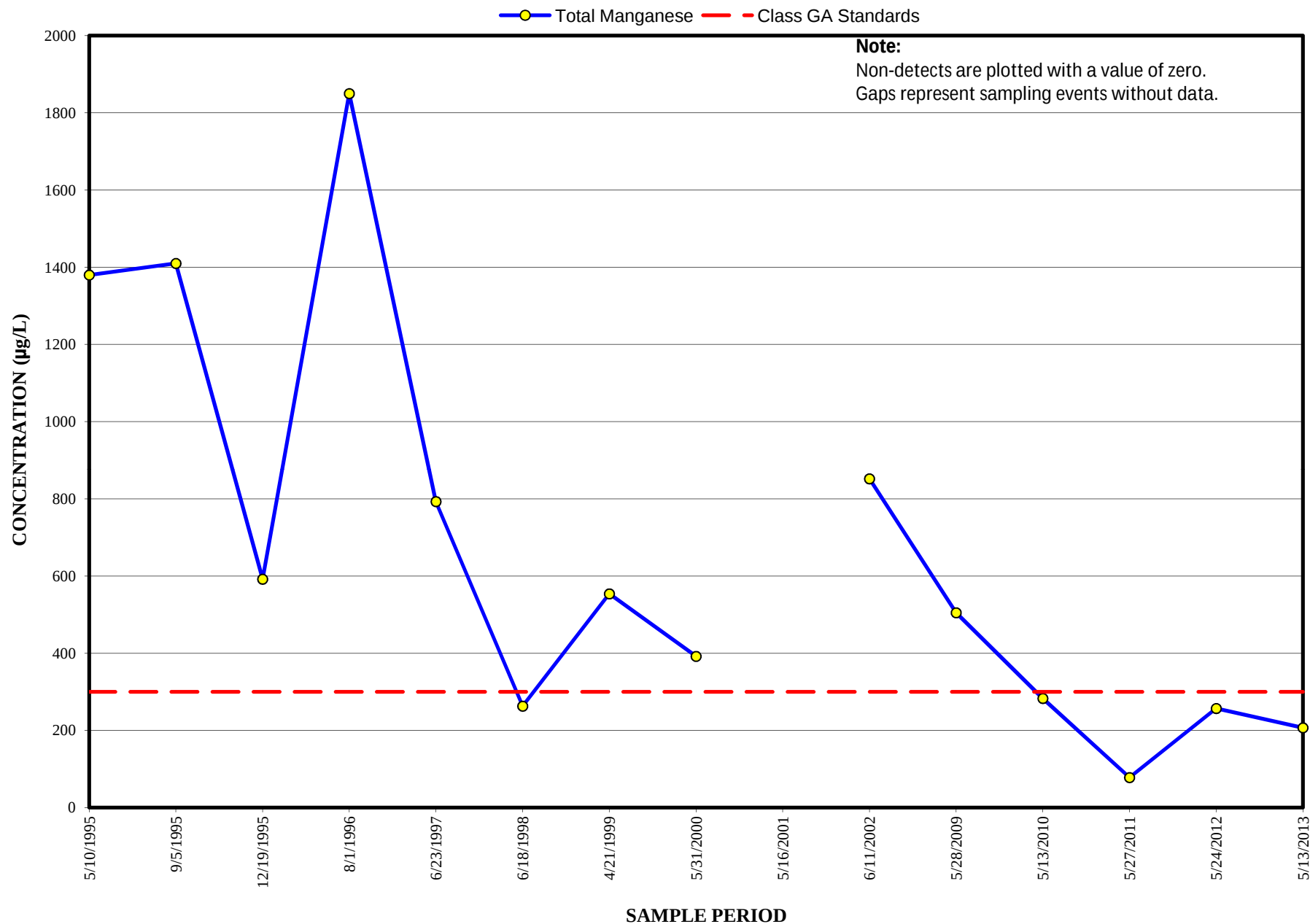
SHRECK'S SCRAPYARD SITE MW-5A TOTAL MANGANESE



SHRECK'S SCRAPYARD SITE

MW-6R

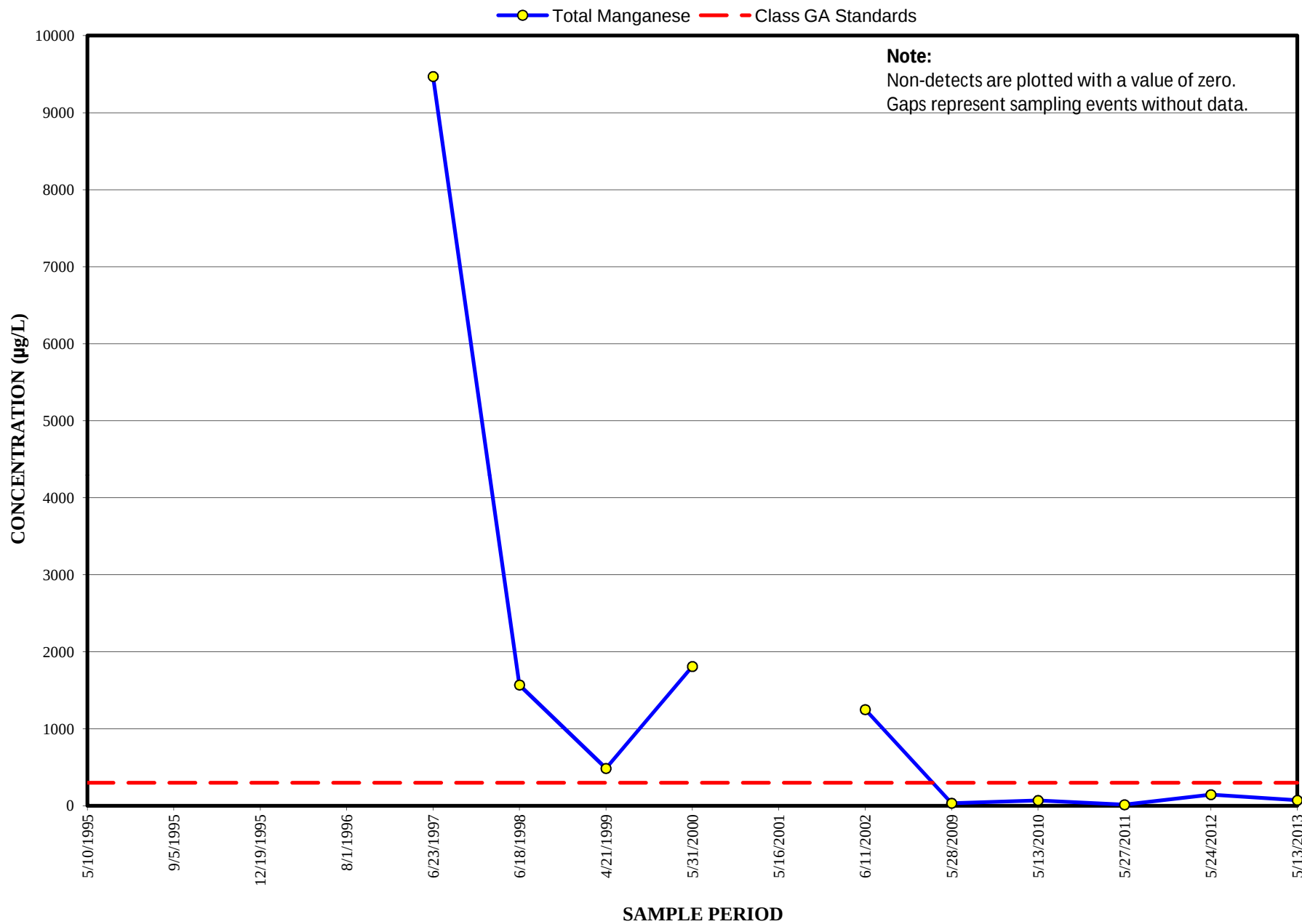
TOTAL MANGANESE



SHRECK'S SCRAPYARD SITE

MW-7

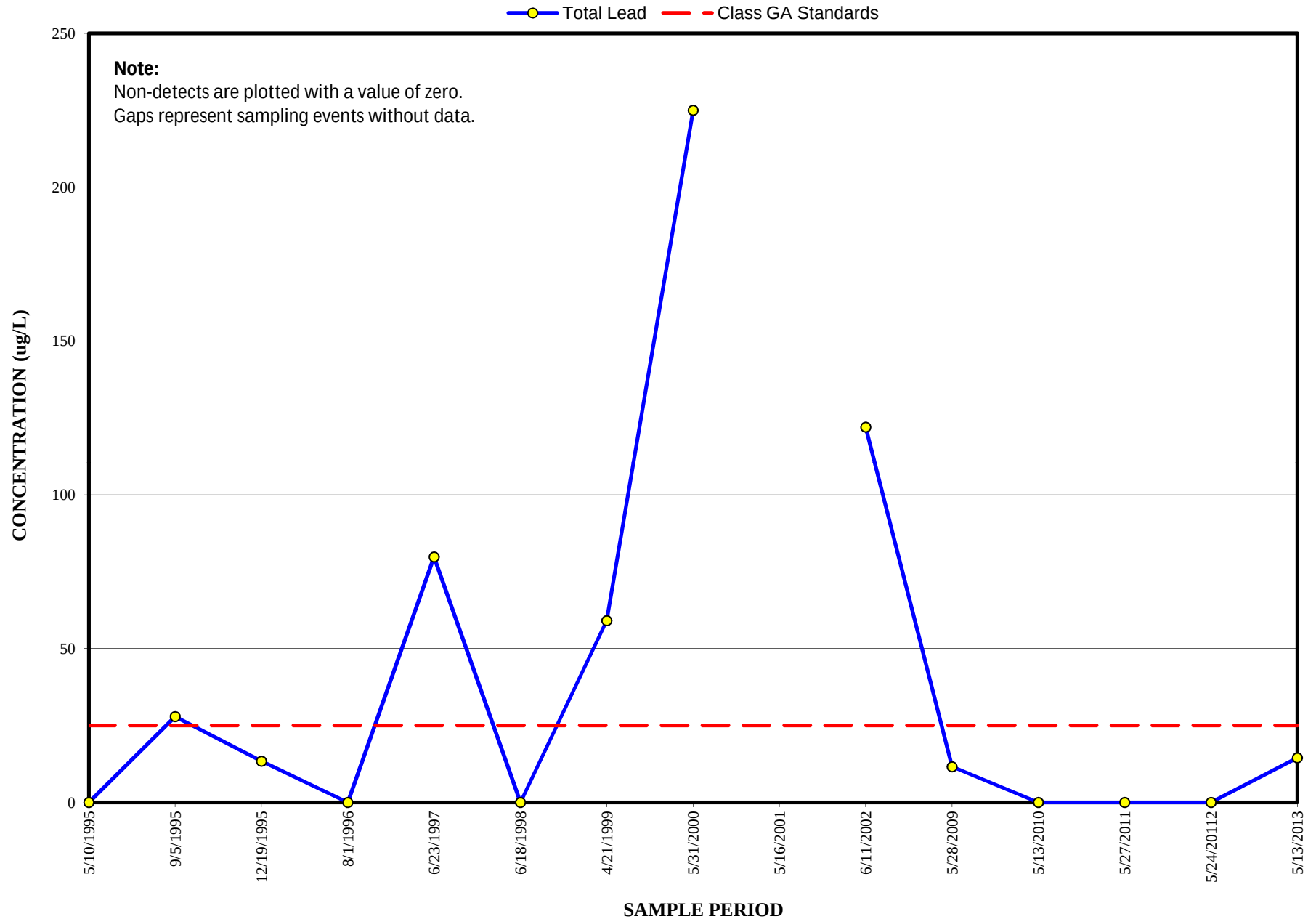
TOTAL MANGANESE



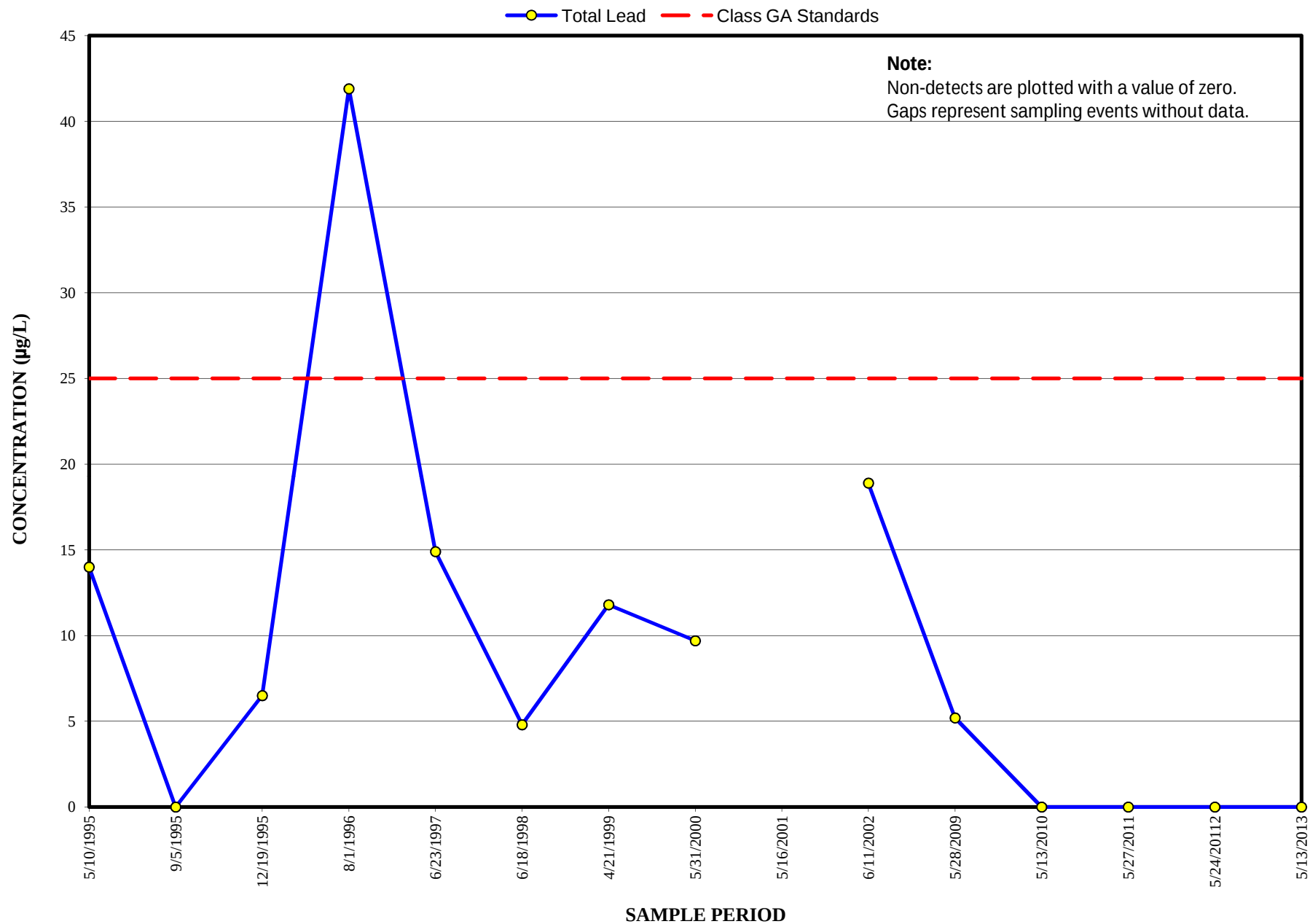
SHRECK'S SCRAPYARD SITE

MW-4

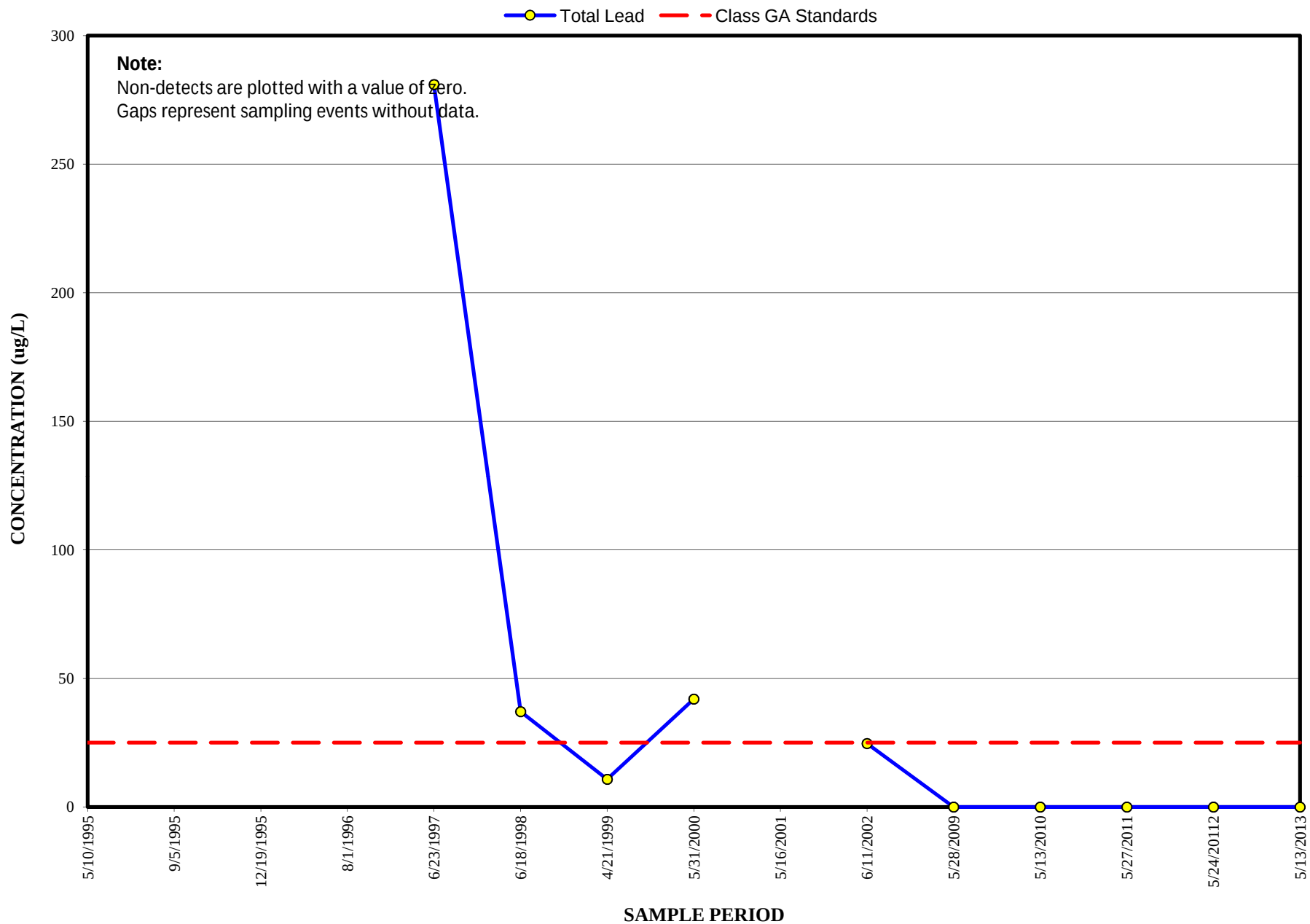
TOTAL LEAD



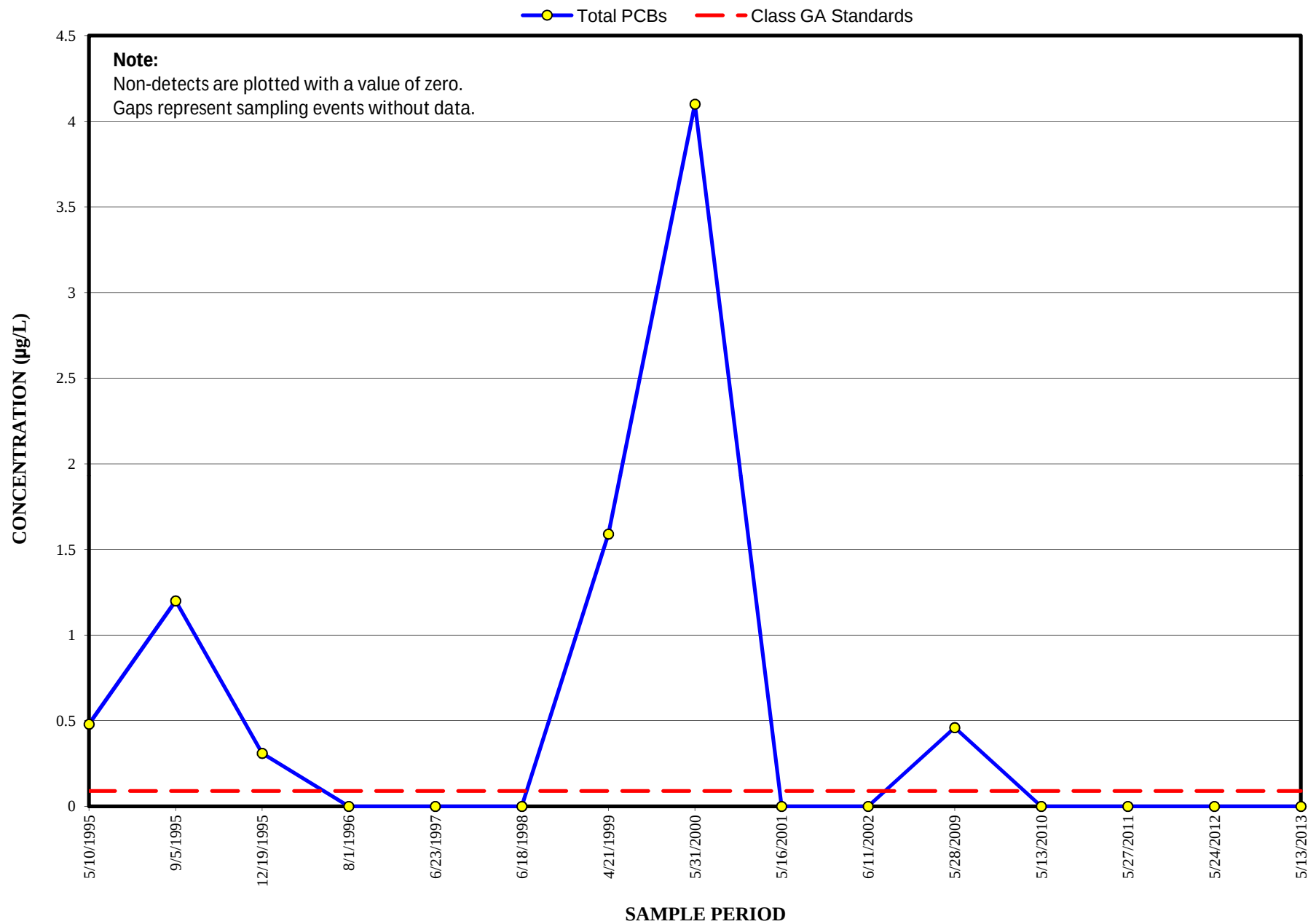
SHRECK'S SCRAPYARD SITE MW-6R TOTAL LEAD



SHRECK'S SCRAPYARD SITE MW-7 TOTAL LEAD



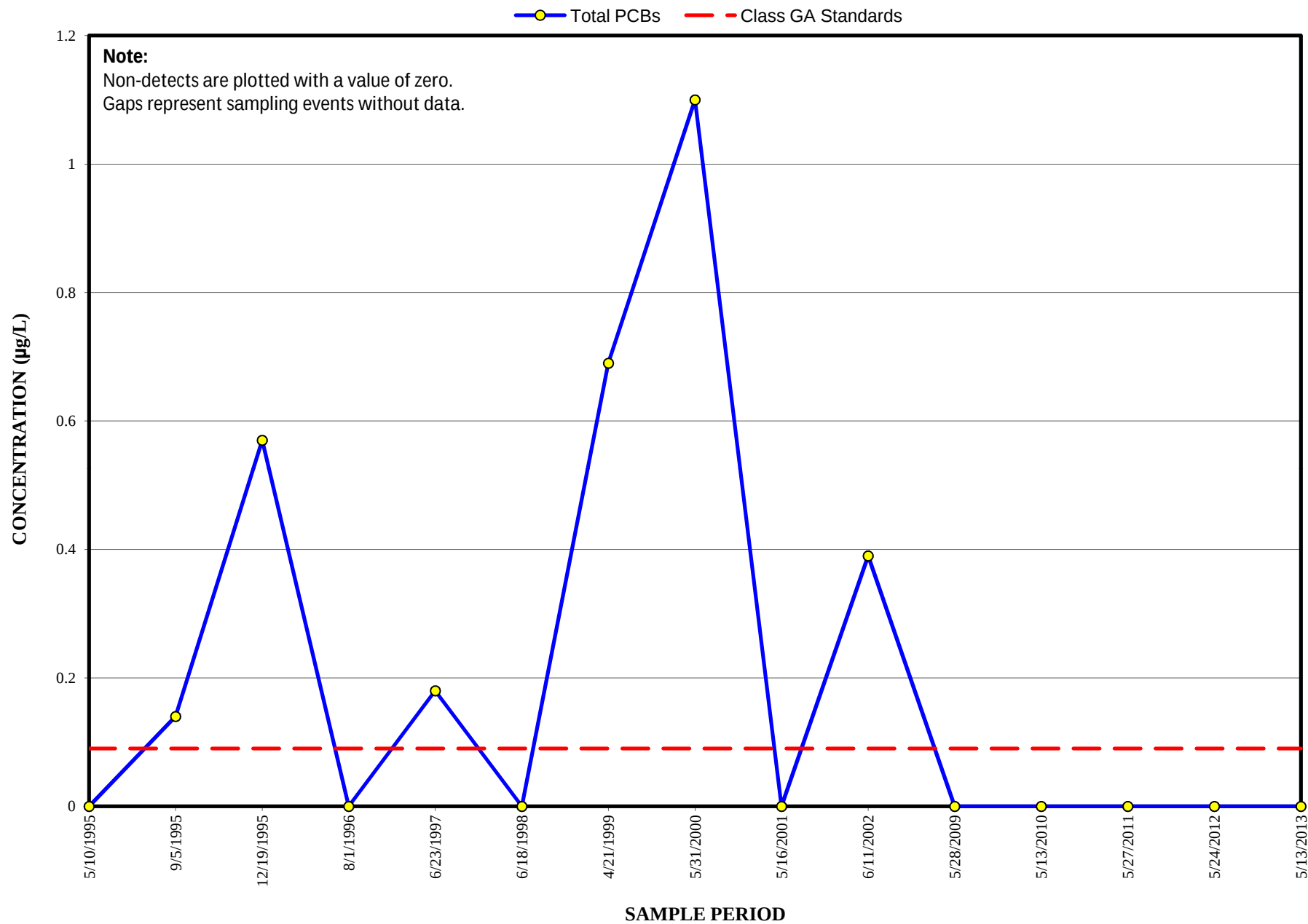
SHRECK'S SCRAPYARD SITE
MW-3
TOTAL PCBs



SHRECK'S SCRAPYARD SITE

MW-4

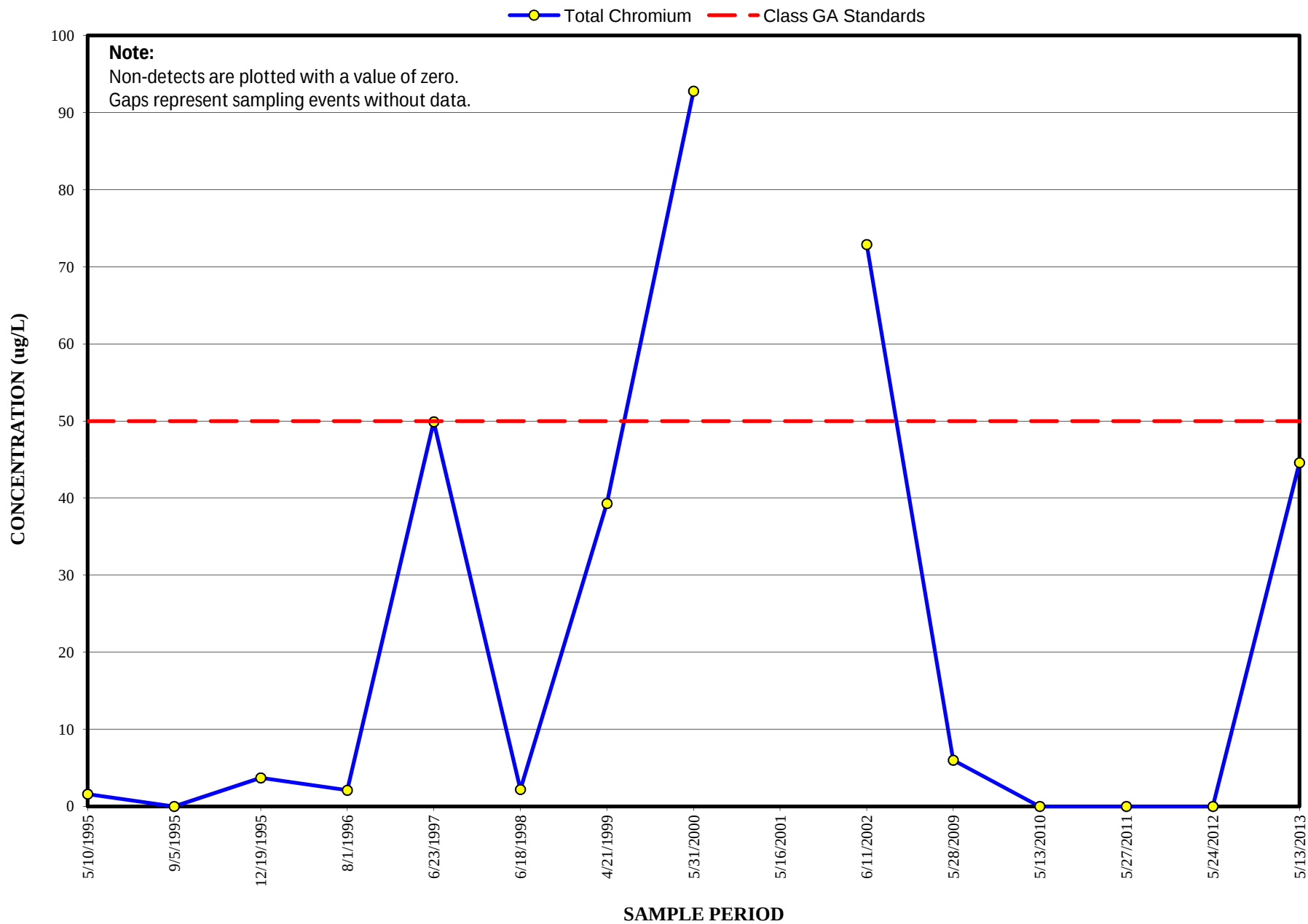
TOTAL PCBs



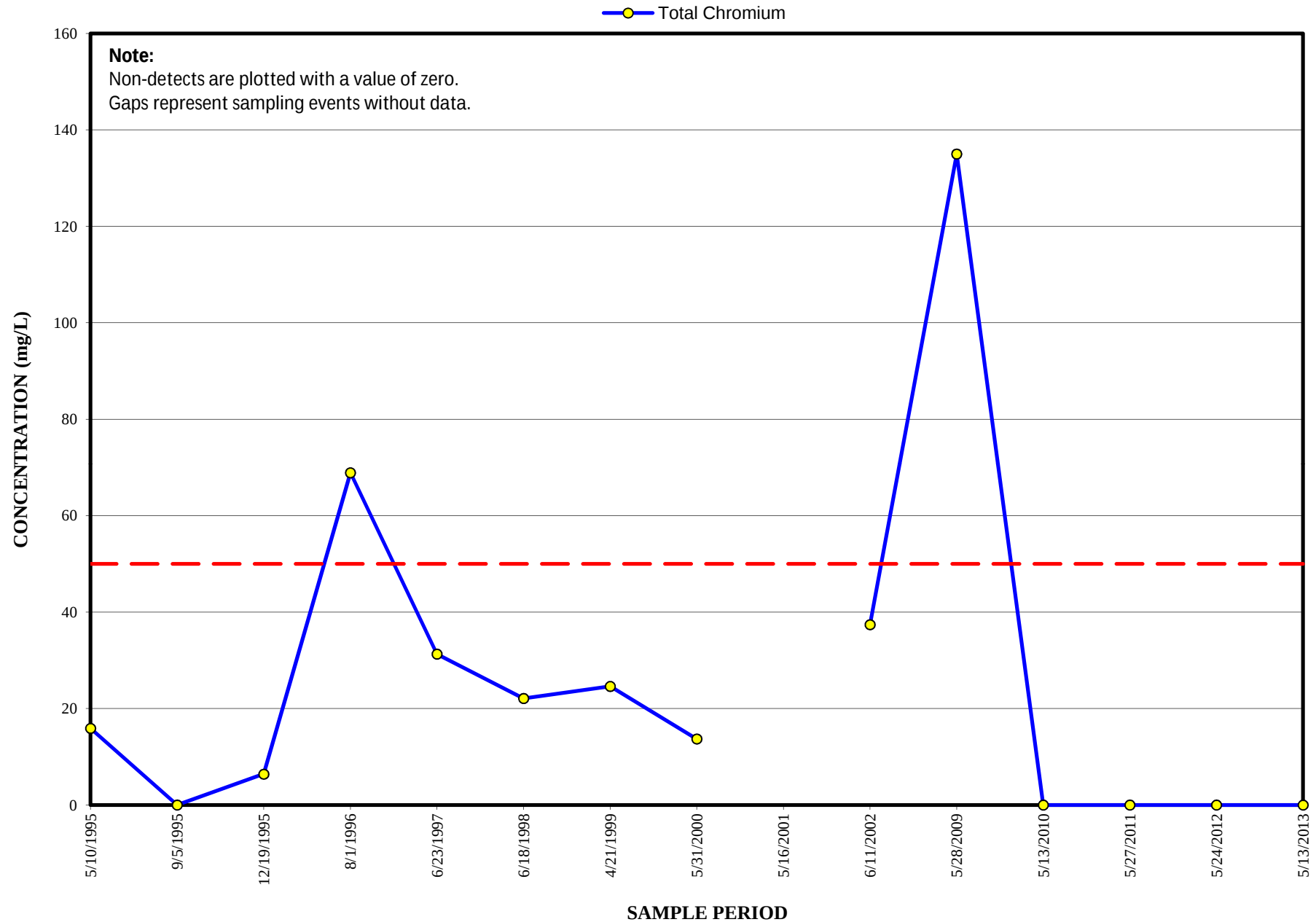
SHRECK'S SCRAPYARD SITE

MW-4

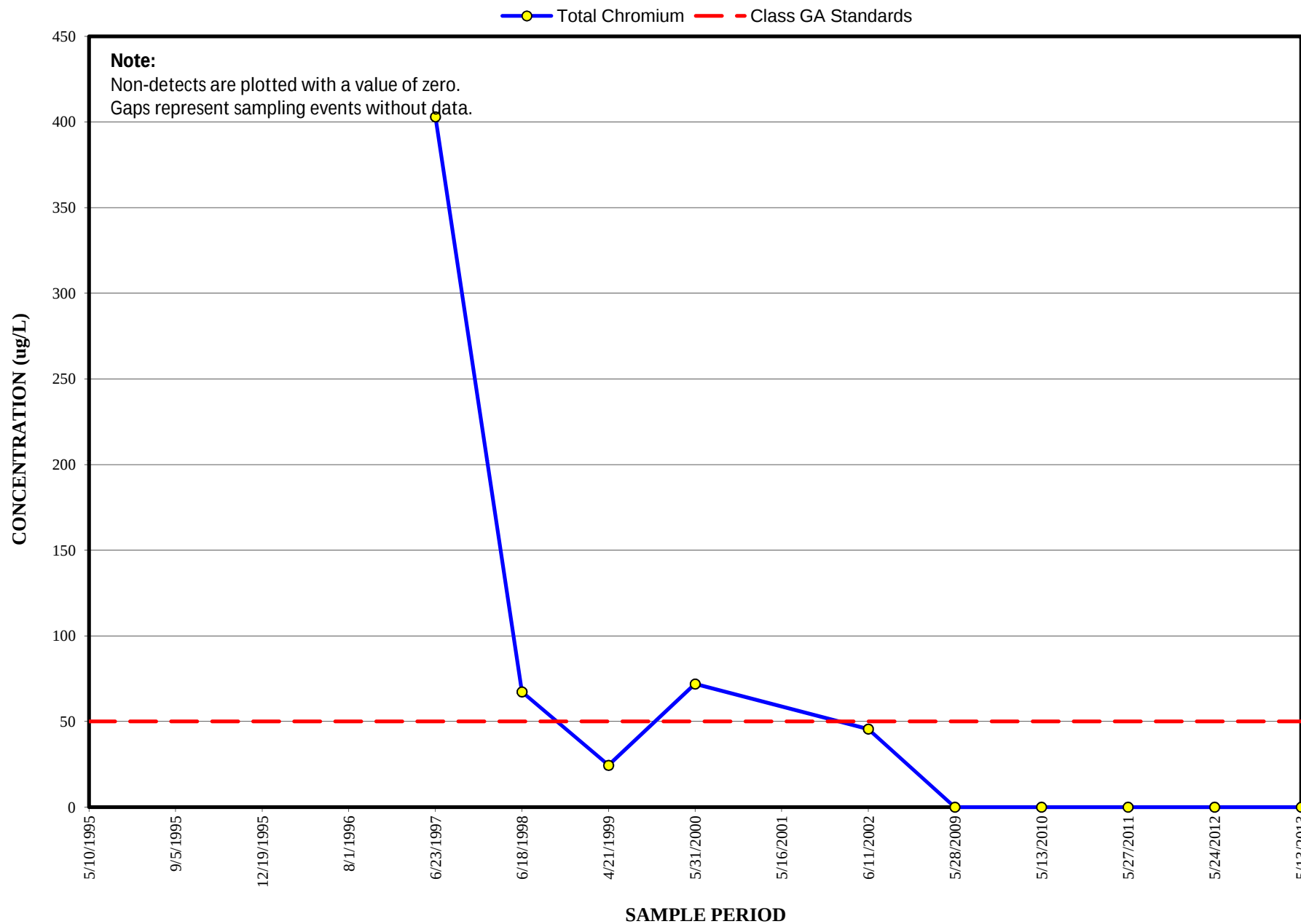
TOTAL CHROMIUM



SHRECK'S SCRAPYARD SITE
MW-6R
TOTAL CHROMIUM



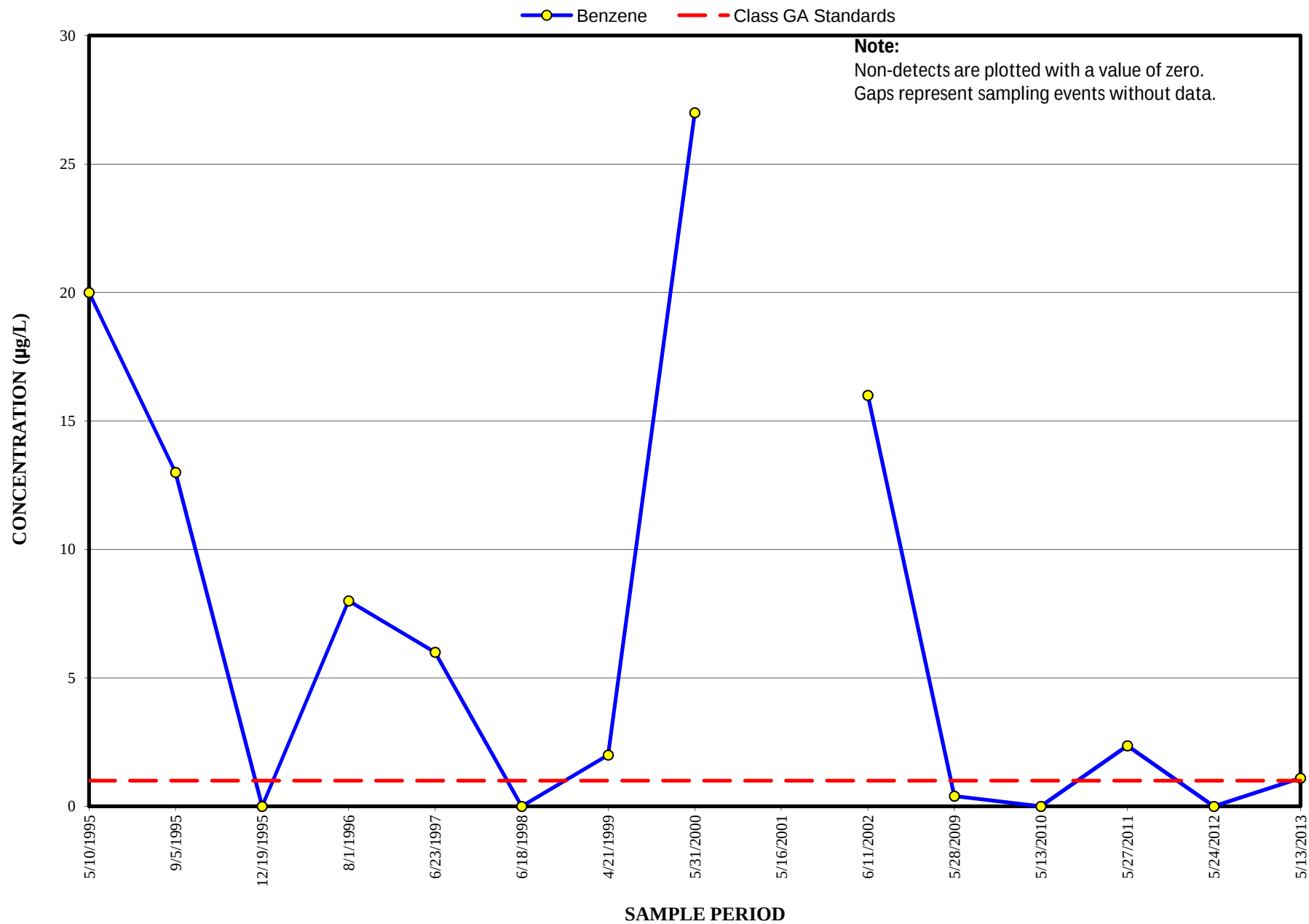
SHRECK'S SCRAPYARD SITE
MW-7
TOTAL CHROMIUM



SHRECK'S SCRAPYARD SITE

MW-6R

BENZENE





Appendix D

**Institutional Control/Engineering
Control Certification Form**



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site No. 932099

Site Details

Box 1

Site Name Schreck's Scrapyard

Site Address: 55 Schenck Street

Zip Code: 14120

City/Town: North Tonawanda

County: Niagara

Site Acreage: 1.5

Reporting Period: July 16, 2012 to July 16, 2013

1. Is the information above correct?

YES NO

☒ ☐

If NO, include handwritten above or on a separate sheet.

2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?

☐ ☒

3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?

☐ ☒

4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?

☐ ☒

If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.

5. Is the site currently undergoing development?

☐ ☒

Box 2

YES NO

6. Is the current site use consistent with the use(s) listed below?
Industrial

☒ ☐

7. Are all ICs/ECs in place and functioning as designed?

☒ ☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

SITE NO. 932099

Box 3

Description of Institutional Controls

Parcel

Owner

Institutional Control

185.05-1-14

RockTenn CP, LLC

Monitoring Plan

In September 1990, a Record of Decision (ROD) was issued for this site. Remediation was completed in 1994. Post-closure groundwater quality monitoring is required to ensure long term effectiveness of the remedy. The ROD did not require the filing of a Deed Restriction at this site.

Box 4

Description of Engineering Controls

None Required

Not Applicable/No EC's

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☐ ☐

N/A

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 932099

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I MARK PETERSON at 55 Schenck Street, North Tonawanda, NY 14120
print name print business address

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Mark Peterson
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

7/12/13
Date



Appendix E

Photo Log

PHOTOGRAPHIC LOG

Project: Schreck's Scrapyard Site 2013 Annual GW Monitoring Report		Location: North Tonawanda, New York	Project No. 04320055.0002
Photo No. 1	Date: 5/13/13		
Direction Photo Taken: Northwest			
Description: Image of well MW-3, no longer heavily vegetated.			

PHOTOGRAPHIC LOG

Project: Schreck's Scrapyard Site 2013 Annual GW Monitoring Report		Location: North Tonawanda, New York	Project No. 04320055.0002
Photo No. 2	Date: 5/13/13		
Direction Photo Taken: East			
Description: Well MW-3 inspection, - LNAPL check			



Infrastructure - Water - Environment - Buildings

PHOTOGRAPHIC LOG

Project: Schreck's Scrapyard Site 2013 Annual GW Monitoring Report		Location: North Tonawanda, New York	Project No. 04320055.0002
Photo No. 3	Date: 5/13/13		
Direction Photo Taken: Northwest			
Description: Well MW-4 inspection, -LNAPL check			



Infrastructure - Water - Environment - Buildings

PHOTOGRAPHIC LOG

Project: Schreck's Scrapyard Site 2013 Annual GW Monitoring Report		Location: North Tonawanda, New York	Project No. 04320055.0002
Photo No. 4	Date: 5/13/13		
Direction Photo Taken: West			
Description: Well MW-5A inspection, -LNAPL check			

PHOTOGRAPHIC LOG

Project: Schreck's Scrapyard Site 2013 Annual GW Monitoring Report		Location: North Tonawanda, New York	Project No. 04320055.0002
Photo No. 5	Date: 5/13/13		
Direction Photo Taken: North			
Description: Well MW-6R inspection, -LNAPL check			

PHOTOGRAPHIC LOG

Project: Schreck's Scrapyard Site 2013 Annual GW Monitoring Report		Location: North Tonawanda, New York	Project No. 04320055.0002
Photo No. 6	Date: 5/13/13		
Direction Photo Taken: West			
Description: Well MW-7 inspection, -LNAPL check			